

January 5, 2001

## **Heavy snowfall could jeopardize roofs of farm buildings**

Heavy snowfall this winter could be putting the roofs of some farm buildings in jeopardy. The weight of snow on a roof, or snow load, accumulates with the snow, says climatologist Mark Seeley of the University of Minnesota Extension Service.

"If the snow of a roof contains one inch of water, it weighs 5.2 pounds per square foot of surface area," says Seeley. "In some places, snow has accumulated to a depth of 20 or more inches. In such cases, the water content of the snow on the roof may be as much as two inches, or 10.4 pounds per square foot. For a 1000-square-foot roof, this translates to over 10,000 pounds of weight."

Roofs are designed to support a limited load coming from snow, wind, and building materials, according to U of M Extension engineer Larry Jacobson. Snow loads for agricultural buildings in Minnesota vary from 20 to 30 pounds per square foot, says Jacobson.

"This level of loading, 20 to 30 pounds per square foot, is not intended to stay on the roof all winter," Jacobson points out. "A roof may be able to support this snow load for several days or a few weeks, probably no more than 30 days." This assumes the building was properly designed by a registered professional engineer, and constructed by a qualified builder according to the design, he adds.

Jacobson says an educated guess regarding a "safe" amount of snow to have on a roof over an extended period of time would be about half of the designed load. If that load is 20 pounds per square foot, about two feet of snow or one inch of ice and one foot of snow would be the maximum.

Several factors affect the amount of snow that can build up on a roof. They include the pitch of the roof, drifting, and shingles that don't shed snow easily. Roofs on a lower building may collect snow sliding off a higher roof, and roof valleys and other areas may collect snow.

"If you have too much snow on a roof, it's a good idea to get it off as soon as possible," says Jacobson. "Generally, there is some time between a large snowfall and possible structural failure."

He says one way to remove snow is to physically get up on the roof and push snow off with a shovel or broom. This obviously involves a safety risk. If you decide to go up on a snow-covered and icy roof, it's important to use ladders, safety ropes, and other precautions, the engineer points out.

Snow rakes and other devices can be used to remove snow. When using a snow rake, use extreme caution when working near overhead electrical lines, says Jacobson. Also, avoid excessive scraping on the roof or trying to chip off ice. These practices can damage the roof and lead to leaks.

"If we continue to receive average or above-average snowfalls, you may want to monitor the snow load on your agricultural buildings and take appropriate action," says Jacobson. "Check high-risk areas, and if you need to remove snow, be extremely careful."

# # #

Web,V2,V4MN,A4,E4

jann0102

Sources: Mark Seeley, (612) 625-4724; Larry Jacobson, (612) 625-9733  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

January 9, 2001

<http://www.extension.umn.edu/News>

## **U of M workshop addresses affordable housing shortage**

The University of Minnesota Extension Service will offer a free one-day workshop to help Minnesota decision-makers plan around the complex issue of affordable housing. The workshop runs from 8:30 a.m. to 4 p.m. Friday, Jan. 19, at the Sheraton Midway Hotel in St. Paul.

Architects, designers, educators, planners, policy-makers, service providers and others with an interest in affordable housing are invited to attend. Avi Freeman, director of the Affordable Home Program at the McGill School of Architecture in Montreal, will deliver the keynote address. The workshop will also feature panel sessions on funding opportunities and programs and best practices and success stories from Minnesota.

The workshop is a result of a September 2000 request by county commissioners for education on affordable housing. Because the number of affordable housing units across the state has decreased, many young adults, adults with disabilities and low-resource families with children find it difficult to find suitable, affordable units.

At the same time, economic development efforts are often stymied in a variety of settings, rural, suburban and urban, when workers cannot find affordable housing.

(over)

The workshop is sponsored by the University of Minnesota Extension Service in conjunction with the Metropolitan Council and the university's colleges of Human Ecology, Natural Resources, and Architecture and Landscape Architecture; department of design, housing, and apparel; and department of wood and paper science.

To register, send an e-mail to [mbruin@che.umn.edu](mailto:mbruin@che.umn.edu) or call (612) 624-3780. There is no charge for this workshop, but registration is limited to 200.

# # #

Web, H5

boyles18

Source: Marilyn Bruin (612) 624-3780

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



MS  
A11

January 9, 2001

## Midwest Ridge and Strip-Till Conference will be Feb. 1

An opportunity to learn the fine points of ridge-till and strip-till planting for corn and soybeans will take place Feb. 1 at Spirit Lake, Iowa. The annual Midwest Ridge and Strip-Till Conference will be at the Village East Conference Center at Spirit Lake.

"This is a program where farmers have the opportunity to learn from other farmers," says soil scientist George Rehm of the University of Minnesota Extension Service. "Those who have used these tillage systems will describe them and explain how they work. The economic and environmental advantages will be highlighted."

The program will also feature scientists from the University of Minnesota and Iowa State University. They will provide the latest information on weed and insect control and tile drainage.

The conference program runs from 10 a.m. to 3 p.m. after 90 minutes for registration. The conference is designed for all crop producers who are either interested in or are now using ridge-till or strip-till planting.

For more information or a conference brochure, call Judy Martens at (612) 625-5797. An on-line brochure with registration information is at [www.conferences.umn.edu/mn/crops/2432/ridgtill.htm](http://www.conferences.umn.edu/mn/crops/2432/ridgtill.htm).

# # #

Web,V2,V4,C4,F4,X2

rehm0103

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

M.  
A.

January 12, 2001

## Minnesota Cow-Calf Days set at 9 locations in February

Updates on beef cow and calf issues will be the focus of Cow-Calf Day programs at nine Minnesota locations in February. The events are for beef producers with cow herds and other interested persons. The University of Minnesota Extension Service is the sponsor.

The first five Cow-Calf Days will be at Staples, Bagley, Greenbush, Grand Rapids, and Finlayson. Topics and speakers for these programs will be:

- Beef herd vaccination strategies, Scott Haskell, University of Minnesota veterinarian;
- Beef cow artificial insemination, Cliff Lamb, U of M animal scientist;
- Calving techniques to improve calf vigor and vitality, Bob Mortimer, Colorado State University veterinarian.

The last four events will be at Glenwood, Pipestone, Rushford, and Rochester. Topics and speakers for these programs will be:

- Breeds and grid marketing, Alfredo DiCostanzo, U of M animal scientist;
- Beef herd vaccination strategies, Trevor Ames, University of Minnesota veterinarian;
- Beef cow artificial insemination, Lamb;
- How cloning will affect the beef cattle industry, Audy Spell, director of operations, Cyagra, Inc., Manhattan, Kan.
- Vitamin and mineral supplementation, John Arthington, University of Florida immunologist.

<over>

Dates, locations, times, and contacts for the Minnesota Cow-Calf Days are:

--Feb. 7, Staples, Central Lakes College, 10 a.m.-3 p.m., contact Jim Carlson,  
(320) 632-0161.

--Feb. 7, Bagley, American Legion, 6-10 p.m., contact Terry Nennich,  
(218) 694-6151.

--Feb. 8, Greenbush, Fine Tymes Supper Club, 6-10 p.m., contact Curt Nyegaard,  
(218) 463-1052.

--Feb. 9, Grand Rapids, North Central Research and Outreach Center, 6-10 p.m.,  
contact Dan Brown, (218) 327-4490.

--Feb. 10, Finlayson, Finlayson Community Center, 10 a.m.-3 p.m., contact Troy  
Salzer, (218) 384-3511.

--Feb. 13, Glenwood, Minnewaska House, 10 a.m.-3 p.m., contact Kirby Hettver,  
(320) 589-7423.

--Feb. 14, Pipestone, Minnesota West Technical College, 10 a.m.-3 p.m., contact  
Philip Berg, (507) 825-6715

--Feb. 15, Rushford, American Legion, 10 a.m.-3 p.m., contact Jerry Tesmer,  
(507) 765-3896.

--Feb. 15, Rochester, Holiday Inn South, 6-10 p.m., contact Steve Drazkowski,  
(651) 565-2662.

# # #

Web,V2MN,V4MN,B1,X1,09,11,15,23,28,31,49,55,59,60,63,71,82,85,90

cowcalf01

Source: Cliff Lamb, (218) 327-4345

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 12, 2001

## **Marshall, Moorhead will host farmland tile drainage workshops**

Farmland tile drainage design and water management will be the subject of March workshops in Marshall and Moorhead, Minn. The workshops will be March 5-6 at Southwest State University in Marshall and March 8-9 at the Red River Inn and Conference Center in Moorhead.

The workshops are designed for farmers, landowners, tile drainage contractors, crop advisers and consultants, soil and water resource technicians, public policy decision-makers, and other interested persons.

The first day of each workshop will cover basic subsurface tile drainage design, including planning, tile sizing, lateral spacing, and the Minnesota Drainage Guide. Tile drainage economics and tile drainage experiences in Ohio are other first-day topics. The second day will include a hands-on workup of a tile drainage design. There will also be an opportunity to attend two of several concurrent sessions, including whether landowners should do their own tiling, surveying basics, tile line assessment, alternatives to tiling, and University of Minnesota tile drainage research.

Presenters and discussion leaders include U of M research and Extension faculty, tiling contractors with the Minnesota Land Improvement Contractors' Association, a soil and water instructor from Minnesota West Technical College, a farmer from Mapleton, and a water and land resource manager and attorney. Out-of-state speakers

include Larry Brown, Ohio State University Extension engineer, at both locations; and Leon Osborne, University of North Dakota meteorologist, and Michelle Harland, Manitoba soil scientist, at Moorhead.

Pre-registration is required for the workshops, and seating is limited. The fee is \$100 per person for both days or \$65 for a single day. For registration information call Jean Spohr at (320) 589-1711 or e-mail [spohrjm@mrs.umn.edu](mailto:spohrjm@mrs.umn.edu). For program information call Jerry Wright at the same number or e-mail [jwright@umn.edu](mailto:jwright@umn.edu). Six continuing education credits per day have been applied for from the Minnesota Certified Crop Advisers board.

Workshop sponsors include the University of Minnesota Extension Service, South Dakota Extension Service, North Dakota Extension Service, Minnesota West Community and Technical College at Canby, and Southwest State University in partnership with the Minnesota Land Improvement Contractors Association and the Minnesota and Red River Valley sections of the American Society of Agricultural Engineers.

# # #

Web,V2,V4MN,A4,C4,F4,Z1,Z6

drain111

Source: Jerry Wright, (320) 589-1711

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 12, 2001

## **Farm price fluctuations are usually predictable**

Farm commodity prices usually fluctuate within a fairly predictable price range every year, says Extension educator Erlin Weness of the University of Minnesota Extension Service.

In an average year, corn typically moves about 96 cents per bushel, while soybeans fluctuate about \$1.40 per bushel, Weness says. Hogs typically fluctuate \$20 per hundred during a year, while fed cattle fluctuate about \$13.

"These fluctuations provide farmers with opportunities to price their product during periods when prices are at higher levels," Weness says. He has a chart showing the 10-year range in cash prices for corn, soybeans, market hogs and fed steers in southwestern Minnesota.

You can check this and lots of other educational information on the home page of the U of M Southwest Research and Outreach Center at <http://swroc.coafes.umn.edu>. Or, contact your county office of the University of Minnesota Extension Service.

Weness also has a price probability chart that shows the percentage of time that prices have been at or above a certain price. For example, corn has been at or above \$2.50 per bushel 25 percent of the time in the past 27 years and 19 percent of the time in the past 10 years.

Price increases in low-price years are shown in another chart. It shows the price increase that occurred in years when the fall cash price was under \$2 for corn and \$5 for soybeans. Weness says typical price increases from these lows were 69 cents for corn and \$1.88 for soybeans.

“The price increase in any one year can vary considerably from the average,” Weness says. “Prices have a high probability of peaking in May, June or July.”

# # #

Web, A2, V2, V4MN

weness112

Source: Erlin Weness (507) 372-8210

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 13, 2001

## **Minnesota growers advised to take advantage of Minnesota Grown logo**

A record 620 growers and marketers purchased a \$5 license to use the Minnesota Grown logo in 2000. But Minnesota Agriculture Commissioner Gene Hugoson would like to see that number grow in 2001.

Minnesota Grown is a trademarked logo and labeling statement the Minnesota Department of Agriculture (MDA) offers to farmers, processors and others for use on advertising, packaging and other promotional materials. The logo takes advantage of consumer preference for locally produced agricultural products.

Hugoson says the logo is a good marketing investment for growers because Minnesota consumers appreciate the high quality of products grown by Minnesota farmers. "Consumers often say they look for Minnesota Grown labeled products because they taste fresher, are of high quality, or because they want to support the local economy," Hugoson says. "This is a great marketing opportunity for Minnesota growers because consumer interest in Minnesota Grown products is on the rise."

For an extra \$30, licensed producers who sell direct to consumers can be included in a glove box-sized annual publication called the "Minnesota Grown Fresh Produce and More Directory." They're also included on a list of the same farms on the MDA web site at [www.mda.state.mn.us/mngrown](http://www.mda.state.mn.us/mngrown).

<over>



The "Minnesota Grown Fresh Produce and More Directory" is a free directory, listing apple orchards, berry patches, farmers' markets, Christmas tree farms and other locations selling products direct from the farm.

The deadline for directory applications is Feb. 3, 2001. To request an application for the license and/or directory, growers may call and leave their name and mailing address on the Minnesota Grown Answerline at (651) 297-8695 or 1-800-657-3838.

# # #

Web, A4, V2, V4MN, H7, P1

mda19

Sources: Michael Schommer (651) 297-1629, Paul Hugunin (651) 297-5510

Editor: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 16, 2001

## **Soaring nitrogen fertilizer costs dampen profit prospects for corn**

Skyrocketing natural gas prices have almost doubled the cost of nitrogen fertilizer for this year's corn crop, adding to the financial challenge of farmers.

There's also concern about a possible nitrogen fertilizer shortage, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"Anhydrous ammonia is the most common source of nitrogen fertilizer for corn," says Thiesse. "The cost of anhydrous ammonia, which is derived from natural gas, has almost doubled in the past 12 months. Current prices for anhydrous are about 22-25 cents per pound, compared with 12-13 cents per pound in January of 2000. The price increase will add \$15-20 per acre to production costs for this year's crop. With prices also up for fuel and other inputs, it's very hard to project a profit on corn in 2001."

Thiesse cites the following strategies to consider regarding nitrogen for the 2001 corn crop:

--Fine-tune nitrogen rates for corn and apply at the University of Minnesota's recommended rates. A soil nitrate test this spring can show how much soil nitrogen is available so you can adjust nitrogen rates accordingly. Nitrification inhibitors such as N-Serve may help reduce soil nitrate losses and allow lower nitrogen fertilizer rates. Other sources of nitrogen, such as urea or ammonium nitrate (28 percent), may be cost competitive with anhydrous this year.

(over)

--Consider livestock manure as an alternative to meet all or part of the nitrogen needs for corn. Liquid hog manure from a pit can contain 35-40 pounds of nitrogen per 1,000 gallons. If the manure is incorporated or injected, approximately two-thirds of the nitrogen is available to the crop the first year. Test the manure before application so you know the exact nutrient content and can adjust application rates accordingly.

--If you have not yet applied nitrogen for 2001 corn, consider switching some of the intended corn acres to soybeans. Soybeans typically don't need nitrogen fertilizer and have a much lower production cost than corn. The lower production cost coupled with a more favorable government loan rate make it easier to project a profit from soybeans than from corn in 2001.

"However, switching corn acres to soybeans may be a high-risk strategy," says Thiesse. "Continuous soybeans tend to have a higher incidence of soybean cyst nematode, disease, and insect problems that can reduce yields. Also, if there is a large switch from corn to soybean acres nationwide, soybean prices could weaken and corn prices could strengthen."

Thiesse recommends working with crop consultants and agronomists to review nitrogen strategies for 2001 corn. Publications and other resources on this topic are also available from county offices of the University of Minnesota Extension Service.

# # #

Web,V2,V4MN,A2,F4

thie0110

Source: Kent Thiesse, (507) 389-8325

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

January 19, 2001

## **Lodging, pests may deserve attention when selecting corn hybrids**

Yield is usually the most important factor to consider in selecting a corn hybrid. But specific problems and situations can bring other factors into play. Bruce Potter, integrated pest management specialist with the University of Minnesota Extension Service, cites factors related to lodging and pests that may deserve attention when choosing a hybrid:

---Root strength. This is a factor to consider where the potential for extended diapause northern corn rootworm damage to corn following soybeans is high. Hybrids with poor root systems sometimes fall over without the help of rootworms. Larger, more vigorous root systems may help reduce lodging. Maintaining standability with hybrid selection is much cheaper than applying insecticide. High rootworm populations, especially when hatching at an early stage of corn growth, will overwhelm any root system.

In fields where extended-diapause rootworm damage is virtually certain, an insecticide might also be considered. However, the insecticide may not provide an economic return due to the unpredictability of extended diapause problems. Where corn follows corn, adult beetle counts from last year provide a reasonably accurate indication of the need for insecticide.

--Stalk strength. This can help prevent stalk lodging from stalk rots or European corn borer damage, but it doesn't prevent yield losses from these pests.

--Corn borer resistance/tolerance. Hybrids differ in resistance to corn borer attack, and some tolerate damage with less stalk breakage. Control is not absolute, and high borer populations can overwhelm resistance/tolerance.

--Bt. Genetically modified Bt hybrids provide very good corn borer control. Planting Bt on some acres can allow time to more thoroughly scout remaining acres. Producers who choose Bt corn are probably wise to determine a percentage of acres they are comfortable with, rather than trying to outguess corn borer populations.

--Other disease ratings. These might include scores for anthracnose leaf blight and other leaf spots. These deserve consideration if there is a history of the disease in a field. These diseases can be important in fields of continuous corn, particularly those with no or minimal tillage.

If stalk rot fungi are a concern, it is important to know which species is the problem. All stalk rot is not anthracnose. Culturing diseased tissue at a plant pathology lab is the best way to determine which species killed corn.

--Herbicide resistance. For hybrids resistant to a specific herbicide compound, good record-keeping is essential to avoid applying the wrong herbicide. Use and export is restricted for some herbicide-resistance hybrids. The best reason to select a herbicide-resistant variety is usually to control a particular weed problem.

# # #

Web, V2,V4MN,F4

pott0119

Source: Bruce Potter, (507) 752-7372

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

January 19, 2001

**Variety selection is important for protecting crops from diseases, insects**

Variety selection can be an important step in protecting crops from disease and insect pests. Most fields have some kind of pest problem, says Bruce Potter, integrated pest management specialist with the University of Minnesota Extension Service.

"Producing varieties with high yield potential and traits that defend plants from pests is difficult," says Potter. "Producing high-yielding varieties with multiple defensive genes is even more difficult. That's why you need to know and prioritize the pest problems in each individual field. Then you can select field-specific varieties to combat the pest problems you expect to reoccur in each field. This process is especially beneficial for problems you can't control with tillage, rotation or crop protection chemicals."

In order to know and prioritize pest problems, it is necessary to monitor fields during the growing season and record field specific problems, notes Potter.

"Genetics for insect or disease resistance do not increase yield," says Potter. "They often tend to lower the top-end yield potential of a variety. These genetics do, however, protect against yield reduction in the presence of the appropriate pest."

# # #

Web,V2,V4MN,F4

pott0118

Source: Bruce Potter, (507) 752-7372

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 19, 2001

### **4-H science and space program reaches out to girls, minority youth**

Every month April Homich and fellow University of Minnesota graduate student Joshua Nollenberg drive four and one-half hours from Minneapolis to the Circle of Life school on the White Earth Indian Reservation in rural Becker county.

There they help create a community-based "Star and Rocket 4-H Club."

Extension specialists, elders, teachers, high school students and young children take part. This is one example of the Minnesota 4-H Foundation and National Aeronautic and Space Administration (NASA)-funded program, "Reach for the Sky," for girls and minority youth.

The Star and Rocket Club includes the telling of traditional Native American sky stories during winter months, and the launching of rockets, kites and airplanes (many made from 4-H curricula) in the spring. Throughout the year connections are made between the University of Minnesota and the Circle of Life School. Bridges are built between Native American stories and life and the science and technology that's exploring and taking people into space.

The Circle of Life School is in a remote part of northeastern Minnesota with the nearest town situated 30 miles away. However, students connect with Homich through the Internet as she works at the University of Minnesota. They also connect through

<over>

video conferencing as Homich studies comets through a giant telescope (partially owned by the University of Minnesota) at Mt. Lemmon in the Catalina Mountains of Arizona. The fourth graders at Circle of Life are also preparing questions for their next video conference, hopefully with NASA's Native American astronaut, John Bennett Herrington.

Only six years ago, April Homich, also Native American, was about to graduate from high school in Superior, Wis. She thought of taking a minimum-wage job, but her physics teacher intervened. He encouraged her to consider going to college.

Then her uncle Larry encouraged her to take the ACT test and said that if she couldn't afford it, he'd pay for it. To April, this was a major vote of confidence. A quick stint working at the county fair paid for the test.

Today she's on a Ph.D. track and the first person in her family to attend college. She mostly studies comets, but stays connected with her Ojibway roots. Homich is excited by the opportunity she has with the "Reach for the Sky" project. She says, "I hope to make a difference to some young persons, as my physics teacher did for me. I would not be here today if it weren't for him believing in me."

For information (and pictures) on the "Reach for the Sky" project, contact Stephan Carlson at the Center for 4-H Youth Development (612) 624-8186.

# # #

Web, Y1, 03

4h118

Source: Minnesota 4-H Foundation (612) 624-8186.  
Editor: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



January 19, 2001

## **Are their hidden profit niches on your farm?**

Does your farm have fields, woods, creeks or ditches that are under-utilized or less suitable for row crops? Many of these areas can be planted to trees or shrubs to provide income and improve conservation.

A new 20-page publication, "Discovering Profits in Unlikely Places: Agroforestry Opportunities for Added Income," tells you how. It has details on the benefits of agroforestry, "before" and "after" full-color drawings of agroforestry practices, a list of commonly used trees and shrubs, and resources for more information.

It's available from county offices of the University of Minnesota Extension Service, or from the Distribution Center by calling (800) 876-8636 or (612) 624-4900. Ask for publication 7407. There's a small charge.

The publication describes six different farm situations, with accompanying profit opportunities and agroforestry practices:

-- Multipurpose windbreaks can be the answer for farmsteads and livestock areas, fence lines, roads and degraded windbreaks. Multiple-row windbreaks can be used to produce marketable products like hybrid poplar, black walnut wood and nuts, hazelnuts and woody floral products from shrubs.

--Improved woodlot management can produce higher quality timber and firewood on neglected or grazed woodlots.

--Alley cropping and selling fruit and nut crops can be profitable on marginally productive upland fields.

--Areas along streams can produce high-value hardwoods and specialty forestry products. A wooded riparian buffer strip along a stream can combine trees, shrubs, herbaceous plants and grasses to produce a variety of products.

--Corners not reached by pivot irrigation, or inconvenient, out-of-the-way or small parcels, can be planted to new woody crops such as hybrid hazelnuts. Other profit opportunities include fruit and prairie seed.

--River bottomland fields where crops frequently flood can be planted to hybrid poplar or cottonwood. These fast-growing trees can be harvested and sold for pulpwood and other wood products every 10 to 15 years in Minnesota.

A team of agricultural producers, Extension educators and researchers developed the publication. It was produced by the Center for Integrated Natural Resource and Agricultural Management (CINRAM), the Minnesota Institute for Sustainable Agriculture (MISA) and the U of M Extension Service.

# # #

Web, A2, A4, V2, V4, F8, P1, T2

misa118

Source: Beth Nelson (612) 625-8217, schre002@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 23, 2001

**Soybean pest problems may warrant attention when choosing varieties**

While yield is usually the top priority when selecting a soybean variety, potential pest problems may also warrant consideration. Bruce Potter, integrated pest management specialist with the University of Minnesota Extension Service, describes some soybean problems that may deserve attention when choosing a variety.

--Iron chlorosis. This is not a crop pest, but can be aggravated by root rots, soybean cyst nematode and herbicides. If iron chlorosis is a problem in a field, make sure it's not wholly or partly related to disease or nematodes. It's possible you may need an iron chlorosis-tolerant soybean variety with SCN resistance or Phytophthora root rot resistance.

Iron chlorosis can have several causes that vary according to weather, soil type and geographic area. Therefore, rating iron chlorosis tolerance is difficult, and ratings are not standardized among seed companies.

--Phytophthora root rot. Genetic resistance is available through several "Rps" genes, each effective against several races of the Phytophthora fungus. However, in southern Minnesota there are races of the fungus that can attack all current Rps resistance genes, including Rps 1k. Using the same Rps gene continually makes it possible to select for, or increase the percentage of, Phytophthora races able to overcome that resistance gene. Therefore, it is important to monitor the performance of Phytophthora resistance genes.

Some seed companies rate field tolerance to PRR. Tolerance is not the same as resistance and is not absolute. The ratings are subjective and not standardized among companies. Tolerance will usually not be sufficient in fields with severe PRR problems.

--Other root rots. These can be caused by several fungus species, individually or in combination. Genetic resistance is not available for Fusarium and Rhizocontia root rots. There may be tolerance differences, but these are not documented in varieties

adapted for Minnesota. Laboratory culturing of diseased tissue is often necessary to identify the organism causing a root rot.

Fungicide seed treatments may help reduce root rots when genetic resistance is not an option.

--Brown stem rot. This is often a problem with reduced tillage. Non-rotated soybeans are often the most severely affected. High levels of this disease have shown up in southwest Minnesota the past two years. Seed companies usually provide resistance or tolerance scores for this disease.

--White mold. Scores for this are subjective, with no genetic resistance available. Varieties can perform differently in different areas. Performance may be related to any one or a combination of canopy architecture, flowering habit or biochemical processes. Any current variety can be overcome by the disease when favorable conditions for the disease exist. Nevertheless, it is best to avoid varieties with poor white mold scores in fields with a history or potential for white mold.

--Soybean cyst nematode. Resistance to this pest works, and more and higher-yielding SCN-resistant varieties continue to be released. Growers should start to consider using resistant varieties when SCN is found in a field. Early use of resistant varieties will help maintain productivity in infested fields.

Ignoring SCN can lead to high nematode populations, which can prevent even SCN-resistant varieties from yielding well. SCN resistance has a slight yield penalty, and resistant varieties are sometimes outyielded by susceptible varieties even in fields with SCN. However, growers should look at resistant varieties as a long-term management strategy designed to maintain soybean productivity in a field.

--Roundup Ready. Varieties with this trait fit best in fields with hard-to-control weed problems. Roundup Ready may not be the best choice in fields with problems more serious than weeds.

# # #

Web, V2,V4MN,F4

pott0120

Source: Bruce Potter, (507) 752-7372

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

January 23, 2001

## **Conference on rural energy will be Feb. 22-23 in St. Paul**

Robotic milking and generating electricity from livestock manure are among the agenda topics at an upcoming conference in St. Paul. The 39<sup>th</sup> Annual Rural Energy Conference will be Feb. 22-23 at the Ramada Inn and Conference Center at 1870 Old Hudson Road in St. Paul.

The conference is designed for electric utility officials, electricians, educators, rural electric cooperative board members and others interested in rural energy. It's sponsored by the Midwest Rural Energy Council, a non-profit organization of investor-owned utilities and rural electric cooperatives in Minnesota and Wisconsin. Members include utilities in Iowa, Minnesota and Wisconsin; representatives from the Universities of Minnesota and Wisconsin; government officials; educators; equipment dealers; and individual members.

Topics will include investigations of electrical phenomena on farms, anaerobic digesters for producing electricity from livestock manure, farmers in distress, robotic milking, agricultural lighting, dairy expansion and deregulation's impact on rural areas. There will be presentations on related topics currently under investigation at the Universities of Minnesota and Wisconsin. There will also be an update on the stray voltage complaint to the Michigan Public Service Commission.

<over>

The conference will include an evening tour of the Bakken Museum of Electricity in Life in Minneapolis.

An Internet web site at [www.mrec.org/confer.html](http://www.mrec.org/confer.html) has a copy of the conference brochure and additional information. For registration information, contact the Wisconsin College of Agriculture and Life Sciences (CALs) at (608) 263-1672.

The MREC was founded in 1954 to initiate, develop, support and coordinate education, research, and communication regarding rural energy issues.

# # #

Web,V2,V4MN,A4,E3

jann0122

Source: Kevin Janni, (612) 625-3108

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 26, 2001

## **Don't fall for an 'advance-fee' loan pitch**

Advance-fee loan scams are one of the favorite ploys that fraudulent loan brokers use to misrepresent the availability of credit.

"Most lending firms are owned and managed by reputable professionals, but don't believe it if someone from a company you don't know tells you a loan is 'guaranteed,'" says Sharon Danes, family economist with the University of Minnesota Extension Service. Danes says the ploy is usually that you're "guaranteed" a loan or other type of credit, but you must pay before you apply.

How do you recognize an advance-fee loan scam?

--Advertisements that promise loans generally appear in the classified section of newspapers and magazines. They may also appear in radio advertisements, on local cable stations and in flyers circulated in neighborhoods and shopping centers.

--Often the ads feature "900" numbers that result in charges on your phone bill, or toll-free "800" numbers. But remember that advertising in recognized media outlets or on the Internet does not guarantee the legitimacy of the company behind the ad.

--To avoid detection and prosecution by postal authorities, these companies often use delivery systems other than the U.S. Postal Service, such as overnight or courier services.

<over>

--Legitimate lenders never "guarantee" that you will get a loan or credit card before you apply. It's against the law for them to do so. If you don't have the offer in hand—or confirmed in writing—and you are asked to pay, don't do it. It's fraud, and is against the law.

--Never give your credit card account number, bank account information or Social Security number over the telephone or Internet unless you are familiar with the company and know why the information is necessary.

For information on your rights or to check out a product or company, contact the Attorney General's Consumer Assistance Line at (651) 296-3353. For information about a specific business, call the Better Business Bureau of Minnesota at (800) 955-5100.

You can also check a number of Federal Trade Commission (FTC) publications by clicking on [www.ftc.gov](http://www.ftc.gov), and then on "Consumer Protection." You may also request free copies by calling the numbers below.

If you have been victimized by an advance-fee loan scam, file a complaint with the FTC by contacting the Consumer Response Center by phone: toll-free (877) FTC-HELP (382-4357); TDD: (202) 326-2502.

# # #

Web, V4, V7, V8, F3

danesh2201

Source: Sharon Danes (612) 625-9273

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



January 26, 2001

**Natural gas price, demand create fertilizer dilemma for corn producers**

As corn producers look ahead to spring planting and attempt to figure out a fertilizer program for this year's crop, they face several dilemmas. The high cost and high demand for natural gas is the biggest, says Bob Byrnes, Lyon County educator with the University of Minnesota Extension Service.

Nitrogen fertilizer is made from natural gas. "The high cost and high demand for natural gas has prompted manufacturers to shut down a sizable portion of their capacity for making nitrogen fertilizer," says Byrnes. "This has raised concerns about the availability of nitrogen fertilizer and potential spring shortages."

Byrnes says these concerns are complicated by the lower-than-normal amount of fertilizer applied last fall. Warm, dry soils after harvest delayed fall nitrogen application for the 2001 corn crop. Rain in late October and the rapid onset of cold weather and frozen soil in November resulted in producers failing to get as much as half of their intended fall nitrogen applied.

Faced with these dilemmas, producers have some alternatives to evaluate. Some which Byrnes cites are:

--Consider the entire corn budget and reduce those inputs that will have the least impact on corn yield. For example, fertilizer nitrogen gives more return than phosphorus (P) and potassium (K). On fields with medium to high P and K levels, consider cutting back on those nutrients.

--Be flexible with nitrogen forms. Most analysts agree that by spring, the nitrogen supply will be adequate. However, there may be shortages due to transportation problems or scarcity of a certain form. If there is a shortage, it is likely to be the liquid

&lt;over&gt;

form. Producers need to be open to pre-plant anhydrous ammonia or urea application or sidedressing with anhydrous early in the growing season.

--Look for an opportunity to reduce expenses for seed, weed control and other inputs. Higher nitrogen prices are expected to increase corn production costs five to six percent, according to Iowa State University. Reducing seed or herbicide expenses could hold down this increase. However, be careful not to sacrifice yield potential or acceptable weed control. U of M Extension publications on "Varietal Trials" and "Cultural and Chemical Weed Control in Field Crops" can provide guidance. These are available from county Extension offices in Minnesota.

--Consider livestock manure as a nitrogen source. Liquid hog manure from a pit can contain 35-40 pounds of nitrogen per 1,000 gallons. If the manure is incorporated or injected, approximately two-thirds of the nitrogen is available to the crop the first year. Test the manure before application so you know the exact nutrient content, and then adjust application rates accordingly.

--Consider switching some corn acres to soybeans. Byrnes says this is the last option to consider. Expect a ten percent yield reduction potential for second-year soybeans. Soil and residue-borne disease problems are likely and any soybean cyst nematode population will explode.

# # #

Web,V2,V4MN,A2,F4

byrn0125

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 26, 2001

Study shows:

### **Valley farmers use many strategies to cope with financial stress**

Postponing machinery purchases was the most frequent financial adjustment Red River Valley farmers used from 1994-98 to cope with the area's economic and production shocks.

Other adjustments included reducing family living and other nonfarm expenses, reducing operating expenses by hiring custom operators and investing in off-farm value-added ventures, according to a newly released University of Minnesota study by economists Glenn Pederson and William Lazarus.

The study is based on questionnaires mailed to 400 crop farmers in northwestern Minnesota and northeastern North Dakota in February 1999. Responses were received from 185 farmers, a 46 percent response rate. In addition, farmers in the study volunteered their farm business record information.

"We tried to identify strategies that Red River Valley farmers have used to improve farm survival by analyzing farm business records and farmer survey data," Pederson says. "The current financial stress of Red River Valley farmers is basically an income problem, but it has its roots in several aspects of the farm business, including production, marketing and financing."

Other study highlights:

--Off-farm employment opportunities are a significant factor in improving farm survival in the Red River Valley region.

--Over half of the farmers had re-negotiated their land rental agreement during 1994-98. In addition, 20 percent of the farmers had gone through a loan reamortization, a debt deferral or a general financial restructuring and about 20 percent had received an emergency loan at one time during the period.

<over>

--Many farmers said they typically sell grain without a contract (wait until after harvest to price their grain). About 49 percent of the 1998 grain crop was marketed without a contract.

-- Based on information from Farm Credit Service officers and farm management instructors, the study found the level of financial and production management skills was a factor in determining which Valley farmers experienced less variability in financial performance. The level of management skills was also a factor in determining which farmers experienced greater uncertainty about the sustainability of their farm businesses.

--Investing in value-added ventures off the farm can have significant risk-reducing effects on both the variability of farm profits and variability of cash flow in the combined farm-household unit.

--Reducing family living expenses was an additional strategy that farm households used to reduce some of the variability of financial performance.

Financial support was provided by the Minnesota Institute for Sustainable Agriculture (MISA) at the University of Minnesota. The study, "Farm Sustainability and Survival in Minnesota's Red River Valley," is available at <http://agecon.lib.umn.edu/mn/p00-05.pdf>. Pederson may be reached at (612) 625-7028, or [gpederso@apex.umn.edu](mailto:gpederso@apex.umn.edu).

# # #

Web, A2, V2, V4, Z1, P1 pederson123

Source: Glenn Pederson (612) 625-7028, [gpederso@apex.umn.edu](mailto:gpederso@apex.umn.edu).

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 26, 2001

## **Evaluate bulls for breeding soundness**

A beef cow herd owner can lose a lot of money from using an infertile bull. That's why a bull should have a breeding soundness exam before the start of the breeding season. Approximately 20 percent of breeding bulls have reduced fertility, according Jeremy Geske, Dakota County educator with the University of Minnesota Extension Service.

"Unfortunately, many infertile bulls are not identified until the end of the breeding season when a high percentage of cows fail to become pregnant," says Geske.

A breeding soundness exam provides a reasonably accurate estimate of a bull's breeding potential, notes Geske. "A veterinarian can evaluate both semen and the overall reproductive health of a bull," he points out. "This exam costs about \$40 per bull, which is a lot less costly than having a high percentage of open cows."

The first phase of a breeding soundness exam is a physical examination of the bull. The veterinarian checks the bull's body condition score, structural soundness, and eyes. Bulls should be in body condition score six or seven, and should be free from structural or eye defects that could impair breeding.

The veterinarian also palpates external reproductive organs to check for abnormalities, and measures scrotal circumference. The minimum recommended circumference is 30 centimeters for yearling bulls and 34 cm for older bulls.

The next step is a rectal palpation of the bull's internal reproductive tract to check for abnormalities. The veterinarian collects a semen sample and analyzes it for motility and defects.

"If the veterinarian doesn't find any problems, the bull is classified as a satisfactory breeder," says Geske. "If a young bull fails the exam, he may need a few more months to mature. In that case a re-test in 60 days is generally recommended. If an older bull fails the exam, you should probably cull him from the herd."

Geske says a breeding soundness exam is only valid for a short time. Therefore, each prospective herd sire should be tested within 60 days of the start of the breeding season. If the test is much earlier than that, the results may not be valid when the breeding season begins. A test closer to the breeding season doesn't leave much time to correct a problem and re-test if the bull fails the exam.

A successful breeding soundness exam doesn't guarantee that the cows will get bred, notes Geske. Most exams don't test for libido (mating desire) or infectious diseases.

"Beef herd infertility costs producer millions of dollars each year," says Geske. "Breeding soundness exams should be performed on all natural service sires each year by a qualified veterinarian."

# # #

Web,V2,V4MN,B1

geske

Source: Jeremy Geske, (651) 480-7704  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

January 30, 2001

<http://www.extension.umn.edu/News>

## **Hog producers sought for U of M toxoplasmosis study**

Hog producers with open-air facilities such as hoop structures, pasture systems or Cargill units are needed for a University of Minnesota study that has major significance for human health.

College of Veterinary Medicine researchers at the U of M are studying the "Toxoplasma gondii" parasite. Pregnant women, people with the HIV virus or those undergoing chemotherapy are particularly vulnerable to the parasite, says Wayne Martin, coordinator of the Alternative Swine Production Systems program at the U of M.

Toxoplasmosis in food animals has the potential for transmission to humans by consumption of inadequately cooked meat, and the subsequent risk of prenatal infections.

Toxoplasmosis may cause stillbirths, abortions, early infant mortality, blindness and crippling in children. About 30 to 40 percent of U.S. adults have the antibody to the parasite, but very few have symptoms since the immune system usually keeps the parasite from causing illness.

There are three primary ways of transmission to humans: Pregnant women when first infected can pass the infection to the baby; humans can accidentally swallow

<over>

material from soil or other surfaces contaminated with infected cat feces; or they can eat raw or partially cooked meat (pork, lamb or venison) containing tissue cysts.

Surveys have shown that non-clinical infections with "T. gondii" are widespread in U.S. pigs, with estimates of three percent of market pigs and 18 percent of breeding stock with positive serum samples. The parasitic infection persists in pigs despite good quality management procedures.

Among food animals, pigs are the major source of human infection. Hogs can become infected by eating feed contaminated by cats, or by eating other infected hosts such as dead rodents in hog pens.

Cats are the main host problem since all developmental stages of "T. gondii" occur in them, but not in other species. Cats can only spread toxoplasma in their feces for a few weeks after they are first infected (generally by eating an infected rodent or bird).

For more information or to participate in the study, contact Wayne Martin at (877) 258-4647, [marti067@umn.edu](mailto:marti067@umn.edu). Your participation is confidential.

# # #

Web, V2, V4MN, P1, S2 martin12501

Source: Wayne Martin (877) 258-4647, [marti067@umn.edu](mailto:marti067@umn.edu).

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



February 2, 2001

## **Sign-up underway for 2000 Crop Disaster Program**

Minnesota crop producers who lost part of last year's crop due to weather disasters may be able to recover part of their losses through the federal Crop Disaster Program. Sign-up for this program is now underway at county Farm Service Agency (FSA) offices. The program was passed by Congress and signed into law last fall.

"Crop yields were much more variable last year than in either 1999 or 1998 across much of Minnesota," says Kent Thiesse, Blue Earth County educator with the University of Minnesota Extension Service. "As a result, more farm operators may qualify for crop disaster assistance payments for the 2000 crop year than for previous years."

To qualify for disaster payments for 2000, producers will need to document a 35 percent yield loss on a crop, says Thiesse. This loss will be based on either their multi-peril crop insurance (MPCI) proven yield or the county average yield. Yields for crops not eligible for MPCI will be calculated using county established yields. Individual fields or farms covered by crop insurance may be eligible for a disaster payment even if the entire acreage of a crop does not have a 35 percent loss. Producers who did not carry some type of crop insurance for 2000 must demonstrate a 35 percent loss on their total acreage of a crop.

<over>

Crop disaster payment rates will be 65 percent of the MPCCI established prices for 2000 if a producer carried crop insurance and 60 percent if the crop was not insured. Thiesse says this should put payment rates for corn at \$1.235 per bushel with insurance and \$1.14 per bushel without insurance . The soybean rates should be \$3.354 per bushel with insurance and \$3.096 per bushel without insurance. Rates for wheat should be \$2.0475 with insurance and \$1.89 without insurance.

There is a payment limit of \$80,000 for total disaster payments to an individual producer on the 2000 crop, Thiesse points out. Producers with a total gross income over \$2.5 million are not eligible for disaster payments.

Producers may receive both a crop insurance indemnity payment and a crop disaster payment on the same bushels from their 2000 crop, according to Thiesse. Crop insurance indemnity payments and disaster payments are treated as separate entities, even though the same documentation is used to calculate both payments. Producers who receive a 2000 disaster payment must purchase some type of crop insurance coverage for 2001 and 2002.

"The good news is crop insurance premiums for 2001 will be lower, due to support from Congress last year," says Thiesse. "Purchasing crop insurance coverage for 2001 may be a good crop management strategy, even if it isn't required."

# # #

Web,V2,V4MN,A2MN,F4MN

thie0201

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

February 2, 2001

## **Overwatering houseplants causes root rot**

Root rot caused by moist soil may be the reason houseplants wilt and die after you water them, according to a "Yard & Garden Brief" from the University of Minnesota Extension Service.

Overwatering, poor soil drainage, inadequate light and crowding of plants encourage root rot. Houseplants most often infected include pothos, African violet, begonia, pepperomia, dieffenbachia and Chinese evergreen.

Prevention is the best defense against root rot. Once symptoms such as wilting and yellow leaves appear, it's often too late to save the plant. You may be able to salvage the plant by repotting in pasteurized soil and pruning decayed roots. Details are available through the Yard & Garden Line on the Internet at [www.extension.umn.edu/projects/yardandgarden](http://www.extension.umn.edu/projects/yardandgarden).

You can also call the Yard & Garden Line toll-free at (612) 624-4771 in the metro area and (888) 624-4771 in greater Minnesota. You can call to contact a Master Gardener in your county, talk to a Yard & Garden clinic expert, listen to a wide variety of tapes at INFO- U and to submit plant or insect samples. All services are free of charge, except for sending samples or talking to clinic experts.

# # #

Web, V4, V8, G1

houseplnts

Source: Beth Jarvis (612) 625-5232, [brjarvis@umn.edu](mailto:brjarvis@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

February 2, 2001

## **Swine farrowing management course available on Internet**

A self-study course for people working in the farrowing area of any pork production operation will soon be available on the Internet. The farrowing management course will be on the pork website at [www.nppc.org](http://www.nppc.org) for ten weeks, from March 1 to May 10. The registration deadline is Feb. 26.

Lee Johnston, University of Minnesota swine scientist stationed at the West Central Research and Outreach Center at Morris, is a co-author of the course curriculum. He co-wrote a section on sow management during lactation and was a project editor. The course is part of a checkoff-funded distance learning program implemented by the National Pork Producers Council.

The course covers the basics in lactating sow and piglet care and is written primarily for the layperson. Although designed for beginners, it's also a refresher course for people experienced in farrowing management. Over 80 percent of those previously taking the course say they acquired greater job skills and changed how they perform farrowing work.

The course has ten lessons and includes a self-graded quiz with each lesson. Lessons are designed to be completed in about one to one and one-half hours, and can be taken at the participant's own pace. Participants who complete all ten quizzes and an online evaluation form receive a certificate.

<over>

Each registered course participant will be assigned a username and password that will provide access to the lessons. The registration fee is \$35 for the first registrant in a group and \$25 for each additional registrant. Registration is due by Feb. 26, and is limited to 250 participants.

For more information, go to [www.nppc.org](http://www.nppc.org) on the Internet, then go to the "Especially for Producers" section and select the "Distance Learning" heading. The phone number for information is (515) 223-2771.

# # #

Web,V2,S2MN,X5

johnst0131

Source: Lee Johnston, (320) 589-1711

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 2, 2001

## **New publication helps you take more control over hog production**

A new 84-page guide to help you explore alternatives for hog production is now available through the University of Minnesota Extension Service.

Titled "Hogs Your Way," it was developed to assist farmers considering adding or changing a hog production system. It covers options for keeping your operation profitable and environmentally friendly, regardless of size. There are profiles on large- and small-scale hog farmers who are successful using Swedish deep-straw farrowing, pasture farrowing, hoop house finishing or confinement farrowing and finishing.

There's also a list of programs, organizations, and other sources of additional information. This publication was developed jointly by the Minnesota Institute for Sustainable Agriculture at the College of Agricultural, Food and Environmental Sciences, and the Minnesota Department of Agriculture's Energy and Sustainable Agriculture Program, in cooperation with the University of Minnesota Extension Service.

It's available for \$5 plus costs from the University of Minnesota Extension Service Distribution Center, (800) 876-8636, or [order@extension.umn.edu](mailto:order@extension.umn.edu). Ask for number 7641. Call the MISA office, (800) 909-6472, for more information.

# # #

Web, V2, V4, P1, S2

misa12401

Source: Beth Nelson (612) 625-8217

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MS  
9/10/01

February 6, 2001

## Think long term if you're considering shelled corn as heating fuel

Corn is cheap and natural gas prices for home heating went through the ceiling earlier this winter. And you may have read or heard media reports extolling the merits of burning shelled corn.

But consider the longer-range implications before you install a special stove to burn corn, advises Bill Wilcke, engineer with the University of Minnesota Extension Service. Wilcke calculates that fuel costs could be slightly lower for shelled corn, compared to natural gas, propane or fuel oil.

"But you need to add in the cost of the corn burner plus the corn fuel feeding and storage system," he says. Also consider the daily labor needed to clean the burner and keep the fuel hopper full.

Perhaps most important is that purchase of a corn-burning stove is a long-term investment. Wilcke says, "You need to consider what might happen to corn prices compared to fuel prices in the long run, and your guess is as good as mine."

Wilcke lists other considerations:

--Corn produces a hard, glassy slag that can coat the inside of the burner or produce chunks that need to be removed frequently—possibly daily.

--It's a challenge to build a burner and fuel-feeding system that works well with shelled corn. Wilcke says it would be hard to build a homemade burner or modify a

wood-burning stove to work well with corn. He says, "It might be best to buy a corn-burning stove from a company that has been around for several years and has a number of satisfied customers."

--Corn-burning stoves would be fairly easy to manage in rural areas, where there is easy access to corn and space to dispose of chunks. But in larger urban areas it could be a challenge to get convenient access to corn at normal grain prices and find a place to dispose of the chunks.

--If you end up installing a corn-burning stove, keep the corn fuel storage area clean and enclosed to minimize rodent problems. Also, clean the corn bin out during summer to minimize problems with stored grain insects, which could migrate into your household food supply.

More detailed information is available in a fact sheet from the Ministry of Agriculture, Food and Rural Affairs in Ontario, Canada at [www.gov.on.ca/OMAFRA/english/crops/facts/93-023.htm](http://www.gov.on.ca/OMAFRA/english/crops/facts/93-023.htm).

# # #

Web, V2, V4, F3, H4

wilcke2501

Source: Bill Wilcke (612) 625-8205, wilck001@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



February 6, 2001

## **Paying for grain marketing services is a good option for some producers**

Hiring a local elevator or a market advisory service to market grain may be a sound strategy for some crop producers. Paul Carr, Faribault County educator with the University of Minnesota Extension Service, says a variety of services and prices are available.

"Services range from making cash, futures and options suggestions to making full pricing decisions for a specified number of bushels," says Carr. "These services can help many producers achieve a better average selling price, but they may not fit everyone's needs."

In researching five different market advisory services, Carr found a cost range from \$180 to \$480 per year. Full pricing programs, where the marketing service actually prices the grain for a producer, can cost five to seven cents per bushel for corn and eight to ten cents per bushel for soybeans. This includes a fee if the service sells the grain in the top third of the annual price range. Some services have a minimum fee; others have no minimum but may charge slightly more per bushel.

The recommendations from a daily advisory service are often the same as those the same service carries out in a full-price program. Therefore, a producer who is committed to checking the markets a couple of times each day and following the advice of the service can save money by paying for just the advisory service. For example, \$500

<over>

would be more than enough to subscribe to an advisory service that could be used for all grain production. However, in a full pricing program it would only market 10,000 bushels of corn at five cents per bushel.

Some producers may have little interest in marketing grain, will not closely follow the recommendations of an advisory service or don't have time to focus on marketing, says Carr. For these people, a full pricing program may be an attractive option, especially if they haven't done well marketing on their own.

Some full pricing programs have no minimums, so a producer can enroll a small number of bushels. This makes it possible to compare the producer's marketing results with those of the advisory service without spending a lot of money.

"No one marketing program is right for everyone," notes Carr. "Producers should evaluate their own performance in relation to the average price over the past year and the top third of the price range. An average in the top third of the price range is an excellent goal. Selling everything at the high is not realistic, while aiming for a breakeven price will not be very profitable.

"If a producer can sell in the top third there is no reason to spend money for services that try to accomplish the same thing. Unfortunately, most people are not able to sell in the top third. Those who are not may want to try an advisory service."

# # #

Web,V2,A2,F4

carr0205

Source: Paul Carr, (507) 526-6240

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MSC  
9A24P

February 9, 2001

## On-line personality test can help choose the right dog

Taking an on-line personality profile can help you find a dog that fits your lifestyle. You can take the test by going to [www.petcare.umn.edu](http://www.petcare.umn.edu), which is maintained by the University of Minnesota College of Veterinary Medicine.

If you're a "happy loner" with average social skills who likes to do things by yourself, the interactive guide recommends solitary breeds to better fit your lifestyle. But if you're an outgoing "social butterfly," the guide recommends a dog that's friendly and sociable, and less apt to challenge or intimidate your friends.

The test isn't foolproof, but should help you understand how your likes and dislikes translate to a dog that's most compatible with you. Once you take the test, click to the canine listings to check the behavior and temperament of individual breeds.

If you really like a particular dog or breed, you can more easily forgive some of its shortcomings. But if you got the dog to please another family member, you won't be as tolerant.

Other cooperators on the site include the U of M Extension Service, the Minnesota State Legislature and the Minnesota Board of Animal Health.

# # #

Web, C3, V2, V4, V8

petcare2801

Source: U of M Veterinary Outreach Programs  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

February 9, 2001

**Study: Grain market advisory service average shows little price edge**

Market advisory services can provide valuable information to farmers in marketing their crops. Some services have outperformed the cash market by a wide margin over the long term, while others have not performed as well as the cash market. However, their average long-term performance doesn't have much advantage over the cash market, according to Faribault County educator Paul Carr of the University of Minnesota Extension Service.

Carr cites a University of Illinois project called AgMAS (Ag Market Advisory Services). The project has studied the performance of advisory services since the fall of 1994. Each year, project participants subscribe to about 25 advisory services, record the recommendations at the time they are given, and compare them to the average price offered, or market benchmark.

The cash prices used in the project are for central Illinois. However, the relationship between the average price offered and the advisory service prices should be reliable for producers in southern Minnesota, says Carr.

"During the 1995-1999 crop years, the average of all advisory services in the study was equal to the benchmark, or average price, in corn," says Carr. "The average for the advisory services on soybeans was 16 cents per bushel higher than the benchmark."

Carr says average individual advisory prices over the five-year period ranged from \$2.27 to \$2.76 for corn and \$5.99 to \$6.79 for soybeans. This compared with market benchmarks of \$2.43 and \$6.20, respectively, over this same period. Five of 18 services averaged better than the benchmark for corn and 14 of 18 services averaged better for soybeans.

"In summary, net advisory prices in the AgMAS study outperformed the average, or market, in soybeans, but not in corn," says Carr. "Few advisory services outperformed the market when you consider both net price and risk. Increased average prices usually resulted in increased risk, or greater variation in price from year to year. Market advisory services continue to provide valuable information to farmers, but in general it's hard to beat the market."

More information on the project is available by going to a University of Illinois website at <http://web.aces.uiuc.edu/farm.doc/> and clicking on AgMAS.

# # #

Web,V2,A2,F4

carr0208

Source: Paul Carr, (507) 526-6240

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

111  
4/2/01

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

February 9, 2001

## **Fertilizer is likely to be cheaper than alfalfa as a nitrogen source for corn**

Alfalfa is a crop that fixes nitrogen, and could probably provide enough nitrogen for this year's corn crop. However, it would be cheaper to buy nitrogen fertilizer in most cases, according to a soil scientist with the University of Minnesota Extension Service.

"This year's high nitrogen fertilizer prices are a concern," says George Rehm.

"The nitrogen credits for alfalfa preceding corn in the rotation have been documented in research, and farmers have been encouraged to use these credits. Trials in southeastern Minnesota in the late 1980s showed that a one-year-old stand of alfalfa produced enough nitrogen for a high-yielding corn crop. The variety of alfalfa planted in these studies had no effect on the amount of nitrogen produced."

However, the idea that it might be less expensive to grow alfalfa than to buy fertilizer requires a couple of assumptions, notes Rehm. One is that nitrogen fertilizer prices will remain high for more than one year. The other is that there is a market for the alfalfa produced in the year it is seeded.

"When thinking about growing alfalfa for its nitrogen value, it's important to remember that there are certain costs associated with seeding and establishing the crop," says Rehm. "Farm management accounting procedures suggest it's more

<over>

expensive to plant and harvest alfalfa for one year than to buy the nitrogen that would be produced in one year."

Another option is to plow under alfalfa this year that was established last year to get the nitrogen value. "Considering realistic expected yields and current prices for high-quality alfalfa, this would not be a wise economic decision," says Rehm.

# # #

Web,V2,A2,F4

rehm0207

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MCA  
9/2/01

February 9, 2001

## **Following soybeans with soybeans could bring several problems**

Switching acres from corn to another crop due to high nitrogen fertilizer costs may be workable in some parts of Minnesota. However, following soybeans with soybeans is not a good idea, says soil scientist George Rehm of the University of Minnesota Extension Service.

The large majority of crop acres in southern Minnesota are planted in a corn-soybean rotation, notes Rehm. Switching this year's corn acres to soybeans means that soybean would follow soybeans.

"This is not a good choice," says Rehm. "Two consecutive years of soybeans is an open invitation to accelerated problems with seedling diseases, which are difficult to control. In addition, soybean cyst nematode problems are already serious. Two years of continuous soybeans would only make them worse. The same is true for white mold."

Switching corn acres to another crop appears more feasible in north central and northwestern Minnesota, says Rehm. "Barley would be an excellent choice," he says. "The feed value of barley is 90 percent of the feed value of corn. Barley requires less moisture and needs less nitrogen fertilizer than corn for optimum yield. A recent record-keeping project with cooperating farmers in north central and northwestern Minnesota showed barley can be profitable in these areas."

<over>



A decision about switching crops requires careful evaluation of several factors, notes Rehm. "In some parts of Minnesota, a switch away from corn may be justified," he concludes. "However, a switch that would result in soybeans after soybeans is not recommended."

# # #

Web,V2,A2,F4

rehm0208

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

100  
9:21

February 9, 2001

## Get ready for spring by checking the Yard and Garden Line

You can get an early start on spring by checking the Yard and Garden Line of the University of Minnesota Extension Service.

Most of the services are free, according to Beth Jarvis, coordinator of the Yard and Garden Line. Jarvis and co-workers produce a regular on-line newsletter with the latest information. You can check it out on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu), then click on the Yard and Garden line.

You can also call the Yard and Garden Line toll-free at (612) 624-4771 in the metro area and (888) 624-4771 in greater Minnesota. Any question on gardens or landscape plants, insects, wildlife, plant diseases or soil testing is fair game.

You can call to contact a Master Gardener in your county, talk to a Yard and Garden clinic expert, listen to a wide variety of tapes at INFO- U and submit plant or insect samples. All services are free, except for sending samples or talking to clinic experts.

Future issues of the newsletter will include features by U of M Extension Service specialists on planting grapes, hiring a lawn care service and using pre-emergence herbicides to treat for crabgrass. There will also be an article on how University of Minnesota researchers are using cabbage to find a treatment for cancer.

The Yard and Garden line also has over 200 "briefs" (articles) on-line. They cover topics from a to z, from azaleas to zoysia grass.

Starting April 1, you can e-mail your questions in. Meanwhile, you can sign up to receive an e-mail reminder when the next issue of the Yard and Garden Line News is posted to the web. Just e-mail Jarvis at [brjarvis@umn.edu](mailto:brjarvis@umn.edu) and she'll add you to the notification reminder list.

# # #

Web, G1, V4MN

jarvis2801

Source: Beth Jarvis (612) 625-5232, [brjarvis@umn.edu](mailto:brjarvis@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

NCC  
9AD7P

February 13, 2001

## Sheep workshop at University of Minnesota will be March 3

Sheep feeding, lambing, health and management will be topics at a Spring Sheep Workshop March 3 on the University of Minnesota's St. Paul campus. The workshop is designed for experienced producers, as well as young people interested in sheep.

The workshop will be in the Animal Science-Veterinary Medicine auditorium, Room 125-135. After a half-hour for registration, the program will run from 10 a.m. to 2:30 p.m. The workshop will feature a producer panel discussing use of current facilities to feed lambs more effectively.

Other topics, presented in three sets of two concurrent sessions, will be:

- How to get more for your wool clip;
- Spring pasture preparation to improve productivity;
- Sheep composting basics;
- The potential for fall lambing in Minnesota;
- Balancing a less expensive ration;
- Options for marketing lambs;
- (For kids)...Sheep Quality Assurance—what is it?

Presenters for these sessions will include U of M sheep scientist Bill Head; U of M forage agronomist Paul Peterson; Extension educators Shirley Doering, Maribel

Fernandez, Jeremy Geske, Bernadette O'Rourke, and Dave Resch; and producer Robert Padula.

U of M veterinarians Cindy Wolf and Scott Haskell will close with a presentation on sheep health, including lamb diseases and parasite control. They will also have an "ask the vet" session.

The workshop registration fee through Feb. 23 is \$20 per person and \$5 for each additional person representing the same flock. The fee after Feb. 23 and at the door is \$25 per person and \$7 for each additional person representing the same flock. For a registration brochure or further information, call the University of Minnesota Extension Service, McLeod County at (800) 587-0770 or (320) 587-0770.

Workshop sponsors include the University of Minnesota Extension Service and College of Veterinary Medicine and the Minnesota Lamb and Wool Producers.

# # #

Web,V2MN,V4MN,S1

orourk212

Source: Bernie O'Rourke, (320) 587-0770

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

9:107p

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

February 13, 2001

## **This year's soybean seed quality is low; take steps to reduce risk**

Seed testing laboratories across the upper Midwest are reporting that seed for planting this year's crop is low in quality. Seed germination and stress and vigor evaluations have been disappointing, according to Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

"Standard germinations this year are 85 percent, compared with the normal standard of 90 percent," says Byrnes. "Some seed dealers are selling seed with less than 85 percent germination, so checking the tag is crucial."

Byrnes says the seed quality problems developed because of last year's growing and harvesting weather. Warm, dry conditions occurred during the soybean reproductive stage in July and August, and above-normal temperatures occurred in late August and early September. This resulted in rapid seed maturation that was sometimes incomplete as seed passed from green to brown without ripening properly. The seed coats that developed were fragile.

The dry September with low humidity caused the soybean seed to dry rapidly, down to as low as 8-9 percent moisture before harvest was completed. These dry beans were highly susceptible to mechanical damage. This damage included cracking of the fragile seed coat, bruising or breaking of the embryo (germ), and splitting of the seed. This mechanical damage is the major cause of the lower germination of this year's seed.

Byrnes suggests the following steps producers can take to reduce risk in planting this year's soybeans:

--Select high-yielding varieties that are defensive (resistant or tolerant) to diseases and stress. Where possible, select these varieties with the best possible seed

<over>

quality. Even though the average seed quality is low, there is considerable variability in seed quality. Generally, seed that's higher in moisture has higher vigor and germination scores.

--In addition to the germination test, consider an accelerated aging test. The accelerated aging test will indicate the potential for "weak" seed, which may not be reflected in the standard germination test. The accelerated aging test can help predict the seed's potential to handle weather-related stresses such as cool, damp conditions after planting.

--Handle seed with care. The seed is drier and more fragile than usual, and any impact will cause greater splitting of seed or damage to the seed coat. Minimize the drop distance when emptying bagged beans. If using bulk seed, move seed from the bulk containers to the seed hopper gently. In general, bulk transfer systems that use belts for moving seed are the least damaging, followed by brush augers, plastic cup augers, steel augers and vacuum systems. With all systems, running full and at a slower speed will reduce the potential for seed damage.

--Reduce environmental stress at planting. Plant when soil temperatures are near 60 degrees. This will help plants emerge from the soil as quickly as possible before running out of energy. It will also reduce the amount of time the germinating seed is exposed to disease infections, herbicide damage, insect feeding, crusting and other stresses. Depending on the spring weather, this will likely mean planting soybeans a bit later than has been common the past few years.

# # #

Web,V2MN,V4MN,F4

byrn0212

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 19, 2001

**“Grazing Systems Planning Guide” available from U of M**

Doing a better job of managing pastures is one way to make livestock production more profitable. Managing the animals as well as the forage plants is a key to success, according to Kevin Blanchet, educator with the University of Minnesota Extension Service.

“A well-managed rotational grazing system can reduce or eliminate the need for supplemental feed, nitrogen fertilizer, and weed and brush killers,” says Blanchet.

“Improved pasture condition and higher forage yields can also lead to more animal production per acre.”

Blanchet recommends designing a grazing plan as the first step in improving pasture management. A typical plan would include the goals of the farming operation, a summary of sensitive areas, a livestock summary with forage requirements, and plans for fencing, livestock watering, forages and grazing system management.

“Continuous grazing of a pasture results in both overgrazing and undergrazing of forages,” says Blanchet. “A rotational system provides a ‘rest’ opportunity for forage plants so they can regrow more quickly. Rotational grazing also provides an opportunity to move livestock based on forage growth, promote better pasture forage utilization and extend the grazing season.”

<over>



Blanchet is one of three authors of a new University of Minnesota Extension publication entitled "Grazing Systems Planning Guide" (BU-07606). The 45-page publication has a section on making an inventory of grazing goals, land and soils, livestock, forages, water sources and fences. Another section covers grazing plan development, including design and layout of paddocks, fences and water systems and heavy use area planning. A section on pasture management covers forages and livestock, soil fertility, brush and weed control and sacrificial paddocks.

The publication concludes with a section on pasture record-keeping and monitoring, a grazing plan example, a list of references, and a set of appendices providing a variety of grazing-related information.

The "Grazing Systems Planning Guide," BU-07606, is on the Internet at <http://www.extension.umn.edu/distribution/livestocksystems//components/DI7606.pdf>. Printed copies are available for purchase through county offices of the University of Minnesota Extension Service, or by calling (612) 624-4900 or (800) 876-8636.

# # #

Web,V2,A2,B1,D1,F4,H6,P1,S1

blanch215

Source: Kevin Blanchet, (651) 480-7739

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 19, 2001

<http://www.extension.umn.edu/News>

## **We all depend on Minnesota's rivers**

There are over 92,000 miles of rivers in Minnesota. All those miles translate to driving coast-to-coast across the U.S. and back about 15 times.

We use river water for drinking, cooking, taking showers and electricity.

Minnesotans also use river water for dozens of other things, including fishing, boating, irrigation and waste disposal.

A 70-page publication titled, "Minnesota Rivers—a Primer," is a basic, non-technical reference for anyone interested in Minnesota's river systems. There are chapters on various uses of Minnesota river water, who controls the state's rivers, monitoring activities and the agencies responsible for river management.

You can order the publication from the University of Minnesota Water Resources Center by calling (612) 624- 9282, e-mail [thoma032@umn.edu](mailto:thoma032@umn.edu). The cost is \$5.

You can also check other U of M Extension Service water quality programs on the Internet at <http://www.extension.umn.edu/water>.

# # #

Web, V2, V4MN, V5, V8, C4,

luikn21501

Source: Water Resources Center (612) 624- 9282, e-mail [thoma032@umn.edu](mailto:thoma032@umn.edu).

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

February 19, 2001

## **Don't let debt collectors harass you**

Using your credit card or taking out a loan creates a debt that you promise to repay. But if you end up dealing with collection agencies, knowing your legal rights can help you cope with this sometimes stressful and expensive experience.

Both state and federal laws set tough limits on those who collect debts for others, according to the article "Dealing with Debt Collectors" from the University of Minnesota Extension Service and Legal Aid of Minneapolis.

For example, if you have a dispute with a collection agency over the amount of the debt or whether you have a debt at all, you can require the agency to provide proof of the debt. Just send a written request for the information and the collection agency must stop collection efforts until the debt is verified.

For more information, contact the Minnesota Attorney General's Office at (800) 657-3787, or (651) 296-3353 in the Twin Cities area.

The article on debt collection is available on INFO-U, a free public service of the U of M Extension Service. Phone (612) 624-2200 in the Metro area, or (800) 525-8636 in Greater Minnesota. Follow voice instructions to make your selections.

You may also access INFO-U via the Internet at [www.extension.umn.edu](http://www.extension.umn.edu).

# # #

Web, V4MN, V8, F3

debtcol21301

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

February 19, 2001

<http://www.extension.umn.edu/News>

### **Swine nursery open house at U of M West Central ROC will be March 3**

There will be an open house at the new swine nursery at the West Central Research and Outreach Center at Morris on March 3 from 12 noon to 4 p.m.

The 1998 Minnesota Legislature appropriated funds to the University of Minnesota for building new swine research facilities at the West Central and Southern Research and Outreach Centers. At the WCROC, a 1,000-head swine research facility has been constructed for production research on pigs from weaning to 50 pounds body weight.

The open house is for pork producers, allied industry personnel and anyone interested in the nursery phase of pork production. State Senator Charlie Berg, State Representative Torrey Westrom and University of Minnesota officials will make brief comments at the open house at 1:30 p.m. WCROC faculty and staff will be on hand to give tours and answer questions. A light lunch will be served.

To reach the WCROC at Morris, turn off Highway 59 east onto State Highway 329. Go east about a mile and follow signs to the nursery site. For more information on the open house, call (320) 589-1711.

# # #

Web,V2MN,A4,S2MN,Z7

jhnst216

Source: Lee Johnston, (320) 589-1711

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 20, 2001

(First of two articles)

## **Changes in hog production affect well-being of families, communities**

Modern agricultural science that conceived and promoted industrial-like hog production has now "sprung back on us to create new problems," says a University of Minnesota rural sociologist.

"Vertical integration was supposed to reduce risks for farmers by providing stable markets," says Wynne Wright, rural sociologist at the U of M West Central Research and Outreach Center at Morris. "For processing firms, it was supposed to stabilize raw material inputs. It was intended to make the commodity system more certain and predictable."

But Wright says vertical integration "has the opposite effect, when as a consequence of industrialized agriculture, we have endangered delicate ecological systems and diminished the social and human capital vital to the sustainability of people and rural communities."

Hog farming in the U.S. peaked in 1940 with 3.768 million operations. In 1940, Minnesota had 134,690 hog farms. By 1997, these farms had declined to 7,512, a drop of 94 percent. Overall, the number of U.S. farms selling hogs declined 43 percent just between 1992 and 1997, according to the 1997 U.S. Census of Agriculture.

"The decline in swine production and changes in operational structure appear to be having a profound impact on the well-being of many farmers, their families and the rural communities where they reside," Wright says.

She interviewed 50 Minnesota farm women involved in hog production, asking questions relating to women's labor on hog farms, decision making, civic participation and self-identity.

<over>

About 60 percent of the farms represented were single-family operations while 16 percent were family partnerships and 20 percent were family corporations. The farms averaged 1,187 acres, much larger than typical Minnesota farms. Of the 50 women, 49 were married with ages ranging from 29 to 61.

Almost all of the women upheld the traditional family farm as an essential social and economic unit. Wright says, "Many believed the farming lifestyle to be unique among other occupational groups, and therefore deserving of special interests."

Some 65 percent believed hog farming to be important to the economy of their communities, but many weren't optimistic about the future.

"The most alarming finding in this study was the degree of cultural depression and pessimism reported by the women," Wright says. Almost half of the women said they were unable to buy the things they need for their family.

For more information on the study, contact Wright at (320) 589-1711, or [wrightw@mrs.umn.edu](mailto:wrightw@mrs.umn.edu).

# # #

(Next week: Many farm women pessimistic and fatalistic)

Web, A4, V2, V4, V8, S2

wright2601

Source: Wynne Wright (320) 589-1711, [wrightw@mrs.umn.edu](mailto:wrightw@mrs.umn.edu).

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 26, 2001

## **Minnesota's looming energy shortages will be focus of St. Cloud event**

Could Minnesota soon be facing the kind of electrical power shortages and brownouts that have been plaguing California? Increasing Minnesota's energy self-sufficiency in the face of predicted energy shortfalls will be the focus of a gathering in St. Cloud March 29-31.

The event is billed as a statewide citizens' action congress and technical seminar, and will take place at the St. Cloud Civic Center. It's designed for citizens, utility officials, local government representatives, legislators and media representatives.

The University of Minnesota's Regional Sustainable Development Partnerships are planning the congress in cooperation with several other public and private organizations. The Regional Partnerships, led by citizen boards of directors, have been established around the state by the Minnesota Legislature as a means for communities to work more effectively with their land grant university.

"The congress will provide a forum to move toward consensus on distributed electric energy generation in Minnesota," says Emily Green, Regional Partnerships state coordinator. "Distributed generation is a strategy to supply dependable and affordable electric energy. Distributed generations has been defined as electricity generation that's intentionally located near those who will use all or a major portion of the electricity."

Green says the congress is intended to sharpen public debate on energy policy issues. These include electric energy supply and demand, retail pricing, conservation, alternative fuels (in particular, wind energy), power plant expansion, transmission and energy economics.

<over>

The half-day technical seminar on March 31 will focus on specific distributed generation options and technology adoption questions. It's designed for representatives of local units of government and local utilities.

"The St. Cloud meetings are intended to draw together the best thinking available--embracing a range of opinions--on Minnesota's electrical energy future," says Green.

In late 1999, a project to expand distributed electrical energy generation in Minnesota was launched through the Regional Partnerships. Its aim is to optimize community energy self-reliance. In addition, the U of M Institute of Technology is preparing five community case studies representing differing power needs and options for local generation. A report on the case studies will be completed by next December.

To register for the congress and/or technical seminar, call (800) 318-8636 or go to [www.regionalpartnerships.umn.edu](http://www.regionalpartnerships.umn.edu) on the Internet. The registration fee is \$60, or \$35 for individual days. For more information on the congress agenda or the Regional Partnerships, call (800) 909-6472.

Groups sponsoring the congress in cooperation with the Regional Partnerships include the University of Minnesota's Institute of Technology, Hubert H. Humphrey Institute of Public Affairs, College of Natural Resources, and College of Agricultural, Food, and Environmental Sciences; the Minnesota Department of Commerce; the Association of Minnesota Counties; Great River Energy; the Minnesota Project; and Minnesotans for an Energy-Efficient Economy.

# # #

Web,V2MN,V4MN,V5MN,V6MN,V8MN,V9MN,A4,E1,E3,F2,R1,78

green220

Source: Emily Green, (612) 625-8759

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



11/11/01  
9:12:17

February 27, 2001

## **Food information demand means tracking grain from field to consumer**

Tracking grain from the field to the consumer's table is a growing trend in the food industry today. Demand for production information about food is driving this trend, says agronomist Denise McWilliams of the University of Minnesota Extension Service. The tracking process involves identity preservation (IP) of grain beginning at the farm level.

"Roughly 10-12 percent of all grains produced in the United States are IP products," says McWilliams. "However, within the next three years, 20 percent may be identity preserved." Internet-based technology that allows the tracking of grain through its growth and use cycles is making IP more workable, she adds.

At least four forces are creating the demand for production information that's propelling identity preservation, according to McWilliams. They are:

--Consumers want more information about their food because of food quality and food safety issues.

--Industry consolidation has increased demand for information on production costs, output prices and risk management.

--Developments in both biotechnology and IP grains and oilseeds have led to contracting output traits (such as soybeans that yield oil with less saturated fat) that meet specific production protocols.

--Environmental concerns have driven the need for soil nutrient management plans, as well as stricter chemical application practices. Both the plans and practices require documentation that relates back to farm management requirements for information. This means more tracking and management to document grain from seed to final use.

Some grain and oilseed buyers are turning to IP management and tracking systems incorporating third-party verification, says McWilliams. Some current third-party IP services include: Vantage Point Network, formed by Deere and Co., Farmland Industries and Growmark, Inc.; IdentityPreserved.com, a joint contracting service through DuPont and Pioneer Hi-Bred International, Inc.; and CropVerifeye.com, an Internet-based service that specializes in auditing crop and food production processes.

# # #

Web,V2,V4MN,A2,F4

mcwl0222

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 27, 2001

(Second of two articles)

**Many farm women pessimistic and fatalistic, study shows**

A University of Minnesota study of 50 women involved in hog production found many of them pessimistic and "culturally depressed." About half of the women said they were unable to buy the things they need for their family.

"This isn't new for farm families, but the decline in their level of satisfaction with the farming lifestyle is a new trend," says Wynne Wright, rural sociologist at the U of M West Central Research and Outreach Center at Morris who conducted the study.

Wright says about 65 percent of the women were less or much less satisfied with the income made from farming than they were five years earlier.

"It's important to keep in mind that the women we interviewed considered their families survivors of the massive drop in hog prices that swept the Midwest in 1998," Wright says. "We would expect their economic portfolios to be fiscally stronger."

"But income wasn't the only source of frustration," Wright says. "Over one-fourth of the women interviewed reported changes in their communities over the past five years that made them less desirable places to live. However, they were not interested in leaving their communities and 80 percent believed their lifestyle to be better or much better when compared to people living in town."

The fatalism expressed by many women in the study was based on the economic inevitability of market forces that many of them felt powerless to influence. Wright says, "Much of this fatalism comes from the lack of certainty about the market and the political climate. But it also comes from changes in the neighborliness of rural communities.

<over>

"Many hog farmers are finding not only the marketplace unagreeable, but neighbors and others who are impacted by confined swine feeding operations now have something to say about how hogs should be raised.

"This challenge to 'the right to farm as usual' is new and a source of community distress for many farm families. Women are often on the frontline to experience this tension since they are more typically responsible for managing the social and community life for the household."

Almost 40 percent of the women in the study were so disillusioned with the future of farming they were skeptical about passing the farm onto their children.

One woman said she would not recommend farming to her children "because the future will be crazy. The reasons why I liked it (farming) are going—everything is high tech and more involved." Another said, "...the stress and the mental health issues that people have to put up with—it's like selling your soul almost sometimes. It sounds drastic, but it's such an unfair exchange that I could not wish that on my kids."

For more information on the study, contact Wright at (320) 589-1711, or [wrightw@mrs.umn.edu](mailto:wrightw@mrs.umn.edu).

# # #

Web, A4, V2, V4, V8, S2      wright21201

Source: Wynne Wright (320) 589-1711, [wrightw@mrs.umn.edu](mailto:wrightw@mrs.umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

AL  
9/20/01

February 27, 2001

## **Direct marketing food requires analysis, planning**

A traditional concern of farmers is that the "middleman" gets most of the money consumers spend at the grocery store. Direct marketing food products to consumers can be a way to "get the share of the middleman" and increase producer income. But a producer who wants to get into direct marketing needs to do a great deal of analysis and planning.

"The food supply chain is composed of many links between the farmer and the consumer," says Wright County educator Maribel Fernandez of the University of Minnesota Extension Service. "If you want to capture the value of a particular link, you must be willing to perform the function. Analyze your skills, time and money resources, personality and determination before committing to it."

Fernandez recommends writing down your purpose for getting into direct marketing and what you want to sell. Then write down all possible steps you can think of between the raw product from the farm and the final product on the customer's table. These may include transportation, processing, packaging, labeling, storing advertising, selling and customer service. Show what you have written to others such as your spouse and children and let them add other steps you might have missed.

"Direct marketing involves a promise to deliver something of value to the customer without excuses," says Fernandez. "Direct marketing customers expect extra

value not only in what they buy, but also in how and when. As a direct marketer you are promising your customers satisfaction in all areas.

"Blaming other people whom you contracted with for part of the processing is not an acceptable excuse for problems. You have to be on top of the whole process to make sure each step is done according to your quality standards."

Numerous resources are available to provide information on direct marketing. One is "The Direct Marketing Resource Notebook" by the Nebraska Sustainable Agriculture Society. The book includes case studies of various direct marketing enterprises, Midwest state and federal marketing contacts and an extensive list of resources. For information on ordering the book, call (404) 254-2289.

Another book Fernandez recommends is "Collaborative Marketing, A Roadmap and Resource Guide for Farmers," published by the Minnesota Institute for Sustainable Agriculture at (612) 625-8235. A book offering tips about legal issues related to direct-marketing farm products is Neil Hamilton's "The Legal Guide for Direct Farm Marketing." It's available for purchase from the Agricultural Law Center at Drake University in Des Moines, Iowa at (515) 271-2947.

For a more comprehensive list of printed resources on direct marketing, contact Fernandez at [maribelf@umn.edu](mailto:maribelf@umn.edu) or (763) 682-7394.

# # #

Web,V2,V4MN,A2,A4,F2,P1

fern0214

Source: Maribel Fernandez, (763) 682-7394  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

February 27, 2001

## **Direct marketing a food product involves at least 7 basic work roles**

Farmers thinking about direct marketing a food product can consider several basic work roles that are part of getting a food from the farm to the consumer. Doing the necessary tasks for all these roles is likely to require teamwork, says Wright County educator Maribel Fernandez of the University of Minnesota Extension Service.

Fernandez cites seven basic work roles for persons doing direct marketing, as identified by consultant Pete Reese. They are:

--Vision and planning: Identify opportunities, draft a purpose statement, write clear long- and short-term goals, create a financial plan, recruit team members, lead an effort to come up with a brand. Also, help negotiate deals with suppliers and customers, build relationships with others involved in a similar enterprise, monitor and evaluate results and make adjustments or implement changes.

--Organization and administration: Assess strengths of each contributing person, create a task list, set up an office, keep financial records, help negotiate with suppliers and customers.

--Production and management: Turn goals into a realistic production flowchart, write resource requirements for major steps (people, machinery, facilities, supplies), recruit workers, make sure the work gets done, keep production records, look for ways to improve the product and make the process more efficient.

--Sales management and customer relations: Determine how to best spend sales energy and money, keep sales records, meet with large customers personally, supervise other people helping with sales and advertising, help negotiate major deals.

--Advertising and public relations: Identify how best to reach customers (flyers, signs, etc.), calculate a budget to support sales, implement development of a label with

<over>

the brand and that meets legal requirements. Also, write sales materials and a telephone message, talk with local newspaper and newsletter editors to get articles written and published, keep a file of other people's sales ideas.

--Financial management: Support a financial planning process; select a financial institution and be the contact person; select a bookkeeper or accountant; manage the checkbook, savings account and investments; track and pay bills; be in charge of taxes, payroll and insurance; look for opportunities to save money.

--Regulatory compliance: Research labor, environmental, transportation, personnel and product safety and liability issues; build relationships with regulatory agencies; recruit legal or consulting help when needed; maintain all certification records, correspondence, and documentation.

"Most likely you won't be able or want to take care of all of these areas on your own," says Fernandez. "One person may take care of one or two areas, but in the long run it is better to allow people to do the work that fits them best."

A list of printed resources on direct marketing is available by contacting Fernandez at [maribelf@umn.edu](mailto:maribelf@umn.edu) or (763) 682-7394.

# # #

Web,V2,V4MN,A2,A4,F2,P1

fern0219

Source: Maribel Fernandez, (763) 682-7394

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



March 2, 2001

(First in a series on small-scale hog production)

## **Niche marketing can help smaller hog producers, U of M researcher says**

Natural and organic hog production can help smaller, niche producers increase their revenues, according to a new University of Minnesota study.

"Demand will drive the development of organic and natural pork markets," says W. Parker Wheatley, an applied economist who completed the study for the U of M Swine Center.

"Consumer concerns about food safety, animal welfare and environmental management form the foundation of various niches that will support this demand," Wheatley says. "Our evidence suggests strong growth in consumer demand for natural pork products will support premiums for natural pork products over conventional pork products."

"For the smaller producer, natural production also introduces more flexibility into their production," he says. "With lower capital requirements, natural and organic production make it easier for smaller producers to enter and exit the markets. This allows them to remain in the market many years, despite volatile market prices."

Both the revenue and cost sides of the equation support pork producers considering entering natural markets. "However, there are institutional barriers between the retail and farm level of this market that will impede the rapid development of this opportunity for producers," Wheatley says.

There are numerous local channels for natural pork products and a few national channels, such as Niman Ranch in California and Organic Valley in Wisconsin. But information regarding marketing is limited, Wheatley says.

"Farmers already in these markets have gained access to marketing channels," Wheatley says. "But the limited marketing information available presents a short-term adjustment cost to farmers considering natural pork as a niche product."

"And at the retail level, firms must feel they will have a steady and consistent supply of product if they are to provide broader support for natural pork products," he says. "But evidence suggests retailers should profit from selling natural pork. If producers, processors, wholesalers and retailers can collaborate to eliminate concerns about steady and consistent supplies, it's likely that much of the market access problem can be overcome."

The Minnesota Pork Producers' Association funded the project. To gather information, Wheatley reviewed a number of studies done throughout the U.S. and talked to pork producers and processors.

For more information or a copy of the study, contact Wheatley at (612) 669-0331, [whea0025@umn.edu](mailto:whea0025@umn.edu).

# # #

(Next: There's a market for natural and organic pork)

Web, V2, V4, P1, S2

whtly22001

Source: W. Parker Wheatley (612) 669-0331, [whea0025@umn.edu](mailto:whea0025@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 2, 2001

## **Minnesota-Wisconsin Dairy Policy Conference will be April 3 in St. Paul**

Dairy price programs, Federal Milk Marketing Order reform, investment in dairy processing and trade policy will be topics at this year's Minnesota-Wisconsin Dairy Policy Conference in St. Paul. The event will be April 3 at the Ramada Inn at 1870 Old Hudson Road in St. Paul. The University of Minnesota and the University of Wisconsin are sponsors.

The conference will address agricultural programs and policy issues affecting the dairy industry. It's designed for dairy farmers, dairy co-op directors, dairy marketing managers and personnel, government and farm organization officials and other interested persons. The program will be from 8:30 a.m. to 4 p.m. following a half-hour for registration.

This year's Dairy Policy Conference is being held in conjunction with the Dairy Directors Leadership Conference, which will be April 2 at the same location.

The Dairy Policy Conference will have morning sessions on the outlook for dairy price programs and reform issues for Federal Milk Marketing Orders. Topics and speakers will be:

--Background for the 2002 farm bill, J. B. Penn, Sparks Companies, Inc., McLean, Va.;

--Federal dairy program directions under the new administration and new Congress, Brad Pfaff, senior policy advisor to Wisconsin Congressman Ron Kind;

--Using supply control to raise milk prices, Paul Christ, agricultural policy consultant, Afton, Minn.;

--Federal order changes since 1996, Rich McKee, Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C.;

<over>

--What has and hasn't been fixed by federal order reform, Robert Yonkers, International Dairy Foods Association, Washington, D.C.;

--Competitive impacts of pooling provisions of Federal Milk Marketing Orders, Jim Hahn, Land O' Lakes, Inc., Arden Hills, Minn.

The afternoon sessions will focus on investment in dairy processing in the upper Midwest and trade issues. Topics and speakers will be:

--A comparison of the potential for investment in new milk processing facilities in the Midwest and West, Mark Davis, Davigo Foods International, Le Sueur, Minn.;

--The outlook for modernization of the cooperative milk processing sector in the upper Midwest, Dave Fuhrmann, Foremost Farms USA, Baraboo, Wis.;

--Financing modernization and new cooperative milk processing plants in the upper Midwest, Gary Sloan, CoBank, Wayzata, Minn.;

--Trade and trade policy issues for the U.S. dairy sector, Jonathon Coleman, U.S. International Trade Commission, Washington, D.C.

--Implication of GMOs for the U.S. dairy industry, Brian Lowry, Monsanto, St. Louis, Mo.

The conference registration deadline is March 27 or until there are 200 registrants. The fee for the Dairy Policy Conference is \$90 per person, and if combined with the Dairy Directors Leadership Conference, the combined fee is \$150 per person. The registration fee does not include overnight lodging. Registration for both conferences is available on-line at [www.wfcmac.org](http://www.wfcmac.org), or by calling (608) 258-4400.

# # #

Web,V2,V4MN,V5MN,A2,D1,F6

hamm0301

Source: Jerry Hammond, (612) 625-2749

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 2, 2001

<http://www.extension.umn.edu/News>

## **Minnesota soybean producers receiving oilseed payments of \$5-7 per acre**

Minnesota soybean producers are receiving federal government Oilseed Program payments for their 2000 crop. The payments are part of the 2000 Farm Emergency Assistance Program Congress passed last year.

"Producers are receiving 14.25 cents per bushel on eligible soybean production," says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service. "The payments are based on 1997, 1998 or 1999 acreage and production. Most southern Minnesota producers are receiving \$5-7 per acre, depending on their verified yield. Minnesota will receive a total of about \$51 million in oilseed payments that will be shared by 38,571 farmers. Nationally, payments will total about \$500 million and will be shared by approximately 590,000 U.S. soybean farmers."

This is the second year in a row the federal government is making the Oilseed Program payments. Last year the payment rate was 14.09 cents per bushel for the 1999 soybean crop.

Thiesse says the purpose of the Oilseed Program is to help farmers affected by extremely low commodity prices for soybeans and other oilseed crops. Whether there will be another oilseed program for this year's crop has yet to be determined.

<over>

“With current low commodity prices and continued low profitability in production agriculture, many observers feel it is highly likely Congress will pass another emergency farm legislation package in 2001,” says Thiesse. “If that occurs, the package would probably include another oilseed payment.”

Many producers also received loan deficiency payments (LDPs) from the federal government of a dollar per bushel or more for their 2000 soybeans. The LDPs helped offset low cash soybean prices that have been below \$4.30 per bushel most of the time since the 2000 harvest. Without the federal payments, most soybean producers would have lost money on every bushel they produced in 2000, according to Thiesse.

The U.S. Department of Agriculture has frozen the national soybean loan rate at \$5.26 per bushel in both 2000 and 2001. Without this action, the 2001 loan rate would have dropped to \$4.92 per bushel. “In light of current low soybean prices, this would have potentially reduced 2001 income for Minnesota soybean producers by approximately \$90 million, due to reduced LDP eligibility,” says Thiesse.

Producers with questions on the Oilseed Program should contact their county Farm Service Agency office.

# # #

Web,V2MN,V4MN,A2,F4

thie0226

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

17  
4-11  
6

March 6, 2001

## **Tax reform in Minnesota is complicated by competing goals**

The current tax reform effort in Minnesota is consistent with the three basic principles of fairness, simplicity and promoting prosperity. But conflict among these principles complicates things, says Laura Kalambokidis, an applied economist at the University of Minnesota.

“For example, provisions that enhance fairness, such as Minnesota’s Working Family Credit for low-income families, also introduce complexity,” she wrote in the “Minnesota Agricultural Economist,” a publication of the U of M Extension Service.

“In addition, the tax system is often used to pursue important social and economic goals such as home ownership and education. The resulting special deductions, credits and rates can conflict with all three of the basic tax-reform principles.

“In any tax-reform effort, policymakers and citizens must consult their own values to balance these competing goals,” she says. “The notion of fairness is highly subjective, and there’s no consensus among economists on how it should be defined.”

Tax reform is being promoted in Minnesota for several reasons, including:

--A widespread perception that parts of the state tax system have grown too complex. Taxpayers complain that some Minnesota taxes—especially the property tax—are very hard to understand and should be simplified.

<over>

--A concern that Minnesota's tax system includes too many special benefits for particular taxpayers. The state's Department of Revenue has identified 292 special benefits.

--Erosion of the sales tax base. Over the last few decades, families have significantly increased the share of their total expenditures for services and reduced the share they spend on physical goods. Minnesota's sales tax exempts most services, including financial, legal and home-improvement services.

"This has meant a steady wearing away of the sales-tax base," Kalambokidis says. "Consequently, Minnesota's general sales-tax rate is one of the highest in the country and is tied to one of the narrowest bases."

There are some questions families should ask about any tax reform, she says. First, a taxpayer may want to decide whether a proposal would be sound policy by asking whether it's consistent with the basic tax-reform principles of fairness, simplicity and economic growth.

Secondly, you can predict how the change will affect the family by identifying what household characteristics determine your tax burden. Examples include income level, area of the state you live in and whether you're planning large purchases.

You can find other examples from the complete article on the Internet at <http://www.extension.umn.edu/newsletters/ageconomist/ag237.html>.

# # #

Web, F2, F3, V4MN, V5MN

kalam3201

Source: Laura Kalambokidis (612) 625-1995, lkalambo@apex.umn.edu  
Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu



ANN  
2001

<http://www.extension.umn.edu/News>

March 6, 2001

## **U of M Shade Tree Short Course will feature 'Tree House of Horrors'**

"Minnesota's Tree House of Horrors" will be a featured exhibit at this year's Shade Tree Short Course sponsored by the University of Minnesota Extension Service. The course will take place March 20 and 21 at Bethel College in St. Paul.

The course is designed for everyone involved in urban forest management and tree care. It also designed for those not normally considered "tree people," including engineers, architects, city planners and city officials.

Minnesota's Tree House of Horrors is a display that shows scores of tree problems ranging from insect pests to infectious diseases to stress disorders. It's a self-tutorial, at-your-own-pace laboratory with information on each tree problem and how to correct it.

The course will include general sessions on trees and the law, the politics of plant protectants, oak forest health and the effects of urban sprawl, and urban soil properties and how they affect trees.

There will also be numerous concurrent breakout sessions divided into three tracks. An introductory track will cover such topics as tree pest identification, tree disease diagnosis, pruning and tree planting. A technical track will cover applying sports conditioning and therapy to tree workers, buckthorn control, soil compaction,

critter control and several other topics. A community forestry track will cover developing city ordinances, community planting projects, evaluating urban forest health and several other topics.

A course brochure and on-line registration are at [www.conferences.umn.edu/mn/hort/shadtree/](http://www.conferences.umn.edu/mn/hort/shadtree/) on the Internet. A brochure and registration information are also available by phone at (800) 318-8638.

# # #

Web,V4MN,V5MN,V7,F8,H7,T2

shade0228

Source: Tracey Benson, (612) 624-3708

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

APR  
2001

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

March 6, 2001

## **'Not knowing' is major farm stress; publication offers new perspective**

Stress on farm families and couples today can come from many sources....low prices, bad weather, financial problems, crop pests. But the most difficult farming stress to deal with is "not knowing," says a University of Minnesota family social scientist.

"It's not knowing what is happening or what might happen, not knowing what you are doing wrong, what you can do to fix the situation, not knowing if you can prevent total loss," says Pauline Boss. She calls such uncertainties "ambiguous loss."

"The ambiguity, more than the event of loss, can immobilize and depress—and increase marital tension," says Boss.

She notes that most family farmers are not on their own anymore. They're not in charge of their own destinies and not able to succeed even with hard work. They are intertwined with an urban sprawl and a global economy so pervasive that their devotion to the land no longer determines success or failure.

"The stress for family farmers today is complicated by a shadowy and ambiguous threat toward a way of life, a loss of a lifestyle connected to the land," says Boss. "When that lifestyle is threatened or lost, the lack of clarity about the future of the family farm brings worry, confusion, conflict and even shame. These feelings all lead to stress that can reach dangerously high levels and can result in too much drinking, verbal and physical abuse of loved ones, and even suicide."

<over>

But Boss believes farm families and couples can find hope in the midst of ambiguous loss. She believes that families who look at their situation in a new way can find new opportunities and options and feel more in control again. She is the author of a new University of Minnesota Extension Service publication that offers insight into how to accomplish this. It's a 16-page discussion guide entitled "Losing a Way of Life? Ambiguous Loss in Farm Families."

The publication presents a new way of viewing uncertainty. It's designed to help farm families get a better handle on stress, change, making decisions and family life. It contains exercises and coping tips for family members of all ages. A section written with the help of an agricultural economist gives realistic ideas on business options for family farms.

The publication is designed not only for farm families, but also for lenders, financial advisors, clergy, counselors and educators working with farm families and couples. It's a follow-up of Boss's book, "Ambiguous Loss," published by Harvard University Press, out in paperback in 2000.

The discussion guide "Losing a Way of Life? Ambiguous Loss in Farm Families" is available for purchase from county offices of the University of Minnesota Extension Service. Ask for item BU-07614. It's also available for purchase by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu) or by credit card at (612) 624-4900 or (800) 876-8636.

# # #

Web,V2,V4,V5MN,A4,F1,F2

boss0221

Source: Pauline Boss, (612) 625-0291

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

115  
2/20/01

March 6, 2001

(Second in a series)

## **There's a market for natural and organic pork, U of M economist says**

The potential markets are there for smaller-scale hog producers considering niche marketing of natural and organic pork, according to a University of Minnesota study.

"Between 40 and 80 percent of all consumers is the potential market for organic and natural pork products, with perceived safety being the drawing factor," says W. Parker Wheatley, an applied economist who did the study for the U of M Swine Center.

Wheatley cited other research showing 39 percent of consumers were highly concerned about food safety and were very likely to pay significant premiums for products they perceived to be safer. Another 37 percent were highly concerned about food safety and nutrition issues, as well as being price conscious. The remaining 24 percent had few concerns about food safety and nutrition.

Wheatley says another study showed 11 percent of consumers had concerns about chemicals in meats, 52 percent had concerns about food safety, with only 19 percent of consumers being primarily concerned about prices.

Another study showed how consumers rank various attributes, specifically related to the market for natural and organic pork products. In order of importance, the ranking was: Not treated with chemical preservatives, no growth hormones, no antibiotics, and animals fed organic feeds.

<over>

Other studies found that many consumers value pork production that minimizes environmental impacts, especially surface and groundwater pollution. For example, a 1999 study found 71 percent of consumers were somewhat or very interested in buying environmentally enhanced foods, and a 1993 study found the niche for environmental meats is 28 percent of consumers.

“Based on these studies, there’s a general concern and willingness by consumers to buy products with certain attributes,” Wheatley says. “Much of the evidence shows consumers will pay premiums at the retail level.

“In addition, there is direct evidence from farmers and marketing firms showing significant premiums can be obtained at the farm level as well.”

Check-off dollars from The Minnesota Pork Producers’ Association funded the project. To gather information, Wheatley reviewed a number of studies done throughout the U.S. and talked to pork producers and processors.

For more information or a copy of the study, contact Wheatley at (612) 669-0331, [whea0025@umn.edu](mailto:whea0025@umn.edu).

# # #

(Next: Can producers count on price premiums?)

Web, V2, V4, P1, S2

whtly22101

Source: W. Parker Wheatley (612) 669-0331, [whea0025@umn.edu](mailto:whea0025@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 9, 2001

**Report says organic research lacking nationally, but Minnesota shines**

A new report chides the nation's land grant research institutions for "largely failing organic farmers," but commends Minnesota for having a "pioneering organic research program."

According to the Organic Farming Research Foundation (OFRF) report, there's "an overwhelming lack of investment in organic systems research by our public agricultural institutions. Of the almost 900,000 available research acres in the land grant system, only .02 percent, or 151 acres, is devoted to certified organic research."

The report says only Minnesota plus Iowa, Ohio, North Carolina and West Virginia have certified organic research acreage. Seven other states have research land in transition to organic certification.

The report lauded the Organic Conversion Project at the University of Minnesota's Southwest Research and Outreach Center in Lamberton, where over 40 farmers are converting part or all of their farms to organic production. The project includes a hotline for organic farmers to call for production information from mentor organic growers.

In addition to the Organic Conversion Project, researcher Elizabeth Dyck works with the Elwell Agroecology Farm, a certified organic farm located at the Lamberton center. Dyck may be contacted at (507) 752-7372, [dyck@ssu.southwest.msus.edu](mailto:dyck@ssu.southwest.msus.edu).

In another project, U of M Southern Research and Outreach Center researcher Gregg Johnson has done on-farm work characterizing a Canada thistle patch on an organic farm using Geographic Information Systems (GIS) and Global Positioning Systems (GPS). The work is ultimately designed to come up with effective control strategies matched to weed biotype traits. Johnson may be reached at (507) 835-3620.

"Minnesota has many notable resources for organic producers," the national report says. "In 1999, Minnesota passed the only legislation in the country that reimburses organic farmers' certification costs. The Minnesota Department of Agriculture's Energy and Sustainable Agriculture Program publishes a 'Greenbook' (resources guide) every year." For more information, call (651) 296-7673.

The Minnesota Institute for Sustainable Agriculture (MISA), housed at the University of Minnesota, has funded some organic research that is focused on policy and economics, the report said. You can contact MISA at (800) 909-MISA, [misamail@umn.edu](mailto:misamail@umn.edu).

The national report is available at <http://www.ofrf.org>.

# # #

Web, V2, V4, A4, P1

wilckeorg

Sources: Bill Wilcke (612) 625-8205, Elizabeth Dyck (507) 752-7372

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



March 9, 2001

### **This year's low soybean seed quality adds to importance of testing**

Testing bin-run soybean seed is especially important this year because of widespread seed quality problems. "Much of the poor seed quality is due to stresses from last season," says agronomist Denise Williams of the University of Minnesota Extension Service. "Even some seed company people are complaining about quality concerns."

With soybeans, one of the key strategies for establishing a good stand is to use high-quality seed, notes McWilliams. "Try to favor those lots that are above 90 percent germination," she says. "Plant seed with the best yield potential and 95 percent-plus germination on your best land. If you are forced to use seed with a lower germination percentage, be sure to increase the seeding rate. That way your quantity of pure live seed will still produce a viable plant population."

Williams says seed supplies are tight this year, especially in the upper Red River Valley. With the demand for seed, poorer quality seed may make it onto the market.

"Besides the general germination percentage, you might also consider evaluating questionable seed with an accelerated aging or stress test about a month before planting," says McWilliams. "Such a test will really show how much of the seed is likely to survive more adverse conditions."

McWilliams says one stress test, the cold test, has often been used in corn but can also be used on soybean seed. The seed is subjected to a period of cold temperatures and then allowed to germinate under warm conditions. The cold test is used to estimate seed germination and seedling growth under the cold, wet field conditions common in Minnesota.

# # #

Web,V2,F4

mcwl0306

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 9, 2001

## **Splitting nitrogen application for corn on non-sandy soils has no benefit**

There is no yield benefit from splitting the nitrogen fertilizer application for corn on non-sandy soils. But splitting the nitrogen application is a good idea for irrigated corn on sandy soils, says soil scientist George Rehm of the University of Minnesota Extension Service.

Corn producers are concerned about the projected high costs of nitrogen fertilizer for the coming growing season, and there is speculation about possible nitrogen shortages. But splitting the application does not change the overall recommended rate, says Rehm. In addition, research indicates that splitting the application of a given amount of nitrogen on non-sandy soils will not increase corn yields .

"In Iowa, corn yields did not increase when an optimum nitrogen rate of 175 pounds per acre was split and applied in any of several combinations," says Rehm. "In similar studies at the U of M West Central Research and Outreach Center at Morris, corn yields were equal when single and split applications were used."

For corn grown under irrigation on sandy soils, it's a different story. Splitting the nitrogen application is recommended in this situation. "There are several options for splitting the application for irrigated corn," says Rehm. "The split does not allow for

reduced rates, but does reduce the potential for leaching of nitrate-nitrogen to the groundwater."

Sidedressing nitrogen is a reasonable alternative for corn producers who were not able to apply fertilizer last fall, Rehm concludes.

# # #

Web,V2,F4

rehm0307

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 9, 2001

## **Follow 'ten commandments' to boost corn yields**

Not every corn producer can set a state or national yield record. But a personal best is worth shooting for, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

McWilliams cites the success of Francis Childs, an Iowa farmer who grew a record-setting 394 bushels per acre in 1999. The techniques of Childs and other growers who produced high yields were reviewed by "Farm Journal" magazine. The magazine listed "ten commandments" for obtaining top corn yields, and McWilliams says any producer can put them into practice. They are:

1. Know your soil (soil test).
2. Prepare your soil. Eliminate compaction and check conditions for accurate planting depth.
3. Know your hybrids. Base your choices on proven results.
4. Plant slowly, so that your planting is accurate, uniform and evenly spaced.
5. Increase population. Use test plots on your own farm to figure the best populations. Also consider soil moisture and moisture-holding capacity.
6. Spoon-feed fertilizer. Consider starter or pop-up as well as sidedressing in areas where this works.

7. Prepare and calibrate your planter to optimize your plant population and planter operation.
8. Plant uniform-sized seed to match sizes and shapes to your meter's capability.
9. Scout your fields.
10. Pay attention to what you can control, such as how well the crop goes into the ground. Patience and resolve pay off.

# # #

Web,V2,F4

mcwl0309

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 13, 2001

## **Meeting will address environmental management systems in agriculture**

Could environmental management systems (EMSs) be used in agriculture to provide environmental results that are superior to regulations? Should they be part of a new Farm Bill?

That's the topic of a March 26 meeting in Bloomington, Minn., sponsored by the Multi-State Working Group (MSWG). MSWG brings together government, business and academic groups to explore innovative approaches to environmental protection.

The session is from 8:15 a.m. to noon at The Hilton at the Airport, 3800 E. 80<sup>th</sup> Street in Bloomington. Anyone interested in agriculture and agricultural stewardship is invited.

Admission is free.

Automakers are now requiring their suppliers to have EMSs, and the Environmental Protection Agency is promoting EMSs as part of a regulatory flexibility program. At the meeting, you can hear a background briefing, and learn how EMSs are being used in Australian agriculture and in California's wine industry.

For more information, check the MSWG web site at <http://www.mswg.org>. Or, call Al Innes of the Minnesota Pollution Control Agency at (651) 296-7330.

# # #

Web, V2, V4MN, A2 envmngmt21201

Sources: Al Innes (651) 296-7330, U of M Water Resources Center (612) 625-2282

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

March 13, 2001

(First in a background series on the prospective 2002 Farm Bill)

## **Exports are important, but they can't solve the current farm problem**

By Willard W. Cochran, professor emeritus, University of Minnesota

Although farm exports are critically important, we can't snap our fingers and get them to quickly expand when the American farm economy runs into price and income troubles.

For our farm sector to remain healthy and viable, it must--year after year--export 30 percent or more of its total production. That was the case in 1996, a good year for the American farm economy. But in 1999, a poor year for farmers, farm exports accounted for only 26 percent of the total value of farm production.

These numbers underscore two important points: First, we see the importance of exporting 30 percent or more of our total agricultural production. Second, even a relatively small decline in exports raises havoc with the farm economy.

But if a small decrease in farm exports causes farm income problems, couldn't we solve the problem by a small increase in exports? Before we get carried away with how easy this should be, we need to discuss how global markets operate.

Consumer demands are determined by four variables: The size of the human population, the income distribution of the human population, the tastes and preferences of that human population, and the rules and laws of each nation governing the handling and distribution of finished products. These consumer demands are converted into global demands for farm commodities by traders, processors and speculators.

On the global supply side, the market for a given commodity such as corn is a function of many variables. They include past and present commodity price



movements, past research and technological developments, past investment decisions, past monetary and credit policies, national government programs subsidizing the production and export of a given commodity, and last but not least, past growing conditions and the weather.

So what turns up as the global supply of a given commodity at a point in time is largely unpredictable. Let's say global demand for a commodity, as determined by factors we discussed above, increases relative to global supply. Then the world price for that commodity rises, as do prices to U.S. farmers. But when the global demand decreases relative to global supply, the world price falls, as do U.S. prices.

We can see that the export market is not some infinitely expanding space, like the universe, into which some federal agency can simply shoot surplus American farm commodities. It has boundaries, determined by global demand and supply.

Over time, population growth and rising per capita incomes have been the principal sources of expansion in global demand for American-produced farm commodities. But when population growth levels off, as it has in Europe and Japan, and countries of the East Asian Rim experience an economic recession, there is nothing American policymakers can do. They can't cause instant population growth or revive per capita incomes in economies experiencing an economic downturn.

Fantasizing about solving the price and income problems of American farmers through instant export expansion is like fantasizing over winning the Power-ball lottery. The chances of success are about the same.

# # #

(Willard Cochrane was the chief agricultural economist to President John F. Kennedy and is a prolific writer in the area of agricultural policy. To comment on this series, contact Richard Levins, economist with the University of Minnesota Extension Service, at 612-625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu), or William Easter at 612-625-7728).

Web, A2, V2, V4, F4

cochrn3701

Source: Willard Cochrane (651) 439-0029

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 13, 2001

<http://www.extension.umn.edu/News>

## **Hybridization of soybeans becoming more feasible**

Hybrid soybeans may be on the way at the farm level. A discovery in China has made soybean hybridization more feasible, says Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

Hybrid corn has accounted for most U.S. corn production for decades. "The development of hybrid corn resulted in big gains in crop uniformity, vigor and yield," says Byrnes. "Corn is a natural crop for hybridization, since the pollen that fertilizes the corn kernels is carried by wind from the pollen-producing tassel to the receptive silks on the developing ear. Soybeans, on the other hand, have both the male and female parts in the same flower, which makes hybridization challenging."

Byrnes says the benefits of hybridization are not as dramatic in soybeans as in corn, so there has been less economic incentive to commercialize hybrid soybeans. "Unlike non-hybrid corn, soybeans are already uniform and hybrid vigor is not as strong as in corn," he points out. "Still, there are potential benefits to hybridization of soybeans. There is potential for higher yields. Disease resistance and other desirable traits could be incorporated into the hybridized plant, shortening the time required to produce seed with the desired traits."

<over>

Traditional soybean breeding involves a process that takes five to ten years and requires multiple generations to produce seeds with similar genetics. Hybridization could shorten the process, says Byrnes.

Since the soybean flower contains both the male and female parts, the hybridization challenge is to introduce male pollen to the female part of the flower. "To accomplish this, a completely male-sterile female parent is necessary," says Byrnes. "In recent years, the Chinese have discovered cytoplasmic male sterility that provides a better way of getting a male-sterile flower. This discovery makes hybridization more feasible. Bees can be used to move the pollen from the pollen-producing parent to the male-sterile female parent."

# # #

Web,V2,F4

byrn0312

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 13, 2001

(Third in series on small-scale hog production)

**Producer premiums for organic and natural pork should last**

Organic food sales have been increasing dramatically, but how long can the market continue to grow?

With organic and natural pork production, modest producer premiums are likely to continue over the long run, according to a study from the University of Minnesota Swine Center. The reason: "Increases in supplies (of organic pork) are unlikely to keep pace with expected increases in demand that cause higher prices," says U of M applied economist W. Parker Wheatley.

Wheatley recently completed the study by reviewing a number of previous studies done throughout the U.S. and talking to pork producers. He says demand is driven by the perceived safety of organic and natural products.

"Demand is also driven by the perception that organic products embody attributes related to improved environmental quality," Wheatley says. "As such, consumers view the premiums paid to organic producers as implicit rewards for reducing the pollution associated with production. An additional source of increased demand is the consumer perception that natural and organic production provides for improved animal welfare."

Actual premiums received by producers are hard to document, since no studies have been done. But Wheatley's discussions with two natural and organic pork producers and one marketing firm give you an idea.

"In fall of 2000, one processor/marketing firm paid \$6 per hundred over the mean market price for Iowa/Southern Minnesota with a minimum price of \$40 per hundred," he says. "The same firm will pay \$65 per hundred live weight for organic pork."

<over>

"Another national cooperative was paying an average of about \$50 per hundred live weight for organic pork. In its promotional material, the cooperative indicated a pricing policy based on production costs and maintenance of a fair price, which is independent of commodity pricing.

"One small-scale producer also does direct marketing and receives \$50 per hundred live weight. This same producer also handles all the processing and marketing in a separately held company.

"These premiums don't seem substantial given that market prices per hundred pounds live weight ranged between \$40 and \$50 in 2000," he says. "However, the premiums existed even when prices were lower in 1998 and 1999, and provided some stability to these producers' incomes."

Check-off dollars from the Minnesota Pork Producers' Association funded the project. For more information or a copy of the study, contact Wheatley at (612) 669-0331, whea0025@umn.edu.

# # #

(Next: No right or wrong methods of producing pork)

Web, V2, V4, P1, S2

whtly3601

Source: W. Parker Wheatley (612) 669-0331, whea0025@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

AC  
17

March 20, 2001

<http://www.extension.umn.edu/News>

(Fourth and last in a series on small-scale hog production)

## **Producing organic pork not a question of right or wrong methods**

Producing natural and organic pork is not a question of right or wrong in terms of different methods. It's simply a matter of meeting consumer demand, says W. Parker Wheatley, a University of Minnesota applied economist.

"If some consumers desire pasture-raised pork because they believe that pigs are 'happier' living in the fields, there's room for smaller niche producers to meet and profit from that demand," says Wheatley, who recently completed a study for the U of M Swine Center.

"The production of such niche products must be driven by what consumers want and will pay for," Wheatley says. "This leaves room in the market for an array of different niche producers, such as natural and organic pork producers, as well as traditional producers."

"Natural and organic production may be viable alternatives to more capital-intensive production for many small-scale producers," he says. Wheatley recently completed the study by reviewing a number of previous studies done throughout the U.S. and by contacting pork producers and processors.

"The evidence suggests a good niche market for small and independent producers, but it would be worthwhile to conduct more primary research," Wheatley

<over>

says. "Much of the evidence we have regarding retail premiums was based on survey research.

"While surveys provide some insights into the willingness of consumers to buy natural pork products, this research does not provide actual incentives and could provide biased results. More reliable information could be obtained through actual market data obtained from retailers and wholesalers."

However, consumer concerns about food safety, animal welfare and environmental management likely mean continued demand for these niche products. Wheatley says, "Our evidence suggests strong growth in consumer demand for natural pork products will support premiums for natural pork products over conventional pork products."

For the smaller producer, natural production also introduces more flexibility. Wheatley says, "With lower capital requirements, natural and organic production make it easier for smaller producers to enter and exit the markets. This allows them to remain in the market many years, despite volatile market prices."

Check-off dollars from the Minnesota Pork Producers' Association funded the project. For more information or a copy of the study, contact Wheatley at (612) 669-0331, whea0025@umn.edu.

# # #

Web, V2, V4, P1, S2

whtly3701

Source: W. Parker Wheatley (612) 669-0331, whea0025@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

March 20, 2001

## **Management necessary to counter yield-robbing soybean cyst nematode**

High infestations of soybean cyst nematode (SCN) can dramatically reduce soybean yields. Combining SCN with other soybean plant stresses such as moisture stress and disease exaggerates yield loss potential. Left unmanaged, SCN populations can increase rapidly, says Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

"An effective SCN management strategy needs to include detecting the nematode, determining its population level and selecting soybean varieties correctly," says Byrnes.

Two ways to detect the presence of the nematode are to check plants during the growing season and to review yields after the growing season. "In-season field observations will detect the plant symptoms of uneven growth and stunted or chlorotic plants," says Byrnes. "Examining the roots will show the cyst, and a soil sample will confirm the infestation. Post-season yield review can indicate a pattern of fields or portions of fields that have declining yields or yields that fall short of the season's expectations."

Byrnes says declining yields and visual symptoms indicate that SCN populations have reached damaging levels. Testing a soil sample can confirm the population level.



Soil samples can come from any field at any time from early spring to late fall. For management decisions, the best approach is to take soil samples in the fall, presumably from corn fields, before growing soybeans the following year.

When a producer confirms that SCN is present and has determined a population level, soybean variety selection is critical. "The strategy of some producers is to continue to plant SCN-susceptible varieties until the SCN population becomes high enough to seriously impact yield," says Byrnes. "The variety may have the yield potential, disease defensiveness and herbicide tolerance the producer wants. Eventually, however, SCN levels will grow to the point that they will be difficult to manage even with a SCN-resistant variety."

The strategy Byrnes recommends is to plant a SCN-resistant variety where the presence of the pest has been confirmed. A University of Minnesota publication, "Soybean Variety Trials: 2001," has an evaluation of SCN-resistant varieties. It reports yields from susceptible, moderately resistant and resistant varieties planted in infested and non-infested fields. The publication is available from county offices of the University of Minnesota Extension Service. It's also on the Internet at <http://www.maes.umn.edu/maespubs/vartrial/pdfpubs/2001soy.pdf>.

# # #

Web,V2,A2,F4

byrn0319

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

10  
97-11

March 20, 2001

## **Bulk systems can speed seed handling, grain shipping**

Using bulk handling systems to get seed to the planter can speed up the planting process. Bulk seed handling has both advantages and drawbacks for farmers, says an engineer with the University of Minnesota Extension Service.

Bill Wilcke cites these advantages for bulk seed handling systems:

--There is less chance of back injury from handling bags.

--The person handling the seed may have less exposure to the chemicals used to treat the seed.

--Seed cost per acre may be lower.

--Seed handling and filling of planters is faster.

--There is less waste of materials and less of a disposal problem for reusable bulk bags compared with smaller disposable seed bags.

Wilcke cites the following disadvantages of bulk seed bags compared with smaller bags:

--It's necessary to buy seed in larger quantities.

--There is less flexibility in purchasing and handling seed.

--Special equipment is necessary to handle bulk bags. Trying to adapt equipment that wasn't designed for bulk bags can result in equipment damage and possible injuries.

--Since some types of grain conveyors can cause seed damage, use of the wrong types of conveyors to transfer seed from bulk containers to planters can damage seed and reduce germination.

Denise McWilliams, agronomist for the U of M and North Dakota State University, says bulk handling systems are becoming more common for shipping grain. "Elevators and even some individual farmers are building their own bulk loading facilities to reduce transportation and shipping costs," she says. "Bulk loading can also reduce safety concerns for businesses and make compliance with federal OSHA regulations easier. And it can make the loading of railroad cars faster and more efficient."

# # #

Web,V2,A2,F4

bulk0315

Sources: Bill Wilcke, (612) 625-8205; Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 23, 2001

<http://www.extension.umn.edu/News>

## **Farm machines on Minnesota roads are regulated by state law**

Spring planting season means many tractors and other farm machines on Minnesota's rural roads. Minnesota law regulates farm machines on the state's roads as "implements of husbandry," according to Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

"State law defines an implement of husbandry as any vehicle designed or adapted exclusively for agricultural, horticultural or livestock operations or for lifting and carrying an implement of husbandry," says Byrnes. "This includes all farm machinery including tractors, other self-propelled machines and any towed vehicle that meets the definition of an implement of husbandry."

The laws are designed to ensure safety on the roads for farm machines as well as other vehicles. Byrnes reviews some basic information in Minnesota's laws regarding implements of husbandry.

--A driver's license is not required to operate an implement of husbandry. License plates and vehicle registration are not required for implements of husbandry. However, a truck towing an implement must have a license plate. A farm trailer with a gross weight of 10,000 pounds or more pulled by a car, pickup or truck must have a registration plate.

<over>

--An implement of husbandry driven or towed faster than 25 miles per hour must be equipped with brakes if it exceeds 6,000 pounds gross weight. All vehicles manufactured or sold after Jan. 1, 1994 with a manufacturer's recommended capacity of more than 24,000 pounds must be equipped with brakes. Surge brakes capable of holding, stopping and controlling a vehicle are acceptable.

--Implements of husbandry that exceed 6,000 pounds gross weight and are not equipped with brakes may not be driven or towed more than 25 miles per hour.

--Implements of husbandry must stay to the right of the center line except when passing or if preceded by a registered motor vehicle equipped with operating front and rear warning lights.

--Towed implements of husbandry must be equipped with safety chains except when hitched to the towing vehicle with a fifth wheel and kingpin assembly, or a hitch pin and retainer that prevent accidental unhitching.

--All implements of husbandry designed for operating at speeds of 25 miles per hour or less must be marked with a slow-moving vehicle emblem. The emblem must be visible 600 feet from the rear of the vehicle. Towed implements that obscure the towing vehicle's SMV must have an emblem of their own. Chains, ropes or cables used for towing farm implements must be marked with a flag.

--Amber flashing lights are required at all times on self-propelled implements manufactured after Jan. 1, 1970. Other lights are required from sunset to sunrise, during rain or anytime visibility is impaired. Self-propelled implements must have two amber flashing hazard lights visible to the front and rear, one white light headlight visible to

the front, one rear taillight visible to the rear, and two red reflectors visible to the rear.

Lights on towed vehicles during non-daylight or poor visibility periods need to include one white or amber light visible from the front to mark the extreme left projection of the implement, one amber light visible from the rear to mark the extreme left projection of the implement, and two red reflex reflectors at the extreme left and right ends of the implement.

--With some exceptions, implements of husbandry are exempt from size limitations if driven or towed at 25 miles per hour or less, not operated on an interstate highway, and operated within 75 miles of land owned, leased or operated by a farmer.

--Farm implements are exempt from weight limitations. However, the weight of any wheel of an implement must not exceed 600 pounds per inch of the tire width. For example, a single tire 10 inches wide can carry 6,000 pounds, or 24,000 pounds total for a four-wheeled implement.

For more information on laws affecting implements of husbandry, contact the Minnesota Highway Patrol or go to a public library and ask for Minnesota Statute 169.

# # #

Web, V2MN, V4MN, A4, E4

byrn0322

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 23, 2001

## **Foot-and-mouth disease spreads easily from animal to animal**

Foot-and-mouth disease can be devastating to the animal agriculture economy. That's why the disease is getting so much attention from animal health officials around the world, according to veterinarian Scott Haskell of the University of Minnesota Extension Service.

Foot-and-mouth disease is a highly contagious disease that affects cattle, sheep, goats, pigs, buffalo, deer, and some zoo animals such as elephants and giraffes. The disease causes fever and blisters on the muzzle, teats and feet of infected animals, and can cause death in young animals. Clinical signs are more severe in dairy cattle and swine than in sheep and goats.

The United States, Canada, Australia, Japan, Indonesia and Korea are free of foot-and-mouth disease. However, the disease is present in many countries in Europe, Asia, Africa and South America.

"The disease is caused by a virus," says Haskell. "The virus is easily killed in the environment. However, it will survive for a considerable time in animal proteins such as meat and milk."

Animals pick up the disease through direct contact with the virus. Infection usually begins and builds up in the respiratory tract. Infected animals breathe out large volumes of the virus in aerosol form, and milk, feces, semen, saliva and urine contain the virus. In aerosol form the disease can spread a considerable distance through air and wind, especially when humidity is above 60 percent.

Haskell says milk tankers can spread the disease from farm to farm, and feeding infected meat meal is a common source of contamination. Pigs eating infected feed can

<over>

easily spread the disease to cattle. However, mechanical spread of the disease by birds is considered unlikely.

"Cattle that have recovered can carry and shed the virus for up to two and one-half years and sheep for up to nine months," says Haskell. "The disease can survive in dry fecal material for 14 days in summer, in slurry for six months in winter, in urine for 39 days and on the soil for up to 28 days."

When an animal is newly infected, there is an incubation period of 2-14 days before symptoms show up. After the incubation period, a fever of 106 degrees develops. The animal goes off feed and salivates, and blisters form on the mouth, teats and feet. An ELISA lab test is used for diagnosis by veterinarians. Diagnosis through symptoms is complicated because the disease looks like some other diseases.

"Control of the disease involves limitation on animal movement, quarantines and tracing back to the source of an outbreak," says Haskell. "Persons going overseas should not visit farms or livestock processing plants or carry any animal or plant products home. It's also a good idea to wear disposable shoes to leave behind and not wear back to this country."

Internet web sites with additional information on foot-and-mouth disease are at <http://www.aphis.usda.gov/oa/fmd> and <http://www.maff.gov.uk/animalh/diseases/fmd/default.htm>.

# # #

Web,V2,V4MN,V6,A4,B1,D1,S1,S2

hask0322

Source: Scott Haskell, (612) 625-0280

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



March 29, 2001

**Livestock producers hope 'mad cow disease' will not reach U.S.**

The disease known as "mad cow disease" has not shown up in the United States, and U.S. livestock producers are hoping it never will. Precautionary measures to keep the disease out of the country are well worth the effort, says veterinarian Scott Haskell of the University of Minnesota Extension Service.

The scientific name for mad cow disease is bovine spongiform encephalopathy, or BSE. When a spongiform encephalopathy affects cattle it's called BSE, and when it affects sheep it's called scrapie, or mad itch disease. When it affects elk it's called chronic wasting disease. Although the U.S. has remained free of BSE, scrapie and chronic wasting disease are currently found in the U.S.

Haskell says spongiform encephalopathy can also occur in wild cats such as the puma and cheetah and wild ungulates such as the onyx, kudu and eland. Disease symptoms similar to spongiform encephalopathy have also shown up in domestic cats.

"Animals with a spongiform encephalopathy have symptoms that are similar to Creutzfeldt-Jacob disease in humans," says Haskell. "However, there is no evidence that the transmissible spongiform encephalopathies of humans are acquired from animals."

Haskell also emphasizes that BSE and other spongiform encephalopathy diseases are different from foot-and-mouth disease, both in the way they are transmitted and the way they affect animals.

&lt;over&gt;

"BSE is a progressive, fatal neurological disease," says Haskell. "It was first diagnosed in England in 1986. The disease is transmitted to cattle when they eat contaminated meat and bone meal in their feed. There is no evidence that transmission to cattle occurs in any other way. However, scrapie in sheep is frequently transmitted within family lines. This has led some scientists to think a ewe can pass the disease to her lambs, but that has not been proven."

Haskell says BSE and other spongiform encephalopathies are caused by virus-like protein particles called prions. Veterinarians diagnose the disease through tissue evaluation in a laboratory.

BSE in cattle and scrapie in sheep affect animals more than two years old, according to Haskell. Staggering, falling, partial paralysis, head and neck tremors, lack of coordination, emaciation and weakness are symptoms that affected animals may display. Intense itch is common in sheep and goats.

"No evidence exists that BSE transmission in cattle occurs other than through feed," says Haskell. "It is very important not to feed cattle any protein that comes from a ruminant, such as meat and bone meal."

Prevention of spongiform encephalopathies involves testing and destroying sheep and elk. Prevention measures in cattle include not feeding ruminant protein sources, as well as testing animals with symptoms of the disease.

Internet web sites at [http://www.bseinfo.org/resource/bse\\_fact.htm](http://www.bseinfo.org/resource/bse_fact.htm) and <http://www.aphis.usda.gov/oa/bse/> have additional information on BSE.

# # #

Web, V2,V4MN,V5MN,V6,A4,B1,D1,S1,S2

hask0326

Source: Scott Haskell, (612) 625-0280

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 29, 2001

## **You can do a lot to help your children learn**

Good teachers are critically important for children. But the truth is, your children learn the most from you—by watching, talking and interacting with you.

“That’s a huge responsibility,” says Joan Sprain, Washington County educator with the University of Minnesota Extension Service. Your children spend less than 10 percent of their childhood in school, and you have a lot to say about what they’re learning the rest of the time.

Sprain has written a new publication, “Learning From You—All Parents Are Teachers,” that has many practical, everyday ideas. For example, there’s a list of 10 ways to help your children meet expectations:

1. Make school real by explaining why it’s important. Talk about how school will affect their future.
2. Expect your children to go to school. Limit absences to when they’re truly ill.
3. Help your child understand teacher expectations by talking about them at the beginning of each term (or assignment).
4. Make sure everyone knows the rules. Set clear, consistent limits about schoolwork and behavior. Follow through with consequences if limits are broken or expectations aren’t met.

5. Set up a regular homework time.
6. Take a peek--look over assignments and give constructive feedback.
7. Emphasize respect. Talk to your children about how you expect them to behave and treat others in school.
8. Read, and then read some more. Set reading goals based on age and ability, such as reading one book a week.
9. While you're reading, ask your local librarian for children's stories that stress the importance of education and learning.
10. Watch for warning signs of stress from too many expectations. Stressed children cry easily, tire quickly, and dawdle. Talk to the teacher about ways to turn down the heat.

The eight-page publication, "Learning From You—All Parents Are Teachers," is available at [www.extension.umn.edu/distribution/familydevelopment/DE7585.html](http://www.extension.umn.edu/distribution/familydevelopment/DE7585.html) on the Internet. You can also get a copy from county offices of the U of M Extension Service. Or, for a nominal charge you can get one by calling the Distribution Center at (800) 876-8636. Ask for number 07585.

# # #

Web, F1, V4, V5, V6, V7, V8

sprain32601

Source: Joan Sprain (651) 430-6804, sprai002@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

March 29, 2001

## **Applying nitrogen to grass can boost hay, pasture production**

Fertilizing grass and grass mixtures with nitrogen is likely to bring a big boost in hay or pasture production. Adequate nitrogen rates often double or triple grass production, according to soil scientist George Rehm of the University of Minnesota Extension Service.

Rehm recommends adjusting nitrogen rates for expected yield. For example, he suggests a total of 120 pounds of nitrogen per acre for high management situations where yields of four tons per acre or more are expected. Such an expectation would be appropriate with rotational grazing or making two cuttings of grass for hay.

When yield expectations are not as high, Rehm recommends fertilizing grass with 60 to 80 pounds of nitrogen per acre.

"The economic value of nitrogen fertilization is easy to measure when the grass is sold for hay," says Rehm. "For pastures there is a general rule of thumb that one pound of nitrogen per acre will produce a pound of added animal gain per acre."

While fertilizing grass with nitrogen is important, Rehm reminds producers not to ignore phosphate and potash needs. "A soil test will show whether these nutrients are needed," he says.

# # #

Web,V2,A2,F4

rehm0329

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

March 29, 2001

**High nitrogen prices increase importance of soil testing**

Collecting soil samples may be the most cost effective management practice crop producers can use this spring. Soil testing is the only way to accurately determine fertilizer needs, says soil scientist George Rehm of the University of Minnesota Extension Service.

"Fertilizing according to soil test results is more important this year than in the past," says Rehm. "Higher nitrogen prices have led to a severe cost-price squeeze for crop producers."

If fertilizer dollars are limited, Rehm recommends switching dollars away from phosphate and potash purchases and buying nitrogen. "But this switch is only justified if soil test values for phosphorus and/or potassium are in the medium high or very high category," he says. "A soil test is the only way to know this."

Rehm says a late spring for field work is not an excuse to skip soil sampling. "The soil testing laboratory at the University of Minnesota and commercial laboratories are geared up for a fast turnaround," he says. "The improvement in fertilizer recommendations from testing is likely to improve net crop production profits."

# # #

Web,V2,A2,F4

rehm0328

Source: George Rehm, (612) 625-6210  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

April 4, 2001

<http://www.extension.umn.edu/News>

## **Fertilizing soybeans can boost yields if nutrients are lacking**

Fertilizing with phosphate and potash can boost soybean yields in some situations. The key factor is soil test levels for phosphorus and potassium, says soil scientist George Rehm of the University of Minnesota Extension Service.

"Concern over the cost of nitrogen for corn should not cause producers to forget about the nutrient needs of soybeans," says Rehm. "Soybeans will respond to phosphate and/or potash if soil test levels for phosphorus or potassium are in the low or very low ranges. Soil test results from either this year or last year are the guide to the most economical rate."

Research shows phosphate fertilization will be profitable if the Bray test is less than 10 parts per million (ppm) or the corresponding Olsen test is eight ppm or less, says Rehm.

When the test for phosphorus is low, use about 60 pounds of phosphate per acre for an expected soybean yield of 40 to 49 bushels per acre, says Rehm. The suggested rate of phosphate increases to about 70 pounds per acre when the soil tests are low and the expected yield is 50 to 59 bushels per acre.

Growers can expect potash fertilizer to increase soybean yields when the soil test values for potassium are less than 120 parts per million, says Rehm. He recommends a

<over>

rate of about 50 pounds of potash per acre if the yield expectation is 40 to 49 bushels per acre. The suggested rate increases to about 80 pounds per acre for expected yields of 50 to 59 bushels per acre.

“In general, fertilizer placement does not affect soybean yields,” says Rehm. “The suggested rates are appropriate for both band (starter) and broadcast applications. However, soybean seeds are sensitive, and contact between fertilizer and soybean seeds should be avoided.”

# # #

Web,V2,F4

rehm0402

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



April 10, 2001

**Corn needs competitive advantage over earliest weeds**

Corn producers need to manage their crop to give it a competitive advantage over the weeds that emerge earliest. Otherwise, these weeds will take advantage of their early foothold, says agronomist Denise McWilliams of the University of Minnesota Extension Service. They will out-compete both the corn and later weeds and severely reduce final yields.

"Weed competition with corn is complex because of interacting factors such as early-season temperature, soil conditions and moisture availability," says McWilliams.

She cites some results from Wisconsin research in 1998 and 1999 examining common lambsquarter and giant foxtail competition in corn.

"These trials found that weed densities and proportions of both weeds make a difference in corn yields, but may not provide a direct correlation," she says. "Giant foxtail was more competitive in 1998, but in 1999 lambsquarters were more competitive."

McWilliams says yield loss differences between the two years were likely due to emergence timing. Both weeds emerged at about the same time in 1998, but the lambsquarters emerged three days earlier in 1999. Yield loss was greatest in 1999 corn when the earlier emergence gave the lambsquarters the upper hand.

"The amount of corn yield losses did not relate directly to the amount of weed competition, weed species, weed volume or weed leaf area," says McWilliams.

# # #

Web,V2,F4

mcwl0410

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

April 10, 2001

<http://www.extension.umn.edu/News>

## Grass weeds can have big soybean yield impact

Competition from grass weeds can cut into soybean yields. It's hard for soybean producers to determine the extent of yield losses, says agronomist Denise McWilliams of the University of Minnesota Extension Service. But in fields where heavy grass weed competition is likely, she recommends considering either preplant or early post-emergence grass control herbicide treatments.

"Variations in weather from one year to the next and soybean variety changes over time make it hard to assess the relationship between weed competition and yield loss," says McWilliams. "But Wisconsin research on common lambsquarter and giant foxtail in soybeans in 1998 and 1999 provides some insight.

"In 1998, giant foxtail was more competitive than common lambsquarter. Soybean yield loss could be predicted based on weed density and even relative weed leaf area during various soybean growth stages.

"Even at very low weed densities, soybean yield loss associated with giant foxtail was 11 percent in 1998, while yield loss with common lambsquarter was only one percent. Soybean yield loss under heavy giant foxtail pressure was 95 percent, while yield loss under heavy common lambsquarter pressure was 50 percent."

# # #

Web,V2,F4

mcw10409

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

April 10, 2001

### **Farm employers can benefit from evaluating themselves**

Evaluating employees is a necessary task for farm operators who hire workers. But employers can also benefit from evaluating themselves. A group of farm employers developed a list of questions for self-evaluation at a recent program on agricultural labor management. Chuck Schwartau, Goodhue County educator with the University of Minnesota Extension Service, says the questions they came up with are:

- Are you fair to all employees and family members in the farming operation?
- Are you open to suggestions, questions and criticism?
- Are you responsive to suggestions?
- Are you accessible to all, regardless of their working schedules?
- Are you flexible in handling situations?
- Are you able to justify your decisions with sound reasoning?
- Are you approachable?
- How well do you communicate and promote communication among the staff?
- What is your training program?
- Do your employees have the proper equipment to do the jobs they are asked to do, and is the equipment safe?
- How is the working environment of your farm...the physical worksite aspect?
- What is the working culture on your farm....the personal aspect?

"How employees answer these questions could tell you a great deal about why your farm operates as it does," says Schwartau. "A great deal of the success of the farm depends on those doing the job. If they are unhappy with several aspects of their employment, it will show in their performance and your farm's performance. The cost may be in reduced productivity, high employee turnover or increased operating expenses. Regardless of the form of the cost, the usual result is reduced profit."

Schwartau says asking employees the questions yourself will probably not get as honest a response as you need. This evaluation needs to take place in a setting where the employees feel safe to respond and their responses can't be traced back to individual employees. A third-party interviewer such as an Extension educator, lender, ag instructor or other trusted person who can conduct the interviews and summarize them confidentially is essential.

The interviewer needs to pay careful attention to employees' responses, says Schwartau. The interviewer needs to sort and summarize the issues and report them to the employer and employees alike in a way that conveys concern for the business and the people involved.

"Remember, this process can identify strengths worthy of praise as well as areas of concern," Schwartau concludes.

# # #

Web,V2,V4MN,A2,A4

schwrt409

Source: Chuck Schwartau, (651) 385-3100

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

April 10, 2001

## **Foot-and-mouth disease highlights need for biosecurity on farms**

Foot-and-mouth disease is bringing increased attention to biosecurity, or farm measures to keep disease organisms from spreading.

But biosecurity may be more important to control other diseases on Minnesota farms such as bovine leukosis, cryptosporidia and Johne's disease, says Scott Haskell, a veterinarian with the University of Minnesota Extension Service. He says dairy farmers especially need to evaluate risk factors and practice "protective exclusion."

At a minimum, visitors to dairy herds should wear protective plastic booties and gloves and go through an extra footbath. Better yet, says Haskell, is not allowing anyone to visit barns and other livestock areas unless they have business. Examples include veterinarians, AI technicians and milk haulers.

"This is hard for farmers," Haskell says. "Many are good hosts and love farm tours and visits. But in today's environment, this can be risky."

Biosecurity has been practiced on intensive swine and poultry operations for years. But Haskell says large dairies in other states are restricting farm visits, sometimes allowing visitors to only see animals in special glass-enclosed viewing areas.

Haskell suggests producers evaluate risk factors when planning a protective exclusion program. Then make management changes to curtail disease organisms.

The first question is whether you continue with an "open" dairy, or go to a "closed" system of restricting non-essential visitors. A closed system would mean no farm tours or foreign visitors.

Other protective measures include using footbaths, controlling birds and wild animals, testing new cows, quarantining new animals away from existing stock and avoiding auction animals of unknown origin or disease status.

“Consider both current and long-range goals,” Haskell advises. Assess and identify farm-specific risks for disease transmission, then make appropriate management changes to create specific pathogen-free environments.

“A team approach is needed,” Haskell emphasizes. He encourages farmers to work with the U of M Extension Service, local veterinarians, animal scientists, nutritionists and state health departments.

If you’re planning an overseas trip where you’ll be close to livestock facilities, wear disposable clothes and shoes. Throw them away—don’t bring them back. And don’t go on farms for a week after you return.

Haskell says foot-and-mouth disease comes and goes around the world. It’s found in Asia, Africa and several South American countries. “But it’s very rare to have an intense outbreak requiring ‘depopulation’ like we’re seeing in England,” he adds.

Internet web sites with additional information on foot-and-mouth disease are at <http://www.aphis.usda.gov/oa/fmd> and <http://www.maff.gov.uk/animalh/diseases/fmd/default.htm>.

# # #

Web, V2, V4, D1

hask4401

Source: Scott Haskell (612) 625-0280, [haske003@umn.edu](mailto:haske003@umn.edu)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MFC  
9/25/01

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

April 13, 2001

## Quality counts with out-of-school programs

Three nationally recognized youth development experts will speak at an April 18 symposium on quality out-of-school experiences and community involvement.

The symposium, called "Bridging Research and Practice," is hosted by the University of Minnesota's Center for 4-H Youth Development in response to national interest and concern about opportunities for quality out-of-school time. The program features Jacqueline Eccles from the University of Michigan, Milbrey McLaughlin from Stanford University, and Karen Pittman from the Forum for Youth Investment.

Both research and experience tell us that good out-of-school programs share many characteristics with family life. There is a sense of belonging and safety, the involvement of youth, the presence of caring adults, and a careful balance of freedom and responsibility.

"Out of school programs can be a place where children and adolescents can experiment," says Eccles, "but where the adults are available to catch them if they get in trouble."

Communities that want quality programming need to get involved and stay involved. McLaughlin says for some young people, a lack of participation reflects a lack of opportunity. "One city official described his community's youth policy as 'parks and police'--parks to provide a place to gather and police to monitor their behavior once gathered there," he says.

<over>

For Pittman too, the current interest in out-of-school time calls for greater community investment in youth development. "Youth do not grow up in programs, they grow up in communities," she says. "The current approach to youth development is powered by the belief that young people and adults can work together to change their communities into places where young people can grow up healthy."

The symposium celebrates the new Howland Family Endowed Chair in Youth Leadership Development. The endowed chair is the first of its kind in the nation and will stimulate research on youth development programs.

The Howland Endowment Fund began in 1987 with a gift of \$650,000 to the University of Minnesota 4-H Foundation from John Howland on behalf of his six brothers and sisters. The entire Howland family had a keen interest in education, agriculture, and the University of Minnesota Extension Service. The impact of this gift is one example of how private donations can help the University and the Extension Service's public mission to help Minnesota.

The symposium begins at 2:30 p.m. at the McNamara Alumni Center at the University of Minnesota. For information about attending or directions to the event, contact Judy Wirebaugh at (612) 624-9109.

# # #

Web, V2MN, V4MN, F1, Y1

4h41001

Source: Joyce Walker (612) 624-8449, walke007@umn.edu

Editor: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



4/17/01  
yfr

April 17, 2001

(Second in a background series on the prospective 2002 Farm Bill)

## **Economist says new Farm Bill should have energy, industrial provisions**

By Jerry Fruin, University of Minnesota Extension Service

The next Farm Bill should address energy and industrial uses, in addition to the traditional food and agriculture provisions.

In the 21<sup>st</sup> century we are evolving from an era of using coal and petroleum (energy originally from the sun that's been stored for 60 million years) to using biomass to quickly convert the sun's energy unto useable energy forms. This will be economical, efficient and pollute less than extracting our finite coal and petroleum resources.

The next Farm Bill should have funding for both laboratory and field research to investigate new ways to utilize biomass energy. Also, payments should be available to help develop pilot energy plants and jump-start new biomass energy projects.

There are three potential sources of biomass energy: crops such as hybrid poplar and switchgrass; by-products such as cornstalks, wheat straw and sawdust; and finished products such as ethanol and biodiesel.

The recent alfalfa biomass energy project near Granite Falls, Minn. is an excellent example of biomass. However, it didn't get off the ground because it was too big—transportation costs were too high to transport the alfalfa up to 150 to 200 miles.

We know now that it's easier for such power plants to succeed if they operate on a 10 to 20-mile radius, producing 5 megawatts of power instead of 50 to 70 megawatts. The biomass crop should also be grown on marginal land, not prime farmland.

The Farm Bill should encourage market development and utilization of by-product crop residues such as corn stalks, wheat straw and sawdust for energy.

Biodiesel fuel is also an attractive possibility. It contains a small amount (two to five percent) of a vegetable oil such as soybean oil mixed with diesel fuels. Biodiesel reduces sulfur emissions and acts as a lubricant to improve engine performance.

The economics of biodiesel are far superior to those of ethanol. And since Minnesota is a state with a surplus of soybeans and soybean oil, adding soy oil to diesel fuel would help soybean prices.

Using biodiesel in Minnesota could jump-start the process across the Midwest and be a model for the rest of the nation. The Midwestern farm states need to take the lead in biodiesel—it's not going to come from the petroleum industry.

Biomass crops for energy—many of them grown on marginal land—will become more important. The world already has ample resources for producing food. Almost every developed country can raise enough calories to feed itself. Much of our world food trade involves trading "flavors" between countries.

In the longer term, biomass for energy will be the transition stage bridging the fossil fuel era with direct energy from the sun. Fuel cells or solar cells already are economical in some situations. For example, it can be more economical to use fuel cells in remote areas than to run two miles of copper wire.

# # #

*Jerry Fruin is an economist and marketing/transportation specialist with the University of Minnesota Extension Service. To comment on this series, contact Richard Levins at (612) 625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu), or William Easter at (612) 625-7728.*

Web, A2, E3, F4, V2, V4

fruin41101

Source: Jerry Fruin (612) 625-8720

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service, is an equal opportunity educator and employer.*

April 17, 2001

<http://www.extension.umn.edu/News>

## **Producing high-quality soybeans helps keep exports rising**

Producing high-quality soybeans is one of the keys to success in the export market. Two-thirds of U.S.- grown soybeans are sold to other countries, says agronomist Denise McWilliams of the University of Minnesota Extension Service. This figure will only increase with world population growth, she adds.

McWilliams cites a recent article in "Feed and Grain" magazine's marketing section indicating that soybean exports in 2001 could reach a record 27.2 million metric tons, valued at \$5.3 billion. That would be up from 26.7 million tons in 2000. Factors pushing exports upward are demand from Asia, primarily China; USDA food assistance programs; and health claims for soy flour and other soybean products.

"U.S. soybeans are recognized by many foreign buyers as having the best quality due to growing conditions and practices, soil types, storage quality and variety availability," says McWilliams. "Upper Midwest producers can help enhance exports by emphasizing good production practices, including field scouting."

One market expected to jump up four percent is Mexico. McWilliams says U.S. products dominate Mexico's oilseed market. Dry growing conditions in Mexico, a declining inflation rate and recent strong purchases of crushing equipment are good

<over>

signs for future sales. However, Canada is promoting canola oil in Mexico, and soybeans from Central and South America are also competitors.

McWilliams adds that two government programs that have helped boost U.S. soybean exports are the Export Credit Guarantee Program and the Intermediate Export Guarantee Program. The first provides credit terms up to three years, and the other provides credit terms up to ten years.

# # #

Web,V2,A2,F4

mcwl0412

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

April 20, 2001

## **Plan early corn pest management by recalling past problems**

Corn producers can often do a better job of scouting and managing early-season pests by recalling pest problems from previous years. Several pests attack corn during emergence and into early plant growth stages, notes agronomist Denise McWilliams of the University of Minnesota Extension Service.

Early diseases that attack corn include seedling blights, Stewart's bacterial leaf blight, anthracnose leaf blight and crazy top. Early insects include flea beetles, seedcorn maggots and beetles, white grubs, wireworms, cutworms and slugs.

"Early weeds can also cut into corn yields," says McWilliams. "Several weed species may have multiple flushes of seed germination, limiting the effectiveness of short residual herbicides."

She cites two weeds, cocklebur and redroot pigweed, as examples of expected yield reduction. When the number of cocklebur per 100 feet of row is 4, 8, 16, 28, 34 and 40, the corresponding yield reduction percentage that can be expected is one, two, four, six, eight, and ten. The same yield reduction percentages can be expected from redroot pigweed when the number of weeds per 100 feet of row is 12, 25, 50, 100, 125 and 150.

Additional information on early-season pest management in corn is available from county offices of the University of Minnesota Extension Service.

# # #

Web,V2,F4

mcwl0419

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

April 20, 2001

## Rotating herbicides improves weed control

Farmers know that rotating crops is an effective strategy for controlling weeds. Rotating herbicides also helps fight weeds, says agronomist Denise McWilliams of the University of Minnesota Extension Service. Rotating herbicides is particularly beneficial in hindering the development of herbicide-resistant weeds, she adds.

McWilliams cites research from a four-year study of crop rotations and herbicides by Ohio and Virginia researchers. The study looked at population trends for weeds such as common lambsquarters, ragweed, several amaranthus species and jimsonweed at two sites. Cropping systems included continuous corn, continuous soybeans and corn-soybean rotations.

"For both common lambsquarter and ragweed, populations increased over four years when the same herbicide was used every year," says McWilliams. "Amaranthus populations decreased over time except with one continuous herbicide treatment. Jimsonweed control was variable based on the treatment."

McWilliams says the researchers found that weed shifts were less severe when herbicides were rotated annually. Shifts to tolerant species occurred where the same herbicide or herbicides with similar activities were used continuously. Many other studies have also shown this, McWilliams points out.

# # #

Web,V2,F4

mcwl0418

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

April 20, 2001

## **Here's some help if you have basement moisture problems**

If you have wet basement problems, it's possible there's a simple, inexpensive solution. A publication from the University of Minnesota Extension Service can help you sort it out.

It's a complete guide to solving wet basement problems and the ideas are presented step-by-step, with several helpful diagrams. The title is, "Moisture in Basements: Causes and Solutions," and you can find it on the Internet at [www.extension.umn.edu/distribution/housingandclothing/components/7051-04.html](http://www.extension.umn.edu/distribution/housingandclothing/components/7051-04.html).

You can also get it from county offices of the University of Minnesota Extension Service. And for a nominal charge, it can be ordered by calling (800) 876-8636. Ask for item 7051.

The step-by-step process starts with controlling interior moisture sources, such as humidifiers and cooking, and ventilating other sources such as the clothes dryer and bathroom. You may need to evaluate the gutters, downspouts and surface grading around the house. More involved solutions include interior or exterior drainage systems, and if the basement is to be finished, placing a vapor retarder over the walls and floor before finishing.

# # #

Web, V4, V7, V8, H5 basement41901

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

April 24, 2001

### **Individual and community factors contribute to farm success**

Good land, access to financing, a community with strong agricultural support services....these all help make a farm successful and able to compete for global markets.

Agronomist Denise McWilliams of the University of Minnesota Extension Service says many factors contribute to the success of a farming operation. She cites a recent article in "Soybean Digest" magazine that examined several of these factors.

"Of course, production potential is important," says McWilliams. "This means land with good soil available at a reasonable price. Water availability, good weather for crop production, and quantity and quality of available labor are also key production factors."

Factors in the surrounding community are also important, she points out. The community needs to support growth by providing proximity and access to information, technology and support services. Opportunities to develop ground to farm are beneficial. These may be limited by environmental constraints near large urban areas. Access to ag loans is usually important.

Market accessibility is another key, says McWilliams. This may mean locations near terminals and markets, or rail and highway systems. "Even value-added products need these market edges to compete globally," she concludes.

# # #

Web,V2,A2,F4      mcwl0420

Source:Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu



April 27, 2001

## **Family meetings can help a farm operation run smoothly**

Most farms today are still family farms, with several family members contributing. That means regular family meetings can help a farming operation run smoothly, says an educator with the University of Minnesota Extension Service.

Scott County educator Dave Resch cites information on farm family meetings the University of Wisconsin has developed.

"Family meetings provide an opportunity for family members to share opinions and points of view and know that these affect decisions," says Resch. "Meetings also provide an opportunity to share ideas, feelings, concerns and suggestions. They help in figuring out what's necessary to keep a busy family organized."

Resch says it's a mistake to wait until there's a problem before calling a family meeting. Waiting until something is wrong means the meeting can turn into a shouting match, especially if family members haven't figured out other ways to handle frustrations. Trying to prevent such problems is a better approach, Resch points out.

Resch recommends monthly meetings. "They should be something to look forward to rather than dread," he says. "The trick is to make them fun." He has the following suggestions for good family meetings:

1. Have family members take turns creating the agenda and running the meeting. Encourage everyone to let the designated person know if there's

something that needs to be discussed. The designated "chair" needs to take responsibility for keeping the meeting running smoothly and efficiently. This includes making sure everyone gets to talk, not allowing the person who has the floor to be interrupted and enforcing ground rules.

2. Ask for a volunteer to take minutes so they can be read at the next meeting. Make sure minutes from all meetings are kept together in a notebook for future reference. Responsibility for taking minutes should also rotate.
3. Don't let a meeting drag on and on. The length of the meeting will depend on the ages and attention spans of family members. Meetings should be no shorter than 15 minutes and no longer than one hour.
4. Make sure the meetings include an opportunity to recognize positive things. Consider having each family member take turns mentioning something nice about whoever is sitting on either side of him or her. Or, end the meeting with a list of all recent happenings for which the family is grateful.
5. Remember, the key to successful family meetings is fun. That's why it's important to follow the "business" portion of the meeting with something enjoyable.

# # #

Web,V2,A2,F1,F2,A4

resch0420

Source: Dave Resch, (952) 492-5383

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

April 27, 2001

## **Now is a good time to fertilize trees**

The best time to fertilize trees is in spring, up until the trees start growing. That's normally early May. "But with our late spring, you still have a good two to three weeks," says Jeff Gillman, nursery management specialist with the University of Minnesota Extension Service.

Gillman says most trees have a single "flush" of growth in spring, and they need to have soil nutrients available as this growth occurs. A publication from the U of M Extension Service gives you the details. You can find it on the Internet at [www.extension.umn.edu/distribution/horticulture/DG7410.html](http://www.extension.umn.edu/distribution/horticulture/DG7410.html). It's called "Tree Fertilization: A Guide for Fertilizing New and Established Trees in the Landscape."

It's also available from county offices of the U of M Extension Service. And for a nominal charge, you can order it by calling (800) 876-8636. Ask for item 7410.

Gillman and soil scientist Carl Rosen wrote the publication. Topics include the need for nutrients, determining the need for fertilization, when to fertilize, what to apply, and application methods and rates.

Trees in the cities and suburbs are often stressed from low moisture, compacted soil, physical damage, nearby construction and competition from grass and nearby trees and shrubs. Fertilizer can reduce this stress, but won't eliminate it. You also need to keep newly planted trees watered and pruned, and keep weeds away from their bases.

# # #

Web, V2MN, V4MN, V8, G1

rosen42501

Source: Jeff Gillman (612) 624-7432, [gillm003@umn.edu](mailto:gillm003@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

April 27, 2001

**Corn producers should avoid swearing that they're using non-GMO seed**

Corn producers should avoid swearing in writing that the seed they plant is not genetically modified—in other words, that the seed is “non-GMO.” That word of caution is from Denise McWilliams, agronomist with the University of Minnesota Extension Service.

No standards exist that require seed that is not genetically modified to be tagged as non-GMO seed, says McWilliams. The American Seed Trade Association has asked the U.S. Department of Agriculture to establish a standard and suggests a one-percent maximum allowance of GMO seeds in a bag tagged “non-GMO.” This would be 800 seeds in a bag of corn with 80,000 seeds, or about 1,500 soybean seeds in a 50-pound bag of average soybeans.

“This standard is obtainable, and is higher than the standard for certified seed,” says McWilliams.

Assuring non-GMO grain is now a complex operation, McWilliams points out. That's especially true for corn, since it's a cross-pollinated crop. “Farmers wishing to sell grain as non-GMO might consider testing their seed before planting,” she says. “In addition, they may want to test the grain in the fall to insure a paper trail proving purity.”

# # #

Web,V2,F4

mcwl0427

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

April 27, 2001

## **Check compatibility when combining soybean inoculants with chemicals**

If you plan to inoculate your soybean seed this year, be careful about combining the inoculant with seed treatments, fertilizers or pesticides. The rhizobia in the inoculant can be killed by the wrong chemical combination. The rhizobia are what help soybeans develop nitrogen-fixing nodules on their roots, notes agronomist Denise McWilliams of the University of Minnesota Extension Service. Killing the rhizobia means the time and money spent on inoculation are wasted.

"Combining inoculants with other treatments has become popular due to more use of liquid-based inoculants," says McWilliams.

Urbana Laboratories, which manufactures soybean inoculants, has posted a suggested set of inoculant compatibility rules on the Internet at [www.urbana-labs.com/compat.htm](http://www.urbana-labs.com/compat.htm). McWilliams cites some of the main points from the rules:

--In general, insecticides are more toxic than fungicides, which are more toxic than herbicides to inoculants.

--In-furrow inoculants were developed to keep inoculants away from seed treated with other products. Therefore, in-furrow treatments should be the first option when combining inoculated seed with other products.

<over>

--If combining an inoculant and a seed treatment on the seed, keep the exposure time as short as possible, preferably less than four hours. However, some seed treatments kill rhizobia immediately, so check the label.

--Liquid interfaces tend to speed up activity detrimental to the inoculant. Therefore, if applying a chemical treatment first, allow it to dry before applying the inoculant.

--Powder-based inoculants tend to protect rhizobia more than liquid-based inoculants, but exposure time should still be minimized before planting.

--Look for compatibility charts on mixtures with inoculants. The charts will show the laboratory results on how long the rhizobia will survive in contact with other chemicals.

"Remember to read the labels on all products you are thinking of using," says McWilliams. "Check with the manufacturer if you are uncertain about compatibility with specific products."

# # #

Web,V2,F4

mcwl0426

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

May 1, 2001

## **For top yield, corn growth stages need to correspond to favorable weather**

Corn plant growth stages need to correspond to favorable weather conditions for the crop to reach its full yield potential. That's one reason a hybrid adapted to a grower's specific region and growing season length is most likely to do well, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

"Stresses such as lack of moisture or fertility can increase the time between vegetative growth stages and decrease the time between reproductive stages," says McWilliams. "Temperatures at planting and beyond also have significant control over growth rates."

She says planting too early may slow plant growth rates and reduce nutrient availability as temperatures are cooler. Cool temperatures may also delay tassel formation in the corn plant. Planting too late speeds plant growth, but may result in a shortened season.

"Genetically, plants grow and develop according to the maturity length of the hybrid," says McWilliams. "An early hybrid usually develops fewer leaves and passes more quickly through growth stages. A later hybrid often produces more leaves and develops more slowly through growth stages."

<over>

She says genetics, the growing season profile, planting date, environment and location all influence the reproductive growth of corn—the number of kernels, final kernel size, weight increase (filling) of kernels, ear length, and number of rows on the ear. These are all key factors in final yield. In addition, the length of time available for growth during the growing season must match the time required by the hybrid for grain to mature completely.

# # #

Web,V2,F4

mcw10430

Source: Denis McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



May 1, 2001

**Corn producers should be in no hurry to switch to earlier hybrids**

Corn producers should not be in a hurry to switch to earlier hybrids, even though planting is later this year than the past couple of years. There's still time to plant full-season hybrids, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"The loss of yield potential from switching to an earlier corn hybrid may be greater than the yield loss from planting a full-season hybrid beyond May 10," says Thiesse. "University research has shown that most corn hybrids adapted to southern Minnesota can achieve nearly full yield potential when planted by May 10. There is a minimal loss of yield potential in these full-season hybrids through May 25."

An increasing concern relating to planting delays is the potential for wetter corn at harvest in the fall, requiring more drying. "In recent years, we have planted earlier than normal," notes Thiesse. "Corn has matured earlier than normal, and there has been good drying weather in the fall. This has resulted in more field drying of the corn, with less artificial drying necessary. That could change in 2001 with later planting dates and probable later corn maturity in the fall. Growers should probably plan ahead for their drying fuel needs before the harvest season."

# # #

Web,V2,F4

thie0426

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

May 1, 2001

## **Gentle handling of soybean seed is likely to mean better germination**

Handling soybean seeds gently at planting time is likely to result in more of the seeds germinating. Soybean seed is very fragile, according to agronomist Denise McWilliams of the University of Minnesota Extension Service.

“The fragility of soybeans shows up at harvest time, when very low crop moisture can result in cracked beans,” McWilliams points out.

She says a ten percent reduction in germination can occur simply from throwing soybean seed out a truck and onto a concrete floor or hard ground.

“Try not to let seed fall more than a foot when handling bags for planting,” says McWilliams. “Test any saved and stored seed before planting for intactness of the seed coat, germination under stress, germination percentage and seed viability.”

# # #

Web,V2,F4

mcw10501

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

May 1, 2001

## **Wait until soils dry out before starting tillage operations**

You can help prevent soil compaction problems by waiting until soils dry out before you start secondary tillage.

Heavy-textured soils are wetter than usual this spring. Tilling wet soils causes compaction and possibly reduced yields, says John Moncrief, soil scientist with the University of Minnesota Extension Service. Compaction can decrease yields due to nitrogen losses, reduced potassium availability and inhibited root respiration due to reduced soil aeration. However, Moncrief says split nitrogen applications and row-applied phosphorus and potassium can help mitigate the effects of compaction.

Excessive compaction also decreases water infiltration and storage, decreases root growth and reduces the soil volume explored by roots. If growing season precipitation is timely and optimal, Moncrief says compaction effects may not show up. But if it's drier or wetter than normal, yields will be affected. Moldboard or chisel plowing usually alleviates surface compaction, but Moncrief says compacted subsoil takes years to alleviate.

A new 15-page publication from the U of M Extension Service gives the details. You can check it on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu). Or, get a copy at your county Extension Office. You can purchase it by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu) or by credit card at (800) 876-8636. Ask for item number 3115.

# # #

Web, V2MN, V4MN, F4 moncrf43001

Source: John Moncrief (612) 625-2771, [moncr001@umn.edu](mailto:moncr001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

N56  
AZ10

UNIVERSITY OF MINNESOTA



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 4, 2001

## **Up to 25 percent of barge season could be lost due to floodwaters**

Farmers, barge companies and railroads are losing money from the continued delay of the shipping season on the Mississippi River.

"In mid-April we thought the shipping season would start by May 1," says Jerry Fruin, transportation and marketing specialist with the University of Minnesota Extension Service. "But the second cresting of the Mississippi is causing more delays, and it's going to be at least mid-May before we see barge traffic."

Normally, the shipping season starts April 1 and goes until the end of November. "We're going to be closed down for a total of six to eight weeks, and that means we could lose up to 25 percent of the shipping season," Fruin says.

Barge traffic is the most efficient way to transport Minnesota grain to out-of-state markets, Fruin says. From Minnesota, about 130 million bushels of corn, 55 million bushels of soybeans and 25 million bushels of wheat are shipped on the Mississippi River each year. All told, about 28 percent of the grain leaving the state is barged down the Mississippi River—primarily for export from gulf ports.

Some grain sales are probably being lost to international competitors, but Fruin says the larger impacts are the additional costs of transportation and storage. Farmers are forced to sell grain at lower prices, barge companies are losing money and some railroads have been flooded and forced to reroute traffic at added costs.

<over>

Elevators located near rivers may not be able to take in or ship out grain by rail, Fruin says, and some can't even take it in or out by truck. In addition, fertilizer shipments scheduled to come by barge are not arriving, delaying critical deliveries to farms before the planting season.

"One can have contingency plans for things like this, but those affected are still losing money," Fruin says.

When water levels finally allow navigation, the Coast Guard will likely implement traffic restrictions, according to a recent Grain Transportation Report from the Agricultural Marketing Service, U.S. Department of Agriculture. These may include enforcing no-wake zones, limiting travel to daylight hours, prohibiting tank barges and reducing minimum tow sizes. More dredging may be necessary to clear channels, and required buoys and other navigational aids will need to be replaced.

# # #

Web, V2, V4, A2, F4

fruin5201

Source: Jerry Fruin (612) 625-8720, fru001@umn.edu

Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

May 4, 2001

**Good planning needed for sustainable lawns, landscapes**

Too many people link the term "sustainable lawn" with a neighborhood weed patch that bears no resemblance to a maintained lawn. But that's not what it's all about.

You can maintain an attractive lawn with few chemical inputs and help the environment at the same time. A "Sustainable Urban Landscape Information Series" from the University of Minnesota Extension Service tells you how.

The key to creating a sustainable landscape is starting with a good design. Then you can move into plant selection, implementation and maintenance.

You can check the program on the Internet at [www.sustland.umn.edu](http://www.sustland.umn.edu). The site has details on a new interactive CD-ROM program called "Plant Elements of Design." It was developed to help garden center professionals, designers and architects select plants with specific characteristics.

There's also a wide array of fact sheets and other materials. The sustainable lawn care section has detailed information on selecting grasses, site preparation, lawn installation, and lawn care practices to reduce the need for fertilizers and pest control.

# # #

Web, V4MN, V8MN, G1

mugas5301

Sources: Bob Mugaas, (612) 374-8434; Brad Pedersen, (612) 624-7407

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 8, 2001

## **Livestock nutrition conference in Bloomington, Minn. will be Sept. 11-12**

A livestock nutrition conference will bring hundreds of scientists from the U.S. and several other countries to the Twin Cities in September. The 62<sup>nd</sup> Minnesota Nutrition Conference and Technical Symposium will be Sept. 11-12 at the DoubleTree Hotel in Bloomington.

The conference will cover nutrition topics for beef and dairy cattle, swine and poultry. Animal nutritionists will share information about current research at universities, in industry and at government centers. The conference is designed for nutritionists, feed industry representatives, veterinarians, educators and livestock producers. Speakers are scientists from the University of Minnesota, other U.S. land grant universities and industry.

A registration flyer with details on the conference agenda, registration fees and hotel reservations is available. To obtain a copy, call Jennifer Hawkins at (612) 624-0724 or (800) 318-8636, or e-mail [hawki044@umn.edu](mailto:hawki044@umn.edu). The conference web site is at [www.conferences.umn.edu/mn/livestok/mnutconf.htm](http://www.conferences.umn.edu/mn/livestok/mnutconf.htm).

# # #

Web,V2,B1,D1,P3,R1,S2

nutrconf

Sources: Tracey Benson, (612) 624-3708, [tjb@umn.edu](mailto:tjb@umn.edu)  
Lee Johnston, (320) 589-1711, [johnstlj@mrs.umn.edu](mailto:johnstlj@mrs.umn.edu)  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

May 8, 2001

**Watch for corn, soybean marketing opportunities before July**

Corn and soybean producers should watch for marketing opportunities in the next couple of months. We're getting into the time of year that often offers the best marketing potential, according to Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service. And that applies to both stored grain and the current year's crop.

"Typically, spring and early summer offer some of the best marketing potential due to volatile markets that respond to changing weather and growing conditions," says Thiesse.

"Basis, which is the difference between the Chicago Board of Trade price for a commodity and the price local grain elevators are offering, usually narrows during this period. The corn and soybean basis in Minnesota should narrow once river and shipping conditions improve."

Thiesse says that in most years the grain price is flat or drops and the basis widens from July through fall harvest. Exceptions are likely only when some kind of late-season crop problem occurs, such a drought or widespread major crop disease that will significantly lower U.S. crop production.

"Many farmers who store grain wait until the summer months to sell, hoping prices will rise," says Thiesse. "Many times the opposite occurs. A considerable amount of 2000 corn and soybeans is still in on-farm storage and waiting to be sold."

###

Web,V2,A2,F4      thie0507

Source:    Kent Thiesse, (507) 389-8325  
Editor:    Joseph Kurtz, (612) 625-3168, jk@umn.edu



MSC  
A27p

UNIVERSITY OF MINNESOTA



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 11, 2001

(Third in a background series on the prospective 2002 Farm Bill)

## **Family farm legislation: who are we protecting?**

By Richard A. Levins

We've had programs to protect family farms for decades, and there are dozens of conflicting efforts to define them. But we have yet to agree on exactly what a family farm is.

We count "farms" and put policies in place to protect "family farms" without being able to say this farm is a family farm, but that one is not. It is little wonder that our programs have performed so poorly.

### **Family income and family farms**

In 1999, the United States Department of Agriculture (USDA) recorded slightly fewer than 2.2 million farms in the United States. Certainly the number of family farms is much smaller, but beyond that, we can't be precise for a very simple reason: we don't know exactly what to count.

A "farm," according to USDA, is "any establishment from which \$1,000 or more of agricultural products were sold or would normally be sold during the year." A person selling a single beef animal for slaughter in a year when prices were high would qualify; otherwise, it would take two such animals to make the grade. Or, if that person

<over>

put all the land into the USDA-paid Conservation Reserve Program, thereby agreeing to produce no farm products, the land is still counted as a farm.

Are all of these farms family farms? Most observers would say "no" for a variety of reasons. For example, a family farm is often thought to be a place that can provide a significant part of the family's income. This is obviously impossible with annual sales of \$1,000. Most economists agree that a farm would have to sell at least \$100,000 in a year to provide an average, full-time living for a single family. If so, fewer than 350,000 USDA farms would be family farms.

We might also worry about whether a USDA farm is too big to be called a family farm. Murphy Family Farms is a good example. In his heyday, Mr. Murphy raised over six million pigs on 500 sites spread out over six states. His annual sales were in the \$775 million range and "Forbes" magazine proclaimed him a billionaire. Mr. Murphy, who has since sold out to an even larger conglomerate, seems a distant cousin, at best, to Old MacDonald. In 1999, 36,000 U. S. farms had sales greater than \$500,000.

### **Raising chickens is not farming?**

Farm income is not the only challenge in defining a family farm. For example, shouldn't the family farmer manage the farm in addition to providing most of its labor supply? Here, the definition of a farmer takes an unexpected twist. In Minnesota, the corporate farming law says farming "does not include the production of poultry or poultry products." But in 1995, USDA reported 12,479 farms in the United States that produced broilers under contract with large processing companies. The Minnesota law excludes these operations because the people working on them do not make most of the

important management decisions; they are more akin to farm employees than to farm managers. A 1997 USDA study found almost one-third of all U. S. farm products, not just poultry, were grown under contract, and that number has grown.

Ownership, too, plays a role. We often assume that a family farm is owned by its operator. This makes sense, but another USDA statistic comes into play: only 28.6 percent of farmers in 1998 owned all of the land they farmed. The others rented some or all of their land. Are two-thirds of what the USDA considers farmers not family farmers simply because of their ownership status? Nationally, non-farmers own over 40 percent of all farmland; in parts of the Midwest, it's closer to 65 percent.

### **First steps for policy**

How big is a family farm? Can contract poultry production be part of a family farm operation? Is a family farmer an owner and an operator, or can he or she rent land? How much of the labor on a family farm must be supplied by the family, and how much can be hired labor? As basic as these questions seem, we have often sidestepped them in farm policy. Either we have assumed that all farms are family farms, or that any program that helps all farms will help family farms.

In federal legislation, a threatened species such as the snail darter has a significant advantage over family farms. We know exactly what a snail darter is. Because of this advantage, we don't talk about protecting generic fish in federal legislation. We talk about protecting a particular kind of fish, and then back it up with legislation powerful enough to delay a federal dam project that compromised the snail darter's habitat.

<over>

But family farms are treated as undifferentiated fish, not as a unique species. If snail darters were farmers, we would either assume that all fish were snail darters, or that any program that helped fish would help snail darters. Of course, this would be laughable, yet this is how we have approached protecting family farms.

A first and basic step for farm policy must be a public discussion where we clearly define the type of farm to be given special protection. Questions of size, ownership, and management must be answered so we can say, "this farm is to be protected by federal policy" and "that farm is not to be protected by federal policy." A special follow-up study should determine how many of our nation's farms meet the definition.

Then we'd be ready to take effective, well-targeted action. New programs could be designed to protect the type of farm we had designated most important. What these programs contain would take considerable thought. But such thought must be guided by a clear, well-accepted definition of what we are trying to protect.

# # #

*Richard A. Levins is a professor and Extension agricultural economist at the University of Minnesota and a senior fellow with the Institute for Agriculture and Trade Policy. He has recently authored the book "Willard Cochrane and the American Family Farm" (University of Nebraska Press). Contact information: Department of Applied Economics, U of M, St. Paul, MN 55108, (612) 625-5238, [dlevins@apec.umn.edu](mailto:dlevins@apec.umn.edu). To comment on this series, contact Levins or William Easter at (612) 625-7728.*

Web, A2, P1, F4, V2, V4

levins5901

Source: Dick Levins (612) 625-5238, [dlevins@apec.umn.edu](mailto:dlevins@apec.umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

May 11, 2001

**Plant soybeans in warm soil; watch for early pests**

Soybean producers may benefit from planting several varieties that vary slightly in relative maturity. This can spread out harvesting, says agronomist Denise McWilliams of the University of Minnesota Extension Service. And it often helps reduce pest and harvest losses, she adds.

McWilliams says soybean seeds need to go into warm soil. "All varieties germinate and emerge at 85 degrees F, but many have very limited germination below 59 degrees F," she says.

She recommends planting soybeans a maximum of two inches deep, aiming for an ideal planting depth of 1-1.5 inches.

"Soybeans should never be planted in dry soil," she says. "On the other hand, too much soil moisture combined with low temperatures allows soil fungi and decay to attack soybean seeds."

McWilliams encourages producers to watch for early soybean pests. Scout for root rots, any early bacterial blight, and brown spot or downy mildew. Also look for any signs of iron chlorosis. Very early insects that affect soybeans may include seed maggots, wireworms and slugs. Early weeds can also rapidly decrease yields if not kept in check.

# # #

Web,V2,F4

mcwl0504

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

May 11, 2001

## **Don't aerate stored grain during warm weather**

Don't aerate stored grain during warm weather. Doing so could warm grain enough to encourage mold and insect growth, according to an engineer with the University of Minnesota Extension Service.

Bill Wilcke says the best time to aerate grain is when the outdoor temperature is less than about 50 degrees F.

"Aeration is the best weapon for keeping dry stored grain in condition during cool months, but should be avoided during warm weather," says Wilcke. "During the aeration process, the temperature of stored grain is gradually brought to the temperature of the air moving through the grain."

Wilcke says aeration when the outdoor temperature is below 50 degrees lets the grain temperature stay low enough that molds and insects don't grow very fast. These are the organisms responsible for grain spoilage.

"If grain is aerated when the outdoor temperature is 60 degrees F or higher, the grain is warmed to a temperature where mold and insect growth and reproduction are very rapid," says Wilcke.

To manage stored grain during warm weather, Wilcke says the first thing to do is make sure the grain is dry, clean, uniformly cool, and free of insect and mold problems.

Grain that is damp, contains large amounts of fines and foreign material, or has hot spots or obvious mold or insect problems should not stay in summer storage. It's best to correct the problems or feed or sell the grain before the weather gets much warmer.

After summer weather arrives, says Wilcke, check the grain frequently—maybe as often as every week or two. If grain storage problems develop and there are times of the day when the temperature is less than 60 degrees, aeration may be feasible. “Try aerating the grain by using a fan that is controlled so that it only operates when the outdoor temperature is less than 60 degrees,” Wilcke suggests. “You could control the fan by switching it on and off manually, by using a simple thermostat or by using a sophisticated microprocessor-based controller.”

If there isn't enough weather cooler than 60 degrees available for aerating the grain and it starts to heat due to mold and insect activity, raise the temperature settings for fan operation, says Wilcke. Then make immediate plans to move the grain out of storage.

More information on managing stored grain is available from county offices of the University of Minnesota Extension Service.

# # #

Web,V2,F4

wilc0510

Source: Bill Wilcke, (612) 625-9733

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

May 15, 2001

## **Late May is prime time to plant vegetables, flowers outdoors**

For most Minnesotans, Memorial Day weekend marks the time when it's safe to plant just about any plant outdoors. Horticulturist Deb Brown of the University of Minnesota Extension Service says that by late May, cold night temperatures are normally not a threat to young plants and seedlings.

"Bedding plants should thrive, since there's little chance of frost beyond Memorial Day," says Brown. "In southern parts of the state, including the Twin Cities metro area, soil should be warm enough even for tomatoes, peppers, eggplants, melons and other 'warm season' vegetable transplants. Farmers' markets and garden centers still have good supplies of these plants, since weather was not especially cooperative earlier in May."

Brown says it's also time to sow seeds that go directly into the ground. Vegetables such as corn, beans, cucumbers and squash, as well as easy-flowering annuals such as zinnias, marigolds, cosmos and bachelor's buttons, should germinate and grow quickly.

"If you like flowers in large containers, you'll find a huge selection of 'instant' gardens, planted and ready to move to your stoop, deck or patio," says Brown. "To save money and exercise more creativity, buy annuals in packs or individually and



combine them in containers to coordinate with the colors of your house or patio furniture. Be sure they're appropriate for the amount of light they will receive."

Brown recommends choosing some upright plants, some trailing plants and several "filler" plants. There should be enough plants in the container so that it looks good right from the start.

For information on caring for newly planted flowers and vegetables, contact the University's Yard and Garden Clinic. The clinic has experts to answer questions on horticulture, plant disease and insect problems between 9 a.m. and 3 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county or can speak to a wildlife expert.

# # #

Web, V4MN,V5MN,V7,G1

brow0514

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

May 15, 2001

## **Don't carry a young child while mowing the lawn**

If you're mowing the lawn with a riding lawnmower, don't carry a young child on your knee or lap. Lawnmowers and kids don't mix, says Goodhue County educator Chuck Schwartau of the University of Minnesota Extension Service.

"Kids seem to have a natural desire to help mow the lawn, at least until they are old enough to do it themselves," says Schwartau. "However, lawnmowers are dangerous enough for adults to operate. Uneven lawns, slope and obstacles make it necessary for the operator to devote full attention to the job."

Schwartau says mowing is a two-handed job, and holding a child is also likely to be a two-handed job. "That leaves the lawnmower operator two hands short when trying to hold a child," he notes.

While riding on a mower may be fun for a child, the dangers are far too great to risk, says Schwartau. It only takes a moment for a child to lose his or her balance and fall off toward turning wheels and whirling mower blades. The best safety guards can't prevent this from occurring.

Some parents may cite a lack of child care as a reason to carry a child on the mower. "That's when you really need to evaluate the importance of the child's safety in comparison with the desire to have a pretty lawn at a given time," says Schwartau.

<over>

"Work on scheduling the mowing when another responsible person is around to help with one job or the other. Trade some time with a neighbor. Perhaps each of you can watch the children while the other mows, or perhaps one can mow both lawns while the other watches the children."

If your children are old enough to get along with minimal supervision, you may be able to mow the lawn without child care. However, be sure the children are not in the area of the mower, says Schwartau. Small objects picked up by a mower can inflict serious injury. Also, take time to pick up the yard and check it for objects before mowing to minimize the chance for hurled objects.

"A nice-looking yard can make us feel good about ourselves and our home," says Schwartau. "But if a child is seriously injured while we are achieving that park-like lawn, the price is too high."

# # #

Web,V2,V4,V5M,V7,V8,E4,F1,G1,H5

schwrt514

Source: Chuck Schwartau

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

May 18, 2001

<http://www.extension.umn.edu/News>

## **Cultivation, chemicals help control thistles in corn**

Corn producers waging war against thistles are likely to need both cultivation and chemicals, according to an agronomist with the University of Minnesota Extension Service.

Denise McWilliams recommends early cultivation of fields with a thistle problem, preferably before the three-inch weed stage. "Continue routine field scouting and cultivating as needed," says McWilliams.

Several herbicides and herbicide combinations are effective against thistles, says McWilliams. U of M Extension educators in each county can recommend specific chemicals.

"Long-term thistle control requires an integrated approach using both mechanical and chemical controls," says McWilliams. "Timely application of chemicals will maximize control of current thistles and help reduce thistle seed banks and root reserves."

# # #

Web,V2,F4

mcwl0517

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

<http://www.extension.umn.edu/News>

May 18, 2001

(Fourth in a background series on the prospective 2002 Farm Bill)

### **U.S. agriculture runs risk of pricing itself out of international markets**

By G. Edward Schuh, Regents' professor, University of Minnesota

Politicians like to tell U.S. farmers they're the most productive and efficient in the world when competing on a level playing field. But this is dangerous and misleading. Moreover, it is not conducive to sound policy.

Brazil, for example, has become very competitive in world soybean production. Brazil has taken tropical soils long thought to be unproductive and is using lime and fertilizer to produce very competitive soybean yields. And the area with these soils is huge—millions and millions of acres. Brazil is a large country--compared to the continental U.S., Brazil is larger "by a Texas."

In addition, Brazil has developed a first class national agricultural research system. They've used it to develop soybean varieties adapted to tropical soils and conditions, and no one else in the world has done this. But it's not only Brazil that has tropical soils capable of high soybean yields. Soils very similar to those of Brazil are scattered throughout sub-Saharan Africa and in Colombia.

The U.S. is still more efficient than Brazil at keeping soybean operating costs low. But when you factor in land costs, the competition is a lot tougher. The value of current subsidies is capitalized into the value of land. This drives total production costs up, with the danger that the U.S. will price itself out of the market.

From a legislative standpoint, the U.S. needs to change the way it addresses the chronic income problem in agriculture. If we want to address the chronic income problem of farmers, and it is appropriate to do so, we need to disconnect the income supplements from the use of land. In that way, the benefits will no longer be capitalized into the value of the land, and thus drive up costs.

In addition, more attention should be given to rural development, or the expansion of nonfarm activities in rural areas. That would enable farmers to live on their farms while garnering additional productive employment. This way they could remain productive citizens in their home communities instead of migrating to urban centers and contributing to congestion and the need for costly infrastructures to accommodate larger populations.

It's not too late to appropriate and invest funds for rural development. For years, human capital has been drained out of small rural communities.

If we would take the money currently being used to subsidize counter-productive commodity programs and invest it in developing rural communities, it would do much more to help lower-income farmers. Moreover, it would do it on a sustainable, longer-lasting basis.

The current system has resulted in a vicious cycle of bidding up land prices, and is very costly for the public treasury. Moreover, present programs tend to benefit the larger farms rather than the truly disadvantaged.

Some day the body politic will realize these counterproductive effects and revolt against expensive farm commodity programs. In addition, the body politic will eventually realize that we must compete in a global economy if we are to sustain our economic growth and development.

# # #

*(G. Edward Schuh is Regents' professor and director, Freeman Center for International Economic Policy at the Humphrey Institute of Public Affairs, University of Minnesota. To comment on this series, contact Richard Levins, economist with the U of M Extension Service, at 612-625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu), or William Easter at 612-625-7728).*

Web, A2, V2, V4, F4

schuh51501

Source: G. Edward Schuh (612) 626-0564, [geschuh@hhh.umn.edu](mailto:geschuh@hhh.umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

May 18, 2001

## Start drinking water before exercising in warm weather

The most important thing an athlete can do to maintain peak performance is to drink water. Research shows plain water is better than cola, carbonated water or pop.

Anyone working out in warm weather needs to drink water before exercising, according to a publication from the University of Minnesota Water Resources Center. Don't wait until you're thirsty to drink.

When you exercise, your body builds up heat, so you sweat to bring your body temperature back to normal. As sweat evaporates from your skin, your body cools. And through this cooling process, you can lose four cups of water every hour during exercise.

You need to make up for that water loss by drinking water before, during and after exercise. You'll become dehydrated if you don't drink enough water.

There are more details in the short fact sheet entitled "Water Will Help You Do Your Best!" The fact sheet is adapted in part from articles in "Sports Nutrition Newsletter," 1995-1996, by Roselyn Biermaier, Carol Trefry and Marie Henricksen.

It's available from the U of M Extension Service water quality program at [www.extension.umn.edu/water](http://www.extension.umn.edu/water). Or, you can order a copy by calling (612) 624-9282.

###

Web, V2, V4, H2

luikk51701

Source: Barbara Liukkonen (612) 625-9256, [liukk001@umn.edu](mailto:liukk001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

May 18, 2001

## **Weeds have survival characteristics to resist control measures**

Weeds are survivors. They often survive diligent efforts by crop producers to eliminate them, notes agronomist Denise McWilliams of the University of Minnesota Extension Service.

"Each weed species has specific characteristics that help it survive and also help you determine the best control strategy," says McWilliams.

McWilliams says the ability of many weeds to quickly produce leaves helps them compete for sunlight. Developing roots rapidly allows them to scavenge for soil nutrients and water.

The number of seeds weeds produce and the time of seed germination allow weeds an edge against crops, says McWilliams. A single weed plant may produce a large number of seeds before or even after the crop producer applies control measures. The weed seed may have variable dormancy, so that some seed remains dormant. When only a portion of the seeds germinate each year, the weed problem can persist for years.

Many weeds can also withstand clipping or mowing, McWilliams points out. Quick regrowth, fast seed production and rapid storage of lost carbohydrate reserves in stems and roots allow weeds to recover. And some weeds grow close to the ground, helping them escape mowing.



“Certain weed species may develop resistance to diseases, insects or even herbicides,” says McWilliams. “Resistance tends to increase where the weeds are commonly exposed to these factors.”

# # #

Web,V2MN,F4

mcwl0518

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

May 22, 2001

<http://www.extension.umn.edu/News>

## **Management improves pastures; U of M workshops will provide details**

Manage your pastures to be productive. That's a key to success with grazing animals, says Wright County educator Maribel Fernandez of the University of Minnesota Extension Service.

While you can't control such factors as temperature and rainfall, you can control soil fertility, weeds and grazing severity, says Fernandez. She recommends the following spring pasture management practices:

--Collect a soil sample, have it analyzed and fertilize according to results. Call your county Extension office to get a soil sampling kit and send the sample to the U of M Soil Testing Lab. You will get fertilizer recommendations along with the soil test results.

--Don't let your animals out on pasture until the forage averages at least five to six inches tall.

--Let the animals graze only until the forage is down to an average of three inches tall.

--Mow or spot-apply herbicide to control annual weeds at the flower bud stage in the spring. This will not kill perennials. Call your county Extension office to get a list of approved herbicides to use on pastures. The Extension publication "Cultural and

<over>

Chemical Weed Control in Field Crops 2001" has this information in a section on grass pastures. The publication item number is BU-3157.

A grazing workshop in Cokato, Minn. at the Centennial Room will provide additional information. It will be June 19 and 26 from 6-8 p.m. each day. The workshop will cover grazing management, grasses and legumes adapted to Minnesota, weed control and fencing.

There will also be a Horse Day program June 16 at Watertown in Carver County. The event will be in the Watertown City Hall, with doors opening at 9 a.m. and the program running from 9:30 a.m. to 3 p.m. The program will cover manure composting and horse nutrition, and will include two pasture visits to see grazing management results. A later Horse Day program will be Sept. 15 at Hanover in Wright County.

For more information on the grazing workshop or the Horse Days, call the Wright County office of the U of M Extension Service at (800) 362-3667 or (763) 682-7394. Information is also on the Internet at [www.extension.umn.edu/county/wright](http://www.extension.umn.edu/county/wright).

# # #

Web,V2MN,B1,H6,S1,10,27,46,47,75,76,91

fernd521

Source: Maribel Fernandez, (763) 682-7394

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

May 22, 2001

### **Missing LDP deadline could mean big losses for farmers, landowners**

Some Minnesota farm operators and farmland owners could lose thousands of dollars if they miss a looming May 31 deadline to request a government payment on their corn and soybeans.

The payment is called a loan deficiency payment, or LDP. The deadline applies to corn and soybeans grown in 2000, according to Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"Apparently, there are quite a few people statewide with eligible bushels of 2000 corn and soybeans who have not yet collected a LDP on those bushels," says Thiesse.

Every bushel of corn and soybeans produced in 2000 is eligible either to be placed under a federal Commodity Credit Corporation (CCC) marketing loan or to receive a LDP at county Farm Service Agency offices. A person may only collect a LDP once on a bushel of grain.

Financial losses for farm operators or landowners who share rent their crop ground could be substantial this year, says Thiesse. LDP rates in Minnesota for soybeans have been above one dollar per bushel most of the time in recent months. Corn LDP rates have been about 15-20 cents per bushel recently.

"Persons with average yields in 2000 will lose about \$45-55 per acre on soybeans and \$25-35 per acre on corn if they don't claim a LDP on eligible bushels," says Thiesse.

“Landowners who are landlords in a typical share rent arrangement would lose about half that per-acre amount on unclaimed LDPs. And the losses could apply to several hundred acres.”

Many times, says Thiesse, it is landlords who are in share rent agreements who neglect to collect the LDP on their share of corn and soybeans. In southern Minnesota most share rent agreements are on a 50-50 basis, so the landlord receives half the crop. Landlords are usually responsible for marketing their share of the corn and soybeans, which includes being able to collect a LDP on eligible bushels at county Farm Service Agency offices.

Thiesse points out that a fair number of the share rent agreements are between family members. Some elderly relatives may not be completely aware of the mechanics or importance of LDPs. He encourages farm operators in these agreements to help their landlords better understand the LDP process and to make sure they are aware of the May 31 deadline.

Persons with questions on the May 31 deadline or on LDPs or CCC marketing loans should contact their county Farm Service Agency office.

# # #

Web,V2,V4MN,A2MN,F4MN

thie0520

Source: Kent Thiesse (507) 389-8325

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MISC  
A27p

May 25, 2001

## **New essay takes a fresh look at collective action by farmers**

Will collective bargaining work for farmers? "History is on the side of the doubters when you ask that question," says Richard Levins, economist with the University of Minnesota Extension Service.

In the past, most efforts to organize farmers to work together for their collective economic interests have fallen victim to the farmer's yearning for independence. But times are different in the 21<sup>st</sup> century, Levins says. "There are fewer farmers; they're better educated and better connected with information technology," Levins says. "But perhaps more important is that today's farmers live in a world of economic giants.

"Farmers acting alone is suicidal," he says. "Farmers must recognize the world in which they live, and act accordingly. Working more hours and farming more acres are no longer solutions.

"Farmers have seen many other farmers driven out of business, and others lose their independence to contracting," he says. "They know that more of the same is on the horizon."

Levins expands on his comments in a new 40-page publication, "An Essay on Farm Income." You can view it at <http://agecon.lib.umn.edu>, or contact the Waite Library, Department of Applied Economics, 232 COB, University of Minnesota, St. Paul, MN 55108. Or, call (612) 625-1705.

# # #

Web, A2, A4, V2, V4, F2, P1

levins51801

Source: Dick Levins (612) 625-5238, [dlevins@apec.umn.edu](mailto:dlevins@apec.umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MSC  
A27p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 25, 2001

## **Beyond slapping: U of M entomologist suggests mosquito strategies**

Mosquitoes are a fact of life in Minnesota during the summer....it's pretty hard to completely avoid them. But entomologist Jeff Hahn of the University of Minnesota Extension Service has some suggestions that may help you reduce your mosquito problem:

--Cut weeds and tall grassy areas near your home to help reduce areas that can harbor mosquitoes.

--Leave yard lights off when possible to avoid attracting the pests unnecessarily. You can also try less attractive lights such as sodium lights, since fluorescent or incandescent lights are more attractive to mosquitoes.

--Make sure your window and door screens fit properly. Repair or replace any screens with holes or tears.

--Remove any containers that may hold water, such as old tires. If they can't be removed, then drain them. If this isn't possible, apply a small amount of vegetable oil on the water's surface. This will suffocate any larvae in the water.

--Keep gutters clean so water doesn't accumulate.

Hahn says spraying for mosquitoes by individual homeowners is not likely to be very effective or practical because it affects only small areas.

<over>

"Mosquitoes are most active early in the morning and at dusk," says Hahn. "Try to avoid going out at those times when possible. If you find yourself out when mosquitoes will be a problem, protect yourself by wearing long-sleeved shirts and long pants."

He also suggests using a repellent, and says DEET is the most effective. He says to apply DEET to clothes or skin, but only enough to lightly cover the desired areas. "Do not overapply repellents," he cautions. "Do not treat children with a product containing more than 15 percent DEET. Always read product information thoroughly before using."

The University's Yard and Garden Clinic has experts to answer questions on horticulture, plant disease and insect problems between 9 a.m. and 3 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county or can speak to a wildlife expert.

# # #

Web,V2,V4MN,V5MN,V7,V9,G1

hahn0524

Source: Jeff Hahn, (612) 624-4977

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



1100  
1/27/01

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 25, 2001

## **Don't panic over uneven corn, soybean stands**

Don't be too concerned about uneven stands when corn and soybeans are just emerging. That's the recommendation of Denise McWilliams, agronomist with the University of Minnesota Extension Service. She says uneven stands may be due to differences in soil moisture, soil temperature and soil-seed contact, as well as some very cool nights and slight crusting in some areas.

"Before you panic, thoroughly scout the field to determine if missing plants are just about to emerge or if other problems are causing the gaps in the rows," she says. "If the seed has germinated and is just emerging, plants that are late in seeing the light may yet catch up in height with the other plants. Until plants are significantly late, such as two to three weeks behind other plants, the later plants may catch up during the growing season."

McWilliams says shorter corn plants can even out with the rest of the field through the fifth-leaf stage or even a little later, depending on environmental conditions. In soybeans, by the third to fifth node, plants under good growing conditions can even out across the field if there are no limitations on nitrogen fixation or other nutrient shortages.

McWilliams says the critical factor affecting yield in both corn and soybeans is moisture availability during flowering.

# # #

Web,V2,F4

mcwl0524

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

May 25, 2001

## **Here's a new brochure on low-cost conservation practices**

"You don't need a large cash investment to go a long way in soil and water conservation," according to a new 12-page brochure from the University of Minnesota Extension Service and U.S. Department of Agriculture (USDA).

The brochure highlights low-cost conservation practices that are made even more affordable through government incentive and cost-share payment programs. Incentive payments are provided to the agricultural producer to implement a management plan.

With cost-share payments, the government provides up to 75 percent of the cost of implementing a conservation practice. Often, the producer's cost-share consists of his or her own time and energy needed to implement the practice.

Topics covered include manure management, field practices and pasture management. There's also a section on water, wind, trees and wildlife.

Les Everett, water quality coordinator with the University of Minnesota Extension Service, wrote the brochure. Copies are available through local Natural Resources Conservation Service (NRCS) offices. You can also request one from the Extension Service Water Resources Center by calling (612) 624-9282. And, it's on the Internet at [www.extension.umn.edu/water](http://www.extension.umn.edu/water). Then click on "EQIP-Education."

# # #

Web, V2, V4MN, C4, P1

evert52301

Source: Les Everett (612) 625-6751, [evere003@umn.edu](mailto:evere003@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

May 30, 2001

## **Soybean processing system leaves more oil, more energy in meal**

A soybean processing system that leaves more oil in soybean meal could benefit both soybean growers and pork producers. The system is working well for a Kansas processor, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

McWilliams says large conventional processors use solvents to extract oil from soybeans, and the resulting meal contains about one percent fat. The Kansas operation is using a press system that produces meal averaging seven percent fat. The higher-fat meal provides more energy in swine diets.

The press system was developed by Insta Pro of Des Moines, Iowa. The Kansas operation is relatively small, using the system to process about 30,000 bushels per month.

"After the soybeans are cleaned, the system uses friction and pressure heating of the beans to over 300 degrees F, making a more digestible product for livestock," says McWilliams. "Presses squeeze out the crude oil separately, and the meal, in cake form, is conveyed to a cooler before being ground into soybean meal."

At current capacity the Kansas plant runs four days a week, 24 hours a day, with four employees, says McWilliams. The plant cost about \$1 million to build and was operational in less than a year and a half. The processor is a limited liability company that allows any farmer to deliver soybeans to the plant.

# # #

Web,V2,F4,S2

mcwl0529

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MSC  
A274

June 1, 2001

## **Check corn, soybean stands when deciding whether to replant**

Corn and soybean producers considering a decision to replant need to scout fields and estimate populations of viable plants. It's important to know the actual crop stand when making a replant decision, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

McWilliams says unexpected stand losses can result from flooding, late spring frosts, hail, insect or disease damage, herbicide or fertilizer injury or other causes.

Scouting makes it possible to compare the actual stand with the desired plant population, says McWilliams. Estimating plant population involves counting the number of viable plants in a length of row that equals one one-thousandth of an acre in several spots across the field. Six to eight spots across 20 acres provide a good sample. Average these counts and multiply by 1000 to get the plant population.

The length of row that equals one one-thousandth of an acre varies with planting width, notes McWilliams. In 22-inch rows, the length is 23.8 feet; in 30-inch rows it is 17.4 feet.

In relating stand loss to yield loss, McWilliams cites figures from the National Crop Insurance Service corn loss instruction book. These figures show that a 75 percent stand will result in a 10 percent yield loss, a 50 percent stand in a 26 percent yield loss

<over>

and a 25 percent stand in a 43 percent yield loss. Yield losses may increase with uneven distribution or large gaps or skips in the stand.

“The stand isn’t the only factor to consider in a replant decision,” notes McWilliams. “Crop insurance requirements may be a consideration. There are likely to be yield losses from planting at a later date. There are costs for the replant seed and other replanting and pest control costs. The grower has to evaluate these factors carefully to determine if replanting is worth the time, money and effort.”

# # #

Web,V2,F4

mcwl0531

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

ACC  
AZTP

June 1, 2001

## **Corn, soybeans for silage offer late planting option**

Corn and soybean producers who haven't been able to get crops planted because of all the rain this spring may want to consider planting for silage. This may be a good option for farmers who can feed or sell the forage, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

For corn, a hybrid selected for normal grain maturity is generally the best choice for silage, green chop or grazing, says McWilliams. Silage hybrids are usually five days later in maturity than hybrids grown for grain. The best time to harvest corn for silage is when the grain is in the late dough stage, McWilliams points out.

Soybeans are also an option for hay or pasture. "Ensiled or fed green, the soybean is one of the few annual legumes suitable for hay, although it's usually fed with other kinds of hay," says McWilliams.

She cites a Wisconsin study showing that row spacing, planting rate and variety have little effect on fiber or protein levels in the forage. In the study, harvest maturity was the main factor in fiber and protein levels. In terms of feeding, animals were less inclined to eat older, coarser, more mature stems.

In Canada studies, soybean forage harvested between R6 and R7 (when leaves begin to turn yellow but before they fall off the plant) was comparable to alfalfa harvested at early bloom stage for protein and fiber content.

<over>

“Soybean forage harvested at the R7 stage should be limited to no more than 50 percent of the total dry matter in the ration,” says McWilliams. “Soybean silage mixed with corn silage shows little difference in value to straight corn silage. Mixing two to three parts corn silage and one part soybean silage makes a well-balanced silage that keeps well and is readily eaten by cattle.”

On both silages, make sure no mold growth occurs, including white mold on soybean plants in the field prior to cutting, says McWilliams. Also, check herbicides and be sure to use only those that have no restrictions on timed application intervals prior to harvest as feed.

# # #

Web,V2,F4

mcw10601

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

June 5, 2001

**Swine AI seminar at Morris will be June 22**

A seminar on artificial insemination in swine will take place June 22 at the University of Minnesota's West Central Research and Outreach Center at Morris. The seminar will be in the WCROC Administration Building from 10:45 a.m. to 4 p.m. It will be preceded by a demonstration of PigWin swine herd inventory management software at 9 a.m.

The AI seminar will have a morning presentation on swine reproductive physiology by U of M animal scientist Alan Hunter. The afternoon session will begin with a presentation on semen collection, extension, storage, packaging and delivery. Mike Wesolowski of AI Partners in Morris will be the speaker. Then Rod Hamilton of Olivia, a representative of American Swine Resources, will speak on receiving semen, on-farm storage and insemination.

There will be optional hands-on insemination practice for interested participants at the Stevens County Fairgrounds in Morris.

The cost of the AI seminar is \$10 per person at the door, and includes lunch and refreshments. For further information on the seminar, contact Stevens County Extension educator Kirby Hettver at (320) 589-7423. For further information on the software demonstration, contact farm business management instructor Dan Perkins at (320) 589-3323, Ext. 2.

# # #

Web,V2MN,S2MN,Z7

hettv604

Source: Kirby Hettver, (320) 589-7423

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu



MSC  
A27p

June 8, 2001

## **Book on swine breeding and gestation facilities available from U of M**

Swine breeding and gestation facilities are the subject of a new book now available from the University of Minnesota. The book was written by engineers from several state universities, and is the third publication in a three-part series on swine housing and management.

"Swine Breeding and Gestation Facilities Handbook," MWPS-43, is the book's title. It's published by MidWest Plan Service (MWPS), a cooperative research and extension organization representing the 12 land-grant universities of the North Central Region of the U.S.

The book is intended for swine producers and builders, according to engineer Larry Jacobson of the University of Minnesota Extension Service. "Design and management of a breeding and gestation facility should enhance animal management and movement and increase labor efficiency, animal well-being and worker safety," says Jacobson.

The book includes discussions of housing management options, building layouts and equipment needs. It also includes chapters on manure handling, environmental control and utility requirements. It has some 60 figures showing specific examples of concepts. It also has more than 40 tables, equations and examples relating to space

requirements, manure production volume, ventilation rates, insulation levels and light levels. Appendices to the book contain worksheets and forms for determining sow, gilt and boar inventories.

Authors are Jay Harmon, Extension agricultural engineer at Iowa State University; Donald Levis, Extension swine specialist at Ohio State University; J. M. Zulovich, Extension agricultural engineer at the University of Missouri; Steven Hoff, agricultural engineer at Iowa State; and Gerald Bodman, retired Extension agricultural engineer at the University of Nebraska.

Other publications in the MWPS swine housing series are "Swine Housing and Equipment Handbook," MWPS-8; "Swine Farrowing Handbook: Housing and Equipment," MWPS-40; and "Swine Nursery Facilities Handbook," MWPS-41.

The cost of "Swine Breeding and Gestation Facilities Handbook," MWPS-43, is \$15 per copy, plus sales tax for Minnesota residents. To order this book or others in the swine housing series, contact MWPS, Biosystems and Agricultural Engineering Dept., University of Minnesota, 1390 Eckles Ave., St. Paul, MN 55108; e-mail [mwps@gaia.bae.umn.edu](mailto:mwps@gaia.bae.umn.edu); or phone (612) 625-9733.

# # #

Web,V2,V4MN,S2,X5

mwps0605

Source: Larry Jacobson, (612) 625-9733

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

UNIVERSITY OF MINNESOTA

**Extension**

SERVICE

**NEWS & INFORMATION**<http://www.extension.umn.edu/News>

June 8, 2001

(Fifth in a background series on the prospective 2002 Farm Bill)

**Is it time for a fresh look at collective bargaining by farmers?**

By Richard A. Levins

The perpetually low income of farmers kept agricultural economists busy for most of the twentieth century. Policy after policy has been tried, rejected, and then tried again in an attempt to solve the farm income problem.

Ever since the New Deal, we have had price supports at various levels for many farm products. Since the Kennedy years, we have supplemented relatively low price supports with direct payments to farmers. All the while, supply control has been attached to most farm bills in one form or another. None of this has provided a lasting solution to low farm income.

Some see the failure of public policy as clear evidence that we should "get the government out of agriculture" and embrace free market philosophies. The 1996 "freedom to farm" bill is very much of this tradition. Global competitiveness, level playing fields, farmer freedom and increased efficiency became the battle cries in this new way to make farmers better off.

But within a few years, government payments to farmers were at record high levels, and getting the government out of agriculture had proven to be more expensive than keeping it in agriculture. Policy experts around the country are now busily crafting ways to go back to the future.

&lt;over&gt;

Government programs are based on the view that farmers are unable to act together in their own best interest. Thus, the government must act on their behalf. Free marketers see collective action as unnecessary and a general affront to the individual freedom they hold dear. As a result, the possibility of farmers acting collectively to take charge of their own economic interests has received virtually no attention in almost 70 years of farm policy debates.

Most economists, and many farmers, doubt whether farmers can work together for their collective economic interests. History is on the side of the doubters. Throughout the 20<sup>th</sup> century, most efforts to organize farmers eventually fell victim to the farmer's yearning for independence.

The twenty-first century is different, however. There are fewer farmers. The farmers we have are better educated and better connected with information technology. And last but not least, today's farmer lives in an agribusiness world of economic giants. Today's farmers have seen many other farmers driven out of business, and still others lose their independence to contracting. They know that more of the same is on the horizon.

Collective bargaining is not getting together and letting the smartest farmer in the group make marketing decisions. Nor is it about getting more efficient. And while supply control is popular, farmers who dump milk and kill baby pigs without targeted use of concentrated economic power serve only shock the public. Instead, collective bargaining is face-to-face negotiation between a powerful farmer group and some other food system powerhouse.

<over>

Organizing 350,000 farmers (roughly the number of family-sized farms that could gross enough to make a decent living) may be difficult. But the experience of other industries faced with similar business circumstances says it's not impossible.

For example, the American Federation of Teachers has one million members and the National Association of Letter Carriers effectively represents 315,000 postal workers. And all workers in an industry need not be in the same union: 59,000 airline pilots bargain together while others that depend on airlines for a living have other unions. (For comparison purposes, the airlines pilots have about twice as many members as the American Soybean Association).

Will the new generation of farmers embrace collective action, or continue to try and make it on their own? Farmers, and only farmers, can answer such a question.

(More information is available in a 40-page article by Levins titled "An Essay on Farm Income." You can view it at <http://agecon.lib.umn.edu>, or contact the Waite Library, Department of Applied Economics, 232 COB, University of Minnesota, St. Paul, MN 55108. Or, call 612-625-1705).

# # #

*Richard A. Levins is a professor and Extension agricultural economist at the University of Minnesota and a senior fellow with the Institute for Agriculture and Trade Policy. To comment on this series, contact Levins or William Easter at (612) 625-7728, [dlevins@appec.umn.edu](mailto:dlevins@appec.umn.edu).*

Web, A2, P1, F4, V2, V4

levins6701

Source: Dick Levins (612) 625-5238, [dlevins@appec.umn.edu](mailto:dlevins@appec.umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
AZIP

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

June 8, 2001

<http://www.extension.umn.edu/News>

## **Here's the latest scoop on digital photography**

Digital photography is becoming more popular as prices go down and image quality improves, according to a new publication from the University of Minnesota Extension Service.

The article presents consumer information about the advantages and many various features of digital cameras. It's written for anyone interested in photography and can help you decide which digital camera is right for your needs.

A digital camera replaces the film (from a conventional camera) with an image-sensor chip that records the picture electronically. The data must then be transferred to a computer to be transmitted or printed.

"Select a camera that uses a removable memory card to record the picture data," says Don Breneman, the author and a photographer with the U of M Extension Service. Think of the removable memory card as digital film; when you fill one, you can remove it and replace it with a fresh one. Later you can download the images into your computer, erase the card, and reuse it.

The higher the resolution, the larger and sharper the image that can be reproduced. A higher resolution image also requires more memory for storage and

<over>

processing in your computer. How much resolution is enough? That depends on what you intend to use your pictures for, Breneman says.

If you're going to email pictures of your kids to their grandparents over the Internet, a low resolution of 512 X 768 will look good on the screen and transmit quickly. A larger file will take longer to transmit and may overload the computer on the receiving end. If you intend to reproduce your pictures as enlarged prints, you'll need an image resolution of at least 1024 X 1536.

It's a good idea to buy the highest resolution camera that you can afford, Breneman says. You can always reduce the image size with your computer software but you can't increase it. The publication has a table that lists the minimum resolutions for various applications such as e-mail and different sized prints.

Don't try to save money by buying a used digital camera. "Buy new," Breneman advises. Technology in digital cameras is still evolving. Models change quickly and older cameras may not be repairable.

You can find the article on the Internet at [www.extension.umn.edu/distribution/communications/DL7651.html](http://www.extension.umn.edu/distribution/communications/DL7651.html). It's also available through county offices of the U of M Extension Service. Or, for a small charge you can order one by calling (800) 876-8636, or (612) 624-4900 in the Twin Cities area. Ask for number 07651.

# # #

Web, F3, V4, V5, V7

brene6601

Source: Don Breneman (612) 625-4248, brene001@umn.edu  
Writer: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

MSC  
A27p

June 12, 2001

## **Minnesota farmers would benefit from biodiesel production**

Although legislation mandating biodiesel fuel in the state was recently defeated in the Minnesota Legislature, the issue is far from over.

Members of Minnesota's Congressional delegation are preparing legislation that would encourage the use of biodiesel as fuel, and interest remains high in farm states producing oil crops such as soybeans, corn, canola, sunflowers and flax. Biodiesel is defined as a variety of ester-based oxygenated fuels made from vegetable oils or animal fats through a relatively simple chemical reaction.

"Minnesota farmers who produce oilseed crops have faced very low prices over the last two years. They would see price gains based on increased local demand for the oil component of these crops," says Douglas Tiffany, an applied economist at the University of Minnesota. His recently completed staff paper entitled, "Biodiesel: A Policy Choice for Minnesota," discusses the economic impact of production and use of this renewable fuel.

"Biodiesel derived from soybean oil is nearly equal in price to petro-diesel today," Tiffany says. "But there are other reasons to favor its production and use at higher prices."

EPA standards effective in 2006 require that sulfur levels of all diesel fuel be substantially lowered in order to protect the catalytic converters that will be used on diesel engines in 2007. Tiffany says the removal of sulfur from diesel fuel will substantially raise refinery costs and result in fuel lacking lubricity, causing increased wear of fuel injection pumps.

"However, research has proven that biodiesel blends as low as two percent can restore lubricity to diesel fuel," Tiffany says. "Other research has proven that biodiesel

<over>



blends dramatically reduce gaseous emissions and particulates from diesel engines, improving air quality for urban and suburban dwellers."

Tiffany's study of mandates for either two percent or five percent biodiesel showed there would be no costs to Minnesota state government. In contrast, ethanol production in the state has been the recipient of state and federal subsidies.

Biodiesel production in Minnesota is sustainable, Tiffany says. "It's an exciting moment when Minnesota farmers using diesel engines may be using fuel derived from their crops," he says. "A portion of the energy in sunlight falling on their fields one year will be making its way back to the farmers producing their next crops or powering the trucks, barges and trains transporting farm commodities to their ultimate destinations.

"Biodiesel use in Minnesota would represent a closed loop of carbon dioxide in our environment," Tiffany says. "Carbon dioxide emitted by burning biodiesel would be sequestered in the growing oilseeds of the state and eventually converted to fuel."

Biodiesel has an energy balance of 3.24, meaning that for every unit of energy used in the production of biodiesel from growing the feedstocks through crushing/extraction and finally transesterification, 3.24 units are available. "This is much better than the energy balance frequently mentioned for ethanol at 1.25," Tiffany says. However, the additional oxygen supplied by ethanol is important in reducing emissions when blended with gasoline.

"Perhaps someday Minnesota may meet five percent of its diesel fuel capacity from home-grown sources," Tiffany says, "much as it produces 10 percent of its gasoline capacity from ethanol."

His paper is available on the Internet at <http://agecon.lib.umn.edu>. You can also get a copy by calling the Department of Applied Economics, (612) 625-1705.

# # #

Web, A2, F4, V2, V4, P1

tiffny6701

Source: Doug Tiffany (612) 625-6715, [dtiffany@dept.agecon.umn.edu](mailto:dtiffany@dept.agecon.umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

June 12, 2001

### **Rosemount will host forage expo, horse and small acreage program**

If it's green and grows in Minnesota and cows, sheep or horses will eat it, it's likely you can learn more about it at an upcoming event at Rosemount, Minn. The University of Minnesota's Rosemount Research and Outreach Center is the site for the 2001 Minnesota Alfalfa and Forage Expo July 17-18.

The event is open to all interested persons and includes a special program for horse and small acreage owners July 17 from 5-9 p.m.

The expo features a continuous educational program from 11 a.m.-12:30 p.m. each day. Some of the topics will be forage establishment, corn silage, use of manure on alfalfa, alfalfa potato leafhopper management, nitrogen fertilization of grass-legume mixtures, and farmer innovations such as bale sleeves.

Grounds will open at 8:30 a.m. each day. A clinic that provides an opportunity for forage producers to have insect, weed and disease problems diagnosed will be open from 8:30-11 a.m. Varietal plots will provide comparisons of the latest alfalfa and corn silage varieties. Field demonstrations of cutting equipment will take place from 9 a.m.-10:45 a.m., and harvesting equipment will be demonstrated from 1:30-3p.m.

The program for horse and small acreage owners will also include field equipment demonstrations, which will begin at 6 p.m. An educational program at

7 p.m. will cover poisonous plants for horses and other livestock, feeding horses, pasture management, weed control in pastures, and fencing and watering systems.

The expo site is located just east of Rosemount in Dakota County, a half mile south of the County Road 42 and Akron Ave. intersection. This intersection is a half mile west of the Dakota County Technical College or three miles west of Highway 52.

The expo will include a trade show with commercial exhibits of forage-related production, handling and feeding equipment. Admission and parking are free, and there will be food concessions on site. For more information, contact the Minnesota Forage and Grassland Council at (651) 436-3930, e-mail [mfgc@umn.edu](mailto:mfgc@umn.edu) or visit the website at [www.umn.edu/mfgc](http://www.umn.edu/mfgc).

# # #

Web, V2, V4MN, F4, 02, 10, 19, 25, 27, 46, 69, 75, 76, 84, 87, 91

forghpo

Source: Paul Peterson, (612) 625-3747

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

June 12, 2001

## **Minnesota 4-H youth conference receives Cargill grant**

National 4-H Council's Youth Grants Program has awarded a grant of \$10,000 to Minnesota 4-H's "Youth Exploring Leadership and Learning Outloud!" conference.

The "2001 Biotechnology and the Future" grants program, funded by the Minnesota-based company Cargill, awards funds to help youth understand the role of biotechnology in today's global economy and its impact on agriculture, energy and environmental management.

"Youth Exploring Leadership and Learning Outloud!" is an annual conference, held June 11-14 this year. It addresses current events and issues affecting youth and the world today. The theme this year, "Targeting the Power of Youth," focuses on youth empowerment, decision-making and planning.

The topic of biotechnology serves as an area of exploration, discussion and consultation as youth learn from leaders active in biotechnology at the University of Minnesota and Cargill. The youth will also travel to the Minnesota Zoo to explore the impact biotechnology is having on plant and animal preservation and environmental management, and to view one of the first cattle cloned using recent developments in biotechnology.

"We're pleased to support Minnesota 4-H's efforts and help young people understand the potential of biotechnology," said Mark Murphy, manager of Cargill

<over>

Stakeholder Relations. "This grant program provides funds for projects that encourage students to learn about this emerging field and help prepare them for the future."

Cargill is an international marketer, processor and distributor of agricultural, food, financial and industrial products and services with 85,000 employees in 60 countries.

Martha Norman, president of the Minnesota State 4-H Federation who helped plan the conference, says "There is a great deal of excitement for young people in looking at the issue of biotechnology. The world is constantly changing and youth want to be involved in the decisions that are affecting the future."

For more information on the conference, contact Deb Noll, executive director of the Minnesota 4-H Foundation at (612) 624-8132, or Brad Froslee at (612) 624-7667.

# # #

Web, V2MN, V4MN, Y1

4hcargill

Source: Brad Froslee (612) 624-7667, frosptown@aol.com

Editor: Jack Sperbeck (612) 625-1794, sperb001@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A21p

<http://www.extension.umn.edu/News>

June 15, 2001

## State 4-H communication arts winners announced

Six Minnesota teens are planning trips to Eastern Europe as state winners in the 4-H/JCRC Communication Arts contest.

Receiving all-expense paid trips are Sarah Baldus, Grand Meadow; Ariel Lopez, Shoreview; Carolyn Pahr, Cottage Grove; Lynnea Piotter, Gaylord; Sarah Ronnevik, Fergus Falls; and Kaitlin Torgerson, Warren.

Contestants addressed issues on the theme "Youth Against Prejudice" in one of four categories: public speaking, creative writing, interpretive reading and photojournalism. The teens will leave for Eastern Europe in July, visiting Prague in the Czech Republic and Budapest, Hungary.

In conjunction with the competition, participants spent the weekend prior to the competition with Twin Cities Jewish host families. They participated in a weekend of Jewish and multi-cultural programming, including a Jewish Sabbath meal with host families, synagogue services, Yiddish storytelling and Israeli dancing.

Eighty-one youth participated in the event, held at Beth El Synagogue in St. Louis Park June 11. This event marked the culmination of 14 multi-county contests held across the state. This event is co-sponsored by Minnesota 4-H Youth Development, University of Minnesota Extension Service and the Jewish Community Relations Council of Minnesota and the Dakotas (JCRC).

# # #

Web, V2MN, V4MN, Y1

4hcoms

Source: Barbara D. Sorensen (800) 247-5044  
Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MSC  
A27p

June 15, 2001

## **Soil sampling shows no substantial loss of fall-applied nitrogen for corn**

Despite this spring's heavy rains, there was no substantial loss of fall-applied nitrogen for corn as of June 11. That's the conclusion of University of Minnesota Extension Service soil scientist George Rehm after studying soil test results from 19 fields. Rehm says there could have been some nitrogen losses where heavy rain has occurred since June 11.

Rehm says the soil samples came from fields in south central, southwestern and west central Minnesota during the week of June 11. The samples were from depths of 0 to 12 inches and 12 to 24 inches.

"Sample analysis for nitrate-nitrogen showed no substantial nitrogen loss from fields fertilized with either urea or anhydrous ammonia," says Rehm. "The samples also showed relatively high amounts of nitrate-nitrogen at the 12- to 24-inch depth. Nitrogen at this depth can easily be used by an actively growing corn crop."

Rehm says it's not surprising that there has been very little, if any, loss of fertilizer nitrogen. Last fall the soil profile was empty and could absorb a substantial amount of rainfall before becoming saturated. "The potential for nitrogen loss remains low until the soil profile becomes saturated," he points out.

Some crop producers may want to measure nitrate-nitrogen in their individual fields, notes Rehm. If so, he recommends collecting samples from the 12- to 24-inch

depth as well as the top 12 inches. "Collecting from the top 12 inches may lead to a conclusion that soil nitrogen is low and more fertilizer is needed," says Rehm.

"Collecting additional samples from 12 to 24 inches may show there is enough nitrogen and that buying more fertilizer would be a waste of money."

Rehm believes the soil nitrogen information from the 19 sampled fields is very reliable, representing production fields in southern and west central Minnesota. Two samples from each field were analyzed and the measured amounts of nitrate-nitrogen were in close agreement.

"There's no way to predict nitrogen losses during the rest of the growing season," says Rehm. "Through the first third of June, however, nitrogen losses have been minimal."

# # #

Web,V2,V4MN,F4

rehmo614

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



MSC  
AETP

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

June 15, 2001

## **Soybeans more flexible than corn in recovering from flooding**

Heavy rains in some areas have left parts of corn and soybean fields underwater. However, damage to submerged crops may not be severe, according to agronomist Denise McWilliams of the University of Minnesota Extension Service. She says the crop growth stage, the length of time the crop is submerged and air and soil temperatures all influence the extent of damage to a submerged crop.

"Small soybeans, if not completely submerged, can survive several days to a week if air temperatures are below 90 degrees F," says McWilliams. "Seedling diseases such as Phytophthora and Pythium can be a problem in saturated fields, so it's important to scout for them."

McWilliams says corn isn't as flexible as soybeans when it comes to flooding. "Corn that hasn't reached the sixth leaf stage can survive underwater only up to four days," says McWilliams. "When the soil temperature is above 77 degrees F, it may not survive 24 hours. Cooler temperatures will prolong survival."

McWilliams cites studies at Iowa State University that showed six-inch corn underwater for 72, 48 and 24 hours had yield reductions of 32, 22 and 18 percent when the amount of available nitrogen was low. At high available nitrogen rates, yield reductions were only 14-19 percent.

<over>

Continued soil saturation can also result in crazy top and common smut in corn, says McWilliams. The excess moisture may reduce corn root development and increase root, crown and stalk rots.

To check the condition of corn that has been submerged, McWilliams recommends digging up a plant (remember that the growing point is below ground until the fifth-leaf stage). Split the plant and check for a white or cream-colored growing point that indicates the plant is alive. Darkening or softening of the growing point indicates plant death. Also, new leaf growth should occur within 3-5 days after water drains from a field, McWilliams concludes.

# # #

Web,V2,V4MN,F4

mcwl0614

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

## NEWS & INFORMATION

<http://www.extension.umn.edu/News>

June 15, 2001

### **Corn, soybean growth stage affects recovery from wind, hail damage**

This is the time of year when corn and soybeans can be hit with high winds and hail. In many cases the crops can recover from storm damage, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

"Corn at the fifth-leaf stage has the growth point at or slightly below the soil surface," says McWilliams. "Corn at this stage should recover from wind or hail damage. At the sixth-leaf stage, the growing point on corn is above the soil surface and the plant has initiated rapid stem elongation. Fields at the sixth-leaf stage and beyond should be carefully scouted and monitored to insure that the corn will recover."

McWilliams says lodging of corn plants may only be a temporary condition, unless high winds or hail has snapped off the main stem completely. If the main stem is completely broken and no tillers are present and viable, consider the corn growth stage to determine whether the growing point was protected and whether regrowth can occur.

"With good growing conditions, three to five days should show if the corn will recover," says McWilliams.

With soybeans, plants cut off below the cotyledons will not recover, according to the U of M agronomist. However, regrowth can occur on soybeans from either one of

<over>

the axillary buds located at the point where the cotyledons are attached to the main stem , or from any of the branch axils.

Wind and hail can also bruise corn and soybeans. McWilliams says bruised stems weaken the plants and may cause them to break at a later time. However, bruising does not affect yield as long as plants do not break.

# # #

Web,V2,V4MN,F4

mcwl0616

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
AZP

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

June 19, 2001

## **Restored shorelands don't need mowing, fertilizers**

No mowing, watering, pesticides or fertilizer is required with a shoreland restoration project. Unless any "exotics" invade and need to be weeded out, native landscaping typically requires no maintenance.

Using native plants is important, since they've adapted to local conditions and local wildlife have adapted to them, says Barbara Liukkonen, educator with the University of Minnesota Extension Service Water Quality Program. She says restoring your developed shoreline to a more natural landscape also helps protect water quality, improves habitat, increases privacy and can discourage nuisance geese.

You can get the scoop on restoring shorelands with a new video, "Shoreland Restoration—A Growing Solution." It's a step-by-step instructional guide that goes through four steps: developing a plan, site preparation, planting trees and shrubs, and planting seedlings.

The video is available for \$10 from University of Wisconsin Extension Publications by calling (877) 947-7827. Ask for GWQ032.

Other videos and publications on shoreland education are available through county Extension offices in Minnesota, or from the Distribution Center at (800) 876-8636, or (612) 624-4900 in the Twin Cities area. The \$15 videos include:

<over>

--"The Living Shore: Best Management Practices for Shoreland Vegetation." The video reviews benefits of shoreland vegetation and provides information on re-establishing vegetative strips along shorelines. Ask for number 7129.

--"Keeping Our Shores: Shoreland Best Management Practices." It introduces best management practices that shoreland owners can use to protect water quality in a lake or river, including shoreline filter strips, septic maintenance and appropriate lawn care practices. Ask for number 6947.

--"Rivers: Ribbons of Life." This video illustrates the importance of land use and land management along rivers and within a watershed, with a focus on wise land use decisions and protecting natural vegetation along rivers.

You can find more water quality publications and resources by visiting the Extension Water Quality web page at [www.extension.umn.edu/water](http://www.extension.umn.edu/water).

# # #

Web,V4MN, C4, T2

liukk61401

Source: Barbara Liukkonen (612) 625-9256, [liukk001@umn.edu](mailto:liukk001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A21p

<http://www.extension.umn.edu/News>

June 22, 2001

## **Air quality standards must be clarified, U of M economist says**

With environmental policy, we can't have a perfectly clean environment along with full-fledged industrial activity.

To put it another way, you contribute to pollution if you drive your car to work, heat your house in winter or cool it in summer, says Stephen Polasky, an applied economist at the University of Minnesota. "But trade-offs can be made, and an enlightened public policy will have to confront these trade-offs when setting new air quality standards," Polasky writes in the "Minnesota Agricultural Economist," published by the University of Minnesota Extension Service.

"Setting precisely and scientifically justified 'safe' levels for many air pollutants is still a dream," Polasky says. "For most air pollutants—ozone and particulate matter included—breathing less pollution is certainly better than breathing more of it.

"But for some pollutants, there is a possibility of adverse health consequences at any level of exposure. These are called 'non-threshold pollutants because there is no level or threshold below which adverse health effects have been shown not to occur."

"There are no 'safe' and 'unsafe' levels to non-threshold pollutants," Polasky says in his article. "There are only 'better' and 'worse.' Science can help us measure pollution, but only politics can help us decide how much or how little is acceptable.

<over>

"But Congress has chosen not to make this political judgment. It has told the Environmental Protection Agency to decide what level of pollution is unacceptable."

Between Congress and the Supreme Court, the EPA has been given an impossible task, Polasky says. In February 2001, the Supreme Court unanimously ruled that the EPA could not consider economic costs in its air quality rule making. The Court held that Congress was so explicit about this that no wiggle-room is permitted.

"But this decision doesn't make the EPA's work any easier," Polasky says. "No new air quality standard can be 'arbitrary and capricious.' There must be good reasons for setting a particular standard at a given level and for not setting it higher or lower.

"Assuming that costs will not be considered, it is hard to see how any standard for a non-threshold pollutant can stand up in court against an allegation that it is 'arbitrary and capricious.'"

The argument to weigh the costs against benefits is often made by those who want to weaken environmental regulations, Polasky says. But studies by the EPA have shown that regulation under the Clean Air Act has yielded far more economic benefits than it has imposed in costs since 1970.

"Reasonable people may disagree about where to set a particular standard," Polasky says. "But a standard will be far more defensible if there is a clear consideration of the important consequences of deciding 'how clean is clean enough.'" His article can be found on the Internet at <http://agecon.lib.umn.edu/mn/mae703.pdf>.

# # #

Web, E3, V4, V7, V8, H2, T2

polasky61901

Source: Stephan Polasky (612) 625-9213, [polas004@umn.edu](mailto:polas004@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)



June 22, 2001

**Location becoming more important in higher farm real estate prices**

Farm real estate prices are still rising in Minnesota, and location of the land is a large factor. "We can't explain current price levels on the basis of income potential and speculation potential alone," says Steve Taff, an applied economist at the University of Minnesota.

Where the land parcel sits with respect to job centers is one of the location factors influencing what buyers will pay, Taff writes in the "Minnesota Agricultural Economist," published by the University of Minnesota Extension Service.

"Average Minnesota farm real estate sales prices just keep on climbing," Taff says in the article. "This is despite low output prices, rising input costs and continued uncertainty about the future of federal subsidies. Sales price increases were seen in all parts of the state except the northwest."

In his study, the Minnesota average price for the 2000 record year was \$1,222 for 2,258 sales of land, with a total of just over 250,000 acres sold. The average he used was a location- and size-weighted mean. This average has steadily climbed from \$936 in 1996 to \$1,039 in 1997, \$1,113 in 1998 and \$1,196 in 1999.

Taff says other reasons for continuing upward movement of farm real estate include:

--Perennial farmer optimism about future prices.

<over>

--Expected extensions of federal farm subsidies.

--Continued favorable local property tax treatment for farmland.

--The desire of some farmers to increase the size of their current operation by buying adjacent farmland.

--The desire of some non-farm buyers to use land as a hedge against inflation.

--Inflation itself.

"As always, I caution potential land buyers and sellers about reading too much into the average land prices reported here and elsewhere," Taff writes. "If you've got land to sell or if you have a hankering to buy land—look before you leap.

"The financial stakes are high. Hire an appraiser, talk with your spouse and children and check your finances," he says. "Think about the children and be careful out there."

His complete article, including sales data by districts in the state, can be found on the Internet at <http://agecon.lib.umn.edu/mn/mae703.pdf>.

# # #

Web, A2, A4, V2, V4

taff61901

Source: Steve Taff (612) 625-3103, [sjtaff@umn.edu](mailto:sjtaff@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

June 22, 2001

**Specialized traits becoming more important in crop marketing**

Value differences among corn and soybean varieties with specialized traits are becoming increasingly important for successful marketing. Farmers who can deliver crops with traits for a specific market can often earn price premiums, says agronomist Denise McWilliams of the University of Minnesota Extension service.

"Over time, variations in crops will become easier to measure," McWilliams predicts. "Production for niche traits and the organic market will become more important. Farmers and elevators will learn from one another how to use premiums for specialized traits to increase profits."

Segregation and transportation of crops will be among the greatest challenges in marketing crops for specialized markets, notes McWilliams. Different types of crops will have to be kept separate and may need special handling to prevent cracking or other problems.

"In the future farmers will narrow the gap between themselves and end users and are likely to grow more crops on contract," says McWilliams. "This is happening already where farmer-owned cooperatives allow specific production for niche markets."

# # #

Web,V2,A2,F4

mcwl0621

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MSC  
AZP

June 22, 2001

## **Minnesota farm business records show high level of federal payments**

The average net income for a representative group of Minnesota farms was \$56,083 last year, according to financial records of the farms. The records also show that government payments accounted for 85 percent of the total net income. The figures underscore the importance of federal dollars to supplement farm income, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

The income figures are from the Minnesota State Colleges and Universities (MNSCU) Farm Business Management Program. They represent the financial records of nearly 2,300 farms. The figures are fairly typical of farm operations throughout southern and western Minnesota and other upper Midwestern states, according to Thiesse.

The farms in the MNSCU program averaged \$47,651 in government payments in 2000, or 85 percent of total net income. An average of \$21,808 came from the scheduled Agricultural Market Transition Act (AMTA) payments that are part of the seven-year federal Farm Bill. The other \$25,843 came primarily from extra AMTA payments and oilseed payments that were part of the Market Loss Assistance Program, and other federal programs for selected farmers such as the Conservation Reserve Program and disaster programs.

<over>

The percentage of net farm income from government payments was highest in the Red River Valley at nearly 96 percent, and lowest in east central and northeast Minnesota at 62.5 percent. South central Minnesota was at just over 88 percent of net farm income from government payments, while southwest Minnesota was at 81 percent and west Central Minnesota at 84.5 percent.

It's important to keep in mind that not all farmers receive a high level of government payments, Thiesse points out. Livestock producers with limited crop acreage and farmers producing specialty crops derive far less of their income from government payments.

The U.S. Department of Agriculture paid out record levels of federal farm payments in 1998, 1999 and 2000 to offset low crop prices and minimize the effects of low farm profitability. Without the federal dollars, there would probably have been an economic disaster for farm businesses in many areas of Minnesota, says Thiesse.

Federal government figures show direct payments to farmers totaled nearly \$30 billion in 2000. This compares with about \$23 billion in 1999, slightly over \$12 billion in 1998 and \$7.5 billion in 1997.

# # #

Web,V2MN,A2,F4MN

thie0618

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

June 26, 2001

## **Disaster declaration may bring little help to homeowners, farmers**

A federal disaster declaration for a county following a flood or severe storm may not bring much assistance for individual homeowners and farmers. The meaning of a disaster declaration can be confusing, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

“A disaster declaration usually means that local government units are eligible for federal assistance funds to help cover costs associated with the natural disaster,” says Thiesse. “Usually, individual homeowners and farmers in the affected counties are eligible to apply for low-interest loans. In a very serious situation such as a major tornado, the Federal Emergency Management Agency (FEMA) will set up a temporary office in the affected area to assist people.”

Thiesse says individuals with high hopes for assistance from a disaster declaration often find there is not much help available. Farm operators who have crop and property losses due to storms or floods are typically eligible to apply for low-interest Farm Service Agency emergency loans. However, these loans are often difficult to qualify for and cumbersome to apply for, says Thiesse. “In most situations, there are very few FSA farm emergency loans actually distributed in the counties that receive a disaster declaration,” he points out.

Disaster payments for crop losses are the biggest concern for most farm operators, says Thiesse. In recent years Congress has passed emergency farm legislation authorizing such payments. For the 2000 crop year, all farms that had a 35 percent or greater loss of crop production were eligible for a crop disaster payment. Farms did not have to be in counties that received a disaster declaration to be eligible.

Congress has not yet acted on emergency farm legislation for 2001. However, "it's highly likely that there will be another assistance package this year that will probably include crop disaster provisions very similar to the provisions for the 2000 crop year," says Thiesse.

# # #

Web,V2,V4MN,V5MN,A2,A4

thie0625

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

<http://www.extension.umn.edu/News>

June 26, 2001

## **Lohr, Tiffany named to endowed chairs in agricultural systems at U of M**

Luanne Lohr and Douglas Tiffany will be the 2001-2002 School of Agriculture Endowed Chairs in Agricultural Systems at the University of Minnesota. They will work on organic marketing and agricultural energy issues.

Lohr, an associate professor in the Department of Agricultural and Applied Economics at the University of Georgia in Athens, will take a sabbatical to serve in the chair from Aug. 1, 2001 to May 31, 2002. She is now completing an organic marketing study with the U.S. Department of Agriculture (USDA).

In Minnesota, she would like to develop her USDA project into a case study of how to build a regional or state organic food network to keep more value-added proceeds from organic production and processing in Minnesota. She will also work with the organic industry and University students and staff to develop a graduate course on the economics of agroecology.

Tiffany is a research fellow in the Department of Applied Economics at the U of M, where his work has included a variety of energy projects. He will serve in the chair from Aug. 27, 2001 to Aug. 25, 2002 and plans to:

- Conduct research on energy requirements for the production, transport and processing of Minnesota ag commodities.



- Collaborate with others interested in agricultural energy to identify strategies that offer the greatest payoffs in energy efficiency and cost savings.
- Stimulate and publicize farmer innovations to reduce energy costs.
- Facilitate discussions on energy policy.
- Identify the vulnerability of Minnesota ag enterprises where energy use is high.

The School of Agriculture Endowed Chair in Agricultural Systems was created in 1995 with financial support of alumni from the School of Agriculture at the University of Minnesota (SAUM), which was an agricultural high school located on the St. Paul campus of the University. Other contributions were from the Minnesota State Legislature and the University of Minnesota.

The chair is part of the College of Agricultural, Food, and Environmental Sciences (COAFES) and is managed by the Minnesota Institute for Sustainable Agriculture (MISA). For more information about the chair, contact MISA at (612) 625-8235 or [misamail@umn.edu](mailto:misamail@umn.edu).

# # #

Web, A4, V2, V4, P1

wilck62501

Source: Bill Wilcke (612) 625-8205, [wilck001@umn.edu](mailto:wilck001@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

<http://www.extension.umn.edu/News>

June 26, 2001

## **A hot car in summer is no place for a pet**

Don't keep your pet in the car on a hot summer day when there's direct sunlight. Even with the windows slightly open, the temperature in your car can reach 120 degrees or more in just a few minutes.

And these conditions can kill a pet in 10 minutes or less, say veterinarians at the University of Minnesota. Pets have special needs during summer days when temperature and humidity are high.

Dogs and cats with a heavy fur coat have only limited ability to cool themselves. They have sweat glands only on their paws, so they can't sweat to stay cool as humans do. Dogs and cats mostly pant to cool themselves, and they need cool places to avoid summer heat.

You can find more tips at the Pet Care Information Center website, [www.petcare.umn.edu](http://www.petcare.umn.edu). The University of Minnesota College of Veterinary Medicine, U of M Extension Service, the Minnesota State Legislature, Minnesota Council of Dog Clubs and the Minnesota Board of Animal Health sponsor the site.

# # #

Web, C3, V2, V4, V8

petcare6251

Source: U of M Veterinary Outreach

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

June 26, 2001

**Disaster declaration may bring little help to homeowners, farmers**

A federal disaster declaration for a county following a flood or severe storm may not bring much assistance for individual homeowners and farmers. The meaning of a disaster declaration can be confusing, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"A disaster declaration usually means that local government units are eligible for federal assistance funds to help cover costs associated with the natural disaster," says Thiesse. "Usually, individual homeowners and farmers in the affected counties are eligible to apply for low-interest loans. In a very serious situation such as a major tornado, the Federal Emergency Management Agency (FEMA) will set up a temporary office in the affected area to assist people."

Thiesse says individuals with high hopes for assistance from a disaster declaration often find there is not much help available. Farm operators who have crop and property losses due to storms or floods are typically eligible to apply for low-interest Farm Service Agency emergency loans. However, these loans are often difficult to qualify for and cumbersome to apply for, says Thiesse. "In most situations, there are very few FSA farm emergency loans actually distributed in the counties that receive a disaster declaration," he points out.

Disaster payments for crop losses are the biggest concern for most farm operators, says Thiesse. In recent years Congress has passed emergency farm legislation authorizing such payments. For the 2000 crop year, all farms that had a 35 percent or greater loss of crop production were eligible for a crop disaster payment. Farms did not have to be in counties that received a disaster declaration to be eligible.

Congress has not yet acted on emergency farm legislation for 2001. However, "it's highly likely that there will be another assistance package this year that will probably include crop disaster provisions very similar to the provisions for the 2000 crop year," says Thiesse.

# # #

Web,V2,V4MN,V5MN,A2,A4

thie0625

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

June 29, 2001

## Would cutting fewer trees help 'save' the environment?

Our forests are beautiful, majestic, and we need to save them, right? The fast answer may be yes, but things are a bit more complicated.

A publication from the University of Minnesota Extension Service helps explain the worldwide environmental situation. Called "Materials and the Environment: Wood as a Global Resource," it says responsible environmentalism means:

- Thinking globally.
- Looking at the whole system, not just parts.
- Basing decisions on reason as well as emotion.
- Making sure that our assumptions reflect reality.

We all use raw materials such as wood, metals, plastics and cement to sustain our lives. And demand for raw materials increases as world population grows.

The U.S. annually uses roughly as much wood by weight as it does all metals, plastics and portland cement combined. And of all the raw materials available today, wood stands out as one of the very few renewable resources, according to specialists in the U of M College of Natural Resources.

Reducing our materials use—being less wasteful—will help the environment. Let's say you cut your consumption in half. You live in a home half the size of what you now have, shop in a supermarket with only half the shelf space, drive half the distance you're used to, and have only half as many shoes and shirts.

Even if every U.S. citizen were to do all that, overall global demand would still increase due to the population growth projected for the next century and the increased demand anticipated as others around the world seek a standard of living closer to ours.

We could also reduce domestic wood use by increasing recycling. As responsible stewards, it's critical that we pursue recycling as vigorously as we can, the publication says. But paper fibers and many other materials degrade each time they're recycled. That means new materials must continually be added to the mix.

We're familiar with wood poles, timbers, lumber, plywood and paper. Wood is also used in molded interior panels for autos, and in adhesives, paints, food additives, drapes, tires and even table tennis balls. Each of us consumes about 80 cubic feet of wood per year, equivalent to a tree one and one-half feet in diameter and 103 feet tall.

Who owns our forests? Individual private landowners own 57 percent, while 28 percent is owned by federal, state or local government. Only 15 percent is owned by the forest products industry.

Check the publication out at [www.extension.umn.edu/distribution/naturalresources/DD6507html](http://www.extension.umn.edu/distribution/naturalresources/DD6507html). You'll find purchase information on the complete educational package, which includes a video and other publications. Or, call (800) 876-8636 and ask for publication number 6507.

# # #

Web, V2, V4, V5, F8, F9, T2

trees6281

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

June 29, 2001

<http://www.extension.umn.edu/News>

## **Seasonal weather influences energy generation from sun, wind, waves**

Future renewable energy generation from the sun, wind and ocean waves is likely to be closely tied to seasonal weather patterns in different parts of the world. Scientists are studying ways to make better use of seasonal weather changes to produce alternative energy, says climatologist Mark Seeley of the University of Minnesota Extension Service.

Seeley cites recent articles in "Science" magazine concerning increasing efficiencies in harnessing ocean wave motions to produce electricity. "Some estimate that improved technology may allow up to 16 percent of the world's electricity output to be generated by wave motions," he notes.

Coastal areas are rated for energy production based on the waves' average energy production in kilowatts per meter of shoreline, says Seeley. Coastal areas of Scotland, northern Canada, the northwest and northeastern United States, southern Africa and Australia are rated as having the most potential for wave-generated power production.

"Seasonally, the maximum power production by waves occurs during the winter," Seeley points out. "That's when atmospheric pressure differences produce a magnitude and constancy of waves due to winds."

<over>

On the other hand, the maximum opportunity to produce power from solar energy occurs during the summer, says Seeley. That's when higher sun angles and longer days increase the efficiency and storage of solar cells that can recharge batteries, heat water or store electricity. Latitude, elevation and frequency of clear days are important climate features in locating solar collectors.

Wind-generated power depends on wind speed and wind constancy. Seeley cites a study by Donald Baker of wind in Minnesota. "He showed that the maximum power output from wind generally occurs in the transition months of April and November," says Seeley. "Therefore, generation of wind from electricity is likely to be highest during the spring and fall."

Seeley is hopeful that energy storage and transmission technology will evolve to make better use of the seasonal variability in the earth's natural energy-producing systems.

# # #

Web,V2,V4,V6,V9,R1,T2

seel0629

Source: Mark Seeley, (612) 625-4724

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



MSC  
A27p

<http://www.extension.umn.edu/News>

July 3, 2001

## **Hot weather brings need to begin regular watering of landscape plants**

It's time to begin regular watering of landscape plants again, according to horticulturist Deb Brown of the University of Minnesota Extension Service.

"The abundant rainfall and generally cool weather this spring were very kind to most landscape plants," says Brown. "However, several days of 90-degree temperatures, sometimes with strong wind, bring the need to resume regular watering."

Brown says newly planted trees are especially vulnerable to heat and wind. They should be watered thoroughly every two or three days, except when the soil is still wet from recent rains. "You might even need to water them daily if you live where soil is very sandy and fast-draining," says Brown.

Lawns should generally get about an inch of water a week, says Brown. This can come from rainfall, sprinklers or a combination of both. "In extreme heat, you might need to apply even more water," Brown points out. "Don't wait until the lawn takes on a dry, yellowish cast. Water as soon as you can see that your footprints don't spring right back after walking on the grass."

She says the best time to water is early in the day when it's cool and there is less wind. You'll lose a lot of water to evaporation if you water in the afternoon. Avoid

<over>

watering at night if at all possible, says Brown. Plants may not dry out until morning, which increases the likelihood of disease.

She also recommends mulching your garden if you haven't already done so. A two- to three-inch layer of organic mulch such as straw, grass clippings, pine needles, chipped leaves or partially decomposed compost will help conserve moisture. The mulch will keep the soil cooler and reduce surface evaporation. It will also limit weed growth, lessening the need to hoe out weeds and possibly disrupt plant roots in the process.

For more information about watering, call the University's Yard and Garden Clinic. It has experts to answer questions on lawn care, plant disease and insect problems between 9 a.m. and 3 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county or can speak to a wildlife expert.

# # #

Web,V4MN,V5MN,V7,G1

brown704

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

July 6, 2001

(First in a series on alternative pork marketing)

## **Many hog producers are looking to reposition themselves**

Hog producers are wondering how to compete in the future, and the answer may lie in their willingness to change with the industry.

"Today only 17 percent of hogs are sold on the open market," says Gene Tinker, swine business management educator with the University of Minnesota Extension Service. As recently as 1997, 43 percent of hogs were sold on the open market.

"The family farm producers I work with are wondering how to reposition themselves," Tinker says. "They remember the extremely low prices of 1998-99 and want to do something different."

Many hog marketing contracts base the price on the open market, which has a decreasing percentage of animals determining the price. Tinker says the open market accounts for pricing 71 percent of market hogs, but only 17 of the 71 percent represent a negotiated price.

Demand for organic and natural foods continues to increase at roughly 10 percent a year, Tinker says. He lists the pros and cons for producers thinking of producing alternative and organic pork.

Pros include:

- You're not in a commodity market, so you can usually get a better price.
- The consuming public may view the product as "better."

<over>

--You can use facilities that don't fit the mold of today's commodity production.

Cons include:

--These markets often require that specific production practices be followed and specific feeds be fed.

--Production costs are often greater. According to an Iowa State University study, it requires \$55 per hundred to break even with organic production.

--Weather often has a greater impact on production, with production tending to be seasonal. "But consumers want the product all the time," Tinker says.

--Treatment for illness may prohibit the animal from meeting the specialty market requirements.

--Organic production requires organic feedstuffs, and the cost of organic protein sources has recently increased due to greater demand.

--Organic feedstuffs may not be readily available in all areas.

--You're apt to have a certifying agency checking on production practices.

--And, all production may not be marketed in the specialty market, so the extra specialty product must be sold in the commodity market for the commodity price.

Producers may contact Tinker at (507) 835-3620, [tinke001@umn.edu](mailto:tinke001@umn.edu).

# # #

Web, A2, V2, V4, P1, S2

tinke731

Source: Gene Tinker (507) 835-3620, [tinke001@umn.edu](mailto:tinke001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MCE  
1274

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 10, 2001

## **Agronomist cites multiple signs indicating soil quality**

Crop yield may be the best overall indicator of the condition of the soil in a field. However, crop producers can check for signs of soil quality before harvest, says agronomist Denise McWilliams of the University of Minnesota Extension Service. She says the growing season is a good time to look at fields and evaluate soil according to 12 quality indicators.

"One indicator is the presence of earthworms," says McWilliams. "The best time to check for them is spring or fall, but you can also do it in the summer. Take a shovel full of earth from the top foot of soil and do a quick count. Ten earthworms per shovel-full are a good soil health indicator, according to the book 'Building Soils for Better Crops' from the Sustainable Agriculture Network. Birds following behind tillage in the spring looking for worms are also a good sign."

A second positive factor is organic matter, sometimes indicated by color. McWilliams says topsoil that is clearly defined and darker than the subsoil usually means excellent soil health. Organic residues on most of the soil surface are a third indicator, and the degree of subsurface compaction is a fourth.

The fifth quality indicator is soil tilth or mellowness, also called friability. If you can place wire flags into the ground easily down to the plow layer with only your fingers, soil tilth is good, says McWilliams.

<over>

If the soil crumbles well, is easily sliced and even spongy when you walk on it, you have a sixth indicator of quality. No gullies and no apparent soil runoff is a seventh factor. Eighth, the soil should hold water for long periods without signs of drought. Ninth, there should be no ponding or runoff from normal rainfall...water should move steadily through the soil. A tenth indicator is crop color, which should be a healthy dark green throughout the season. Eleventh, the soil pH should fit the crop grown.

The twelfth soil quality indicator is nutrient holding capacity. Soil tests should show an upward trend in soil nutrients in relation to fertilizer applied and crop harvested. However, nutrient levels should not go into the "very high" category, says McWilliams.

"It's difficult for any piece of land to hit all 12 soil signs perfectly in one growing season," says McWilliams. "However, hitting as many as possible is a worthwhile goal."

# # #

Web,V2,C4,F4

mcwl0705

Source: Denise McWilliams, (701) 231-8160

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MJC  
AZP

July 10, 2001

## Weed seeds have an amazing ability to survive

You can burn them, freeze them, shred them or digest them....but you're still not likely to wipe them out. They're weed seeds, and they have an amazing ability to survive, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

"Even burning fields after weed seeds mature will give only erratic control," says McWilliams. She cites early studies by the U.S. Bureau of Reclamation showing that seven percent of field bindweed seed can germinate after burning. Thus, weed species that have been absent from a field for many years may suddenly appear after a burn.

Cutting or shredding weeds won't necessarily reduce the weed seed bank on a farm. McWilliams cites several weed species that can still have a high seed germination rate if cut when the seed is only medium ripe. To keep weeds from producing viable seeds, you need to cut the weeds before the bud stage, she points out.

"Some weed seed will even germinate after storage in a silo for up to four years," says McWilliams. "Other seeds may lose their germinating ability in 10 to 20 days, depending on silage moisture content, temperature and level of organic acids."

Some weed seed may survive in manure after a trip through an animal's digestive tract, even during the heating and decomposition process. McWilliams cites studies showing field bindweed seed with 22 percent viability after storage in manure for two months, and velvetleaf seed with two percent viability after storage in manure one month.

# # #

Web,V2,C4,F4

mcwl0706

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MJC  
A2/p

July 10, 2001

## Follow these steps for safe summer barbecues

Warm weather is great for outdoor picnics and barbecues. But it's also the perfect environment for bacteria and pathogens in food to multiply rapidly and cause foodborne illness.

In the summer months, it's especially important to practice safe food handling when preparing perishable foods such as meat, poultry, seafood and egg products. Bill Schafer, food safety expert with the University of Minnesota Extension Service, cites information from the Partnership for Food Safety Education.

--Always wash your hands with hot, soapy water before and after handling food.

--When marinating for long periods of time, keep foods refrigerated. Don't use sauce that was used to marinate raw meat or poultry on cooked food. Boil used marinade before applying it to cooked food.

--When grilling, preheat the coals on your grill for 20 to 30 minutes, or until the coals are lightly coated with ash.

--Use a meat thermometer to insure that food reaches a safe internal temperature.

Hamburgers should be cooked to 160 degrees F. Large cuts of beef such as roasts and steaks may be cooked to 145 degrees F for medium rare, or 160 F degrees for medium.

Cook ground poultry to 165 degrees F and poultry parts to 170 degrees F.



--When taking foods off the grill, don't put cooked food back on the same plate you just used for raw food.

--A full cooler will stay cold longer than one that's only partially filled, so pack plenty of extra ice or freezer packs.

More information is available on the Partnership for Food Safety Education website at [www.fightbac.org/main.cfm](http://www.fightbac.org/main.cfm).

# # #

Web, F7, V2, V4, V7

schafer791

Source: Bill Schafer (612) 624-4793, [wschafer@umn.edu](mailto:wschafer@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIX  
A24

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 17, 2001

## Don't overdo the juice for kids

Parents should limit the amount of fruit juice their children drink, according to new recommendations from the American Academy of Pediatrics (AAP).

The AAP says drinking too much fruit juice can contribute to diarrhea, cavities, obesity and malnutrition, according to Mary Darling, nutritionist with the University of Minnesota Extension Service. The new AAP guidelines include the following:

- Juice should not be introduced into the infants' diets before six months of age.
- Infants should not be given juice from bottles or easily transportable covered cups that allow them to consume juice easily throughout the day. Infants should not be given juice at bedtime. Encourage use of juice as part of a meal or snack, rather than allowing children to sip throughout the day. Juice should not be used to pacify unhappy infants or children.
- Intake of fruit juice should be limited to 4 to 6 ounces per day for children one to six years old and 8 to 12 ounces, or two servings per day, for children seven to 18 years old.
- Children should be encouraged to eat whole fruits to meet their recommended daily fruit intake.
- Infants, children and adolescents should not consume unpasteurized juice. Unpasteurized apple juice is sometimes available during the fall apple season.
- Health care providers should be aware that the amount of juice being consumed by a child may contribute to stomachaches and cramps.

# # #

Web, F7, V2, V4, V7

darling7131

Source: Mary Darling (612) 624-6286, [mdarling@umn.edu](mailto:mdarling@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

100  
A-5

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 17, 2001

*Editors: A black-and-white head-and-shoulders photo of Dick Senese is available. To obtain a photo call (612) 624-3064 or (612) 625-3168, or e-mail [jk@umn.edu](mailto:jk@umn.edu).*

## **Senese leads Extension effort to bring U of M resources to communities**

Minnesota communities that will thrive in the future must take advantage of the abilities and contributions of a diverse and changing population. They must foster a business climate that can add jobs to their economy. They must have active leaders and involved citizens. And they must be able to take advantage of new technology and the opportunities of the Information Age.

The University of Minnesota Extension Service can help the state's communities succeed in these areas, says Dick Senese, the head of that organization's new Community Vitality capacity area. "We have this incredible jewel of a resource, the University of Minnesota, that has outreach as a core part of its mission," says Senese. "We can connect university resources with the day-to-day problems and issues facing Minnesota communities."

Senese is enthused about the opportunity to work with communities across the state, but has a special place in his heart for the Iron Range. He grew up in Buhl, Minn., in St. Louis County and attended Mesabi Community College in Virginia, Minn. for two years. He completed a bachelor's degree in psychology and political science in 1985 at the University of Minnesota, Duluth, where he was vice president of the UMD Student Association.

<over>

He went on to complete a master's in counseling at UMD and in 1997 completed a Ph. D. from the U of M in the Twin Cities in counseling and psychology.

Senese brings a background in education and public affairs to his new role at the U of M. He previously served as an assistant dean in psychology at Capella University, an on-line university headquartered in Minneapolis. He designed courses and degree programs for the school and was responsible for faculty and staff hiring and development. He also taught psychology for six years at St. Olaf College in Northfield. In addition, he has taught courses at Metropolitan State University in St. Paul, St. Scholastica in Duluth and UMD.

Senese served as chair of the Minnesota State DFL Party from 1997-1999. He has also worked for Sen. Paul Wellstone as a campaign manager and in Wellstone's offices in Washington, D.C. and St. Paul.

Senese feels the role of the University, working through Extension's Community Vitality capacity area, is to assist local leaders and their communities to deal with issues and take advantage of opportunities. "In Community Vitality we believe that the best leadership and the best solutions come from within the community," he says. "The local Extension advisory committees really help direct our arena of work. Our job is to assist local leaders in defining and addressing local issues. I don't believe in 'one size fits all' programming."

The Community Vitality capacity area that Senese leads includes 59 field educators spread across the state and 35 campus-based faculty. The faculty on campus are in several colleges and departments, including the Department of Applied

<over>

Economics, the Humphrey Institute of Public Affairs, the Tourism Center, the 4-H Center, the Department of Landscape Architecture and the College of Liberal Arts.

One area in which Extension's Community Vitality capacity area can assist local communities is in understanding and adjusting to rapid demographic changes. "We have a Census 2000 project through which we will be able to provide a pretty sophisticated analysis of census data, so that community leaders can use that in their decision making," says Senese. This information can be useful to such people as educators looking at teacher needs, employers looking for workers, and entrepreneurs looking for markets, he points out.

As a resource for helping communities improve their economy, Senese cites Extension's Business Retention and Expansion Strategies Program. "BR&E works with communities to conduct economic and business climate assessment, and develop and implement a plan to capitalize on the opportunities identified," he says.

"And we support that like we support all our programs, with a research base. We don't just go on anecdotal evidence...we collect data and research in conjunction with community people to really figure out what's going on."

In the area of citizenship and leadership, Senese points to the Minnesota Political Leadership Program. "Extension co-sponsors a conference for the Minnesota state legislators," he says. "We present information about the future issues facing Minnesota. We provide the results of non-partisan research on public issues."

Minnesota communities also need to be able to take advantage of new communication technologies, says Senese. He cites Access Minnesota Main Street, an

<over>

Extension program to help small businesses with e-commerce activities such as web sites and business-to-business Internet relationships.

Another Extension program in the Community Vitality area is the Master Internet Volunteer Program. "We train people to be able to go into their communities and teach others how to take advantage of the Internet," says Senese.

Senese is excited about leading Extension's Community Vitality outreach effort. "Growing up on the Iron Range, with the tradition and history of community involvement that you find on the Iron Range, has really instilled in me the fire to do this work," he says.

# # #

Web,V4MN,V5MN,A1,A3,E1,H3,N1,H1

senese

Source: Dick Senese, (612) 625-7779

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

112  
A24



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 20, 2001

*Editors, broadcasters: This news release was previously distributed May 8. Since then, the conference site has been changed to a different hotel. We apologize for any inconvenience resulting from this change.*

## **Livestock nutrition conference in Bloomington, Minn. will be Sept. 11-12**

A livestock nutrition conference will bring hundreds of scientists from the U.S. and several other countries to the Twin Cities in September. The 62<sup>nd</sup> Minnesota Nutrition Conference and Technical Symposium will be Sept. 11-12 at the Hilton Minneapolis/St. Paul Airport in Bloomington.

The conference will cover nutrition topics for beef and dairy cattle, swine and poultry. Animal nutritionists will share information about current research at universities, in industry and at government centers. The conference is designed for nutritionists, feed industry representatives, veterinarians, educators and livestock producers. Speakers are scientists from the University of Minnesota, other U.S. land grant universities and industry.

A registration flyer with details on the conference agenda, registration fees and hotel reservations is available. To obtain a copy, call Tracey Benson at (612) 624-3708 or (800) 318-8636, or e-mail [tjb@umn.edu](mailto:tjb@umn.edu). The conference web site is at [www.conferences.umn.edu/mn/livestok/mnutconf.htm](http://www.conferences.umn.edu/mn/livestok/mnutconf.htm).

# # #

Web,V2,B1,D1,P3,R1,S2

nutrconf

Sources: Tracey Benson, (612) 624-3708, [tjb@umn.edu](mailto:tjb@umn.edu)

Lee Johnston, (320) 589-1711, [johnstlj@mrs.umn.edu](mailto:johnstlj@mrs.umn.edu)

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service, is an equal opportunity educator and employer.*

31-2  
A24

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 20, 2001

(Last in a series on alternative pork marketing)

## **There's a big difference between hog marketing, production contracts**

Many people talk about hog production and marketing contracts as though they're interchangeable. But they're two very different issues, says Gene Tinker, swine business management educator with the University of Minnesota Extension Service.

The marketing contract stipulates the producer will still own his or her own pigs, but will market a certain percentage to strictly one packer. Marketing contracts are often long-term—from five to seven years. In addition, Tinker says the packer may include some provisions that impact how the producer operates.

A production contract involves the producer raising pigs for someone else in the producer's own facilities. The owner of the pigs pays expenses such as feed and veterinary costs, and the producer pays operating costs that include facilities and repairs. A set rate of so much per pig or pig area is paid for the animals raised.

An overall advantage of contracts is that they generally decrease the risk a producer is exposed to, Tinker says. Those risks range from just price risk to production risk, depending on the type of contract.

Disadvantages of contracts that Tinker lists include:

--You're locked into production for a specified period of time, regardless of changes in life or lifestyle.

<over>



--Changes in other costs, such as fuel, can turn a good financial agreement into a bad one.

--The contract may be voided due to poor production or quality of animals delivered.

"Know your cost of production before signing a contract," Tinker says. "Evaluate how the contract will impact the operation under different scenarios. And play the devil's advocate."

Look for more advice on any contract from your accountant, attorney and Extension educator. You can also contact Tinker at (507) 835-3620, [tinke001@umn.edu](mailto:tinke001@umn.edu).

# # #

Web, A2, V2, V4, P1, S2

tinke791

Source: Gene Tinker (507) 835-3620, [tinke001@umn.edu](mailto:tinke001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MS  
6/24

July 20, 2001

<http://www.extension.umn.edu/News>

## **Publications available on Japanese beetle management**

It's not easy to control Japanese beetles if you find them in your lawn or garden. You can apply insecticides, although you may need to do repeat applications.

The beetles have become a serious invader pest in Minneapolis and the western suburbs. They've also been seen in St. Paul, Stillwater, Hastings, Rochester and Winona, according to Doree Maser of the Minnesota Department of Agriculture.

The Japanese beetle is a serious pest of turf and ornamental plants. Grubs feed on the roots of turfgrass, and adults feed on the foliage of over 300 plant species. The front of the adult beetle is dark metallic green, and it's about 3/8 of an inch long.

If you have—or suspect you have Japanese beetles, publications from the University of Minnesota Extension Service and Minnesota Department of Agriculture can help you identify and control the beetles.

You can contact Maser at (651) 296-1348 for a colored brochure that identifies the beetles. You can also view a new publication called "Japanese Beetle Management in Minnesota" from the University of Minnesota Extension Service by going to [www.extension.umn.edu](http://www.extension.umn.edu) on the Internet. The publication is also available from county Extension offices. For a small charge, you can order one by calling (800) 876-8636, or (612) 624-4900 in the Twin Cities area. Ask for number 7664.

# # #

Web, V2MN, V4MN, V7, G1

jbeetle

Source: Doree Maser (651) 296-1348

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

APR  
2001



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 20, 2001

## **Farm risks, insurance will be University of Minnesota seminar focus**

Risk is part of farming, and insurance is a tool for managing risk. Wise use of insurance for farm risk management is the subject of an upcoming University of Minnesota seminar. It will be Sept. 15 from 1-5 p.m. at the Hyatt Regency Hotel in Minneapolis.

"A 'Risky' Business Seminar: Effective Use of Insurance is Basic to Large Farming Operations" is the title of this intensive seminar. It's designed for ag business owners, farm managers, farm advisors, Extension educators, livestock producers and other interested persons. The University of Minnesota's Veterinary Outreach Programs, Extension Service and Center for Insurance Research are sponsors.

The seminar is designed to help farm operators consider these questions:

- Have you asked your agent/broker for a survey of your insurable and uninsurable risks?
- Do you know which risks are covered and not covered by your current insurance policies?
- Are you covered against a sexual harassment lawsuit?
- Do you carry too much insurance, or the wrong kind?
- Have you considered alternatives to buying insurance?

<over>

Speakers include Andrew Whitman, Robert Provost and Paul Wilkus. Whitman is a U of M professor in insurance at the Carlson School of Management. He specializes in research on insurance law, coverage and claims; workers' compensation; employee health benefits; and corporate risk management. Provost is acting director of the Minnesota Center for Insurance Research, and spent 30 years as head of the insurance industry's public information office in Minnesota. Wilkus specializes in professional compensation and benefits, individual and group financial planning, practice valuations, and estate and retirement planning.

The seminar is offered in conjunction with the annual Allen D. Lemay Swine Conference. The seminar fee is \$110 per person. To obtain a registration brochure or more information, call (800) 380-8636 or (612) 624-3434. Online registration is available at [www.cvm.umn.edu/outreach/01adl\\_reg.htm](http://www.cvm.umn.edu/outreach/01adl_reg.htm)

# # #

Web,V2,V4MN,A2,A4,D1,P3,S2

smmrbell

Source: Sarah Summerbell, (612) 624-3434

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

100  
A-1/p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 24, 2001

## **Conservation programs may pay more than crops on marginal land**

Trying to clear a profit by growing crops in lowland areas next to streams and ditches can be a formidable task. It's especially tough when there's a wet spring. There has been a lot of crop loss in such areas this year, notes Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

Thiesse says it may be easier to generate income from lowland areas and other marginal cropland by enrolling the land in a federal conservation program. Two options are the Continuous Conservation Reserve Program (CRP) and the Conservation Reserve Enhancement Program (CREP).

"The annual rent payment per acre for land in Continuous CRP is usually comparable to the average cash rent rate on the land," says Thiesse. "The Continuous CRP annual rent payment continues for the 10-15-year period the land is enrolled in the program. In addition, the landowner gets a CRP signing incentive payment of \$100-\$140 per acre as an up-front bonus."

Among the conservation practices that qualify for Continuous CRP are filter strips, riparian buffers and grass waterways. Most of the installation costs are covered through additional incentive payments.

Land anywhere in the Minnesota River watershed is eligible for enrollment in CREP, says Thiesse. This program provides for development of riparian buffers and

<over>

wetland restoration in frequently flooded cropland in the floodplain of the Minnesota River and its tributaries.

"CREP is a combination of the federal CRP and state Re-Invest in Minnesota (RIM) programs," says Thiesse. "Participants receive annual CRP payments for 15 years, plus an up-front 40 percent RIM signing bonus. Many of the enrollment contracts may also be eligible for the continuous CRP bonus."

The CREP program was fully funded during the recently completed session of the Minnesota Legislation, says Thiesse. The goal is to enroll 100,000 acres in CREP by 2002, and so far, about half of the goal has been reached.

Landowners interested in the Continuous CRP program should contact either their county Natural Resources Conservation Service or Farm Service Agency office. Information on the CREP program is available from county Soil and Water Conservation District offices.

Thiesse has written an information sheet entitled "Financial Opportunities through Government Conservation Programs." It's available from the Blue Earth County Extension Office at (507) 389-8325, or on the Extension Service web site at <http://www3.extension.umn.edu/county/blueearth/> .

# # #

Web,V2,V4MN,V5MN,C4,F4

thie0718

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

July 24, 2001

**Recent rains boost crops, but winds cause widespread damage to corn**

Recent rains across much of southern Minnesota were good news for crops, but winds that came with the rains and flattened some corn fields were bad news. "The combination of wind, heavy rainfall and soft soils caused entire fields of corn to be blown flat," says Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

Byrnes reports damaged corn in large areas of Lyon, Lincoln, Redwood, Murray and Cottonwood counties from storms July 20-21. Blue Earth County Extension educator Kent Thiesse also reports that "several thousand acres of corn were virtually flattened" across a widespread area of south central Minnesota over the same weekend.

"Cool, wet early season weather kept corn plants from developing strong roots," says Byrnes. "Heavy rain July 20 softened the soil and reduced the ability of corn roots to anchor plants into the soil adequately to withstand high winds from a July 21 storm."

The storm damage occurred as most cornfields were beginning pollination, notes Byrnes. Successful pollination of corn kernels requires pollen from tassels to land on silks emerging from the ear.

"For pollination to occur on storm-damaged corn, tassels need to be upright so pollen can be distributed to the silks," says Byrnes. "Silks need to be exposed to receive the pollen. A small portion of plants with tassels erect will provide enough pollen for

&lt;over&gt;

pollination. However, some silks on downed plants will not receive pollen because they are under other silks or leaves. The result will be missing kernels on the part of the ear where silks do not receive pollen."

Byrnes says pollination success improves as corn plants return to an upright position. Past experience has shown that corn plants will attempt to right themselves provided the stalks are not broken and roots are still in contact with the soil.

Assuming corn does pollinate, storm damage may cause problems for grain fill, maturity and harvesting, says Byrnes. There will be less photosynthesis in leaning and downed plants. Some leaves won't be exposed to sunlight. Poor sunlight interception will hinder grain fill, resulting in grain with lower test weight.

Corn maturity may be delayed as plants redirect energy from normal development to regeneration of roots that were torn when the plants went down. Harvesting leaning and goosenecked plants requires slow harvest speeds, and harvest losses tend to be higher than normal.

Byrnes says storm damage appears to be unrelated to corn hybrid or soil insect activity. He adds that it will take some time to determine the full extend of storm-related losses.

# # #

Web,V2MN,F4

byrn0723

Source: Bob Byrnes, (507) 537-6702, Kent Thiesse (507) 389-8141  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



130  
12/19

UNIVERSITY OF MINNESOTA

**Extension**

**S E R V I C E**

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

July 24, 2001

## **Respecting children just as important as nurturing, discipline**

Effective parenting involves a balance of nurturing, discipline and respect for children. And that's true regardless of a family's cultural or economic circumstances, says Ron Pitzer, family sociologist with the University of Minnesota Extension Service.

Respect means giving children freedom of thought and expression. When parents are not respectful of children, it's referred to as psychological control, Pitzer says. Too much psychological control can limit kids' opportunities for self-discovery, keep them from forming an identity, damage self-esteem and confidence, and prevent them from learning to understand and express their emotions.

While this kind of freedom is important throughout childhood, it becomes especially important when children reach early adolescence, around age 10 or 11. Pitzer says it's at this age that kids begin to form an independent psychological identity and are more insistent on having freedom and privacy. Pitzer says it's much more effective for parents to use behavioral control than psychological control.

Parents who practice behavioral control monitor, understand and guide behavior, Pitzer says. They reward good behavior and prevent misbehavior. Children who don't get enough of this guidance and supervision are at risk for developmental difficulties, Pitzer says.

More information on positive parenting is available at [www.extension.umn.edu](http://www.extension.umn.edu), or at a county office of the University of Minnesota Extension Service.

# # #

Web, F1, V4, V7

pitzer7241

Source: Ron Pitzer (612) 625-8169, [rpitzer@umn.edu](mailto:rpitzer@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MCC  
A24

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

July 24, 2001

<http://www.extension.umn.edu/News>

## **Enhancing private woodland value will be forestry field day focus**

Enhancing the value of woodlands on private property will be the focus of an upcoming forestry field day near Park Rapids. The Hubbard County Private Woodland Council's Summer Forestry Field Day will be Aug. 18 from 1-4 p.m. at the Gary and Deb Korsgaden residence south of Park Rapids.

The field day is designed for private woodland owners, and is open to all interested persons. Sponsoring the event along with the woodland council are the University of Minnesota's Extension Service, College of Natural Resources and Cloquet Forestry Center. Instructors will be Gary Korsgaden and Eli Sagor, a U of M Extension educator in forest ecology and management.

Gary Korsgaden is an active speaker and writer on forestry topics. He and his wife have 90 acres of woodland. At the field day he will discuss the couple's successes and challenges as woodland owners. He will also cover thinning, timely harvesting, food plot planting, recreational trail design and cost estimates, and establishing bird nesting boxes.

Other topics include stewardship options for red pine plantations and safe use of a chainsaw. There will be a demonstration of methods and equipment for development and maintenance of recreational trails.

<over>

The Korsgaden residence is at 16163 Deer View Road, Park Rapids. From the T & M Express in Park Rapids, go three miles south on County Road 6, then turn left onto Township Road CC. Drive all the way to the end and look for signs. The driveway is near a gray storage barn.

For more information, call Gary Korsgaden at (218) 732-0188.

# # #

Web,V2MN,F8,03,04,11,15,18,29,43,56,82,85

forestfd

Source: Susan Seabury, (218) 879-0850, ext. 108

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

100  
A27p

July 27, 2001

## Mapping can be effective for countering weeds

Mapping the weeds in your crop fields can provide you with a valuable tool for dealing with these problem plants in the future. Mid- to late summer is a good time for weed mapping, says agronomist Denise McWilliams of the University of Minnesota Extension Service.

"Weed mapping can be simple or high-tech," says McWilliams. "You can use a global positioning system and spatial analysis computer software, or pencil drawings."

Mapping weed locations will allow you to check for yield loss due to weeds, says McWilliams. A combine with a yield monitor can be helpful for this. Maps also provide a way to find weed problem areas next year and plan tillage or herbicide control measures.

"Scouting fields for weed pockets and comparing summer weeds with early season weeds can show you how well your weed management program worked this year," says McWilliams. "And by maintaining a record of weed problems over the years, you can further refine your control strategy to get the maximum payoff for your weed control efforts."

# # #

Web,V2,F4

mcwl0720

Source: Denise McWilliams, (701) 231-8160  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

July 31, 2001

### **Crop producers need to adjust for low yield prospects**

This year's corn and soybean yields in much of Minnesota could be the lowest in several years. Producers with poor yield prospects need to make adjustments, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

Setbacks to this year's crops have included cool, wet spring weather that delayed or prevented planting; heavy rains in early June that flooded some fields; hot, dry weather in late June and July; and wind and hail damage.

"If corn and soybean yield prospects appear to be significantly lower than average, it's probably a good idea to review the farm business management plans and cash flow projections for 2001 and make adjustments," says Thiesse. "It's also a good idea to keep ag lenders and other creditors informed about crop prospects and potential cash flow impacts. Producers with crop insurance need to account for any potential crop insurance indemnity payments."

Farm operators who have a flexible cash rent lease or other rental contract provisions that allow adjustments for natural disasters need to contact their landlords, says Thiesse. It might be good to show landlords the fields and explain likely yield reductions. Sending pictures is a way to keep absentee landlords informed.

"It's usually much easier to negotiate rental adjustments at harvest if there has been good communication between the producer and landlord during the growing

season," says Thiesse. "It's always a good idea to document planting dates, rainfall amounts, severe storm dates and damage and other pertinent information."

Federal crop disaster payments for this year, similar to the last two years, are a possibility, says Thiesse. However, neither Congress nor the U.S. Department of Agriculture has taken any action on disaster payments for the 2001 crop at this time.

It's very likely that Congress will pass another piece of emergency farm legislation in coming weeks, says Thiesse. The legislation will likely include a market loss assistance payment this fall, using the Agricultural Market Transition Act (AMTA) payment formula, and another oilseed payment early in 2002.

"The 2001 payment rates for both the extra market loss assistance payment and the oilseed payment are likely to be less than the 2000 rate," says Thiesse. "Last year's market loss assistance payment rate was 36.3 cents per bushel for corn and the oilseed payment rate was 14.25 cents per bushel for soybeans. The emergency legislation the U.S. House passed in June would lower those payments to approximately 30 cents per bushel for corn and 12 cents per bushel for soybeans in 2001."

This year's corn is likely to need more drying than was necessary the past couple of years, says Thiesse. Producers may want to line up drying gas needs for fall to protect against supply problems or rising prices. In addition, grain drying and handling systems need to be in good repair prior to harvest.

# # #

Web,V2,A2,F4

thie0727

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

July 31, 2001

## **Positive parenting balances nurturing, discipline and respect**

Positive parenting starts with a balance of nurturing, discipline and respect. But how parents balance these elements varies, says Ron Pitzer, family sociologist with the University of Minnesota Extension Service.

"Some parents are demanding and expect a great deal of their child, while others are permissive and demand very little," Pitzer says. There are also parents who limit their youngster's behavior and allow little or no freedom of thought and expression.

At least four distinct parenting styles are created, depending on the balance:

--Parents who nurture, discipline and respect their children are positive.

--Parents who nurture and respect their children but don't discipline them much or well are permissive.

--Parents who discipline their children but are not very nurturing or respectful of them are dominating.

--Parents who don't nurture, discipline or respect their children are unengaged.

A research study shows how children raised with these differing parenting styles are affected. The study examined self-esteem, confidence, respect, responsibility, academics, social competence, anxiety, depression and problem behavior.

The study showed that children raised by positive parents tend to do well overall, Pitzer says. They have self-esteem and confidence, are respectful and

<over>

responsible, and show good academic performance. These children are socially competent as defined by having empathy, emotional control, good communication and ability to manage conflict. Such children have little anxiety or depression and don't have much problem behavior.

Children and teens raised by permissive parents tend to have good self-esteem, are socially competent in most areas and have little depression. However, Pitzer says they scored low on respect and responsibility, underachieve academically and have a lot of problem behavior.

Children raised by dominating parents are somewhat the opposite. They tend to have low self-esteem and confidence and a lot of anxiety and depression. These children are not very socially competent, rate in the middle on being respectful and responsible and have average academic performance. They have very little problem behavior.

Children and teens of unengaged parents tend to do the worst in all of the areas studied. They have low self-esteem and confidence, a lot of anxiety and depression, and little social competence. They are not respectful or responsible, have poor academic performance and show a lot of problem behavior.

"As this study clearly shows, the balanced approach of nurturing, disciplining and respecting children is where positive parenting begins," Pitzer says. More information on positive parenting is available at [www.extension.umn.edu](http://www.extension.umn.edu), or at a county office of the University of Minnesota Extension Service.

# # #

Web, F1, V4, V7

pitzer7251

Source: Ron Pitzer (612) 625-8169, [rpitzer@umn.edu](mailto:rpitzer@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



August 3, 2001

(Sixth in a background series on the prospective 2002 Farm Bill)

**For small farms:**

**Household income safety net might be better than commodity programs**

By William F. Lazarus

The U.S. Department of Agriculture (USDA) has spent nearly \$70 billion on federal farm programs since 1996, and those payments have made the difference between profit and loss for many farm operators. The "Federal Agricultural Improvement and Reform (FAIR) Act" expires in 2002. And as discussions about the next farm bill gain momentum, we might consider how the goal of farm household income support fits within U.S. farm policy, and how to achieve that support.

The goals of farm policy were stated by the 21st Century Commission on Production Agriculture as:

- Producing an abundant supply of quality agricultural products at fair prices.
- Maintaining a prosperous, productive economic climate for farmers.
- Maintaining strong family farms as a dominant part of the production system.
- A high quality of life for all individuals living in rural areas.

The commission's wording is broad and open to different program approaches. One way to interpret their use of the terms "prosperity," "family farm" and "quality of life" would be to focus on assuring a minimum standard of living for farm households.

<over>

The mention of "reasonable prices" also implies attention to controlling production surpluses as well as avoiding shortages. "Quality of life" and "family farm organization" also imply protecting the environment and slowing industry consolidation.

I use the term "household income safety net" to refer to ways to target farm program payments to households based on some measure of income or living standard. The idea gained visibility when Secretary of Agriculture Dan Glickman called 1999 the "Year of the Safety Net." Economists at the USDA Economic Research Service (ERS) have analyzed several safety net approaches. Their conclusions are presented on the USDA website at: <http://www.ers.usda.gov/Emphases/Rural/>. The safety net concept might be of interest to those in the Minnesota farm community who are looking for alternatives to traditional farm programs.

The USDA-ERS analysis looked at how the cost to the government and the distribution of benefits across different farm sizes and regions would compare to current direct payments if government assistance were based directly on financial need. They used various target levels of farm household income and implied operator hourly earnings to measure financial need. They found that lower-income farmers would benefit relatively more under the safety net scenarios, while farmers producing selected commodities would benefit less than under current farm programs.

Minnesota farmers overall could receive either higher or lower payments than currently, depending on the income measure used. For example, if payments were made to bring farm household income up to 185 percent of the poverty line, the cost to the government would be about the same as current programs. (The poverty line for a

<over>

family of four was \$16,400 in 1997; 185 percent of this amount is \$30,340). It was estimated that this scenario would have cost the government a total of \$21 billion over the three years 1998-2000, compared to the \$19.5 billion actually spent.

The income safety net approach is not new. It has precedents in a number of nonfarm federal programs. While the safety net approach might help small farms, it has received mixed reviews so far. According to the May, 2000 issue of "Agricultural Outlook," the analysis has been criticized because of a perceived association of income transfers with social welfare programs.

Critics favor price supports over the income-support approach since commodity price supports carry less of a negative "social welfare" image. Still, small family farms often have relatively high production costs; so price supports that help low-cost producers expand and prosper often don't help them much.

# # #

*(William F. Lazarus is a farm management economist with the University of Minnesota Extension Service. To comment on this series, contact Richard Levins at (612) 625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu), or William Easter at (612) 625-7728).*

Web, A2, P1, F4, V2, V4

lazarus8201

Source: William Lazarus (612) 625-8150, [wlazarus@umn.edu](mailto:wlazarus@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

August 3, 2001

(Seventh in a background series on the prospective 2002 Farm Bill)

**Farm household income safety net programs hard to implement**

By William F. Lazarus

A farm household income safety net might do a better job of assuring a minimum living standard for families on small farms than our current commodity programs. But in addition to the "welfare" image problem, it would be hard to implement income-based programs.

One problem is how to obtain the income data on which to base the payments. Economists at the USDA Economic Research Service (ERS) have analyzed several approaches to implementing a safety net approach. Their conclusions are presented on the USDA website at: <http://www.ers.usda.gov/Emphases/Rural/>.

The economists explored the possibility of basing payment calculations on data already collected on federal income tax form 1040 and schedule F. Payments could be handled in a similar way as under the current earned income credit (EIC), but certain modifications would be needed.

The EIC is a refund of a share of earned income, and is zero when earned income is zero or negative. Without the current farm program payments that the income safety net would replace, some farm households would have negative earned income and would not receive payments under EIC rules.

<over>

Also, payments under the current farm program tend to be much larger than payments under the current EIC. Minnesota farms in the state's farm business management programs averaged around \$40,000 per operator in 2000, while the EIC presently tops out at less than \$4,000.

To provide the same level of aggregate financial support to the farm sector as currently, a farm household income safety net payment modeled after the EIC would have to pay a much higher amount for a given income level than the current EIC pays to nonfarm households. If farm households were paid higher income safety net payments than nonfarm households receive in EIC payments, the thorny question of a minimum farm income to qualify as a farm household would arise.

There would also be the obvious question of why farm households deserve more than nonfarm households. Enforcing the tax reporting rules might also become harder if larger payments were involved.

A farm household income-based approach would probably factor in nonfarm income as well as farm income. Nonfarm income is a significant contributor to farm households' financial well being, at least for the Minnesota business management program farms. Their nonfarm income averaged around \$13,000 in 2000, while the average of their market-based farm income probably would have been negative using IRS cash accounting methods.

Another problem with the income-based approach would be determining how much to reduce payments as market-based income increases. A "1-for-1" payment reduction would take away the incentive to improve farm profitability or generate

<over>

nonfarm income. A fractional reduction would likely be needed to minimize such disincentives. For a family with more than one child, the EIC is reduced at a rate of 22 cents per dollar of earned income. A related concern is that markets for land and capital assets could be affected by an income-based approach. Again, the effect on land and capital markets has long been a concern with current programs, but a shift to an income-based approach could result in unpredictable distortions, at least in the short run and in local areas.

So a "farm household income safety net" approach might do a better job than current commodity programs of assuring a minimum standard of living for families on small farms. But it would be a dramatic departure from current policy, and it would face opposition on ideological grounds and be hard to implement.

# # #

*(William F. Lazarus is a farm management economist with the University of Minnesota Extension Service. To comment on this series, contact Richard Levins at (612) 625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu), or William Easter at (612) 625-7728).*

Web, A2, P1, F4, V2, V4

lazarus8301

Source: William Lazarus (612) 625-8150, [wlazarus@umn.edu](mailto:wlazarus@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

August 3, 2001

**TIPS 4-state swine seminar will be Sept. 6-7 in South Sioux City, Neb.**

A four-state swine conference with sessions on farrowing, reproduction, foreign animal diseases and European views on animal welfare is set for Sept. 6-7 in South Sioux City, Neb.

The "Techniques for Improving Profitability Seminar" (TIPS) for swine producers will be at the Marina Inn in South Sioux City. It's designed for both owners and employees of swine operations. Sponsors are the Extension services of Iowa State University, the University of Minnesota, the University of Nebraska and South Dakota State University. Most of the conference presenters will be faculty members from the sponsoring universities.

The program will begin at 3 p.m. Sept. 6 with split-track sessions. A session on Paylean (a new feed ingredient) and carcass merit will include carcasses from Paylean- and non-Paylean-fed pigs hanging on a rail in the classroom. A hands-on, interactive session on farrowing management will include several stops designed to refresh farrowing house workers' skills.

The evening session Sept. 6 is an informal time for producer interaction and one-on-one visits with university specialists. Displays and specialists will be available on USDA mandatory price reporting, producer-owned slaughter facilities, production practices tied to specific market requirements, and university pork industry centers.

<over>

In a Sept. 7 session producers will practice using grow-finish decision tools in a computer lab and take home finishing herd decision software. Another session will cover reducing phosphorus in swine manure, and will include free evaluation of feed samples for particle size.

Sessions on reproduction Sept. 7 will cover the female reproductive process and the impact of gilt development on lifetime female productivity.

The program will conclude with "The European Influence on U.S. Production Practices," including a discussion of animal welfare and foreign animal diseases.

The conference fee is \$90 for a single registration and \$65 for each additional registration from the same operation. Fees include the cost of all meals and refreshments. Lodging must be arranged directly with Marina Inn at (402) 494-2441. A block of rooms is being held under the conference name through Aug. 16.

For more information or a brochure contact Lee Johnston at the University of Minnesota's West Central Research and Outreach Center at Morris at (320) 589-1711, e-mail [johnstlj@mrs.umn.edu](mailto:johnstlj@mrs.umn.edu).

# # #

Web,V2,S2,X5

tips0726

Source: Lee Johnston, (320) 589-1711

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



August 10, 2001

<http://www.extension.umn.edu/News>

## **Community Technology Leadership seminars set in 12 locations**

Small rural communities can't afford to be on the wrong side of the digital divide--lacking the telecommunications and information technology their businesses and citizens need in the 21<sup>st</sup> century.

A series of Community Technology Leadership Seminars in September for community leaders will emphasize education and cooperative action to help communities gain market strength. "Community leaders know that a top reason why businesses come, stay or grow in their communities is telecommunications and information technology capacity," says Jane Leonard, a course instructor and chair of the Minnesota Rural Partners Board.

"Leaders need to plan ahead and consider the issues proactively, instead of waiting until there's a crisis," Leonard says. "In the 21<sup>st</sup> century you can't sustain most businesses, schools, hospitals or governments for very long without high capacity information and telecommunications technology."

Whether you're a veteran of digital divide battles or new to the scene, Leonard says the seminars will provide fresh insights and a deeper understanding of market complexities that can work for or against you. Regulatory, social, economic, leadership and technological dynamics will be discussed.

<over>

The University of Minnesota's College of Continuing Education and the University of Minnesota Extension Service are sponsoring the seminars. Two seminars will be offered in each of Minnesota's economic development regions. Locations are:

Northwest—Greenbush, Sept. 11, 1:30-4:30 p.m., Senior Citizens Center; Crookston, Sept. 12, 6:30-9:30 p.m., City Hall.

Northeast—Chisholm, Sept. 13, 1-4 p.m., Ironworld Auditorium; Two Harbors, Sept. 14, 2-5 p.m., Community Center.

Central—Little Falls, Sept. 18, 9 a.m.-noon, Initiative Foundation Offices; Pine City, Sept. 20, 1-4 p.m., Pine Tech Auditorium.

West Central—Alexandria, Sept. 19, 9 a.m.-noon, Alexandria Tech Management 1; Morris, Sept. 19, 4-7 p.m., USDA Soils Lab.

Southwest—Windom, Sept. 26, 1:30-4:30 p.m., Community Center; Redwood Falls, Sept. 27, 6:30-9:30 p.m., Redwood Falls Community Center.

Southeast/South Central—Mankato, Sept. 25, 1-4 p.m. (check web site for video locations); Owatonna, Sept. 27, 9 a.m.-noon, Initiative Fund Offices.

The seminar fee is \$40. For more information, contact Kay Syme at (612) 624-4938, [ksyme@cce.umn.edu](mailto:ksyme@cce.umn.edu). Or, register online by going to <http://register.cce.umn.edu> and enter section key 173373.

# # #

Web, V2MN, V4MN, V5MN, E1

lenrd8301

Source: Jane Leonard (651) 645-9403, [jane@communitytechnologyadvisors.com](mailto:jane@communitytechnologyadvisors.com)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

August 10, 2001

## **Understanding animal behavior can reduce dairy farm injuries**

Understanding the behavior of dairy animals is important for reducing work-related injuries on dairy farms. About two-thirds of animal-related farm accidents in Minnesota take place on dairy farms, according to a survey of nearly 2,000 farms.

Kevin Janni, engineer with the University of Minnesota Extension Service, cites several animal behavior factors related to accident risk.

--Panoramic vision. Cattle have a large panoramic field of vision—they can see everything around them except what is immediately behind their hindquarters. Approaching from the side or front can be less startling to the animals than approaching from behind.

--Cows with new calves. A cow with her new calf can be defensive and difficult to handle. Avoid getting between the cow and her calf. Keep an eye on the cow. Carry out newborn calf treatment in an area isolated from the cow.

--Dairy bull aggression. Dairy bulls are much more aggressive by nature than cows. Although some dairy bulls appear gentle and calm, they may react unexpectedly, inflicting serious injuries or death on the bull handler. Bulls raised alone or not properly socialized may be more aggressive than those raised in groups. Never consider a bull safe, and don't let your children play with a bull even if you have raised the animal.

<over>

--Noise and crowds. Sudden exposure of dairy cattle to noise and crowds, especially in a barn, may make the animals nervous and difficult to handle. Calm cattle are easier to move. It can take 30 minutes for cattle to calm down after being excited.

--Horned animals. Horned cows or bulls are more inclined to attack handlers. Make sure all cattle on the farm are dehorned.

--Kicking. Cows commonly kick forward and out to the side. They also have a tendency to kick toward the side where they have pain from inflammation or injuries. Therefore, if a cow is suffering from mastitis in only one quarter, you may want to consider approaching her from the side where there is no mastitis when examining or milking.

--Dry cows. Dry cows usually behave more aggressively after coming back from the pasture. It may take them a week or so to get used to barn life again.

More information is available in a U of M Extension publication entitled "Safe Work Practices on Dairy Farms," FO-0878. It's on the Internet at [www.extension.umn.edu/distribution/livestocksystems/DI0878.html](http://www.extension.umn.edu/distribution/livestocksystems/DI0878.html). Printed copies are available for purchase through county offices of the U of M Extension Service, or by calling (612) 624-4900 or (800) 876-8636.

# # #

Web,V2,D1,E4

jacob803

Source: Kevin Janni, (612) 625-3108

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

August 14, 2001

**4-H Day at the Minnesota State Fair is Aug. 25**

For young people across Minnesota, one of the first experiences with the Minnesota State Fair is through 4-H.

Similarly, many adults arrive at the fair for their first time as 4-H volunteers or chaperones. 4-H Day at the Minnesota State Fair on Saturday, Aug. 25, is one way for people to reconnect with others and celebrate 4-H programs and activities at the fair.

This year's 4-H Day will start in the 4-H building in the morning. If you come to the Minnesota 4-H Foundation booth and register as alumni and friends of 4-H, you'll receive a memento. At 11:30 a.m. there's the 2001 State Arts-In performance in the 4-H building, followed by an alumni and friends gathering that showcases 4-H programs, events, alumni and hospitality. All 4-H alumni and friends are then invited to join the 2001-2002 State 4-H Ambassadors in the daily State Fair parade at 2 p.m.

4-H Day is a good reason to spend time at the State Fair while reconnecting with friends, relatives, and 4-H staff and volunteers involved in the largest out-of-school youth organization in the state. It promises to be a day of fun, action and memories.

To find out more about 4-H Day at the Minnesota State Fair, contact the Minnesota 4-H Foundation at (612) 624-7971, or e-mail [mnfdn@umn.edu](mailto:mnfdn@umn.edu).

# # #

Web, V2M, V4MN, Y1

4h8131

Source: Betty J. McAndrews (612) 624-8162

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

August 14, 2001

## **Satellite images help show water quality changes in Minnesota lakes**

Pictures taken from space are helping University of Minnesota researchers monitor lake water quality in Minnesota.

Satellite imagery is a new way of providing information on lakes. And its big advantage is that it measures water quality in all regional lakes from a single satellite image, says Patrick L. Brezonik, program director of the U of M Water Resources Center.

A newly released study that Brezonik worked on measured water quality in the Twin Cities metropolitan area lakes over the last 25 years. Of the roughly 500 lakes in the seven-county area, most have not changed significantly.

However, water quality in 31 of the Twin Cities area lakes, including Lake Minnetonka, improved in the course of the 25-year study. But the water became less clear in about 20 of the lakes.

"The satellite imagery agreed closely with ground level observations," Brezonik says. Water clarity is closely related to algae growth, and lake water deemed more clear by the satellite imagery had fewer algae in ground level observations.

In the study, the light reflected from lakes in satellite images was calibrated using water samples collected on lakes by local citizen monitoring groups and government agencies.

<over>

Brezonik says using satellite imagery to monitor lakes that aren't included in ground-based monitoring programs will greatly increase the lake water clarity information available to regional decision-makers. Presently, only 20 percent of the lakes in the seven-county Twin Cities metropolitan area are included in ground-based monitoring programs.

The Metropolitan Council funded the Twin Cities lakes project. Brezonik and co-workers have also recently concluded a similar statewide study expanding the satellite technique to survey over 10,500 Minnesota lakes. This study, funded by the NASA Upper Midwest Regional Earth Science Applications Center, will also classify lake water clarity in Wisconsin and Michigan.

You can learn more about the study, including how your favorite lake fared, by going to <http://resac.gis.umn.edu> on the Internet.

You can also check the U of M Extension Service Water Quality site at [www.extension.umn.edu/water](http://www.extension.umn.edu/water). There's information on drinking water quality, water quality and agriculture, soil and water conservation, sewage treatment, waste management and recreation.

# # #

Web, V4, V7, T2

brez7241

Sources: Pat Brezonik (612) 624-3738, [brezo001@umn.edu](mailto:brezo001@umn.edu)  
Steve Kloiber (651) 602-1056, [steve.kloiber@metc.state.mn.us](mailto:steve.kloiber@metc.state.mn.us)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

August 14, 2001

## **Soybean pest spreading rapidly west and north across Minnesota**

A soybean pest that first showed up in southeastern Minnesota is moving rapidly westward and northward across the state. Infestations of the soybean aphid are expanding and intensifying, according to entomologist Ken Ostlie of the University of Minnesota Extension Service.

The soybean aphid is an eastern Asian soybean pest that first showed up in southeastern Minnesota and eight other Midwestern states in the summer of 2000. It was detected in southeastern Minnesota earlier this summer and has spread rapidly into counties farther and farther west and north. In southeastern Minnesota counties where it first showed up, infestations are common and severe, says Ostlie.

Soybean yield losses from aphid infestations can be significant. "China has reported up to 58 percent yield losses," says Ostlie. "In a Wisconsin study in 2000 there was a 13 percent yield loss. The soybean aphid also spreads soybean mosaic and other viral diseases."

Ostlie says soybean producers have many questions about how to manage the pest and whether to treat infested fields with insecticides. "We're playing catch-up in trying to answer questions, because there isn't a lot of information available," he points out.



Ostlie says no stage-specific thresholds for insecticide use have been developed for row or drilled soybeans, but several hundred aphids per plant during reproductive stages are likely to damage soybeans. Neither the short- nor long-term impacts of insecticide application have been studied in the U.S. Insecticides may disrupt natural control of soybean aphids by predators and parasitic wasps, says Ostlie. This could lead to aphid resurgence.

“As a result of these uncertainties, farmers and their agricultural advisors find it difficult to decide whether or not to spray, especially with low soybean prices,” says Ostlie.

If producers do decide to apply an insecticide, Ostlie recommends recording pre-treatment infestations levels, leaving check strips, and checking yields to evaluate the effectiveness of treatment.

Soybean aphids are pale yellow and less than one-sixteenth of an inch long. They are the only aphids that form colonies on soybeans.

Ostlie is the author of a new four-color flyer, “Soybean Aphids,” that’s available from county offices of the University of Minnesota Extension Service. It’s also on the Internet at [www.soybeans.umn.edu](http://www.soybeans.umn.edu). The publication contains an enlarged color photo of an aphid, a graphic showing the life cycle of the aphid, and information on scouting for aphids, insecticide options and how aphids damage soybeans.

# # #

Web,V2,V4MN,F4,X2

ostl0813

Source: Ken Ostlie, (612) 624-9272

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

M 11  
9-10-01

August 17, 2001

## **Wheat byproduct can replace some higher-cost feed for dairy cows**

Dairy producers can substitute wheat middlings for some of the higher-cost feed ingredients in rations for early-lactation cows. Such a substitution will not hurt milk production or cow performance, according to a University of Minnesota study.

Dairy scientist George Marx conducted the wheat middling study at the U of M Northwest Research and Outreach Center in Crookston. Wheat middlings are a by-product of milling wheat for flour and pasta. About 20 percent of the original wheat kernel ends up as wheat middlings in the milling process, says Marx. The middlings are readily available in areas of Minnesota and North Dakota where wheat milling is a large industry, and prices tend to be lower in those areas than in other parts of the country.

Marx used 40 early-lactation, high-producing Holstein cows in the study. Half received a diet in which 10 percent of the dry matter content was wheat middlings. The other half received a control diet containing corn and soybean meal at equal ration dry matter content. The balance of the ration for both groups consisted of alfalfa haylage, corn silage, high-moisture corn, soybean meal, vitamins and minerals. The cows received their feed as a total mixed ration during the 12-week study.

<over>

“Daily milk production, milk fat and milk protein did not differ between the two groups of cows,” says Marx. “Peak milk production was also similar for each group, both for first-lactation cows and those in later lactations.”

Reproduction data showed no difference in the number of services necessary to get cows rebred or conception rates between the two groups. No unusual health conditions or nutritional disorders occurred with any of the cows. The only difference that showed up in the study was that the milk somatic cell count was slightly higher for the cow group receiving the wheat middlings.

“Results of this feeding trial indicate that the wheat middlings byproduct feed was an acceptable and economical component at 10 percent of the ration dry matter for early-lactation cows,” Marx concludes.

# # #

Web,V2,D1,R1

marx0814

Source: George Marx, (218) 281-8606

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIW  
9/1/01

August 17, 2001

## Misconceptions about lawn seeding are common

Late summer grass seeding is more likely to be successful if some common misconceptions don't get in the way. Deb Brown, horticulturist with the University of Minnesota Extension Service, cites these misconceptions:

- Spring is the best time to seed grass.
- If you seed thickly, new grass will choke out weeds.
- Don't fertilize--it will burn newly-seeded grass.
- You must keep grass seeds and young grass constantly wet.
- You shouldn't mow young, thin-bladed grass.

"Spring is actually the second-best time to plant grass seed," says Brown. "In Minnesota, the best chance for success occurs when you seed between mid-August and mid-September."

Warm daytime temperatures during late summer and early fall encourage rapid sprouting, Brown points out. This means there should be plenty of time for good root development before hard frosts end growth. Longer and cooler nights are good for the new grass, and rainfall is likely to increase in September.

While too much fertilizer can burn grass, Brown recommends incorporating mild fertilizer into the soil when you plant grass seed. She says the best time to work phosphorus and potassium into the root zone is before planting.

"If you've never had your soil tested, this would be a good time to find out what nutrients you need to add for good grass growth," says Brown. "Or you could simply apply a starter fertilizer or mild organic fertilizer such as Milorganite or Sustane. Don't use 'weed and feed' products, which are fertilizers containing a weed-killer."

It's not necessary to keep grass seeds constantly wet, says Brown, and would be almost impossible to do anyway. Watering lightly a couple of times a day is sufficient in all but the hottest weather. As seeds sprout and begin to grow, gradually shift to deeper but less frequent watering. Overwatered, saturated soil leads to root rots and other problems.

Brown says it's okay to mow young grass. "When it reaches a height of three and one-half to four inches, cut it back an inch," she says. "Just be sure your lawnmower blade is sharp so it doesn't rip the grass. Gradually reduce the height as temperatures cool. If you've overseeded thin areas of existing lawn, mow whenever the more established grass needs it. It shouldn't hurt your new grass."

For answers to your lawn care and gardening questions, call the U of M Yard and Garden Line at (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area.

# # #

Web, V2MN, V4MN, V5MN, G1

brown815

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MW  
9/15/01

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

August 21, 2001

## **Emergency legislation will help with farm income, cash flow problems**

Emergency farm legislation recently passed by Congress and signed into law by the President will provide much-needed assistance to Minnesota farmers this fall and winter. Many farm families are struggling with reduced income and cash flow problems, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"Corn and soybean prices continue to be in the bottom 10 percent of local cash prices recorded in the past 25 years in most of Minnesota," says Thiesse. "In addition, crop yields in most areas of the state are likely to be well below average this year. Meanwhile, costs for fuel and other inputs are up."

The recently passed \$5.5 billion farm assistance legislation includes approximately \$4.6 billion for supplemental market loss assistance payments. These payments will be made under the Agricultural Market Transition Act payment formula used in the past, says Thiesse.

Payment rates will be somewhat lower than last year. "The 2001 market loss assistance payment rates will be slightly over 30 cents per bushel for corn and 53 cents per bushel for wheat," says Thiesse. "The rates in 2000 were 36.3 cents per bushel for corn and 63.7 cents per bushel for wheat."

<over>

The new farm legislation also provides another oilseed payment for 2001 soybeans and other oilseed crops. Thiesse expects the 2001 oilseed payment rate for soybeans to be about 12 cents per bushel, compared with 14.25 cents per bushel in 2000.

“There will likely be about a 15 percent reduction in market loss and oilseed payments in 2001, compared with 1999 and 2000, for most Minnesota corn and soybean producers,” says Thiesse. Producers should receive both the market loss assistance payment and the oilseed payment by early September.

The new emergency farm legislation also raises the payment limit for loan deficiency payments and gains from Commodity Credit Corporation marketing loans from \$75,000 to \$150,000 for the 2001 crop year, notes Thiesse. He says this will be important to many crop producers if low commodity prices continue through the end of the year and into 2001.

# # #

Web,V2,V4MN,A2MN,F4MN

thie0817

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIN  
9/2/01

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

August 21, 2001

## **Punishment is not a good way for parents to enforce rules**

Parental discipline is a combination of identifying and expecting responsible behavior from children. It includes setting limits or rules, monitoring behavior and firmly but kindly enforcing the limits, says Ron Pitzer, family sociologist with the University of Minnesota Extension Service.

“Enforcing rules is much more than punishment,” Pitzer says. “Punishment is probably the least effective way for parents to enforce rules.”

He says rules are easier to enforce if they’re clear, reasonable, fair and appropriate to the child’s age and development. They should also be flexible, agreed to by both the parent and child, and state what to do rather than what not to do.

Children who don’t get enough guidance and supervision are more apt to have developmental problems. Such guidance and supervision is referred to as behavioral control, Pitzer says, and studies show that it has a favorable influence on children.

“A balanced approach of nurturing, disciplining and respecting children is where positive parenting begins,” Pitzer says.

More information on positive parenting is available at [www.extension.umn.edu](http://www.extension.umn.edu), or at a county office of the University of Minnesota Extension Service.

# # #

Web, F1, V4, V7

pitzer8171

Source: Ron Pitzer (612) 625-8169, [rpitzer@umn.edu](mailto:rpitzer@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)



August 24, 2001

## **Shallow or older wells should be tested every year**

Water should be tested annually from wells less than 50 feet deep or over 40 years old.

A water sample should also be tested before a pregnant or nursing woman or infant uses the water. Nitrate is a common contaminant found in many Minnesota wells, and too much nitrate in drinking water can cause health problems for infants.

Water that is high in nitrate shouldn't be used for infants--for drinking, mixing formula, juice and cereal. "Sometimes people only think about drinking, not all the other uses for preparing infant food or formula," says Barbara Liukkonen, water quality educator with the University of Minnesota Extension Service.

Pregnant women in their third trimester should avoid water high in nitrate, Liukkonen says. Women at that stage of pregnancy are often already methemoglobinemic (that is, their blood may not be carrying enough oxygen) and they can be especially susceptible to elevated nitrate levels.

In addition, water should be tested when there's been a flood or prolonged drought, after a chemical accident or spill, when a neighbor's well is contaminated, or when there's a noticeable change in odor, taste or color.

Water tests for private wells should be analyzed at a laboratory certified by the Minnesota Department of Health (MDH). You can get more information from county offices of the U of M Extension Service, and at [www.extension.umn.edu/water](http://www.extension.umn.edu/water).

# # #

Web, V2MN, V4MN, F2

luikk8211

Source: Barb Liukkonen (612) 625-9256, [liukk001@umn.edu](mailto:liukk001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

August 24, 2001

**Fumigating on-farm stored grain requires legal certification, endorsement**

Farmers who find insects in their stored grain and want to treat the grain themselves need to be legally certified as private pesticide applicators. Those who want to fumigate need an additional endorsement to do so, says Dean Herzfeld, pesticide safety coordinator with the University of Minnesota Extension Service.

"We recommend farmers consider hiring the fumigation done rather than attempting to do it themselves," says Herzfeld. "The labels for stored-grain fumigants require the use of expensive specialized personal protective equipment. The labels also require a lot of safety practices that many farmers may not be familiar with."

When hiring a stored-grain fumigator, check to be sure the person doing the work is currently licensed in Minnesota, says Herzfeld. The license should be for either "Structural Pest Control Operator" with "fumigator" on the license, or for commercial applicator in "Category N: Stored Grain and Fumigation." The Minnesota Department of Agriculture has a website at [www.mda.state.mn.us/lis/](http://www.mda.state.mn.us/lis/) to check on the license status of all Minnesota licensed pesticide applicators.

New certification requirements for farmer who do their own fumigation went into effect in March of this year. Farmers doing this work must be currently certified private applicators, and also have a "Private Applicator Fumigation Endorsement."

Farmers can contact their county Extension office to arrange to take the monitored fumigation endorsement closed-book exam, says Herzfeld. It takes about two weeks to receive the endorsement through the mail. A same-day fax service is also available for a higher fee. There is more information on the Private Applicator Fumigation Endorsement on the Pesticide Applicator Training Program website at [www.extension.umn.edu/pesticides/](http://www.extension.umn.edu/pesticides/).

# # #

Web,V2,V4MN,A2,F4

herz0823

Source: Dean Herzfeld, (612) 624-3477

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIW  
q Ag 55w

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

August 24, 2001

## **Hot, dry weather encourages insect growth in stored grain**

Hot, dry weather this summer has encouraged the growth of insects in stored grain. Some farmers preparing to sell stored grain are finding insects in the grain. Treatment options are limited, according to Colleen Cannon, entomologist with the University of Minnesota Extension Service.

“For immediate control, the only options are fumigation with a phosphine-based product or admixture treatments,” says Cannon. “Farmers should consider hiring a fumigator. If they want to fumigate their grain themselves, they need proper certification and a fumigation endorsement.”

Information on the certification and endorsement requirements is available from county offices of the University of Minnesota Extension Service, or on the Internet. The web address is [www.extension.umn.edu/pesticides](http://www.extension.umn.edu/pesticides).

“Make sure the fumigation applicator pays careful attention to sealing the bin and applying fumigant at the recommended rates,” says Cannon. “It’s also important to monitor phosphine gas levels, especially during aeration. Grain with a phosphine content above 0.03 parts per million may not be moved. It’s essential to use adequate respiratory protection and monitoring devices during fumigation. The label is the law—the fumigator must follow all label instructions scrupulously.”

The main alternative to fumigation is an admixture treatment with an organophosphate-based grain treatment. Cannon suggests chlorpyrifos-methyl for wheat and pirimiphos-methyl for corn, augered in with the grain during rebinning. As long as labeled application rates are used, the grain can be moved immediately after treatment.

<over>

Cannon says malathion is no longer effective against some of the common grain insect pests, and is not recommended.

"Prevention is the best solution to grain insect problems," says Cannon. "Store grain in bins that are clean and in good repair. Where insects are a consistent problem, treat empty bins with an insecticide labeled for such a use, such as a cyfluthrin product. Once grain is in the bin, aerate it to maintain recommended storage temperatures. Finally and most important, monitor bins regularly for insect activity—ideally, every week during warm weather."

Planning ahead to prevent insect problems is especially important this year, Cannon points out. The Environmental Protection Agency is considering withdrawing chlorpyrifos-methyl and pirimiphos-methyl, which would greatly limit available treatment options.

More information on monitoring stored grain for insects and treating insect-infested grain is available from county offices of the University of Minnesota Extension Service.

# # #

Web,V2,V4MN,A2,F4

cann0822

Source: Colleen Cannon, (612) 625-4798

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIW  
(Ag 85)

<http://www.extension.umn.edu/News>

August 24, 2001

## **Plant pathologist: Know source of daylilies to avoid deadly rust**

If you want to add daylilies to your home landscape and want the plants to be free of disease, buy locally grown plants. Make sure the plants don't come from states where rust is a problem, says plant pathologist Janna Beckerman of the University of Minnesota Extension Service.

"Daylily is one of the most popular landscape perennials in the U.S.," says Beckerman. "Its disease resistance is a major reason for its popularity. However, a new disease, daylily rust, threatens this resistance."

Daylily rust is a fungus that can kill infected plants, says Beckerman. The disease came to the U.S. from Asia. It first showed up in Georgia and Florida last year, and has now been found in 21 states. Bright yellow spots and/or water-soaked lesions appear prior to the development of yellow to orange to dark rust-colored pustules on the underside of plant leaves. Spores of these colors develop in one to two weeks and can reinfect plants. No other daylily disease produces these spores.

The rust pathogen requires another plant besides the daylily to complete its lifecycle, Beckerman points out. After infecting and reinfecting daylilies, spores produced on the plant need to infect a plant of the genus *Patrinia*. Though not common in Minnesota, *Patrinia* are occasionally sold as "golden valerian" and successfully grown here, says Beckerman.

After daylily rust infests *Patrinia*, it is able to sexually reproduce. This gives it greater genetic diversity. "Without the alternate *Patrinia* host, the disease cycle is broken, making it unlikely that daylily rust infection can persist from year to year in Minnesota," says Beckerman.

<over>

She says federal plant pathologists have concluded that daylily rust will be impossible to contain by regulatory means. The disease develops too quickly for plant inspectors to identify and eliminate every source of inoculum before wind carries spores far and wide. Rust spores will likely be able to infect daylily nationwide within a relatively short time. It is likely the rust will overwinter in the southern states and spread northward every year.

"The best strategy for Minnesota homeowners is to buy locally grown daylilies," says Beckerman. "They should inquire to be certain growers have not obtained their daylilies from states that have reported rust. Segregating newly acquired plants from established plants is a good idea."

Beckerman says some of the daylily varieties most susceptible to rust are "Pardon Me," "Gertrude Condon," "Crystal Tide" and "Stella d'Oro."

"If you think you may have daylily rust, call the Minnesota Department of Agriculture at (651) 296-8328," says Beckerman. "If the disease is confirmed, you may need to destroy infected plants. Heavily infected plants serve as an inoculum source for all your other daylilies, and those of your neighbors. "

For answers to your plant care and gardening questions, call the U of M Yard and Garden Line at (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area.

# # #

Web,V2,V4MN,V5MN,G1

bckrm820

Source: Janna Beckerman, (612) 625-7022

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MN  
08/28/01

<http://www.extension.umn.edu/News>

August 28, 2001  
(Eighth in a series of articles related to the Farm Bill)

## **Environmental 'tinkering' in Farm Bill won't solve pollution problems** By K. William Easter, University of Minnesota economist

Soil erosion and nutrient pollution of our water resources by agriculture are a growing concern.

Many people would argue that the Farm Bill should address these concerns so we get more out of all the money we pour into agricultural subsidies. But developing an effective strategy as part of a Farm Bill will not be easy.

Previous Farm Bills have encouraged the expansion of erosive crops. Attempts to mitigate the resulting environmental problems have relied on Best Management Practices for these crops and on land retirement. This approach has proven to be not enough.

For example, University of Minnesota soil scientist Gyles Randall says in 30 years he's never seen as much soil erosion in south central and southeastern Minnesota as he has in the last few years. Randall goes on to question whether the corn-soybean crop production system as we know it today is sustainable.

Randall says substantial changes in federal farm policy, cropping systems and use of crops produced on farms will need to occur to sustain a healthy environment and rural community.

We must move away from intensive corn-soybean rotations to more diversified cropping systems if we're serious about reducing nitrate and phosphorus pollution of

<over>



the Minnesota River by 40 percent. This was a publicly stated goal several years ago. More than conservation tillage, grass waterways and careful application of fertilizer nutrients are needed.

Including alfalfa in the cropping system would reduce nitrate pollution. We know nitrate discharge from tile drains is much lower when alfalfa is grown, compared to corn and soybeans. In addition, alfalfa provides a year-round soil cover that prevents soil erosion. The downside is that alfalfa is not as profitable as corn or soybeans and is not supported in the present government program.

Phosphorus pollution could be significantly reduced with changes in farming practices and amounts of fertilizer or manure applied. However, changing farming practices may mean no row crops close to water bodies. In addition, it may require new methods to encourage farmers to prevent soil and phosphorus loss. One such method might be tradable phosphorus pollution permits.

It is clear that we need more than environmental tinkering with the Farm Bill if we want to significantly reduce nutrient pollution from agriculture. Top-down approaches in past Farm Bills have had only limited success in reducing pollution. What we need are changes that give farmers incentives to switch to more sustainable cropping systems.

# # #

*(William Easter is a professor in the Department of Applied Economics)*

Web, A2, A4, F4, V2, V4, F2, P1

easter8221

Sources: William Easter (612) 625-7728, Gyles Randall (507) 835-3620

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

10/1  
7/2/01

August 28, 2001

## **Booklet on 'Extinguishing Silo Fires' available from U of M**

Silo fires are a unique farm hazard that can be difficult for fire departments to extinguish. The key to dealing with silo fires is prevention, says John Shutske, farm safety and health specialist with the University of Minnesota Extension Service.

"Preventing silo fires is largely a function of harvesting silage or haylage at the proper moisture content," says Shutske. "A silo fire is most likely if silage or haylage is put up a bit too dry. Most fires occur when silage is put up at less than 45 percent moisture."

A 12-page reference booklet entitled "Extinguishing Silo Fires" is available from the University of Minnesota. "Every fire department in rural Minnesota should have one of these manuals, particularly in dairy country where we see large numbers of tower silos," says Shutske.

"Extinguishing Silo Fires" is available for \$4.26 per copy, which includes 6.5 percent sales tax for Minnesota residents. To order, send a check payable to the University of Minnesota to First on the Scene—NRAES 18, c/o Midwest Plan Service, Biosystems and Agricultural Engineering Department, University of Minnesota, 1390 Eckles Ave., St. Paul, MN 55108.

# # #

Web, V2,V4MN,A4,E4,F4

shut0828

Source: John Shutske, (612) 626-1250  
Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

MIW  
9 Aug 55w

August 28, 2001

## **Danger from deadly silo gas is greater due to stress on corn**

Deadly silo gas is a concern every year for corn producers who harvest their crop as silage. Crop stresses are adding to the danger this year, according to John Shutske, farm safety and health specialist with the University of Minnesota Extension Service.

"Dry conditions and wind have affected corn and other forage plants in many areas this year," says Shutske. "Generally, silo gas levels are higher in plants that have been drought stressed or otherwise damaged by wind, insects or disease. High weed content in chopped silage material also adds to the silo gas problem, since weeds are less able to convert the nitrogen they take up into protein."

Silo gas is the common term for nitrogen dioxide. Most farmers are somewhat familiar with the gas, but don't always understand the true risks, says Shutske. Silo gas is formed as a natural by-product of silage production when chopped-up plant material ferments in a silo.

Silo gas dangers aren't limited to upright silos, says Shutske. "We typically associate silo gas with upright, concrete silos," he points out. "But silage in bag systems and bunker silos also produces silo gas. The risks with these other storage systems is lower, however, since they are more easily ventilated with ambient outside airflow. Oxygen-limited silos present different hazards, including the absence of oxygen if a person enters such a structure."

Shutske says silo gas has an acrid, bleach-like odor. It's brown to a yellow hazy color, but can be difficult to see in dim lighting. It's heavier than air, causing it to settle into low-lying areas. These may include the bottom of silo chutes, between silage bags or in low spots within a bunker silo.

<over>

"Silo gas is highly toxic, even at low levels," says Shutske. "Toxic exposure can and does occur to producers, children, livestock and pets who are exposed to the gas."

A farmer or family member exposed to low levels of silo gas might only notice some mild irritation or intermittent coughing, says Shutske. With higher gas levels, people can become unconscious, and if not removed to fresh air, will die from the gas.

At the lower levels of exposure, the nitrogen dioxide will oxidize in the lungs and create nitric acid. The acid is highly irritating and corrosive, says Shutske. The lungs respond by trying to dilute the acid with more water. Thus, a person can die several hours or even days after an initial exposure to silo gas, due to excess fluid build-up in the lungs.

"Producers frequently ask for an 'easy' answer about how they can enter a silo safely right after they've filled it," says Shutske. "There is no easy answer. The best answer is to stay out for three weeks to a month unless you have a self-contained breathing unit. Dust masks and pesticide respirators with cartridges offer zero protection against silo gas.

"If you absolutely must enter the silo, you need to do it immediately after filling. But even then, there could be significant levels of gas, so maximum ventilation is essential."

Shutske recommends checking with your local silo salesperson or builder for the latest information on safe silo entry. Or, contact the International Silo Association at (630) 258-7206 for a copy of the "Silo Operator's Manual."

# # #

Web,V2,V4MN,A4,E4,F4

shut0827

Source: John Shutske, (612) 626-1250

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MW  
9/13/01

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

August 28, 2001

## **Intensive corn-soybean agriculture not sustainable, U of M scientist says**

By Gyles Randall, University of Minnesota soil scientist

Present-day corn and soybean production in southern Minnesota does not appear to be sustainable from economic, environmental, ecological and sociological perspectives. Let's examine these four factors:

1. Economics is a primary determinant as to whether an agricultural production system is sustainable--to the producer, the agricultural infrastructure and the surrounding community. Global competition, primarily from Argentina, Brazil, and China, will put extreme pressure on the U.S. corn and soybean market.

Visitors to Brazil say there are over 200 million acres of relatively flat land outside of the Amazon River Basin available to be cleared for crop production. This is more than the total acreage of corn and soybeans in the U.S. (about 140 million acres).

Due to low prices, federal assistance with loan deficiency payments (LDPs) has been the primary source of profit for most corn and soybean producers the last two years. Some have said that without them we would have witnessed the largest bankruptcy ever in American agriculture.

Unfortunately, LDPs have stimulated all-out field edge to field edge production, since the farmer is rewarded based on number of bushels produced. Although

<over>

economically good for the producer, this government policy has come at the expense of soil and water stewardship and has created severe long-term consequences.

Coupled with global competition and taxpayers questioning government payments to produce crops they see as not essential to food in grocery stores and restaurants, the economic picture for current corn-soybean production becomes bleak.

2. Environmental factors have become more prominent in recent years when determining the sustainability of crop production systems. In my travels throughout south central and southeastern Minnesota, I've never seen as much erosion as in the last few years. We've had some intense rains, but we've also converted the landscape to a crop production system (corn and soybeans) that is extremely susceptible to soil erosion.

We must question the sustainability of the corn-soybean rotation from an environmental perspective. This is due to more soil erosion, greater and more "flash flood" runoff water compared to cropping systems containing alfalfa and grass perennials, and more loss of nitrate-nitrogen to ground and surface waters.

3. Ecological factors must be considered when evaluating sustainability. More and diverse plant and wildlife is considered highly favorable in a rural ecosystem and presents an aesthetically pleasing quality, which is gaining value in American society. But the current corn-soybean cropping system provides little opportunity for animal and plant diversity on the landscape.

Transportation of corn and soybeans to New Orleans for overseas shipment is another ecological challenge. The judicial branch recently denied attempts by the U.S.

<over>

Army Corps of Engineers to reconstruct the lock and dam system to better accommodate barge traffic for grain shipment. My guess is that corn and soybean agriculture will not win this ecological debate.

4. Sociological impacts are also seen as side effects of present-day corn and soybean agriculture. As farms get larger to support profitable corn and soybean production, we have fewer farms and farm families. Rural populations decline, student numbers in schools dwindle and church membership shrinks. Producers often bypass the local community to purchase inputs at larger regional outlets where prices are cheaper due to volume purchases.

And as more production contracts are developed between agribusiness and the farmer, the farmer will gradually assume the role of "custom operator" or "indentured servant" and lose the freedom to manage. These trends will likely continue regardless of the cropping system, but the corn-soybean rotation has speeded the process.

What does this all mean? Present-day corn and soybean production systems with little livestock in the enterprise do not appear sustainable. We will need substantial changes in federal farm policy, cropping systems and usage of crops produced on the farm to sustain a healthy environment and rural community.

# # #

*Gyles Randall is a soil scientist and professor at the University of Minnesota Southern Research and Outreach Center, Waseca.*

Web, A2, A4, F4, V2, V4, F2, P1

randl8221

Source: Gyles Randall (507) 835-3620, [grandall@soils.umn.edu](mailto:grandall@soils.umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

M/W  
9/10/01

August 29, 2001

## **Downed corn will make harvest difficult**

This year's corn crop is going to be tough to harvest for many Minnesota producers. Summer storms and winds knocked down a lot of corn in some areas of the state and caused extensive stalk lodging. John Shutske, Extension specialist in the University of Minnesota Biosystems and Agricultural Engineering Department, cites some basic principles for harvesting downed corn:

--Reduce ground speed. Slow down and adjust gathering chain/snapping roll speed to match the combine's ground speed. Consult the combine operator's manual for specific instructions.

--Harvest low, but watch out! The combine header will need to be as low to the ground as possible to pick up downed corn. However, you must also be careful to avoid running foreign material such as stones through the machine.

--Catch as much corn as you can. You may need to adjust snapping plates inward. This is especially important if stalks are rotten and hollow or if ears are small. For all adjustments involving the header, threshing, separating and cleaning units, your local dealer should also be a good source of information. A dealer may suggest modifying the combine's concave. Remember that doing so may influence crop quality and drying costs, especially if you open or modify the concave and allow more cobs to go through.

--Go against the grain. Where lodging is severe, it may be necessary to combine corn "against the grain" to pick up as much as possible. Of course, if you can only harvest in one direction and must slow down, the number of acres harvested per hour will drop.

<over>



In some cases it may be possible to trade an acre of downed corn intended for grain with a producer with an acre of standing corn who intends to make silage. Some silage harvesters are better than combines for picking up a lodged crop. Be sure to account for yield and nutritional differences if making this type of trade.

--Consider non-traditional equipment designed for downed corn. There may be enough damaged and downed crop in some areas to justify using non-traditional equipment for harvesting corn. Mark Hanna of Iowa State University suggests producers may want to consider using a grain platform instead of a corn head. Comparing measured losses will show which method works best. An Internet web site with information on measuring harvest losses is at [www.bae.umn.edu/extens/ennotes/enaug01/combine.htm](http://www.bae.umn.edu/extens/ennotes/enaug01/combine.htm).

"There are companies that sell corn reels and other systems that might be useful for harvesting down corn," says Shutske. "You may want to talk with these manufacturers before the harvest season and ask for producer testimonials." Some of the websites with company information are: [www.keldermanmfg.com/cornreels.htm](http://www.keldermanmfg.com/cornreels.htm), [www.meteer.com/ag/products/reels/reels.html](http://www.meteer.com/ag/products/reels/reels.html) and [www.roll-a-cone.com](http://www.roll-a-cone.com).

# # #

Web,V2,V4MN,E4,F4

shut0823

Source: John Shutske, (612) 626-1250

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIW  
qAg85w

<http://www.extension.umn.edu/News>

August 29, 2001

## Harvesting downed corn presents safety, health hazards

Caution—harvesting downed corn can be hazardous to your health. A badly lodged crop is a genuine safety concern, says John Shutske, farm safety and health specialist with the University of Minnesota Extension Service. And the concern is widespread this year because storms and high winds have knocked down a lot of corn in some areas of the state.

“Don’t become a victim of an entanglement injury,” says Shutske. “With more material entering the combine, you increase the chances of plugging the head or other components. Under no circumstances is it ever safe to try to unplug a machine that is running. All moving parts and the engine must be turned off.

“On newer combines the header generally shuts off a few seconds after you leave the seat. Don’t be fooled. If you need to unplug, you need to physically shut the machine down before dismounting. Never depend on a safety device to shut it down.”

Shutske recommends wearing gloves while unplugging the combine to prevent hand injuries and abrasions. A heavy duty, curved garden or hand tool may be useful for digging out plugged material.

Protecting your lungs should also be a priority. In cases where the crop is dusty, healthy individuals need to strongly consider wearing a high quality two-strap dust mask, says Shutske. Such a mask is especially important when coming in direct contact with corn plants, such as when unplugging the combine.

“A corn crop that has been stressed during the growing season is likely to have more mold and fungus growing on the plants,” says Shutske. “These make respiratory protection during dusty conditions even more essential.”

<over>

People with heart or lung problems such as asthma should check with a doctor to see what type of respirator is appropriate, says Shutske.

Be on the alert for increased fire potential this year, warns Shutske. With more dry material entering the machine, fire risk is greater. Make sure to blow or sweep off the combine as needed. Many combine fires occur as crop material accumulates over time on moving parts and engine components. In really dusty conditions it's sometimes necessary to clean off the machine every few rounds.

Combine operators need to have at least one ten-pound handheld ABC dry chemical fire extinguisher on board and readily accessible, says Shutske. Having two is better. University of Minnesota Extension fact sheet 6481 has more details on preventing combine fires. It's available from local Extension offices in Minnesota and is on the Internet at [www.extension.umn.edu/distribution/cropsystems/dc6481.html](http://www.extension.umn.edu/distribution/cropsystems/dc6481.html).

Operator fatigue is another major safety concern. Adverse harvest conditions demand a higher level of attention from the combine operator, adding to stress and fatigue.

"The potential for an accident or injury to the operator rises dramatically with greater fatigue," says Shutske. "If you have additional hired help, consider running in shifts to break up the demands of the work. Make sure you drink plenty of water and eat several small, well-balanced, nourishing meals each day. Gently stretch your arms, neck, back and legs any time you're able to take a quick break. Give your eyes a rest every few minutes by looking up and out to a distance, allowing your eyes to re-focus and re-adjust."

# # #

Web, V2,V4MN,E4,F4

shut0825

Source: John Shutske, (612) 626-1250

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MVA  
QAGSLW

August 29, 2001

## **Workshop on forest ecology at Wolf Ridge is Sept. 28-29**

In late September you can spend a fall day gazing at the foliage from atop Wolf Ridge on the North Shore of Lake Superior. And in the process you'll learn how forest landowners and residents can make forestry stewardship plans become reality.

The workshop, "Succeeding as a Land Steward: Making Your Stewardship Plan a Reality," has two components. The optional Friday evening session, entitled "Knowing your forest and making a plan," focuses on how you can use native plant and tree species, soils and climate to better understand the forests in your backyard or on your favorite hiking trail.

Speakers include Lawson Gerdes of the Minnesota County Biological Survey, Eli Sagor of the University of Minnesota Extension Service and John Kohlsted, program naturalist at the Wolf Ridge Environmental Learning Center.

The Saturday session, "Making the stewardship plan a reality," will stand on its own if you can't attend Friday's session. Forest ecologists, loggers and foresters will lead discussions and walks in the woods.

Speakers and topics include Mark Adams, a horse logger from Hovland, Minn., low-impact harvesting methods; Bruce Berggren, Minnesota DNR, how to get more white pine on your property; and Mike Demchik, University of Minnesota Extension Service, how to produce maple syrup.

Other presenters will discuss choosing the right forester and logger for your stewardship goals; working with other landowners to gain access to new information, markets and services on your property; and opportunities to become involved with "green certification" of products from your property.

Sessions will be informal with ample time for questions and answers. To register for this workshop, you'll need to fill out a registration form and send it to Wolf Ridge. Registration costs are \$42 for both the Friday evening and Saturday sessions (including meals and lodging), and \$15 for the Saturday session only (including lunch).

Detailed registration and payment instructions are available online at [www.cnr.umn.edu/cfc/outreach/workshops.html](http://www.cnr.umn.edu/cfc/outreach/workshops.html). If you don't have Internet access, call Judy Larson at Wolf Ridge at (800) 523-2733 for registration information.

For more information about the workshop content, contact Eli Sagor of the University of Minnesota Extension Service and Cloquet Forestry Center at (218) 879-0850, ext. 120 or [esagor@cnr.umn.edu](mailto:esagor@cnr.umn.edu).

The program is sponsored by the Northeast Minnesota Sustainable Development Partnership, University of Minnesota Extension Service, Minnesota Department of Natural Resources Division of Forestry, Minnesota County Biological Survey, Wolf Ridge Environmental Learning Center, Community Forest Resource Center and the Cloquet Forestry Center.

# # #

Web, F8, V4, Z2

sagor

Source: Eli Sagor (218) 879-0850, ext. 120, [esagor@cnr.umn.edu](mailto:esagor@cnr.umn.edu).

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MIW  
9AgSEW

August 29, 2001

## **This year's corn, soybean yield drop will be costly for Minnesota farmers**

Lower corn and soybean yields in Minnesota this year will be costly for the state's farmers. Income loss on a typical 700-acre farm could be over \$20,000, according to Erlin Weness, farm management educator with the University of Minnesota Extension Service.

Weness says crop production has the potential to fall 15-20 percent below 2000 levels.

"A projected drop in soybean yields of 10 bushels per acre would reduce gross income to producers \$52 per acre if the price is the loan rate of \$5.15 per bushel," says Weness. "If corn yields drop 17 percent, or 25 bushels per acre, from last year, farmers can expect a gross income drop of \$5.50 per acre. There most likely will be little or no loan deficiency payment on corn this year."

Larger expenses for most crop inputs have added to the economic shortfall, Weness points out. Costs for fertilizer, chemicals, fuel and seed have generally been somewhat higher in 2001.

Federal payment rates on corn through the Agricultural Market Transition Act will be lower on this year's crop says Weness. Federal oilseed payment rates on soybeans will also be lower.

<over>

"If corn yields drop 25 bushels per acre and soybeans drop 10 bushels per acre from last year, the resulting projected crop income drop would be \$28.75 per acre for a farm with half corn and half soybeans," says Weness. "That would be over \$20,000 for a 700-acre farm."

Weness points out that the figures above are projections, and individual farm yields and prices can vary widely.

"Farmers who are faced with major yield reductions need to reevaluate their cash flow projections and make financial adjustments," says Weness. "It's also important to keep lenders informed of potential crop shortfalls. If crop insurance is in place, insurers should be notified so that indemnity payments come as early as possible."

# # #

Web,V2,V4MN,A2,A4

weness828

Source: Erlin Weness, (507) 372-8210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MIW  
AHSBW

August 29, 2001

## Reducing need to dry corn will save expensive fuel

Drying corn will be expensive this fall. The cost of fuel for drying has gone up, says engineer Bill Wilcke of the University of Minnesota Extension Service.

"Every percentage point of moisture removal in a heated-air dryer that you can avoid will save about .02 gallons of liquefied petroleum gas per bushel of corn harvested," says Wilcke.

Storing corn in a silo or silage bag as whole-plant silage, high-moisture ear corn or shelled corn is one way to avoid drying.

"If you have cattle or other ruminants you might consider changing their rations and feeding more silage or ground ear corn," says Wilcke. "Those who don't have the necessary equipment might be able to hire a custom harvester. Those without a permanent silo might be able to use silage bags or temporary bunkers."

Storing high-moisture shelled corn in a silo or silage bag where it can ferment is an option for livestock producers who can feed the corn. Wilcke says the naturally occurring bacteria that cause fermentation need high moisture levels to become active. This means corn should be harvested at 25-30 percent moisture.

"Corn often dries to less than 25 percent moisture in the field before the silo is full," says Wilcke. "Corn stored at less than 25 percent moisture is often too dry for



bacteria to cause fermentation, but it's at an ideal moisture for the corn to mold. If you plan to store high-moisture corn, start harvest early and make sure the silo is full before the corn gets too dry. Attempts to rewet shelled corn that is too dry to ensile are usually unsuccessful."

One way to avoid artificial drying is to let corn dry in the field. Wilcke says this is not a good option unless it's early in the season, you have good drying weather, and you don't have disease or insect problems that cause lodging and dropped ears.

Corn that will be fed during the winter may not need drying, says Wilcke. "If it can be aerated in storage to keep its temperature near 30 degrees F, it can be safely stored at up to 18 percent moisture during the winter," he points out. "But wet corn must be fed or dried by spring. It needs to be down to 15 percent moisture or less for storage in warm weather."

Don't dry corn to below 14-15 percent moisture unless you plan to store it for a year or more, says Wilcke. Overdrying increases fuel use and reduces dryer capacity. It also reduces the number of bushels available for sale, since it removes water that adds to the weight of the corn. And, says Wilcke, overdried corn is more susceptible to cracking and breaking during handling.

# # #

Web,V2,V4MN,A4,F4

wilck827

Source: Bill Wilcke, (612) 625-8205

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

WCC  
ARTIP

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

September 6, 2001

## **Farmwork emergency response manual can be live-saving resource**

If you're a member of a Minnesota farm family, there's close to a 20 percent chance that you or a member of your family will be seriously hurt while doing farmwork in the coming year. University of Minnesota studies consistently show this, according to John Shutske, farm safety and health specialist with the U of M Extension Service.

A family member's life can hang in the balance when a farmwork injury occurs, so knowing how to respond is critical. A manual available from the U of M called "First on the Scene" is an invaluable resource for this, says Shutske.

"The 45-page manual walks farm family members and other interested readers through the process of responding to common farm emergencies," says Shutske. "It covers machinery entanglements, tractor overturns, grain suffocations, silo gas exposure and overexposure to pesticides."

The manual was written by a team of farm safety experts from across the nation. It features graphics that illustrate events that commonly occur on farms. It also has 11 "decision trees" that help step a person through an appropriate and safe response to common farm emergencies.

Shutske recommends the manual as a resource and discussion starter for all farm families. "Knowing how to respond to a catastrophic situation also plants seeds of

<over>

prevention in the minds of family members," Shutske points out. "This manual is an ideal handout for farm safety workshops, clinics and other events designed for farm owners, workers and parents."

"First on the Scene" is available from the U of M Department of Biosystems and Agricultural Engineering. The cost is \$7.46 per copy, which includes 6.5 percent sales tax for Minnesota residents. To order, send a check payable to the University of Minnesota to: First on the Scene—NRAES 12, c/o Midwest Plan Service, Biosystems and Agricultural Engineering Department, University of Minnesota, 1390 Eckles Ave., St. Paul, MN 55108.

# # #

Web,V2,V4,V5,A4,E4

shut0904

Source: John Shutske, (612) 626-1250

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A 27P

<http://www.extension.umn.edu/News>

September 6, 2001

## **Minnesota farmwork death toll for past year is 24**

Twenty-four farmers, workers and children died in farm-related accidents in Minnesota during the year ending June 30, 2001. That's up slightly from the 22 deaths that occurred the previous year, says Stacey Madsen, farm safety and health educator with the University of Minnesota Extension Service.

Madsen says National Farm Safety and Health Week is a good time to reflect on the safety of Minnesota's farming community. The observance this year is Sept. 16-22.

"Minnesota averaged 25 farm-related deaths per year over the five-year period that ended June 30, 2000," says Madsen. "The number of deaths for agricultural workers remains high. Across the nation, agriculture recorded the second highest fatality rate of all occupational categories in 2000. The rate was 20.9 fatalities per 100,000 workers, according to the U.S. Bureau of Labor Statistics."

The most common farm-related cause of death in Minnesota during the 2000-2001 year was being pinned against, between or underneath a tractor or other piece of equipment. This caused 11 of the 24 deaths, according to Madsen. Four people were killed in a roadway collision involving a car and a sugarbeet truck. Two people died after falling. One person died from injuries sustained after becoming entangled in a power take-off and another suffocated when he was covered with grain.

<over>

Males were killed in 20 out of the 24 farm-related incidents, or 83 percent.

The average age of the people involved in these fatal accidents was 52.1 years old. There were four children killed. When the children are not included in the calculations, the average age of the farmers who died was 62 years old. Nine of the farmers who died were 70 or older.

The four children who died ranged in age from less than one year to three years old. One child was female and the other three were male. Two were involved in falls that led to their deaths. One child was run over by a tractor. One drowned in a runoff gutter of a hog feedlot. All of the child fatalities occurred in the family's farmyard.

Information about the time of day an accident occurred was not available in all cases. Based on the data available, however, many of the deaths occurred in the early afternoon. Ten of the 16 incidents occurred between noon and midnight.

The University of Minnesota Extension Service farm safety and health website at [www.bae.umn.edu/~fs/](http://www.bae.umn.edu/~fs/) contains a wide variety of information and resources. The website for National Farm Safety and Health Week is [www.nsc.org/farmsafe.htm](http://www.nsc.org/farmsafe.htm).

# # #

Web,V2,V4,V5,A4,E4

shut0905

Sources: Stacey Madsen, (612) 624-7444; John Shutske, (612) 626-1250

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A274

September 6, 2001

## **U of M soil test for high phosphorus levels can help protect water quality**

Minnesota livestock producers now have a soil test for phosphorus available that should make it easier to conform with new state feedlot rules on soil phosphorus and to protect water quality. The University of Minnesota Soil Testing Laboratory is offering the new test, called the "Phosphorus Test for High P Soils."

New phosphorus regulations went into effect July 1 as part of state feedlot rules, according to water quality project coordinator Les Everett of the U of M Extension Service. The Minnesota Pollution Control Agency developed the rules. They require that land receiving manure or process wastewater from animal feedlots capable of holding 300 or more animal units have soil samples analyzed for phosphorus at least once every four years.

If soil phosphorus levels exceed specified limits, a manure management plan must be prepared and submitted with a permit application to the MPCA or the county feedlot officer of a delegated county. The limits for fields in special protection areas or within 300 feet of open tile intakes are 60 parts per million (ppm) on the Olsen-P test or 75 ppm on the Bray-P test. The limits for fields outside special protection areas and more than 300 feet from open tile intakes are 120 ppm for Olsen-P and 150 ppm for Bray-P.

"The new soil test is designed to give accurate P test results for samples testing in the higher ranges for extractable Olsen P," says Roger Eliason, head of the U of M Soil Testing Laboratory. "Samples submitted for this test will be analyzed by the Olsen method, using dilution to ensure accurate results at the higher ranges. The new Olsen-P test has a range of 10 to 250 ppm. The normal Olsen reporting range is 1-50 ppm, and the normal Bray test shows 1-100 ppm."

Eliason says the Olsen test will be used instead of the Bray test for the high phosphorus measurement because the Olsen test will give accurate results on both the alkaline and acidic soils of Minnesota. This means that a single test method is applicable statewide. The Bray test is allowed by the state rules, with different value limits. However, the Bray test often fails on calcareous soils, Eliason points out. Thus it isn't applicable statewide.

"The use of the Olsen test for all soils will help avoid confusion by maintaining uniformity of method for all soils," says Eliason.

The cost of the new test is \$5, which covers the expense of dilution and of providing a separate test for a limited number of samples. Additional details and information for submitting samples are available from county offices of the University of Minnesota Extension Service. The information is also on the Internet at <http://soiltest.coafes.umn.edu/>.

# # #

Web,V2MN,V4MN,V5MN,A4,C4

everett

Sources: Les Everett, (612) 625-6751; Roger Eliason, (612) 625-7701  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MSC  
A27P

September 6, 2001

## **Southern blight shows up on ornamental landscape plants in Minnesota**

"The Fungus That Ate the South" has found its way to Minnesota, with the potential to bring disease to a wide variety of ornamental landscape plants. It's commonly known as southern blight, according to Janna Beckerman, plant pathologist with the University of Minnesota Extension Service.

"The scientific name for the fungus that causes southern blight is 'Sclerotium rolfsii,' " says Beckerman. "It has a host range of over 500 species of plants. One reference says susceptible ornamentals are 'too numerous to list.' It has been called 'The Fungus That Ate the South' because it affects so many plants there and can spread so quickly."

Beckerman says the disease was diagnosed on plants from a Twin Cities yard this summer after first showing up last summer. It appears to have successfully overwintered in Minnesota, and it spread from daylily to hosta, astilbe and iris.

"The fact that it spread isn't shocking," says Beckerman. "The fact that it survived last winter is. Most plant 'experts' said it couldn't happen."

The key symptom of southern blight is crown rot. Beckerman says mycelial fans develop quickly, and within days, sclerotia form within the mycelial fans. Sclerotia begin as white fungus balls that look like mustard seeds as they mature. Unlike white mold, sclerotia form on the outside of the plant stem, and can form a crust surrounding the base of the plant.

Beckerman says water droplets form on the fungus balls. These droplets contain high concentrations of oxalic acid, which kill plant cells and can lead to the death of an infected plant.

<over>



Fungicides have limited effectiveness for controlling the disease, says Beckerman. Increasing the organic content of soil and applying nitrogen fertilizer are strategies that have been somewhat effective against the disease, she adds.

Beckerman says prevention is the best option for dealing with the disease. "Know the source when you buy new plants," she says. "Buy only from sources that are likely to be free of disease."

For further information she recommends an Iowa State University publication on the Internet at [www.extension.iastate.edu/Publications/SUL8.pdf](http://www.extension.iastate.edu/Publications/SUL8.pdf).

For information on gardening and lawn care, contact the University's Yard and Garden Clinic. The clinic has experts to answer questions on horticulture, plant disease and insect problems between 9 a.m. and 3 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county.

###

Web,V4MN,V5MN,G1

bckrm903

Source: Jana Beckerman (612) 625-7022

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A871p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

September 7, 2001

<http://www.extension.umn.edu/News>

## **Engineer cites two options for reducing fuel use when drying corn**

In-storage cooling of new-crop corn that's been heated in a dryer is an option that can save some fuel. Dryeration is another fuel-saving option, says Bill Wilcke, engineer with the University of Minnesota Extension Service.

"Corn loses almost no moisture when freshly dried kernels are rapidly cooled immediately after drying," says Wilcke. "A different approach is to unload corn from a dryer while it's still hot and move it into storage. If it's cooled slowly using the storage bin's aeration fan, the corn will lose one or two percentage points of moisture during the cooling process.

"This means that if the final target moisture is 15 percent, you can unload the dryer when the corn reaches 16-17 percent instead of drying it all the way to 15 percent."

Wilcke says in-storage cooling saves the fuel that would be required to remove the last one or two points of moisture. It also reduces the amount of time that corn spends in the dryer, greatly increasing dryer capacity.

More information is available in a University of Minnesota Extension Service bulletin entitled "Dryeration and In-Storage Cooling for Corn Drying." It's on the Internet at [www.extension.umn.edu/distribution/cropsystems/DC7356.html](http://www.extension.umn.edu/distribution/cropsystems/DC7356.html) . Printed

<over>

copies are available from Wilcke in the U of M Biosystems and Agricultural Engineering Department at [wilc001@umn.edu](mailto:wilc001@umn.edu) or (612) 625-8205.

Details on dryeration are covered in the same bulletin. Dryeration is similar to in-storage cooling, except that corn is intentionally left hot (called steeping or tempering) for four to 12 hours. After this tempering period, kernels lose two to three percentage points of moisture as they cool.

“Compared with rapidly cooling corn in a dryer, dryeration reduces energy use, increases dryer capacity, improves corn test weight and reduces the number of cracked kernels,” says Wilcke.

He recommends moving corn from the bin where cooling takes place to a different storage bin after the dryeration process to avoid potential moisture condensation on the inside walls of the cooling bin.

# # #

Web, V2, V4MN, E4, F4

wilck905

Source: Bill Wilcke, (612) 625-8205

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A072

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

September 7, 2001

## **In-storage drying with unheated air is option for corn**

Corn producers who want to eliminate the expense of buying liquefied petroleum gas to dry their crop with heated air may want to consider natural-air drying. However, it's important to consider the cost of electricity for natural-air drying, says engineer Bill Wilcke of the University of Minnesota Extension Service.

Natural-air drying is an in-storage process that uses bins with full perforated drying floors, says Wilcke. The process requires fans of approximately 0.75 to 1.0 fan horsepower per 1000 bushels of corn for bins that are no deeper than about 18 feet.

"Natural-air drying works well in the upper Midwest, but harvest must be delayed until the moisture content of corn in the field drops to about 22 percent," says Wilcke. "Drying requires several weeks of fan operation. In many years, corn doesn't finish drying before winter and must be finished in early spring."

While natural-air drying uses no LP gas or natural gas, it does use an average of about one kilowatt hour of electricity per bushel of corn to run the drying fan, Wilcke points out. Cost effectiveness of natural-air drying compared with heated air depends on the relative costs of gas and electricity and on how favorable the weather is during the drying season.

A U of M Extension publication entitled "Natural-Air Drying in the Upper Midwest," BU-6577, has more information. It's on the Internet at

<over>

[www.extension.umn.edu/distribution/cropsystems/DC6577.html](http://www.extension.umn.edu/distribution/cropsystems/DC6577.html) . Printed copies are available for purchase through county offices of the University of Minnesota Extension Service, or by calling (612) 624-4900 or (800) 876-8636.

If you don't like some of the limitations of natural-air drying, you can partially dry corn to about 20 percent moisture in a heated-air dryer and then finish drying it in a bin equipped for natural-air drying. "Combination drying allows you to harvest corn earlier than you can with just natural-air drying," says Wilcke, "but it uses less fuel and produces better quality corn than complete heated-air drying."

More information on this strategy is available in a publication entitled "Combination High-Speed, Natural-Air Corn Drying." It's available from the U of M Biosystems and Agricultural Engineering Department by e-mail at [wilck001@umn.edu](mailto:wilck001@umn.edu) or by phone at (612) 625-8205.

# # #

Web,V2,V4MN,E4,F4

wilc0906

Source: Bill Wilcke, (612) 625-8205

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

September 11, 2001

## **U of M farm safety effort targets children**

A farm can be a deadly place for children, especially in areas where work is going on. About one in five farmwork-related fatalities in Minnesota involves a child below age 16, according to John Shutske, farm safety and health specialist with the University of Minnesota Extension Service.

Younger children seem to be particularly vulnerable, especially the very young who are playing or watching work that's going on. "We have had several very tragic deaths of young toddlers who were playing or exploring the farm worksite while their parents did routine chores," says Shutske. "With both parents often working, both on and off the farm, very young children who are not being watched at all times are at a huge risk for death or injury on a farm."

Child safety is a main focus of U of M farm safety education. A recent study by the U of M Department of Biosystems and Agricultural Engineering shows the effort is far-reaching.

"We surveyed 83 of Minnesota's 87 counties through county Extension offices," says Stacey Madsen, farm safety and health Extension educator on the U of M campus. "We wanted to find out what types of farm safety educational programs local Extension educators were implementing."

Three-fourths of the counties surveyed were directly involved in educational initiatives for rural children concerning farm and other work-related hazards. "We found that more than 12,000 children participated in Extension-sponsored or coordinated educational events last year," says Madsen. "In addition, community members, parents and rural leaders volunteered thousands of hours working on this important issue."

In several counties, as many as one-quarter of all children under age 16 participated in farm safety and health educational programs in 2000, according to Madsen.

The U of M Farm Safety and Health Program provides materials, consultation and training demonstration ideas for other child safety efforts throughout the country. For example, the program has developed child safety materials used by "Progressive Farmer" magazine. This effort has reached more than 50,000 children nationwide.

Shutske says efforts to prevent serious injuries and fatalities among young people doing farmwork appear to be paying off. "We've been able to blanket the state with age-appropriate education for kids who are at the age when they're just beginning to do actual farmwork," he says.

The U of M Farm Safety and Health Program website includes educational resources and research information on agricultural injury prevention and health promotion. It's at [www.bae.umn.edu/fs](http://www.bae.umn.edu/fs).

# # #

Web,V2,V4MN,V5MN,A4,E4

shut0907

Source: John Shutske, (612) 626-1250; Stacey Madsen, (612) 624-7444

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

September 11, 2001

**Knowing soil nutrient levels is essential for good fertilizer decisions**

Soil testing to determine soil nutrient levels is essential for making good fertilizer decisions for next year's crops. George Rehm, soil scientist with the University of Minnesota Extension Service, cites some key numbers to keep in mind regarding fertilizer for corn and soybeans.

"Phosphate fertilizer is not likely to increase corn yields if the soil test for phosphorus is higher than 20 parts per million on the Bray test or 16 parts per million on the Olsen test," says Rehm. "Broadcast application of potash will probably increase corn yields if the soil test for potassium is less than 80 parts per million."

For soybeans, Rehm says phosphate fertilizer will probably boost yields if the soil test for phosphorus is less than 10 ppm on the Bray test or 8 ppm on the Olsen test. Broadcasting potash is a good idea if the soil potassium test is less than 100 ppm.

"Take a close look at soil test results before making fertilizer decisions," says Rehm. "Soil test values have been increasing in Minnesota. Broadcast applications of phosphate and/or potash aren't always worthwhile. If they aren't needed, growers are better off to save their money."

County offices of the University of Minnesota Extension Service have soil sample bags and information sheets on soil testing.

# # #

Web,V2,V4MN,F4

rehm0911

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu



September 14, 2001

### **Share machinery ownership with someone far away?**

Owning farm machinery with someone hundreds of miles away may be a good way to cut machinery ownership costs.

"A corn belt farmer jointly owning a combine with a wheat belt farmer can be a good match," says Erlin Weness, farm management educator with the University of Minnesota Extension Service. The machine is more fully utilized over a longer wheat-corn harvest period without conflicts over usage during individual harvest seasons.

It's more common to share machinery with someone close to minimize transportation costs. Regardless of location, you need to thoroughly discuss any machine-sharing arrangement before going ahead, says Weness. He has just written an article titled "Sharing Farm Machinery."

If you decide to proceed, put the agreement in writing. Weness says, "The more details you can agree on and put in writing before going ahead, the better your chance for a successful business venture."

A key to successful joint machinery ownership is deciding when and how equipment will be used. If you're sharing with a neighbor, you could set a schedule of usage up. This could call for A to get the machine on day one, and B on day two.

Other alternatives can be worked out where one party has the machine until the dryer and wagons are full. Then the other partner takes the machine until his or her

<over>

facilities are full. "Any type of agreement is possible," Weness says. A key factor is whether you and your partner have the temperament to negotiate and work through day-to-day decisions dictated by weather delays and other down time.

You also need an agreement as to how and when a machine is serviced, maintained and fueled. Establish some "rules of conduct" such as the condition the machine must be in then you get it from your partner.

Also, agree on who's responsible for repairs. If one partner does all the repairs, maintenance, oil changes and lubrication, that partner should be reimbursed.

It's best to have a predetermined dissolution plan, Weness says. If both want out, the machine can be sold to the highest bidder and the proceeds divided. If both want to own the machine but want out of the joint ownership, you could draw straws to see who sets the price. Then the other partner decides whether to buy or sell at that price. If one wants to sell out, a local appraiser could determine the buyout price.

More detailed information, including different ways to structure machinery agreements, is available in the new article Weness wrote. You can find it at <http://swroc.coafes.umn.edu>, or request one from a county office of the U of M Extension Service.

# # #

Web, V2, V4MN, A2, A4

weness9111

Source: Erlin Weness (507) 372-8210

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

September 14, 2001

## **Sharing farm machinery can cut crop production costs**

Farm machinery costs make up 20 to 30 percent of the annual per acre cost of producing corn and soybeans on Minnesota farms.

But spreading the ownership costs between two or more farms can reduce these costs, says Erlin Weness, farm management educator with the University of Minnesota Extension Service. Weness says there are several ways to structure shared machinery agreements, including:

--Sole ownership with a custom agreement. One person owns the machine and is responsible for all ownership costs. The owner signs a custom farming agreement with another farmer for a set fee. The fee may or may not include fuel or labor. "This type of ownership keeps everything very simple," Weness says. "Everyone involved in the agreement knows what's expected."

--Purchasing machinery jointly by two or more farmers who wish to work together. If the machine is purchased 50-50, each party is responsible for making one-half of the interest and principal payments. A working bank account can be established to handle transactions, and each person pays an agreed amount into the account.

--Purchasing machinery jointly in the same percentage as acres farmed. If A has 750 acres and B has 250 acres, a 75-25 percent split of all ownership and operational costs is set up. But Weness says ownership adjustments will be required if either partner changes their acreage, which makes this a cumbersome ownership method.

"One key to successful joint ownership is for the partners to agree on when and how each piece of machinery will be used," Weness says. "Any type of agreement is possible, but it's important to determine up front who will use the machine first and how it will be shared through the season."

<over>

"Depending on weather conditions, machinery use decisions may have to be made on a day-to-day basis," Weness says. You and your partner must have the temperament to negotiate and work through these decisions.

Another key to success is to make an agreement as to how and when a machine is serviced, maintained and fueled. "Establish some rules of conduct up front," Weness says. Do you want the machine fueled, clean and in good repair when you receive it from your partner? Or is it okay to get it with mud on the tires, weeds hanging from it and with a vital part dragging on the ground. How about half eaten sandwiches, pop cans and junk in the cab?

"When looking for a potential joint owner, look for someone who has similar habits regarding machinery care and maintenance," Weness says. "You may also want to work with someone who has a similar work ethic and personality. If you and your partner have conflicting personalities, expect a short business relationship."

More detailed information is available in a new article Weness wrote titled "Sharing Farm Machinery." You can find it at <http://swroc.coafes.umn.edu> or at a county office of the U of M Extension Service.

# # #

Web, V2, V4MN, A2, A4

weness9101

Source: Erlin Weness (507) 372-8210

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

September 14, 2001

**Young children on farm need adult supervision at all times**

*The following commentary is from Madge Alberts of the Children, Youth and Family Consortium, University of Minnesota:*

One recent Sunday afternoon, I was driving in rural Minnesota past a dairy farm, and I saw a woman mowing her very large lawn on a riding mower. A common sight during the summer, right? Only this woman had not one, but TWO children on the mower with her, one perched on each knee. I thought to myself, "Now there is an accident waiting to happen. WHAT is she thinking?"

My better judgment told me I should have stopped and said something to her about how dangerous and irresponsible her actions were. But I didn't.

A few months ago, I was watching television one night, and two things occurred, one right after the other, that made me sit up and take notice. First, on the 6 p.m. news, there was report of a young boy from Wisconsin who had wandered out of his home at 3 in the morning and nearly froze to death. He apparently was watching a video (at 3 a.m.) after having been in the barn with his siblings and parents until nearly 2 a.m. while his parents milked cows. Thankfully, he has recovered.

Later that same evening, "Judging Amy," a prime-time TV show about a single mom, who's also a judge required to make decisions regularly about a variety of family issues, came on. This episode had a story line about a dairy farmer who was reported to child protection for keeping his children home from school to work on the farm. Of course, this story was fiction, but it probably made many people without knowledge of farming think critically about the roles of kids working on farms.

I'm the spouse of a dairy farmer. I'm also the mom of five children/step-children, and a family development professional. I know what life is like on farms, and I know firsthand the stresses and demands that sometimes drive people to make decisions that

may not be wise. And WAY too often, those decisions are about our kids' safety. I have heard many stories in the last few months about children who have been seriously injured or killed on farms in incidents that were the result of bad judgment, and maybe even irresponsibility on the part of the parents--incidents that probably could have been prevented.

So it's time for me to speak up.

We are not always attentive enough to the safety needs of our young children. Far too often, we take chances we shouldn't take because we think it will never happen to us! But it does happen--and has happened--to many people who thought it would never happen to them.

So for what it's worth, here's my thinking on the issue, which is based on experience and the research about farm safety which we all know, but often choose to ignore.

--Children are not responsible for their own safety. It is the responsibility of the adults in their lives to fill that role.

--Young children should never--NEVER--be around a farm site or in barns unsupervised. Period. If they are outside, they should be under the direct supervision of an adult who is not preoccupied with something else--within direct eyesight--at all times. When parents are working at their job of farming or milking cows, their attention cannot be fully focused on the safety of their children.

--Young children should not be riding on machinery of any kind. Yes, it's fun to ride on the lawnmower with mommy. And yes, it's even more fun to ride in the big tractor while daddy is cutting hay. But it's not safe. What happens if the child falls off the lawnmower and gets caught underneath it? If you think it can't happen, think again. You say the tractor has an enclosed cab? What happens if there's some emergency with the equipment and the parent has to jump out? Will he remember to shut off moving parts? What if the child tries to climb out after him? There is just too much risk involved to have children in situations like this until they are of a developmental age that they are capable of understanding the dangers of the situation and making decisions for themselves.

<over>

--Don't take for granted that young children fully understand the dangers of farm equipment and machinery. They don't. They aren't developmentally able to understand the consequences of getting caught in a PTO, even if you've told them. They don't understand that they could get stepped on by a cow if they get too close. They don't understand that sticking their hand in a conveyor to grab a handful of feed could result in their arm being ripped off. Too often we expect children to be able to utilize adult reasoning powers, and they aren't able to do so, developmentally. Further, at young ages, they aren't able to transfer the danger of one situation to another similar situation--they need to be told the rules or cautioned of the dangers for every single situation.

--At least one parent needs to maintain a level of alertness to be able to adequately parent the children. When parents are so exhausted that they can't attend to the physical, emotional, and mental needs of their kids, they need to make some changes.

--The first "job" of children is to be children. Although working as a family on the family farm (large or small) can be a very healthy environment for kids, and help them develop a great work ethic, it's too easy to cross the line and expect kids to take on roles that aren't developmentally appropriate, or that take too much time away from their job of growing up and learning. Be sure those needs are respected.

A few years ago I was part of a study of dairy farm families in southern Minnesota. When we asked about safety issues, one wife told us that when she works outside, she and her husband arrange childcare for their kids. If they can't find childcare, she doesn't go out. They did not allow their young children to be outside when they were occupied working. They made some significant financial sacrifices in order to accomplish this. Unfortunately, I'm afraid their wise choice here is the exception rather than the rule.

During times of high stress or fatigue--such as planting, harvesting, chopping hay, inclement weather situations and low milk prices--our ability to make good

<over>

judgments or decisions is impaired. We are much more tempted to cut corners or let things slide because we believe we don't have the time, energy and maybe the money to attend to them adequately.

I have long believed that if, as farm families, we are unable, for whatever reason, to adequately attend to the safety and developmental well-being of our children, including proper parenting, we need to re-think our priorities. Yes, working together and living together on a farm can provide a wonderful, nurturing environment for spouses and children. But it can also pose risks that must be acknowledged and attended to on a daily basis.

In a University of Minnesota Extension publication entitled "Keeping Farm Children Safe," author and farm safety expert John Shutske says, "Farm accidents to children are not random. They are very predictable. And almost all of them could be prevented." Given the alarming number of children who have been seriously injured or killed in farm accidents in the last year or so, we are apparently not giving adequate attention to children's safety. Losing even ONE child because of poor judgment or laxness in supervision is too much, and it affects all the family members for the rest of their lives.

The publication "Keeping Farm Children Safe" also contains an exceptional chart showing the developmental stages of children, what they're capable of at each stage, as well as risks, and protective measures. It is available on-line at:

[www.extension.umn.edu/distribution/youthdevelopment/DA6188.html](http://www.extension.umn.edu/distribution/youthdevelopment/DA6188.html) . It's also available from county offices of the University of Minnesota Extension Service. Another useful resource is the North American Guidelines for Children's Agricultural Tasks. It can be found at: <http://www.nagcat.org/> .

# # #

Web,V2,V4,V5MN,A4,E4,F2

albrt913

Source: Madge Alberts, (612) 625-7899  
Editorial contact: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



MSC  
A271D

<http://www.extension.umn.edu/News>

September 14, 2001

## **New manual from U of M can help communities develop tourism**

A new resource to help bring tourist dollars into local communities is available from the Tourism Center of the University of Minnesota Extension Service. The 254-page "Community Tourism Development" manual is designed to help communities implement effective tourism programs.

The manual is designed for communities starting new tourism development efforts as well as those with established programs. Contributors to the manual are from the tourism industry, businesses, communities and universities.

The manual covers planning and organizing, building community support, assessing attractions, marketing, funding and management. It includes planning worksheets, tips on involving youth and senior citizens, business involvement and making the most of community festivals.

Seven case studies of successful tourism development efforts are included. Among these are Mississippi Valley Partners in southeastern Minnesota and southwestern Wisconsin; Grand Marais, Minn.; and Walnut Grove, Minn.

"All communities must address the same questions when trying to improve success with tourism," says Cynthia Messer, U of M Extension tourism educator. "If you want to develop tourism, the manual can help you create a vision, bring partners

<over>

together to discuss it, encourage commitment and create an organization that fosters collaboration."

A companion video, "Rural Tourism Development Case Studies," is also available. The video shows how four communities applied the principles of tourism development in their communities. Three of these community case studies are updated in the manual.

"Community Tourism Development," item MI-07650, is available from the U of M Extension Distribution Center at (800) 876-8636 or [www.extension.umn.edu](http://www.extension.umn.edu). Cost of the manual is \$59. Cost of the video, item VH-05667, is \$15.

# # #

Web,V2,V4,V5MN,V8MN,E1,T1

messr907

Source: Cynthia Messer, (612) 624-6236

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A&T

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

## NEWS & INFORMATION

September 24, 2001

<http://www.extension.umn.edu/News>

### **Ambiguous loss may affect both farm families, those missing loved ones**

Ambiguous loss faces Minnesota farm families facing an uncertain future due to the global market and low commodity prices. It's also a problem for anyone who is missing family members, friends or co-workers in New York or Washington, D.C.

Ambiguous loss, or not knowing what might happen, is the most difficult stress to deal with, according to Pauline Boss, University of Minnesota family social scientist. She was brought to New York to help union employees who are missing friends and co-workers from the World Trade Center attack deal with uncertainty and grief.

"Without clear information and certainty, even strong people become ambivalent and can't decide what to do next," Boss says. "They don't know if the missing person will be found, so their grief and coping process is frozen. People are understandably stuck."

She has these suggestions for anyone who is missing family, friends or co-workers:

--Gather as much information as possible, and talk to others about how you feel. Keep hoping, but at the same time, it's okay to think about what to do if the missing person is never found. Denial can be a useful coping mechanism in the short term, but not in the long term.

--While it's hard to find meaning in the tragedy, keep talking with others about the stress of not knowing. Reach out to others and let them help you. Don't be a loner.

--While living with ambiguous loss, do some daily activity, even a small one, where you feel more in control.

--Honor the missing person in your own way, Boss advises, and know the situation is not your fault.

<over>

Many of us who live far away from the East Coast may have feelings of ambiguous loss, Boss says. Our sense of safety has been violated, which causes stress and grief.

Boss is the author of "Ambiguous Loss: Learning to Live with Unresolved Grief" (Harvard University Press, 2000, Paperback, 2000).

Specifically for farm families, Boss has also written a University of Minnesota Extension Service publication entitled "Losing a Way of Life? Ambiguous Loss in Farm Families."

"Farming has always been about ambiguity from outside forces like the weather, insects, diseases and the market," Boss says. "But today the force of a global market has catapulted farming into a global enterprise."

"The worldwide competition today outweighs even those uncertainties of weather and pestilence that have historically created trouble for family farmers," she says. "For centuries farmers have overcome those uncertainties, but the new global market becomes for many small farmers the straw that breaks their back. This new giant may be too much to overcome in spite of hard work and absolute devotion to the land."

"Not knowing can freeze you in place. Ambiguity causes depression and prevents you from making decisions," Boss says. "Ambiguity can immobilize even the strongest man or woman, but it doesn't have to."

The 16-page discussion guide for farm families and those who work with them is available for purchase from county offices of the University of Minnesota Extension Service. Ask for item BU-07614. It's also available for purchase by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu), or by credit card at (612) 624-4900 or (800) 876-8636. The cost is \$4 plus shipping and handling charges.

# # #

Web, V2, V4, A2, A4

boss9201

Source: Pauline Boss (612) 625-0291

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MCC  
A 12

September 25, 2001

## **On-line course can help nurses reduce farmwork risk for children**

Children are too often injured or killed while working on a farm because their abilities don't match the job they are trying to do. However, nurses and others working with farm families can become better equipped to help through an on-line course from the University of Minnesota's Farm Safety and Health Program.

The course is based on the "North American Guidelines for Children's Agricultural Tasks."

"The guidelines are based on practical knowledge of child development principles," says Michele Schermann, a registered nurse and farm safety educator with the University of Minnesota Extension Service. "They incorporate information about an individual child's capacity to make decisions, react accurately to situations, process information and understand the results of potentially dangerous actions."

"The team that developed the guidelines was also sensitive to the fact that parents take great pride in teaching their children about the values and work ethic that come from working on the family farm."

The goal of the guidelines is to reduce risk for children, with the ultimate goal of preventing farm work-related injury and illness. The U of M Farm Safety and Health

Program has created an on-line course based on the guidelines. The course walks participants through the process of helping parents choose jobs that match the abilities of children.

Course participants learn to identify developmental stages of children. They also learn about 16 farm hazards and the specific protective measures an adult can use to eliminate or minimize the hazard potential.

Although the course is designed for nurses working with rural residents, anyone with an interest in child safety on farms can participate.

The title of the on-line course is "A Nurse's Guide to Children's Agricultural Safety." There is no charge for the course, except for nurses who would like 2.5 continuing education credits. The fee for the credits is \$15.

To register for the course or obtain further information, call the U of M Farm Safety and Health Program at (612) 624-7444 or e-mail [fs@gaia.bae.umn.edu](mailto:fs@gaia.bae.umn.edu) .

# # #

Web,V2,V4,V5MN,A4,F2

nurs0917

Source: Michele Schermann, (612) 624-7444

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A-7p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

September 25, 2001

## **Crunch numbers on corn losses, drying costs to decide when to harvest**

Is it better to harvest corn early and save more of the corn or leave it in the field longer to dry and save on fuel for artificial drying? That's the question many Minnesota corn producers are considering, says Lyon County educator Bob Byrnes of the University of Minnesota Extension Service.

Byrnes recommends making a careful estimate of potential harvest losses as a first step in answering the question. "Check non-Bt corn for ear droppage potential and all fields for stalk rot," he says. "For ear droppage potential, pick four representative locations in each field. Then examine and test 25 consecutive plants at each location. Examine ear shanks for corn borer tunnels or frass (debris from tunnels). Tug each ear downward. Tunneled ear shanks will usually snap off or bend when the ear is tugged.

"Count the number of tunneled ear shanks, and add the number from the four counts. The total is the estimate of the percentage of potential harvest loss. Multiply this percentage by the expected yield to determine the possible harvest loss in bushels per acre."

As ear shanks dry they become more brittle and susceptible to droppage, especially when hit by strong winds, notes Byrnes.

He suggests checking stalk lodging potential by pushing each plant several nodes above the ear. Push plants at least a foot from vertical, and count plants that break off or bend (lodge) below the ear.

"The only practical way to estimate harvest loss from lodged, goosenecked and downed plants is with the combine," says Byrnes. "Run the combine in both directions at a couple of locations at least 300 feet from the field border, and measure ear loss."

<over>

To do this, says Byrnes, mark off 1/100<sup>th</sup> of an acre in a width equal to the width of the combine and centered over a harvested combine pass. Calculate the length of this area by dividing the number 435.6 by the combine harvesting width in feet. For example, with a combine having a six-row head (30-inch rows) and a harvesting width of 15 feet, the length for 1/100<sup>th</sup> of an acre is 29 feet (436.5 sq. ft. divided by 15 ft. = 29 ft.).

Each 0.75-pound ear on the ground in the marked off area represents a bushel-per-acre loss, says Byrnes. Smaller ears on the ground can be measured in terms of how many 0.75-pound ears they would make.

"In good conditions with a properly adjusted combine, the ear loss should be less than one bushel per acre," says Byrnes. "Reducing ear loss may require harvesting at slower speeds or in only one direction. This would mean slower harvest and starting harvest early."

Harvesting earlier, when corn moisture levels are higher, increases drying cost. Factors affecting drying cost include yield, LP gas price and corn price. Byrnes cites the example of a 100-bushel-per-acre corn yield, a corn price of \$1.75 per bushel, and an LP gas price of 69 cents per gallon. In this example it costs \$7.35 to remove an extra five percentage points of moisture. This would equal the value of 4.2 bushels of corn per acre.

Corn price, gas price, yield and moisture percentage points to remove vary among individual corn growers, notes Byrnes. He suggests the following formulas to calculate exact bushels per acre necessary to pay drying cost:

Drying cost (cents/pt/bu) = [LP gas price (\$/gal) x 0.02] + [electricity price (\$/KWH) x 0.01]

Bushels/acre to pay drying cost = [Drying cost (cents/pt) x number of pt of moisture to dry x yield (bu/a)]/corn price (\$/bu).

# # #

Web,V2,V4MN,A2MN,F4

byrn0922

Source: Bob Byrnes, (507) 537-6702

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu



MSC  
12/12

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

September 28, 2001

## Here are pesticide terrorist emergency telephone numbers to call

Although it's near the end of the crop dusting season in Minnesota, the potential for crop dusting aircraft to distribute chemical or biological weapons has been in the news following the East Coast terrorist attacks.

If you suspect any terrorist activity related to crop dusting, the U.S.

Environmental Protection Agency (EPA) suggests these emergency telephone numbers:

--Federal Bureau of Investigation (FBI), Chicago office, (312) 431-1333

--National Response System, EPA, (312) 353-2318

--National Pesticide Telecommunication System, (800) 858-7378

--The EPA's Emergency Planning and Community Right-to-Know Act (EPCRA)

hotline, (800) 424-9346; website: <http://www.epa.gov/epaoswer/hotline/>. You can

also check <http://www.epa.gov/epaoswer/hotline/epcra.htm> for more information

about EPCRA, also known as SARA Title III. It was enacted in November 1986 and

provides an infrastructure at the state and local levels to plan for chemical emergencies.

As part of the anti-terrorism program, businesses and others who handle large amounts of pesticides are being advised to increase their security.

# # #

Web, V2MN, V4MN, F4

herzfeld9271

Source: Dean Herzfeld (612) 624-3477, [deanh@umn.edu](mailto:deanh@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

September 28, 2001

**The farm depression won't end until the global economy is revived**

By Willard W. Cochrane, professor emeritus, University of Minnesota

The economic slump in the United States is part of a global slump, or worse, a global depression. And the U.S. farm economy, now an integral part of the global economy, cannot revive until the global economy is somehow revived.

The current U.S.-world economic slump is not cyclical. It is a worldwide structural, under-consumption problem and will not be resolved until this is solved.

It took the massive expenditures by government (mostly deficit-financed) in support of the World War II effort to pull the American economy out of the Great Depression. Purchasing power is the willingness and capacity to purchase goods and services. It is possible to widen the purchasing power stream and pull an economy out of a depression by government action *if that government has the courage to take the spending efforts that are required.*

One can hope that the economic downturn of 2000-2001 need not turn into a second Great Depression. But a restricted flow of purchasing power in 2000-2001 is pushing the global economy, and the U.S. economy with it, down a slippery slope, just as a restricted flow of purchasing power did in 1929-30.

This slide will continue as long as the global economy is plagued by a restricted flow of purchasing power. How far and deep this slide will go, I have no way of knowing. Recessions have a way of feeding on themselves. We see this at work everyday as firms lay off workers (act to restrict the flow of purchasing power) in efforts to save themselves by reducing costs.

Consumer spending in the U.S. remained strong in the summer and fall of 2001, but other components of that flow of purchasing power continue to be weak. Capital spending in the U.S. has hit rock bottom. Expenditures on public goods (education, roads and rapid transit) by government have been weak over the past decade, and are becoming weaker.

Outside of Japan, the wages of workers in the Asian Rim countries are so low that those workers never give a thought to purchasing the many and varied gadgets, clothes and machines that they are producing. The burden of purchasing the plentiful goods being

&lt;over&gt;

produced in the Asian Rim countries falls almost exclusively on American consumers, and those consumers are heavily laden with debt.

So who is going to purchase all the stuff that this wonderfully productive global system--stretching along the Asian Rim from South Korea to Singapore, including Japan, across India to Israel to Western Europe and then across the U.S. and Canada--can produce? Making use of the most modern technologies, this global production system is turning out products in ever increasing volumes. The range of products is astounding: from electric tooth brushes to Seiko watches, from Nike athletic shoes to designer jeans, from computer components to radios, from Nissan trucks to Lexus automobiles, from scooter bikes to rapid transit railcars, from thousands of miles of fiber optic cable to wood fiber products of all kinds. The list is endless and growing.

American consumers have until now done more than their share in buying this stuff, but that appears to be slowing down. Other segments of the purchasing power stream have been weak, and are becoming weaker. Investments in capital goods are down, as are government expenditures on public goods in the U.S., and consumer expenditures in the Asian Rim countries have never been strong.

As business profits are down and workers are being laid off, purchasing power becomes weaker and we find ourselves in a recession, or perhaps a real depression. And we will remain mired in this economic slump until ways can be found to expand the flow of purchasing power once again. Further, and most importantly, this is a global slump, so the purchasing power stream that we are talking about is a global stream.

To pull out of the global economic slump induced by a restricted flow of purchasing power, the governments of the economic heavy hitters--Japan, Germany, and the U.S.--must embark upon large public works programs financed either through progressive income tax receipts or by budget deficits, thereby widening the flow of purchasing power. I am talking about major efforts to improve educational systems, redesign and rebuild urban transit systems and move to cleaner energy-producing systems.

Complementing these public goods-producing activities should come efforts to reduce income inequalities in the major and emerging economies. In the U.S. this means increasing the minimum wage (perhaps by 50 percent), imposing a wealth tax on the rich and adopting fair trade practices to protect our workers from imports produced under very low wage conditions.

Finally, it is time to restructure the farm production plant in the United States along less intensive, more sustainable lines. This means less dependence on export markets, and financing this restructuring job with the funds now going to support the incomes of big crop farmers.

<over>

This is what it will take, and perhaps more, to pull the U.S. economy, as a part of the global economy, out of its present slump. It will take time and require major efforts. The global slump will hang on until we find a way to widen purchasing power to where it can purchase what this wondrously productive global production plant can turn out.

What about the impact of the Sept. 11 terrorist attack on the United States? Over the next several months it is likely to be negative--perhaps even importantly negative. Until the uncertainties recede, consumers are likely to cut back on plans to purchase big-ticket items, and businesses are likely to further reduce their investments in capital items. Thus, the short-term effects of the attack appear to augment the line of argument developed in this essay. The longer-run effects are anyone's guess.

# # #

Web, A2, V2, V4, F4

cochrane9251

Source: Willard Cochrane (651) 439-0029

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MCC  
4/2/01

September 28, 2001

## **Levins receives fellowship to study U.S. food and agriculture issues**

Richard Levins, an economist with the University of Minnesota Extension Service, has received a Food and Society Policy fellowship from the W.K. Kellogg Foundation.

The national professional fellowship program is designed to improve communications about food and agriculture issues in the U.S. It addresses the need for consumers and societal leaders to better understand how to sustain family farms and food production in the U.S.

Levins has written extensively on issues affecting family farming, food system control and environmental impacts of agriculture. His research interests include the economic relationships between sustainable agriculture and rural economies and designing public policies to support sustainable agriculture.

The American Agricultural Economics Association awarded the Quality of Communication Award to his book, "Willard Cochrane and the American Family Farm."

Levins will be participating in a study tour of community-based food and agriculture systems in Europe in early October. He will also meet with leaders in Washington D.C. who work in food and agricultural policy.

Twelve fellows were chosen from 80 applicants nationwide. During their two-year terms they will write food and agricultural articles and participate in policy conferences and other communications activities.

# # #

Web, A2, A4, V2MN, V4MN, F2, P1

levins9261

Source: Dick Levins (612) 625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MSC  
A-27p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

September 28, 2001

## **Find dark, humid place to store potatoes for winter**

A dark location with 95 percent relative humidity is a good place to store newly-harvested potatoes for the upcoming winter. A temperature of 40 to 55 degrees F works well for long-term potato storage, according to Beth Jarvis, Yard and Garden Line coordinator with the University of Minnesota Extension Service.

"Potatoes for storage should be harvested after the tops die, then cured at 50-60 degrees F for 14 days before storage," says Jarvis. "They don't need washing before storage. Store them no more than six to eight inches deep in a location with good air circulation. Mature potatoes should keep up to eight months when stored at 40 degrees F. They'll sprout sooner at warmer temperatures. "

Jarvis says if potatoes are stored at temperatures near freezing, the starch converts to sugar and potatoes will have an unusually sweet flavor. If this happens, move them to a room where the temperature is 55-65 degrees F, and the normal flavor should return in a day or two.

Jarvis recommends storing potatoes away from apples and pears, as these fruits release ethylene that hastens sprouting. Potatoes may rot more quickly when stored with onions, but that is because onions store well at warmer temperatures than potatoes. Potatoes stored at temperatures above 55 degrees will shrivel and the eyes will sprout, and Jarvis recommends discarding these potatoes.

<over>

For more information about harvesting and storing vegetables, call the University's Yard and Garden Clinic. It has experts to answer questions on gardening, lawn care, plant disease and insect problems between 9 a.m. and 3 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county or can speak to a wildlife expert.

# # #

Web,V4MN,V5MN,G1

jarv0711

Source: Beth Jarvis, (612) 625-5232

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27p

October 2, 2001

## **4-H has lasted 100 years because it meets real needs**

By Dale A. Blyth

National 4-H Week (Oct. 7-13) and our 4-H centennial celebration begin during uncertain times. While recent events have shaken our sense of security, they also remind us of the power of our core values and beliefs. At such times it is important to recognize and support a program that has shaped so many lives and continues to do so today.

4-H has lasted 100 years because, as part of the University of Minnesota Extension Service, it meets real needs.

Nonetheless, the challenges of today and tomorrow are very different than they were 100 years ago. 4-H is helping youth learn to live and work with people who are different than they are, and to turn those differences into strengths. 4-H is also working to involve new immigrants and youth from diverse communities.

The increasing diversity of youth we work with, the opportunities we offer, the ways we work with youth—from standard community club meetings to special events to after-school programs—all enrich the possibilities for all 4-Hers.

4-H meets youth's need for learning opportunities that are fun and challenging. 4-H's hands-on learning appeals not only to kids who do well in school, but also to kids

<over>



who struggle. Youth find an interest that fits them. They learn at their own pace. They come to think of themselves as competent.

4-H meets youth's need to lead and contribute to the growth of others. 4-H connects older youth to younger youth. It connects all youth to adults who partner with them rather than saying "do what I say."

4-H meets youth's need to serve and to make a difference. By strengthening their ability to contribute to the community, 4-H shapes civic responsibility for a lifetime. We know this because research shows 4-H alumni help in their communities more than other adults do.

This year the 4-H tradition of dedicating "my hands to larger service" will be seen in a statewide service campaign called "A Million Lives Touched." This powerful, yearlong event will help youth make a difference in their community, then reflect on the experience.

In many ways, 4-H is needed now more than ever. 4-H offers opportunities every day to over a quarter of a million youth statewide. It's hard for me to imagine a more satisfying job than one that lets me see and support such efforts.

How can you help?

--Volunteer yourself. You'll find it a surprisingly satisfying experience. Even volunteers who join reluctantly see the difference their efforts make, and they're hooked. There are many ways to connect and share your interests and talents through 4-H.

<over>

--Support an opportunity. Donate funds or materials that make engaging, fun opportunities possible for others.

--Invite older youth to participate. There is a natural desire to be like older kids and 4-H is good at exposing youth to positive role models and creating meaningful roles for teens. One generation engages the next generation and on it goes.

--Start young. Get young kids involved in positive group activities so that, by middle school, they choose them over destructive options. Too many youth drop out of everything. Research shows that youth need and benefit from connections to quality opportunities in out-of-school time.

Finally, as you look at 4-H, I ask you to set aside your images of our past and help create the reality of our tomorrow. Realize that it is 4-H's breadth of challenging opportunities to learn, lead, and serve that will shape the lifetimes of today's youth.

Creating such opportunities in ways that make a difference is the most important job of every Minnesotan. Programs like 4-H are one important vehicle to help you exercise that responsibility.

What we do with youth today sets the foundation for our country's next 100 years.

# # #

*Dale Blyth is assistant dean, University of Minnesota Extension Service and director of the Center for 4-H Youth Development*

Web, V2MN, V4MN, V5, Y1

blyth1020

Sources: Dale Blyth (612) 624-2188, Kathleen Cleberg (763) 571-4232

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

M  
A 27P

October 2, 2001

## **Reduced-tillage planting boosts profitability, cuts soil losses**

*The following commentary is from George Rehm, soil scientist with the University of Minnesota Extension Service:*

Excessive rains across much of Minnesota in May and June caused widespread soil erosion. Farmers don't like to see soil erosion, because when they lose topsoil they lose dollars.

The amount of soil lost this year underscores the need to take a new look at conservation practices that can keep soil loss to a minimum.

Reduced tillage is one management strategy growers can use to keep soil on the landscape. In past years many crop producers have tried one or more conservation tillage systems, but returned to full-width tillage. They found problems with these systems that were frustrating. Most of these problems have been solved, and yields from conservation tillage are now equal to yields from full-width systems.

Ridge-till and strip-till are two systems that are well-adapted to the soils and climate of Minnesota. Crop producers who use these systems save soil, fuel and input costs and increase profitability. They are pleased with the results.

Conservation tillage systems such as ridge-till and strip-till require different management practices than full-width tillage. These new practices are based on research and are not complicated.

It's time to take a very close look at ridge-till and strip-till planting. Specific information on management practices for these tillage systems is available from county offices of the University of Minnesota Extension Service.

# # #

Web, V2, V4MN, V5MN, A2, C4, F4

rehm1001

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

October 5, 2001

## **Families suffering from job layoffs can adjust perceptions, studies show**

Shock and denial are typical first reactions of people who've been laid off. But how much stress you experience in a situation such as a layoff depends on how intensely you feel about it.

You can change your interpretation of an event by reassessing your priorities, according to a University of Minnesota Extension Service publication titled "Adjusting to Suddenly Reduced Income." Studies on families who suffered major income loss show they were able to adjust their perception of the situation.

These families changed their priorities from "What we are losing is the most important part of our lives," to "Our family and our health are the most important parts of our lives."

"Sometimes you may limit your options or fail to consider possible solutions due to the way you see, define or describe the problem," says Pat Stumme, Freeborn County educator with the U of M Extension Service. Family economist Sharon Danes and Stumme co-authored the publication.

When people experience a major income loss, they go through stages of grief that include shock and denial, anger, depression and detachment, dialogue and bargaining, and acceptance. Adults and children often move back and forth between the stages and sometimes get stuck at one for a while.

People's reactions to unplanned income loss are complex, and a blend of several parts of their lives, Stumme says. The publication has sections on getting back to "normal," dealing with your feelings, reassessing how money will be used, setting goals to target limited money and managing family disagreement and conflict over money.

"Adjusting to Suddenly Reduced Income" is available on the Internet. Go to [www.extension.umn.edu](http://www.extension.umn.edu), then click on "Financial and Business." Printed copies are available at nominal cost from county offices of the University of Minnesota Extension Service. Or, call the Distribution Center at (800) 876-8636 and ask for item 6499.

# # #

Web, V2, V4, V6, V7, F3

stumm1041

Source: Pat Stumme (507) 377-5660, [stumm003@umn.edu](mailto:stumm003@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

October 5, 2001

<http://www.extension.umn.edu/News>

## Here are some myths about tobacco you can share with teens

Teens may think smoking is cool, helps with weight loss and can't hurt them. But these are some of the false messages about tobacco to point out to teenagers.

Smoking is not cool. Tobacco can cause bad breath, stained teeth, wheezing and coughing and makes your hair and clothes smelly.

And it's not true that "everybody's doing it." A nationwide survey in 1999 showed that 82 of 100 eight-graders had not smoked a cigarette in the past 30 days. About 65 percent of high school seniors had not smoked in the same time period, according to the University of Minnesota Extension Service and School of Public Health.

Smoking isn't likely to cause visible changes in weight. A healthier and longer lasting approach to losing weight is exercise.

Teenagers probably know that using tobacco can cause long-term illnesses like cancer or emphysema. They also need to know it reduces the lungs' ability to function, making breathing tough during exercise and athletics.

In addition, smoking and chewing tobacco are expensive. A person who smokes a pack a day spends over \$1,000 per year on cigarettes. That would buy about 75 new CDs.

And finally, it's very hard to quit smoking. Although 20 million people in the U.S. try to quit every year, only three percent are successful in the long run.

For more information, go to [www.extension.umn.edu](http://www.extension.umn.edu), and then click on "Family Development."

# # #

Web, V2MN, V4MN, F1, Y1

tobaco1041

Source: University of Minnesota School of Public Health  
Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

October 9, 2001

## **Manure management plan can bring fertilizer savings**

Livestock producers who grow crops can save money on fertilizer by implementing a well-prepared manure management plan. Such a plan will also help producers comply with state or county feedlot rules, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"Under new state feedlot rules, all livestock producers must have a manure management plan to obtain a permit for a new or existing livestock production facility," says Thiesse. "Several counties also require a manure plan as part of their county feedlot permitting process."

Thiesse says many livestock producers have been following manure management plans for several years to save on commercial fertilizer for crops.

"Most certified crop consultants and crop advisors can help livestock producers prepare a good manure management plan," says Thiesse. "Producers can also get help on maximizing the nutrient value of manure for crop production. Ideally, the manure management plan becomes part of a farm's overall crop nutrient strategy."

More information on requirements for manure management plans is available from county feedlot officers and county offices of the University of Minnesota Extension Service.

# # #

Web,V2,V4MN,A2,A4

thie1006

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)



October 9, 2001

<http://www.extension.umn.edu/News>

## **New guide to feedlot rules for Minnesota livestock producers**

A new publication that explains recent changes to Minnesota's environmental regulations for feedlots is available from county offices of the University of Minnesota Extension Service.

The Minnesota Department of Agriculture (MDA) published the "Minnesota Livestock Producer's Guide to Feedlot Rules." It's also available from area offices of the Minnesota Pollution Control Agency and from farm business management instructors.

Anyone who raises livestock in Minnesota may be subject to federal, state and local environmental regulations. The new publication will help answer questions such as whether your operation meets the definition of a feedlot, if you need to register and whether you need a permit.

However, the majority of existing Minnesota livestock operations will not have to make changes to their feedlots, manure handling or storage facilities due to recent changes in Minnesota Feedlot Rules. In addition, there are many exemptions to the registration and permitting process.

For example, operations defined as pastures are generally not considered feedlots and are exempt from the Feedlot Rules (although pastures must not pollute water).

<over>

In addition, small livestock facilities of less than 50 animal units not located in a shoreland area are exempt from the registration process (50 animal units is equivalent to 36 large cows, 125 mature swine or 2,778 mature turkeys). Facilities with less than 10 animal units located in a shoreland area are also exempt from registration.

Other publications on feedlot planning and manure management are being developed by MDA and will be available later this fall. The new publication and other Feedlot Rule information are also available on the MDA website at [www.mda.state.mn.us/feedlots/default.htm](http://www.mda.state.mn.us/feedlots/default.htm).

# # #

Web, A4, T2, V2MN, V4MN

fedlotrules

Source: Minnesota Department of Agriculture

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

October 9, 2001

**Consider key questions when looking at biomass fuels for drying corn**

Wood, hay, crop residues and other biomass materials could have potential as fuel sources for drying corn. But anyone interested in drying with biomass fuels needs to consider several key questions, an engineer with the University of Minnesota Extension Service points out.

"Biomass fuels have the advantage of being renewable," says Bill Wilcke. "Some are fairly energy dense, meaning they produce a good amount of energy per pound of fuel. And producing biomass fuels might reduce farmer dependence on fluctuating energy prices and supplies. There could even be an opportunity for farmers to sell fuel."

Wilcke says growers interested in drying corn with a biomass fuel need to consider these questions:

- Can the biomass be harvested ahead of corn harvest, or will time and labor for harvesting fuel compete with time and labor for harvesting corn?
- What is the expected moisture content of the biomass fuel, and will it need to be dried before it is burned? The higher the fuel moisture content, the lower the net energy production per wet pound of fuel.
- Is it necessary to have special equipment and facilities to harvest, transport and store the biomass fuel, or can you adapt equipment and facilities you already own? If you have to buy special equipment, don't forget to include the cost of that equipment in your cost per Btu calculations.
- How hard is the fuel to handle? Does it flow on its own, and can the fuel supply be automated? Or, will a lot of labor be necessary to keep the burner supplied with fuel? Setting up an automatic fuel supply for a pelleted or granular fuel might be relatively

easy. However, it would be more difficult to set up an automatic system for logs or large bales.

--Can you buy a burner that will handle the fuel you have in mind, and will it supply the necessary number of Btu per hour? Several companies produce small biomass burners, but not many produce the larger sizes necessary for heated-air corn drying.

If you decide to build your own burner, keep in mind the challenges. It can be difficult to come up with a design that provides the right amount of air for complete combustion, is easy to feed, can withstand high temperatures for long periods of time, and provides for convenient removal of ash, clinkers or slag.

--Will removing biomass from the land reduce soil quality and leave the soil vulnerable to erosion? For example, using all the cobs from a crop of corn might not affect the soil much, but removing all of the corn stalks would.

--Is there a net energy gain from using the biomass fuel? When you subtract all the energy required to grow, harvest and transport the biomass fuel from the energy produced by burning it, how much are you gaining?

--Is the biomass material you are considering more valuable as food, feed or an industrial feed stock than it is as a heating fuel?

--Is it cost effective to use the biomass fuel? Consider the cost of equipment, labor and other inputs for producing, harvesting, transporting, storing and burning the biomass product. Is the cost per Btu competitive with other alternatives?

For more information contact Wilcke in the U of M Biosystems and Agricultural Engineering Department at [wilck001@umn.edu](mailto:wilck001@umn.edu) or (612) 625-8205.

# # #

Web,V2,V4MN,A2,F4

wilc1004

Source: Bill Wilcke, (612) 625-8205

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A2715

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

October 9, 2001

## **Carcass Merit Program provides detailed value information on beef cattle**

Minnesota cattle producers can learn detailed information about the value of their market beef animals by participating in the Minnesota Carcass Merit Program. Alfredo DiCostanzo, beef cattle scientist with the University of Minnesota Extension Service, says the program can also test the profitability of "retained ownership" of calves.

Participants contract groups of steer calves for custom feeding. They receive information about the calves' feedlot performance, including average daily gain, feed intake and feed efficiency. Participants also receive carcass merit information, including dressing percentage, fat depth, ribeye area, yield and quality grade. The true value of the animals based on carcass merit is calculated.

"From 1995 to 2000, the portion of fed cattle sold through a formula or grid system has increased from 17 percent to 38 percent," says DiCostanzo. "This portion is expected to exceed 60 percent in the next five years. This program provides an opportunity to find out whether your breeding program produces cattle that are meeting industry standards."

If the program reveals the need for changes, coordinators can help with suggestions, says DiCostanzo.

<over>

The program is in its ninth year, and has enrolled over 1,900 steers since it began. Last year, steers returned a net profit of \$115 per head through the feeding period. This was the profit calf producers received by retaining ownership through the feeding period.

Gilland Feedlot, Inc. of Morgan, Minn. does the custom feeding of the steers in the program, and also offers financing for the value of the cattle entered. Participating producers must follow a pre-program management routine and must mark steers with permanent identification.

When cattle in the program reach approximate finish weight, they are sent to a common harvest facility. Carcass data is collected, and profit or loss and steer values are calculated. Data is compiled, summarized and sent to owners.

The deadline to enroll calves this fall is Nov. 5. The cost to producers to participate is \$15 per steer plus feedlot costs. To enroll calves or obtain more information, contact DiCostanzo at (612) 624-4995 or [dicos001@umn.edu](mailto:dicos001@umn.edu), or Kirby Hettver at (320) 589-7423 or [hettv001@umn.edu](mailto:hettv001@umn.edu). A website with additional information is at [www.ansci.umn.edu/beef/carcassmerit/2001-02cmp.htm](http://www.ansci.umn.edu/beef/carcassmerit/2001-02cmp.htm).

# # #

Web,V2,V4MN,B1

dico1003

Source: Alfredo DiCostanzo, (612) 624-4995

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MCC  
2/14

<http://www.extension.umn.edu/News>

October 16, 2001

## Careful watering of houseplants helps overcome effects of dry indoor air

Dry indoor air during the winter heating season can be hard on houseplants.

Giving extra attention to watering the plants can help, says horticulturist Deb Brown of the University of Minnesota Extension Service.

"The more you heat your home, the drier the air usually becomes," says Brown.

"Most foliage plants thrive in humid air. Anything you can do to increase humidity will help them, including running a room humidifier. However, there are practical limits to how much moisture is acceptable indoors in cold weather. High humidity can result in frosted, dripping windows that can damage wooden window sills. Excessively high humidity in winter also makes the air feel 'clammy' and uncomfortable."

For most houseplants, Brown recommends watering carefully as soon as soil begins to dry to help eliminate the effects of low humidity. You can determine when it's time to water again by checking the soil regularly, or catching the plant when its color begins to dull. Don't wait until you see leaves drooping, says Brown. Allowing foliage plants to get that dry often results in brown leaf tips and margins.

Regardless of how often you water, be sure to water thoroughly, says Brown.

Allow water to come through the container drain hole before you stop. Wait a few minutes, then remove excess water that has collected in the tray or saucer.

<over>

Brown says watering too frequently, or allowing water to collect in the pot so roots can't dry at all, will exclude oxygen from the soil. This sets the stage for root rotting organisms to attack plant roots. This can happen any time of the year, but in winter, there's less energy available for growing new roots.

The University's Yard and Garden Clinic has experts to answer questions on plant care, gardening and insect problems between 9 a.m. and 1 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area.

There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county.

# # #

Web,V2,V4MN,V5MN,G1

brow1012

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



October 16, 2001

## Parents encouraged to avoid physical punishment

Many people would say so-called "mild physical punishment" of children is okay. Indeed, how could one or two mild swats on a child's seat once in her life damage her psychologically?

"But one problem with advocating limited mild physical punishment is that no one agrees on what it means," says Ron Pitzer, family sociologist with the University of Minnesota Extension Service. Pitzer says he once interviewed 50 people, and asked what mild physical punishment meant to them.

"About one-quarter of them said mild physical punishment included things such as a 'slap on the face of a teenager for sassiness' that are flat-out abuse," he says. "So we concluded that permission should not be given to use mild physical punishment as a disciplinary tool."

"Even vocal pro-spanker advocates don't agree about the specifics," Pitzer says. "When they tell a parent that mild physical punishment is okay, they are telling them different things. In our Positive Parenting program, we encourage a no-spank stance for several reasons, in addition to a lack of clarity about what mild physical punishment is.

"Mild physical punishment does not pass the tests of being safe, effective, and safer and more effective than alternatives," Pitzer says. "Instead, we suggest a process of parental examples, nurturing, setting limits, monitoring and enforcing limits."

Mild physical punishment such as spanking contributes to children being more aggressive, abusive and violent later in life, Pitzer says. However, he emphasizes that no spanking does not equal no discipline.

"In fact, most parents don't discipline enough. Some researchers estimate that as many as 40 percent of parents are 'unengaged' with their children," Pitzer says.

For parenting standards, Pitzer suggests a three-step approach: setting limits; monitoring activities, whereabouts and behavior; and enforcing the limits—firmly but gently. These three functions and a good example must be provided for, and Pitzer says it can be done successfully in many ways and in different cultures.

More information on the U of M Extension Service Positive Parenting program is available at [www.extension.umn.edu](http://www.extension.umn.edu), or at a county office of the University of the Minnesota Extension Service

# # #

Web, F1, V4, V6, V7, V9

pitzer10111

Source: Ron Pitzer (612) 625-8169, [rpitzer@umn.edu](mailto:rpitzer@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MBC  
3/27P

<http://www.extension.umn.edu/News>

October 16, 2001

## **Anthrax information available on U of M website**

Information on anthrax is available on a website of the University of Minnesota's College of Veterinary Medicine. The college's Center for Animal Health and Food Safety has developed two fact sheets on anthrax that are on the website. "Anthrax in Minnesota" and "Anthrax in Animals and Humans" are both available at [www.cvm.umn.edu/anh1th.html](http://www.cvm.umn.edu/anh1th.html).

Will Hueston, director of the center, says anthrax has been around for many years and has been reported in nearly every state. "The number of human cases has decreased over time in the U.S.," he points out. "About 200 cases have been reported in the U.S. in the last 50 years. Minnesota's last reported human case was in 1953."

Anthrax has been diagnosed over 200 times on 192 farms in Minnesota since 1909, says Hueston. There was an anthrax outbreak earlier this year in northwestern Minnesota, but it did not result in any human cases. The outbreak occurred in Roseau, Kittson, Polk and Marshall counties. It resulted in the death of 93 cattle, two horses and two wild white-tailed deer.

Anthrax is a bacterial disease that has occurred sporadically in the U.S. in both animals and humans. Anthrax bacteria can form spores that can survive in the environment for years.

<over>

"In humans there are three forms of the disease—cutaneous, inhalation and intestinal," says Hueston. "Cutaneous, or skin anthrax, is the most common human disease form. It results when the organism enters broken skin. Cutaneous anthrax accounts for nearly 90 percent of all reported human cases. With antibiotic treatment, deaths from cutaneous anthrax are rare. However, without treatment, up to 20 percent of affected individuals may die."

Hueston says the inhalation form of anthrax is rare. This form of anthrax has been associated most frequently with laboratory exposure or industrial settings such as woolen and mohair mills, where spores are found in dust generated from contaminated wool or hair. Despite treatment, death is the usual outcome.

The third form is intestinal anthrax caused by the consumption of inadequately cooked meat or other animal products from anthrax-infected animals. There have been no reported cases of intestinal anthrax in the U.S., says Hueston, but epidemics of this form have been reported in Third World countries. This form also usually results in death.

Anthrax is a reportable disease in Minnesota. Confirmed or suspicious cases of anthrax in animals must be immediately reported by telephone to the Minnesota Board of Animal Health at (651) 296-2942. For questions regarding human exposure and illness, contact the local health department or the Minnesota Department of Health at (612) 676-5414.

# # #

Web,V2,V4MN,V5MN,V6MN,V8MN,V9MN,A4,H2

anth1015

Source: Will Hueston, (612) 625-8709

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MSC  
A27P

October 17, 2001

## U of M publication gives tips on managing fall leaves

You have several options for managing fall leaves in your yard. For starters, shredded leaves decompose faster on the lawn than whole leaves, says Tom Halbach, a water quality and waste management educator with the University of Minnesota Extension Service.

"We have found that some mulching lawnmowers do a good job of shredding leaves into small chips," Halbach says. You can also shred leaves by running them through a shredder/chopper. Grass blades should still be visible through leaves after shredding. Several passes with the mower, with or without a leaf shredding attachment, are recommended.

If you plan to allow some leaves to remain on the lawn this fall, fertilizing the lawn will help decompose the leaves and give the grass a good start next spring.

About 20 to 25 percent of your lawn's total nitrogen fertilizer needs can be applied in the fall, says Halbach. If you've already applied nitrogen this fall, it will help leaves decompose faster this fall and early next spring. If not, he says you have until about Oct. 27 to put fertilizer on your lawn.

"A carbon-to-nitrogen ratio of about 30 to one is ideal to speed decomposition of leaf chips," Halbach says. Leaves are high in carbon, and a typical carbon-nitrogen ratio

in the Twin Cities area is about 70 to one, he says. Adding nitrogen fertilizer helps reduce the ratio, which in turn speeds the decomposition process.

Even when leaves are shredded, more than a light layer of leaves can smother the grass, causing partial dieback or making grass more susceptible to diseases. It's often necessary to remove some of the fallen leaves, say Halbach and Extension educator Robert Mugaas, who have written a publication titled "Options for Disposing of Leaves."

The publication discusses options for off-site disposal and for leaves at home as mulch, compost or leaving them on the lawn. "Options for Disposing of Leaves," (publication number 5570) and other publications on composting, mulching and home yard chippers and shredders are available on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu), or from county offices of the U of M Extension Service. There's a small charge. You can also order the publications by calling (800) 876-8636, or (612) 624-4900.

# # #

Web, V2, V4MN, G1 halbach10151

Sources: Tom Halbach (612) 625-3135, [halba001@umn.edu](mailto:halba001@umn.edu)

Brian Horgan (612) 624-0782 [bphorgan@umn.edu](mailto:bphorgan@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

<http://www.extension.umn.edu/News>

October 19, 2001

## **Publication on destructive soybean cyst nematode available from U of M**

A newly-revised publication on one of the most destructive soybean pests is now available from the University of Minnesota Extension Service. "The Soybean Cyst Nematode" is the name of the four-color publication. It's on the Internet at [www.soybeans.umn.edu/pdfs/DC3935.pdf](http://www.soybeans.umn.edu/pdfs/DC3935.pdf), and is also available from local Extension offices.

Annual U.S. soybean yield losses due to the soybean cyst nematode have been estimated at about \$1.5 billion, according to Senyu Chen, U of M nematologist and one of the authors of the publication. In Minnesota, the pest has been detected in at least 52 counties. Most farms that produce soybeans have some level of infestation, says Chen. In heavily infested fields, the nematode can cause yield losses of more than 30 percent.

The soybean cyst nematode is a microscopic roundworm that attacks roots of soybeans and a number of other host plants, but few other crops.

The eight-page publication covers the life cycle, symptoms and signs, diagnosis, detection through soil sampling, and management strategies for the soybean cyst nematode.

The printed publication is available for purchase from county offices of the University of Minnesota Extension Service. Ask for item FO-03935. It's also available for purchase from the Extension Distribution Center by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu), or by credit card at (612) 624-4900 or (800) 876-8636.

# # #

Web,V2,V4MN,X2,F4

chen1018

Source: Senyu Chen, (507) 835-3620

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

1100  
1274

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

October 19, 2001

<http://www.extension.umn.edu/News>

## **Avoid these six problems when marketing your grain**

Avoiding six common problems can help make grain marketing more profitable, says Robert Anderson, farm management educator with the University of Minnesota Extension Service.

Here are the six common mistakes to avoid:

1. Producers won't sell when markets are going either up or down rapidly because they're too emotional. Anderson says producers are most comfortable selling when markets are stable, which is common to markets with relatively low prices. However, you can remedy this problem by placing scale-up or scale-down sell orders with your grain buyers or commodity brokers.

2. Producers are more worried about the market going up than they are about it going down. They will buy call options after they sell so they don't miss the high. Instead, Anderson says you should focus on buying put options to manage downside risk on unpriced grain.

3. Producers don't sell in a long enough marketing window. They tend to wait until after harvest and, in most cases, after Jan. 1 before they begin selling. They try to finish before the new harvest begins so they have room for the next crop, but this is only an eight-month marketing window.

<over>



You need to work at selling increments before planting, after planting, after harvest, and during the spring and summer storage season. Anderson says many times the best marketing opportunities are available before the crop is planted. Using a longer marketing window increases the chances of capturing good marketing opportunities.

4. Producers tend to sell when they need money. Too much of the crop is sold during the February-March time period when markets are historically low and cash flow needs are large. Anderson says producers need to plan ahead by selling in advance of this late winter period to provide for cash flow needs.

5. Producers tend to sell before harvest to make room for the new crop. Generally, in years of good crop prospects, the basis is widening and seasonal lows come at this time of year. You need to provide for storage space before this time period.

6. Producers don't make storage pay because they don't sell the "carry" in the market. In times of low prices, markets tend to have a "carry," which means that price offerings for sales in the future are higher than for the present time. Producers with on-farm storage can capture these premiums by forward contracting their unharvested crop for the following spring or summer delivery.

"Grain marketing is a very challenging part of farming," Anderson says. "But having a good marketing plan and avoiding some of these pitfalls can help."

# # #

Web, V2, V4, A2    andersn10181

Source: Robert Anderson (507) 752-7372, [ander643@umn.edu](mailto:ander643@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MISC  
9-27-01

October 23, 2001

## **Houseplants may need help to compensate for limited natural daylight**

The shorter days of late fall and early winter provide less of the natural daylight that many houseplants need to thrive. Deb Brown, horticulturist with the University of Minnesota Extension Service, suggests helping plants compensate for the fewer hours of daylight.

“One approach is to move your houseplants to brighter locations,” says Brown. “But be careful not to endanger their foliage by placing them too close to icy cold windows.”

Where window light is just not enough, Brown recommends supplementing natural daylight with fluorescent lights. Set the lights about a foot from the plants. Keep the lights on several hours daily, but don't run them 24 hours a day. Brown says most houseplants grow best when they're allowed a four- to six-hour dark period each night.

“Automatic timers are really useful tools for giving your plants the light they need on a regular basis,” says Brown. “These inexpensive gadgets are sold at hardware and building supply stores. They're meant to thwart burglars by turning lights on and off when you're away from home. They also work great with plant lights. Turning lights off at the right time is almost as important as remembering to turn them on.”

If you grow houseplants or blooming plants with high light requirements, Brown says it might be worth investing in a high-intensity discharge (HID) light. The two main

types of HID lights are metal halide and high-pressure sodium. HID lights cost more than fluorescent tubes, but are long-lasting and very bright. They range from 175 to 1000 watts. One 400-watt metal halide bulb emits more light than 21 standard 40-watt fluorescent tubes.

The University's Yard and Garden Clinic has experts to answer questions on plant care, gardening and insect problems between 9 a.m. and 1 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county.

# # #

Web, V2,V4MN,V5MN,G1

brow1019

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

October 23, 2001

## Set goals to help cope with sudden income changes

Setting both family and personal goals can help your family deal with limited family income.

It's important to have a family discussion—with children included—to share personal and family goals, according to a University of Minnesota Extension Service publication titled "Adjusting to Suddenly Reduced Income."

Children's goals may be simple and less expensive, depending on their ages and needs. Purchasing a special pair of shoes may be important to a child. But once children see what adults are giving up, they're better able to understand why they must give up something too.

Setting both family and personal goals—plus business goals if you're involved in a family business—makes it easier to identify what's most important and determine how to focus the reduced income. Sharing and talking about each person's goals, whose need has not been met or who must be involved to meet a given goal is important.

That's because reducing spending is most effective if decisions are made together, says Pat Stumme, Freeborn County educator with the U of M Extension Service. Stumme and family economist Sharon Danes wrote the publication.

"Adjusting to Suddenly Reduced Income" is available on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu). Printed copies are available at nominal cost from county offices of the University of Minnesota Extension Service. Or, call the Distribution Center at (800) 876-8636 and ask for item 6499.

# # #

Web, V2, V4, F3      stumme10191

Source: Pat Stumme (507) 377-5660, [stumm003@umn.edu](mailto:stumm003@umn.edu)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

M.C.  
427P

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

October 23, 2001

*Editors: A photo of the Zieroths on their farm is available by mail or e-mail. To obtain a print, call (612) 624-3064 or (612) 625-3168. To obtain a digital photo by e-mail, send a request to [brene001@umn.edu](mailto:brene001@umn.edu).*

## **Changes bring labor efficiency, improved quality of life for dairy family**

The 14-hour work days were taking their toll on Carver County dairy producers Jon and Jill Zieroth. So were the physical demands of cleaning stalls by hand and pushing a heavy feed cart through their tie-stall barn. Milking was especially demanding because there were more cows than stalls, meaning the extra cows had to be moved in and out of the tie-stalls. Vacations were out of the question.

If they had to go back to that situation, says Jon, they wouldn't be dairying anymore.

"I can remember going to their place and Jon would be physically and mentally exhausted," recalls Carver County Extension educator Vern Oraskovich. "Now when you go there you see a totally different person."

Realizing that they were working too long and too hard to have a satisfying quality of life, the Zieroths made some changes in their operation during the late 1990s. They didn't go through a big expansion, though they did add a few cows and are currently milking 90 head. They didn't hire outside labor. But they did find a way to have more family time; reduce the physical demands of milking, feeding and barn cleaning; and even get away for vacations from time to time.

A key transition step for the couple was building a new 94 x 108-ft. freestall barn. Another was converting their tie-stall barn to a double-four flat-barn milking parlor with a 16-inch step-up. They also discontinued growing their own replacement heifers. They worked closely with their lender to analyze the financial feasibility of these changes and also went through an analysis of their operation by a dairy diagnostics team.

The Zieroth farm north of Waconia has been in the family since Jon's great-great-grandfather started farming there in 1877. Jon grew up working on the farm and went into partnership with his father Loren in 1983, three years after graduating from high school.

Jill grew up in town in nearby Mayer. Jon and Jill are the parents of Jeremy, 20, a student at River Forest College outside of Chicago; Nicole, 17, a senior at Mayer Lutheran High School; and seven-year-old Timmy.

The Zieroths were milking about 60 cows in 1983 and 75 in 1994 when Loren retired and Jon and Jill bought full ownership of the 500-acre farm. They had added another 10 cows by 1996, though there were only 60 spaces in the tie-stall barn. Jon and Jeremy were doing the milking, while Loren helped with stall bedding and cleaning, barn cleaning and moving cows in and out.

On a typical day they started milking at 6 a.m. and finished at 9:30. Feeding, bedding and cleaning the barn took another three hours, so morning chores took until 12:30 to 1 p.m. to complete. Evening chores began at 4:30, milking at 5:30, and the work in the barn ended at 8 to 8:30 p.m. Moving extra cows in and out of the 60-stall tie-stall

barn added to the work. Milking 80 cows with this system typically involved four people full-time.

The need for changes was obvious, especially with Jeremy making plans to leave for college. "We started to do cash flows for a freestall barn and parlor, working with Charley Streiff at the First National Bank of Waconia," says Jon. "We took the actual take-home milk price for the three previous years, subtracted a dollar per hundredweight, and used that for the projected milk price. We subtracted a thousand pounds from our rolling herd milk production average and used that for projected production. We took actual per-cow expenses for breeding, veterinary care and utilities. These were the figures we used for the financial projections."

Jon's loan approval for the project was not due to having plenty of up-front money. "We borrowed 100 percent of the money for the freestall barn and parlor," he says.

The Zieroths moved their cows into the new 100-stall freestall barn in late July of 1999. Then the process of remodeling the tie-stall barn into a flat-barn parlor began. The first day of milking in the new parlor was August 23, 1999.

Shortly before construction began on the new freestall barn, the Zieroths sent their replacement heifers to a custom grower about 15 miles away. It was necessary to either do this or build new heifer housing, since the new freestall barn was built where the heifers had been housed.

Jon had his doubts about not raising his own heifers, although "it was proven on paper they could be raised as cheap or cheaper" by a custom grower. Now, he says he's well satisfied with the arrangement. "They're coming back at a good weight, to calve at

the right age," he says of the heifers. After two years with the arrangement, he says "I'm not looking to get back in the heifer business."

With the freestall barn came a change to feeding a total mixed ration using a tractor and TMR mixer wagon. Feeding in the tie-stall barn had involved using a feed cart and separate feedings of hayage, corn silage, protein, minerals and grain.

The new barn also eliminated cleaning the tie-stalls by hand. Now the Zieroths use a skid-steer loader to clean the freestall barn.

After the cows were moved into the freestall barn, the herd milk production average climbed by 4,000 pounds. It's currently at 21,700 pounds. Jon attributes the production increase to greater cow comfort.

Jon says the new system cuts almost an hour off the milking time. One person scrapes the freestall barn while the other is milking. The only chores after milking are scraping the holding area and feeding the cows with the TMR mixer. Instead of finishing the morning work at 12:30 to 1 p.m., the Zieroths are now done at 9:30 to 10 a.m., with one less person working.

What do the changes mean for the family? "It makes it a lot nicer....you don't feel quite as tied down," says Jon. "With the old barn and switching cows in and out of the tie-stalls, we had to have three people there at milking time. And we couldn't bring in outside people to milk because it was impossible for them to know what to do.

"Now if we want to hire people to milk they only have to come for one milking to see how it's done. If we want to take off we can get someone to do the chores now."



"There's more time for field work in the spring and fall now," says Jill. "And it's easier to go on vacation. We've been able to go to Hawaii for vacations twice in the past three years. Before, we wouldn't have considered that."

Jon says getting out of the barn earlier makes it easier to attend the kids' school events. "If we want to leave the barn a half hour before milking is done, one person can finish up," he says. "Before, it took two at a minimum."

"Now it's possible for one person to handle everything, if necessary. I've done everything by myself a couple of times."

Jill says she has noticed that Jon is now a lot more relaxed. "He even gets to take a nap once in a great while," she says.

"It's just a lot less stressful all the way around," says Jon. "Everyone knows what needs to be done; we get it done; then we can go play."

Charley Streiff, ag loan officer at the First National Bank of Waconia, has been working with the Zieroths for over eight years. "They have been wonderful to work with and have kept excellent records," he says.

Before they changed their operation, Streiff says, "their herd wasn't big enough that they could hire a full-time person. Their work load was high, and they had no time for family activities."

The initial financial projections involved hiring one full-time person. "It turned out that with the family help they have, their new system is efficient enough that they haven't had to hire more than occasional part-time help," he says.

Streiff was a member of the diagnostic team that analyzed the Zieroth operation. Oraskovich was also on the team, along with a veterinarian, a nutritionist, a milk plant

field person and another dairy producer. "The fact that a dairy family goes through that process with the diagnostic team says a lot about their attitude about management," says Streiff.

He notes that the Zieroths are a relatively young farm family who either had to get more labor efficient or get out of dairying. There are a number of similar situations in Carver County and Minnesota, he adds.

"From a personal perspective, these types of projects are the ones I feel proudest of, where we've helped a younger dairy farmer stay on the farm and become more efficient," he says.

Oraskovich says families such as the Zieroths show it's not necessary to add several hundred cows to an operation and hire lots of labor to meet lifestyle goals and be successful.

"There are many people who want to make mid-size or smaller-scale expansions," he says. "Many of them want to have a less labor intensive way to continue their operation. To accomplish this, it's not necessary to build a \$250,000 milking parlor. Changes such as the Zieroths have made, such as putting in a freestall barn and a flat-barn parlor, can help many families meet their goals."

# # #

Web, V2,V4MN,V9MN,D1,10

zieroth4

Sources: Jeff Reneau, (612) 624-9791; Kevin Janni, (612) 625-3108  
Vern Oraskovich, (952) 442-4496

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

October 26, 2001

## **Applications open for Silver Bell sheep producer awards**

The Minnesota Lamb and Wool Producers are taking applications for awards that represent excellence in modern sheep production. Applications for the 2001 Silver Bell and Junior Silver Bell Awards are due by Nov. 15. Presentation of the awards will take place at a Shepherd's Conference Nov. 30-Dec. 1.

The Silver Bell Awards go annually to one or two top Minnesota sheep producers. Selection criteria include flock size, lambing and weaning rate, lamb and wool production and net return per ewe. In addition, the selection committee will consider less tangible factors such as adoption of new technology and enthusiasm for sheep production.

If you're interested in applying or know someone you believe should apply, you can obtain an application from your county office of the University of Minnesota Extension Service. Applications are also available from Jeremy Geske at (651) 480-7704. Applications should be returned by Nov. 15 to Jeremy Geske, Dakota County Extension Office, 4100 220<sup>th</sup> St. W., Farmington, MN 55024.

# # #

Web, V2MN, V4MN, V5MN, S1

gesk1025

Source: Jeremy Geske, (651) 480-7704

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MS  
212

<http://www.extension.umn.edu/News>

October 26, 2001

### **A life crisis can also mean opportunity**

A life crisis--dealing with a problem that doesn't have ready solutions-- is hard, stressful and frustrating. But the keys to adapting to a crisis are the ability to stand up to the situation and to accept help.

A crisis consists of the problem and your reaction to it, says Ron Pitzer, former family sociologist with the University of Minnesota Extension Service. "It's a turning point for better or worse, and things will never be quite the same again," Pitzer says.

The Chinese written character for crisis is composed of two equal symbols. Pitzer says, "One means danger, the other means opportunity. While you must remain aware of the danger of the crisis, you should try to also recognize the opportunities."

Researchers who've studied a variety of crises have found that the more people faced the realities of their problems and persevered in grappling with them, the stronger they emerged after the crisis. People who came out of the crisis weaker, less effective or spinning toward breakdown had evaded the issues. They hadn't sought the help of others and refused it when offered.

More information is available from county offices of the University of Minnesota Extension Service. Ask for publication 2466, "Change, Crisis and Loss in Our Lives." Or, check the Internet at [www.extension.umn.edu](http://www.extension.umn.edu).

# # #

Web, V2, V4, F1

pitzer10251

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

MSC  
A212

October 26, 2001

## **Minnesota Dairy Extravaganza will be Nov. 27-29 in Minneapolis**

Dairy equipment displays, dairy education workshops and dairy organization meetings will be part of an upcoming three-day event in Minneapolis. The 2001 Minnesota Dairy Extravaganza will be Nov. 27-29 at the Minneapolis Convention Center. The event is designed for producers, and bus transportation to Minneapolis will be available from locations around the state.

The extravaganza will take place from 10 a.m. to 4 p.m. each day, and will be part of the North American Farm and Power Show. There will be over 150 exhibitors in "The Dairy Alley" of the convention center's 200,000-square-foot display hall.

A workshop on "Managing the Business" will take place Nov. 27. Topics and speakers will be:

- Marketing milk, Margo Rudstrom, University of Minnesota Extension economist;
- Managing labor, Mike Murphy, Monsanto;
- Dairy development and business plans, Dave Weinand, Minnesota Department of Agriculture;
- Dairy modernization, Tim McNamara, Ag Star Financial Services;
- Transferring the farm to the next generation, Steve Rheume, Ag Star Financial Services;
- Cow friendly counties, Bruce Kleven, Minnesota/Wisconsin Association of Cooperatives and Jerry Hiel, Minnesota Department of Agriculture.

<over>

A workshop on "Managing the Cows" will take place Nov. 28. Topics and speakers will be:

- Linking soil tests to manure use, George Rehm, U of M Extension soil scientist;
- Getting cows bred, Paul Fricke, University of Wisconsin;
- Update on Johnes, mad cow, foot and mouth, and biosecurity, Bill Hartman, Minnesota Board of Animal Health;
- A plan for maximum milk quality, Jeff Reneau, U of M Extension dairy scientist, and Gary Neubauer, Pharmacia Animal Health;
- Farm records, John Fetrow, U of M veterinarian, and Dave Stish, farm business management instructor from Little Falls.

The Minnesota Dairy Leaders Roundtable, a group of 45 organizations representing dairy producers, processors, educators and other connected with the dairy industry, will meet Nov. 28. The extravaganza will also include meetings of dairy associations and promotion boards.

The Minnesota Dairy Herd Improvement Association is organizing buses Nov. 27 and 28. Routes will be from Winona through Plainview, Rochester and Cannon Falls; from Sauk Center through Albany and St. Cloud; from Windom through New Ulm and St. Peter; from Staples through Little Falls and St. Cloud; and from Willmar through Litchfield and Waconia. The fee for the extravaganza registration and the bus ride is \$10 per person. To register and reserve a bus ride, call (800) 827-3442.

For more information on the extravaganza call Pat Kearney at (320) 231-7893. The North American Farm and Power Show website is at [www.tradexpos.com/farmpowr/](http://www.tradexpos.com/farmpowr/).

# # #

Web,V2,V4MN,A4,D1,X3

fred1024

Source: Pat Kearney (320) 231-7893

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

ENC  
2001

October 30, 2001

## **Managing conflict can be a key part of retirement planning**

Disagreements and conflicts are normal when people spend as much time together as they do in retirement. But you can work on a process to manage the conflict, says Sharon Danes, family economist with the University of Minnesota Extension Service.

Conflicts may arise between desired interests, use of time and choice of friends. For example, if a woman retires and assumes that her retired husband has the same enthusiasm for travel as she does, it could create tension if he prefers to stay at home.

Think of managing vs. resolving the conflict, Danes advises. The following five-step process can help:

1. State the problem to be solved in one sentence. But take time to think about it, since what people argue about is often not the real problem.

2. Write the problem with an "I" statement rather than a "you" statement. That means you state the problem in terms of how you feel, not in terms of what the other person has done.

3. Identify your feelings about the problem. Feelings can include being angry, frustrated, excited, anxious, confused, resentful, hopeful and hurt. Rate the items from zero, or "not at all," to 5, or "very."

4. Then get together with your partner. If you don't view the problem in the same manner, start discussing the place where there is agreement about retirement. The tendency is to concentrate only on disagreements, forgetting there are many points you agree on. Concentrate on the hopes and positive ideas, what's most important, who should do what, possible options and who is helping in positive ways.

Then try to sift through points of disagreement. Points to discuss include: what you need to reduce emotional intensity, what you want the other person to understand about your position, which parts of the problem are your responsibility, which parts you have control over and who is interfering with whom.

5. List alternative solutions to be investigated.

More details are available in a U of M Extension Service publication that Danes co-authored titled "Retirement: More than Money Decisions." The publication, including worksheets and other publications in a retirement series, can be found on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu), then click on "family."

It's also available from county offices of the Extension Service. Or, call the Distribution Center at (612) 624-4900 or (800) 876-8636 and ask for item 3791. There is a small charge.

# # #

Web, V2, V4, E2, F3

danes10291

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

October 30, 2001

## **Minnesota Dairy Expo, Forage Conference will be Dec. 13 in St. Cloud**

Building a successful dairy operation and dairy cow comfort will be two main topics at the Minnesota Dairy Expo and Forage Conference Dec. 13 in St. Cloud. The event will also include a trade show with exhibits of a wide variety of dairy equipment and supplies.

The event will be at the Holiday Inn from 10 a.m. to 3:30 p.m., with registration opening at 9:30 a.m. It's designed for dairy producers, advisors, managers, educators and other dairy professionals.

Wisconsin Secretary of Agriculture, Trade and Consumer Protection James Harsdorf will be the opening speaker. Harsdorf, who is also a dairy farmer, will speak on the future of the dairy industry. He will be followed by Wisconsin dairy producer Hank Wagner, an organizer of the Professional Dairy Producers of Wisconsin. Wagner will discuss creating a future in dairying.

Marcia Endres, president of the Minnesota Forage and Grassland Council and a dairy scientist with the University of Minnesota Extension Service, will discuss the work of the MFGC. The morning general session will conclude with a presentation by Bob Lefebvre of Minnesota Milk Producers on programs to help dairy producers.

The two-hour afternoon program will include four breakout sessions. Topics will include profitable dairy decisions, milk marketing, cow comfort and corn silage quality.

<over>

Speakers will include Endres, U of M veterinarian John Fetrow, U of M Extension economist Margo Rudstrom, Canadian veterinarian Neil Anderson and U of M Extension dairy nutritionist Jim Linn.

There will also be two panels in the afternoon. A panel on common ground in Minnesota dairying will include a traditional dairy producer, a niche-adapted producer and a large-scale producer. A panel on contracting forages will include two forage producers and two dairy producers.

The registration fee is \$25 per person and includes program proceedings and a noon buffet lunch. To obtain a registration brochure or further information, call (320) 255-6169, (800) 450-6171 or (651) 436-3930, or e-mail [salfe001@umn.edu](mailto:salfe001@umn.edu) or [mfgc@umn.edu](mailto:mfgc@umn.edu).

# # #

Web,V2,D1,A4

salf1026

Source: Jim Salfer, (320) 255-6169

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 2, 2001

## **New study shows sustainable farms profitable, help the environment**

Farm profits and environmental performance on sustainable farms match and often exceed that of conventional farms, according to a new four-year study coordinated by the Minnesota Institute for Sustainable Agriculture (MISA).

The study profiled three farms in detail, measuring soil loss, rainfall and field runoff. Production and financial data were also analyzed to evaluate the bottom line.

Two of the farms were dairy farms in the Sand Creek watershed, the biggest contributor of sediment in the Minnesota River Basin. One dairy farm—an organic grazing system—performed exceptionally well. A combination of pasture and contour strips rotated among alfalfa hay, corn, soybeans and small grains held sediment and nutrients on the field.

Normal rainfalls caused almost no soil loss, and a four-inch rain resulted in only 52 pounds of sediment per acre. In contrast, another study on the same soil type with corn and soybeans on plowed fields had 20,000 pounds (10 tons) of eroded soil per acre.

The second dairy grazing farm consisted of gently rolling pasture in continuous grass and legumes for over 10 years. The permanent pasture not only held the soil and nutrients in place, but also absorbed all rainfall most of the time.

The third farm was in the Chippewa River watershed, also part of the Minnesota River basin. It was mostly flat pasture, where beef cows and calves are rotationally grazed. The soil cover prevented runoff from most rainfalls. Three storms caused runoff with sediment, but at rates 20 to 40 percent less than the watershed average.

Despite the unconventional grazing systems, both dairy farms were very healthy from a financial standpoint. One farm consisted of 41 cows and produced organic milk.

The other farm had 141 cows and produced regular milk. Net income averaged \$83,000 per year on the larger farm--two to three times the average for similar dairy farms in the region. Input expenses and debt load were kept relatively low.

Income on the smaller dairy farm averaged \$57,000 per year—one and one-half to three times higher than peers. However, the beef cow-calf operation on the third farm didn't fare as well. The beginning young farmer faced several problems common to many beginning farmers, including high debt levels. Net income was negative, and both spouses worked full-time jobs off the farm.

Start-up costs are partly to blame as the farmer is investing in pasture fertilization that will pay off later in lower feed costs. And bad luck was a factor. A combination of a barn fire that destroyed winter feed and weather-related herd mortality problems resulted in further losses. However, the financial analysis showed there's potential for profitability in the long run.

Cooperators with MISA on the project were the Sustainable Farming Association of Minnesota, Land Stewardship Project and the Minnesota Project. The study is titled "Sustainable Farming Systems: Demonstrating Environmental and Economic Performance." For either the 44-page report or a short summary, contact the MISA office at [misamail@umn.edu](mailto:misamail@umn.edu). Or, call (612) 625-8235 or (800) 909- 6472.

# # #

Web, V2, V4, D1, C4, P1

misa10311

Source: Helene Murray (612) 625-0220, [murra021@umn.edu](mailto:murra021@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 2, 2001

## **U of M Crop Pest Management Short Course will be Nov. 19-20**

Soybean aphids, crop variety selection and waterhemp management will be on the agenda at the University of Minnesota's 21<sup>st</sup> Annual Crop Pest Management Short Course Nov. 19-20. The event will be at the Earle Brown Center on the U of M St. Paul campus.

The short course is designed for those who advise farmers on crop pest problems, including crop consultants, Extension educators and seed and ag chemical dealers. However, it's open to all interested persons.

Soybean aphids will be the focus of a morning general session Nov. 19. The session will cover aphid biology and life history, aphid ecology and management, yield impacts and the aphid's role in transmitting plant disease.

Afternoon concurrent sessions will cover corn and soybean pests, weed management, genetic engineering for improved wheat scab resistance, environmental stress on crops, and marketing issues.

Some of the topics on the Nov. 20 agenda are lime for soybeans, banded fertilizer, biological control of white mold, weed management, crop variety selection, corn root problems and soil compaction.

The course fee is \$150 per person for registrations postmarked by Nov. 16 and \$170 per person after that date. For further information on the short course program content, call Kevin Cavanaugh at (612) 625-2778. To register or obtain a registration brochure, call (800) 318-8636 or e-mail [extconf@umn.edu](mailto:extconf@umn.edu). The conference brochure and on-line registration are available at [www.conferences.umn.edu/mn/crops/](http://www.conferences.umn.edu/mn/crops/) .

# # #

Web,V2,V4MN,V5MN,F4

Hawk1101

Source: Jennifer Hawkins, (612) 624-1259; Kevin Cavanaugh, (612) 625-2778

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 2, 2001

## **U of M offers new advanced strategies program with futures and options**

The University of Minnesota's Center for Farm Financial Management (CFFM) will offer a new two-day course on "Advanced Strategies with Futures and Options" Dec. 13-14.

The program will be at the Earle Brown Center on the U of M St. Paul campus. Edward Usset, U of M grain marketing and teaching specialist, will lead the session.

Usset developed the Minnesota Master Marketer Program, which has served nearly 250 grain producers since 1999. Guest speakers include Mike Kvistad, vice president of Benson-Quinn Commodities Inc., and Tom Walker Sr. of Walker & Company.

"The program is directed at Minnesota producers and professionals," says Bob Craven, economist with the U of M Extension Service and director of CFFM.

With presentations and hands-on exercises, participants will develop a better understanding of futures and options as pricing tools and improve their ability to select the best tool in different market situations. Advanced strategies to be explored include options to set a minimum price, fences, writing covered calls, spreads and "2 for 1" spreads.

<over>

Other topics include incorporating technical and fundamental analysis into selecting a pricing tool, the importance of volatility in options, inter-delivery and inter-commodity spreading, and the need to distinguish hedging and speculative activities.

Registration fees are \$150 per person, which includes lunches and handout material. For a brochure or to register, contact CFFM at (800) 234-1111 or (612) 625-1964.

You can also e-mail your requests to [cffm@cffm.agecon.umn.edu](mailto:cffm@cffm.agecon.umn.edu) or look up details on the CFFM web site at [www.cffm.umn.edu](http://www.cffm.umn.edu). To learn more about the content of the course, contact Ed Usset directly at (651) 681-7999, or e-mail [usset001@umn.edu](mailto:usset001@umn.edu).

# # #

Web, V2MN, V4M, A2, F4

craven10261

Source: Bob Craven (612) 625-1964, [rcraven@umn.edu](mailto:rcraven@umn.edu)

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



November 7, 2001

## **New pocket-sized agricultural drainage calculator is easy to use**

A new pocket-sized drainage calculator available from the University of Minnesota Extension Service puts agricultural drainage calculations in an easy-to-use format.

Gary Sands, engineer with the U of M Extension Service, developed the new calculator. It will be a handy tool for farmers, drainage contractors, engineers, public agencies, crop consultants, Extension educators and water quality professionals across the Midwest region.

Drainage calculations and other information appear in a "slide chart" format. Calculations are made by sliding an inner sleeve to match points on the outer jacket. Instructions for use are included on the calculator. Side one of the calculator allows users to compute the required pipe size for various pipe grades and drained acres. The reverse calculation, from pipe size/grade to drained acres, can also be performed.

The calculator can be used for both corrugated and smooth-interior pipe. Tables are also included on side one for selecting drainage coefficients and estimating drainage pipe coil lengths based on the number of wraps on a pipe spool.

Side two of the calculator lets users determine flow rate and check to make sure minimum recommended flow velocities can be achieved. Feet of fall (elevation change) can be determined based on percent grade and length of run.

Other tables on side two include estimates of pipe requirements based on drain spacing and minimum recommended grades for various drainage pipe sizes and materials. The pocket slide chart was developed in partnership with Prinsco, Inc. It may be purchased from the Extension Service Distribution Center for a nominal fee. Call (612) 624-4900 or (800) 876-8636 and ask for item number 07688.

# # #

Web, V2, F4

sands1161

Source: Gary Sands (612) 625-4756, [grsands@umn.edu](mailto:grsands@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 7, 2001

## **U of M Cattle Feeder Days will be at Morris, Slayton, Ormsby, Rochester**

Receiving calves, managing the feedbunk and feeding corn byproducts will be topics at Minnesota Cattle Feeder Days at four locations in early December. The events will be Dec. 4 at Morris at the University of Minnesota's West Central Research and Outreach Center, Dec. 5 at Slayton at Legends Grill, Dec. 6 at Ormsby at the Town House Restaurant and also Dec. 6 at Rochester at the Elks Club. The events at Morris, Slayton and Ormsby will begin at 9:30 a.m. and the one at Rochester will begin at 5:30 p.m.

Topics and speakers will be:

--Bunk management and feeding strategies, Sheri Bierman, beef cattle nutritionist, Big Gain, Mankato;

--Incorporating corn byproducts in feedlot diets, Terry Durham, Minnesota Corn Processors, Marshall;

--Successful preconditioning and receiving programs with stressed calves, Jim Simpson, beef cattle consultant, Canyon, Texas;

--Managing risk in upcoming feedlot contracts, Kirby Hettver, U of M Extension educator, Stevens Co.;

--Feedlot cattle research update, Alfredo DiCostanzo, U of M Extension beef cattle scientist, St. Paul.

<over>

The registration fee is \$20 per person. Further information and registration are available through the contact person for each location. They are Kirby Hettver at Morris, phone (320) 589-7423; Philip Berg at Slayton, phone (507) 825-6715; Bill Crawford at Ormsby, phone (507) 235-3341; and Steve Drazkowski at Rochester, phone (651) 565-2662. The Minnesota Cattle Feeder Days web site is at [www.ansci.umn.edu/beef/cattlefeeder/2001cfd.html](http://www.ansci.umn.edu/beef/cattlefeeder/2001cfd.html) .

# # #

Web,V2,V4MN,B1,X1,45,51,55,80,88

ctlfed01

Source: Alfredo DiCostanzo, (612) 624-4995

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 7, 2001

## **Farmland rental rates in south central Minnesota projected to hold steady**

Farmland cash rental rates in 13 south central Minnesota counties will hold steady for 2002, a survey by the University of Minnesota Extension Service indicates.

"Survey results from most counties show a change of only a few cents per acre in expected annual rental rates for 2002, compared with 2001 rates," says Blue Earth County Extension educator Kent Thiesse.

The survey includes 3,409 responses from landlords and farm operators in the 13 participating counties. Survey results represent over 350,000 acres of tillable farmland that are under cash rental agreements. Thiesse says survey results are intended to indicate trends, not to fix or set annual cash rental rates.

The range in cash rental rates in the 13-county region is \$50-160 per acre. The highest county average rates in 2001 were \$110 per acre in Martin County and \$109 in Faribault County.

"Land quality, available drainage and local demand for land are big factors that determine local rental rates," says Thiesse. "For example, in Blue Earth County, well-tiled land brings an average of \$5 per acre above the county average. Land with very poor drainage is discounted \$10-15 per acre. Some higher land rental rates may also include the use of facilities such as grain bins or machinery storage."

<over>

Counties included in the survey are Blue Earth, Carver, Faribault, Kandiyohi, Le Sueur, McLeod, Martin, Meeker, Nicollet, Renville, Scott, Sibley and Waseca.

A "Land Rental Survey Booklet" showing the projected rental rates for 2002 for the 13 counties is now available. The booklet also shows actual cash rental rates paid in 2001. In addition, it provides rental trend data for flexible leases, share rental arrangements, rental agreements with family members, and the impact of tile drainage on rental rates.

The booklet has historical land rental trend data, a cash rent worksheet for 2001 and a list of factors influencing cash rental rates. Information sheets on government farm programs, flexible lease agreements, sample rental contracts, property tax adjustments, agricultural drainage and building rents are included.

For a free copy of the 2001-2002 Land Rental Survey Booklet, contact a University of Minnesota Extension Service office in one of the 13 counties included in the survey. You can also request a copy by calling (507) 389-8325 or (507) 931-6800. Funds to print the booklets have been provided by 12 agricultural lending institutions in south central Minnesota.

# # #

Web, V2, V4MN, A2, A4, 07, 10, 22, 34, 40, 45, 46, 47, 52, 68, 75, 77, 86

thie1105

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 7, 2001

**Workshops using grain marketing game set at 40 Minnesota locations**

Crop producers can play a grain marketing game and learn marketing strategies at workshops taking place at over 40 Minnesota locations. The workshops are called "Winning the Game II....Profitable Strategies for Marketing Grain." They're sponsored by the University of Minnesota Extension Service, the Minnesota Soybean Research and Promotion Council and several other organizations.

The U of M Center for Farm Financial Management has developed the "gaming" model, using actual grain marketing information. The format allows participants to make grain marketing decisions during the workshops and compare the results with those of other participants. The model looks at the results of marketing decisions over the past 17 years in a variety of grain marketing scenarios.

The workshops also cover such topics as the seasonality of corn and soybean prices, understanding Crop Revenue Coverage insurance as part of grain marketing, and grain marketing resources. Participants can begin to develop a "take-home" grain marketing plan for their farm.

The grain marketing workshops are free for farm operators. Dates, times, locations and local sponsors are available from the following contacts: Zach Fore, Red Lake Falls, (218) 253-4401; Terry Salmela, Mora, (320) 679-6340; Craig Haugaard, Benson, (320) 843-3796; Tim Arlt, Owatonna, (507) 444-7685; Marv Zylstra, Windom, (507) 831-4022; and Kent Thiesse, Mankato, (507) 389-8141.

# # #

Web, V2MN, V4MN, V5MN, A2, A4

thie1106

Source: Kent Thiesse, (612) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

November 9, 2001

## Here's a handy summary of recent tax law changes

Recent tax law changes for both farmers and non-farmers are summarized in a new six-page publication from the University of Minnesota Extension Service.

The Economic Growth and Tax Relief Reconciliation Act of 2001 and the Taxpayer Relief Act of 1997 reflect the most widespread federal tax law changes in the last 15 years. Some of these changes along with potential tax strategies for farm families and others are outlined by authors Erlin Weness and Gary Hachfeld, educators with the U of M Extension Service.

The publication has sections on the lower tax brackets, capital gains tax, education expenses, Roth Individual Retirement Accounts and retirement plans. Income averaging has been reinstated, but only for farmers.

You can find the new publication on the Internet at <http://swroc.coafes.umn.edu>. Or, check with a county office of the U of M Extension Service.

# # #

Web, V2, V4MN, A2, A4

weness1191

Sources: Erlin Weness (507) 372-8210, [wenes001@umn.edu](mailto:wenes001@umn.edu)  
Gary Hachfeld (507) 931-6800, [hachf002@umn.edu](mailto:hachf002@umn.edu)  
Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)



November 9, 2001

## **Risk protection for retirement is more than just insurance**

Unforeseen events such as those of Sept. 11 put the ideas of security and risk protection in a different context for many of us.

But you can protect your family's assets against other unforeseen events such as illness, liability, property loss and disability by developing a risk protection plan.

A publication from the University of Minnesota Extension Service, "Retirement: Risk Protection," helps you take a detailed look at health insurance and life insurance.

But it's important to see risk protection as more than just insurance, says Sharon Danes, the publication's author and a family economist with the U of M Extension Service. For example, health insurance can help you manage rising health care costs, but by itself it does not promote good health.

Making sure that each family member has a nutritionally balanced diet, weekly exercise and reduced levels of prolonged stress is as important to your total risk insurance plan as a health insurance policy.

You can find the publication on the Internet at [www.extension.umn.edu](http://www.extension.umn.edu), then click on "family." It's also available for purchase from county offices of the Extension Service. Or, call (612) 624-4900 or (800) 876-8636 and ask for item 3795.

# # #

Web, V2, V4, E2, F3

danes1191

Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

November 13, 2001

*Editors: A photo of Carl Rosen is available. Call (612) 624-3064 or (612) 625-3168, or e-mail [jk@umn.edu](mailto:jk@umn.edu) to request a photo.*

## **Carl Rosen receives top faculty award from U of M Extension Service**

Carl J. Rosen of Roseville, soil scientist with the University of Minnesota Extension Service, recently received a top award from that organization. Rosen received the 2001 Distinguished Extension Campus Faculty Award at a conference in Rochester.

Rosen holds the rank of professor in the U of M Department of Soil, Water and Climate, and also has an appointment in the Department of Horticultural Science. He joined the U of M faculty in 1983.

The award recognizes Rosen's accomplishments in soil nutrient management for commercial horticulture crops, including potatoes. His work has produced many of the production guidelines for potato growers. He developed a plant tissue test that has increased nitrogen use efficiency for potatoes. The test helps minimize the environmental concern of nitrogen loss while maintaining or increasing potato yields. The test has been widely adopted across Minnesota and parts of Wisconsin and North Dakota.

Rosen was also cited for his work in finding beneficial uses for urban wastes, including composts, sewage sludge, incinerator ash, municipal solid waste and yard waste. In the late 1980s he began a research and Extension effort in alternative urban

waste utilization methods. He advocated that land application of some wastes to recycle nutrients and improve soil properties was a viable alternative to landfills. He also advocated improved methods to compost yard wastes and use them in the urban landscape. He helped produce an Extension publication on managing yard wastes and composting that has reached tens of thousands of Twin Cities households.

According to a colleague, Rosen's work in finding beneficial uses of waste materials has led to saving tens of millions of dollars for the people of Minnesota over the past 18 years.

Rosen serves as the primary soil fertility expert for Extension's Master Gardener Program. His recommendations on soil nutrient management are widely adopted in the nursery and landscape industry. He has generated many Extension publications on nutrient management of garden fruits, vegetables and flowers, as well as home landscape plants, shrubs and trees. He advises urban residents on safe and efficient fertilizer, manure and compost use. He has developed lawn care recommendations for homeowners and lakeshore property owners to maintain healthy turf while minimizing runoff of nitrates and phosphorus into surface waters.

Rosen grew up in Swarthmore, Pa. He received B.S. and M. S. degrees in horticulture from Penn State University and a Ph. D. in soil science in 1983 from the University of California, Davis.

# # #

Web,V2MN,A4,C4,G1,H7

rosen

Source: Gwen Gmeinder, (612) 625-6795

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 13, 2001

### **Work on after school, summer enrichment program brings award**

Contributors to an after school and summer enrichment program for young people from multi-ethnic backgrounds in St. Paul have been honored by the University of Minnesota Extension Service.

The program, called the "One of a Kind Kid Club," received the Dean and Director's Distinguished Diversity and Inclusion Award. Those involved in implementing the program received the award at a recent conference in Rochester.

The One of a Kind Kid Club is site-based, targeting children and youth in St. Paul's McDonough Homes, Torre de San Miguel and Dunedin Terrace neighborhoods. The program involves approximately 80 children and youth whose backgrounds are Hmong, Cambodian, African-American, Somali, Ethiopian, European and Hispanic.

One purpose of the program is to develop and nurture teen leadership groups in the targeted communities. Teens develop skills and knowledge in cross-cultural leadership, teaching and social responsibility. The teen leaders meet bi-weekly and also participate in broader youth leadership events such as Ramsey County leadership retreats, 4-H Camp and educational field trips.

The program also implements quarterly after school and summer enrichment sessions for younger children. These sessions develop skills related to relationships, social responsibility, nutrition education and intercultural education.

<over>

One of a Kind Kid Club was implemented four years ago as a way to strengthen the overall urban 4-H Youth Development program and to develop authentic integration and inclusiveness among Ramsey County 4-H participants. It has developed over 30 teen leaders who have become active in other Ramsey County and Minnesota state 4-H events. It has been able to maintain a 75 percent participation rate each year, despite a relatively high migration rate at the targeted sites.

Jennifer Skuza, Ramsey County Extension educator, serves as lead contact for the program. Skuza and Extension educators Peggy Kennedy and Donna McDuffie are the primary program developers. Other Ramsey County Extension staff members who help with the program are Rosa Garner, Renete Lopez, Jessica Potter, Bessie Pierce, Phallo Keo, Rose Spitzman, Juanita Walker and Annie Vann. Non-extension collaborators include Sylvia Elrod, Torre de San Miguel/Common Bond communities; Julia Hupperts, Dunedin Terrace/St. Paul Public Housing; Cha Moua, Dunedin Terrace/Saint Paul Public Housing; and Ann Simerson, McDonough Housing/Saint Paul Parks and Recreation.

The diversity award recognizes accomplishments in achieving and sustaining diversity and inclusion in the Extension organization, its programs and audiences.

# # #

Web,A1,A3,H3,Y1,64

awrddivr

Source: Peggy Kennedy, (651) 704-2066

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 13, 2001

*Editors: A photo of Dorothy Rosemeier is available. Call (612) 624-3064 or (612) 625-3168, or e-mail [jk@umn.edu](mailto:jk@umn.edu) to request a photo.*

## **Dorothy Rosemeier receives top U of M Extension Service faculty award**

Dorothy Rosemeier, executive director of the West Central Regional Sustainable Development Partnership at Morris, recently received a top award from the University of Minnesota Extension Service.

Rosemeier received the 2001 Distinguished Extension Field Faculty Award.

Roger Steinberg of Rochester, last year's winner, presented the award to Rosemeier at a conference at Rochester.

Rosemeier works at the U of M West Central Research and Outreach Center at Morris. She previously served as an Extension educator in Swift County for 21 years. She helped organize the Swift County Business Retention and Expansion Program, guiding 38 local leaders through the nine-month process of visiting 53 firms and developing a strategic plan. As a result of the follow-up to those visits, two large firms changed plans for leaving and expanded in Swift County.

Rosemeier partnered with others in creating a Regional Tourism Coalition, which published and distributed a regional tourism brochure and continues to market tourism in west central Minnesota. She helped create Project Lead, a regional women's

<over>

leadership program. She has also been facilitator for the steering committee of the Farm Women Network of West Central Minnesota.

In her current position, Rosemeier works with a regional team to create a partnership between the University of Minnesota and the people of west central Minnesota to direct research, education and outreach funds to support sustainable development.

Rosemeier, who lives in DeGraff, joined Extension as an educator in Swift County in 1978. She grew up near Spring Valley, Minn. and earned a bachelor's degree in home economics education from the University of Wisconsin-Stout in 1978. She later earned a master's degree in vocational education from the University of Minnesota.

# # #

Web,V2MN,A4,E1,Z7

awrdrrsm

Source: Gwen Gmeinder, (612) 625-6795  
Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

November 16, 2001

## Good records, filing system can increase farm business profits

Good farm records backed up by an organized filing system can increase efficiency and profits in your farm business. "Ideally, you should be able to retrieve any receipt in a few seconds," says Erlin Weness, farm management educator with the University of Minnesota Extension Service.

Your filing system has a dual role: easy retrieval of documents for personal reference or proof of payment, and verification of income and expense items if the Internal Revenue Service audits you.

Set up individual files for each income and expense item, Weness advises. He says the labels on your files should be the same as your account codes in your farm accounting system. Other files you'll need include government transactions, capital items purchased, money borrowed and loans repaid, and non-farm income and family living expenses. Then add files for 1099s received and sent, and an "income tax" file.

More detailed information is available in a new article by Weness and co-worker Jim Christensen titled "Establishing a Farm Filing System." You can find it at <http://swroc.coafes.umn.edu>. Or, ask a county office of the U of M Extension Service to download it from the Internet.

# # #

Web, V2, V4MN, A2, A4

weness11131

Source: Erlin Weness (507) 372-8210, [wenes001@umn.edu](mailto:wenes001@umn.edu)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service, is an equal opportunity educator and employer.*



MSC  
2/2/11

November 16, 2001

## **Be wary of buying drugs on-line**

Reports of anthrax exposure have spawned websites and e-mails selling Ciprofloxacin (Cipro) and other antibiotics for treatment. The Federal Trade Commission (FTC) warns that fraudsters often follow the headlines, tailoring their offers to prey on consumers' fears and vulnerabilities.

FTC and the Food and Drug Administration (FDA) say you should talk to your health-care professional before you use any medications. Unless you are specifically notified or instructed by public health officials, there is no need for antibiotics to prevent anthrax. Confirming an infection requires a doctor's examination and diagnosis, and this is particularly important for anthrax.

A general questionnaire doesn't provide adequate information for a health-care professional to determine whether a particular drug will work for you, is safe and whether another treatment is more appropriate. It also fails to address whether there will be adverse reactions with another medication you're taking or whether you have a medical condition, such as an allergy, that could make the drug harmful.

Some websites may sell ineffective drugs, and some sites may claim to sell FDA-approved drugs, like Cipro, made to meet U.S. standards. But they may be selling a similar drug made elsewhere, where there may be no guarantee of appropriate manufacturing standards. In fact, the drugs could be counterfeit or even adulterated with dangerous contaminants.

Know who you're buying from. Online, anyone can pretend to be anyone—it's easy to fake e-mail addresses. You may send the website your money and not get the real thing, or anything, in return. To ensure that the site is reputable and licensed to sell

<over>

drugs in the United States, the FDA recommends that you check with the National Association of Boards of Pharmacy (<http://www.nabp.net/>, (847) 698-6227).

In addition, the FTC and the FDA advise not doing business with websites that do not provide access to a registered pharmacist to answer questions. Avoid sites that don't provide their name, physical business address and phone number. Otherwise, you will never know who you're dealing with and how to reach them if there is a problem.

Don't purchase from foreign websites at this time. It is generally illegal to import the drugs bought from these sites; the risks are greater, and there is very little the U.S. government can do if you get ripped off.

If you buy drugs online, pay by credit or charge card. If you pay for online purchases by credit or charge card, the Fair Credit Billing Act will protect your transaction. Under this law, you have the right to dispute charges under certain circumstances and withhold payment while the creditor is investigating those charges. In the case of unauthorized use of a consumer's credit or charge card, consumers generally are held liable only for the first \$50 in charges. Some cards may provide additional warranty or purchase protection benefits.

Go to <http://www.ftc.gov/bcp/online/pubs/alerts/bioalrt.htm> on the Internet for more information. For information about treatment for anthrax, visit <http://www.consumer.gov> or [www.fda.gov/cder/drug/infopage/cipro](http://www.fda.gov/cder/drug/infopage/cipro).

# # #

Web, V2, V4, F3     anthrax11141

Sources: Extension Service Food Safety Newsletter/Federal Trade Commission  
Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
A27P

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

November 20, 2001

## **Bonuses can motivate, retain and reward farm employees**

Providing bonuses can be a good way to motivate, retain and reward farm employees. Many of today's farm employers use bonuses, says Scott County educator Dave Resch of the University of Minnesota Extension Service.

Resch cites a survey funded by Iowa State University's Leopold Center for Sustainable Agriculture. The survey found that over 43 percent of employers pay some type of bonus. Most bonuses are based on volume, performance, longevity or profitability.

A volume-based bonus involves a fixed payment per unit of farm output. This works especially well for hog and dairy farms. Employees get additional pay based on pigs weaned, cows milked or acres worked. This system provides employees additional compensation as their workload increases.

A performance-based bonus provides incentives for extra duties associated with increased efficiencies. The employees need to have direct influence in the performance factor for this to work, says Resch. The base efficiency must be defined before the year starts. The efficiency target can't change during the year. Performance bonuses should be paid as soon as the goal is reached.

A longevity-based bonus recognizes the value of experience and commitment to the farm. This bonus may be tied to a specific number of years or working through a

<over>

certain season such as harvest. A longevity bonus can overcome problems such as frequent turnover or being shorthanded during critical times.

A profitability-based bonus allows employees to share in some of the risks and rewards of the farm business. This plan is more common for long-time employees. If this bonus is connected to a percentage of net income or profits, the employer must be willing to share financial information with employees.

"A good bonus plan requires employer-employee discussion in advance," says Resch. "If performance or profitability determines the amount of the bonus, both parties must understand and agree on the specifics of the plan. The employer needs to make the expectations and conditions clear to the employee and follow them strictly."

Resch says bonuses are for work above the base workload and expectations, and thus may not be given every year.

Some ways to pay bonuses are in cash, gift certificates, holidays at resorts, use of tools and equipment, or commodities. In the Iowa State survey, bonuses ranged from \$500 to about \$3,000.

# # #

Web,V2,V4MN,A2,A4,D1,S2

resc1116

Source: Dave Resch, (952) 492-5383

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MISC  
A27p

November 20, 2001

## **Bonus plans for farm employees can take a variety of forms**

If you plan to provide a bonus to a farm employee, discuss the specifics ahead of time. That's a key to avoiding misunderstanding, says Scott County educator Dave Resch of the University of Minnesota Extension Service.

Resch says most bonuses are based on volume, performance, longevity or profitability. He cites some common bonus plans:

- Pay per pig sold
- Pay per pig weaned above a certain number
- Pay per pound of pigs per farrowing crate above a certain number
- Bonus per acre worked
- Bonus on a percentage of calf sales
- Bonus on quality payment for milk
- Bonus on conception rate for cows and heifers
- Bonus for each year worked
- Bonus based on net income
- Christmas bonus

# # #

Web, V2,V4MN,A2,A4,D1,S2

resc1117

Source: Dave Resch, (952) 492-5383

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 20, 2001

**A different digital divide in agricultural e-commerce?**

Whether individual agricultural producers will have full access to e-commerce technology is a question of technology development and control, not one of access to computers and the Internet.

"This is the real digital divide question," says W. Parker Wheatley, one of the authors of a research paper from the University of Minnesota's Department of Applied Economics. "You can buy a computer for \$500 and get Internet access; that's not the problem. However, a digital divide in the development of strategic applications is still possible."

"First, the 'big players' will develop marketing and information software to fit their needs. Second, they will consider the needs of individual producers to attract them as users as well," Wheatley says. "Who develops commercial applications as well as who owns them will have important strategic implications for how individual producers engage in and benefit from electronic commerce."

E-commerce can bring concerns of collusion and price-fixing. For example, owners of one e-commerce "platform" control about 70 to 80 percent of the total meat processing capacity in the U.S. "Electronic information can be shared very efficiently," Wheatley says. "It would be quite easy for processors to simply link buying protocols and begin to manipulate markets."

"But this doesn't mean there is or will be collusion and price-fixing," Wheatley says. "It's an issue for us to be aware of, not upset about. Legislators and regulators are starting to ask questions, and the digitization of market exchange leaves an electronic trail that could provide an excellent vehicle for monitoring transactions and verifying trading practices."

&lt;over&gt;

Also, ownership of Internet markets by "large" players could simply be driven by the fact that they have easier access to capital to set up the e-commerce ventures. Wheatley says. "And by their sheer size, they can attract users to the market."

E-commerce can help small niche producers if they work together with others in a cooperative venture to form a critical mass. "But unless they've already established markets, it's usually not cost effective for an individual small producer to develop his or her own website," Wheatley says. "With millions of websites out there, it's very difficult to gain the attention of potential customers."

"Although individual producers may find it difficult to generate their own electronic agents or applications, they probably won't be at a large disadvantage," Wheatley says. "And they probably won't be worse off using Internet market places than conventional ones."

"Overall, e-commerce is only one factor in market development," he says. "It's not a panacea for market problems, and won't bring a short run revolution in agriculture. Its effects on markets will evolve over the longer term."

"E-Commerce in Agriculture: Development, Strategy and Market Implications," is available at <http://agecon.lib.umn.edu>. Other authors are Brian Buhr, economist with the U of M Extension Service, and Dennis DiPietre, a food industry consultant. Buhr and DiPietre worked for an agricultural e-commerce firm in 1999-2000.

# # #

Web, V2, V4, A2, A4

whtly1191

Source: Parker Wheatley (612) 669-0331, [whea0025@umn.edu](mailto:whea0025@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 28, 2001

<http://www.extension.umn.edu/News>

## **U of M to offer Master Marketer program in Morris**

The University of Minnesota's Center for Farm Financial Management (CFFM) is bringing the Master Marketer program to Morris in January and February 2002. Over 250 growers have taken part in previous programs over the past three years.

It's at the Best Western Prairie Inn in Morris Jan. 9-10, Jan. 23-24 and Feb. 6-7. Edward Usset, grain marketing specialist with the U of M Extension Service, will lead the program.

The Master Marketer program is four days of intensive marketing training for grain producers. It's an intensive education program to improve marketing skills and increase farm revenues. It also encourages the development of marketing clubs.

Subjects discussed in the workshop include marketing strategies using futures and options, an integrated risk management workshop, fundamental and technical price analysis, crop insurance and marketing clubs. Speakers include two of the premier grain analysts in the country, Bill Tierney of Kansas State University and Robert Wisner of Iowa State University (ISU). Al Kluis of North Star Commodities and Elwynn Taylor of ISU will also speak.

The registration fee is \$325 per person, and includes all lunches and handout materials. For a brochure or to register, contact CFFM at (800) 234-1111 or (612) 625-1964. You can also e-mail your requests to [cffm@cffm.agecon.umn.edu](mailto:cffm@cffm.agecon.umn.edu) or look up details on the CFFM web site at [www.cffm.umn.edu](http://www.cffm.umn.edu). To learn more about the content of the course, contact Ed Usset directly at (651) 681-7999, or e-mail [usset001@umn.edu](mailto:usset001@umn.edu).

# # #

Web, V2MN, V4MN, A2, F4, 80, 06, 26, 63, 81, 83

craven11271

Source: Bob Craven (612) 625-1964, [rcraven@umn.edu](mailto:rcraven@umn.edu)Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)



November 28, 2001

## **Base grain marketing decisions on planning, not emotions**

Be guided by your plan, not your emotions, if you want to be successful in marketing your grain. The most dangerous emotions in grain marketing are fear and greed, says Ed Usset, grain marketing specialist with the University of Minnesota Extension Service.

"These emotions can and will affect your selling decisions," says Usset. "Using a consistent trading plan is the only workable strategy to keep from responding to the market emotions of the moment."

An effective plan requires that you know and control your costs, says Usset. "For long-term survival in a commodity market, producers must continually strive to keep production costs low," he points out. "FINPACK is a farm financial software package that can help with this." FINPACK is available from the University of Minnesota Center for Farm Financial Management, 249 Classroom Office Building, St. Paul, MN 55108. A demonstration of FINPACK is on the Internet at [www.cffm.umn.edu](http://www.cffm.umn.edu).

Usset, a member of the Center for Farm Financial Management staff, says treating grain marketing as a year-round task is necessary for success. "In today's environment of increased price volatility, pricing opportunities can develop any time, sometimes well before the crop is harvested," he says. "Weather scares and new crop uncertainty can push prices higher in a developing crop. Many research studies have

shown that pre-harvest pricing strategies that can take advantage of these market bulges are more profitable than post-harvest strategies."

Tools for pricing grain before harvest including the forward contract, futures contract and hedge-to-arrive contract.

Respecting seasonal trends is another key factor in effective marketing. "All commodity prices tend to follow some well-defined patterns throughout the marketing year," says Usset. "While not every year is the same, we can define certain times in the year as better selling opportunities."

To use marketing tools effectively, it's necessary to develop a solid knowledge of cash-futures price relationships, says Usset. The difference between cash and futures prices is commonly known as the "basis."

"The basis for a storable commodity displays a distinct seasonal pattern," says Usset. "With grain stocks and the demand for storage high at harvest, cash prices are often at their largest discount to the futures. As the crop is put away and some is used, the supply of storage increases relative to demand for its use, and the basis narrows. Astute decision-makers gather a 3-5-year history of their local basis, using daily or weekly data. Many marketing tactics require a knowledge of the basis."

For further information on grain marketing, contact Usset at (651) 681-7999 or your county office of the U of M Extension Service.

# # #

Web,V2,V4MN,A2,A4

usst1119

Source: Ed Usset, (651) 681-7999

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

November 28, 2001

**U of M offers workshops on developing pre-harvest marketing plans**

The University of Minnesota's Center for Farm Financial Management (CFFM) is bringing a one-day workshop called "Develop and Execute your Pre-Harvest Grain Marketing Plan" to six different Minnesota cities in January and February 2002. Over 200 Minnesota growers participated in similar workshops last year.

The first workshop will be in Mankato Jan. 16. Subsequent workshops will be in Willmar Jan. 18, Rochester Jan. 30, Luverne Feb. 1, Crookston Feb 13 and St. Cloud Feb 15. Edward Usset, U of M grain marketing and teaching specialist, and Bob Craven, director of the CFFM and economist with the U of M Extension Service, will lead the programs.

During this workshop producers will examine the key elements of a pre-harvest marketing plan and learn how to establish price objectives and decision dates. The use of a wide variety of futures and options pricing tools will be reviewed. "Marketeer" software will be used to highlight the details of market plan development. New for this year is a simulation game where participants can exercise their marketing plan in a real world environment.

The registration fee is \$95 per person, which includes lunch and handout materials. For a brochure or to register, contact CFFM at (800) 234-1111 or (612) 625-1964.

You can also e-mail your requests to [cffm@cffm.agecon.umn.edu](mailto:cffm@cffm.agecon.umn.edu) or look up details on the CFFM web site at [www.cffm.umn.edu](http://www.cffm.umn.edu). To learn more about the content of the course, contact Ed Usset directly at (651) 681-7999, or e-mail [usset001@umn.edu](mailto:usset001@umn.edu).

# # #

Web, V2MN, V4MN, A2, F4

craven11261

Source: Bob Craven (612) 625-1964, [rcraven@umn.edu](mailto:rcraven@umn.edu)Editor: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

November 28, 2001

<http://www.extension.umn.edu/News>

## **Minnesota Dairy Days will be at 8 locations in January**

Practical ideas for success in dairying will be the focus of Minnesota Dairy Days 2002 at eight locations in January. The events will feature plenty of time for interaction and discussion among producers, according to Marcia Endres, University of Minnesota dairy scientist.

Endres says the events are designed for producers, but are also open to veterinarians, educators, consultants, agribusiness representatives and other interested persons. The program will be from 10 a.m. to 3 p.m. at each location, following a half-hour for registration. While the program will be similar at each location, there will be a presentation by a local Extension educator on a different dairy management topic at each site.

A dairy research update will lead off the program. That will be followed by a session on dairy modernization. Kevin Janni, U of M Extension engineer, will cover facilities and manure handling. Jeff Reneau, U of M Extension dairy scientist, will discuss milking systems. Bill Lazarus, U of M Extension economist, will cover financing modernization.

A time for open questions and discussion will begin the afternoon session. Then Endres will discuss the basics of transition cows. She will be followed by a local

<over>

Extension educator covering a dairy management topic. An update on the state's Dairy Enhancement and Profitability Program and Business Planning Grants by Bob Lefebvre of the Minnesota Milk Producers Association will close out the program.

Pre-registration for a meal count is required one week prior to the meeting date. The fee is \$25 for the first person from a farm and \$15 for each additional person. Registration flyers and additional information are available from the contact persons listed below or from Bonnie Rae at (612) 624-4995. There is a registration flyer on the Internet at [www.ansci.umn.edu/dairy/calendar/2002mdd-brochure.pdf](http://www.ansci.umn.edu/dairy/calendar/2002mdd-brochure.pdf).

Dates, locations and local contacts for Minnesota Dairy Days 2002 are:

- Jan. 8, Thief River Falls, Best Western, George Marx, (218) 281-8606;
- Jan. 9, Perham, VFW, Vince Crary, (218) 385-3000;
- Jan. 10, Alexandria, Holiday Inn, Larry Zilliox, (320) 762-3890;
- Jan. 11, Milaca, Embers Restaurant, Jim Salfer, (320) 255-6169;
- Jan. 15, Edgerton, Pizza Ranch, Wayne Schoper, (507) 794-7993;
- Jan. 16, New Ulm, Turner Hall, Wayne Schoper, (507) 794-7993;
- Jan. 17, Zumbrota, VFW, Chuck Schwartau, (651) 385-3100;
- Jan. 18, Lewiston, Community Center, Neil Broadwater, (507) 457-6440.

# # #

Web,V2MN,V4MN,V5MN,D1MN

endr1121

Source: Marcia Endres, (612) 624-5391

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 30, 2001

## **Tool available to estimate livestock odor impact**

A tool to estimate the impact of odor from livestock and manure storage facilities is available in a new publication from the University of Minnesota Extension Service. The name of the tool and the publication is "Odor from Feedlots Setback Estimation Tool," or OFFSET.

The tool is a five-step formula that's based on odor measurements from Minnesota farms and Minnesota climatic conditions. It's the result of four years of extensive data collection and field testing, according to U of M Extension engineer David Schmidt. Schmidt is one of the developers of the tool and one of the publication's authors, along with Extension engineer Larry Jacobson and research associate Susan Wood.

"Prediction of odor problems is important as rural and non-rural areas converge," says Schmidt. "Odor impact estimates can be useful for rural land use planners, farmers or citizens concerned about the odor impact of existing, expanding or new livestock production sites. Until now, scientific methods to predict odor impacts did not exist."

The amount of odor emitted from a particular farm varies according to animal species, housing types, manure storage and handling methods, the size of the odor

<over>

sources and the use of odor control technologies. However, the impact of these odors on the surrounding neighborhood or community depends on both the amount of odor and the weather conditions.

“OFFSET combines odor emission measurements with the average weather conditions to estimate the strength and frequency of odor events at various distances from a given farm,” says Schmidt.

The “OFFSET” publication is on the Internet at [www.extension.umn.edu/distribution/livestocksystems/DI7680.html](http://www.extension.umn.edu/distribution/livestocksystems/DI7680.html) . It’s also available for purchase from county offices of the University of Minnesota Extension Service. Ask for item FO-07680. Also available is a related publication entitled “Preparing an Odor Management Plan.” Ask for item FO-07637. It’s on the Internet at [www.extension.umn.edu/distribution/livestocksystems/DI7637.html](http://www.extension.umn.edu/distribution/livestocksystems/DI7637.html) .

Both publications are also available for purchase from the U of M Extension Distribution Center by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu), or by credit card at (612) 624-4900 or (800) 876-8636.

# # #

Web,V2,V4MN,A2,A4,D1,S2,P3

schm1126

Source: David Schmidt, (612) 625-4262

Writer: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 30, 2001

**Conservation Security Act could make U.S. organic farmers competitive**

The proposed Conservation Security Act in the Farm Bill could "level the playing field" and make U.S. producers more competitive in the global organic market, says an economist at the University of Minnesota.

European Union (EU) organic producers have captured much of the international market due to government subsidies, says Luanne Lohr, holder of a U of M School of Agriculture Endowed Chair in Agricultural Systems. Lohr says European organic producers have benefited from early development of EU organic certification standards in 1991 and agri-environmental support programs implemented under a EU regulation in 1992.

U.S. organic farmers have fallen behind since they're at a disadvantage due to lack of similar government support, Lohr says. "The Conservation Security Act could level the playing field by providing farmers with financial support for practices that protect the environment," Lohr says. "This includes organic production, and these payments would not be subject to WTO limits on subsidizing production."

The growing international organic market is conservatively projected to reach sales of \$102 billion by 2010. Current value of the European organic market is estimated at \$5.2 billion, of which U.S. imports contribute only four to six percent. The Japanese organic market is estimated at \$3 billion, but U.S. imports constitute only three percent.

&lt;over&gt;



The proposed Conservation Security Act is the only policy tool U.S. agriculture has to counter the European Union's advantage, Lohr says. "The European agri-environmental program is a 'Green Box' policy under the World Trade Organization (WTO). This means it's not subject to spending limits or elimination as long as payments are related to environmental enhancement rather than production or export performance."

Organic farming is risky, and 28 percent of U.S. organic farmers earned less than \$5,000 in gross income in 1997. With some income risk protection, more farmers could promote their exports, Lohr says. This could include travel to international trade shows sponsored by the USDA Foreign Agricultural Service, certification with more expensive internationally recognized certification bodies and tailoring crops to meet product demand in international markets.

Lohr is a faculty member on leave from the University of Georgia. Her research was also supported by the Minnesota Institute for Sustainable Agriculture. She's written a new paper, "The Importance of the Conservation Security Act to U.S. Competitiveness in Global Organic Markets," that's available at <http://agecon.lib.umn.edu/> on the Internet.

# # #

Web,A2, A4, V2, V4, P1

lohr11291

Source: Luanne Lohr (612) 624-7258, [llohr@apex.umn.edu](mailto:llohr@apex.umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

November 30, 2001

## **Agricultural weather network adds station at Roseau**

A new agricultural weather station is now operating at Roseau as part of a network of over 50 weather stations in northwest Minnesota and North Dakota. Information from the stations is available 24 hours a day by telephone or from the Internet.

The stations provide information on air temperature, rainfall, potential evapotranspiration, growing degree days and crop water use. They also report dew point temperature, soil temperature, relative humidity, solar radiation, air pressure, and wind speed and direction.

"The information on growing degree days is especially helpful to farmers," says Curt Nyegaard, Roseau County educator with the University of Minnesota Extension Service. "When farmers know the planting date of their crop, they can determine the growth stage from weather station data without having to physically check the field. They can determine the best treatment times for weeds, insects and diseases."

The Roseau weather station is part of the North Dakota Agricultural Weather Network (NDAWN). Data from the Roseau station is available by calling (218) 424-7053 or going to [www.ndawn.ndsu.nodak.edu](http://www.ndawn.ndsu.nodak.edu) on the Internet.

The website also has information from the other weather stations in northwest Minnesota. These stations are at Humboldt, Stephen, Warren, Eldred and Felton.

# # #

Web,V2,F4MN,Z1

nyeg1128

Source: Curt Nyegaard, (218) 463-1052

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

November 30, 2001

## **It's a good idea to keep tax records longer than four years**

The Internal Revenue Service says checks and receipts can be discarded after about four years, but it's a good idea to keep them longer.

"Prudent managers almost always keep their records longer than four years," says Erlin Weness, farm management educator with the University of Minnesota Extension Service. "There are many times you'll need to go back more than four years to find a specific check or receipt," he says. "If storage isn't an issue, keep all records as long as possible before discarding them."

Keep your account books and income tax returns at least until you retire. When storage becomes a big burden, discard all but the tax account books and tax returns, Weness advises. It's a good idea to keep all receipts, checks and information pertaining to any items you still own. Being able to put your hands on a document can save you a lot of time, trouble and sometimes money.

More detailed information is available in a new article by Weness and co-worker Jim Christensen titled "Establishing a Farm Filing System." You can find it at <http://swroc.coafes.umn.edu>. Or, ask a county office of the U of M Extension Service to download it from the Internet.

# # #

Web, V2, V4MN, A2, A4

weness11141

Source: Erlin Weness (507) 372-8210, [wenes001@umn.edu](mailto:wenes001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

December 4, 2001

### **Study: Aeration reduces soluble phosphorus in liquid swine manure**

Aerating liquid swine manure can reduce the amount of soluble phosphorus in the manure, a University of Minnesota study indicates. High phosphorus levels in manure can be a threat to water quality when the manure is applied to farm fields.

Jun Zhu, engineer with the University of Minnesota Extension Service, used aeration to raise the pH of swine manure. The higher pH enabled calcium and iron in the manure to react with soluble phosphorus to form insoluble compounds.

"Passing an aerating gas mixture through liquid manure slurry purges carbon dioxide out of solutions and causes pH to rise," says Zhu. "Based on a laboratory-scale experiment at the U of M Southern Research and Outreach Center at Waseca, we found that low-level aeration can raise the pH of manure."

Zhu found that with both intermittent (on and off every two hours) and continuous aeration, the manure pH increased by about one unit, from 6.5 to 7.5, within one day. This increase in pH was accompanied by a 75 percent reduction in soluble phosphorus concentration in the liquid manure.

"This study indicates it is possible to effectively reduce the soluble phosphorus concentration in liquid swine manure without using expensive chemical additives," says Zhu. "The liquid portion of the treated manure that contains low soluble

<over>

phosphorus can then be spread on fields immediately after aeration, while the solid portion can be processed separately. In this way, the environmental concerns about phosphorus pollution due to swine production might be significantly reduced."

Zhu also found that continuous aeration showed no advantage over intermittent aeration in removing soluble phosphorus. The advantage for intermittent aeration was that it used about half as much energy.

# # #

Web,V2,V4MN,A2,A4,C4,F4,D1,S2,P3

zhu1130

Source: Jun Zhu (507) 835-3620

Writer: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

December 4, 2001

## **U of M publication can help livestock producers plan odor management**

One way livestock producers can show their intentions to be a good neighbor is to develop an odor management plan. Such a plan can help avoid conflicts regarding odor, says David Schmidt, engineer with the University of Minnesota Extension Service. And in Minnesota, state law requires that feedlots with 1,000 animal units or more have an air emission plan.

"It has become common for livestock operations to have a manure management plan," says Schmidt. "These plans document the proper handling and application of manure onto cropland. Likewise, odor management plans identify potential odor sources, specify control strategies to reduce the odors and establish criteria for implementing the control strategies."

Schmidt says an odor management plan consists of four steps: (1) Create a list of potential odor sources on a farm. (2) Determine which of the odor sources are most likely to bring about odor complaints. (3) List one or two odor control strategies for each of the significant odor sources. (4) Develop a protocol to respond to odor complaints.

A new publication on "Preparing an Odor Management Plan" is available from the U of M Extension Service. Schmidt and Extension engineers Larry Jacobson and

<over>

Kevin Janni are the authors. The publication has detailed information about each of the four steps in developing an odor management plan.

“Preparing an Odor Management Plan” is on the Internet at [www.extension.umn.edu/distribution/livestocksystems/DI7637.html](http://www.extension.umn.edu/distribution/livestocksystems/DI7637.html) . It’s also available for purchase from county offices of the U of M Extension Service. Ask for item FO-07637. Also available is a related publication entitled “OFFSET—Odor from Feedlots Setback Estimation Tool.” Ask for item 07680. It’s on the Internet at [www.extension.umn.edu/distribution/livestocksystems/DI7680.html](http://www.extension.umn.edu/distribution/livestocksystems/DI7680.html) .

Both publications are also available for purchase from the U of M Extension Distribution Center by e-mail at [order@extension.umn.edu](mailto:order@extension.umn.edu), or by credit card at (612) 624-4900 or (800) 876-8636.

# # #

Web, V2,V4MN,A2,C4,F4,A4,D1,S2,P3

schm1129

Source: David Schmidt, (612) 625-4262

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
91

<http://www.extension.umn.edu/News>

December 7, 2001

## **Midwest Ridge and Strip-Till Conference will be Feb. 5 in Owatonna**

Using ridge-till and strip-till to make corn and soybean production more profitable will be the focus of an upcoming conference in Owatonna. The Midwest Ridge and Strip-Till Conference will be Feb. 5, 2002 at the Holiday Inn in Owatonna.

The program is designed for growers who are using ridge-till and strip-till, as well as those who are thinking about using these planting systems. Farmers from Minnesota and Iowa who use the systems successfully will describe their management practices. University of Minnesota faculty members will discuss fertilizer management and pest control options.

"It appears that future farm programs will have a strong link to soil conservation," says George Rehm, soil scientist with the U of M Extension Service. "Ridge-till and strip-till planting fit very well with any soil conservation program."

Rehm cites a recent survey showing that ridge-till farmers in Minnesota spend less to produce a bushel of corn or soybeans than neighbors who plant conventionally.

The conference program runs from 10 a.m. to 3:15 p.m. Registration begins at 8 a.m., and a round-table discussion for early arrivers begins at 9 a.m. Representatives of various companies that provide equipment and services for ridge-till and strip-till planting will be on hand to meet with growers.

<over>



The conference fee is \$55 per person. Early registration is strongly recommended. To obtain a registration flyer, call (612) 624-0724 or (800) 318-8636, e-mail [extconf@umn.edu](mailto:extconf@umn.edu) or go to [www.conferences.umn.edu/mn/crops](http://www.conferences.umn.edu/mn/crops) on the Internet. Registration from the website is also an option.

For further information on the conference program, contact Rehm at (612) 625-6210 or [rehmx001@umn.edu](mailto:rehmx001@umn.edu).

# # #

Web,V2,A2MN,C4MN,F4,X2

rehm1204

Source: George Rehm, (612) 625-6210

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

December 7, 2001

### **Horticulturist suggests care checklist to help poinsettias last longer**

Poinsettias should not be on anyone's list of holiday foods. However, the plants are not poisonous, says horticulturist Deb Brown of the University of Minnesota Extension Service.

"Poinsettias have milky white sticky sap that may irritate a person's eyes, or soft tissues of the mouth and throat if ingested," says Brown. "This could be why poinsettias were once considered poisonous. But thorough scientific testing has proven they aren't poisonous. Most people don't even find the sap irritating. So if a leaf gets into a child's mouth, there's no need to panic."

Brown says plant breeders have developed poinsettias that last much longer than in the past. "A poinsettia can become ugly and bedraggled without proper care," she notes. "But if you know how to care for it, you can easily keep your poinsettia looking good through late March into early April and beyond."

She provides the following checklist for keeping a poinsettia in top form:

--Make sure the plant is wrapped well when you bring it home. Unwrap it as soon as it's indoors. Even a few seconds of frost can kill a poinsettia.

--Expose it to at least six hours of bright light daily. The foliage needs good light for photosynthesis. If you don't care about keeping it more than a few weeks, you can put your poinsettia in a dim location, but the plant will live off stored energy and will deteriorate faster.

--Keep poinsettias away from cold, drafty locations as well as heat sources such as fireplaces or hot air ducts. Chilling can cause leaves to yellow and drop. Hot air causes wilting and drying.

--Keep night temperatures cooler than daytime, but no less than 55 degrees F. Slightly cool night temperatures slow the rate at which poinsettias use food energy, but too cool means trouble.

--Slice holes in the bottom of the decorative foil or plastic used to cover the pot, so water drains freely. Waterlogged soil will bring root rot, leaf loss and plant death.

--Water soil thoroughly with barely lukewarm water whenever the soil surface feels dry. Pour out excess water that collects in the tray or saucer. Never water when the soil surface feels wet, but don't let it get too dry either. Leaves that are frequently allowed to wilt won't last long.

--Begin monthly fertilization after you've had the plant about six weeks. Use houseplant food mixed half strength. If you don't plan to keep your poinsettia beyond January, fertilizing isn't really necessary.

For answers to your plant care and gardening questions, call the U of M Yard and Garden Line at (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area.

# # #

Web,V2,V4MN,V5MN,V8MN,C4,H7,T2

brow1208

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

December 7, 2001

**'Real' Christmas trees provide environmental, economic benefits**

Christmas trees from tree farms generally grow on land that's not well-suited for intensive food crop production. They provide several environmental benefits, says horticulturist Deb Brown of the University of Minnesota Extension Service. Thus, there's no reason to feel anything but positive about buying a "real" tree, says Brown.

"Each acre of living Christmas trees puts enough oxygen into the air to supply the needs of 18 people," says Brown. "And there are at least a million acres in the U.S. devoted to growing them. Every year as trees are harvested, more are planted to take their place. Meanwhile, their roots hold soil in place, preventing erosion. They also provide shelter for birds and other wildlife."

In addition to their environmental benefits, Christmas trees boost the Minnesota economy, says Brown. Over a half-million trees are harvested annually in the state and shipped all over the country.

If you do choose a tree grown on a farm, it's important to keep it fresh and prevent drying. Brown says the best way to do this is to saw about two inches off the bottom, then set it immediately in a large stand filled with warm water. She says there is no need to add anything special to the water.

"Check the stand several times daily to make sure it never runs dry," says Brown. "If it does, the tree trunk will seal over and won't absorb much water until you

saw off the bottom again. This is very difficult, if not impossible, once the tree has been decorated."

An increasing number of trees are collected and fed into chippers after the holidays to provide mulch for gardening and landscaping. Sometimes entire branches provide cover for bulb beds and mulch for ornamental perennials.

The Minnesota Christmas Tree Association website at [www.mncta.com/index.html](http://www.mncta.com/index.html) has information on different types of Christmas trees and where to buy them.

The University's Yard and Garden Clinic has experts to answer questions on plant care and gardening between 9 a.m. and 1 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county.

# # #

Web,V2,V4MN,V5MN,V8MN,C4,H7,T2

brow1207

Source: Deb Brown, (612) 624-7491

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

December 7, 2001

## You'll want to bookmark the Extension Service website

Gardening and houseplants, tips on retirement and raising teenagers, and timely farm management tips are just some of the topics you'll find on the newly-designed University of Minnesota Extension Service website at [www.extension.umn.edu](http://www.extension.umn.edu).

You'll find detailed news you can use—sometimes resulting from the latest headlines. For example, "Restoring Hope in the Wake of Terrorism" was created shortly after Sept. 11. It has advice for parents and teachers and sections on building tolerance, understanding Islam and giving and receiving assistance.

You can find about 10,000 documents organized around six topics: community, environment, family, farm, garden and living. There are links to 4-H-- Extension's youth program, the Info-U consumer line, Minnesota Agricultural Experiment Station and the Yard and Garden Line. You can also find listings of Extension educational workshops near you, along with links to county Extension office websites throughout Minnesota.

The site has a new look and is easier to navigate. It connects you with other outreach activities at the University of Minnesota, such as courses available through the College of Continuing Education.

There's a good chance your friends and neighbors are using it—there were over one million "hits" in November 2001. If you don't have it bookmarked, what are you waiting for? Make it your free holiday gift to yourself.

# # #

Web, V2, V4, A4, G1

website11191

Source: Karen Lilley (612) 624-3707, [kll@umn.edu](mailto:kll@umn.edu)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

December 7, 2001

## **New policy goal should be more farmers, not fewer**

By Richard A. Levins

I spent a week this fall visiting farms in Holland and the European Union headquarters in Brussels. As I had expected, we talked about high-profile issues such as food safety, mad cows and genetically modified organisms. But the discussions I found most interesting were about policies that would save small farms and preserve the character of rural areas.

The current member countries of the European Union (EU) have almost eight million farms, four times as many as we have in the United States. As other countries join the EU, millions more farms will come under Common Agricultural Policy. Should that policy demand that these farms "get big or get out," the path we have taken here, or should they try something else?

I think the answer depends on what you expect from a farmer. In the United States, our policies most often take a fairly narrow view of what a farmer does: plant and harvest crops, feed and care for livestock. Waves of new technology constantly make it possible for fewer people to do these vitally important tasks. Hence, we hear solutions to the farm income problem that would reduce the number of farmers. In short, we have too many farmers.

The Europeans I met took a different, broader view of the farmer's job description. In addition to producing food, the European farmer is expected to play a significant role in supporting rural economies and in protecting the environment. This is additional work, and it requires more farmers, not fewer.

Don't American farmers have the same goals for their communities and their environment? Of course they do. Two decades of working with farmers have, if nothing else, taught me that the farmer's heart is in the right place. But it is unrealistic for public policy to on one hand ask farmers to do more, and on the other hand, to talk of needing fewer farmers.

The European idea may not seem new for U.S. farmers, but we apply it all the time to other professions. Teachers, for example, must pass textbook knowledge along to students. But they also must encourage students and lend excitement to learning. They must be the first to diagnose all types of student problems. They must participate in the overall process of making sure that their school provides the best possible learning environment.

This is why, in spite of new teaching technologies, we continue to prefer smaller class sizes and more teachers. The same reasoning applies to nurses, police officers and many other professions. We want more of them, not fewer.

But somehow, the language of teachers, of nurses, and of police officers does not apply to farmers in this country. Surely, the best of farmers cannot do as much for the environment when they are responsible for 2,000 acres instead of 200, or 500 dairy cows

<over>



instead of 50. And no one thinks that rural communities will be better off if we pursue a policy that basically "lays off" good farmers and asks them to move elsewhere.

It's time we stopped inventing policies to reward the largest farmers and do without the rest. Instead, we should be talking of farmers the way we do teachers, nurses, and other providers of services we all value. We would be better off with more farmers, not fewer.

# # #

Levins is a professor and economist with the University of Minnesota Extension Service (dlevins@apex.umn.edu). He has written Willard Cochrane and the American Family Farm (University of Nebraska Press, 2000), a book that reinterprets the history of 20<sup>th</sup> century farm policy.

Web, A2, A4, V2, V4, P1

levins1231

Source: Richard A. Levins (612) 625-5238, [dlevins@apex.umn.edu](mailto:dlevins@apex.umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MISC  
9A27p

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

December 11, 2001

## **Website, Extension offices have U of M soybean variety trial results**

Choosing the right soybean variety is one of the most important steps a grower can take to produce a bountiful crop in 2002. A website with results of the 2001 University of Minnesota Soybean Variety Trials can be a key resource for making the right choice. It's at [www.soybeans.umn.edu](http://www.soybeans.umn.edu) . Producers without Internet access can get the variety trial results from the Internet at their county office of the U of M Extension Service, and a print version will soon be available.

"University trials are the only source for independent and reliable variety evaluation," says Seth Naeve, U of M Extension soybean agronomist. "Although individual seed companies can adequately evaluate their own products, without independent appraisals there is no way to judge varieties from competing companies."

The way yields are reported has changed this year, Naeve points out. To make it quicker and easier for growers to find the most productive variety in each of the tests, yields are reported on a percentage basis. The performance of each variety is scored relative to the average yield of all varieties in the test. This "percent of the mean" score quickly shows which varieties yield above average (more than 100 percent) and which yield below average (less than 100 percent).

The University of Minnesota variety trials test conventional, Roundup Ready, soybean cyst nematode-resistant and special use varieties. "Because average and top

<over>

yields differ from one test to another, it has in the past taken some effort to find the best-yielding varieties," says Naeve. "Now producers can just look for the varieties that yield several percentage points above average in any test."

Naeve says varieties should be judged as yielding significantly different only if their yields differ by more than the LSD, or least significant difference. This figure is listed at the bottom of yield tables. The LSD is now given as a percentage, so only varieties that yield more than five percentage points different in a test with an LSD of five should be considered to perform differently.

Yields in bushels per acre for any variety can be calculated by multiplying the variety's percent of the mean score by the mean yield. For instance, the yield for a variety that scored 105 in a test with a mean yield of 60 bushels per acre would be 63 bushels per acre ( $60 \times 1.05 = 63$  bushels per acre).

Further information on yield trials for soybeans and other crops is available from county offices of the University of Minnesota Extension Service.

# # #

Web,V2MN,V4MN,F4MN,X2

naev1210

Source: Seth Naeve, (612) 625-4298

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MISC  
7/27/01

December 11, 2001

## U of M soybean website focuses on production information

A visit to the University of Minnesota's soybean website to check variety and pest management information may be the best way to get next year's crop off to a good start. The site at [www.soybeans.umn.edu](http://www.soybeans.umn.edu) focuses on production information for farmers. It's currently highlighting variety performance evaluations from the 2001 season, according to Seth Naeve, soybean agronomist with the U of M Extension Service.

Producers and agricultural professionals can check results of the U of M Soybean Variety Trials as well as results from county strip trials. Producers without Internet access can get copies of the trial results at their county Extension office.

The website is also a resource for timely crop production concerns. "There is a wealth of information on our new pest, the soybean aphid," says Naeve. "As research results from the 2001 season are analyzed, entomologists are providing new knowledge to the site. As we learn more, we can make better recommendations for battling this pest in 2002. Be sure to monitor the website to keep up to date on local outbreaks and management alerts as the season unfolds."

The website is also a resource for soybean disease and disease management information. "Managing diseases has become increasingly important for Minnesota soybean farmers," says Naeve. "It is essential to stay updated on new products and forms of genetic resistance and understand how to use them as losses from soybean diseases increase."

# # #

Web, V2MN,V4MN,F4MN,X2

naev1211

Source: Seth Naeve, (612) 625-4298

Editor: Joseph Kurtz, (612) 625-3168, [jk@umn.edu](mailto:jk@umn.edu)

136  
137

<http://www.extension.umn.edu/News>

December 11, 2001

## **Competition to rent land can lead to unrealistic yield, price projections**

Farm operators bidding on new land parcels that become available for cash rent need to do some precise calculations. That means checking costs and projected break-even yields and prices carefully, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

"Getting caught up in the desire for more land to farm can lead to unrealistic projections," says Thiesse. "It's important to account for all cash and overhead costs of renting the extra land. There may be times when a farm operator is better off to let someone else rent the land rather than pay a high cash rent."

High rental rates are most likely to occur when a landlord makes a land parcel available to multiple potential farm operators, says Thiesse. This makes the rental process more competitive.

"Land rental rates tend to be more stable and closer to average rates in ongoing rental agreements or in new agreements that are quietly worked out between a landlord and a new tenant," says Thiesse.

Average land rental rates for 2002 are likely to stay steady with 2001 rates, according to the annual land rental survey in south central Minnesota conducted by the U of M Extension Service.

“There is really no justification for sharp increases in land rental rates for 2002, says Thiesse. “Corn and soybean prices remain at some of the lowest levels in several decades. Yields in 2001 were average or below—average in much of Minnesota. Government farm programs have provided a large portion of farm income in recent years. There are currently no provisions for market loss assistance or oilseed payments for 2002, and it appears doubtful Congress will finalize a new Farm Bill in time for the 2002 crop.”

A land rental survey booklet with survey results from 13 south central Minnesota counties is available from Extension offices in those counties or by calling (507) 389-8325.

# # #

Web,V2,A2,A4,F4

thie1207

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
1-1-01

December 14, 2001

## **'Positive Discipline' book helps parents face the challenges**

Kids don't come with directions. But you can get some direction on parenting young children with a 52-page book from the University of Minnesota Extension Service.

"Positive Discipline: A Guide for Parents" looks at some of the common parenting challenges parents may face with children from birth through early elementary school. It features easy-to-use, positive discipline techniques to guide your child's behavior.

An example is sibling battles, where fights may occur over property and personal space. Tips for parents include setting clear rules about what things in the house are to be shared and what things are private. It's up to the "owner" (child) to decide to share private things.

Other tips on sibling rivalry:

- Try not to compare your children—treat each as an individual.
- Give each child a chance to have your undivided attention.
- Ask your children to come up with ideas about how to get along better.

However, you're the one who decides which of their ideas make sense.

Sibling rivalry is one way children learn how to deal with conflict. If possible, let the children work the problem out. Step in only when they can't seem to work things out and the conflict might get out of hand.

"Positive Discipline: A Guide for Parents" is available at nominal cost from county offices of the University of Minnesota Extension Service. Or, call the Distribution Center at (800) 876-8636 or (612) 624-4900 in the Twin Cities area. Ask for item 07461.

You can find many other publications on families and parenting at [www.extension.umn.edu/family](http://www.extension.umn.edu/family) on the Internet.

# # #

Web, V4, F1 posdiscipline

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



NISC  
9/2/01

December 14, 2001

## **Trying to remove snow and ice may not benefit trees**

The snow and ice that winter brings to Minnesota can damage trees and shrubs. But trying to remove the snow and ice isn't always a good idea. Doing so at the wrong time or in the wrong way can cause more damage, according to Janna Beckerman, plant pathologist with the University of Minnesota Extension Service.

"Heavy, wet snow and ice can weigh down and break branches, split trees and even kill them outright," says Beckerman. "All trees are susceptible, some more than others. Heavy snow or ice on any tree with weak branches can cause breakage."

Beckerman says weak-wooded deciduous trees such as Siberian elm, green ash and silver maple are all very susceptible to winter breakage. Multiple leader or clump trees, such as birch or redbud, are highly susceptible to snow and ice damage. High winds that often accompany snow or ice storms can greatly increase the likelihood of breakage.

Even healthy limbs of broadleaved trees and shrubs can break if the ice or snow is extremely heavy, says Beckerman. And if too much snow or ice accumulates on the upper part of a tree, the root system can be lifted out of the ground.

Wet, heavy snow or ice on conifers often leaves them drooping. "Upright evergreens, such as aborvitae and juniper, are probably the most susceptible to snow

and ice damage," says Beckerman. "Spruce and fir are more resistant. Pines tend to be moderately susceptible, depending on location and size."

When branches are frozen and brittle, don't try to remove snow and ice, says Beckerman. When conditions are warmer, she recommends gently shaking the snow or ice from branches. Another approach is to carefully brush off the snow with a broom in an upward fashion. Downward strokes only put greater stress on the branch. If ice-covered branches on small trees and shrubs are severely bent, she recommends propping them up with stakes to prevent breakage.

"Whatever you do, don't beat the tree or shrub with a broom or rake," says Beckerman. "This may not only cause greater damage, but can also create new openings for diseases to enter."

She also cautions against trying to remove ice or snow from large trees. "Nothing can be done to prevent damage to large trees," she says. "And saving the tree but losing the homeowner is never recommended. Homeowners can be injured or killed if a large, ice-laden branch or tree breaks while the homeowner is underneath it."

For answers to your plant care and gardening questions, call the U of M Yard and Garden Line at (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area.

# # #

Web,V2,V4MN,V5MN,G1

bckrm1212

Source: Janna Beckerman (612) 625-7022  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

MISC  
0A27

December 14, 2001

## **Minimizing future damage from snow and ice can help trees survive**

Winter damage from snow and ice can detract from the beauty of trees and shrubs in a yard. And when a tree is wounded by snow and ice damage, it becomes more vulnerable to disease.

"Injury sites provide openings for numerous fungi," says Janna Beckerman, plant pathologist with the University of Minnesota Extension Service. "These opportunistic disease organisms readily colonize the injured sites and can turn a damaged tree into a dead tree."

Beckerman recommends pruning trees and shrubs at the appropriate time to reduce the amount of snow and ice they will collect. "Remove branches that are or may become weak," she says. "Branches with wide angles to the main stem are structurally stronger and can support more snow and ice than those with a narrow or acute angle."

When in doubt, check with a professional arborist about cabling and bracing weak limbs, says Beckerman. Small trees and shrubs can be wrapped together. Another option is to tie branch leaders with strips of burlap, strong cloth or even nylon stockings two thirds of the way above weak tree crotches. Remove these wrappings in the spring to prevent girdling.

Being careful where you plant trees and shrubs can help avoid snow and ice damage. "Plant them away from places where the snowmelt from a roof will drip on

them," she says. "In Minnesota, dripping water will eventually freeze on the plants and accumulate, building up enough ice to break branches. Wooden barriers built over small shrubs can allow snow and ice to slide off rather than accumulate."

If you live where ice storms are a regular occurrence, you can plant trees that are more "resistant" to snow and ice. Trees Beckerman lists in this category include ginkgo, black walnut, catalpa, littleleaf linden and white oak. Trees to avoid include black locust, honey locust, hackberry, American elm, Siberian elm and green ash.

The University's Yard and Garden Clinic has experts to answer questions on plant care and gardening between 9 a.m. and 1 p.m. weekdays. Call (612) 624-4771 in the metro area or (888) 624-4771 from outside the metro area. There is a \$5 fee, which can be billed to a major credit card.

The clinic is one of the services available through Yard and Garden Line. Also available are free recorded messages 24 hours a day from Info-U. And at no charge, callers can request a return call from a Master Gardener volunteer in their county.

# # #

Web, Web,V2,V4MN,V5MN,G1

bckrm1213

Source: Janna Beckerman (612) 625-7022

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

NR  
1-47

UNIVERSITY OF MINNESOTA

**Extension**

S E R V I C E

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

December 14, 2001

## **An IRS audit will be less stressful if you're prepared**

Being prepared for an Internal Revenue Service (IRS) audit you hope never happens will nonetheless make the audit easier and less stressful. Erlin Weness, farm management educator with the University of Minnesota Extension Service, lists 12 tips in a new publication he's written:

1. Keep receipts to justify all deductible expenses and capital purchases, and keep them filed according to your expense ledger accounts.
2. Keep checks to verify all deductible bills paid. Write the purpose of the check in the memo portion of the check. Every memo should relate to a clear business or deductible personal expense. If you write "food," "life insurance," or "kid's allowance" on the check, don't expect it to be deductible.
3. Don't try to deduct capital items as current repairs. If any repair checks are for a large amount, expect the auditor to make you prove they're repairs rather than a capital purchase. It may be better to write numerous small checks for repairs.
4. File and keep all W-2 Forms, 1099s, K-1s and other informational returns sent to you by financial institutions, employers and other businesses at year-end.
5. Use proper terminology for all entries in your accounting program. Don't type or write in such things as "gift," or "used tractor" (if you are entering it in repairs).
6. Write checks for specific items. If you write one check for several items such as feed, fertilizer or repairs, it can be very confusing for an auditor. Weness says auditors like to see one check for every bill, not one check for several bills.
7. Write checks for all charitable contributions. Cash donations may not fly very well. If you give property to charities, have proper documentation and a receipt.

<over>

8. If you buy capital items such as machinery, list them as capital purchases and put them on your depreciation schedule. If listed as repairs, they will probably be ruled non-deductible and moved to your depreciation schedule.
9. Make sure you have a current, qualifying written employment agreement or rental agreement if you are employing or renting land from your spouse. The same goes for renting to or being employed by your corporation or if using the Sec. 105 medical plan. Weness says these are current "hot buttons" for the IRS.
10. Having an organized filing system for retrieval of important receipts can be a big help if you are audited. An audit is a demand for you to prove the legitimacy of your tax bill. If you can't prove an item, don't expect to deduct it.
11. Keep a journal of difficult or hard to understand transactions handled during the year. It's easy to forget your reasoning regarding accounting entries a year or two later. Write down unusual transactions to explain them while you understand them and include them with your documentation for the year. Commodity Credit Corporation and USDA transactions may particularly need explanations.
12. Don't take shortcuts when dealing with the IRS. If the proper thing is to write and exchange checks, do so instead of writing a "net" check. Document in writing any item pertaining to self or family deals. The IRS particularly scrutinizes family and controlled group transactions.

For more information, see the publication "Preparing for an IRS Audit" at <http://swroc.coafes.umn.edu>. Or, ask a county office of the U of M Extension Service to download it from the Internet.

# # #

Web, A2, A4, V2, V4

weness12111

Source: Erlin Weness (507) 372-8210, [wenes001@umn.edu](mailto:wenes001@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
9/2/01

# NEWS & INFORMATION



<http://www.extension.umn.edu/News>

December 14, 2001

## **Beef cattle value-based marketing home study course offered by U of M**

A home study course for beef cattle producers on "Preparing for Value-Based Marketing" is available this winter from the University of Minnesota Extension Service.

The six-lesson course is for producers with both large and small operations. It's designed to provide producers with the information necessary to make profitable value-based marketing decisions.

Course lesson topics include feeder calf management for successful marketing, breed selection and breeding geared for value-based marketing, using EPDs to improve value, collecting and utilizing carcass information, marketing alternatives and making marketing decisions.

The course provides an educational opportunity for those who find it difficult to attend meetings due to work schedule, family commitments or geographic location. This is the fourth beef cattle home study course offered by the U of M Extension Service. It's adapted from a similar course that was successful in Nebraska.

Registrations received by the January 15 deadline will guarantee course enrollment. Course lessons will be mailed to participants every 6-10 days beginning in late January from the Pipestone County Extension Office.

<over>

Printed materials from the first three course offerings, "Breeding Herd Management," "Health Management" and "Pasture Management," are also available.

The course registration fee is \$30, and covers the six lessons, a three-ring binder, supporting reference materials and postage costs. Additional information and registration forms are available from the Pipestone County Extension Office, 119 2nd Ave. SW, Suite # 2, Pipestone, MN; phone (800) 967-2705 or (507) 825-6715. There are also registration forms on the Internet at [www.extension.umn.edu/county/pipestone](http://www.extension.umn.edu/county/pipestone). Click on the "Program" heading and look for "Beef Home Study Courses."

# # #

Web, V2,V4,V5,B1MN,B1IA,B1ND,B1NE,B1SD,B1WI

berg1213

Source: Philip Berg, (507) 825-6715

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*



December 18, 2001

## **Be careful about certifying in writing that crops are free of GMOs**

Be careful about signing any document certifying that crops you have grown are free of genetically modified organisms (GMOs). Such a document could make you legally responsible for something you can't control, says Blue Earth County educator Kent Thiesse of the University of Minnesota Extension Service.

There has been resistance in Europe, Japan and some other countries to grain that was produced with GMO varieties and hybrids. As a result, some grain dealers or processors may seek to buy grain that is certified as non-GMO. But producers should only sign certifications for grain growing and handling practices they have control over, says Thiesse.

"A good rule of thumb is to only sign contracts and certification for non-GMO grain production that could be reasonably verified if problems occur," says Thiesse.

"Producers don't control grain after it leaves the farm."

Thiesse says a grower could reasonably commit to the following statements in a contract or certification regarding non-GMO grain:

- No seed represented by the seed company as GMO was planted.
- Seed represented by the seed company as non-GMO was planted.

--Care was taken to avoid contamination in all operations including harvest, storage and transportation of the grain.

Some statements for producers to avoid in a contract or certification are:

--The grain has no GMO germplasm.

--No contamination occurred in harvest, storage or transportation of the grain.

--No contamination has occurred from pollen drift.

When in doubt, it's probably best to seek the advice of an attorney or other professional before signing any non-GMO contract or certification, says Thiesse.

"Thus far, very few grain elevators or warehouses are segregating grain as GMO or non-GMO, and even fewer are paying any premiums for non-GMO grain," says Thiesse. "That could change if the demand for non-GMO grain increases and if better standards and certification procedures are established."

# # #

Web,V2,V4MN,A2,F4

thie1211

Source: Kent Thiesse, (507) 389-8141

Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

MSC  
1/1/01

December 18, 2001

## Living snow fences have advantages over slatted fences

Living snow fences (LSFs) offer a promising solution to problems caused from blowing snow, according to a new University of Minnesota publication.

LSFs--designed plantings of trees, shrubs or native grasses--have many advantages over wooden slatted fences, according to research by the Center for Integrated Natural Resources and Agricultural Management (CINRAM) at the U of M.

The living fences are often more cost effective than structural snow control methods. They're more attractive, provide wildlife cover and last longer than wooden structures. Once established, they require little maintenance for up to 50 years.

"Experience and research have brought windbreak technology a long way in the past 30 years," the publication says. "Living snow fences can be made much more effective than in the past."

It's also possible to make some money by marketing the products from LSFs. Examples include a system with single rows of walnut and high-bush cranberry, and another system with single rows of hawthorn and chokecherry.

You'll find more details in "Producing Marketable Products from Living snow Fences," available from county offices of the U of M Extension Service. Or, call (800) 876-8636 or (612) 624-4900 in the Twin Cities area and ask for publication number 07646.

# # #

Web,A2, A4, C4, V2MN, V4MN

currnt12171

Source: Dean Current (612) 624-4299, [curre002@umn.edu](mailto:curre002@umn.edu)  
Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

December 21, 2001

## **Guide for farm rents, rates and values is updated**

A newly updated guide to farm rents, rates and values gives ballpark figures and a starting point for negotiation.

Fraser Norton, Rock County educator with the University of Minnesota Extension Service, prepared the guide. "Rates for grain storage and pasture grazing are two of the most common questions we get," he says.

There are a dozen different rents listed, including those for livestock facilities, house and machine shed rent. The value of straw and stover is a new entry. There are also values for swine manure, corn silage, oatlage, hay and haylage. There are rates for contract hog farrowing, hog and cattle finishing and contract calving.

You can find the guide at <http://swroc.coafes.umn.edu>. Or, ask a county office of the U of M Extension Service to download it from the Internet.

You can also contact Norton directly at (507) 283-8685, or [norto009@umn.edu](mailto:norto009@umn.edu).

# # #

Web, V2, V4, A2, A4

norton12191

Source: Fraser Norton (507) 283-8685, [norto009@umn.edu](mailto:norto009@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

December 21, 2001

## **U of M publication shows marketing strategies for 2001 corn, soybeans**

There are several marketing strategies you can use for corn and soybeans harvested in 2001.

You'll find the details in a new fact sheet written by Robert Anderson, farm management educator with the University of Minnesota Extension Service. If you have on-farm storage for corn, Anderson says one low-risk marketing strategy is to take the LDP and hedge into the spring and summer months, whenever the carry in the market is large.

A carrying charge market is a description of a futures market where future months are priced as a premium to the present month. Anderson says this strategy gives you an opportunity to price grain at attractive prices with no downside risk, except for basis fluctuations.

An alternative to taking the LDP at harvest is to put grain under loan, then lock in the Posted County Price for 60 days. If prices rally during that time frame, the loan can be repaid at the locked-in rate, then sold as a cash price that has improved from the price at the time of the lock-in. If there's no price rally, you can let the lock-in expire and continue with the nine-month loan.

The big factor that will affect winter soybean prices is the expected South American crop. Anderson says it's likely our soybean prices may not increase enough to

<over>

cover storage costs after the late-winter time period, after normal basis improvement occurs.

If you wish to speculate on a winter increase in prices, Anderson says you may want to LDP the soybeans, sell the cash commodity and purchase call options. Many times the cost of options is less than the cost of storing the physical commodity. In addition, the downside risk is eliminated and only the cost of the option is at risk.

You can find the article titled "Corn and Soybean Price Outlook and Marketing Strategy for 2001 Production" at <http://swroc.coafes.umn.edu>. Or, ask a county office of the U of M Extension Service to download it from the Internet.

# # #

Web, A2, V2, V4

anderson12101

Source: Robert Anderson (507) 752-7372, [ander643@umn.edu](mailto:ander643@umn.edu)

Writer: Jack Sperbeck (612) 625-1794, [sperb001@umn.edu](mailto:sperb001@umn.edu)

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*

180  
1/27

UNIVERSITY OF MINNESOTA

**Extension**  
SERVICE

# NEWS & INFORMATION

<http://www.extension.umn.edu/News>

December 28, 2001

## **Minnesota Dairy Days will include session on upgrading facilities**

Better working conditions, more family time and less manual labor are some of the benefits dairy producers report from upgrading their facilities. Modernizing a dairy can also increase cow comfort and boost milk production, says Kevin Janni, engineer with the University of Minnesota Extension Service.

Janni says some of the most common changes producers make are remodeling a two-story barn to put in a step-up, swing or pit parlor; adding a freestall barn; upgrading stalls; and remodeling a building to house more animals, allow drive-by feeding, and allow skid loader access. Many changes are done to improve working conditions and increase income.

Janni has visited with numerous dairy producers who have changed their operations. "For many, the biggest step was going from a stall barn to a freestall barn and beginning to feed a total mixed ration," he says. "Producers report tremendous labor savings from this. Cow comfort also improves."

It takes time and effort to think about, investigate and plan changes, notes Janni. He encourages producers to ask lots of questions and figure out what fits their particular operation and management system.

Janni will give a presentation on dairy modernization at eight Minnesota Dairy Days 2002 across Minnesota in January. The events are for producers and others in the

<over>

dairy industry. They will also include an update on U of M dairy research and sessions on milking systems, financing dairy facility upgrades, and transitions cows. Each location will feature a local Extension educator covering a dairy management topic, as well as a time for open questions and discussion.

Pre-registration for a meal count is required one week prior to the meeting date. The fee is \$25 for the first person from a farm and \$15 for each additional person. Registration flyers and additional information are available from the contact persons listed below or from Bonnie Rae at (612) 624-4995. There is a registration flyer on the Internet at [www.ansci.umn.edu/dairy/calendar/2002mdd-brochure.pdf](http://www.ansci.umn.edu/dairy/calendar/2002mdd-brochure.pdf).

Dates, locations and local contacts for Minnesota Dairy Days 2002 are:

- Jan. 8, Thief River Falls, Best Western, George Marx, (218) 281-8606;
- Jan. 9, Perham, VFW, Vince Crary, (218) 385-3000;
- Jan. 10, Alexandria, Holiday Inn, Larry Zilliox, (320) 762-3890;
- Jan. 11, Milaca, Embers Restaurant, Jim Salfer, (320) 255-6169;
- Jan. 15, Edgerton, Pizza Ranch, Wayne Schoper, (507) 794-7993;
- Jan. 16, New Ulm, Turner Hall, Wayne Schoper, (507) 794-7993;
- Jan. 17, Zumbrota, VFW, Chuck Schwartau, (651) 385-3100;
- Jan. 18, Lewiston, Community Center, Neil Broadwater, (507) 457-6440.

# # #

Web,V2MN,V4MN,D1MN

jann1227

Sources: Kevin Janni, (612) 625-3108; Marcia Endres, (612) 624-5391  
Editor: Joseph Kurtz, (612) 625-3168, jk@umn.edu

*The University of Minnesota, including the University of Minnesota Extension Service,  
is an equal opportunity educator and employer.*