MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

January 6, 1995

Source: George Rehm
612/625-6210
Writer: Jack Sperbeck
612/625-1794

LEARN FROM FARMERS WHO HAVE USED RIDGE-TILL

Farmers who've used ridge-till systems for many years will be featured at the Minnesota Ridge-till Conference Jan. 19 at the Holiday Inn in Willmar. The program is planned for farmers who would like to switch to ridge-till planting systems, says George Rehm, soils specialist with the University of Minnesota's Extension Service.

Many farmers consider switching to a ridge-till planting system, Rehm says, but don't know where to go for ideas and information. In addition to farmers who'll talk about their experiences in getting started with ridge-till, the conference will feature exhibits by manufacturers of equipment that's suited for ridge-till planting systems. Rehm says these manufacturers are another good information source for farmers who are thinking of switching to ridge-till.

Discussions of weed control, fertilizer programs, and roots and ridges will also be part of the program. Registration information is available from county offices of the Minnesota Extension Service. Or, call Kelly Fisher at 1-800-367-5363.

# # #

EXTU,GOPH,MNF,DTN,V2,F4MN NAGR4945

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

January 6, 1995

Source: Brent Woodward
612/624-4995
Writer: Joseph Kurtz
612/625-3168

Note to editors and broadcasters: Check the list at the end of this news release for the Cow-Calf Day location nearest you.

BEEF COW-CALF DAYS WILL BE AT 7 MINNESOTA LOCATIONS

Surviving the current down price cycle will be a top priority for beef cow-calf producers in 1995. They can learn strategies to accomplish this by attending one of the 1995 Beef Cow-Calf Days that will take place at seven locations across Minnesota in February.

The University of Minnesota's Extension Service is sponsoring these events in conjunction with the Minnesota Beef Council and the U.S. Meat Export Federation. The program will be similar at each location.

Topics and speakers will be:

--Surviving the current down price cycle, Harlan Hughes, extension livestock economist, North Dakota State University;

--Foreign marketing opportunities, Tom Scott, director of industry relations, U.S. Meat Export Federation;

--Competitive strategies for Minnesota, Brian Buhr, extension marketing specialist, and Brent Woodward, extension animal scientist, University of Minnesota;

(over)

--Breeding systems, Woodward;

--Supplemental feed for the cow herd, Alflredo DiCostanzo, extension animal scientist, U of M;

--Benefits of check-off dollars, Ron Eustice, executive director, Minnesota Beef Council;

--Minnesota Carcass Merit Review and Minnesota IRM program, local extension educator;

--Cow-calf research review, Woodward.

Producers can choose between two concurrent sessions that will close out the program: 1) applying financial analysis to the beef cattle enterprise, by Hughes, or 2) managing coccidiosis and cryptosporidium in calves, by Dale Haggard, U of M extension veterinarian.

There will be a modest registration fee for each event. For further information contact your local office of the Minnesota Extension Service or the contact person listed below.

more)

Dates/Times/Locations:

2/14/94	9:00a-4:00p	Staples Technical College, Assembly Room, Staples; lunch available Contact: Jim Carlson, Morrison County, 612-632-0161
2/15/94	8:30a-3:00p	Evergreen Eating Emporium, Lower Level, Thief River Falls, MN; lunch available Contact: Dale Carter, Roseau County, 218-463-1052
2/15/95	5:30p-10:00p	Sawmill Inn, Grand Rapids, MN; refreshments served Contact: Dan Brown, North Central Experiment Station, 218-327-4490
2/16/94	5:30p-10:00p	Hinckley High School Cafeteria, Hinckley, MN; refreshments served Contact: Steve Drazkowski, Pine County, 612-384-6156
2/21/94	9:00a-4:00p	Minnewaska House, Glenwood, MN; lunch available Contact: Milan Drewlow, Stevens County, 612-589-7423
2/22/94	9:00a-4:00p	Southwest Technical College, Room 407, Pipestone, MN; lunch available Contact: Philip Berg, Pipestone County, 507-825-5416
2/23/94	9:00a-4:00p	American Legion, Rushford, MN; lunch available Contact: Jerry Tesmer, Fillmore County, 507-765-3896

# # #

EXTU,GOPH,MNF,DTN,V2,V4MN,V5MN,B1 NAGR4944

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

January 10, 1995

Source: Dale Hicks
612/625-8700
Writer: Joseph Kurtz
612/625-3168

GO FOR HIGHER YIELD WHEN CHOOSING BETWEEN 2 VARIETIES

Go for the higher yielder from performance trials when choosing between two corn hybrids or two soybean varieties to grow on your farm. That's a good strategy even if the yield difference is small, according to Dale Hicks, agronomist with the University of Minnesota's Extension Service.

Suppose you are choosing between two cultivars (varieties or hybrids), cultivar A and cultivar B. "Statisticians have calculated the probability of making an incorrect decision when A is chosen over B and B should have been chosen as the better cultivar," says Hicks. "They determined that farmers make the correct cultivar choice 50 percent or more of the time when they choose the higher yielding of any two cultivars, even though the real yield difference may be small. And as the size of the yield difference increases, the probability of making the correct cultivar choice increases."

Hicks says the probability of making the correct corn hybrid choice by choosing the higher yielding of two hybrids from yield trials is 56 percent when the yield difference is one bushel per acre. (This is based on analyses of Illinois corn performance

(over)

trials.) This means that 56 percent of the time, when you choose a variety that has a one bushel per acre yield advantage in trials, it will outperform on your farm the hybrid that was one bushel lower in the trials.

When the difference in the trials is five bushels per acre, you make the correct choice (that is, you choose the hybrid that will yield best when you plant it) 77 percent of the time when you select the higher yielder.

"Yield differences of 1 to 5 bushels per acre would not be statistically different in most yield trials," Hicks points out. "But there's a very high probability of choosing the correct hybrid by choosing the higher yielding one."

The likelihood of making the correct choice goes up as the yield advantage in the trials goes up. When the yield difference is 10 bushels per acre, the higher yielder is the correct choice 93 percent of the time. When the advantage is 15 bushels per acre, the higher yielder is the correct choice 98 percent of the time. When the yield difference in the trials is 20 bushels per acre, the higher yielder is the correct choice 100 percent of the time.

"With a good data set, preferably from three or more locations, growers can rank soybean varieties and corn hybrids and choose the highest-yielding two or three," says Hicks "In addition to yields, growers may want to consider other traits such as kernel moisture and lodging for corn and chlorosis scores

(more)

and disease ratings for soybeans. This simple technique will result in making the correct cultivar choices in a high percentage of the cultivar decisions. The end result will be higher yields and higher profitability."

# # #

EXTU,GOPH,MNF,DTN,V2,F4 NAGR4946

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

January 18, 1995

Source: Stephan Carlson
612/626-1259
Writer: Deedee Nagy
612/625-0288

YOUTH ENVIRONMENTAL PROJECTS CAN COMPETE NATIONALLY

Youth organizations involved in water quality or related environmental projects can earn national recognition through the "Give Water a Hand" effort, part of the National 4-H Environmental Stewardship Program. Stephan Carlson, 4-H Youth Development educator at the Minnesota Extension Service, invites 4-H clubs, school groups, Boy and Girl Scouts, church groups and others to "get a blue thumb" by helping to protect water resources.

Groups that use the Give Water a Hand curriculum to study and carry out a water-related project can compete for national recognition as part of National Drinking Water Week, May 7-13. Winners will receive a trip to Washington, D.C., to take part in the awards ceremony. A member of the Nobel Prize family will make the presentation.

Give Water a Hand guidebooks are available free through the Minnesota 4-H office, 1-800-444-4238, or county offices of the Minnesota Extension Service. Groups are encouraged to tackle a water quality project in one of four areas: school, home,

(over)

community or farm. A leader guidebook suggests how to get started, timelines, community resources and ways to evaluate effectiveness. Action guides for each of the four areas suggest activities and include an entry form for the national competition.

Competition deadline is March 1. Materials will be judged initially against other Minnesota projects. Top state entries will compete against winners from across the country.

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EXTU,GOPH,V4MN,H8,T2,Y1 N4-H4947

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

January 19, 1995

Sources: Roger Swendsen
612/427-5310
Shirley Anderson
507/537-6702
Writer: Martin Moen
612/625-6243

TRAINING AVAILABLE FOR YOUTH-ORIENTED GAMBLING CURRICULUM

Most adults can remember when gambling was something you did as a fundraiser for a local charitable organization. Or, perhaps you made a few trips to the casinos in Nevada. In the last few years though, all of that has changed---gambling is a part of everyday life in Minnesota.

"Growing up in a culture where gambling is accessible and accepted is very different from growing up in an environment where gambling opportunities are rare," says Roger Swendsen, director of gambling programs for the Minnesota Institute of Public Health. That's why the institute is co-sponsoring a series of training workshops for teachers and other youth educators who want to help kids learn about gambling-related choices.

The training sessions will feature curricula developed by the University of Minnesota's Extension Service and the Minnesota Institute of Public Health. The curricula have been successfully tested in Minnesota schools and offer materials on developing

(over)

critical thinking and decision-making skills; identifying positive and negative consequences of gambling activities; practical strategies for offering help to people experiencing gambling-related problems; and guidelines for making choices about if, when, and how much to gamble.

The training will be offered in six different locations in Minnesota: Jan. 24 in Thief River Falls, Jan. 25 in Grand Rapids, Jan. 31 in St. Paul, Feb. 1 in Marshall, Feb. 2 in Rochester, and June 13 in St. Cloud. The training is intended for teachers, school counselors, community youth leaders, social workers, clergy, and community volunteers who work with children of these age groups. Continuing education credits are available for attending the training.

Registration for the one-day training is $15 and includes lunch and a copy of either the middle school or high school curriculum. For more information contact Becky Johnson at (612) 427-5310 or 1-800-247-1303.

A team of extension educators in southwest Minnesota wrote the curriculum for students in grades six through nine. "The curriculum helps teachers bring a piece of the real world into their classroom," says Shirley Anderson, a co-author of the curriculum and extension educator in Marshall, Minn. "They recognize that kids are gambling at an age where they can't handle losing. And kids, like some adults, have a difficult time recognizing when gambling has taken control of their life."

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"Gambling has become a new rite of passage for 18-year-olds here in Minnesota," Swendsen says. "The curricula can be very helpful in assisting young people to understand and reduce the risks associated with gambling."

The training is sponsored by the Minnesota Department of Education, the University of Minnesota's Extension Service, the Minnesota Department of Human Services, and the Minnesota Institute of Public Health's Gambling Problems Resource Center.

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EXTU,GOPH,MNF,V4MN,V5MN,V8MN,V9MN,F1MN,F2MN,Y1MN NHEC4948

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

January 24, 1995

Source: David Weinand
612/625-9757
Writer: Joseph Kurtz
612/625-3168

Editors, broadcasters: Please check the list of workshop locations at the end of this release to localize this story.

UNIVERSITY OF MINNESOTA SETS DAIRY MANAGEMENT WORKSHOP SERIES

Identifying profit opportunities in dairying, establishing goals, and making decisions for change will be key topics at a series of upcoming Dairy Management Workshops in Minnesota.

The three-part series of workshops will take place at eight locations across the state during February and March. These are Waseca, New Ulm, Norwood, Fergus Falls, Melrose, Rice, Owatonna, and McIntosh. The University of Minnesota's Extension Service is the sponsor, and the workshops are part of the university's Dairy Initiatives program. University dairy scientists and dairy extension educators will be workshop speakers.

Session I will focus on finding short run production and profit opportunities. Participants will analyze their own dairy operation and assess strengths, weaknesses, opportunities, and threats. A case study exploring a practical situation will be part of the workshop.

Exploring long-range options will be the topic for Session II. Participants will establish goals and plans for their dairy operation, learn how to develop a dairy diagnostic team that will produce results, and learn to improve and maintain production cost control.

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Designing the future will be highlighted in Session III. Topics will include testing for reality, enabling decision-making for change, knowing more about available options and resources, and developing strategies for change.

Registration fee for the workshop series is $25 per family or farm unit. To obtain a registration brochure, contact your county extension office or call (612) 625-9757, or contact one of the people listed below.

The workshop locations, dates, and contact persons are:

Waseca, Waseca County Extension Office, Wednesdays, Feb. 22, March 1, March 8; contact Tim Dolan at (612) 237-5531.

New Ulm, Turner Hall, Mondays, Feb. 20, Feb. 27, March 6; contact Wayne Schoper at (507) 794-7993.

Norwood, Kubes Supper Club, Thursdays, Feb. 23, March 2, March 9; contact Vern Oraskovich at (612) 442-4496.

Fergus Falls, Courthouse Commissioners Room, Fridays, March 3, March 10, March 17; contact Denzil Cooper at (218) 346-5750.

Melrose, CountrySide Restaurant, Wednesdays, March 1, March 8, March 15; contact Jeff Kearnan at 1-800-450-6171.

Rice, K.C.'s Restaurant (formerly Andie's), Tuesdays, Feb. 28, March 7, March 14; contact Jeff Kearnan at 1-800-450-6171.

Owatonna, Owatonna Eagles Club, Tuesdays, Feb. 21, Feb. 28, March 7; contact Kendall Langseth at (507) 377-5660.

McIntosh, McIntosh Municipal Building, Thursdays, March 2, March 9, March 16; contact Vince Crary at (218) 563-2465.

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EXTU,GOPH,MNF,DTN,V2MN,V4MN,V5MN,A2MN,D1 NAGR4949

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

January 30, 1995

Source: Gerry Wagner
612/625-1978
Writer: Joseph Kurtz
612/625-3168

MILK MARKETING, DAIRY POLICY CONFERENCE WILL BE MARCH 7-8

The impact on the dairy industry from NAFTA, GATT, and the 1995 Farm Bill will among the main topics at an upcoming conference in Bloomington, Minn.

The 50th Annual Midwest Milk Marketing Conference and Minnesota Dairy Policy Conference will be at the Marriott Hotel in Bloomington. The conference is designed for directors and officials of dairy cooperatives, officials of farm organizations involved in dairy policy making, dairy producers, members of the news media, agricultural educators, and others interested in dairy policy issues.

The future of government dairy programs will be a main topic March 7. Former Minnesota Congressman Tim Penney will be one of the speakers, previewing the 1995 Farm Bill. Also, Richard McKee of the USDA's Agricultural Marketing Service in Washington, D.C. will discuss Federal Milk Order regulation. Lon Hatamiya, Agricultural Marketing Service administrator, will cover agricultural market regulation.

A March 8 session on marketing and promotion will include a presentation on competing in the world market and the implication of NAFTA and GATT. The speaker will be Peter Vitaliano, economist with the National Milk Producers Federation. Also,

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developing export markets for U.S. dairy products will be covered by Gary Corbett of Dean Foods Co., Chicago, Ill. Consumer trends in food consumption will be the topic of Lydia Botham of Land O' Lakes, Inc., Arden Hills, Minn.

Planning for dairy herd expansion and managing large herds will be the focus of an afternoon session March 7. Dairy producers from Minnesota and Michigan and a representative of Farm Credit Services will be on the program.

Conference registration begins at 7 a.m. March 7 and the program gets underway at 8 a.m. Adjournment on March 8 is set from 11:30 a.m.

The advance registration fee is $80 per person, which includes program costs, materials, lunch and refreshments. Fee at the door will be $90. To obtain a registration brochure or further information, contact Pat De Steno at 1-800-367-5363 or (612) 625-1214.

# # #

EXTU,GOPH,MNF,V2,V4,V5,A2,D1, NAGR4952

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

January 31, 1995

Source: Tracey Benson
612/624-3708
Writer: Martin Moen
612/625-6243

Reporters, editors: Enclosed with this release is a map that depicts the Minnesota River basin divided into two halves. It is integral to the story--see the second paragraph.

CONFERENCE TO EXPLORE SEDIMENT CONTROL FOR MINNESOTA RIVER BASIN

We've heard quite a bit about how dirty the Minnesota River is, and how farmers who produce the food we eat from the land within the river's watershed can help to clean it up. So far, those discussions have lacked specific changes farmers can make in their agricultural practices to make the river cleaner. The University of Minnesota will change that situation in late February when it releases detailed, regional tillage guidelines for farmers in the Minnesota River basin.

The one-day conference, "Sediment Control Solutions for the Minnesota River," will be presented Feb. 21 at the Garden Inn in Mankato and Feb. 22 at the Royale Inn in Montevideo. Conference information will be tailored to cropping conditions in the eastern and western regions of the Minnesota River basin, so farmers are encouraged to attend the conference location in their region.

Registration is $20, which includes morning and afternoon breaks, lunch, and course materials. The fee for registrations

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received after Feb. 14 and at the door will be $25. Contact Tracey Benson at (612) 624-3708 or 800-367-5363 for more information.

Conference presenters include faculty from the University of Minnesota, research scientists from the university's Agricultural Experiment Station, and representatives from the Minnesota Department of Agriculture and Minnesota Pollution Control Agency.

Conference sponsors are the University of Minnesota, the Board of Water and Soil Resources, the Farm Equipment Association, the Minnesota Association of Soil and Water Conservation Districts, the Minnesota Department of Agriculture, the Minnesota Pollution Control Agency, and the Natural Resources Conservation Service.

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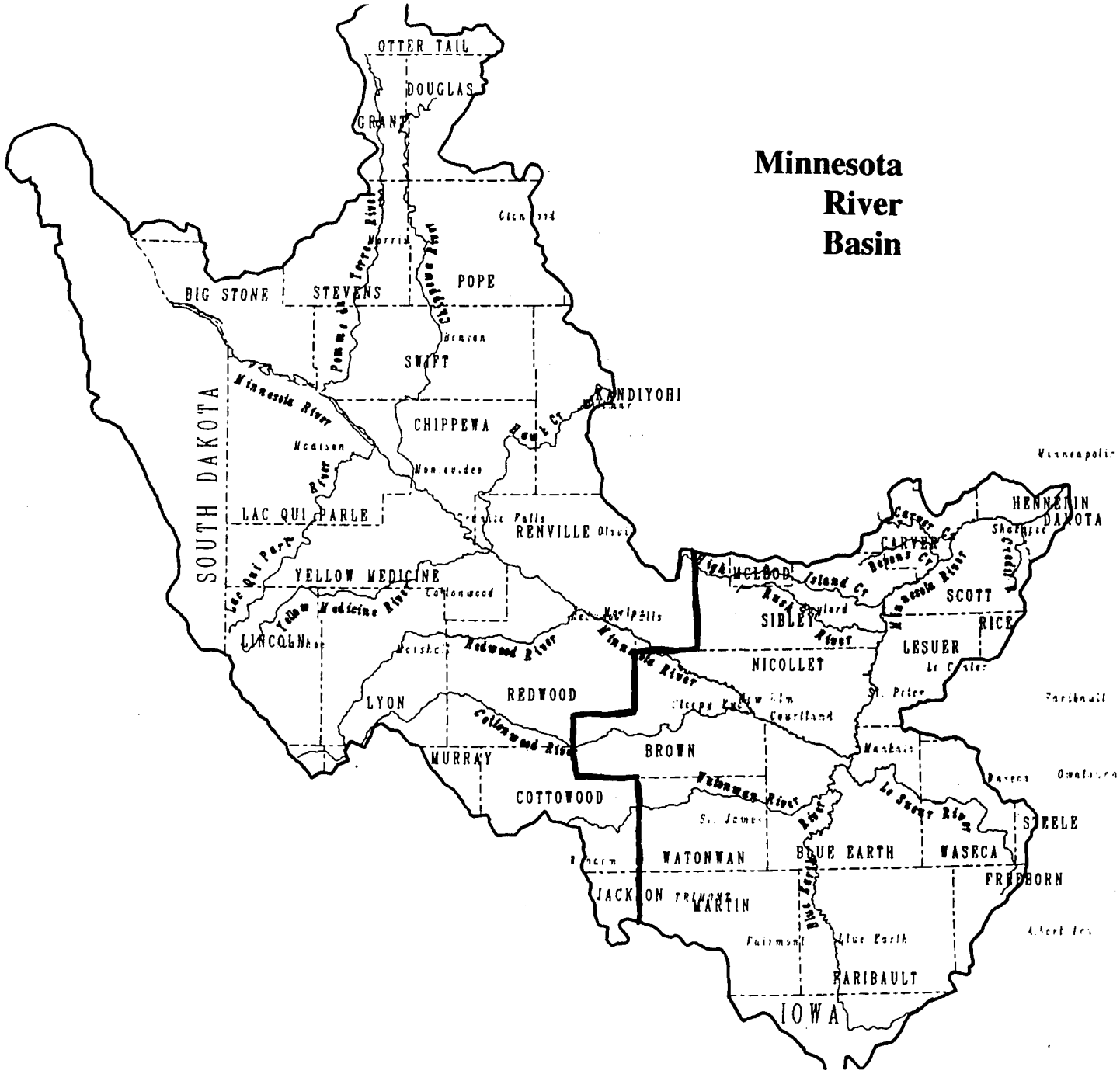
EXTU,GOPH,MNF,V2MN,F4,Z5,Z6,10,19,24,27,69,75,79 NAGR4953

Minnesota River Basin



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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 1, 1995

Source: George Rehm
612/625-6210
Writer: Jack Sperbeck
612/625-1794

BANDING POTASH WITH RIDGE-TILL WILL INCREASE YIELDS

Sometimes small management changes make a big difference in corn production and profitability. For ridge-tillers, using 40 to 50 pounds per acre of potash in a band near the seed is one of those small, yet important practices.

Banding has been adapted by most ridge-tillers even though soil tests for potassium may be in the high or very high range. Typical yield increases are 12 to 15 percent, says George Rehm, soil scientist with the University of Minnesota's Extension Service.

Rehm says research from the university's College of Agriculture, starting in 1989, showed that banded potash was a positive management practice for ridge-till corn production. Some corn hybrids were more responsive than others. As the research continued, the impact of banded phosphate was evaluated and recommendations for the banded application of both phosphate and potash were fine-tuned.

"This research helped solve a problem that may have limited corn yields in the ridge-till system for a number of years," Rehm

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says. "Now, ridge-till farmers who are using banded phosphate and potash can increase profits and have a positive impact on environmental quality at the same time."

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EXTU,GOPH,DTN,V2,F4 NAGR4954

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 3, 1995

Source: Gerry Wagner
612/625-1978
Writer: Joseph Kurtz
612/625-3168

U OF M PLANS AG TOUR TO GERMANY, AUSTRIA, SWITZERLAND

An opportunity to visit Germany, Austria, Liechtenstein, and Switzerland this summer is available through a University of Minnesota agricultural tour.

The two-week tour will leave Minneapolis by air June 22 and return July 6. Travel in Europe will be by private bus.

The tour will begin with four days in Germany. The tour group will arrive in Frankfurt and then visit the medieval town of Rothenburg. There will also be a guided sight-seeing tour of Munich and visits to Oberammergau and a Bavarian farm.

The stay in Austria will begin in Salzburg. A sight-seeing tour will include the Mirabel Gardens, Mozart's birthplace, and sites associated with the film "Sound of Music." There will also be a sightseeing tour of Innsbruck and a visit to an Austrian farm.

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From Austria the tour will move to Liechtenstein, then to Lucerne, Switzerland. A sightseeing tour there will be followed by a visit to a Swiss dairy farm and cheesery and a sightseeing excursion into the Swiss mountains.

The tour group will return to Germany with stops and sightseeing in the Black Forest and Heidelberg, a cruise on the Rhine River, and a visit to a vineyard in a traditional wine-producing area.

The tour cost will be $2,700 per person, which includes air and bus transportation, 13 nights' double occupancy hotel accommodations, 13 breakfasts, six lunches, and eight dinners. The group will be limited to 46 or bus capacity. A deposit of $200 per person is required upon registration. For further information or to obtain a registration brochure, call 1-800-367-5363.

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EXTU,GOPH,MNF,DTN,V2,V4,V5,B1,D1,F4,S2 NAGR4958

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 6, 1995

Source: Pat De Steno
612/625-1214
Writer: Martin Moen
612/625-6243

EDUCATIONAL TOUR OF WASHINGTON D.C. PLANNED

There are many new faces in Washington D.C. as a result of last year's election, and you can spend six days in our nation's capital by joining the Know America tour, sponsored and conducted by the University of Minnesota's Extension Service.

On the Know America Tour, you'll visit sites such as the Washington Monument, the Lincoln and Jefferson Memorials, the Holocaust Museum, the U.S. Capitol, the Smithsonian Institution, the Viet Nam Veterans' Memorial, Mount Vernon, the White House and Arlington National Cemetery.

The dates of the Know America tour are April 8-13, and the cost is $950 per person. The price includes round-trip airfare, lodging for five nights, breakfasts and dinners, bus transportation in Washington D.C., admissions, and a tour guide.

For more information, write to Pat De Steno, Know America Tour, Minnesota Extension Service, 405 Coffey Hall, 1420 Eckles Ave., St. Paul, MN 55108-6068; or call (612) 625-1214 or 1-800-367-5363.

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EXTU,GOPH,MNF,V4MN,V5,V8MN,A2,A3,E2,H3,N1 NESP4959

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 6, 1995

Source: Earl Fuller
612/625-6760
Editor: Joseph Kurtz
612/625-3168

CROP INSURANCE IS PART OF RISK MANAGEMENT FOR FARM BUSINESSES

What could possibly happen in your farming operation that would be a "disaster" to the operation? The answer to that question is a key to planning your federal crop insurance coverage, say Earl Fuller, economist with the University of Minnesota's Extension Service.

"For any event that would be a disaster, you need a risk management plan in place to limit the impact of the event," says Fuller. "It usually requires a combination of actions to limit the impact of a disaster. Examples of such actions would be planting several different crops or crop varieties, pricing parts of the crop at different times, not using all your borrowing capacity, and buying crop insurance.

"In evaluating a potential disaster, you may need to consider the concerns of other 'stakeholders' in the farm business. These might include creditors or co-owners. Whether they can sleep nights may be as important as whether you can."

Fuller says it may be necessary to negotiate with these other stakeholders about the level of crop insurance coverage you

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take out. The same may be true for other parts of your risk management strategy.

"Expect to lose any insurance fees or premiums you pay," says Fuller. "That is the normal outcome. Access to funds and a higher assurance that you can continue to farm with less stress is your payoff for paying the fees."

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EXTU,GOPH,MNF,DTN,V2,V4MN,F4 NAGR4961

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 6, 1995

Source: Earl Fuller
612/625-6760
Editor: Joseph Kurtz
612/625-3168

MARCH 15 IS FEDERAL CROP INSURANCE SIGN-UP DEADLINE

If a crop failure in 1995 would cause a cash flow disaster in your farming operation, you need to sign up for federal crop insurance by the March 15 deadline. The federal program is now "the only game in town" for crop producers, says Earl Fuller, extension economist with the University of Minnesota's Extension Service.

The federal Crop Insurance Reform Act passed in 1994 brings the biggest change in federal crop programs in many years, says Fuller. The new law is likely to end crop disaster payments outside the insurance program. "There will no longer be any other crop disaster funds for insurable crops without offsetting federal budget cuts from other programs," says Fuller. "There is no longer a provision in the law or 'off budget' funding that in the past has allowed for crop disaster programs. And given the national debt and federal deficit, odds are slim for any new legislation to reinstate the old federal disaster system."

Fuller says commercial producers of all crops need to contact their local Consolidated Farm Service Agency (CFSA,

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old ASCS) office by the March 15 deadline. This is necessary not only to sign up for the crop insurance coverage, but to assure eligibility for almost all future U.S. Department of Agriculture programs. These include new commodity loans, cost sharing assistance, the Conservation Reserve Program, any price support or production adjustment program payments, or any new Farmers Home Administration farm ownership, operating, or emergency loans.

One of the main features of the new program is a low level of multiple-peril crop insurance (MPCI) known as CAT, or Catastrophic Assistance. When you look at CAT you need to consider what crop loss would be catastrophic or disastrous to your farming operation, says Fuller.

Producers will pay a $50 to $600 administrative fee for CAT coverage, but no insurance premiums, Fuller points out. The producer is charged an administrative fee of $50 per crop per county, but that cannot exceed $200 per producer per county up to a maximum of $600 per producer for all counties in which a producer has insurable crops. Even that may be waived for limited resource farmers with less than $20,000 gross income from all sources.

A producer has the option of signing up for additional coverage through a local insurance agent who sells MPCI. If they do, they will also get CAT coverage, says Fuller. The agent will usually take care of all the paper work, but

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Fuller recommends checking with the agent to make sure this is done.

Fuller doesn't see a reason for producers not to sign up for the new program. "Sign up isn't an issue," he says. "The issue is whether you obtain adequate protection from a crop loss that could be disastrous to your cash flow."

# # #

EXTU,GOPH,MNF,DTN,V2,V4MN,F4 NAGR4960

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 6, 1995

Source: Earl Fuller
612/625-6760
Editor: Joseph Kurtz
612/625-3168

COUNTY EXTENSION EDUCATORS CAN HELP WITH CROP INSURANCE PLANNING

A computer analysis can make it easier to determine how much crop insurance coverage you should obtain for 1995. Extension educators in county offices of the University of Minnesota's Extension Service have software available to provide this analysis.

"Crop insurance is a form of risk management for the farm business," says Earl Fuller, University of Minnesota extension economist. "Business risk management plans start with cash flow projections. Project your cash flow obligations. Project gross margins from the crop at various levels of yields, prices, and insurance coverage. Don't forget the need for coverage of forward contracts in the event of high crop prices and low yields on your farm.

"Project the impact on your livestock operations of a feed crop failure. Where would you get the money to buy the feed? Where would you borrow it?"

Extension's computer software can analyze various combinations of yield and price, along with actions you could

(over)

take. "That is easier and quicker than trying to do the calculations by hand," says Fuller. "Many insurance agents have the same software. It is legal to copy the software for your personal use. Bring some disks to the extension office and ask for a copy of the software. Just don't let the computer or any person tell you what a disaster is for you."

# # #

EXTU,GOPH,MNF,DTN,V2,V4MN,F4 NAGR4962

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

February 8, 1995

Source: Carl Vogt
612/624-3639
Writer: Deedee Nagy
612/625-0288

WOODLAND OWNERS, USERS CONFERENCE SET IN ST. PAUL

Private woodland owners and users and urban landowners can learn about land management, wildlife and recreation, tree identification, insect and disease prevention and tree protection during construction at the Woodland Owners and Users Conference, Feb. 25 at Bethel College and Seminary in St. Paul. The conference is sponsored by the University of Minnesota's Extension Service, Department of Forest Resources, and the Minnesota Department of Natural Resources..

The day-long conference will include sessions on landscaping for wildlife, cost-share assistance, tree planting, shoreland management, wetland habitats, precautions for building in wooded areas, tree health, and trails and recreation. Registration, which includes printed materials and lunch, is $20 in advance or $25 at the door. Children under 12 may register for $7.50.

For more information contact the University of Minnesota Forest Resources Department at (612) 624-7222.

# # #

EXTU,GOPH,F8,X9 NNRD4964

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

February 8, 1995

Source: Jan Swanson
612/624-2268
Writer: Joseph Kurtz
612/625-3168

PROGRAMS WILL FOCUS ON NETWORKING FOR PORK PRODUCERS

Networking and cooperative efforts among pork producers will be the focus of a series of upcoming programs in south central Minnesota.

The purpose of the programs is to provide a forum for pork producers to interact, develop contacts, and explore networking opportunities. The sessions will highlight various networking efforts that Minnesota producers have started.

The sessions, coordinated by the University of Minnesota's Extension Service, will take place simultaneously at the Austin, Faribault, and Mankato Technical Colleges. The three sites will be linked by television so that interaction among the sites can take place. All but one of the sessions will run from 7-9 p.m. Upcoming dates are February 14 and 28, March 14 and 28, and April 11.

Each session will feature local pork producers and swine professionals. There will be short presentations of 10-15 minutes, plus time for input and questions from participants.

Program topics and speakers will be:

Feb. 14--Group marketing, presented by Greg Boerboom, a pork producer from Marshall, Minn.

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Feb. 28--Networking and competitive positioning for pork producers. This session will be a downlinked satellite program from the National Pork Producers Council. As in the other sessions, participants at Austin, Faribault, and Mankato will be able to interact. Time of this program only will be 7:30-9 p.m.

March 14--Producer alliances in farrow-to-finish with existing contract barns, presented by Brian Caldwell, a veterinarian from Mapleton, Minn.

March 28--Starting a cooperative, presented by Linden Olson, a producer from Worthington, Minn.

April 11--Boar studs as an option for pork producers, presented by Dennis Rossiter, a veterinarian from St. Peter, Minn.

No advance registration is necessary. For further information, call (612) 624-3434 or 1-800-380-8636.

# # #

EXTU,GOPH,MND,DTN,S2,X3,Z5,50 NAGR4963

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

February 8, 1995

Source: Tracey Benson
612/624-3708
Writer: Deedee Nagy
612/625-0288

MEETINGS ON SEPTIC SYSTEMS SET FOR GOVERNMENT OFFICIALS

Residential septic systems can contribute to ground and surface water contamination in addition to costing homeowners money and frustration. Meetings in six Minnesota cities during February and March will explain the new Septic System Operation and Maintenance Education Program developed by the Minnesota Extension Service. The program will include morning sessions on the septic system maintenance program for township officers, county commissioners and other local officials.

In the afternoon, a related program will present information to local water plan coordinators, extension educators, planning and zoning officials, environmental health staff and Soil and Water Conservation District employees. Once trained, they will bring the information to homeowners in their local communities through workshops, consultations and printed materials.

The locations and dates of the septic system meetings will be:

* Grand Rapids--Feb. 21
* Detroit Lakes--Feb. 22

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* Willmar--Feb. 23

* Redwood Falls--Feb. 24

* Faribault--Feb. 27

* Cambridge--March 6

The programs are sponsored by the Minnesota Pollution Control Agency, the Board of Water and Soil Resources, the Association of County Planning and Zoning Administrators, the Association of Townships and the Association of Minnesota Counties. For registration, participants should contact Tracey Benson at the University of Minnesota Extension Service Special Programs Office, 1-800-367-5363.

# # #

EXTU,GOPH,V4MN,C4,T2 NESP4965

MINNESOTA EXTENSION SERVICE

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

MSC 2A27

NEWS/ INFORMATION

February 13, 1995

Sources: Melissa Minnehan
612/624-4762
Julie Swanson
612/625-7246
Writer: Deedee Nagy
612/625-0288

TRAINING TAKES TEEN TEACHING PROGRAMS STATEWIDE

The Dads Make a Difference and Project 4 Teens programs of the Minnesota Extension Service and Minnesota 4-H Youth Development will soon be available in more communities because of training this month for adults who will work with teams of young people in their local communities. About 60 persons from schools, churches, public health agencies, extension offices and other youth-serving organizations throughout Minnesota underwent two days of training Feb. 9-10 in Farmington.

Both programs involve training teenagers to teach middle school students. Dads Make a Difference involves high school students teaching younger teens about paternity, fathers' roles in children's lives and the importance of both parents to their children. Project 4 Teens uses the same cross-age teaching model to get pre-teens thinking about healthy relationships, sexuality and preventing too-early parenthood.

Dads Make a Difference is a collaboration of the Children's Defense Fund Minnesota, the Family Tree Clinic of St. Paul, the

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Minnesota Extension Service of Ramsey County and the Ramsey County Attorney's Office, Child Support and Collections Unit. Project 4 Teens is supported by the Minnesota Extension Service; Minnesota 4-H Youth Development; the Ripley and Blandin Foundations, Hazelden Services Inc. and the Ramsey County Department of Public Health.

Workshop participants commit to going back to their communities to train teens to work with younger youth through schools and other groups. Both programs have been active in the Twin Cities and selected communities throughout the state, but this training effort is expected to take them to many more regions of the state.

# # #

EXTU,GOPH,V4MN,C1,F1,Y1 N4-H4966

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 17, 1995

Source: Earl Fuller
612/625-6760
Editor: Joseph Kurtz
612/625-3168

DISASTER PROTECTION AVAILABLE FOR 'NON-INSURABLE' CROPS

A no-producer-cost disaster protection program for "non-insurable" crops not covered by multi-peril crop insurance is now available through provisions of a new federal law. The disaster protection program applies to forages in most Minnesota counties, as well as to cut flowers, nursery stock, Christmas trees, and most vegetable crops. Aquaculture is also included.

The program is called NAP, which stands for non-insurable assistance program. NAP was instituted as part of the federal Crop Insurance Reform Act of 1994. Producers of "non-insurable" crops have until March 15 to sign up for NAP at local offices of Consolidated Farm Service Agency (CFSA), formerly ASCS.

"NAP works much like an insurance program would, except there are no producer premiums," says Earl Fuller, economist with the University of Minnesota's Extension Service. "Federal disaster funding pays for a specified level of crop losses."

Fuller says since there is no cost to sign up for NAP, the only reasons not to sign up are "philosophical or illegal."

Disaster coverage eligibility for NAP requires a pre-disaster recording of historical production at the CFSA office.

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A low yield for the area and for the producer is necessary to trigger assistance.

NAP provides a coverage level of 50 percent of the historically established yield and 60 percent of the expected market price. That was specified by Congress in the new law, and is called 50/60 coverage.

"Two things must happen for you to receive a payment under NAP," says Fuller. "First, the average area yield for the crop must fall below 65 percent of the expected area yield as established by the Federal Crop Insurance Corporation. Second, your farm must experience losses in excess of 50 percent of the established farm yield, which you must report while evidence of the crop is still in the field. If both of these conditions are met, you will be paid for losses in excess of 50 percent of your established farm yield at 60 percent of the average market price for the crop.

To sign up for NAP coverage or obtain further details about provisions of the Crop Insurance Reform Act, contact your county CFSA office.

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EXTU,GOPH,MNF,V2,V4MN,V5MN,A2,F4,F5,H7,P1 NAGR4967

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St. Paul, Minnesota 55108-1030

MSC 9A27p

NEWS/ INFORMATION

February 17, 1995

Source: George Rehm
612/625-6210
Writer: Jack Sperbeck
612/625-1794

BANDING PHOSPHATE, POTASH BOOSTS PROFITS AND THE ENVIRONMENT

Banding phosphate and potash on corn and small grains can increase profits. Banding can also reduce chances of soil erosion and surface water contamination, says George Rehm, soil scientist with the University of Minnesota's Extension Service.

If you're using current recommendations from the University of Minnesota, Rehm says rates of phosphate and potash for corn and small grain can be cut in half if the nutrients are applied in a band instead of broadcast and incorporated before planting. Economic benefits aside, banded placement can have a very positive effect on environmental quality.

When phosphate fertilizer is placed in a band below the soil surface, the applied phosphate is not subject to loss from soil erosion. And if phosphorus is not attached to the sediments lost in the erosion process, contamination of surface waters is reduced.

So banded placement is a good option if you're thinking about a new way of fertilizer placement this spring.

# # #

EXTU,GOPH,DTN,V2,F4 NAGR4968

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

February 17, 1995

Source: Earl Fuller
612/625-6760
Editor: Joseph Kurtz
612/625-3168

PAST YIELD RECORDS ARE KEY IN DETERMINING CROP INSURANCE COVERAGE

A past record of crop production and yields on your farm is a key factor in determining yield coverage levels under the federal crop insurance program. Four or more years of records provide the best yield coverage for the lowest cost in most cases, according to Earl Fuller, economist with the University of Minnesota's Extension Service.

Basic coverage, known as CAT, is the lowest level of multiple peril crop insurance (MPCI) for insurable crops, says Fuller. CAT stands for catastrophic assistance.

"CAT coverage comes under the Actual Production History Plan (APHP)," says Fuller. "CAT provides a coverage level at 50 percent of the APHP proven yield on your farm and 60 percent of the expected market price. That is called 50/60 coverage. If you purchase yield or price coverage above the CAT level, there will be some government-paid subsidy on the added premiums. Your insurance agent can explain the details of how this works."

You can still buy hail insurance or other single peril coverage for higher levels of yield and price from agents of private companies, says Fuller. However, there won't be any reduction in MPCI premiums unless you purchase more coverage than is offered by CAT.

# # #

EXTU,GOPH,MNF,DTN,V2,V4MN,V5MN,A2,F4 NAGR4969

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

February 24, 1995

Source: Jim Linn
612/624-4995
Writer: Joseph Kurtz
612/625-3168

4-STATE DAIRY MANAGEMENT SEMINAR WILL BE MARCH 10 IN ROCHESTER

Feeding and managing dairy cows for maximum profitability will be the focus of this year's 4-State Dairy Management Seminar March 10 in Rochester.

The seminar is designed for dairy producers and managers, feed industry personnel, and agribusiness professionals interested in dairy nutrition and management. It is sponsored by the extension services of the University of Illinois, Iowa State University, the University of Minnesota, and the University of Wisconsin. The program will consist of one speaker from each of these universities.

The seminar in Minnesota will be at the Holiday Inn South on Highway 63 South in Rochester. The same program will also take place March 7 in Breese, Ill.; March 8 in Dubuque, Iowa, and March 9 in Arlington, Wis. At each program registration will begin at 10 a.m., the program will begin at 10:30 a.m., and adjournment will be at 3 p.m.

Ken Nordlund, associate professor in the School of Veterinary Medicine at the University of Wisconsin, will lead off the seminar. He will discuss comfort issues in dairy cow stall design and review features that make stalls cow-friendly. He

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will show examples of problem stall installations and possible solutions.

Later in the morning, Jeff Reneau, extension animal scientist at the University of Minnesota, will focus on management information decision aids for larger dairies. He will discuss practical dairy herd management problem solving through diagnostic use of dairy records.

Mike Hutjens, extension dairy specialist at the University of Illinois, will begin the afternoon session. His topic will be bunk management skills and strategies. He will cover weigh backs, testing, space, surfaces, grouping, and feed selection.

Lee Kilmer, extension dairy specialist at Iowa State University, will make the final presentation. He will look at evaluating available feeds for nutritional and economic efficiency. He will focus on methods to determine which homegrown feedstuffs, purchased feeds, and commodities will be good for the cow and good for the dairy producer's checkbook.

Preregistration for the seminar is encouraged, although registrations will be accepted at the door. The registration fee is $35 per person. Checks for the Rochester seminar should be payable to the University of Minnesota. Send the registration fee to Animal Science Extension, 101 Haecker Hall, 1364 Eckles Ave., University of Minnesota, St. Paul, MN 55108. To obtain further information or a flier on the seminar, contact your county extension office or call (612) 624-4995.

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EXTU,GOPH,MNF,DTN,V4MN,D1,X1,Z4 NAGR4970

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 3, 1995

Sources: Joe Deden
507/467-5000
David Rathke
612/625-4209
Writer: Martin Moen
612/625-6243

SPACE STILL AVAILABLE IN FORESTRY EDUCATION WORKSHOPS

A series of forestry education workshops offered in southeast Minnesota have proven popular with private forest landowners, but space remains available. The workshops are coordinated by the University of Minnesota's Extension Service.

The remaining Forests for the Future workshops will be held on two weekends in April at the Forest Resource Center near Lanesboro, Minn.

The workshops provide practical, research-based information on how to expand wildlife populations, earn income from forest products, or create recreational opportunities while protecting a forest's aesthetic values and soil and water resources. Private woodland owners, farmers, loggers, environmental educators, vocational agriculture teachers and real estate brokers are encouraged to attend.

Registration for each workshop is $15, which includes at least $5 worth of educational materials and a noon meal. All of the workshops will include indoor seminars and outdoor hikes, so

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participants are asked to dress appropriately. For more information, contact the Southeastern District Extension Forester at (507) 467-5000.

Here are descriptions of the workshops:

Landscaping for Wildlife and Recreational Trail Design
April 1 9 a.m. - 3 p.m.
Forest Resource Center, Lanesboro, Minn.

You're not alone if improving habitat for nongame wildlife is one of the priorities you've set for your forest land--this has been one the most popular topics at previous workshops. You'll learn about a wide range of habitat improvement options including timber harvesting, reforestation, food plots, crop management, bird feeders, ponds, shelterbelts, and nest boxes.

This workshop will also teach you how to improve access to your property for hiking, snowmobiling, horseback riding, cross-country skiing, or bicycling.

Game Management
April 2 9 a.m. - 3 p.m.
Forest Resource Center, Lanesboro, Minn.

At this workshop you'll learn how to evaluate the food, water, cover and space on your land for white-tailed deer, wild turkeys, ruffed grouse, and sport fish in streams and ponds. Demonstrations of how to make jerky, dry foods, and prepare trail foods will also be provided.

Acquiring and Developing Woodland
April 29 9 a.m. - 3 p.m.
Forest Resource Center, Lanesboro, Minn.

This workshop also was presented on January 7.

Whether you already own forest land or are looking to buy, this workshop will help you evaluate its potential for wildlife habitat, forest products, and recreation. You'll also discover how you may qualify for cost-sharing that can help you achieve your forest management goals.

This workshop also will cover laws relating to property taxes, zoning, timber harvesting, fencing, trespassing, endangered species and waste disposal. You'll also learn how to protect trees when constructing buildings or roads in wooded areas.

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Managing Oak and Walnut Stands
April 30 9 a.m. - 3 p.m.
Forest Resource Center, Lanesboro, Minn.

This workshop combines information presented at the March 3 and 4 workshops.

As you've probably heard, oak trees are becoming scarce in southeast Minnesota, which partially explains their high value. In this workshop you'll learn how to design a harvest and re-growth system in hardwood stands to sustain an abundance of oaks while protecting woodland beauty and soil and water resources. You'll learn how to control undesirable trees and shrubs, reduce the impacts of insects and diseases, and plant oak seedlings and acorns.

A single black walnut tree may be worth over $1,000, but most are worth less than $100. Don't grow average trees when you can produce high quality, valuable walnut trees. In this workshop you'll learn how to manage both natural stands and plantations for timber and nuts, select planting sites, control weeds and other pests, prune limbs and market trees and nuts. Current efforts to find butternut trees (white walnut) that are resistant to the widespread canker disease will also be discussed.

The workshops are funded by the Minnesota Legislature through the Legislative Commission on Minnesota Resources, the University of Minnesota's Extension Service, the Forest Resource Center, and the Minnesota Department of Natural Resources. Co-sponsors include forestry committees in Fillmore, Wabasha and Goodhue counties, and Soil and Water Conservation Districts and County Extension Offices in Southeastern Minnesota.

# # #

EXTU,GOPH,MNF,F8MN,F9MN, NNRD4975

MSC
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MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

March 3, 1995

Source: Bill Wilcke
612/625-8205
Editor: Joseph Kurtz
612/625-3168

CORRECT STORED GRAIN TEMPERATURE, MOISTURE BEFORE WEATHER WARMS

It's time to check the condition of the grain you have stored on your farm. Approaching warmer weather can have a big impact on grain quality, says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"It's important to correct grain temperature or moisture before the weather gets too warm," notes Wilcke. "First, check grain at the top center of the bin for evidence of moisture migration. Uneven grain temperatures that develop during winter cause convection currents and diffusion, which in turn move moisture to the top center of the bin. Any grain made wet again by moisture will mold or become infested by insects when the temperature increases this spring. If you find an area of wet grain, either remove it from the bin, or scatter it across the grain surface and try to dry it using the bin's fan."

Wilcke says all grain in the bin should be down to about 14 percent moisture for storage into summer and 13 percent for storage beyond summer. If moisture is not down to these levels, feed, sell, or dry the grain in the next couple of months.

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In many cases, natural-air drying is not completed before winter, and needs to be finished in the spring. "Probe natural-air drying bins to locate the drying front and to determine the moisture of the wet grain," Wilcke says. "If the drying front is at least halfway through the bin and all grain is less than about 22 percent moisture, chances of success are good." He recommends using the following moistures and dates as a guide to restarting the drying fan:

--Moisture greater than 19 percent: Start fan about March 15 and run continuously until top is down to desired moisture;

--Moisture of 17-19 percent: Start fan about April 1 and run continuously until top is down to desired moisture;

--Moisture less than 17 percent: Start fan about April 15. Run fan continuously if target moisture is 13-14 percent; stop fan on exceptionally warm, dry days if target moisture is 14-15 percent.

If the grain is dry enough for spring and summer storage, check grain temperature at several depths and locations to make sure it is uniform, says Wilcke. Aerate if there are temperature differences of more than about 15 degrees in different parts of the bin. Make sure to do the aerating before average outdoor temperatures (daytime high plus nighttime low divided by two) get much above 40 degrees. As long as grain is less than about 40 degrees, molds and insects are relatively inactive, Wilcke points out.

(more)

Because condensation occurs when you aerate this time of the year (the grain temperature is below the dew point temperature of the air), it is important to operate the aeration fan continuously to move the temperature front and layer of condensation all the way through the bin. "For a typical bin with a small aeration fan, this will take 5-7 days," says Wilcke. "In bins with drying fans, temperature fronts can be moved through a bin in a day or do."

Even if grain is dry and cool going into spring, it's still important to check it every week, says Wilcke. "Mold and insect problems can develop very rapidly in warm weather," he notes, "but catching these problems early will minimize spoilage loses."

# # #

EXTU,GOPH,MNF,DTN,V2,V4MN,F4 NAGR4973

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

March 3, 1995

Sources: David Rathke
612/625-4209
Joe Deden
507/467-5000
Editor: Martin Moen
612/625-6243

FOREST ECOLOGY CAMP FOR TEENS SCHEDULED FOR LATE JUNE

The University of Minnesota's Extension Service is planning a summer camp to provide high school youth with the opportunity to explore the forest ecosystems of Minnesota. The Forest Ecology Summer Camp will be offered June 18-24 at the Forest Resource Center near Lanesboro, Minn. The week-long program costs $195 per person and space is limited, so early registration is requested. A limited number of camp scholarships are available.

Participants will be introduced to basic principles of forest management including forest products, wildlife habitat improvement, soil and water protection, and recreation planning. Working with a team of peers, they'll conduct a forest inventory and develop a stewardship management plan for a 10-acre "adopted" forest. Camp programs also will include a high ropes confidence course, a canoe trip, fisheries management, a cave tour, prairie management, and presentations on bats, owls, snakes, and natural resource careers.

For more information contact your local county extension office or the Forest Resource Center, 1991 Brightsdale Road, Rt.

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2, Box 156a, Lanesboro, MN 55949; telephone (507) 467-2437. More information also can be obtained from the University of Minnesota's Department of Forest Resources, 116C Green Hall, St. Paul, MN 55108-1027; telephone (612) 625-4209.

Program presenters include forest resource specialists Mel Baughman, Joe Deden, and David Rathke; wildlife and fisheries specialist Jim Kitts; and 4-H educator Stephan Carlson; all from the University of Minnesota's Extension Service.

Partial funding for the summer camp is provided by the Minnesota Legislature through the Legislative Commission on Natural Resources and the Minnesota Department of Natural Resources Stewardship Program. Co-sponsors include the University's Extension Service and Departments of Forest Resources, and Fisheries and Wildlife; the Minnesota Department of Natural Resources, Division of Forestry; the Forest Resource Center; forestry committees of Fillmore, Goodhue and Wabasha counties; and Soil and Water Conservation Districts and County Extension Offices in southeastern Minnesota.

# # #

EXTU,GOPH,MNF,V4MN,V5MN,V8MN,F8MN,F9MN,Y1MN,Z4 NNRD4974

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

March 7, 1995

Source: John Shutske
612/626-1250
Writer: Patricia Ohmans
612/624-8914

NOTE: Three graphics are attached to end of story.

FARM WORK DEATHS DOWN AGAIN: REASON FOR HOPE?

The number of Minnesotans killed in farm work-related accidents declined again last year. "This year's total of 24 deaths is the lowest it's been since we've kept records," announced John Shutske, agricultural safety and health specialist for the University of Minnesota's Extension Service. "Our statistics definitely show a marked decline in farm-related fatalities over the past 20 years. Even when we adjust for the declining farm population, the trend is definitely downward."

Is this a trend we can count on? Shutske says he is hopeful, but uncertain. "The numbers still bounce up and down from year to year, and we're not sure of all the reasons why," he said. "Research has pinpointed the most serious farm hazards, and we're beginning to understand when a person is most likely to be hurt doing farm work. But we have a long way to go before we can accurately predict whether any given year is going to be a bad one for farm injuries."

Many factors determine the rate of death and injury from farm work, Shutske explained. Improvements in farm machinery and

(over)

technology have surely made a difference. "All new tractors are now equipped with rollover protection, and potentially dangerous moving parts must be shielded. Most new combines are equipped to automatically shut off the header if the operator leaves the driver's seat," he said.

Beyond engineering changes, educational efforts in farm communities seem to be paying off. Many rural educators have made farm safety a regular part of their programming, sponsoring farm safety day camps and special training for teens. Farm safety advocates have raised awareness among farmers and the businesses that serve them about the importance of community-wide efforts to promote safer farming practices.

Two Minnesota programs have concentrated on developing community teams of farm safety advocates, Shutske said. "The Minnesota Farming Health Project, sponsored by the state health department, and our own Farm Safety and Health Leadership Team are two examples.

"For example, in several Minnesota counties, extension educators have worked with agribusinesses to beef up the supply of safety equipment available at local supply outlets. Now, when farmers want to purchase a respirator or hearing protection, they don't have to drive all over the county," Shutske explained.

Such efforts are on the increase. "There's a lot of activity in rural communities. People are realizing that farming is potentially deadly work, and acting on that realization in complex and subtle ways," Shutske said. "We're finally

(more)

acknowledging that farm safety is a community-wide problem, and one that must be addressed not just by farmers, or educators, or politicians, but by all of us."

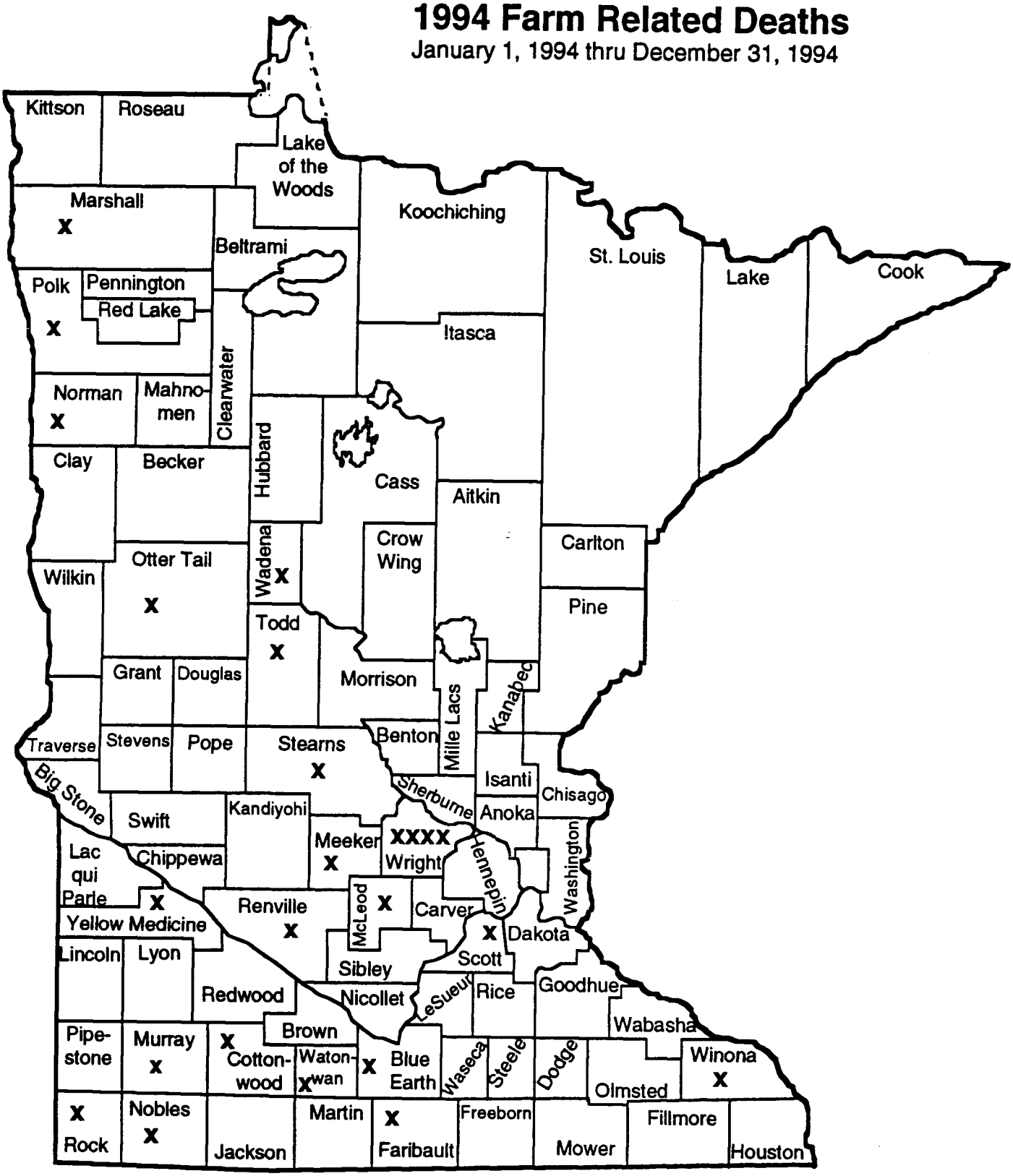
The statistics motivate farm safety advocates to work harder, Shutske said. "People know that even one death from farm work is too many," he noted. "These numbers might be statistics to some, but to us, the statistics represent real families wrenched apart, incomes decimated, children maimed. We're pleased with the apparent decline, but we won't be satisfied until the numbers get down to zero!"

# # #

EXTU,GOPH,MNF,DTN,V2MN,V4MN,V5MN,V8MN,V9,E4 NAGR4976

1994 Farm Related Deaths

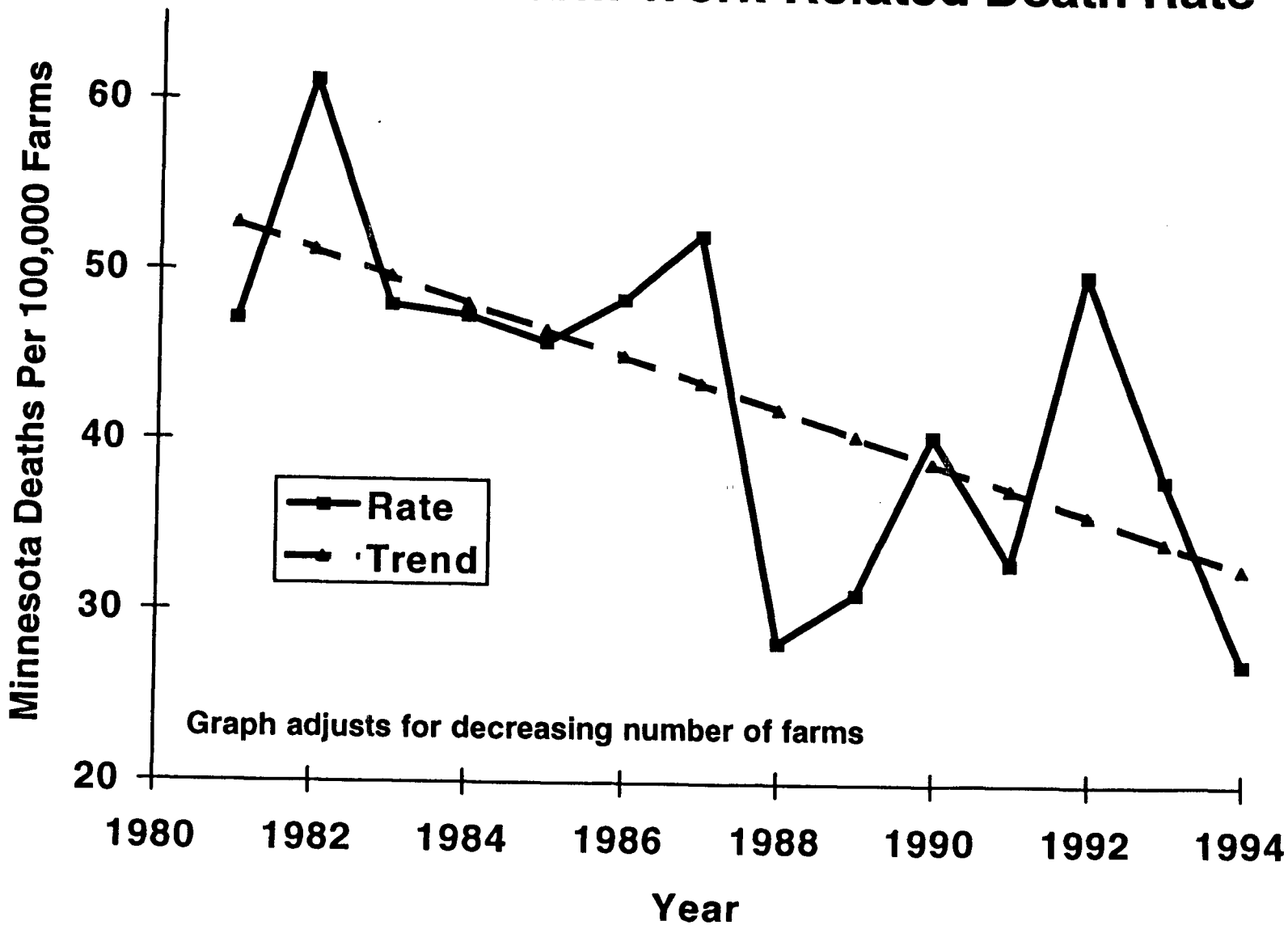
January 1, 1994 thru December 31, 1994



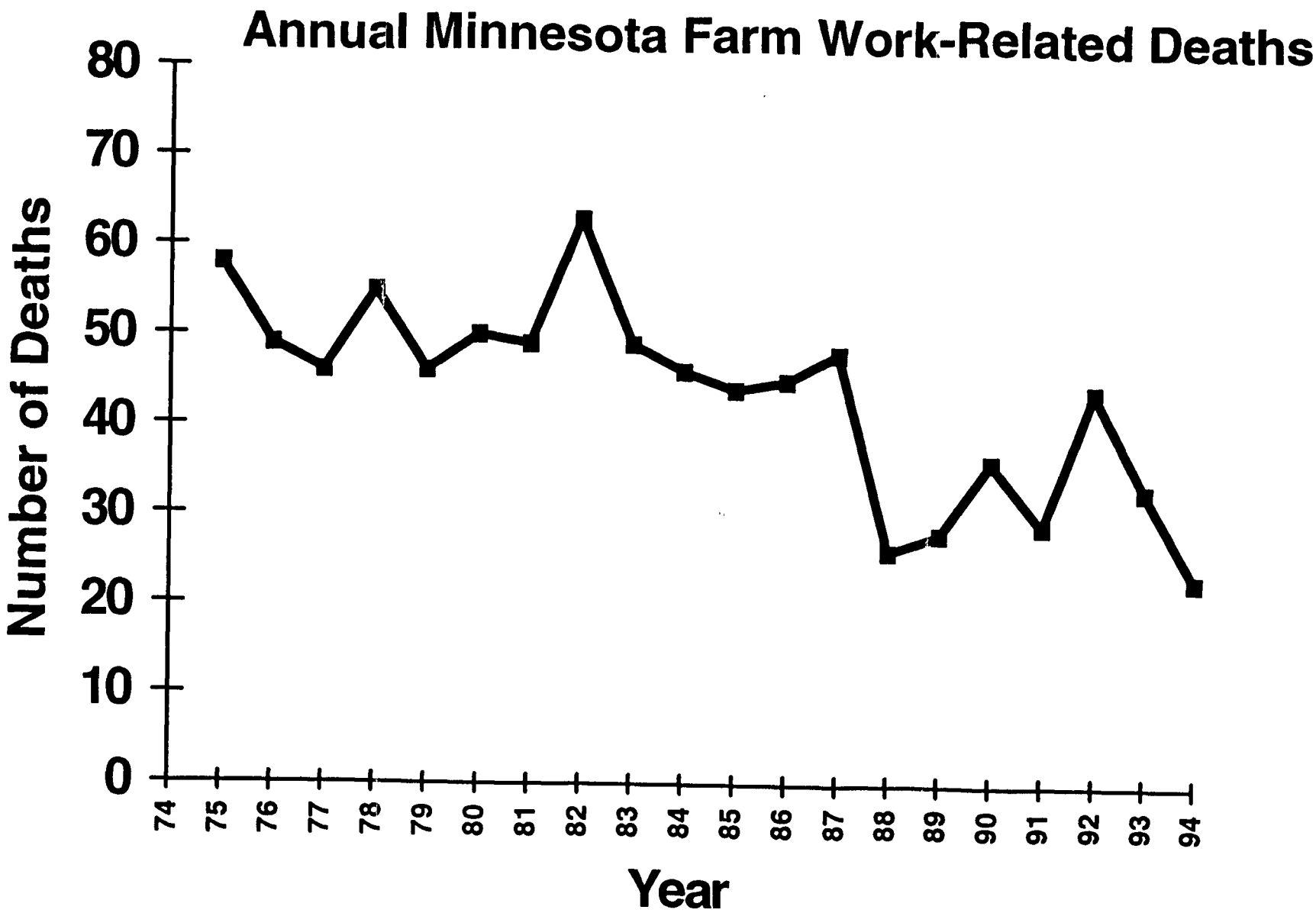
Source: Minnesota Extension Service
University of Minnesota
Agricultural Engineering

24 Fatalities in 1994

Minnesota Farm Work-Related Death Rate



Source: John M. Shutske, Minnesota Extension Service
University of Minnesota - Department of Agricultural Engineering



Source: John M. Shutske, Minnesota Extension Service
University of Minnesota - Department of Agricultural Engineering

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

March 7, 1995

Sources: Joan Sprain
612/439-0101
Laurel Swanson
612/442-4496
Writer: Martin Moen
612/625-6243

CURRICULUM HELPS EDUCATORS TEACH PARENTING SKILLS

We expect a lot from parents. Providing a loving, nurturing home is a given. Parents are also supposed to know the right thing to do in every situation. They're supposed to know how to help their children deal with problems. And, parents are expected to do all this while keeping their own lives happy and meaningful. It's a difficult juggling act.

These expectations have forced many parents to search for educational resources on parenting. Some just want the basics; others are looking for alternative styles of raising children that are different from the way they were brought up. The University of Minnesota's Extension Service has produced a new curriculum that will help meet these needs.

"Positive Parenting" is an 80-page curriculum that consists of 27 separate publications on disciplining children without the use of physical punishment. The curriculum was written for use by parent educators in schools, churches, social service agencies and other organizations.

The information is based on university research and is presented in an understandable and practical style. The

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curriculum includes background information for parent educators and handout materials for use by parents. Topics such as guidance and discipline methods, parenting styles, child development, and setting limits are discussed.

Joan Sprain, an extension educator in Washington County, wrote some of the materials contained in the curriculum. She says, "The curriculum is a response to the growing demand for information about violence prevention in families. People are just beginning to recognize the link between violence in our families and violence in our society in general."

The "Positive Parenting" curriculum (item MI-6530-NR1) costs $7 (Minnesota residents include 7 percent sales tax). Send a check or money order, payable to the University of Minnesota, to MES Distribution Center, University of Minnesota, 1420 Eckles Ave., St. Paul, MN 55108-6069. Include the title and item number in your order. Call (612) 625-8173 to charge your purchase to Mastercard, Discover, or VISA.

Copies of the curriculum are also available from county extension offices in Minnesota.

# # #

EXTU,GOPH,MNF,V4,V5,V8,C1,F1,F2 NHEC4977

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 10, 1995

Source: George Rehm
612/625-6210
Editor: Jack Sperbeck
612/625-1794

YOU WON'T FIND MIRACLE PRODUCTS FOR CROP PRODUCTION

Melting snow, singing birds and sales pitches for miracle products are signs of spring in Minnesota farm country. And more sales pitches are expected this spring due to higher prices for nitrogen and other fertilizers.

But there are no miracle products for crop production, says George Rehm, soil scientist with the University of Minnesota's Extension Service. "Each year spring's arrival is accompanied by claims and advertisements for new products," he says. "They're supposed to have magical effects on root growth, leaf size or the feeding value of the crop."

Many sales people will claim their magical product will reduce the amount of nitrogen fertilizer needed for crop production, Rehm says.

These miracle products are easy to identify. "The literature uses testimonials instead of results of research trials," Rehm says. "The seller also claims the product is so new that very few know about it."

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What do you do when you're confronted with sales pitches for these new products? "Remember there are no miracle products for crop production," Rehm says. "Your highest probability for maximizing farm profits comes from products and production practices that have evolved from high quality research, not testimonials."

Ask questions if you're unsure about using a "new" product. There are several sources of good information, including your county extension office, crop consultants and fertilizer dealers.

"If something seems too good to be true, it probably is," Rehm says. "Ask before you spend."

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EXTU, GOPH, MNF,DTN,V2,F4,P1 NAGR4980

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 14, 1995

Source: Debra Noll
612/624-7457
Writer: Deedee Nagy
612/625-0288

MINNESOTA 4-H FOUNDATION ACCEPTING GRANT APPLICATIONS

Remember being frustrated when you were a kid and no one would listen to your opinions about "adult" issues? The Minnesota 4-H Foundation is awarding grant money this spring to worthy youth development programs or projects that young people want and adults will support.

"Kids have to experiment with speaking their minds and taking responsibility for community issues that matter," says Deb Noll, a development associate with the 4-H Foundation. "Young people who want to get involved need to be nurtured by adults." She says it is important for young people to participate in discussing and implementing community programs. From such experiences, young people gain self-confidence and experience that help them handle new situations.

The 4-H Foundation is making several thousand dollars available to help fund youth development programs. Grants can range from $400 to $2,000, but any size application will be accepted, Noll says. Preference will be given to projects that bring adults and youth together and focus on developing lifelong

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skills in the young people.Other important criteria include:

* efforts to reach out to new audiences of adults and youth, including representation by community members of diverse ages, ethnicities, income levels and abilities;

* emphasis on the learning process (such as the "learning by doing" model) rather than just on the end results;

* evidence of working with others and contributions of time, money and supplies from local supporters;

* uniqueness and innovation in programming.

Other funding guidelines encourage programs that will have a long-term impact, and programs that involve a variety of community groups.

Deadline for submitting a grant application is April 30. Forms are available from county offices of the University of Minnesota's Extension Service or by calling the Minnesota 4-H Foundation at 1-800-444-4238. For more information about the grants program, contact the 4-H Foundation at (612) 624-7457.

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GOPH,EXTU,MNF,V4MN,V5,F1,Y1 N4-H4982

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 14, 1995

Source: Cindy Wolf
612/625-1780
Editor: Joseph Kurtz
612/625-3168

DAIRY SHEEP SYMPOSIUM SET FOR MARCH 30 IN MADISON, WIS.

Sheep dairying as an alternative agricultural enterprise will be the focus of a symposium March 30 in Madison, Wis.

The Great Lakes Dairy Sheep Symposium will be at the Holiday Inn Southeast in Madison. It is designed for current dairy sheep producers, processors of sheep's milk, and producers and processors considering entering the industry.

The symposium will come immediately before the Wisconsin Sheep Industry Conference March 31-April 1. That conference is the largest sheep educational event in the U.S. and annually draws 1,000 people or more.

Dairy sheep symposium topics will range from set-up of a sheep dairy farm to making cheese from sheep's milk. Sheep dairying is a well established industry in parts of Europe, and two speakers from Europe will be featured. Olivia Mills from England is author of the book "Practical Sheep Dairying" and has spoken and consulted on sheep dairying in many countries. Francis Barillet from France coordinates dairy sheep research for

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the European Union. He also chairs the French Dairy Sheep Committee and the working group on dairy sheep recording of the International Committee for Animal Recording.

U.S. speakers include Cindy Wolf, University of Minnesota veterinarian; Bill Boylan, who conducted research on sheep dairying at the University of Minnesota until his recent retirement; and Janet McNally, sheep instructor at Pine Technical College, Pine City, Minn.

Registration fee for the conference is $45 per person, which includes proceedings, lunch, and cheese and wine tasting. For registration information contact Yves Berger, Spooner Agricultural Research Station, R.R. 2, Box 2335, Spooner, WI 54801-2335; phone 715/635-3735. For information on the Wisconsin Sheep Industry Conference registration, call Dick Roembke at 414/377-1491.

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EXTU,GOPH,MNF,V2,V4,V5,D1,P1,S1 NAGR4983

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 16, 1995

Source: Mike Schmitt
612/625-7017
Editor: Joseph Kurtz
612/625-3168

CUTTING NITROGEN RATES FOR 1995 CORN COULD BE COSTLY

Although prices for nitrogen fertilizer are up sharply this year, cutting N rates for corn on a straight percentage basis could be a costly mistake. There are better strategies for holding the line on fertilizer costs, according to Mike Schmitt, soil scientist with the University of Minnesota's Extension Service.

"The ratio of the price of nitrogen per pound to the price of a bushel of corn determines the optimum N rate in University of Minnesota fertilizer recommendations," says Schmitt. "Although N prices may have increased by 20-40 percent, this increased N cost is relatively small when compared with the price of a bushel of corn. Dozens of recent research trials show there should be no economically optimum rate reductions due to the recent price increases."

A better approach to minimizing the amount of money you spend on fertilizer, says Schmitt, it to follow some basic fertilizer N management practices.

"First, don't add more fertilizer than recommendations call for," he says. "This means taking full credit for N from manure

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and legumes. The University of Minnesota N recommendations do not build in any 'insurance' and do consider all N credits. An additional tool for refining rates is the new preplant soil N test now available throughout the state.

"Second, base your yield goals on your previous five-year average yield, leaving out the lowest yielding year. 1994's yields proved in many cases that when the weather is favorable for higher-than-predicted yields, conditions are also favorable for increased soil N release.

"Finally, use fertilizer N management strategies that are 'best' for your area. Producers often add insurance N when they know that they are not following best management practices."

Schmitt says the 1995 corn crop will suffer if producers apply nitrogen at rates below recommendations. "There are many fine tuning strategies for keeping fertilizer N purchases to a minimum," he points out. "The grain yield return to fertilizer N is great. Let's not jeopardize this return on investment by indiscriminately cutting fertilizer rates without agronomic justification."

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4985

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 17, 1995

Source: Ward Stienstra
612/625-6290
Editor: Joseph Kurtz
612/625-3168

SOYBEAN SEED TREATMENT IS RISK PREVENTION DECISION

Treating soybean seed is a practice that sometimes pays dividends and sometimes doesn't. It's a risk prevention decision, says Ward Stienstra, plant pathologist with the University of Minnesota's Extension Service.

"In studies across several states, treating seed improved 20 percent of the stands," says Stienstra. "At 25 percent of the test sites seed treatment resulted in a yield increase of three or more bushels per acre."

There are three situations in Minnesota for which Stienstra says seed treatment is always warranted. The first is when the seed lot is infested with a fungus, such as Phomopsis.

"In this case, the improvement in germination is nearly one for one for each seed infested," says Stienstra. "If the seed lot has 20 percent seed infection and the seed is still alive, not killed by the fungus, application of a suitable fungicide will improve germination and establishment by about 20 percent."

The second situation is when the seed does not have adequate phytophthora resistance or "field tolerance." In this case,

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adding an appropriate seed treatment will protect the developing seedling in the early stages when seed and seedling rot can occur, says Stienstra.

The third situation is when you plant early into less prepared soils, or low-till sites, that have high residue. Disease in seedlings is more likely in this environment, says Stienstra.

He suggests reviewing the results of early soybean stand establishment on your farm by soil type and expected planting date. However, a poor stand may be the result of factors other than disease.

"Soybean seedling establishment from deep planting is more difficult," he points out. "Placing seed at the right depth and planting at the right speed are important factors, especially on low-till sites."

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4989

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NEWS/ INFORMATION

March 17, 1995

Source: Dale Hicks
612/625-8700
Editor: Joseph Kurtz
612/625-3168

SELECT VARIETIES ACCORDING TO YIELD DATA FROM SEVERAL LOCATIONS

When it's time to choose corn hybrids and soybean varieties, the best information to look at is a several-location average of yield trials. That goes contrary to what most producers believe, says Dale Hicks, agronomist with the University of Minnesota's Extension Service.

"If you base your hybrid and variety choices on yield results from several locations, you'll get higher yields during the next growing season than if you base your choices on results from one location," says Hicks. "That's true even if the single location is your own farm."

Hicks cites a Wisconsin survey in which corn growers ranked the sources of information most useful in choosing corn hybrids as follows: results of yield tests on their farm, corn company tests on their farm, test results close to their farm, university tests, and information from corn company agronomists.

"Few producers question the idea that the best variety selection information is 'on my farm' or 'local' information," says Hicks. "To determine the validity of this, we looked at results from 10 years of University of Minnesota soybean variety tests and eight years of University of Wisconsin corn hybrid tests."

For soybeans, the tests were from the Southern Experiment Station at Waseca, the Southwest Experiment Station at Lamberton, and a farmer's field at Fairmont. For each location and the

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average of the three locations, yields were ranked from high to low and the highest three varieties were chosen as the varieties to grow the next year. Yields of these varieties in the next year's test were calculated as a percent of the test average. These locations could all have been separate on-farm trials that farmers might use to choose varieties. Using any one of the three locations simulates the situation when a grower uses an "on my farm" test.

Analysis of soybean test results involved seven sets of choosing varieties and determining their yield performance the next year, which simulates a farmer choosing and growing soybeans for seven years.

Higher yields occurred at each of the three locations when the varieties were chosen from the three-location average rather than any of the single locations. For example, the highest yielding variety chosen from Lamberton results yielded 2 percent above the test average when grown the next year at Lamberton (averaged over seven years). But the highest yielding variety chosen from the three-location average yielded 5 percent above the test average when grown the next year at Lamberton. When planting two or three varieties, the three-location average also resulted in higher yields.

In the Wisconsin corn yield trials, the same procedures were followed as in the Minnesota soybean trials. When the next year's yields were averaged over the three locations, equal or higher yields occurred by basing choices on the three-location test average.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4988

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NEWS/ INFORMATION

March 20,1995

Source: George Rehm
612/626-6210
Writer: Jack Sperbeck
612/625-1794

FERTILIZER CAN BE GOOD INVESTMENT

Trying to cut crop production costs by eliminating fertilizers could be a mistake, according to a University of Minnesota soil scientist.

George Rehm, Minnesota Extension Service, said farmers need to know soil test levels for phosphate and potash (P and K) before cost effective fertilizer programs can be developed.

"There's a substantial return on investment if soil test values show the fertilizer is needed," he said. "But this return probably won't be seen if soil test values for P and K are in the high or very high range."

Rehm said producers can save on fertilizer dollars by using starter instead of broadcast P or K for corn and small grain production.

More information on fertilizer management is available from county offices of the Minnesota Extension Service.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4991

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 20,1995

Source: George Rehm
612/626-6210
Writer: Jack Sperbeck
612/625-1794

EARLY SPRING IS GOOD TIME FOR SOIL SAMPLES

All signs point to an early spring--and a good time to collect soil samples if you didn't get it done last fall.

Soil testing is a job that's easily put off in the fall. But soil testing "is the most important management tool that farmers can use in arriving at cost effective fertilizer recommendations," says George Rehm, soil scientist with the University of Minnesota's Extension Service.

Minnesota farmers benefit two ways from using results of analysis of soil samples. First, the results show rates of plant nutrients that must be added in a fertilizer program to get the most cost efficient yield.

Soil test results also show what nutrients are supplied in adequate amounts by the soil and aren't needed in a fertilizer program.

Several soil testing laboratories are available. "Farmers frequently ask which one is best. The best advice is to choose a

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laboratory that uses research data collected in Minnesota as a basis for its fertilizer recommendations," Rehm says.

Sample bags and information sheets are available from county extension offices.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4990

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 20,1995

Source: George Rehm
612/626-6210
Writer: Jack Sperbeck
612/625-1794

DON'T WORRY ABOUT NUTRIENT BALANCE FOR CROPS

Test your soil for nutrient supplies, then apply fertilizer to add nutrients that test low. But don't worry about "balanced fertility" or "nutrient balance," advise soil scientists with the University of Minnesota's Extension Service.

"The terms 'balanced fertility' or 'nutrient balance' sound nice and impress some people. But they're not important for crop production in Minnesota," says George Rehm. In other words, test for and apply nutrients independently of each other, advises Mike Schmitt, Rehm's coworker.

The use of terms like "balanced fertility" or "nutrient balance" implies there's a fine balance among plant nutrients in the soil. These terms also imply that an excess of one nutrient in the root zone may lead to shortages or deficiencies of another nutrient. This is not true, however.

The concept of nutrient balance originated with some limited research in New Jersey in the early 1940s, Rehm says. But research conducted since then has clearly shown that an "ideal"

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nutrient balance does not exist in soils. The ratio of one nutrient to another can vary over a wide range and still not have an impact on crop yield.

Results from a soil test give the supply of nutrients available for crop production. "If your fields weren't sampled last fall, sample this spring," Rehm advises. "This is a small job that can result in more profit from crop production."

If the soil test is low, add fertilizer. If it is high, additional fertilizer is not profitable.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4993

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St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 20,1995

Source: George Rehm
612/626-6210
Writer: Jack Sperbeck
612/625-1794

USE SPLIT NITROGEN APPLICATIONS ON IRRIGATED, SANDY SOILS

Split applications of nitrogen fertilizer on irrigated, sandy soils can increase yields. They also reduce the potential for movement of nitrate-nitrogen to the groundwater, says George Rehm, soil scientist with the University of Minnesota's Extension Serve.

You have several options for split applications. Nitrogen can be applied broadcast or knifed in, or injected with the irrigation water. In addition, any combination of these methods can be used, which lets you be very flexible.

Don't apply any nitrogen fertilizer to sandy soils before planting. This increases the chances that some nitrogen fertilizer may be lost due to leaching, which may reduce corn yields, and profits.

Split applications don't allow for using reduced rates of nitrogen fertilizer. For sandy soils, nitrogen rates should still be determined by considering the yield goal, previous crop and soil organic matter content.

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While split applications of nitrogen fertilizer have been beneficial for corn production on irrigated sandy soils, they have not yet improved yields when corn in grown on the fine-textured soils of Minnesota, Rehm says.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR4992

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 21, 1995

Source: Judy Sunvold
800-367-5363
Writer: Joseph Kurtz
612/625-3168

UNIVERSITY OF MINNESOTA PLANS ALTERNATIVE LIVESTOCK CONFERENCE

If the idea of raising buffalo, llamas, ostriches, or elk intrigues you, an event the University of Minnesota is planning this summer is for you.

The event is the Alternative Livestock Conference, scheduled for July 27-29 on the university's St. Paul campus.

The conference will be designed for people considering an alternative livestock enterprise, as well as those who have already established such an enterprise. It will provide networking opportunities with other producers. There will be live animals on hand for show and demonstration, and also displays on production and support services.

The conference will include educational presentations on alternative livestock production, health and nutrition, and housing. There will also be information on the economics and marketing of alternative livestock and value-added products.

To obtain a preliminary brochure for the conference, call Judy Sunvold at 1-800-367-5363 or (612) 625-2636.

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EXTU,GOPH,MNF,DTN,V2,V4,V5,A4,P1

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 22, 1995

Source: Bill Lazarus
612/625-8150
Writer: Joseph Kurtz
612/625-3168

CASH RENT PRICES FOR MINNESOTA FARMLAND SHOW SMALL INCREASE

Estimated average cash rent prices for Minnesota farmland increased about two percent in 1994 compared with a year earlier. A statewide increase of one percent is the forecast for 1995, based on the results of a University of Minnesota survey.

"Almost three-quarters of the farmland rented in Minnesota is on a cash basis," says Bill Lazarus, economist with the university's Minnesota Extension Service. Lazarus conducted a survey last fall of Minnesota cash rent prices for farmland. Over a thousand township boards across the state provided information for the survey.

"The average of the responses on estimated cash rent for land of average quality in 1994 was $61 per acre statewide," says Lazarus. "That's up three percent from 1993. However, when only the townships for which we have estimates in both years are considered, average estimated rents increased by two percent."

The highest estimated rents were in the south central region of the state, where they averaged $91 per acre. That's up five percent from a year earlier.

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Respondents were also asked to estimate cash rents expected in 1995. The results indicated the statewide increase would be one percent, according to Lazarus.

"Average estimated cash rent for high quality land in south central Minnesota exceeded $100 per acre in 1994," says Lazarus. "In the northeast corner of the state, the estimated rent for relatively high quality land was about $26 per acre."

Expected increases in 1995 rents are fairly evenly distributed across land qualities, with slightly larger increases expected in the southern part of the state. "The survey responses show that statewide, rents will increase by one percent for all qualities of land," says Lazarus.

Additional details from the cash rent survey are available in the Winter, 1995 issue of the "Minnesota Agricultural Economist" newsletter prepared by the Minnesota Extension Service and the Department of Agricultural and Applied Economics at the U of M. Copies are available from county offices of the Minnesota Extension Service or from Waite Library, Department of Agricultural and Applied Economics, University of Minnesota, 1994 Buford Ave., St. Paul, MN 55108-6040; telephone (612)625-1705.

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EXTU,GOPH,MNF,DTN,V2,V4MN,V5MN,A2 NAGR4995

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 27, 1995

Source: Tom Milton
612/624-5307
Writer: Martin Moen
612/625-6243

WORKSHOPS WILL TEACH BANDSAW MAINTENANCE, LOG SAWING TECHNIQUES

Years ago it was fairly easy to find a local sawmill that would custom-saw lumber to fit your needs. But many of the small mills disappeared as equipment became more expensive and harder to maintain. The small, local sawmill is making a comeback thanks to the introduction of portable bandsaw-type mills about 15 years ago.

The growing popularity of the portable bandsaw mills has led the University of Minnesota to offer a series of workshops that will teach owners how to get the most performance out of their equipment, and how to get the most lumber from a log. The goal is to help operators maximize the efficiency and profitability of operating their mills.

The workshops are scheduled for four Minnesota locations: April 4 at the Holiday Inn in Eveleth, April 5 at the Ranch House Supper Club in Walker, April 6 at the American Legion in Mora, and April 7 at the Forest Resource Center near Lanesboro. The workshops will begin at 8 a.m. and conclude at 3:30 p.m.

Registration is $35 and includes lunch and workshop materials. Each workshop consists of a classroom session in the

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morning and an outdoor demonstration of a portable bandsaw sawmill in the afternoon. Participants should dress appropriately for the afternoon session. For more information contact Mary Ferguson at (612) 624-3619. Preregistration is required, but payment can be made at the door.

"The new technology has made it possible for people to get into the sawmill business with a small investment of between $8,000 and $20,000," says Tom Milton, a forest products specialist with the University of Minnesota's Extension Service. Portable bandsaw mills require less room to operate, can saw a log more accurately, and produce more lumber from a log than a circular sawmill. With additional equipment an experienced sawyer can saw as much as 4,000 board feet of lumber each day.

The workshop topics include the role portable bandsaws can play in the sawmill market; how to get the most from your sawblade; methods of sawing logs that can improve recovery and the grade of lumber produced; setting up, aligning and checking your portable bandsaw; and efficient log and lumber handling techniques.

The workshops are sponsored by Wood-Mizer Products Inc., the Forest Resource Center, and the University of Minnesota's Extension Service, College of Natural Resources and Department of Forest Products.

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EXTU,GOPH,MNF,X9,F9MN,Z3,Z4,21,34,46,47 NNRD4997

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 27, 1995

Source: Judy Sunvold
612/625-3775
Writer: Joseph Kurtz
612/625-3168

Editors: A limited number of b/w photos are available for use with this news release. If you would like a photo, contact Jennie Y. Rominger at (612) 625-6294.

3 INDUCTED INTO MINNESOTA LIVESTOCK HALL OF FAME

Three Minnesotans were honored recently for their longtime contributions and service to the state's livestock industry.

James Foss of Kenyon, Richard Goodrich of Scandia, and Maurice Grogan of Marine-on-St. Croix were inducted into the Minnesota Livestock Hall of Fame. Their induction took place during the 99th annual meeting of the Minnesota Livestock Breeders' Association in St. Paul.

Foss and his brothers, Steven and Davis, farm 675 acres and have a Milking Shorthorn cattle herd of 60 cows and 120 replacement heifers and steers. The three brothers also market about 400 hogs per year.

Their cattle have been shown in several states, and they have sold cattle from coast to coast and in three foreign countries. They have produced and sold several bulls for artificial insemination use.

James Foss is a past president of the Minnesota Livestock Breeders' Association and past state president of the Milking

(over)

Shorthorn organization. He served as president of the American Milking Shorthorn Society for 1979-80, and has also served as a director of the national group.

He has served on his local fair board, elevator board, school board, and has been a Sunday school teacher and active member of Holden Lutheran Church.

Goodrich has served as head of the University of Minnesota's Department of Animal Science since 1983. A native of New Richmond, Wis., he received his undergraduate education at the University of Wisconsin-River Falls. He received a master's degree from South Dakota State University in 1962 and a Ph.D. degree from Oklahoma State University in 1965.

Goodrich joined the University of Minnesota faculty in 1965 and was promoted to professor in 1971. He has directed basic and applied ruminant nutrition research at the university. He has taught courses in animal care, ruminant nutrition, laboratory analyses of feedstuffs, and mineral nutrition.

Goodrich has served on the Editorial Board and Board of Directors of the American Society of Animal Science and on numerous ASAS committees. He has published 73 refereed articles, 125 abstracts, nine book chapters, and 321 experiment station publications.

Goodrich has been active in international agriculture and has visited 15 countries for presentations and international projects. He is a past president of the Midwest Section of the American Society of Animal Science. He received the University

(more)

of Minnesota's outstanding teaching award in 1969 and the Horace T. Morse award for outstanding contributions to undergraduate teaching at the university in 1979.

Grogan is a seedstock producer who has shown cattle at the Minnesota State Fair since 1948. He has served as a director of the Minnesota Hereford Association and the Red Angus Association. He was a member of the first Minnesota Beef Council and served on the council for nine years.

Grogan is an honorary member of the Stillwater FFA Chapter and received a 25-year plaque for service to Washington County 4-H.

He received the Minnesota Purebred Beef Performance Man of the Year Award in 1994 and was the first recipient of the R.E. Jacobs Award for contributions to the Minnesota livestock industry.

He has judged livestock shows in Minnesota and Canada. He has bred and shown many champions at Midwest fairs and showed cattle at the first World Beef Expo. He has hosted tours of his farm for visitors from across the nation and many foreign countries.

# # #

EXTU,GOPH,MNF,V2MN,B1,D1,25,87 NAGR4996

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NEWS/ INFORMATION

March 27, 1995

Sources: Al Withers
612/296-6688
Mike Martin
612/625-4211
Writer: David Hansen
612/625-7290

SUMMER RESEARCH OPPORTUNITIES AVAILABLE FOR SCIENCE TEACHERS

Science teachers have a new opportunity this summer to work alongside University of Minnesota researchers and help investigate plant, insect, soil and environmental problems. University of Minnesota Agricultural Experiment Stations at Morris, Waseca and Grand Rapids have assistant scientist positions available under a new initiative with the Ag in the Classroom program of the Minnesota Department of Agriculture.

The project will link middle school and secondary science teachers with hands-on research projects. "Both we and the university feel working with science educators is of high priority and mutually beneficial," says Al Withers, program director of Minnesota Ag in the Classroom. "Experiment station research staff will provide an invaluable learning experience for these educators as they

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look for ways to incorporate agricultural concepts into their classroom."

Research areas include agronomy and plant genetics, entomology, plant pathology, horticulture, soil science, agricultural engineering and animal science. Each branch station has $6,000 available to fund the summer positions.

Both teachers and the university stand to benefit because "we can bring teachers into contact with the science we do, while we get expert help on our important research projects," says Michael Martin, assistant director of the Agricultural Experiment Station and acting dean of the university's College of Agricultural, Food, and Environmental Sciences.

Martin explains that the wide variety of research projects underway at the branch stations will enable teachers to experience research in many forms, from collecting soil and plant samples to conducting laboratory tests. "Most research will focus on plants, soil and water," Martin summarizes.

Information and applications are available from Withers at: M-AITC, 90 West Plato Boulevard, St. Paul, MN 55107, phone (612) 296-6688. The deadline for applying is May 15.

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EXTU,GOPH,MNF,V4MN,V5MN,V8MN,R1MN NEXP4998

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NEWS/ INFORMATION

March 29, 1995

Source: Steve Taff
612/625-3103
Writer: Martin Moen
612/625-6243

MINNESOTA FARMLAND VALUES DECLINE SLIGHTLY IN 1994

The price of a typical acre of Minnesota farmland decreased by 1 percent in 1994 from $839 to $830 per acre. But this statistical fact masks the reality that four of the six regional areas defined by the study posted increases in value. The study's author says the statewide figure is almost meaningless.

"The statewide average is the result of a mathematical process," says Steve Taff, an economist with the University of Minnesota's Extension Service, "and is irrelevant to the land market." He says the statewide figure also is a poor indicator of the health of the farm economy, adding, "We report the figure only out of tradition and because people are curious."

The regional land values are more meaningful, Taff says. "When you look at individual regions, the types of farms and the commodities that are produced are much more similar," he notes. "Consequently, the average land value figure is a more reliable indicator of the agricultural land market in that area."

The southeastern region posted a 16 percent increase in land values between 1993 and 1994--the largest increase among the state's regions. This region includes most of the Twin Cities

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metropolitan area and extends as far west as Meeker County. Pressure from urban expansion is just one factor that may have driven the price of a typical acre of agricultural land in the southeastern region from $1,021 in 1993 to $1,184 in 1994.

Agricultural land in the southwestern region remains the most valuable in Minnesota, with an average value of $1,191 per acre, a 2.7% increase over 1993.

The northwestern region experienced the largest decrease in value, from $586 for a typical acre in 1993 to $465 in 1994, a drop of 20.6 percent. "I'm not sure why the values dropped so much in this region," Taff says. "One possible answer is that the majority of the transactions in the northwestern region dealt with land outside of the Red River Valley basin, where agricultural land is more valuable."

The average land value figures are often used to gauge the mood of the individuals participating in the transactions. Taff says, "If the average prices increase, we say that buyers are optimistic about their ability to make the payments in the future."

Taff says the optimism reflected in the land transactions in most of the regions in 1994 may not be justified. "The cost of agricultural inputs is going up, commodity markets show little potential for upward movement, and the future for federal subsidy programs appears shaky," he points out.

However, Taff doesn't believe the inflated land prices indicate the farm economy is headed for a collapse. "Average

(more)

agricultural land values are, at best, an indirect measure of the farm economy. If we want an accurate impression of the farm economy's health," Taff says, "we should look at individual farm incomes."

Taff also cautions against using words such as "strong" or "weak" to describe the land market. "If I were buying land, the last thing I'd want is a 'strong' market," he says. "But, if I were selling land, I'd be pleased by those circumstances." Taff says anyone who uses land value figures needs to avoid value-laden words such as these.

The 1994 study is based on 1,733 agricultural land transactions reported to the Minnesota Department of Revenue by local assessors and auditors between Oct. 1, 1993 and Sept. 30, 1994. While agency and county officials strive to identify all sales data, some is inevitably missed. Consequently, Taff says variations in the yearly total number of transactions may not reflect changes in actual market intensity.

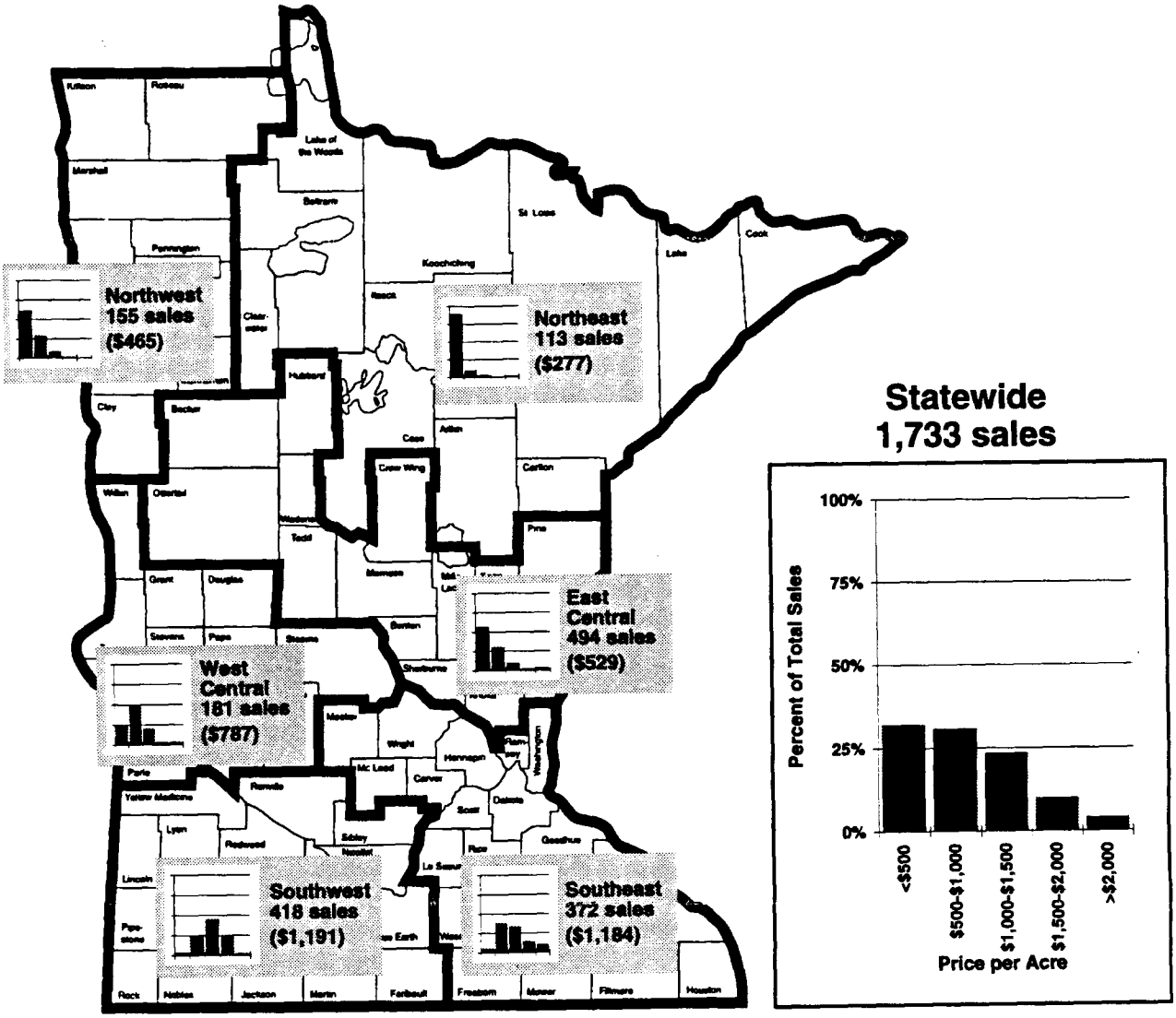
The annual land value study is supported by the Minnesota Department of Revenue and the University of Minnesota's Agricultural Experiment Station and Department of Agricultural and Applied Economics. Free copies of the study can be obtained by contacting the Waite Memorial Library, University of Minnesota, 1994 Buford Ave., St. Paul, MN 55108-6040; tel. (612) 625-1705. Request the "Minnesota Agricultural Economist," No. 679, Winter 1995.

# # #

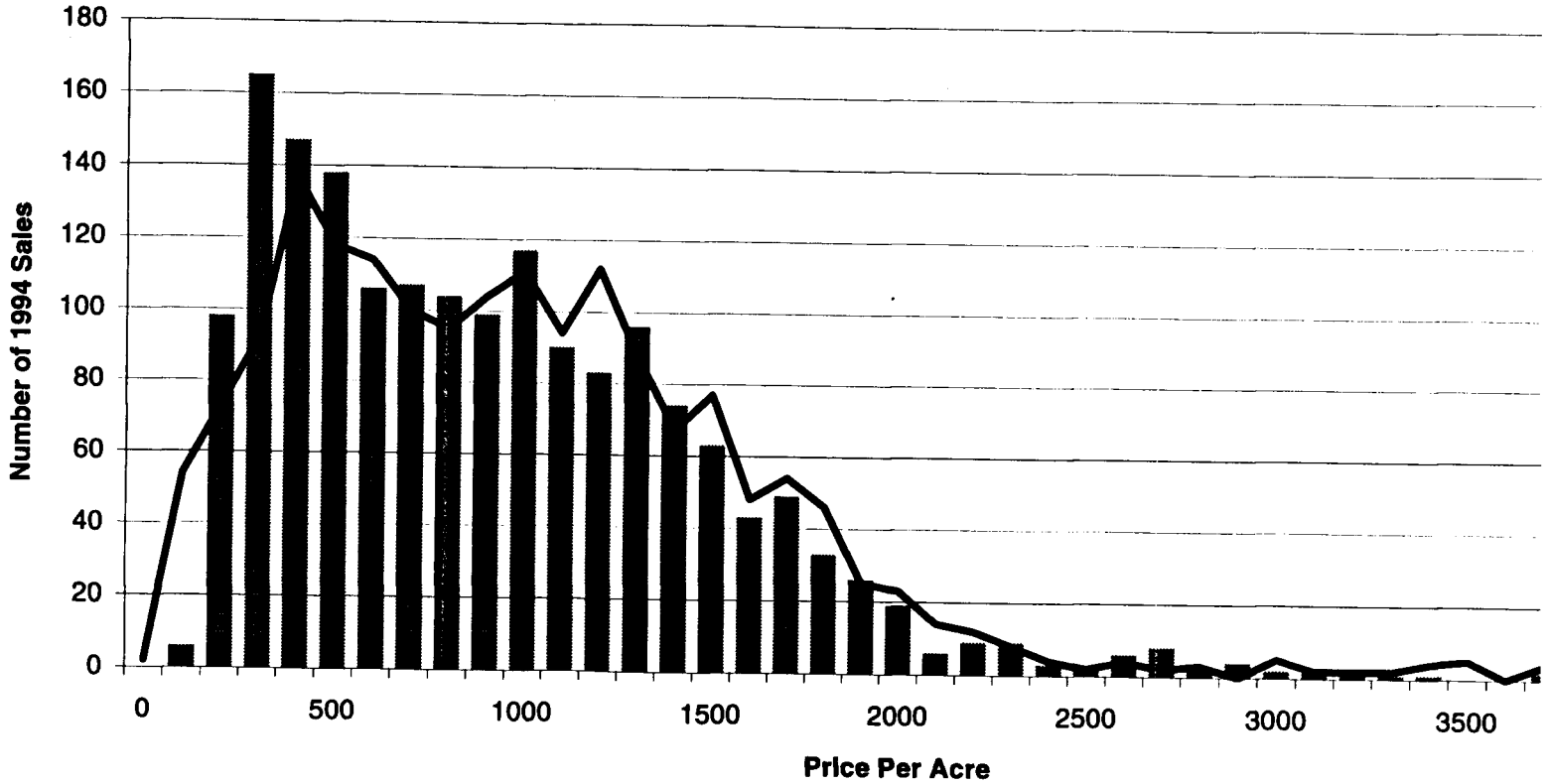
The price of a typical acre of agricultural land by region. *(regions match those used in the graphic titled, Recorded 1994 Farmland Prices....etc.)*

	1993	1994	% change
East Central	$507	$529	+ 4.3%
Northeast	$290	$277	- 4.5%
Northwest	$586	$465	- 20.6%
Southeast	$1,021	$1,184	+ 16%
Southwest	$1,160	$1,191	+ 2.7%
West Central	$772	$787	+ 1.9%
Statewide	**$839**	**$830**	**- 1.1%**

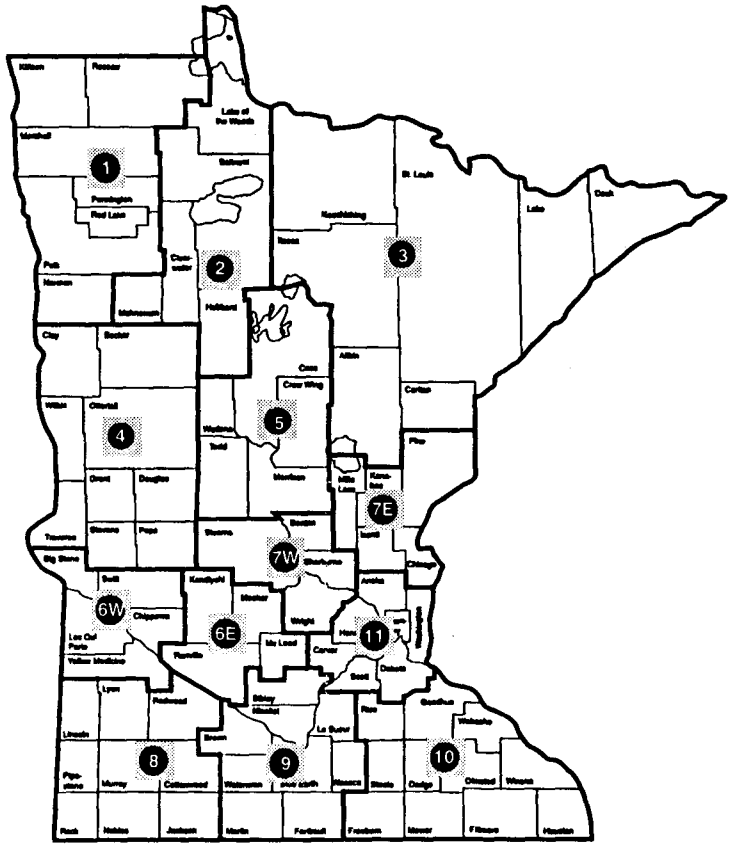
Recorded 1994 Farmland Prices (Area Mean) by Reporting District

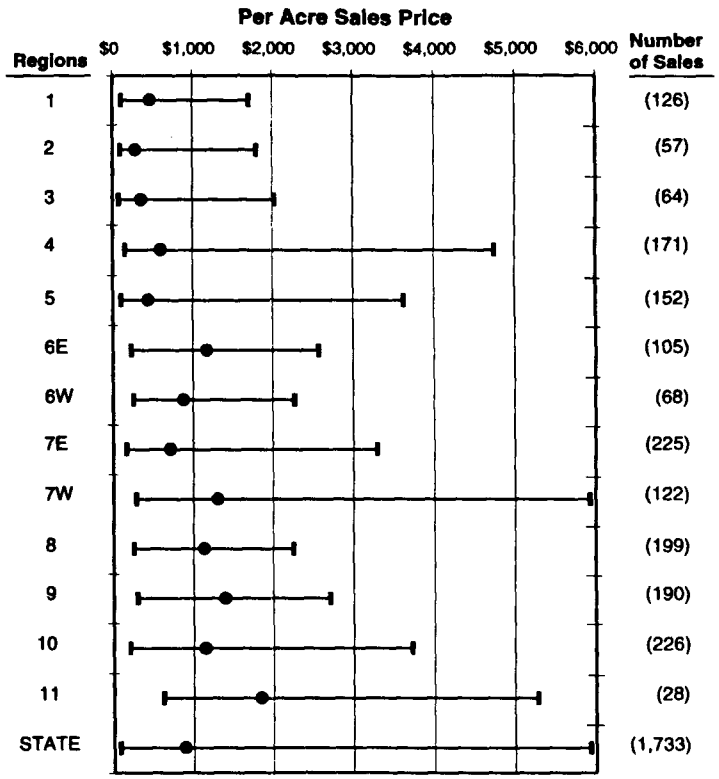


Distribution of Observed 1994 Basic Land Sales Prices (Bars) and Calculated Tillable Land Prices (Line)



Area Mean and Range of Sales Prices by Economic Development Region





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NEWS/ INFORMATION

March 29, 1995

Source: Cindy Wolf
612/625-1780
Writer: Joseph Kurtz
612/625-3168

CONFERENCE ON SMALL SHEEP FLOCKS WILL BE APRIL 8 IN ALBERT LEA

A demonstration of routine baby lamb care and presentations on grazing and pasture lambing are on the agenda at a sheep producer conference in Albert Lea on April 8.

The Upper Midwest Small Flock Conference will have a morning classroom session at the Albert Lea campus of South Central Technical College. The afternoon program will be at the farm of Wayne and Carol Busch, nine miles from Albert Lea. Maps with directions to the Busch farm will be available at the morning session.

Conference registration begins at 9 a.m. and the program gets underway at 9:30 a.m. Cindy Wolf, University of Minnesota veterinarian, will begin the program with a presentation on assisting the ewe at lambing time. She teaches small ruminant health in the university's College of Veterinary Medicine.

Pasture lambing will be the topic of veteran sheep producer Brooke Rodgerson. She and her husband use spring pasture lambing with 275 ewes, and also emphasize rotational grazing in their operation.

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The legality of locker lamb sales will be the topic of Wayne Busch, farm management instructor on the Albert Lea campus of South Central Technical College. Busch has served as an instructor in the Albert Lea Lamb and Wool Program for nine years.

A presentation by Larry Becker on the National Sheep Checkoff will close out the morning session. Becker owns and operates a commercial sheep flock in Wisconsin. He is a member of the American Sheep Industry Association's executive board and is chair of the American Wool Council.

The afternoon program at the farm will consist of three rotating sessions. Wolf will demonstrate routine baby lamb care. Busch will demonstrate equipment for the small flock. Rodgerson will discuss planning and implementing a grazing system.

The registration fee for the conference is $15 per flock. To register, mail a check payable to SCTC to Wayne Busch, SCTC, 2200 Tech Drive, Albert Lea, MN 56007. For more information or for phone registration, call (507) 373-0656.

# # #

EXTU,GOPH,MNF,DTN,V2,V4,Z4,Z5,Z6,S1 NAGR5000

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1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

March 31, 1995

Source: Roger Jones
(612)625-6290
Writer: Joseph Kurtz
(612)625-3168

MATCH EACH WHEAT FIELD WITH APPROPRIATE VARIETY

Selecting a wheat variety with the appropriate disease resistance for each field is a key step in disease management for 1995. Roger Jones, plant pathologist with the University of Minnesota's Extension Service, offers the following recommendations.

"Varieties like Grandin, with high susceptibility to Septoria and other leafspot diseases, should be planted on fields that were rotated to a non-host in 1994," he says. "Varieties with partial resistance to scab, like 2375, should be planted after crops of Fusarium-damaged barley or wheat. Small grains should not be planted after corn unless Fusarium ear rot was not present in the crop or in the crowns and stalks of residue.

"In general, when planting varieties other than 2375 and Grandin, consider both scab and leafspots. Marshall and Nordic are partially resistant to scab and both are tolerant

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to Septoria. These varieties would be the best choices in fields were wheat is following wheat and fields where Septoria diseases were prevalent in 1994. Sharp and Butte 86 are additional varieties that are susceptible or moderately resistant to scab. These varieties are susceptible to Septoria, but not as susceptible as Grandin. They could lodge under high fertility, but they are less prone to shattering than 2375."

Jones says planting one of the varieties that is highly susceptible to scab, such as Vance, Norm, Gus, or Bergen, should be considered too risky for 1995.

# # #

EXTU,GOPH,MNF,DTN,V2,F4,X4 NAGR5002

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NEWS/ INFORMATION

April 7, 1995

Tillage Is Weapon Against Residue-Borne Diseases in Wheat, Barley

Tillage is a primary tool for reducing residue-borne diseases in wheat and barley. The residue of wheat and barley is a major source of disease problems in these crops, says Roger Jones, plant pathologist with the University of Minnesota's Extension Service.

"The residue of our 1994 wheat crop is heavily contaminated with inoculum of *Septoria nodorum,* especially fields in northwestern Minnesota that were planted to Grandin last year," says Jones. "Reducing primary inoculum in these fields using tillage implements that bury this residue will delay the development of Septoria diseases. Tan spot inoculum will also be reduced."

Jones says the impact of tillage on the development of scab is more controversial. However, it is clear that infected seed and chaff are major sources of primary inoculum, and reduction of these sources with additional tillage won't hurt efforts to battle scab this year, he adds.

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"Tillage is a key disease-fighting tool," Jones points out. "Fungicides are expensive, and in-season rainfall is something we can't control."

# # #

EXTU,GOPH,MNF,DTN,V2,X4,F4 NAGR5006

Source: Roger Jones
(612)625-6290
Writer: Joseph Kurtz
(612)625-3168

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NEWS/ INFORMATION

April 7, 1995

Knife Spacing of Anhydrous Applicator Doesn't Affect Corn Yield

In the sidedress application of anhydrous ammonia for corn, the spacing of applicator knives doesn't affect yields. That's the conclusion of Sam Evans, soil scientist at the University of Minnesota's West Central Experiment Station. The conclusion is based on a 1994 study at the station comparing 30-inch and 60-inch knife spacings when several rates of nitrogen were applied.

"There are some precautions and special considerations for farmers who want to use the 60-inch spacing," Evans points out. "This practice requires special attention to loss due to volatilization. If you smell anhydrous ammonia, loss could be substantial. If you detect a loss, set the applicator deeper in the soil or wait until soil moisture conditions are more acceptable for application. Also, this spacing is suggested for sidedress only."

(See table on page 2)

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EFFECT OF ANHYDROUS AMMONIA APPLICATOR KNIFE SPACING
ON CORN GRAIN YIELD

Nitrogen applied	Knife spacing	
	30	60
lb/acre	bu/acre	
0	81	81
32	107	114
72	150	149
108	143	153
144	159	160

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR5007

Source: Sam Evans
(612)589-1711
Editor: Joseph Kurtz
(612)625-3168

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

April 7, 1995

Tourism Researchers, Museum Officials to Meet in St. Paul

Visitor studies and tourism researchers and museum professionals from around the world will meet in St. Paul, July 18-22. The Visitor Studies Annual Conference encourages research sharing among many persons who work with tourism and visitor relations, marketing, museum design and evaluation. The conference is sponsored, in part, by the Minnesota Extension Service at the University of Minnesota.

Kathleen McLean, director of public programs at the renowned San Francisco Exploratorium, will be a keynote speaker at the conference. Paulette McManus of the Department of Museum Studies at University College, London, England, will deliver another major conference address. The conference themes include technology in museums and issues related to audiences, according to Stephan Carlson, extension educator with the Minnesota Extension Service and one of the conference organizers.

Minnesota was chosen as the site because of its many new and innovative tourism attractions including the Minnesota History Center, Science Museum of Minnesota, Minnesota Children's Museum and the Minneapolis Sculpture Garden/Walker Art Center complex.

Persons associated with tourism studies or with major visitor destinations may obtain more information about conference

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events and registration from Tracey Benson at (612)624-3708 or 1-800-367-5363, or Stephan Carlson at (612)626-1259.

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EXTU,GOPH,T1 NNRD5005

Source: Stephan Carlson (612)626-1259
Tracey Benson (612)624-3708
Writer: Deedee Nagy (612)625-0288

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NEWS/ INFORMATION

April 7, 1995

Good Seed-to-Soil Contact Is Key when Direct Seeding Alfalfa

Even if there is a large amount of crop residue on the soil surface, you can establish alfalfa successfully through direct seeding with a conservation drill. "The key is to get the seed down into the soil and achieve good seed-to-soil contact," says John Moncrief, soil scientist with the University of Minnesota's Extension Service. "If you accomplish that, you can obtain stand density that is similar to what you would get with a conventional system."

Moncrief recommends checking soil pH in the corn year before alfalfa establishment. "If you need lime, you need to do enough tillage to get incorporation to 3-4 inches," he points out. "Even if you don't add lime, it's a good idea to do enough tillage to level 'corn row ridges' before seeding alfalfa."

Alfalfa has been shown to be a "surface feeder" of P and K, says Moncrief. Therefore, topdress applications of these nutrients, based on soil tests on established stands, have been effective.

"Alfalfa production with residue management systems has been similar in profitability to conventional systems," Moncrief

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concludes. "Reduced tillage costs are sometimes offset by higher drill ownership costs for a conservation drill."

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EXTU,GOPH,MNF,DTN,V2MN,F4,X2 NAGR5008

Source: John Moncrief
(612)625-2771
Editor: Joseph Kurtz
(612)625-3168

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DEVELOPMENT SYSTEM
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1420 Eckles Avenue
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NEWS/ INFORMATION

April 13, 1995

20-inch Corn Rows Produce Higher Corn Yields Than 30-inch Rows

Corn has consistently yielded better when planted in 20-inch rows compared with 30-inch rows, according to data from University of Minnesota studies over the past three growing seasons. Dale Hicks, agronomist with the university's Minnesota Extension Service, has reported results of the studies.

"We have studied row spacings and plant populations for corn at the Southern Experiment Station at Waseca, the Southwest Experiment Station at Lamberton, and the West Central Experiment Station at Morris for the past three years," says Hicks. "Even though yields have varied from 50 to 200 bushels per acre at the three locations during the 1992, '93, and '94 growing seasons, we have obtained a consistent yield increase in 20-inch compared with 30-inch spaced rows. The studies included three hybrids and four plant populations. All hybrids tested produced higher yields in 20-inch rows, and plant populations of 30,000 plants per acre produced the highest yields in 10-, 20- and 30-inch rows. The yield advantage for 20- over 30-inch rows was 7 5 percent at Waseca, 7.1 percent at Lamberton, and 7.8 percent at Morris."

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Farmers growing sugarbeets have been growing corn in 22-inch rows for several year, notes Hicks. "One of the advantages of a common row spacing for corn, soybeans, and sugarbeets might be equipment inventory," he says, "particularly for growers with fewer than 700 total acres of corn, soybeans and sugarbeets."

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EXTU,GOPH,MNF,DTN,V2MN,F4 NAGR5009

Source: Dale Hicks (612)625-8700
Editor: Joseph Kurtz (612)625-3168

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NEWS/ INFORMATION

April 14, 1995

Manured Fields Don't Need Micronutrient Fertilizer

Your crops won't need any commercial micronutrient fertilizer this year if you've applied manure to your fields within the past couple of years. The manure will supply the micronutrients, says Mike Schmitt, soil scientist with the University of Minnesota's Extension Service.

Schmitt says the importance of micronutrients such as sulfur, zinc, and boron is difficult to pinpoint. "In many research trials, adding these nutrients has had no effect on yields," he points out. "However, there are situations with some crops grown on some soil types where micronutrient additions will increase yield. But the amount of micronutrients needed by crops is small, and manure application eliminates the need for commercial micronutrient fertilizers."

Schmitt says many people have the perception that manure creates "imbalances" in the soil when it raises phosphorus and potassium test values to exceptionally high levels. "These high soil test values do not create a micronutrient shortage," he says, "because as the manure supplies the P or K to build the soil test levels, it is also supplying micronutrients."

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Some dairy producers are located in regions where sulfur or boron is a concern for alfalfa. Applying manure as a preplant application or for corn in the year before seeding to alfalfa will supply the micronutrients for a couple of years of alfalfa, says Schmitt. After this, there may be a need to topdress commercial sulfur or boron if manure is not being topdressed on the alfalfa.

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EXTU,GOPH,MNF,DTN,V2MN,F4 NAGR5012

Source: Mike Schmitt (612)625-7017
Editor: Joseph Kurtz (612)625-3168

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NEWS/ INFORMATION

April 14, 1995

Corn Following Alfalfa Shouldn't Need Much Added Nitrogen

If you're planting corn this year in a field that was in alfalfa the past couple of years, you shouldn't need to add much nitrogen fertilizer. Taking full credit for the nitrogen from the alfalfa is a key to reducing production costs, notes George Rehm, soil scientist with the University of Minnesota's Extension Service.

"Iowa research over 11 years found that when corn followed two full production years of alfalfa, corn yields would average 150 bushels per acre without the addition of fertilizer N," says Rehm. "Alfalfa was harvested with standard harvest schedules. Only short-term fall regrowth was plowed down. Sufficient N for 150-bushel corn was supplied from the alfalfa root system, some top growth that developed after the last harvest, and soil organic matter."

Rehm says recent Midwest-collected data suggest that a nitrogen credit of 150 pounds per acre is appropriate in Minnesota for corn following a good stand of alfalfa (five or more plants per square foot). If the stand is considerably thinner, then the N credit should be reduced to approximately 75 pounds per acre.

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Second-year corn that follows a good stand of alfalfa will also have a reduced need for nitrogen fertilizer, according to Rehm.

"Long-term research in Wisconsin indicates that a credit of 75 pounds of nitrogen per acre can be used for second-year corn after a good stand of alfalfa," he points out. "And this is supported by limited University of Minnesota research."

A publication on "Providing Proper N Credit for Legumes" is available from local offices of the Minnesota Extension Service. It is also available from the MES Distribution Center as item number FO-3769-NR. The cost is $1.00 per copy, plus 6.5 percent sales tax for Minnesota residents. Send a check payable to the University of Minnesota to MES Distribution Center, 20 Coffey Hall, University of Minnesota, 1420 Eckles Ave., St. Paul, MN 55108-6069. Include the title and item number in your order.

# # #

EXTU,GOPH,MNF,DTN,V2,F4 NAGR5010

Source: George Rehm (612)626-6210
Editor: Joseph Kurtz (612)625-3168

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NEWS/ INFORMATION

April 14, 1995

Keep Crop Residue out of Seed Furrow When Planting Corn

If you're planting corn using conservation tillage this spring, keep crop residue out of the seed furrow. This will ensure stand establishment and optimum early growth, says John Moncrief, soil scientist with the University of Minnesota's Extension Service.

"If the preceding crop was corn, crop residues are more of a problem," says Moncrief. "The worst case is when corn residue is pushed into the seed furrow with planter mounted disc openers or coulters and is in contact with the seed. This delays germination because of slower absorption of soil water due to poor seed-to-soil contact. Also, early growth may be delayed due to chemicals leaching out of the crop residue. Soybean residue is much less detrimental, even if some if it ends up in the seed furrow of corn."

Moncrief also recommends keeping a wide strip clear of residue when planting to minimize reduced temperature effects. "Corn is the most temperature-sensitive crop grown in Minnesota," he says. "To minimize the potential for reduced growth due to the lower soil temperatures associated with crop residue cover,

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keep a strip about one-third the width of the row spacing, or 10 inches with 30-inch rows, to less than 10 percent cover."

He says the most effective way to do this is to use planter-mounted tillage tools such as clearing discs, sweeps, brushes, rolling fingers, or plows.

A fact sheet on "Tips for Profitable Crop Residue Management Systems" is available from county offices of the Minnesota Extension Service. It is also available from the MES Distribution Center as item number FS-6049-NR. Cost is 25 cents per copy, plus 6.5 percent sales tax for Minnesota residents. Send a check payable to the University of Minnesota to MES Distribution Center, 20 Coffey Hall, University of Minnesota, 1420 Eckles Ave., St. Paul, MN 55108-6069. Include the title and item number in your order.

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EXTU,GOPH,MNF,DTN,V2,F4 NAGR5011

Source: John Moncrief (612)625-2771
Writer: Joseph Kurtz (612)625-3168

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NEWS/ INFORMATION

April 21, 1995

Two New Beef Cattle Publications Available from U of M

Two new publications on beef cattle are now available by mail from the University of Minnesota's Department of Animal Science. They are designed for producers, extension educators, and agricultural professionals.

The 85-page "1995 Minnesota Cattle Feeders Report" contains information on beef cattle feedlot research conducted in Minnesota. It also contains proceedings papers from presentations at the Cattle Feeders Days held last December at three locations. Copies of the report are available by mail at a cost of $5.00 each. The price is to cover printing, postage and handling costs.

The 99-page "1995 Minnesota Beef Cow/Calf Days Report" contains updates on various Minnesota cow/calf research and extension projects. It also contains proceedings of presentations from the 1995 Cow/Calf Days that took place at seven locations in February. Copies of this report are available by mail at a cost of $6.00 each.

If the two reports are ordered together so they can be mailed together, the total cost is $10. To order either or both

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publications, send a check payable to the University of Minnesota to Brent Woodward, Extension Animal Scientist, University of Minnesota, Dept. of Animal Science, 101 Haecker Hall, 1364 Eckles Ave., St. Paul, MN 55108-6120.

# # #

EXTU,GOPH,MNF,V2,V5,B1 NAGR5014

Source: Brent Woodward (612)624-4995
Writer: Joseph Kurtz (612)625-3168

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NEWS/ INFORMATION

April 21, 1995

Walk Alfalfa Fields to Check Stand Density, Assess Winter Damage

Now is a good time to walk your alfalfa fields to check stand density and assess potential damage from winter weather. First-year hay stands should have 10-15 plants per square foot, according to Neal Martin, agronomist with the University of Minnesota's Extension Service. Older stands should have at least five plants per square foot, he adds.

"Early in the spring, you can determine if regrowth is coming from all plants," says Martin. "Dig a few plants to observe the health of the roots. White color and firm texture are signs of excellent health. Discoloration or soft texture is a sign of decaying roots. Fields with varying degrees of plant damage should be monitored until plants reach at least six inches of regrowth."

Martin says damaged plants may recover briefly using food reserves within the crown, but don't have live root tissue to move water and food to the top of the plants. "If plants are actively growing when they are six inches high and their root texture is firm, they should survive," he says. "Damaged stands should be harvested late, at 50 percent bloom to full bloom. This gives them a greater chance of recovering from damage."

# # #

EXTU,GOPH,MNF,DTN,V2MN,F4,X2

NAGR5013

Source: Neal Martin (612)625-8700
Writer: Joseph Kurtz (612)625-3168

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

April 25, 1995

Flat, Falling Soybean Yields May Be Due to Soybean Cyst Nematode

If soybean yields on your farm aren't what you think they should be, the problem could be the soybean cyst nematode. The nematode is present in at least 31 Minnesota counties, says Ward Stienstra, plant pathologist with the University of Minnesota's Extension Service.

"The best indicator of nematodes is your farm records showing increasing corn yields and flat or declining soybean yields," says Stienstra. "Field symptoms are often not evident in the early development of the nematode problem. Even the reduced growth is hard to determine. Few people carefully dig up plants to check roots for evidence of nematode reproduction."

Stienstra says increasing weed problems are another early sign of the presence of nematodes, since affected soybeans become less competitive with weeds.

If there are indications that the nematode is present on your farm, Stienstra suggests planting a resistant soybean variety. "Some growers are concerned that resistant lines don't yield as well as susceptible lines," he says. "The yield potential of resistant lines is lower for several varieties if

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they are planted in non-infested fields, but after several years of testing in Minnesota, it is clear that resistant lines out-yield susceptible lines when the nematode is present."

Stienstra cites a study in which Bell, a resistant variety, outyielded Sturdy, a susceptible variety, by six bushels per acre in nematode-infested fields.

"Another key factor is that there's a large difference in nematode egg levels following a susceptible variety compared with a resistant variety," he points out. "The resistant soybean plant significantly lowers the nematode population. This allows the grower to manage nematode levels and make informed decisions about what crop to plant."

The soybean cyst nematode is not going to go away, says Stienstra. :It's been in Minnesota since 1978," he says. "Sooner or later you will have to decide to manage it."

# # #

EXTU,GOPH,MNF,V2MN,F4,X3 NAGR5029

Source: Ward Stienstra (612) 625-6290
Writer: Joseph Kurtz (612)625-3168

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

April 25, 1995

Don't Let Preplant Nitrogen Application Delay Corn Planting

Don't let preplant nitrogen fertilizer application get in the way of planting corn. You can probably switch to sidedress application without hurting yields, says George Rehm, soil scientist with the University of Minnesota's Extension Service.

"Every corn grower knows it's important to plant corn early," says Rehm. "The cold, wet weather this spring may make it hard to apply nitrogen before planting and still stay on schedule. Several studies over the years have shown that time of application does not usually have a substantial effect on yield. So don't delay planting because you haven't applied nitrogen."

Rehm says all nitrogen sources (82-0-0, 28-0-0, 46-0-0) can be applied at sidedress time. "If there is no nitrogen loss during application, all sources should have an equal effect on corn yields," he points out. "In 1992 and 1993, many corn producers broadcast urea at sidedress time and followed closely with a cultivator. This is an acceptable method for applying sidedress nitrogen."

Rehm says using starter fertilizer is also a good management practice if nitrogen is sidedressed. He suggests a rate of 15-25

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pounds N per acre in the starter. "This should be enough nitrogen for corn until the sidedress application," he says.

# # #

EXTU,GOPH,MNF,V2MN,F4,X3 NAGR5017

Source: George Rehm (612)625-6210
Writer: Joseph Kurtz (612)625-3168

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

April 26, 1995

May 20 Videoconference Will Assess Forest Ecosystem Management

How you manage your forest land is up to you, but the management practices you use affect the larger landscape around your property. Ecosystem management is an approach that can help you take these larger issues into consideration.

"Managing Forest Ecosystems: Assessing New Opportunities" is the title of a 90-minute videoconference that will help you learn more about this approach to forest management. The videoconference will be available via satellite on May 20 from 10 a.m. until 11:30 a.m. CDT. There is no charge for viewing the videoconference.

Through case examples, the videoconference will show how private landowners are making management choices that fulfill their personal objectives while addressing ecosystem issues. These issues include consideration of endangered species, exotic pest species, biological diversity, and overall forest health.

One of the case examples focuses on the Cannon River Big Woods project near Faribault, Minn. Minnesota is a leading state in fostering ecosystem management across multiple ownerships.

The videoconference is intended for nonindustrial private forest landowners. Members of the conservation, environmental

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and public policy communities will also benefit from the videoconference.

Anyone with a C or KU band satellite dish can view the videoconference. Or you can view it at one of the public viewing sites listed below. If there is no site near you, contact your local county extension office. The staff may be able to set up a viewing site for you.

# # #

EXTU,GOPH,MNF,C4MN,F8MN,F9MN,T2MN,X9MN NNRD5030

Source: Mel Baughman (612)624-0734
Writer: Martin Moen (612)625-6243

CITY, VIEWING SITE, CONTACT PERSON, TELEPHONE

Aitkin, Aitkin County Courthouse, Mark Jacobs (218)927-7321
Anoka, Anoka County Extension Office, Art Widerstrom (612)772-7928
Bemidji, Beltrami County Extension Office, Mark Reed (218)759-4163
Caledonia, Houston County Extension Office, Valerie Green (507) 724-5264
Detroit Lakes, Becker County Extension Office, Chip Lohmeier (218)846-7307
Faribault, Rice County Courthouse, Marian Anderson (507)332-6109
International Falls, Rainy River Community College, Christy Bubolz (218)283-6282
Preston, Fillmore County Extension Office, (507)765-3896
Roseau, Roseau County Extension Office, Bob Wennerstrand (218) 386-1304
Staples, Brainerd/Staples Technical College, Greg Haglin (218)894-3726
Stillwater, Washington County Extension Office, Larry Westerberg (612)772-7929
Waconia, Carver County Extension Office, Al Olson (612)442-2317
Winona, Winona Technical College, Kevin O'Brien, (507)523-2183

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NEWS/ INFORMATION

April 27, 1995

Accurate Sprayer Calibration Helps Hold Down Weed Control Costs

Calibrating your sprayer accurately is one of the keys to holding down weed control costs and increasing herbicide effectiveness. Financial losses in the U.S. from poor herbicide application are estimated to be over $1 billion annually, says Bev Durgan, agronomist with the University of Minnesota's Extension Service.

"A Nebraska study found that 60 percent of applicators missed their estimated application rate by more than 10 percent," says Durgan. "Nearly a third of the applicators overapplied or underapplied by more than 30 percent. Another study found that 25 percent of applicators were overapplying by 30 percent. Overapplying a $20-per-acre herbicide by 30 percent will increase your herbicide cost by $6 per acre."

Durgan says the studies found that the most common equipment problems were leaking nozzles and hoses and defective pressure gauges. Calibration errors can also result from damaged or worn nozzle tips, use of different size nozzles or nozzle screens, and failure to accurately check ground speed and pressure. Nozzle spacing and sprayer boom height also affect accuracy.

"The sprayer boom needs to be adjusted to give the proper overlap of nozzles for broadcasting or to give the proper boom

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height for band application," says Durgan. "A boom that is too low will concentrate the herbicide into a smaller area, with spaces between nozzles left without adequate coverage. A boom that is too high increases the amount of overlap, causing excess herbicide in the area between nozzles, and increases drift potential."

Nozzle spacing and the height of the target area--either the soil surface or plant surface--determines boom height, Durgan points out.

She says nozzles need to be in good shape for accurate application. Nozzle life is influenced by the type of herbicide, pressure, and method of tip cleaning. Abrasive materials such as wettable powders wear nozzles more than liquids.

"Never use a metal object to clean nozzle tips because this can enlarge the nozzle orifice," says Durgan. "Compressed air or a toothbrush or toothpick will work. Check nozzles regularly and replace any nozzle that deviates more than 10 percent from the flow designated by the manufacturer or more than 5 percent from the average of all the tips."

Variation in ground speed can result in application errors, Durgan points out. The rate applied varies directly with ground speed. This means that reducing ground speed by half doubles the herbicide application rate. "Always check ground speed under field conditions and over a measured course," she says.

# # #

EXTU,GOPH,MNF,DTN,V2,E4,F4 NAGR5031

Source: Bev Durgan (612) 625-8700
Writer: Joseph Kurtz (612)625-3168

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DEVELOPMENT SYSTEM

405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

MEDIA ADVISORY

May 4, 1995

TO: Reporters, Editors, Freelance Writers, Others

FR: Martin Moen, (612) 625-6243 Martin H. Moen
MES news coordinator

RE: Electronic access

Over the past several months many of you have asked about receiving our press releases electronically. (***If you want to continue receiving hard copies through the mail, you don't have to do anything***) We've made some adjustments in our operation and are prepared to offer you four alternatives to receiving hard copies of releases. They are:

- **Via the Internet** We're ready to send you releases as e-mail, just send us your Internet address and we'll sign you up. We also invite you to visit our MES gopher site at gopher.mes.umn.edu where you can access our press release database and download files at your convenience.

- **Via diskette** We'll mail you a diskette containing our press releases in IBM ASCII format. To keep costs down, we ask that you mail them back so the diskettes can be reused.

- **Via the Minnesota Newspaper Foundation** This is the best option for Mac users. The MNF operates a bulletin board system called NewsCurrent that lets you download files in Mac formats from MES and about 20 other Minnesota agencies and organizations. It costs you only $52/year. Their telephone number is (612) 672-0948.

- **Via fax** Send us your fax number and we'll start calling you on a regular basis.

In this age of electronic delivery, we'll continue our tradition of targeting our distribution based on the content of the press release. In fact, this is the first time in at least seven years that we've mailed something to our entire list. So, if you wish to receive releases in an electronic format, we ask that you identify which of the following subject areas you're interested in: agriculture, family and human relationships/health, natural resources, community economic development, consumer news, and gardening.

If you want to receive press releases electronically, fill out the enclosed form and fax it to us at (612) 625-2207.

If you have any questions, please call me at the number listed above.

TO: Jennie Rominger, fax (612) 625-2207

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To receive MES News & Information releases electronically, fill out this form (please type or print clearly) and fax it back to us. *(check only one)*

___ I want to receive **MES releases as Internet e-mail.** This is our preferred method of delivery. My e-mail address is:_____

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___ I need **MES releases in a Mac format** and I don't have Internet service. We encourage you to subscribe ($52/year) to the Minnesota Newspaper Foundation's NewsCurrent system. This will allow you to download Mac formatted files from MES and many other state agencies.

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___ **Community Economic Development**---includes business news, community economic development, and tourism development.

___ **Consumer News**---includes consumer economic advice, clothing trends, housing issues, and advice on home furnishings and appliances.

___ **Gardening**---includes all gardening topics, both commercial and consumer.

To make these changes, we need to know who you are. We also will occasionally mail you a release. Examples of these are hometowners and topics that don't fit these categories. Please give us your mailing address:

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NEWS/ INFORMATION

May 4, 1995

Alfalfa Fields May Be Full of Dead or Dying Plants

If winter kill has struck your alfalfa fields, they may be full of dead or dying plants. Neal Martin, agronomist with the University of Minnesota's Extension Service, has found severe winter kill of alfalfa at the university's experiment stations at Rosemount, Waseca and Lamberton.

"Plants in some fields have died because of exposure to very low temperatures or because of ice sheets," says Martin. "These plants can be easily pulled from the soil because their roots are decaying rapidly. In other fields, plant regrowth began in late March and then froze. This killed plants in some fields, but in others, some plants have new shoot growth intact and are actively growing. Root tissue may or may not be showing signs of decay.

"If these plants have solid white roots without decay and growth coming from the crown, they could be alive and may develop into fully active plants. Time is necessary to determine if these plants will survive. If they continue to grow to a height of six inches, they should make it."

Martin says five live alfalfa plants per square foot can produce good yields. "If feed supplies are short and grasses are

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present, three to five plants per square foot will be an adequate stand to keep for at least the first cutting," he adds. "Stands with 50 percent or more grass will respond economically to an application of 50-75 pounds of actual nitrogen per acre. It's a good idea to delay the first cutting of plants injured from winter conditions until 50 percent bloom or later to allow for recovery."

If you have extensive damage, Martin recommends seeding new alfalfa before planting corn. "The quickest way to establish new alfalfa is to direct-seed using a preplant incorporated herbicide or a postemergent herbicide to control annual grasses," he says. "You can make the first cutting 60 to 70 days after the alfalfa emerges."

In sloping fields subject to water erosion, Martin recommends seeding alfalfa with a companion crop such as oats. Seeding alfalfa with oats and then spraying out the oats when they are four to six inches tall will result in alfalfa as quickly as direct seeding would, he points out. Seeding with barley or oats and harvesting the barley or oats for forage at boot stage is another low-risk establishment strategy.

"If winter killed alfalfa is more than two years old, manage for autotoxicity of alfalfa," says Martin. "The best strategy is to switch to another crop. If you want to continue with alfalfa, you can minimize the risk of autotoxicity by killing existing top growth with an herbicide. Use Roundup if you have perennial

(more)

grasses; otherwise, use 2,4-D at one quart or less per acre of four-pounds-per-gallon product. Use primary tillage to speed decomposition of the old roots. After two weeks, prepare a good seed bed and seed. With direct seeding, minimize stress on the alfalfa by using a grass herbicide."

# # #

EXTU,GOPH,MNF,DTN,V2MN,V4MN,D1MN,F4MN,X2 NAGR5034

Source: Neal Martin (612)625-8700
Writer: Joseph Kurtz (612)625-3168

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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 5, 1995

University of Minnesota Plans Dairy Tour to Northeast Wisconsin

You can visit innovative dairy farms in northeast Wisconsin and enjoy the scenic highlights of Door County this summer during a University of Minnesota dairy tour.

The university's 24th Annual Dairy Tour will be August 2-8. The tour, which is tax deductible for most producers, will depart from St. Paul by motor coach. Tour stops will include a dozen or more of the top dairy farms in the Wausau, Oconto Falls, Fox River, Manitowoc, and Fond du Lac areas.

An operation that grew from 70 to 180 cows by installing a flat barn parlor will be the first stop. The farm's cows are housed in a new 156-stall, four-row, sand-bedded barn with head to head stalls. Another first-day stop will be at a 400-head heifer rearing facility.

A highlight of the second day will be a dairy farm walk-through seminar on cow comfort presented by Gordy Jones, DVM. The farms visited will feature barns with curtain sidewalls, an instant chiller that eliminates bulk tank refrigeration and saves energy, and use of electronic identification and heat sensors.

Later in the tour there will be a stop at a farm that has a nine-million-gallon, three-pit manure system. Another operation

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involves milking 95 cows in a 60-stall barn. A farm with a solar freestall barn will be a tour stop.

In addition to the dairy farms, tour participants will be able to visit a fallow deer farm and see cranberry production. Relaxing and visiting the many shops and points of interest in Door County will be the order of the day on Sunday, August 6.

Cost of the tour is $579 per person. A deposit of $50 is required at the time of registration. To obtain a tour brochure and registration information, call Leon Meger at 1-800-367-5363.

# # #

EXTU,GOPH,MNF,DTN,V2,D1,X1 NAGR5035

Source: Gerald Wagner (612)625-1798
Writer: Joseph Kurtz (612)625-3168

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 8, 1995

Farmland Prices in NW Minnesota a Mixed Bag

The University of Minnesota's Extension Service recently reported a 20 percent drop in the average price of an acre of farmland in Northwest Minnesota. While that figure is accurate, there's much more to the story.

"Like any region of Minnesota, the quality and value of agricultural land in the Northwest area is very diverse," says Steve Taff of the university's Department of Agricultural and Applied Economics. "The fact that the average price dropped for the whole region is simply the result of a mathematical equation. Individual land sale experiences can be very different."

Further analysis of the data on which Taff's statewide study is based has uncovered several explanations for the region-wide decrease.

Using soil type maps to distinguish between more valuable farmland in the Red River Valley and less-valuable acreage outside the valley, Taff placed the Northwest region's agricultural land transactions into two categories: those involving land in the Valley and those involving land outside the Valley. The result, to quote economist jargon, was a bipolar distribution.

"In other words," Taff says, "there were a lot of transactions grouped at the low end of the price per-acre scale and a smaller group of transactions at the high end.

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Consequently, the overall average was dragged down by the large number of transactions at lower prices." The lower price group was from the non-Valley area.

In 1993 there were 37 transactions involving 5,072 acres of farmland in the Valley. On average, these parcels were sold at $891 per acre. In 1994 there were 50 transactions involving 6,910 acres of farmland in the Valley. On average, these parcels were sold at $788 per acre.

Land sale transactions outside the Red River Valley shaped up this way: 1993 saw 42 transactions involving 5,539 acres selling at an average price of $358 per acre; 1994 saw 103 transactions involving 18,635 acres selling at $351 per acre.

Taff says the small declines in average sale prices in these two sub-regions are overshadowed by the three-fold increase in total acreage sold outside the Valley.

"The decline in farmland prices in the Valley," Taff says, "shows up only when 1994 is compared to 1993. If you look at a graph of average land prices in the Valley over the past decade, you see a consistent trend of slow improvement." He says 1993 appears to be an irregularity in the pattern. "The 1994 average Valley price is actually about where it should be."

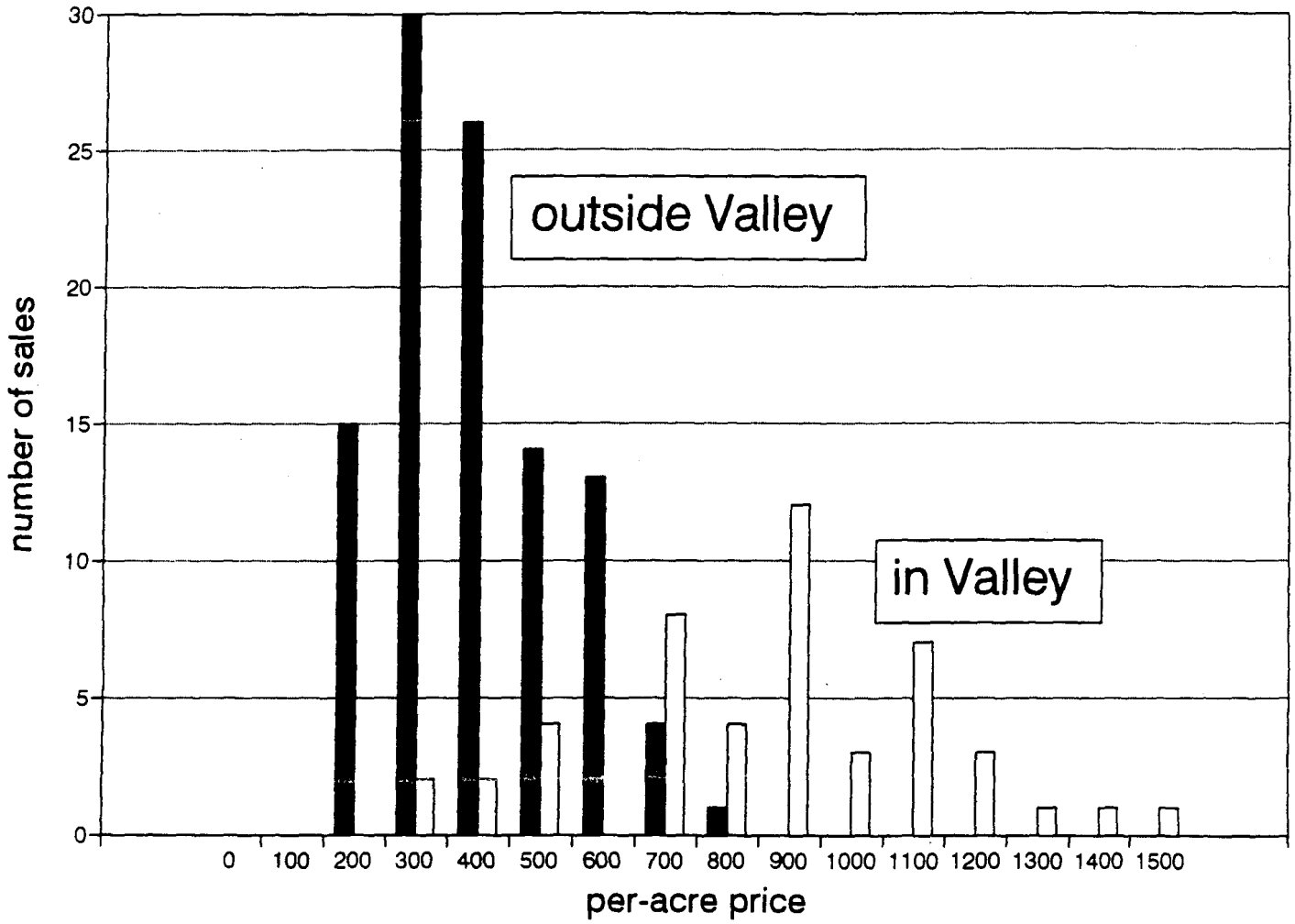
Taff says the average land prices, while sometimes misleading, are useful to county assessors who must establish property tax assessments without actually appraising each parcel. The average price figures are also used as a starting point in cash rent and sale price negotiations.

# # #

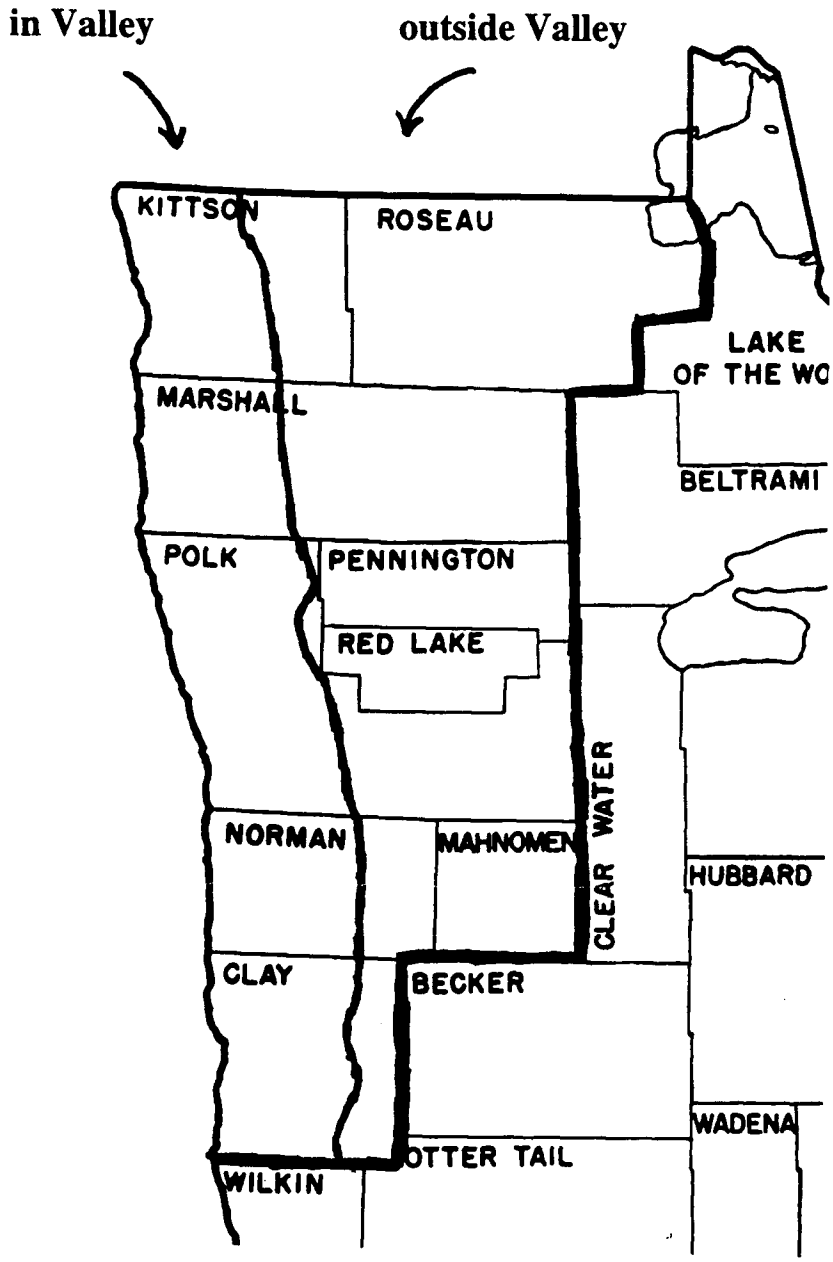
EXTU,GOPH,MNF,A2MN,Z1,03,14 NEXP5036

Source: Steve Taff (612) 625-3103
Writer: Martin Moen (612) 625-6243

1994 farmland sales in NW Minnesota



University of Minnesota 1994
Farmland Value Study
Northwest Region



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NEWS/ INFORMATION

May 11, 1995

Project Will Put Forest Data into Decisionmakers', Public's Hands

Successful completion of a three-year project will make a wealth of forest data available to anyone with access to the Internet. The University of Minnesota and the Minnesota Department of Natural Resources (MN-DNR) are collaborating on the project with funding from the National Aeronautics and Space Administration (NASA).

Natural resource professionals gather data about forest conditions in several different ways, including aerial photography, satellite imaging and on-the-ground field observations. Aerial photography and satellites can supply large amounts of data on a regular basis. But they do not provide a very detailed view of forest conditions. Field observations provide much more detail, but are expensive to do so they're conducted on a very infrequent basis.

Local and regional forest policy decisionmakers would love to integrate these sources of information, but there is no efficient and effective means of doing it. The coordinators of this project think the Internet can help solve this problem.

The collaborative project will identify sources of data useful to forestry professionals, develop methods of sharing that information across the Internet, write software that will allow

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users to manipulate and combine various types of electronic files, and develop materials for training natural resource professionals to use the data. The project is being coordinated by Thomas Burk, a professor in the university's Department of Forest Resources.

The $650,000 project is one of 15 funded by NASA as part of the Agency's efforts to promote public use of Earth and space science data over the Internet.

"There are a number of hurdles that need to be overcome," says Steven Laursen, assistant dean of the university's College of Natural Resources (U-CNR). "These barriers are too large for any one agency or institution to overcome alone. Only by working together can we achieve such an ambitious goal."

MN-DNR staff at offices in Aitkin, Brainerd, Grand Rapids, Lake City and St. Paul will help define these needs and test the software applications developed by the U-CNR's Remote Sensing Laboratory. Staff from the university's Minnesota Extension Service will provide the training component.

"The tools we develop will provide substantial public benefits," says William Befort, MN-DNR Forestry remote sensing coordinator in Grand Rapids. The project will improve the ability of forest managers to respond to forest fires. "When a fire breaks out now, foresters have to rely on outdated maps and their working knowledge of the area. 'How much fuel is available to the fire?' and 'Are there any access roads in the area?' are questions the forester may have a difficult time answering," Befort says.

(more)

"Those answers will be easier to obtain if a forester can download recent satellite images of the area and combine it with the most recent field observations available," Befort says. A collection of data such as this could show the forester where the nearest road is, whether nearby farmland has a crop growing on it or is grass-covered, as well as forest type and its condition.

Laursen says the tools will also help foresters detect changes in the number, mixture, age and health of various tree species. Natural resource professionals would also gain a more accurate view of other forest environment factors such as the building of beaver dams and the quantity and quality of wetlands.

The project began last September. To date, the project has identified the five MN-DNR offices that will serve as test sites, started to identify the needs of potential users, developed trial software applications, and developed a home page on the Internet's World Wide Web. The home page, called ForNet, is located at the following Internet address:
http://wwwrsl.forestry.umn.edu:10000/fornet/

For more information about the Minnesota project, send an e-mail message to: fornet-info@forestry.umn.edu

# # #

EXTU,GOPH,MNF,V4,V9,F8,T2 NNRD5037

Source: Steven Laursen (612)625-9298
William Befort (218)327-4449
Writer: Martin Moen (612)625-6243

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 15, 1995

Try Some Edible Flowers in Summer Menus

Edible flowers have captured the interest of gardeners and cooks alike. Deborah Brown, horticulturist with the University of Minnesota's Extension Service, says many flowers can be used not only as garnish but also as part of salads, stir-fry dishes and other recipes.

Brown says many flowers are edible; however, some may not be palatable. Among the edible flowers are apple and plum blossoms, begonias, calendulas, chives, daylilies, galdiolus, honeysuckle, lilac, mint, nasturtiums, pansies, rose petals, squash flowers and tulip petals. "If you don't like their taste, you can always use them as bouquets," she adds.

If you are buying flowers to add to food, make certain they haven't been treated with pesticides, Brown says. Gardeners who add their own flowers to recipes can control how they were treated before they appear on the menu. Many gardening books list edible flowers and ways to use them in foods.

For more information, contact the university's Dial-U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m.

(over)

and 5 p.m. weekdays for assistance. A $2.99 fee will be charged automatically to the telephone you use.

# # #

EXTU,GOPH,MNF,G1 NAGR5040

Source: Deborah Brown (612)7491
Writer: Deedee Nagy (612)625-0288

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 15, 1995

Approach Borax Remedies for Creeping Charlie Cautiously

Creeping charlie can take over a lawn, crowding out the more desirable bluegrass and leaving homeowners desperate for a way to eradicate the weed.

Deborah Brown, horticulturist with the University of Minnesota's Extension Service, says some remedies, particularly those using household borax, can harm gardens. If used improperly, borax can kill desirable grasses along with the creeping charlie.

Iowa State University researchers suggest dissolving five teaspoons of borax (20 Mule Team Borax is a common trade name) in a quart of water. The mixture can be sprayed to cover a 25 square foot area. Brown cautions that the tendency may be to use the quart of mixture too quickly. If that happens, the mixture will be too strong and could harm grass and other vegetation.

Boron, the active ingredient in borax, will kill any vegetation if used in sufficient quantity," Brown says. "Sensitivity to boron varies among plants so you may be able to kill the creeping charlie while causing only minimal browning to bluegrass, which is less sensitive. Too much, however, and

(over)

you'll kill the grass, plus you may have difficulty getting new grass to grow there for a long time."

She suggests using the borax treatment once in late May or June. If the treatment is done properly, there should be a drastic reduction in creeping charlie by autumn.

She warns that the borax method is only for creeping charlie growing in grassy areas. The technique shouldn't be used for garden areas where the weed is a problem.

If you use borax, Brown says you must also encourage desirable grasses to grow so they can fill in where the creeping charlie has died. "Without that, you can bet those thin areas will be colonized by other weeds quite rapidly," she adds.

For more information, contact the university's Dial-U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m. and 5 p.m. weekdays for assistance. A $2.99 fee will be charged to the telephone you use.

# # #

EXTU,GOPH,MNF,G1 NAGR5039

Source: Deborah Brown (612)624-7491
Writer: Deedee Nagy (612)625-0288

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 19, 1995

Preteens Especially Attracted to 4-H Programs

If you want to know what Minnesota's preteens are doing after school, on weekends, and during summer break, find out about local 4-H programs. Children ages nine to 11 accounted for more than half of all 4-H participants and two-thirds were under 12 years old last year according to a report released by the Center for 4-H Youth Development in the University of Minnesota's College of Education. Participation was essentially evenly divided between girls and boys.

"We make a special effort to attract preteen participants to 4-H," says Carol Shields, extension educator and acting director of the Center. "This is a time in a child's life when very important attitudes are being formed and serious consequences to life decisions are being considered. We have to reach kids at this age and even younger if we want to help them make good decisions about alcohol and drug use, sex and pregnancy, non-violence and social responsibility."

The Center for 4-H Youth Development provides outreach, research, teaching and youth programs that focus on positive values and life skills, competency building, pride and accountability, and strong families and communities.

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Just over 12 percent of last year's 4-H participants live on farms. Over half live in rural, non-farm areas or in towns with populations of less than 50,000. City and suburban youth accounted for one-third of last years' 4-H participants. "4-H is not just for farm kids," says Shields. "It's for all the children of Minnesota. As population demographics and needs have changed, so has 4-H."

School enrichment programs, like Alcohol Decisions and Project 4 Teens, and individual study, which includes programs like the bicycle safety program, forest ecology camp and MinnAqua, accounted for three-quarters of total participation. Community or project clubs accounted for just over 11 percent of participants.

The bicycle safety program was by far the most popular special interest short-term program. Animal and poultry, as well health and safety programs, also drew large numbers of young people to 4-H.

More than 282,000 young people participated in 4-H programs in Minnesota in 1993-94. The figure represents growth of 250 percent since 1985. Almost 112,000 youths participated in county-specific programs.

"We're very pleased with the growth in county-specific programs and expect statewide program participation to increase once again for 1995-96," says Carol Shields, extension educator and acting director of the Center.

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4-H programs were supported at the state and county levels by over 28,000 adult and youth volunteers. About two-thirds of these volunteers were female; 500 volunteers, or 2%, were American Indian or Alaskan Native. "Volunteers are the foundation of 4-H," says Shields. "They are there for kids when it counts."

Copies of the report are available from your local county extension office. 4-H Youth Development is coordinated by the University of Minnesota's Extension Service and College of Education.

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EXTU,GOPH,MNF,V4MN,V8MN,Y1 N4-H5041

Source: Carol Shields (612)625-8715
Writer: Jennie Y. Romancer (612)625-6294

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 22, 1995

Wagyu Cattle, Youth Clinic, Awards Highlight Beef Cattle Tour

An opportunity to see Wagyu cattle, a youth clinic, and annual awards will be highlights of an upcoming tour for Minnesota beef cattle producers. The Minnesota Beef Cattle Improvement Association (MBCIA) will have its annual tour and business meeting June 7. The tour will begin at the Dar Giess farm near Sauk Rapids, Minn. at 2:30 p.m.

Giess will have his South Devon cattle on display, along with Charolais and Simmental from neighboring operations. Charles Christians, animal scientist with the University of Minnesota's Extension Service, will coordinate the youth clinic at this farm. The clinic will center on judging cattle, with emphasis on using performance data and Expected Progeny Differences (EPDs).

The tour will then move to the Old Country Buffet in St. Cloud for a 5 p.m. "dutch treat" supper.

The final stop will be at Schiefelbein Farms, Kimball, Minn. There, a feed consultant will discuss nutrition and chelating minerals, as well as pasture management and fertilization. There will also be presentations on calving problems and whole-herd health programs.

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Cattle of the Wagyu breed, which was developed in Japan and is known for high marbling, will be a special attraction at Schiefelbein Farms. The operation also has purebred Angus and Simmental herds and Angus-Simmental crossbreds.

The MBCIA will present its annual awards. Wesley Cashman, Mora, will receive the Commercial Producer of the Year award. Richard and Robin Wiese, Pequot Lakes, will receive the Purebred Producer of the Year award. The Schiefelbein brothers of Kimball will be honored as a group as the Young Producers of the Year. The MBCIA annual meeting will close out the day.

For information on participating in the youth clinic, contact Charles Christians, University of Minnesota, 101 Peters Hall, St. Paul, MN 55108; phone (612)624-0766. For tour registration, contact Jim Bryan, 5820 Cannondale Rd., Red Wing, MN. 55066; phone (612)388-4897.

# # #

EXTU,GOPH,MNF,DTN,V2MN,B1,05,11,18,33,47,76,78,91 NAGR5042

Source: Charles Christians (612)624-0766
Writer: Joseph Kurtz (612)625-3168

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EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

May 25, 1995

Outreach Program Aims at Cleaner Minnesota River

The Minnesota River is one of the most highly polluted streams in the state. Obtaining suggestions, comments and concerns from those with an interest in making the river cleaner is one of the things two extension educators with the University of Minnesota's Extension Service are seeking to accomplish through an educational outreach project.

Extension educators Amy Rager, Yellow Medicine County, and Gary Wyatt, Watonwan County, are working on a 10-week Minnesota River Basin Outreach project. Their goal is to develop an educational outreach plan to deliver information to farmers about environmentally safe practices and to help reduce non-point source pollution of the Minnesota River. The project is funded by a grant from the Minnesota Department of Agriculture.

Water quality standards most often violated in the Minnesota River are fecal coliform bacteria, turbidity, ammonia, and dissolved oxygen. The volume of suspended sediment carried by the river is also high. During 13 years of monitoring the river at Mankato, the U.S. Geological Survey found a sediment load of 2,700 tons per day. This equals a 10-ton dump truck load every five and one-half minutes.

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Levels of fecal coliform bacteria are often high. Sources of these bacteria include waste from animal feedlots and inadequately treated sewage. Phosphorus and nitrogen are the main nutrients that cause problems.

University of Minnesota soil scientists Jim Anderson and John Moncrief have identified Best Management Practices (BMPs) crop producers can use to save soil and protect the river from erosion and runoff. Crop producers who would like to share which BMPs have worked best for them, or persons with suggestions, concerns, or ideas for educational programs are encouraged to contact Rager or Wyatt. Call Wyatt at (507)375-1275 or Rager at (612)669-4471.

# # #

EXTU,GOPH,MNF,DTN,V2MN,T2,06,07,08,10,12,37,40,52,67,68,75,77,92
NAGR5043

Source: Gary Wyatt (507)375-1275
Editor: Joseph Kurtz (612)625-3168

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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 2, 1995

Cuts in Farm Subsidies Won't Devastate Minnesota Economy

While cuts in farm subsidies could be painful for individual recipients, the Minnesota economy won't notice the loss, says University of Minnesota agricultural economist Steve Taff.

"The numbers paint a clear picture," Taff says. "A reduction in federal agricultural subsidy programs will have very little impact in Minnesota because only about half of our farmers get subsidies. And, only a small percentage of those who do get a subsidy receive more than $5,000."

Minnesota residents receive approximately $1.5 billion each year in federal agricultural subsidies. About 20 percent of this total goes to food stamp recipients, while approximately 50 percent is received by farmers. If, for example, these subsidy programs are reduced by 20 percent, Minnesotans would lose approximately $300 million.

"A $300 million loss in a $150 billion state economy is only a 0.2 percent loss," Taff points out.

If farmers shoulder half of this $300 million loss, the total Minnesota agricultural economy of approximately $25 billion would lose only $150 million--a 0.6 percent loss.

"We should be concerned about the individual farmers and food stamp recipients who will suffer this loss," Taff says.

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"But claims that reductions in federal agricultural aid will harm Minnesota's economy are not supported by the facts."

# # #

EXTU,GOPH,MNF,V2MN,V4MN,V5MN,V6MN,V8MN,V9MN,A2MN NAGR5049

Source: Steve Taff (612) 625-3103
Writer: Martin Moen (612)625-6243; mmoen@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 7, 1995

U of M Has Woodland Management Book for Private Forest Landowners

There are more than 130,000 private forest landowners in Minnesota; other Midwestern states have even more. Collectively, they control more than half the forest land in the Midwest. But there are very few forest management guides written for the private landowner. A book from the University of Minnesota fills that niche.

"Woodland Stewardship, a Practical Guide for Midwestern Landowners" is intended for owners who seek guidance in designing and implementing management plans for their forest land. It provides a wealth of practical, research-based information written in an easy-to-understand style. The 194-page book is available for $14.95.

"Private forest landowners are a mixed group," says Mel Baughman, a co-author of the book and forest resources specialist with the university's Extension Service. "They might be farmers, factory workers, lawyers, business managers or doctors. While their ownership objectives vary widely, most have not discovered the full value of their land for wood products, wildlife, recreation, and protection of the soil, water and aesthetic resources."

"Woodland Stewardship..." (item MI-5901-NR4) costs $14.95 (Minnesota residents need to include 7 percent sales tax). Send

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check or money order, payable to the University of Minnesota, to MES Distribution Center, University of Minnesota, 1420 Eckles Ave., St. Paul, MN 55108-6069. Include the title and item number in your order. Call (612)625-8173 to charge your purchase to Mastercard, Discover or VISA. There is a 10 percent discount on orders of 25 or more copies.

# # #

EXTU,GOPH,MNF,V5,V6,F8,X9 NNRD5046

Source: Mel Baughman, (612)624-0734
Writer: Martin Moen, (612)625-6243

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

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NEWS/ INFORMATION

June 9, 1995

After a Cool Spring, June Isn't Too Late for Planting

Don't be discouraged if May's cool weather kept you from landscape and gardening tasks. Deborah Brown, horticulturist with the University of Minnesota's Extension Service, says June is a good time for planting most landscape plants, and there's still time to put in some vegetables, too.

She cautions, however, that it is too late to plant bare rootstock trees or shrubs. Woody plants that are balled and burlapped or growing in containers can be planted if you are able to water them when rainfall is inadequate. Container-grown perennials can go in the garden regardless of whether they're flowering, in bud or past their bloom, Brown adds.

"Anyone who is getting a late start this year can create an 'almost instant' garden with flowering annuals in containers and bedding plant packs," Brown says. "Garden centers and farmers' markets also have potted herbs, tomatoes and pepper plants to set on sunny decks or patios or to transplant into a sunny garden."

It's not too late to plant snap beans from seeds (bush beans are speedier growers than pole types) or an early-maturing sweet corn variety. Carrots, beets and onions from sets will mature

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when planted now. Late in June, Brown says gardeners can plant seeds for cabbage to harvest in the fall.

Although the best time for spring grass seeding is past, Brown says it is still possible to fill in thin or bare areas in a lawn as long as you water the seed frequently during warm, windy weather. Easy to use grass "patch" products are also appropriate for June lawn care. These have grass seed embedded in mulch material to keep the seed moist.

For more information, contact the university's Dial-U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m. and 5 p.m. weekdays for assistance. Anywhere in the state, a $2.99 fee will be charged to the telephone you use.

# # #

EXTU,GOPH,MNF,G1 NAGR5050

Source: Deborah Brown (612)624-7491
Writer: Deedee Nagy (612)625-0288; dnagy@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 9, 1995

It's Ant Season, But You Can Discourage the Critters

If you're tired of sharing your home with nuisance ants, Jeffrey Hahn, entomologist with the University of Minnesota's Extension Service, says there are both chemical and nonchemical methods of getting rid of the pests.

First, he suggests checking to be sure food is properly stored and garbage is taken out regularly. Clean countertops, tables and other surfaces that may come in contact with food. Rinse cans and bottles in the recycling bin. Caulk cracks or other tiny openings around your home's foundation where ants may be entering.

If these methods fail, Hahn suggests insecticide treatments around the foundation or specifically where you know the ants are entering. Chlorpyrifos (Dursban) or diazinon are two such chemicals. Hahn cautions to only use chemicals labeled for outdoor use around buildings. If you can locate the actual ants' nest in the yard, Hahn suggests carbaryl (Sevin), chlorpyrifos (Dursban), diazinon and acephate (Orthene). Use only products that are labeled for lawn use.

Even without chemical treatments, ants generally will go away by the end of summer if they are nesting outdoors. For more

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information, contact the university's Dial-U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m. and 5 p.m. weekdays for assistance. A $2.99 fee will be charged to the telephone you use anywhere within the state.

# # #

EXTU,GOPH,MNF,G1 NAGR5052

Source: Jeffrey Hahn (612)624-4977
Writer: Deedee Nagy (612)625-0288; dnagy@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 9, 1995

Spring '95 Was a Bad Season for Bulbs

If you didn't care much for our cool spring, you have lots of company, namely the spring-flowering bulbs in your garden. Deborah Brown, horticulturist with the University of Minnesota's Extension Service, says this was a bad year for bulbs. Many froze and rotted in the soil while others sent up stunted growth with distorted foliage.

"These problems probably were caused by a winter with poor snow cover and an early, mild spring with numerous single-digit temperatures in early April," Brown says. This month, she advises homeowners to remove any bulbs that performed poorly. Those that bloomed well can be left in place or dug up after their leaves have yellowed.

If you choose to leave successful bulbs in the garden, Brown suggests planting flowering annuals that don't require much water in the same area. If you're constantly watering an area to keep annuals going, the moist soil can rot bulbs. Marigolds, petunias and moss roses are among the flowers that don't require much water and thus work well in bulb-planted areas.

If you're going to plant bulbs this fall, Brown suggests applying several inches of mulch at planting time. This could

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help prevent the kind of bulb damage that was prevalent this year.

For more information, contact the university's Dial-U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m. and 5 p.m. weekdays for assistance. Anywhere in the state, a $2.99 fee will be charged to the telephone you use.

# # #

EXTU,GOPH,MNF,G1 NAGR5051

Source: Deborah Brown (612)624-7491
Writer: Deedee Nagy (612)625-0288; dnagy@mes.umn.edu

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
EDUCATIONAL DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

June 12, 1995

U of M Offers Guide to Local Gov't Cooperation, Restructuring

Three cities share a city hall and a clerk. A suburb contracts with the city next door for snow plowing services. A township declines in population and can no longer provide services. Another township triples in size and wants more control over planning and zoning within its boundaries, so it decides to investigate incorporation. These are examples of common situations facing local governments.

"The issue of reorganization and restructuring of local governments has been a popular topic in Minnesota as taxpayers and officials face the prospect of having to do more with less," says Beth W. Honadle, professor of Applied Economics at the University of Minnesota. "Citizens are demanding their local governments pursue the most efficient and effective ways of delivering services, even if that means considering changing the boundaries of existing governmental jurisdiction," she says.

Honadle is the co-author of a guide to local government cooperation and restructuring recently published by the Minnesota Extension Service. "Choices for Change: A guide to Local Government Cooperation and Restructuring in Minnesota" discusses

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the kinds of problems governments may encounter, provides actual case studies, and takes readers through the legal framework. "It's designed as a guide for elected and appointed officials as well as concerned citizens who are interested in learning about their options," Honadle says.

The publication presents information, tips, and resources for such alternatives as joint power and inter-local service agreements and such structural changes as consolidation, annexation, incorporation and dissolution. The guidebook takes the reader step-by-step through questions people should ask themselves before proceeding with any particular option.

"The guide was designed to be multipurpose. It can be used as a general reference, to look up a bit of information to help people get started, to provide some resources and some background information on the law. But it may be most useful as a guide to help people generate as many relevant options as possible," Honadle says. "A self-assessment tool helps people define their needs, collect the necessary information and decide if the change is practical.

"The guidebook introduces options and helps people decide whether or not they want to explore a certain option further. It doesn't advocate any particular option. For example, a common situation is an expanding business in a township needs municipal services. The guide walks the reader through several options, such as the township providing the services the company requires,

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the township contracting with a bordering city for the services, the bordering city annexing land, or the business moving."

"Choices for Change: A Guide to Local Government Cooperation and Restructuring in Minnesota" (BU-6541) is available for $4.50 from your local county extension office or may be ordered from the MES Distribution Center, Room 20, Coffey Hall, 1420 Eckles Avenue, St. Paul, Minnesota, 55108. Minnesota residents add 7 percent sales tax. Make checks payable to the University of Minnesota.

# # #

EXTU,GOPH,MNF,V4,E1,V7 NEXT5053

Source: Beth W. Honadle (612)625-3772
Writer: Jennifer Obst (612)625-2741; jobst@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 14, 1995

Workshop on Grading Hardwood Lumber Offered by U of M

Explaining why one piece of pine lumber is a higher grade than another piece of maple, and is therefore more expensive, can be difficult. This is especially true when you're pressed for more than a superficial answer. A University of Minnesota workshop will give you the advanced training needed to explain how hardwood lumber is graded for quality.

The "Hardwood Lumber Grading Short Course" will offer instructions on grading techniques by discussing the rules established by the National Hardwood Lumber Association (NHLA). The short course will be held Aug. 22-24 at the St. Cloud, Minn. Technical College. A registration fee of $200 per person is required before Aug. 11. Space is limited, so early registrations are encouraged.

The course will begin at 8 a.m. on Aug. 22 and will conclude at approximately 3 p.m. on Aug. 24. The registration fee includes an NHLA rule book, a hardwood inspection training manual, a picnic, and refreshment breaks. Lodging and other meals are not included in the registration fee. Participants are asked to bring their own 36-inch, 4-line lumber ruler.

For registration information contact Paula Marquart, Woodcraft Industries-St. Cloud, at (612)252-1503. For more

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information about the content of the course contact Lew Hendricks, Department of Forest Products, University of Minnesota at (612)624-2790.

The course is sponsored by the University of Minnesota's Extension Service, the NHLA, Woodcraft Industries and the St. Cloud Technical College. Cosponsors include the university's College of Natural Resources, the Minnesota Department of Natural Resources, and the University of Wisconsin Extension Service.

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EXTU,GOPH,MNF,V5,F9,X9 NNRD5056

Source: Lew Hendricks (612)624-2790
Writer: Martin Moen (612)625-6243; mmoen@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 14, 1995

Weather Has Increased Tick Populations in Minnesota

If you're a tick, you've loved the winter and spring this year in Minnesota. But, if you're a human or a dog or cat, you should be extra vigilant in looking for ticks after you've been outdoors this summer.

Jeff Hahn, an entomologist with the University of Minnesota's Extension Service, says the larger-than-normal tick population is a concern, but shouldn't keep you from going outside. "If you take the proper precautions, you can enjoy yourself with minimal or no risk," says Hahn.

A comprehensive guide to the ticks found in Minnesota is available from the university for $1. See the end of this article for ordering information.

Precautions

--You can wear long-sleeved shirts and long pants. This may not be realistic for everyone, but if you're especially concerned this is the easiest non-chemical precaution you can take. Tucking your pants inside your socks will give you even more protection.

--You should stick to the trails when you're out hiking. Ticks are much more common in tall vegetation.

--You can apply a chemical repellent. Effective chemical products include DEET and Permanone. DEET can be applied to

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clothing or skin, but Permanone should only be applied to clothing. Research has shown that overapplying these chemicals does NOT result in increased protection--so follow label directions conservatively. There also are chemical products available for pets.

--You should look for ticks soon after an outdoor hike. Don't wait to look for ticks on yourself, your children or your pets. Removing ticks before they become attached is much easier and the risk of disease is eliminated.

Removing Ticks

Whenever you find a feeding tick attached to an animal or human, grasp it as close as possible to the skin with tweezers or tissue paper. Avoid squeezing the tick's abdomen. Gently, yet firmly, pull the tick off. Always treat the wound with a germicidal agent such as iodine.

Methods using tape, alcohol, Vaseline or lighted matches to induce the tick to voluntarily pull its mouthparts out of the skin are not effective. Using tweezers is the most effective removal method. Never destroy ticks by crushing them between your fingers, as this practice has been known to cause infection.

Minnesota Ticks

There are 13 known species of ticks in Minnesota, but of these only two are commonly encountered by humans: the American dog tick, also called the wood tick; and the blacklegged tick, formerly called the deer tick.

The American dog tick is the largest found in Minnesota and is the one most often encountered by humans. The superstition

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that ticks crawl up trees and drop down on humans and animals is false. The belief that ticks twist their mouthparts into the bite wound and have to be "unscrewed" to be removed is also untrue.

Adult blacklegged ticks are smaller than adult American dog ticks, but don't rely on size to correctly identify ticks. Because the blacklegged tick is a potential carrier of Lyme disease, correct identification is important.

Lyme Disease

Lyme disease is most prevalent in the east central region of Minnesota. Most cases of Lyme disease occur in June and July, although cases have been reported in Minnesota from February through November.

A blacklegged tick infected with Lyme disease needs to be attached for at least 24 hours before the disease is transmitted to the host. Consequently, early detection and removal are important. Squeezing the tick's abdomen--the largest part of its body--during removal may immediately transfer the disease to the host.

A person bitten by a Lyme disease-infected tick may develop a red skin lesion. The lesion expands to form a large, bright red ring with a clear center which often is hot to the touch. Other early symptoms include fatigue, chills, fever, headache, muscle pain, sore throat, nausea or vomiting. See a doctor immediately if you believe you have been bitten by a tick carrying Lyme disease. Save the tick for later identification.

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Identifying Ticks

The University of Minnesota will identify ticks for you. Live ticks should be placed in a container of rubbing alcohol; dead ticks should be gently packaged in tissue paper. Send ticks to the university's Dial U Clinic, 155 Alderman Hall, 1970 Folwell Ave., St. Paul, MN 55108. The clinic will only identify the species of the tick. You will be charged a $2.99 fee.

To order the four-page publication, "Minnesota Ticks and Their Control," send a check or money order, payable to the University of Minnesota, for $1 (Minnesota residents add 7 percent sales tax) to: MES Distribution Center, 20 Coffey Hall, University of Minnesota, St. Paul, MN 55108-6069. Include the title and item number FO-1013-NR1 in your order.

# # #

EXTU,GOPH,MNF,V4,V5,V7,C3,H2,H8,T1 NAGR5055

Source: Jeff Hahn (612)624-4977
Writer: Martin Moen (612)625-6243; mmoen@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

June 16, 1995

Reference Notebook on Livestock Industry Changes Available

Family farms or corporate farms? Large or small farming operations? Independent pork producers or contract producers? Single family or multi-family dairying?

These questions generate a lot of discussion and controversy these days, particularly among livestock producers, rural citizens, and government officials. Often the questions generate more heat than light when they come up at meetings of county commissioners, zoning boards and the Minnesota state legislature.

One thing is certain--the livestock industry in Minnesota and the rest of the country is going through a time of rapid changes. Making it easier to understand the scope and impact of these changes is one of the purposes of a reference notebook titled, "Structural Change in the Livestock Industry."

The notebook contains materials compiled by county- and campus-based staff members of the University of Minnesota's Extension Service. It focuses mainly on the swine and dairy industries. There are fact sheets on changes in these industries, megatrends in agriculture, consumer issues, the impact of technology, emerging business arrangements, and public policies and values relating to livestock industry changes.

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There are also articles outlining strategy options for dairy and swine producers.

One section of the notebook outlines four livestock industry scenarios that are typical today. It's designed to serve as the basis for discussions at educational meetings or workshops.

"This notebook is designed for policy makers and livestock producers," says Bob Koehler, Murray County extension educator. "By better understanding the underlying causes of changes in the industry, as well as available options, policy makers and producers should be able to make better choices based on their situations and goals. Hopefully, this will reduce conflict in rural communities."

Copies of the notebook are available for $15 each. Send your request to Waite Library, Department of Applied Economics, University of Minnesota, 232 Classroom Office Building, 1994 Buford Ave., St. Paul, MN 55108, or phone (612)625-1705. Make checks payable to the University of Minnesota.

The extension service staff members who contributed to the notebook, in addition to Koehler, are Wayne Hansen, Redwood County extension educator; Bill Lazarus, farm management specialist; Brian Buhr, marketing economist; Joe Conlin, dairy scientist; and Lee Johnston, swine scientist.

# # #

EXTU,GOPH,MNF,DTN,V2,D1,S2,X1,X3 NAGR5057

Source: Bill Lazarus (612)625-8150
Editor: Joseph Kurtz (612)625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108-1030

NEWS/ INFORMATION

June 20, 1995

Buttercup in Pastures, Green Chop Is Toxic to Livestock

The smallflower buttercup, a plant that is toxic to grazing animals, is common in northeastern Minnesota. It's also becoming widespread in southeastern Minnesota this season, according to Roger Becker, weed scientist with the University of Minnesota's Extension Service.

"The plants have yellow flowers with small, yellow petals," says Becker. The plants mature at from 6-20 inches tall. The wet spring has helped them thrive, as they do best in moist environments."

The toxic compound in buttercup causes blistering, salivation, diarrhea, and abdominal pain in livestock, says Mike Murphy, U of M veterinary toxicologist. Severe toxicity can lead to convulsions and death. "In grazing studies with high infestations of buttercup species, sheep ingested lethal doses within five hours," says Murphy. "But the toxic compound degrades rapidly after the plant is cut. Therefore, ensiled or cured hay is not toxic. The concern is with grazing and green chop."

Becker says animals will naturally avoid buttercup. The plant generally results in toxicity where animals are short on

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other forage and are forced to eat it. "With green chop, patches of highly infested forage can cause problems for individual animals that might eat a large amount of buttercup at feeding time," he adds.

Murphy says the blistering caused by buttercups is actually a blessing, since it's a visible sign that animals have been eating the plants. The blistering may show up on the lips, tongue, nose or mouth of animals that eat buttercup before more serious toxicity or death occurs. "If feeding green chop or grazing infested fields, watch for blistering or excessive salivation and provide non-infested forage to animals as soon as possible," he advises.

# # #

EXTU,GOPH,MNF,V2MN,B1,D1,S1,Z2,Z4 NAGR5045

Source: Roger Becker (612)625-5753
Mike Murphy (612)625-8787
Writer: Joseph Kurtz (612)625-3168; pkurtz@mes.umn.edu

Smallflower Buttercup, *Ranunculus abortivus*

Smallflower buttercup

(1) young plant; (2)plant in bloom; (3) mature receptacle bearing seeds; (4) seeds. The plant is 6 to 20 inches tall. Stems are slightly hairy, slender, and branched from the base of the plant. Flowers are small and yellow with small, oblong petals.

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NEWS/ INFORMATION

June 21, 1995

Conference Will Explore Changing Ag Structure

When agriculture changes, communities dependent on the industry change, too. That's the topic of a conference in Minneapolis July 10-11 at the Radisson Hotel South and Plaza Tower. Participants will discuss the impact of technological advances, expanded environmental concerns and changing consumer interests on agriculture and rural communities.

"Industrialization of Heartland Agriculture: Challenges, Opportunities, Consequences and Alternatives" offers a look at changes pressuring agriculture in the 1990s and the impact those changes have on all involved. The meeting is sponsored by a group of public and private organizations and coordinated by North Dakota State University (NDSU).

Representatives of local government, state agencies, agricultural production and related businesses are invited to the conference. Program organizers will use the discussion to develop educational materials to help communities and groups struggling with the challenges of a changing agriculture.

The discussion will begin with some reasons why agriculture is "industrializing" and will move quickly to the implications of that trend and its related changes. Specific issues include size and scale of production, business structure, and how each change

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affects different groups. Speakers will also discuss the impact of technology on agriculture and related needs of the industry. The consequences of change will be discussed from the perspective of individual farms, food companies and communities, as well as the impact changes have on public policy or industry behavior. Conference organizers have balanced the program with a wide range of perspectives.

For more information on the program or to register, call the NDSU Department of Agricultural Economics at (701) 231-8642. Registration is $95 or $105 after July 7.

The conference is sponsored by NDSU; the Farm Foundation; North Central Regional Committee on Public Policy; USDA's Economic Research Service, Agricultural Marketing Service, and RBCDS Cooperative Services; the Midwest Assn. of State Departments of Agriculture; and the North Central Regional Center for Rural Development.

# # #

EXTU,GOPH,MNF,V2,V4MN,A4,E1 NAGR5061

Source: Stan Ernst (701) 231-9488
Writer: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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NEWS/ INFORMATION

June 21, 1995

Affordable Housing Conference Will Be June 28 at U of M

Housing affordability and the social and community issues it encompasses will be the topic of a day-long workshop June 28 at the Earle Brown Center on the St. Paul campus of the University of Minnesota. The conference, sponsored by the Minnesota Extension Service, is aimed at community leaders, including extension educators, civic planners, mortgage lenders and housing industry professionals. Sessions are to be highly interactive, with participation and idea-sharing from all attendees.

Speakers will include university housing educators, officials of the Minnesota Housing Finance Agency, city administrators and the founder of Project for Pride in Living, Joe Selvaggio. Registration is $7.50, which includes lunch.

For further information, contact Bonnie Bolin at (612) 625-5756 or e-mail: bbolin@mes.umn.edu

# # #

EXTU,GOPH,MNF,V4MN,V8MN,V9MN,H5MN NHEC5060

Source: Bonnie Bolin (612) 625-5756; bbolin@mes.umn.edu
Writer: Deedee Nagy (612) 625-0288; dnagy@mes.umn.edu

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NEWS/ INFORMATION

June 23, 1995

Think Long-term When Updating Grain Drying, Storage, Handling

If it's time to update your grain drying, storage, and handling systems, think long-term. That's what Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service, recommends.

"Bins and dryers installed today will probably last 20 years," says Wilcke. He suggests the following strategies when making updates:

--Think big. Crop yields, acreages, and equipment sizes will probably continue their upward trend, so allow plenty of room for vehicles and for expansion.

--Plan for high-capacity grain movement. Include large dump pits, surge bins, and high-capacity conveyors. You have better things to do than wait for grain to be transferred from one point to another.

--Consider energy efficiency and do what you can to keep energy costs down. This is especially important, since future energy prices are difficult to predict.

--Keep grain quality in mind. Which quality characteristics are important depends on what the grain will be used for, but in general, for cash market grain, you'll want high test weight, low

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breakage susceptibility, low amounts of fines and foreign material, and no mold. Provide for grain cleaning in your handling system, select conveying systems that handle grain gently, select dryers that dry and cool grain gently, and install aeration systems in all storage bins.

Allow for flexibility. There are already good opportunities for marketing grain with special quality characteristics (for example, high oil, high protein, low breakage susceptibility, organic). To take advantage of these opportunities, you will need to handle and store these grains separately to preserve their identity. Installing a variety of bin sizes and flexible handling systems will make this possible.

"Many drying systems on Minnesota farms are at least 20 years old and in need of updating," says Wilcke. "A year with potentially wet crops such as this year is a good time to do it."

If you need to buy a fan for your grain drying system, a University of Minnesota publication may be helpful. "Selecting Fans and Determining Airflow for Crop Drying, Cooling, and Storage" (F0-5716) is available from county offices of the Minnesota Extension Service. It's also available by mail for $1.00 per copy (Minnesota residents add 7% sales tax.) Send a check payable to the University of Minnesota to MES Distribution Center, 20 Coffey Hall, University of Minnesota, 1420 Eckles Ave., St. Paul, MN 55108-6069. Include the title and item number in your order.

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A FANS computer program is also available to use in the fan selection process. For more information about the FANS computer program, contact the University of Minnesota, Department of Biosystems and Agricultural Engineering, 1390 Eckles Ave., St. Paul, MN 55108-6005.

# # #

EXTU,GOPH,MNF,DTN,V2,E4,F4 NAGR5064

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

June 23, 1995

DairyCHAMP Moves to New Home at University of Minnesota

The computerized dairy management program known as DairyCHAMP has a new home within the University of Minnesota.

DairyCHAMP will now be part of the university's Center for Farm Financial Management. The center will provide maintenance, support, and development of DairyCHAMP.

"DairyCHAMP is a tool for identifying problems that limit overall dairy herd productivity," says Andrew Whyte, technical staff member of the Center for Farm Financial Management.

DairyCHAMP was developed by the university's College of Veterinary Medicine and remained there during its first 10 years. The program during this time has emphasized animal health and biological productivity. Within the Center for Farm Financial Management, the DairyCHAMP program will be expanded, with an emphasis on measures of financial efficiency, profitability, solvency, total quality management, responsible resource use, and environmental considerations.

"The center will continue to draw on the talent of individuals within the College of Veterinary Medicine and the Department of Animal Science and will add farm management

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expertise from the Department of Applied Economics and other departments as necessary," says Whyte.

The DairyCHAMP program and staff will be combined with the nationally-known FINPACK team of the Center for Farm Financial Management. This will provide unified support for integrating DairyCHAMP with FINPACK and other center software for dairy farm management decision making.

For further information, contact the Center for Farm Financial Management, Department of Applied Economics, 249 Classroom Office Building, University of Minnesota, St. Paul, MN 55108; phone (612) 625-1964 or 800-234-1111. Contact Andrew Whyte by e-mail (dairychamp@cffm.agecon.umn.edu).

# # #

EXTU,GOPH,MNF,V2,A2,D1,X1 NAGR5063

Source: Andrew Whyte (612) 625-1964 or 800-234-1111
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

June 26, 1995

Take Steps to Reduce Hot Weather Stress on Hogs

Hogs aren't hog-wild about hot weather. As producers know, excessive heat is stressful to swine. Death loss is a danger when handling hogs in hot weather. Charles Christians, animal scientist with the University of Minnesota's Extension Service, has these hot-weather reminders for pork producers:

--First and foremost, make sure the animals have plenty of clean, cool water available.

--Don't try to cool down hot hogs by pouring cold water directly on their backs. This can cause death loss, says Christians. He suggests putting water around their heads, noses, and bellies.

--If you are using a fogger or mister in an open-front building, the best strategy is to run it for awhile, then turn it off for awhile. This allows evaporation to cool the animals. Keeping the spray going all the time increases humidity.

--In enclosed buildings, keep a close eye on temperature and air movement. Having an auxiliary generator should be standard procedure so that you can maintain air movement if the electricity goes off.

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--Don't handle or disturb the hogs any more than necessary. If you have to sort or truck them, do it in late evening or early morning.

--It's especially important to keep boars cool to maintain their fertility. Breeding should be at night or in the morning before 10 a.m.

--When heat reduces feed intake, adding fat to diets may be helpful.

# # #

EXTU,GOPH,MNF,DTN,V2,S2,X3 NAGR5065

Source: Charles Christians (612) 624-0766
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

June 29, 1995

Handbook on Dairy Housing, Equipment Available from U of M

A newly revised plan handbook entitled "Dairy Freestall Housing and Equipment," MWPS-7, is now available from the University of Minnesota.

The 124-page handbook focuses on using dairy facilities as part of a sound management plan, says John Chastain, agricultural engineer with the university's Minnesota Extension Service. Such a plan facilitates sanitation, animal care and movement, and the flow of goods and services.

The handbook includes the following chapters: Data Summary, Total Dairy facility, Replacement Housing, Milking Herd Facilities, Milking Center, Special Handling and Treatment Facilities, and Utilities. More than 100 figures illustrate ideas; 54 tables provide information needed for detailed planning and design. The handbook also provides an appendix on concrete quality and construction and one on livestock fences. A list of references and an index complete the book.

The handbook comes from MidWest Plan Service. It was written by a committee of agricultural engineers from land grant universities in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin, and from USDA.

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"Dairy Freestall Housing and Equipment," MWPS-7, replaces the "Dairy Housing and Equipment Handbook" (also numbered MWPS-7). Its cost is $20, plus 7 percent sales tax for non-exempt Minnesota residents. It is available from Terry Capaul, University of Minnesota, Biosystems and Agricultural Engineering Dept., 1390 Eckles Ave., St. Paul, MN 55108.

# # #

EXTU,GOPH,MNF,DTN,V2,D1,X1 NAGR5066

Source: John Chastain (612) 625-3701
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

June 29, 1995

Agricultural Health Course Offered This Summer

Every year, more than 1,200 U.S. farmers are killed on the job. Why is agriculture this country's deadliest industry? What can be done to make farm work safer for farmers and farm families? If you are interested in these questions, you may want to attend a 3-credit course offered this summer through the Midwest Center for Occupational Health and Safety.

The course, offered weeknights from Aug. 21 to Sept. 1, provides an overview of the hazards and behavioral risk factors that make farming this country's most dangerous job. Sessions will address farm work-related injuries and diseases and their impact on agricultural workers, including migrant workers and farm children. Lectures will cover machinery-related injury, hearing loss, respiratory illnesses and cancers. Potential solutions, including safety and health regulations, engineering, and community-based educational programs, will also be discussed.

"The course will cover our state-of-the-art thinking about how to make farming less hazardous work," said John Shutske, farm safety and health specialist for the University of Minnesota's Extension Service. "This is a great opportunity for people who

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are concerned about the health of farmers to learn about the underlying causes of farm accidents and illnesses, and to hear about health promotion strategies that really work."

The 3-credit course is designed for extension educators, graduate students, physicians, nurses and other health care providers, as well as farmers and other agricultural community members. Continuing Education Units will be granted for attendance.

Due to a grant from the Minnesota Extension Service, the fee for the entire course is only $10 for each week of the two-week course. Participants may attend one, several or all of the course sessions for the same fee. Those registering for graduate credit, however, pay $275 for the first credit and $150 for each additional credit. Based at the Minneapolis campus of the University of Minnesota, the course will also be broadcast via interactive television to the Crookston and Duluth campuses.

For more information on the course, contact the Midwest Center for Occupational Health and Safety, 640 Jackson St., St. Paul, MN 55101; (612) 221-3992.

# # #

EXTU,GOPH,MNF,V2,V4MN,A4,E4 NAGR5069

Source: Lucy Walsh (612) 221-3992
Writer: Patricia Ohmans (612) 625-1743;
pohmans@maroon.tc.umn.edu

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NEWS/ INFORMATION

July 6, 1995

Photo available: Editors--to obtain a black-and-white photo of John Craig with his red deer to accompany this article, call Jennie Rominger at (612) 625-6294 or 1-800-367-5363, or Joseph Kurtz at (612) 625-3168.

End Use Market Is Key for St. Cloud Red Deer Producer

Watching the red deer frolic in his meadow is a joy for John Craig, but that's not the reason he keeps the animals on his acreage near St. Cloud. "The number one thing for me is that there is a market for the product," says Craig, who started his red deer herd three years ago. "There had to be an end use venison market for me to get involved. I wanted to avoid just producing breeding stock."

Craig now has 31 head of deer on his 20-acre farm. He started with nine females, called hinds, in October of 1992. He launched the deer enterprise after a 28-year career in sales. His animals are part of an estimated 600 total head of red deer on Minnesota farms.

Craig will be one of the participants at an Alternative Livestock Conference the University of Minnesota is sponsoring July 27-29. The conference at the university's St. Paul campus is for persons thinking about raising alternative livestock and those already doing so. In addition to red deer, the conference

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will cover bee, bison, elk, emu, free range chicken, goat, goose, llama, ostrich, rabbit, rhea and reindeer enterprises.

"I used to spend a lot of time on the road, and when I would eat out, I would look for venison on the menu," Craig says. "Often it was there, and usually it was red deer."

He learned that in 1991 New Zealand shipped 600 tons of red deer venison to the U.S. That increased to 670 tons in 1994, or about 10 percent of what New Zealand produces.

"That's one of the key things that got me into this," says Craig. "We're so far behind New Zealand, we can't supply the U.S. demand. The market here is small, but it's growing rapidly, with much of the potential waiting to be cultivated."

He also learned that red deer have been raised on farms for thousands of years in Europe, so they have lost some of their wildness. "They're easy to care for and not susceptible to most diseases," says Craig. "They don't require winter shelter. Two years ago, the temperature here dropped to 40 degrees below zero, and they did just fine. They do benefit from the trees that cut the wind in the winter."

Another advantage of red deer is that they are natural pasture grazers, whereas most species of deer prefer to browse (eat plant material from trees and shrubs). Good pastures will sustain about three head per acre.

During the summer the animals thrive on pasture, mineral block, and water. During the winter they get alfalfa hay and

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grain. Craig estimates the winter feeding cost at 35 cents per day for each adult.

One of the main expenses in deer farming is fencing. The state requires that perimeter fences for deer be at least 75 inches high. Craig estimates the cost of fencing materials at $1.25 per lineal foot of fence. It can cost another $1.00-1.50 per foot if you have to hire someone to put up the fence.

The other major expense in starting a red deer enterprise is the breeding stock. Craig bought his nine bred hinds for $2,300 per head in 1992, and his stag cost $2,000. "Prices for breeding stock are still at about that level," he says. "Prices may eventually drop somewhat, but they haven't so far."

Red deer are members of the elk family. They're smaller than elk, but larger than white-tail deer. Adult red deer hinds weigh around 280 pounds, and adult stags around 450 pounds.

Young stags are ready for the venison market when they are 13-15 months old and weigh about 200-230 pounds. The carcass weight will be about 62 percent of the live weight. Young females are not harvested, since they are more valuable as breeding stock.

Craig's income from the animals sold for venison is about $400 per head. He estimates costs for land, fencing, feed, depreciation on his original breeding stock, deworming medicine, transportation to market, and USDA inspection of the slaughtering process total $200 per head. That figure doesn't include labor, but Craig says that amounts to only about 30 minutes a day in the winter and "just a few minutes a day" in the summer.

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Last fall when Craig sold animals for venison, they went to Jay Flattum of Chisago City, a wholesale distributor of meat from farm-raised bison, rabbits, and pheasants, as well as red deer.

"I buy directly from producers," says Flattum, who also has his own herd of red deer. "I have the animals slaughtered at a USDA-inspected plant and then processed into wholesale cuts. The meat goes to hotels, restaurants, and retail outlets."

Flattum says a majority of what he calls "white tablecloth" restaurants in the Twin Cities area have venison on their menu some time during the year. "It's all farm raised, and a lot of it comes from New Zealand," he says. "My major competition is New Zealand producers, but I've been able to take market share away from them in Minnesota."

Flattum says venison is "very marketable as a niche product." However, he urges those thinking about raising deer to make a realistic appraisal of the market and not to rely on the income projections of people selling breeding stock.

"Venison appeals to consumers who want low-fat meat," he says. "But it competes with meat from other species such as bison."

At the Alternative Livestock Conference, there will be live animals of several species on hand for show and demonstration. The conference will include educational presentations on alternative livestock marketing, production, health, nutrition, and housing. To obtain registration information and a brochure, call Judy Sunvold at 1-800-367-5363, extension 5-2636, or (612) 625-2636.

# # #

EXTU,GOPH,MNF,V2,V4,V5,V9,A4,P1 NAGR5070

Source: Judy Sunvold (800) 367-5363
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

July 11, 1995

Water Quality, Farming Systems Field Day Will Be July 26

What can over 2,000 water samples tell you about nitrogen and herbicides in the groundwater? For one thing, that you can balance profitable agriculture and environmental concerns in a groundwater sensitive area such as Minnesota's Anoka Sand Plain.

A five-year summary that incorporates results of those 2,000 water samples will be discussed at a research field day from 9 a.m. to noon on Wednesday, July 26.

The farming systems tour will be held at the Management Systems Evaluation Area--or MSEA--three miles southwest of Princeton, Minn.

There's a chance that the "hard facts" from this study could minimize future regulations that may not apply to the Anoka Sand Plain area. Based on the reliable, unbiased data, farmers can advocate a voluntary, rather than a regulatory, approach to minimize environmental problems attributed to agriculture.

For more information, contact Bruce Giebink, water quality education coordinator with the University of Minnesota's Extension Service, at (612) 625-4749.

# # #

EXTU,GOPH,MNF,DTN,F4,R1,X5 NAGR5073

Source: Bruce Giebink (612) 625-4749
Writer: Jack Sperbeck (612) 625-1794; jsperbeck@mes.umn.edu

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NEWS/ INFORMATION

July 11, 1995

Dry Bean Field Day at Staples Will Be Aug. 10

Thinking of getting started in dry edible bean production? A special one-hour seminar for you is scheduled Thursday, Aug.10 at 9 a.m.

The seminar--and dry bean field day the rest of the morning--will be held at Staples, Minn. at the Central Minnesota Economic Development, Research and Education Center. It's on the north side of Staples on County Road 2.

The field day will feature repeating wagon tours of several university-lead research projects. Extension educators and researchers from the University of Minnesota and North Dakota State University will discuss the research projects.

Topics will include variety performance, white mold control, weed control, irrigation and nitrogen timing practices, market trends and processing, and the value-added concept.

The field day is sponsored by the Agricultural Utilization Research Institute (AURI), Central Lakes College--Farm Business Management, Northarvest Bean Growers Association and the University of Minnesota's Extension Service and Agricultural Experiment Station.

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For more information, call the Central Minnesota Center at Staples at (218) 894-2610 or your county office of the Minnesota Extension Service.

# # #

EXTU,GOPH,MNF,F4,H7,R1,X5 NAGR5074

Source: Jerry Wright (612) 589-1711
Writer: Jack Sperbeck (612) 625-1794; jsperbeck@mes.umn.edu

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405 Coffey Hall
1420 Eckles Avenue
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NEWS/ INFORMATION

July 14, 1995

Warm Weather, Storms Set Stage for Fireblight

This summer's warm weather and intermittent thunderstorms encourage fireblight, a bacterial disease that affects more than 130 common plant species in this region. Cynthia Ash, assistant extension plant pathologist with the University of Minnesota's Extension Service, says the disease is best controlled with resistant varieties and careful pruning.

Fireblight gets its name from the burnt appearance it causes on plant parts, Ash says. The most susceptible plant species are in the rose family, including varieties of apple, crabapple, pear, mountain ash, cotoneaster, hawthorne and raspberry. First signs are on leaves and stems, followed by movement of the bacterium into woody tissues. Outbreaks often occur following thunderstorms or hail.

Ash suggests planting varieties known to resist fireblight. Apple and crabapples in that category includ Dolgo, Haralson, Northwestern Greening, Red Baron, Sweet Sixteen and Adams. In addition, gardeners should avoid heavy pruning during the growing season. This promotes new growth, which is most susceptible to fireblight. It is best to prune young trees in late winter or

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early spring, taking care to remove all blighted twigs and branches, she adds.

If you must prune in the summer, Ash recommends removing infected material 10 to 12 inches below the point of visible infections. Pruning shears should be dipped between cuts into a solution of one part household bleach to nine parts cold water. They should stay in the freshly made bleach solution at least five seconds between snips.

For more information, contact the university's Dial U Insect and Plant Information Clinic. Dial 1-900-988-0500 between 9 a.m. and 5 p.m. weekdays for assistance. A $2.99 fee will be charged to the telephone you use.

# # #

EXTU,GOPH,MNF,G1 NAGR5075

Source: Cynthia Ash (612) 625-6290
Writer: Deedee Nagy (612) 625-0288; dnagy@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
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EXTU,GOPH,MNF,G1 NAGR5075

Source: Cynthia Ash (612) 625-6290
Writer: Deedee Nagy (612) 625-0288; dnagy@mes.umn.edu

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1420 Eckles Avenue
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NEWS/ INFORMATION

July 19, 1995

Minnesota Nutrition Conference Will Be Sept. 18-20

Leading scientists in animal nutrition at the national and international levels will share information at a conference in Bloomington, Minn., Sept. 18-20.

They will take part in the 56th Minnesota Nutrition Conference and Alltech, Inc. Technical Symposium at the Marriott Hotel. The event is designed for animal nutritionists, animal industry representatives, veterinarians, educators, and livestock producers. The conference agenda includes swine, beef, dairy, and poultry nutrition topics.

Biotechnology will be the focus on the Alltech, Inc. Technical Symposium the afternoon of Sept. 18. The future of biotechnology will be addressed by Pearse Lyons, who formed Alltech in 1980. The company, which makes animal feed and fermentation products, is headquartered in Nicholasville, Ky. Other symposium topics include soy protein, organic selenium, and immune modulators.

The two-day Minnesota Nutrition Conference begins Sept. 19. The first day will focus on ruminant nutrition. The morning of Sept. 20 will focus on swine nutrition and the afternoon will focus on poultry nutrition.

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Most of the conference speakers are from universities and private companies across the U. S., and some are from other countries.

The registration fee for the conference is $60 in advance and $75 at the door. Program and registration information is available from Extension Special Programs, 405 Coffey Hall, University of Minnesota, St. Paul, MN 55108-6068; telephone (612) 625-1214 or 1-800-367-5363.

# # #

EXTU,GOPH,MNF,V2,B1,D1,P3,S2 NAGR5088

Source: Gerry Wagner (612) (625-1978)
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

July 19, 1995

Part 1 in a 3-part series

No Re-Leaf for Trees

Are you still waiting for your tree to leaf out? You're not alone; many trees around the state have partially leafed out or have not leafed out at all.

What happened? As you recall, the weather this past March was quite pleasant with above normal temperatures. Many trees awoke from winter dormancy thinking it was spring. In early April we experienced extremely low temperatures that froze many of the buds and tender leaf tissues that were just beginning to emerge. Actively growing trees cannot tolerate freezing temperatures--the new plant tissue dies or development is delayed. The best thing to do is wait and see if new leaves develop.

To make life even more difficult for the tree, we've had extremely warm temperatures without significant rainfall. It's difficult for trees that were already hit by Mother Nature to take another stressful situation.

It's important to monitor a tree's moisture level. In warm weather trees transpire or "breathe" at a faster rate and use more water. Younger trees with small root systems need frequent watering. Begin watering young trees before they show signs of

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leaf wilt. Older trees are usually able to withstand dry periods because their larger, established root systems can store more water.

During warm weather monitor your tree's moisture level by inserting a couple of fingers two inches into the soil in various spots under the tree. If the soil is moist the tree has plenty of water. If the soil is dry, water the tree by placing a soaker hose or sprinkler just beyond the reach of the branches. A slow trickle for several hours will supply water to the small roots in the upper 8-10 inches of the soil.

This information was provided in cooperation with the Minnesota Shade Tree Advisory Committee (MnStac). MnStac is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state, and local agencies; and nonprofits.

# # #

EXTU,GOPH,MNF,V4MN,V5MN,V7MN,V8MN,F8MN,G1MN NNRD5085

Source: Gail Steinman (612) 920-9326
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

July 19, 1995

Increasing Profitability of Pork Production is TIPS Objective

Helping swine producers increase profitability is the objective of TIPS, a 4-state educational program Sept. 7-8 in South Sioux City, Neb.

TIPS is an acronym for "Techniques for Improving Profitability Seminars." The program is sponsored by the extension services of Iowa State University, the University of Minnesota, the University of Nebraska, and South Dakota State University. Swine specialists from these universities will make most of the presentations.

The registration deadline is August 30 and the fee is $70. Enrollment is limited to 150, and the past two conferences have filled to the limit. Registration forms are available at county offices of the Minnesota Extension Service. They're also available from Lee Johnston, West Central Experiment Station, at (612) 589-1711; or from the University of Nebraska at (402) 584-2261.

The conference program begins at 1 p.m. Sept. 7 and adjourns at 3:30 p.m. the following day. Topics the first day include legal issues in pork production, new health technologies, size of operations, characteristics of high-profit operations, and communications between bankers and producers.

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Informal four-corners discussions will take place the evening of Sept. 7. Topics will include facility design and renovation, computer software, Pork Quality Assurance certification, understanding packer cutout sheets, and genetics.

Topics Sept. 8 will include avoiding mistakes in the design of a production system, feed additives, feed preparation, operating a marketing network, the future of the swine industry, remaining competitive in pork production, and dietary amino acid formulations for sows.

# # #

EXTU,GOPH,MNF,DTN,V2,X3,Z6,S2 NAGR5087

Source: Lee Johnston (612) 589-1711
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

July 27, 1995

Professionals Recommended for Tree Care Work after Storms

After a storm leaves damaged trees in its wake, many people are eager to enter the tree care business. It is important to remove or repair damaged trees. However, tree care work is dangerous and requires a professional arborist with the proper equipment, says Gary Johnson, urban forester with the University of Minnesota's Extension Service.

"When searching for a tree care/arboricultural company, make sure it's a reputable business," says Johnson. "These companies may be found in the yellow pages or recommended by your city forester or local Department of Natural Resources field forester."

To make sure you receive professional service, Johnson recommends choosing professionals by following these three steps:

--Make sure they meet minimum qualifications. (1)Ask if they are fully insured for property damage, personal liability and workers' compensation. Ask to see a current insurance binder. (2) Find out if they belong to any professional organizations, such as the Minnesota Society of Arboriculture, the International Society of Arboriculture (ISA), the National Arborist

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Association, or if they are an ISA-certified arborist. (3) Find out if they perform a variety of tree care services, such as bracing and cabling, stump removal, and planting.

--Ask for some local references for previous work. Contact these references. Were they fully satisfied? This may also be a good time to consider more than one company. If possible, investigate two or three tree care companies to get their analysis of the damage and cost estimates.

--Make a contract. After selecting the company you feel will do the work best (low bids are not necessarily the best), have the company assemble a contract for the work. Don't hire a company without a contract. Make sure the contract states exactly what work will be done, and who is responsible for clean-up and stump removal.

This information was provided in cooperation with the Minnesota Shade Tree Advisory Committee (MnSTAC). MnSTAC is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state, and local agencies; and non-profit organizations.

# # #

EXTU,GOPH,MNF,V4MN,V5MN,V7,V8MN,F8,G1,H7,T1 NNRD5091

Source: Gary Johnson (612) 625-3765
Mike Zins (612) 443-2460
Writer: Gail Steinman (612) 920-9326
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

July 27, 1995

Approach a Storm-Damaged Tree with Extreme Caution

Approach a storm-damaged tree with extreme caution. Trees that have fallen into power lines or any energized line may be deadly, says Gary Johnson, urban forester with the University of Minnesota's Extension Service.

"If you suspect the tree has contacted energized lines, call your local electric company immediately," says Johnson. If there are no wires present, he recommends the following steps to repair the damage:

--Know the type of tree damaged. Decide if it's worth saving. Some trees have stronger wood than others and warrant repair work if they haven't been damaged too badly. Other weak-wooded trees may not be worth the time and effort, since they many soon split out more or be weakened by decay.

--Decide whether to remove the tree. Trees that are hazards need to be removed. A hazard tree is any tree that, if it falls or splits open, would result in damage to property, people, or other valuable trees. Trees with cracks and inner wood decay may be hazards. Consult a tree care professional for an evaluation of the tree's hazard potential.

--Determine whether the tree can be repaired. If it's a smaller tree, not a hazard, and is only suffering from broken

(over)

branches or stems, you may be able to do the repair work yourself. Remove the entire broken branch with a three-step pruning technique. (A) Cut part way through the branch from beneath, at a point one or two feet from the tree trunk or larger branch. (B) Make a second cut from the top of the branch, at a distance of two to four inches further out from the first cut. This should allow the branch to fall from its own weight, breaking at the "hinge" and not ripping the bark down the trunk. (c) Complete the job by making a final cut next to the trunk or larger branch, just outside the swollen branch collar.

"Never top trees," says Johnson. "Decapitating trees only delays the death and creates more branches to get rid of."

Johnson says larger trees should be evaluated and repaired by professionals. Sometimes, split trees can be repaired by braces and cables, but this should only be done by a professional who has determined that the procedure may be useful.

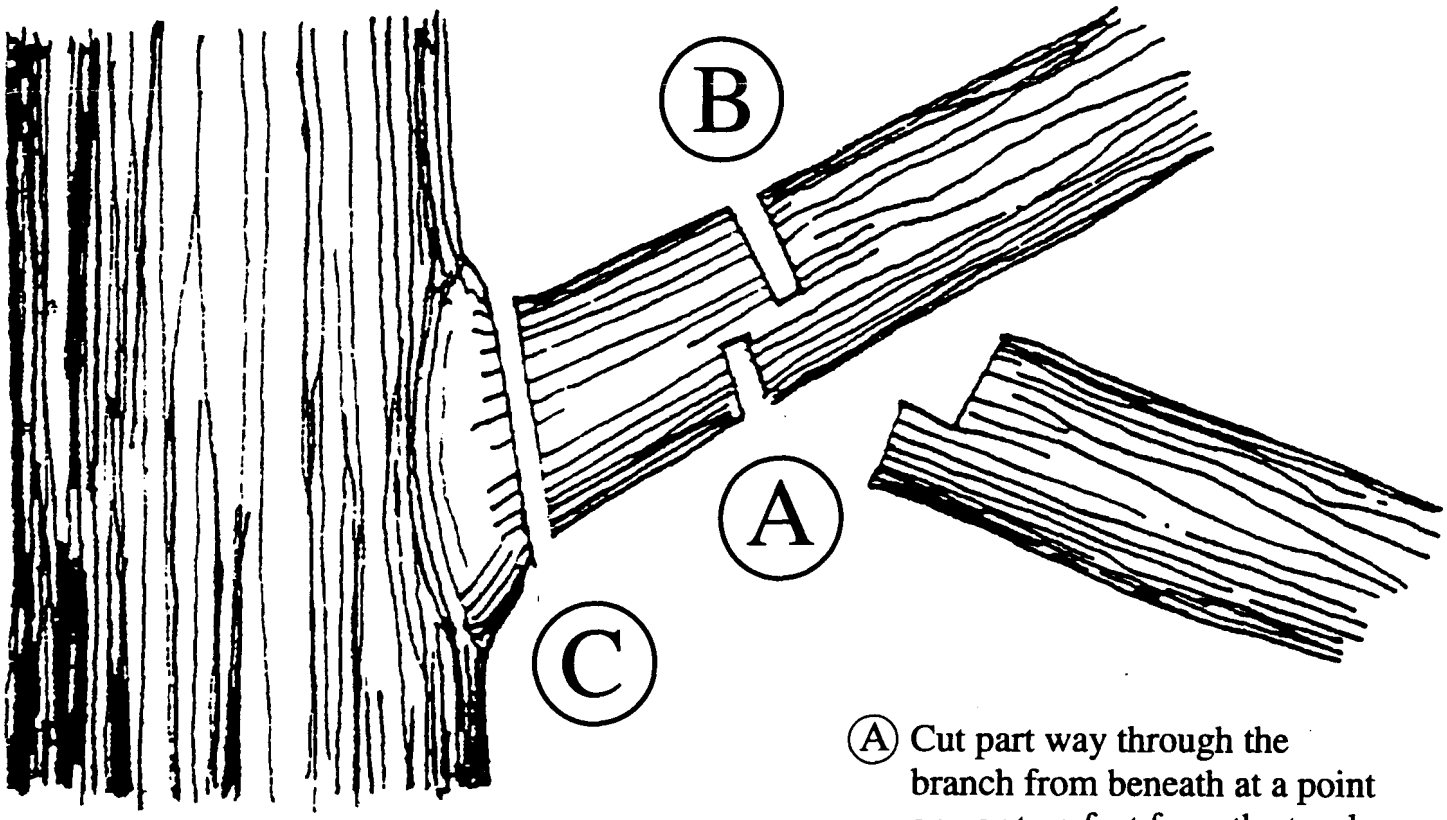
This information was provided in cooperation with the Minnesota Shade tree advisory Committee (MnSTAC). MnSTAC is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state, and local agencies, and non-profit organizations.

# # #

EXTU,GOPH,MNF,V4MN,V5MN,V7,V8MN,F8,G1,H7,T1 NNRD5090

Sources: Gary Johnson (612) 625-3765
Mike Zins (612) 443-2460
Writer: Gail Steinman (612) 920-9326
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

Ⓑ Make a second cut on the top of the branch at a distance of $^1/_3$ to $^1/_2$ the diameter of the limb from the first cut. This should allow the length of the limb to fall from its own weight and be safely removed.



Ⓐ Cut part way through the branch from beneath at a point one or two feet from the trunk.

Ⓒ Complete the job by making a final cut next to the trunk just outside the branch collar, with the lower edge farther away from the trunk than at the top.

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NEWS/ INFORMATION

August 3, 1995

Part 2 in a 3-part series

Good Tree Care Involves More Than Just Trees

Plant Health Care (PHC) is a holistic approach to the care of landscape plants for their health, safety and beauty. It considers everything that positively or negatively affects your landscape plants and treats the landscape as a system, not just a collection of different trees, shrubs, grass and flowers. It can save you time and money, and reduce your use of chemicals to control pests.

PHC recognizes that many trees and other plants will not reach maturity without the homeowner doing something to reduce stress caused by improper planting and poor soil conditions such as compaction or poor drainage. The following guidelines will help you keep your landscape plants healthy and vigorous, and better able to withstand common problems such as dry summers, insects or disease.

1. PHC begins with proper soil preparation. Before you plant, make sure the soil contains the nutrients plants need to grow. You can loosen the soil, add fertilizer or correct drainage problems. A soil test will help you decide what to do.

2. Your goal is to prevent problems rather than treat problems. Choose the right plant for your landscape; mulch the soil around the plants with wood chips, compost or another good mulch; and water on a regular basis when rains are few and far between.

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3. Learning to tolerate some plant damage is another goal. Nature is not a perfect host and all plants suffer some problems. Moderate damage often does not harm your plants, so there may not be any reason to spray them with chemicals.

4. You should also learn to check your plants on a regular basis--every one to two weeks during the growing season. If damage is threatening or evident, consult with a professional for treatment options.

5. Learning more about your plants and their environment will help you make informed decisions. Talk with a professional to learn what preventive maintenance practices may be used to avoid problems.

6. When problems do appear, you need to treat them intelligently. Sometimes the best solution is not the cheapest, but it's the one that does the least amount of harm to the rest of your landscape.

PHC allows you to be an informed consumer and make the right choice for your landscape. Have a professional assist you when making decisions. If you need help with tree care questions, contact your county extension office.

This information was provided in cooperation with the Minnesota Shade Tree Advisory Committee (MnSTAC). MnSTAC is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries;
commercial tree services; academic institutions; federal, state and local agencies; and nonprofits.

# # #

EXTU,GOPH,MNF,V4MN,V5MN,V7MN,V8MN,F8MN,G1MN NNRD5092

Source: Gail Steinman (612) 920-9326
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

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NEWS/ INFORMATION

August 11, 1995

Part 3 in a 3-part series

'Unnatural' Urban Soils Contribute to Tree Care Problems

It takes millions of years to develop soils that are rich in organic materials and minerals. As urban areas develop, these natural conditions are changed. We move, mix and compact soil ingredients when we build structures upon the landscape.

These changes can dramatically affect soil structure and fertility. They also change what tree species will grow well on that soil.

"As development continues, we can't prevent changes in our soils," says Gail Steinman of the Minnesota Shade Tree Advisory Committee (MnSTAC). "Instead, we should recognize that the soil has changed from its natural state, and plant tree species that are adapted for the changed soil conditions."

The natural structure of soil includes pockets of water and air that plants need to survive. Heavy construction equipment can move and compact soils, squeezing out these spaces.

For example, Steinman says trees that usually grow on flood plains such as swamp white oak, elm or honeylocust are good choices for compacted soils in urban areas. But tree species such as red oak, paper birch and sugar maple are unable to grow well in compacted soil.

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As the make-up of urban soils changes, soil fertility is also affected. Soil fertility is the measure of minerals in the soil that are available to a plant.

Trees need three essential elements to grow: nitrogen, phosphorus and potassium. Fertilizer labeled as a 10-10-10 mixture contains equal amounts of these elements. To learn more about the soil conditions in your landscape, fertilizer recommendations, or selecting the proper tree for your site, contact your local office of the Minnesota Extension Service.

When grass and other organic materials are removed during development, the soil becomes much hotter. So, when urban trees are planted, wood-chip mulch is placed in a doughnut shape around the base of the tree to help reduce soil temperatures. Mulch also reduces soil erosion, compaction, and weed competition. It increases soil moisture and organic matter.

Remember, planting the right tree for your urban soil conditions and then taking care of it with a layer of mulch will help you grow a healthier tree.

This information was provided in cooperation with the Twin Cities Tree Trust and the Minnesota Shade Tree Advisory Committee (MnSTAC). MnSTAC is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state, and local agencies; and nonprofits.

# # #

EXTU,GOPH,MNF,V4MN,V7MN,G1,F8 NNRD5095

Source: Gail Steinman (612) 920-9326
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

August 15, 1995

Manage Small Grains to Prevent Spoilage after Harvest

Hot weather is a threat to small grain producers trying to preserve the quality of this year's crop and avoid spoilage after harvest. Scab is also a concern in some cases, says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"If you harvest small grains at a moisture content above 14 percent, artificial drying is necessary," says Wilcke. "Gas-fired drying is fast and usually reliable. Adjust the dryer temperature to keep kernel temperature below 140 degrees F for milling wheat and below 110 for seed wheat."

Natural-air drying is normally a good alternative to gas-fired drying, notes Wilcke. But beware that the risk of spoilage in damp grain is high during warm weather. Mold is likely if you hold grain wetter than about 16% moisture for very long when the average daily temperature (the nighttime low plus daytime high divided by two) is above 65 degrees F, he adds.

"It might be better to use gas-fired drying if you need to harvest wet grain during warm weather," says Wilcke. "If natural-air drying is the only option available, it would be best to delay harvest until grain moisture or outdoor temperatures drop. Check Minnesota Extension Service publication FS-5949, 'Wheat and Barley Drying,' for more information."

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Once grain is dry, Wilcke recommends trying to cool it to less than 60 degrees F as soon as possible. At this time of the year, when daytime temperatures are still high, it might be necessary to put aeration fans on a thermostat, or to just run them at night, to adequately cool grain.

"Don't worry about the higher relative humidity associated with nighttime air," says Wilcke. "Cooling occurs much faster than re-wetting. Later this fall, operate fans to cool grain to about 40 degrees F, and then run the fans again in late fall to cool grain to about 25 degrees for winter storage."

He says some limited laboratory research on storage of scab-infected wheat indicates that scab does cause wheat to deteriorate slightly faster than sound wheat. "Cleaning wheat before storage will reduce storage risk slightly," he points out. "But the difference in storage life between sound and scabby wheat appears to be relatively small, so there shouldn't be any problem storing scabby wheat if you use good management.

"If you can't clean scabby wheat before storage, at least use a spreader when filling bins to distribute fines and chaff, or pull the centers out of bins that don't have spreaders to remove fines and chaff that accumulate under the fill spout. Aerate bins as described above to cool grain as quickly as possible after bin filling."

# # #

EXTU,GOPH,MNF,DTN,V2MN,E4,F4,X4 NAGR5102

Source: Bill Wilcke (612) 625-8205; wwilcke@mes.umn.edu
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

August 18, 1995

Green Kernels Show Up in 1995 Small Grain Crop

Green kernels have shown up in small grains at harvest time in some areas this year. Some producers are concerned about drying and storing immature, or green, small grain kernels.

"We don't have any research on drying and storing green small grain kernels," says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service. "But perhaps we can extrapolate what we know about other crops like corn and soybeans." He offers some "best guesses" for handling grain that contains green kernels.

"Don't expect green kernels to ripen or turn the color of ripe kernels in storage," he says. "Many people believe that green soybeans turn yellow in storage, but in a laboratory study, green soybeans didn't show much color change after a year in storage. I would expect similar results for small grains."

He says a few kernels scattered uniformly throughout a bin of adequately dry (less than 14 percent moisture) grain aren't likely to cause serious problems. "Aerate the grain to keep it cool, watch it a little more closely than normal, and be prepared to move the grain for feeding, selling, or drying if problems develop," he says.

Wilcke says a lot of green kernels scattered uniformly throughout a bin of grain could cause problems, even if the other kernels are dry. The

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green kernels could raise the average moisture content of the bin, leading to mold, heating, and insect problems. But even if the average moisture in the bin is acceptable, the green kernels are likely to be wetter than average and could mold. Wilcke says intentional overdrying might be one option for reducing storage risk, but early disposal is probably a better idea.

"Concentrated pockets of green kernels will undoubtedly cause problems," he notes. "If green kernels have a different size, shape, or density than mature kernels, they could segregate during handling and end up in concentrated areas--under the spoutline, for example. These pockets are likely to mold, heat, and attract insects. If it looks as if green kernels will segregate during handling, use a grain cleaner to remove them, use spreaders to distribute them uniformly in bins, or pull the centers out of bins that don't have spreaders to remove material that accumulates under the spoutline."

He says very wet, immature grain that is rapidly dried in a high-temperature dryer could end up having a poor test weight. (This often happens with immature corn.) "Gas-fired drying would be a better choice than natural-air drying for small grain wetter than about 20 percent moisture," he says. "But keep checking the quality of grain coming out of the dryer and reduce dryer temperature if necessary to avoid large quality losses."

# # #

EXTU,GOPH,MNF,DTN,V2,E4,F4,X4 NAGR5103

Source: Bill Wilcke (612) 625-8205; wwilcke@mes.umn.edu
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

August 22, 1995

U of M Tourism Center Names New Advisory Board Members

The University of Minnesota Extension Service's Tourism Center has named new advisory board members. The board helps the center's staff focus attention on the most important programs and research needed by Minnesota's tourism industry.

Named to multi-year terms on the board were:

- Gary Delaney, Bluff Creek Inn, Chaska
- Joe Delmont, Hospitality Publications, St. Paul
- Paul Erickson, Minn. Amateur Sports Assn., Blaine
- Billie Forman, Ecotours International Inc., St. Paul
- Bill Hansen, Sawbill Canoe Outfitters, Tofte
- Mary Hirschboeck, Minn. Retail Merchants Assn., St. Paul
- Dan Hou, Minneapolis NW/I94 KOA, Rogers
- Arlo Johnson, Minn. Motel Assn., Brooklyn Park
- Brian Majerus, Windom Chamber of Commerce, Windom
- Ann Moroz, Bear Paw Resort, Park Rapids
- William Morrissey, Minn. Dept. of Natural Resources, St. Paul
- Barbara Muesing, U of M-Crookston, Crookston
- Chris Ruttger, Ruttger's Bay Lake Lodge, Deerwood
- Rae Van Wyhe, Minn. Office of Tourism, St. Paul

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"Our advisory board provides an important link in our relationship with Minnesota's tourism and hospitality industry," says Bill Gartner, director of the Tourism Center. "We're grateful for their commitment to the goals of the Tourism Center and the university in providing education and research to address key tourism industry issues."

The Tourism Center conducts research and education programs for people in the tourism industry. Through educational materials and workshops the center helps communities develop and strengthen their tourism businesses.

# # #

EXTU,GOPH,MNF,T1,10,16,17,18,27,29,61,64 NEXT5104

Source: Cynthia Messer (612) 624-6436
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 8, 1995

Harvest Corn for Silage When Milk Line Is Halfway down Kernel

If you have a medium-sized bunker silo, the best time to harvest corn for silage is when the corn's milk line is halfway down the kernel. That's according to Jim Linn, dairy scientist with the University of Minnesota's Extension Service.

"When the milk line reaches halfway down the kernel, the corn should be close to 65 percent moisture," says Linn. "If you have an upright silo, you might harvest slightly later, at 60 to 62 percent moisture."

Producers who wait for corn leaves to dry before harvesting silage can be easily fooled and harvest too late, says Linn.

By the time the milk line has reached the tips of the kernels, the kernels are likely to be dry enough to pass through the cow as whole kernels that aren't digested, says Linn. "Drier silage may need a finer chop, 1/4 inch, rather than the normal 3/8-inch chop, to crack and break up whole kernels for improved digestibility," Linn points out.

If you harvest a large acreage of corn for silage, Linn suggests starting harvest when the milk line is 1/4 of the way down the kernel. That will make it possible to harvest most of the silage by the one-half milk line stage.

# # #

GOPH,MNF,DTN,V2,B1,D1,F4 NAGR5107

Source: Jim Linn (612) 624-4995
Editor: Joseph Kurtz (612)625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 8, 1995

Fall Sheep Day at West Central Experiment Station Is Sept. 23

Improving sheep pastures and boosting the lamb crop will be among the topics at the University of Minnesota's upcoming Fall Sheep Day at Morris. This event for sheep producers will be Saturday, Sept. 23, in the farm shop at the university's West Central Experiment Station.

Bill Head, the new sheep scientist at the West Central Experiment Station, will be introduced. Also, Harvey Windels, U of M professor emeritus who recently retired after more than 30 years as animal scientist at the Northwest Experiment Station at Crookston, will be recognized.

Registration for Fall Sheep Day begins at noon and the program runs from 12:30-5 p.m. Topics and speakers will be:

--Maximizing reproduction in ewe lambs, Windels;

--Managing land resources to optimize lamb production, Head;

--Feedlot performance of 25 percent Friesian lambs, Ken Gagner, Morris science teacher, and Lee Johnston, WCES animal scientist;

--Inducing spring breeding of ewes, Jon Wheaton, U of M animal scientist;

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--Renovation of pastures for grazing, and pasture tour, Gary Lemme, station head, WCES;

--Marketing heavy lambs, Salvador Aguilar, Jr., Grover Meats, Blue Island, Ill.;

--National checkoff, Dale Carter, president, Minnesota Lamb and Wool Association.

For further information, call the West Central Experiment Station at (612) 589-1711.

# # #

GOPH,MNF,V2MN,S1,Z7 NAGR5108

Source: Lee Johnston (612) 589-1711
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

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September 13, 1995

Fall Is the Best Time to Fertilize Your Tree

Mid-September is an ideal time to fertilize your trees. This is the period when tree roots grow and the tree stores nutrients for spring growth.

There are several ways to fertilize a tree. One of the best is the drill hole method. You should drill a grid of 2-inch holes under the tree and slightly beyond the reach of the tree's branches. The holes should be two feet apart and 12-18 inches deep. Keep the holes at least three feet away from the trunk to avoid damaging the large roots radiating from the trunk.

Place two tablespoons of a balanced fertilizer in each hole. A balanced fertilizer contains equal amounts of nitrogen, phosphorus and potassium and, for example, can be labeled as a 10-10-10 fertilizer.

Fill the hole with the soil you removed, unless the soil around the tree is clay or carries a great deal of foot traffic. In these cases, you should fill the holes with peat moss or small gravel to increase the amount of oxygen available to the tree's roots.

After fertilizing, water for several hours with a hose at a slow trickle. This will allow the water to deeply penetrate the soil. If you have a lot of water running off, you need to water

(over)

at a slower rate. Continue to water the area weekly (if it doesn't rain) until the ground freezes.

This technique may cause the grass around the holes to grow vigorously in the spring. Fertilizing your grass in the spring will make the area more uniform in color and growth rate.

This information was provided in cooperation with the Minnesota Shade Tree Advisory Committee, a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state and local agencies, and nonprofit organizations.

# # #

GOPH,MNF,V4MN,G1,F8MN NNRD5111

Source: Gail Steinman (612) 920-9326
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 13, 1995

Nominations for Minnesota Dairy Farm Tour Guide Encouraged

One of the best ways for new or expanding dairy producers to learn successful management strategies is to tour successful dairy operations. The University of Minnesota's Dairy Initiatives program is putting together a list of dairy producers willing to host farm tours. This list will be published in the form of a Minnesota Dairy Farm Tour Guide.

The university is currently soliciting nominations of successful operations for listing in the tour guide. The operators need to have a positive attitude toward dairying and something special about their operation that could be an asset to other farms. Those nominated will be contacted and encouraged to be part of the tour guide project.

"The guide should be a valuable resource for producers interested in expansion, rotational grazing, transfer of the farm to the next generation, or some other change," says Dave Weinand, Dairy Initiatives coordinator.

To obtain a nomination form, contact Weinand at (612) 625-9757.

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GOPH,MNF,V2MN,D1,X1 NAGR5112

Source: Dave Weinand (612) 625-9757
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

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NEWS/ INFORMATION

September 13, 1995

U of M Plans Agricultural Tour to Australia, New Zealand

An opportunity to experience Australia, New Zealand, Fiji, and Hawaii is available early in 1996 through a University of Minnesota agricultural tour.

Dates for the 28-day tour will be Feb. 2-29, 1996. It will be the thirteenth straight year for the tour, which includes stays with host families in Australia and New Zealand. The tour, which may be tax deductible for qualifying farmers, will center on agriculture. However, scenic and recreational highlights are also on the itinerary. The tour occurs during late summer in Australia and New Zealand.

The agricultural emphasis of the tour is on dairying, and it will provide insight into the world's most efficient dairy operations. There will be visits to dairy farms, cattle and sheep ranches, agricultural colleges, and research facilities.

A faculty member from the University of Minnesota's Extension Service will serve as a resource for agricultural information on the tour.

There will be a stopover in the tropical island of Fiji to tour, relax, swim, and shop. Stops in Hawaii can be added for a small extra fee.

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Cost of the tour is $4,495 per person from Minneapolis and most other U.S. cities, and $4,295 from Los Angeles. Included are air fares, bus transportation, transfers, lodging, many meals, and departure taxes. The tour group is limited to 45, and reservations will be taken in the order received.

For a brochure about the tour, contact Extension Special Programs, 405 Coffey Hall, University of Minnesota, St. Paul, MN 55108-6068; phone 1-800-367-5363 or (612) 625-1978.

# # #

GOPH,MNF,DTN,V2,V4,V5,D1,X1 NESP5113

Source: Gerald Wagner (612) 625-1978
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 18, 1995

Get Grain Dryers, Bins, and Handling Equipment Ready for Harvest

Be sure to thoroughly clean and check grain dryers, storage bins, and handling equipment to make sure they are ready for harvest. That reminder comes from Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service. Wilcke recommends the following preparation procedures:

--Clean old grain, fines, and bird and rodent nests out of bins, dryers, and conveyors.

--Check belts and bearings and replace any that are badly worn.

--Lubricate greasable bearings and check the oil level in gear boxes.

--Inspect controls, gas lines, and wiring, and then start fans, burners, and conveyors to make sure they still work.

--Replace any safety equipment that is broken or missing.

--Check the calibration on your moisture meter by comparing your results with those from a meter that is known to be accurate.

--If a new person will be operating the drying system this year, take some time to help that person become familiar with the equipment, controls, and safety procedures.

# # #

GOPH,MNF,DTN,V2MN,E4,F4

NAGR5114

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 18, 1995

Harvest Corn with Greatest Potential Loss from Corn Borers First

Preharvest corn yield losses due to European corn borer damage may be greater than normal this year, says a University of Minnesota agronomist. "You may want to evaluate yield loss potential and harvest those fields first that have the highest yield loss potential," says Dale Hicks of the Minnesota Extension Service.

Hicks outlines one way to estimate potential ear droppage and yield loss potential:

At four representative locations in a field, examine and test 25 consecutive plants. You can gauge the potential for ear drop by performing a simple tug test and by examining ear shanks for tunnels or corn borer frass. Tug each ear downward. Tunneled ear shanks will usually snap off or bend easily when the ear is tugged.

Count the number of tunneled ear shanks from the 25 consecutive plants in each of the four locations. Add the counts for the four locations; this is the estimate of potential percent harvest loss. To convert to bushels per acre, multiply the percent loss by your estimate of yield for the field. Suppose you find 10 tunneled ear shanks (the sum of the counts at the four

(over)

locations in the field) and you think the field yield is 150 bushels per acre. The potential yield loss due to ear droppage before harvest is 15 bushels per acre.

# # #

GOPH,MNF,DTN,V2MN,F4 NAGR5115

Source: Dale Hicks (612) 625-8700
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 19, 1995

Check Condition of Grain Stored through Summer

If you stored grain through the summer and you're thinking about holding it for a second year, check the condition of the grain before making your decision. That's the recommendation of Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"Walk on the grain surface and look for signs of mold, insects, and crusting, and check for musty or sour odors," says Wilcke. "Probe down into the grain to measure temperature and to pull up samples for inspection and moisture measurement.

"If you find any problems with mold, insects, or heating, run aeration fans during the coolest weather available to cool grain to less than 60 degrees F. Transferring grain from one bin to another can sometimes help mix grain and break up problem spots."

If the grain contains a lot of fines, Wilcke recommends running it through a grain cleaner while you're moving it. If the grain is too wet for long-term storage (corn and small grains should be 13 percent or less, soybean 11 percent or less for long-term storage), run it through a dryer.

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"Grain that has developed serious quality problems is not a good candidate for long-term storage and should be fed or sold," says Wilcke.

Grain that is high enough in quality for a second year of storage should be aerated several times this fall, Wilcke adds. "Cool the grain to about 40 degrees F in mid-fall, and to about 25 degrees in late fall," he says. "Then continue to monitor grain condition every two to four weeks until the grain is fed or sold."

# # #

GOPH,MNF,DTN,V2,F4 NAGR5117

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 20, 1995

'Emuburgers,' $6,000 Leather Jackets Featured at Oct. 7 Seminar

Emu meat is heart-healthy, low in cholesterol and high in protein. Emu leather jackets or boots can cost a small fortune. And emu oil is used by over 30 National Basketball Association teams as a pain reliever and anti-inflammatory medication.

For farmers on a few acres who want to diversify, emu production could be another source of income, says Angela Paulson, an Elbow Lake, Minn., producer.

The emu is a large, non-flying bird of the ostrich family. An emu seminar--for the curious, the serious and the experienced--is scheduled Saturday, Oct. 7 at the Fergus Falls Middle School from 8 a.m. to 9 p.m.

National and state experts will discuss getting into the business, marketing, and production techniques for incubating, hatching and raising birds from chicks to adults.

There will be an emuburger bar at noon. Registration is $15 per person, or $20 after Sept. 23. Registration includes the noon burger bar and a supper buffet.

"From 7 to 9 p.m. the general public is invited at no charge to see the fashion show and exhibit hall," Paulson says. Emu

(over)

boots sell for $800 and jackets range from $1,600 to $6,000. The exhibit hall will feature products for the emu industry.

For more information, contact Angela Paulson, Rt. 2, Box 64, Elbow Lake, MN, 56531, phone (612) 528-2294; or Vicki Haugen, Rt. 3, Box 229, Hawley, MN, 56549, phone (612) 937-5588.

"We're looking for farm supply exhibitors," Paulson says. "Emu producers support local feed suppliers and farm equipment businesses."

Seminar speakers include Pierce Allman, executive director of the American Emu Association; Tom Murphy, Killdeer, N.D., president of the American Emu Association; Ardell Nelson, owner and CEO of Canyon Global Corp., Vanderpool, Texas; and Zoann Parker, Pennsylvania State University.

Emu farming is Minnesota's "booming" agribusiness, according to a brochure from the Emu Association of Minnesota. Paulson says there are about 10,000 producers nationally and 100 in Minnesota.

# # #

GOPH,MNF,V2,V4,V5,V7,P1,A4 NAGR5118

Source: Angela Paulson (612) 528-2294
Writer: Jack Sperbeck (612) 615-1794; jsperbeck@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 20, 1995

Festival, Event Management Course Available

Is your community's annual festival growing in popularity and complexity? Would you like it to? A 40-hour program will make you better prepared to coordinate your community festival. It will also give you the opportunity to earn festival manager certification from the Minnesota Festival and Events Association (MFEA).

"There are more than 2,000 festivals conducted in Minnesota each year," says Glenn Kreag, a tourism specialist with the University of Minnesota Extension Service's Tourism Center. "The majority of these festivals are run by volunteers or part-time workers who can be overwhelmed by the complexities of money management, site location and logistics, marketing, fundraising, entertainment contracts, and managing volunteers.

"Without careful planning and tight control of the budget," Kreag says, "even a traditionally successful event can lose money and possibly go under. Attending this course can help ensure that doesn't happen."

Kreag says the course is designed for both professional and volunteer managers. It will help you develop and improve your event and festival management and leadership skills, upgrade your money management skills, produce a festival management and

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marketing plan for your local festival, and network with other managers.

The course can be completed in three two-day sessions which are scheduled for Dec. 1-2, Jan. 19-20, and March 8-9 at the Country Inn by Carlson in White Bear Lake, Minn. Registration is $245 for MFEA members and $285 for nonmembers. The fee includes program costs, materials, refreshment breaks and lunch on the first day of each session.

The deadline for registering is November 15 and space is very limited. Call the Tourism Center at (612) 624-4947 for a program brochure or for more information and disability accommodations. Partial scholarships are available for MFEA members who are volunteer (unpaid) festival or event managers. Contact Leo Berg, MFEA, at (507) 354-8850.

# # #

GOPH,MNF,V4MN,V5MN,E1MN,T1MN NEXT5119

Source: Glenn Kreag (218) 726-8714
Writer: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 22, 1995

For Grain Yield Monitors to Pay, You Must Be Able to Use the Data

If you're thinking about investing in a grain yield monitor for your combine, you need to be sure you can make good use of the data you collect from the monitor. Otherwise, the investment won't pay, says John Lamb, soil scientist with the University of Minnesota's Extension Service.

"The cost is about $3,000 for the monitor and $4,000 for the locating equipment to go with it, plus the cost of processing the data," says Lamb.

A monitoring system can provide benefits, says Lamb. Such a system makes it possible to document problem areas in a field, adjust inputs within a field economically, and measure relative yield differences according to factors such as soil properties. Also, it can be used for long-range record keeping.

But Lamb also has some concerns. "There is a danger that we may get too concerned about small yield differences in any given field, spend a lot of money to correct the differences, and not get any return for the money spent," he says. "Also, it's dangerous to use yield data from only one year. We may end up chasing ghosts. Using one year's data may be very useful in

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understanding production problems encountered for that year, but don't base future production decisions on this information only."

Little research information on grain yield variability within a field is available, Lamb points out. But the information that is available suggests that high- and low-yield areas within a field are not in the same place from year to year.

"This may be explained by a number of factors affected by climate," says Lamb. "For example, if the two years were 1993 and 1994, the growing conditions went from the poorest in 1993 to the best in 1994 in much of Minnesota."

Lamb says grain yield monitors may be considered as a starting point for getting into "precision farming." But to make the most of this technology, he points out, it will have to be used with other components of the technology package. This will also cost dollars.

"As yet, economic returns from such investments have not been well documented," he says. "Much more research is needed to identify the causes of yield variability within production fields before a firm decision on this technology can be made."

# # #

GOPH,MNF,DTN,V2,E4,F4 NAGR5122

Source: John Lamb (612) 625-1772
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 22, 1995

Economics Important in Grid System Fertilizer Application

Economics is an important consideration when using a grid system for variable rate fertilizer application. John Lamb, soil scientist with the University of Minnesota's Extension Service, says several factors affect the economics of this technology.

"Accuracy in determining fertilizer needs in different parts of the field increases as grid sizes become smaller," says Lamb. "But you also have to look at the value of the crop, the size of yield response to phosphorus and potassium, and the number of years between soil samples. And smaller grid sizes mean more soil samples, raising sampling and analysis costs."

Using standard grid sizes such as 350 x 350 feet or 450 x 450 feet is common, notes Lamb. However, he recommends a modified approach, evaluating fields and basing grid size on the variability in each part of the field. "There would be areas with small grids, such as 60 x 60 feet, where there is a large amount of variability," he says, "and grids of 500 x 500 where the variability is small."

Does it matter when you do soil sampling? "At this time we think taking samples at different times during the growing season

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may not be a problem, particularly if a field is sampled at the same time of the season each time," says Lamb. "We don't know what effect winter sampling has on soil test results, but we think sample handling could have an effect."

# # #

GOPH,MNF,DTN,V2,E4,F4 NAGR5123

Source: John Lamb (612) 625-1772
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 25, 1995

Attention during Fall Benefits Lawns, Roses, Trees, Bulbs

Lawn Fertilization: It's a good idea to fertilize your lawn a second time in autumn, probably in mid- to late October, says Deb Brown, horticulturist with the University of Minnesota's Extension Service.

"People often think doing this is wasteful," Brown says, "but grass roots continue to grow as long as the soil is at least 45 degrees F. The roots will use the fertilizer and your grass will come back thicker and in better condition next spring." Brown says a healthier, thicker lawn will also keep weeds out.

Broadleaf weeds: Dandelions, creeping charlie and plantain are tough perennial weeds that you can get rid of more easily this time of year. You can dig them out by hand or use weedkillers as long as the temperatures are between 55 and 75 degrees F Brown says. "Spray on calm days and use the chemicals only on the weeds," she adds. "The weeds are storing energy for next year's growth, so they'll absorb the chemicals quite nicely." However, if the weeds are showing signs of yellowing, the chemicals won't have much effect.

Lawn maintenance: Continue to mow your grass during fall and cut it to a height of 2 - 2-1/4 inches. Rake up leaves before the snow arrives. "Doing both of these things will help prevent

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snow mold from developing in your lawn," Brown says. "Snow mold is more likely when leaves and long grass get matted down and snow is slow to melt in the spring."

Roses: Mid-October is a good time to protect your rose bushes. You can use the Minnesota Tip Method which consists of digging a small trench, tipping the rose plant into the trench, and then covering it with soil followed by leaves or straw. "An easier method," Brown says, "is to cover the crown of the rose bush with a 10-12 inch mound of soil and then cover that with leaves or straw. You need to prune the plant back to make this technique work." Brown says you'll be more successful with this method if the plant's graft or bud union is 2 inches below the soil surface. Hardy shrub roses--which need no protection--are becoming a popular alternative to this annual chore.

Tree care: Once a tree's leaves have turned brown and dry, it's dormant and you can fertilize the tree without danger of encouraging new growth this fall. However, if you have a very sandy soil it's better to fertilize in the spring. Late fall is also a good time to prune oaks and elms.

Evergreens: It's normal for these plants to drop needles in the fall. "Older needles on the inner parts of branches turn yellow, then brown. Eventually they drop off. As long as the plant has green, healthy needles on the outer parts of the branches, the plant is probably fine," Brown says.

Spring bulbs: Bulbs planted in mid-October should be watered to encourage good root growth. "In order to survive the

(more)

winter," Brown says, "bulbs need to develop a root system. Water bulbs when you plant them and again if we hit a dry spell." Brown says once the ground starts to freeze, you should mulch bulbs with 6-8 inches of straw or leaves. The mulch protects the bulbs from cold weather and keeps them from growing prematurely when temperatures fluctuate in early spring.

# # #

GOPH,MNF,V4MN,V5MN,V8MN,G1 NAGR5124

Source: Deborah Brown (612) 624-7491
Writer: Martin Moen (612) 625-6243; mmoen@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
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NEWS/ INFORMATION

September 27, 1995

Harvest Early if Potential Corn Loss Tops 3 Bushels per Acre

This year's European corn borer infestation has the potential to cause unprecedented harvest losses in corn. Therefore, it's a good idea to harvest early if losses are likely to exceed three bushels per acre. That's the assessment of entomologist Ken Ostlie and agronomist Dale Hicks, both with the University of Minnesota's Extension Service.

Evaluate all fields and rank them in order of potential harvest loss, say the U of M scientists. Fields with the highest potential loss should be harvested first.

Delaying harvest increases the risk that high velocity winds will cause harvest losses, say Ostlie and Hicks. Harvesting earlier may reduce or avoid these losses, but also increases drying costs. For example, beginning harvest at 32 percent rather than 27 percent means an extra 5 percent more moisture to dry. Factors such as yield level, LP gas price, and corn price affect the cost of drying this extra moisture. For example, assuming a corn yield of 130 bushels per acre, expected price of $2.50 per bushel, and an LP gas price of 50 cents per gallon, it costs $6.95, or the equivalent of 2.8 bushels per acre, to dry this

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extra moisture. Thus, early harvest would pay in this situation when potential harvest losses exceed a minimum of 3 bushels per acre.

The variables of corn price, LP gas price, yield level, and percentage points of moisture to be removed will vary with individual corn growers, note Ostlie and Hicks. A producer can use the following formulas to calculate exact bushels per acre required to pay drying cost by inserting specific values for each of the variables:

Energy costs (cents per point moisture removed per bushel) =

[LP gas price ($/gal) x 0.02] + [electricity price ($/kwh) x 0.01]

Bushels/acre to pay drying costs =

[Energy costs (cents per point) x number of points of moisture removed x yield (bu/a)] divided by corn price ($/bu)

For a wide range of conditions, including yield levels from 135-175 bushels per acre and corn prices from $2.50-$2.90 per bushel, it requires from 2.5 to four bushels per acre to pay for drying the extra 5 moisture points, say Ostlie and Hicks. Therefore, they recommend early harvest whenever harvest losses are likely to exceed three bushels per acre.

# # #

GOPH,MNF,DTN,V2MN,F4,X3 NAGR5125

Sources: Ken Ostlie 624-7436; Dale Hicks (612) 625-8700
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

September 27, 1995

Corn Borers Shouldn't Affect Residue Management, Tillage Choice

European corn borer infestations shouldn't be a determining factor in corn residue management or choice of tillage system. That's according to Ken Ostlie, entomologist with the University of Minnesota's Extension Service.

"A major cause of corn borer mortality in the fall is simply the harvesting operation," he notes. "The gathering and stripping activities of the combine and the chopping of the cobs and leaves result in live larvae remaining only in the lower 6-10 inches of the stalk. Stalk chopping and fall tillage certainly add to this mortality, but the overall effect on outbreaks appears minimal. Corn borer outbreaks still occurred 20-30 years ago when the majority of corn acreage was moldboard plowed."

Corn borer behavior ensures that an individual farmer's tillage practices have no impact on next year's problems, says Ostlie. "Moths leave corn fields each generation to gather at action sites for mating," he says. "When they leave to lay eggs there's no recognition of farm boundaries. Individual moths may disperse over distances of two to five miles while searching for

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attractive fields. This mixing ensures that any stalk chopping and moldboard plowing this fall constitutes revenge at the expense of added energy use and soil loss."

# # #

GOPH,MNF,DTN,V2,F4,X3 NAGR5126

Source: Ken Ostlie (612) 624-7436
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 6, 1995

Dairy Expansion Conference Will Be in Rochester, Stevens Point

A two-day workshop designed for people considering major dairy expansions and for professionals who advise them will be held Nov. 7-8 in Rochester, Minn., and Nov. 8-9 at Stevens Point, Wis.

Sponsors of the Four State Extension Dairy Expansion Conference are the extension services of Iowa State University, the University of Illinois, the University of Minnesota, and the University of Wisconsin. Conference speakers include extension specialists, consultants, and producers.

Topics will include factors that affect the competitive environment of the Upper Midwest, options and risk management, emerging technologies in dairy production, building a business plan, managing a growing dairy operation, managing animal flow, cash flow, and health risks.

Other topics include manure handling, flat barn parlors, traditional parlors, animal health, cow populating, labor management, grazing, and data systems.

A panel of producers will discuss how they assembled a management team. A panel of agribusiness professionals will discuss various financing strategies and alternatives.

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In Rochester, the conference will be held at the Holiday Inn South, 1630 South Broadway. In Stevens Point, it will be held at the Holiday Inn Holidome and Convention Center, 1501 North Point Drive.

Cost of the conference is $125 for the first person attending and $95 for each additional person from the same farm. After Oct. 20, the fee is $150 for the first person and $95 for each additional person. The fee includes four meals, refreshments, and all printed materials. Lodging is not included in the registration fee. Early registration is encouraged, and registration will be confirmed by mail.

For further information, contact your local extension office or call Joe Conlin at (612) 624-4995.

# # #

GOPH,MNF,DTN,V2MN,V4MN,D1,X1 NAGR5129

Source: Joe Conlin (612) 624-4995
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 9, 1995

Ag Engineer Lists Strategies for Managing Fines in Harvested Corn

Feeding by corn borers on this year's corn is resulting in lots of damaged and broken kernels at harvest. These broken and damaged kernels lead to an abundance of fine material, or fines, says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

Wilcke says fines cause problems in drying and storage bins. They are much more likely to mold and attract stored grain insects than are whole kernels. Fines increase airflow resistance, which means fans can't deliver as much airflow. Reduced airflow means slower and more expensive drying--an especially critical factor in natural-air dryers.

Also, fines tend to segregate and accumulate under the fill spout when grain is moved. These pockets are likely to cause spoilage problems because they are susceptible to mold and insect attack and it's hard to force air through them to reduce the temperature or moisture.

"The appropriate strategy for dealing with fines depends on how many are present and whether you can feed or sell fines that are removed from grain," says Wilcke. "Although fines definitely cause problems in drying and storage bins, they do have economic

(over)

value. For livestock or poultry feeders, fines have a similar feed value to whole corn kernels. And for cash grain operators, if corn contains fewer fines than the amount where discounts kick in, fines have the same value as corn."

Wilcke points out, for example, that no. 2 corn can contain up to 3 percent "broken corn and foreign material," or BCFM.

Wilcke cites the following possible strategies for managing fines:

--Set combines to minimize kernel damage.

--Set combines for maximum cleaning--unless you have a grain cleaner at the farmstead and can feed or sell the fines.

--Use a grain cleaner to remove fines before grain is put into drying and storage bins.

--Use some type of grain spreader when filling bins to distribute remaining fines as uniformly as possible throughout the bin, or

--Don't use a grain spreader and drop grain in a cone-shaped pile over the unloading sump. Pull a few bushels of grain out through the sump for every load or two going into the bin to remove some of the fines that accumulate in the center.

--If you discover that you have a concentration of fines in the center of your bins after they are full, unload some grain through the center sump to try to remove some of the fines.

"All storage bins should be aerated after harvest to cool grain," says Wilcke. "Aerate the grain several times during the

(more)

fall with a target temperature of about 25 degrees F for winter storage. Check bins containing good quality grain about once a month and check bins containing fines or damaged grain every two weeks for signs of mold or insects."

# # #

GOPH,MNF,DTN,V2,F4 NAGR5139

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 9, 1995

Editor: The price and availability information in this release is good until June 30, 1996. If you run this release after that date, call (800) 876-8636 to confirm price and availability.

Bulletin Helps Gardeners Select Hardy Ornamental Grasses

Although the varied forms, textures, and colors of ornamental grasses have long added beauty and interest to gardens in Europe and Asia, they haven't been used much for landscaping in colder parts of the United States and Canada. One reason for this is that there's been little information available about the cold-hardiness of ornamental grasses.

That, however, is no longer the case. A Minnesota Extension Service bulletin, "Ornamental Grasses for Cold Climates," is now available for gardeners to use in selecting winter-hardy ornamental grasses suited to their specific needs and situations.

Extension horticulturist Mary Meyer, one of the authors of "Ornamental Grasses for Cold Climates," says there's an ornamental grass for practically every landscaping need. She explains that some ornamental grasses thrive in standing water or poorly drained soils, while other species tolerate or prefer shady locations. Ornamental grasses which have invasive rhizomes can be useful for erosion control. Still others contribute fall color or winter interest or can serve as alternatives to

(over)

conventional lawns. Native species can be used in prairie plantings.

"Ornamental Grasses for Cold Climates" features 20 color photos and 26 illustrations of ornamental grasses, a special section on Miscanthus (a popular ornamental grass), and a color map of USDA plant hardiness zones. Also included is a list of nurseries that sell ornamental grasses and can offer planting tips.

The bulletin summarizes a six-year winter hardiness study of 165 ornamental grasses, including some native species, at the University of Minnesota's Landscape Arboretum. The arboretum is located west of Minneapolis, in USDA Plant Hardiness Zone 4a. The minimum annual temperature in Zone 4a ranges from minus 25 to minus 30 degrees F (minus 32 to minus 34 degrees C). Zone 4a stretches from Idaho to Maine in the United States and from British Columbia to New Brunswick in Canada.

The 28-page bulletin is available from county offices of the Minnesota Extension Service. Credit card orders for "Ornamental Grasses for Cold Climates" can be placed by calling (800) 876-8636 or (612) 624-4900; ask for item BU-6411-NR. The cost is $6 per copy plus shipping. The bulletin is available to disabled persons in alternate formats upon request.

# # #

Source: Mary Meyer (612) 443-2460 ext. 639
Writer: Sam Brungardt (612) 625-6797; sbrungardt@mes.umn.edu

GOPH,MNF,G1,IA,V4MN,ND,SD,WI,SelMedia NAGR5140

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NEWS/ INFORMATION

October 10, 1995

Minnesota Extension Service Honors Horticulturist

Deborah Brown, extension horticulturist, regular gardening expert on several radio stations and host of the "Minnesota Gardening" television program, has received the University of Minnesota's Extension Service (MES) Director's Award to Distinguished Faculty. Brown, a Lauderdale resident, was honored Oct. 9 by Gail Skinner-West, interim MES dean and director, during extension's annual staff development conference held in Rochester.

Brown was cited for her ability to bring accurate, timely gardening information to Minnesota residents through her news media work, Master Gardener training sessions and work with the Dial U Insect and Plant Information Clinic. In addition, Brown was instrumental in getting a horticulture therapy program and handicap access gardens established at the Minnesota Landscape Arboretum.

Recently Brown began hosting the biweekly television program "Minnesota Gardening," which features seasonal topics, expert guests and practical information for gardening enthusiasts. She is also an originator of the Minnesota Gardening calendar, now in its fifth year offering tips for lawn, garden and houseplant care.

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Brown is a frequent guest on radio and television stations throughout the state. In addition, she writes material for gardening sections and columns in the Minneapolis Star Tribune and the St. Paul Pioneer Press. She is an active member of Garden Writers and will be co-chairing that group's annual meeting in Minneapolis next year.

The Director's Award to Distinguished Faculty is given annually to an outstanding campus-based faculty member. It carries a $1,000 stipend through the University of Minnesota Foundation and is financed by contributions.

# # #

GOPH,G1,64 NEXT5132

Source: Gail Skinner-West (612) 624-2703
Writer: Deedee Nagy (612) 625-0288; dnagy@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 17, 1995

4 States Will Present Personnel Workshop for Dairy Producers

Work on a dairy farm needs to focus more on results than on activities. That's one of the messages Tom Fuhrmann will present at the upcoming 4-State Dairy Personnel Workshop Dec. 13-14 at LaCrosse, Wis.

Fuhrmann is a veterinarian and management consultant based in Tempe, Ariz. He will discuss the concept of Total Quality Management (TQM) and its application in dairying. He says TQM is a management philosophy through which small and large companies produce goods and services of higher quality at lower costs.

The Dairy Personnel Workshop, being held for the fourth consecutive year, will be at the Radisson Center in LaCrosse. Sponsors are the extension services of Iowa State University, the University of Illinois, the University of Minnesota, and the University of Wisconsin.

Those whose registrations are postmarked by Dec. 1 will receive a registration fee discount. Conference sessions begin at 10 a.m. Dec. 13 and adjourn at 3:30 p.m. Dec. 14.

Topics and presenters Dec. 13 will be:

--Total Quality Management as it relates to dairy management, Fuhrmann;

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--Assessing styles and values as they relate to employee effectiveness, Gary Maas, agricultural personnel recruiter, Massena, Iowa;

--Monitoring employee performance, Fuhrmann.

Topics and presenters Dec. 14 will be:

--Family employment on the dairy farm, Maas;

--Farm labor law, representatives of state labor departments;

--Compensation survey report, John Ambrosius, extension farm management specialist, University of Wisconsin--Platteville;

--Precision hiring, Maas.

The fee for registrations postmarked by Dec. 1 is $150 for the first person and $100 each for additional persons from the same family or business. Fees after Dec. 1 are $175 for the first person and $125 each for additional persons.

Workshop brochures with registration forms will be available in the near future from county extension offices in each of the four sponsoring states. They will be available from the University of Wisconsin by calling (608) 263-3485. You can also register by sending the registration fee to Dairy Personnel Workshop, UW-River Falls, Dept. of Animal and Food Science, 410 S. Third St., River Falls, WI 54022.

# # #

GOPH,MNF,DTN,V2,A2,D1,X1 NAGR5141

Sources: Dennis Cooper (715) 425-3704; Joe Conlin (612) 624-4995
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 23, 1995

Sow Pools for Pig Production Have Advantages, Disadvantages

Sow pools are one option for independent pork producers who want to take advantage of such technologies as all in/all out pig flow and improved genetics.

Sow pools are cooperative pig production systems that are popular in Sweden but are not very common in the U.S. Cooperating producers depopulate their individual sow herds and use a combined herd, which is kept in a central unit, for breeding and gestation. Sows are transported back and forth between members' farms and the central unit according to a predetermined schedule. The goal is to produce pregnant sows for delivery to the members' farms 5-10 days before farrowing. At weaning, the sows return to the central unit. Weaned pigs are retained by the members for sale as feeder pigs or for production of market hogs.

Animal scientist Lee Johnston and economist Bill Lazarus of the University of Minnesota's Extension Service have looked at the advantages and disadvantages of sow pools. They cite the following advantages:

--Genetics: A successful sow pool will be stocked with highly productive, high-health females that possess the potential to produce pigs with high lean gain. Membership in the sow pool

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allows a producer to use improved genetics without incurring the entire expense of repopulating the breeding herd.

--Improved pig flow: In a sow pool, bred sows are delivered from the central unit on a predetermined schedule and farrow within a short time. This enables producers to implement all in/all out pigflow through the nursery, grower and finisher phases of production.

--Professional management: Managers of the central breeding unit have most of the responsibility for the sow herd. Pool members can focus on other phases of the enterprise. This may be particularly important for crop producers during planting and harvesting.

--Marketing groups: With every sow pool member using similar genetics, members should be able to cooperate in offering large, uniform groups of market hogs to packers. This could result in higher prices.

--Renovation of facilities: Sow pool members no longer need their own breeding and gestation facilities. These facilities could be remodeled for additional farrowing, nursery, or growing-finishing space.

Johnston and Lazarus cite these disadvantages of sow pools:

--Health status risk: Maintaining a high health status for all pigs in both the central pool and on members' farms is a challenge since sows regularly move from the central unit to members' farms and back again. Strict adherence to sound

(more)

biosecurity measures by all members of the pool at all times is a must.

--Capital investment: An initial investment, comparable to the cost of improving an existing swine operation to similar performance levels, should be anticipated. The amount required can be substantial.

--Renovation of facilities: Renovation of existing farrowing and nursery facilities may be necessary to comply with the biosecurity plan of the sow pool.

Johnston and Lazarus are the authors of a new publication, "Sow Pools in a Swine Production System." Copies are available free from the Minnesota Pork Producers Association, 360 Pierce Ave., Suite 106, North Mankato, MN 56003; or from Waite Library, Department of Applied Economics, University of Minnesota, 231 Classroom Office Bldg., 1994 Buford Ave., St. Paul, MN 55108-6040, telephone (612) 625-1222.

# # #

GOPH,MNF,DTN,V2,S2,X3 NAGR5143

Sources: Lee Johnston (612) 589-1711
Bill Lazarus (612) 625-8150
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 27, 1995

Gestating Ewes Show No Ill Effects from Vomitoxin from Scab

Gestating ewes showed no ill effects from vomitoxin resulting from barley scab in a University of Minnesota research trial. The trial took place in 1994 and early 1995 at the university's Northwest Experiment Station at Crookston.

Animal scientist Harvey Windels conducted the research trial using 22 Polypay-type ewes that were 4 1/2 years old. Half the ewes received a diet containing 12 parts per million (ppm) vomitoxin on a dry matter basis, with the vomitoxin coming from scab-infested barley. Windels noted that the barley was not moldy and apparently did not contain other toxins that are sometimes produced by mold. The remaining ewes received a diet containing only 1.1 ppm vomitoxin. The ewes received these diets from 10 days before breeding through their entire gestation.

The scientists reported that the diet containing 12 ppm vomitoxin had no apparent detrimental effect on lambs born and reared per ewe, ewe health, lamb birth vigor, birth weight, lamb health or lamb weaning weight.

# # #

GOPH,MNF,DTN,V2,F4,S1 NEXP5146

Source: Harvey Windels (218) 281-8609
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 27, 1995

Conference for Sheep Producers Will Be Dec. 1-2 in St. Cloud

Successful and profitable sheep production will be the focus of a conference Dec. 1 and 2 in St. Cloud. The 1995 Shepherd's Holiday and Small Flock Conference will be at the Best Western Kelly Inn.

The Minnesota Lamb and Wool Producers Association is sponsoring the event. Preregistration is encouraged, and registration fees are lower through Nov. 18.

Conference speakers are sheep experts from Minnesota and across the nation, including several University of Minnesota faculty members.

The conference, which includes a trade show, will open with registration beginning at 10 a.m. on Friday, Dec. 1. The program begins at 12:30 p.m., and will move to the Armory in St. Cloud for a hands-on session at 2 p.m.

Friday afternoon topics include the National Sheep Improvement Program (NSIP), needed lamb marketing changes, ultrasound for pregnancy checking and fetal counts, guard dogs for predator control, lamb carcass quality, feed evaluation, and raising orphan lambs.

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Speakers include Dan Waldron, Texas A & M animal scientist; Wayne Purcell, Virginia Tech economist; Bill Head, University of Minnesota sheep scientist; Janet McNally, Hinckley, Minn., sheep producer and instructor for the Pine Tech Lamb and Wool Program; John Essame, Belview, Minn., producer and former coordinator of the Willmar Lamb and Wool Program; Robert Jordan, U of M professor emeritus; and Yves Berger, shepherd and assistant superintendent, Spooner (Wis.) Agricultural Station.

Stan Potratz of Premier Sheep Equipment, Washington, Iowa, will be the Friday evening banquet speaker.

Saturday morning topics include sheep fencing, American Sheep Industry (ASI) Lamb Council activities, expansion of sheep operations, NSIP (repeated from Friday), and the National Sheep Referendum.

Saturday morning speakers include Potratz, Waldron, Purcell, and ASI secretary-treasurer Lorin Moench.

Saturday afternoon topics include the economics of being a shearer, matching animals to level of production and environment, coccidiosis and internal parasites, pasture versus confinement for lambs, wool pools, quality assurance, ewe flock health, and teaching shearing and sheep production in Krygyzstan.

Speakers include Bernie Lex, Buffalo, Minn., sheep shearer; Head; Jay Bobb, Pipestone, Minn., veterinarian; Berger; Robert Padula, ASI; Cindy Wolf, U of M veterinarian; and Doug Rathke, Hutchinson, Minn., producer.

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There are various registration options for individuals and families, with fees ranging from $5 to $35. For registration or other information, contact George Mead at (612) 682-4626; Dale Carter at (218) 463-1052; or John Essame at (507) 925-4415. For trade show information, contact Dave Resch at (612) 492-2370.

# # #

GOPH,MNF,DTN,V2,V4MN,V5MN,S1 NAGR5144

Source: Cindy Wolf (612) 625-1780
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

October 27, 1995

Timing Is Important in Transition of CRP Acres to Crop Production

Farmers who plan to return CRP acres to crop production during the next few years need to plan ahead. Timing will be an important factor in the transition process, says Bob Byrnes, extension educator in Lyon County with the University of Minnesota's Extension Service.

"Producers planting spring-seeded crops will be at a distinct disadvantage if they don't consider weed control and biomass management the previous fall," says Byrnes.

CRP contracts expire on Sept. 30 of the expiration year, meaning chemical spraying and tillage can occur after that time. "In 1995, the state CFSA Committee allowed spraying or tillage anytime in September for 1995 expiring contracts," says Byrnes. "The committee also indicated it would establish a policy for CRP contracts expiring in 1996 and future years. Such a policy would help in the transition of CRP acres. Successful transition may require mowing of the CRP vegetation in mid-summer, application of a non-selective herbicide to the regrowth, and biomass incorporation following successful vegetation control."

Byrnes says fall-seeded crops such as winter wheat or alfalfa may be an option to plant in the year of contract

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expiration. Current rules provide greater latitude for preparation and planting of such crops.

"For CRP acres that will be rented," says Byrnes, "it is important to have the rental arrangement secured before the contract expires so weed control and other practices can take place on time."

# # #

GOPH,MNF,DTN,V2,A2,F4 NAGR5145

Source: Bob Byrnes (507) 537-6702
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 3, 1995

Cattle Feeders Days Will Be at Crookston, Morris, Slayton

Dealing with environmental issues such as manure management is essential for successful cattle feeding. Manure management will be one of the topics addressed at the upcoming Minnesota Cattle Feeders Days. They are sponsored by the University of Minnesota and the Minnesota Beef Council.

The Cattle Feeders Days will be Dec. 5 at Crookston at the Northwest Experiment Station, Dec. 6 at Morris at Edson Hall at the University of Minnesota-Morris, and Dec. 7 at Slayton at the VFW.

The program will be similar at each location. Registration begins at 8:30 a.m. and the program gets underway at 9 a.m. Adjournment is at 3:15 p.m.

Topics and speakers will be:

--Minnesota feedlot research update, Alfredo DiCostanzo or Harvey Windels, both University of Minnesota animal scientists;

--Feedlot waste handling facilities, David Schmidt, U of M agricultural engineer;

--Nutrition for incoming cattle, Tom Peters, DeKalb Feeds nutritionist;

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--Feedlot health maintenance, Trevor Ames, U of M veterinarian;

--Protein requirements of feedlot cattle, DiCostanzo;

--Feed intake management, Fred Owens, Oklahoma State University animal scientist;

--Injection site blemishes, Ron Eustice, Minnesota Beef Council;

--Retail perspective on beef quality, Wendell Affield, Luekens Village Foods.

There will be a modest registration fee at each location. For further information contact Harvey Windels at Crookston, (218) 281-6510; Lynn Gordon at Morris, (612) 589-7423; or Bob Koehler at Slayton, (507) 836-6148.

# # #

GOPH,MNF,DTN,V2MN,B1,X4,Z6 NAGR5149

Source: Alfredo DiCostanzo (612) 624-4995
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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NEWS/ INFORMATION

November 3, 1995

Sheep Research Report Available from University of Minnesota

Accelerated lambing, grazing kura clover, and out-of-season breeding are among the topics covered in a sheep research publication that is available by mail from the University of Minnesota.

The "1995 Minnesota Sheep Research Report" contains results and progress reports on the university's sheep research projects. Other topics covered include estrus synchronization, feeding vomitoxin-contaminated barley, parasitism, feeding betaine to lambs, and cell cloning.

Copies of the 46-page research report are available for $5 each. Send a check, payable to the University of Minnesota, to Charles Christians, 101 Peters Hall, 1404 Gortner Ave., University of Minnesota, St. Paul, MN 55108.

# # #

GOPH,MNF,DTN,V2,S1 NAGR5150

Source: Charles Christians (612) 624-0766
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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405 Coffey Hall
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NEWS/ INFORMATION

November 3, 1995

Farm Buildings Wiring Handbook Available from U of M

A handbook on wiring farm buildings, published by MidWest Plan Service, is available from the University of Minnesota.

"Farm Buildings Wiring Handbook," MWPS-28, complies with the 1990 National Electrical Code. The 64-page handbook outlines materials and methods for electrical equipment and wiring in agricultural buildings. It also helps determine if existing wiring is adequate.

Half of the handbook focuses on assessing needs, planning, and describing materials, fixtures, and their use. Other topics include branch circuits, motor circuits, and the service entrance. The remainder of the book covers standby power, alarm systems, stray voltage, and lightning protection. Example plans for a machine shed and a swine building are included. The handbook has 80 illustrations, tables of data, and example calculations. It is intended for students, teachers, producers, and practicing engineers.

"Farm Buildings and Wiring Handbook," MWPS-28, is available from Terry Capaul, Biosystems and Agricultural Engineering Dept., University of Minnesota, 1390 Eckles Ave., St. Paul, MN 55108;

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telephone (612) 625-9733. The cost is $10, plus 6.5 percent sales tax for non-exempt Minnesota residents.

MidWest Plan Service is an organization of agricultural engineers from land grant universities in the north central U.S.

# # #

GOPH,MNF,DTN,V2,E4 NAGR5151

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 6, 1995

Use Aeration to Control Insects in Stored Small Grain

The best way to control insects in stored small grain this time of year is usually to cool the grain using aeration fans. That observation is from Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

The warm, humid conditions that were common earlier this fall cause insects to thrive, says Wilcke, and some insect problems in storage bins have been reported. "At grain temperatures of less than 60 degrees F, insect activity slows," Wilcke points out. "At temperatures less than 40 degrees, many insects go dormant and some die. The insect death rate increases at lower temperatures."

Wilcke says the normal recommendation for stored grain temperatures in Minnesota is 20 to 30 degrees F. "But if you have a severe insect problem, it might be worth cooling the grain to lower temperatures to kill more of the insects," he adds. "If you do cool grain to less than 20 degrees, use aeration fans to bring it back up to about 30 degrees before spring weather arrives."

If you have insect problems in a bin that doesn't have aeration fans, your options are limited, says Wilcke. "You could try running the grain through a grain cleaner to remove some insects and the fines that attract insects," he says. "If grain

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moisture is higher than it should be for storage of small grains, which is about 13 percent, consider running the grain through a dryer. Be careful not to get the grain too hot, though. Grain temperatures above 140 degrees F will reduce milling quality and temperatures above 110 degrees F will reduce germination. Also, if grain will be returned to a bin without aeration fans, use the dryer fan to cool grain to the outdoor temperature before storing it."

If aeration, cleaning, or drying doesn't keep insects under control, feed or sell the grain before the problem gets worse, says Wilcke.

What about fumigation to kill stored grain insects? This involves sealing bins and applying a chemical that releases toxic gases. "If the fumigation is done properly, it can be effective at killing all insects in the bin," says Wilcke. "However, fumigation might not be the best option, especially at this time of year. For one thing, some fumigants can't be used at low temperatures and some can't be used on grain that will be used for seed or malting purposes. Be sure to read the label. For another thing, fumigants are highly toxic to humans. Applying the fumigants requires special training and equipment. Finally, fumigants don't provide residual insect control. If the grain is warm or damp, insects will return as soon at the gas dissipates."

# # #

GOPH,MNF,DTN,V2,F4,X4 NAGR5152

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
EDUCATIONAL DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
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NEWS/ INFORMATION

November 10, 1995

Keep Wet Soybeans Cool until You Can Dry Them

If you have harvested wet soybeans this fall and don't have a dryer, keep the beans cool until you can dry them. That means 20-40 degrees F, says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"With proper aeration, you might be able to hold wet beans a month or more, depending on bean moisture," says Wilcke. "The wetter the beans, the less time you have. If you've put wet beans into storage that doesn't have aeration, you need to watch them closely and move them soon, within a few weeks, before they start molding and heating."

If beans are wetter than about 18 percent moisture, natural-air drying will be a challenge, especially in view of the lateness of the season and the cold weather. "The beans should probably be dried in a gas-fired dryer," says Wilcke. "If they are much wetter than 20 percent moisture, you might have to make several passes through the dryer to keep the beans from getting too hot and to prevent excessive splitting of seeds."

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If you sell wet beans, the water shrink is the same for soybeans as for other crops, notes Wilcke. The water shrink factor, percent weight loss per percentage point of moisture removed, is 100 divided by (100 - final moisture content). For example, for shrinking beans to 13 percent moisture, the water shrink factor is 1.149 percent per point. "But the shrink factor used by elevators is often greater for beans than for corn because they usually add a greater handling loss for beans," says Wilcke.

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GOPH,MNF,DTN,V2,F4,X3 NAGR5155

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
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NEWS/ INFORMATION

November 10, 1995

U of M Swine Health Clinics Will Be in Worthington, Austin

Cutting costs and increasing revenue in pork production will be topics at the University of Minnesota's upcoming Swine Health Clinics in Worthington and Austin.

The clinics will be Dec. 6 in Worthington at The Coliseum and Dec. 7 in Austin at the Holiday Inn. The program is similar at each location. Registration begins at 8:15 a.m. and the program is from 9 a.m. to 4:30 p.m.

A morning session on finance will include presentations on market overview, outlook for private producers, tips for cutting costs, and tips for increasing revenue. Speakers include extension educator Bob Koehler, Slayton; and veterinarians Wayne Freese, Worthington; Keith Wilson, Worthington; Mike Mohr, St. Peter; Mike Eisenmenger, Windom; and Tim Klein, Wells.

A morning session on disease will cover diseases in high health herds, and PRRS. Speakers include veterinarians Dave Iverson, Luverne; Steve Olson, Austin; Scott Dee, Morris; and Tom Molitor, University of Minnesota.

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An afternoon session on emerging issues will cover odor control, feedlot regulations, manure storage, and artificial insemination. Speakers will be Larry Jacobson, U of M agricultural engineer; Mike Peil, Nobles County commissioner; Franz Strack, Amboy, swine operations manager; and Clark Huinker, Fairmont veterinarian.

The final session will be on information systems. Topics include information system needs, integrating production and financial records, and new developments in grow-finish record keeping. Speakers will be producers Paula Boerboom, Marshall; and Mary Hugoson, Granada; and U of M veterinarians Bob Morrison and Gary Dial.

The registration fee at each site is $35. An additional registrant from the same farm may register for $20, and a student with a parent or instructor may register for $15. To register, send a check payable to the University of Minnesota to: Janice Storebo, University of Minnesota, 1365 Gortner Ave., 440 VTH, St. Paul, MN 55108. For further information, call 1-800-380-3686 or (612) 624-3434 or fax (612) 625-5755.

# # #

GOPH,MNF,DTN,V2,S2,X3,20 NAGR5154

Source: Charles Casey (612) 624-1711
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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DEVELOPMENT SYSTEM
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1420 Eckles Avenue
St. Paul, Minnesota 55108

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NEWS/ INFORMATION

November 14, 1995

Delaying Nitrogen Applications until Next Year Is Probably Wise

Unless the weather improves dramatically, it's probably wise to delay nitrogen applications until next year. George Rehm, soil scientist with the University of Minnesota's Extension Service, cites some of the factors that have a bearing on this decision.

"Wet soils and below-normal temperatures make anhydrous ammonia application very difficult, if not impossible," notes Rehm. "So thoughts have turned to urea as a nitrogen source for fall application. However, urea should not be broadcast on frozen soils that will stay frozen throughout the winter. Urea dissolves easily in water and will move with snow melt unless attached to soil particles. Application yet this fall is worth considering only if much warmer temperatures that allow for some thawing are predicted."

Volatilization of nitrogen from urea is a concern unless the urea dissolves and moves into the top one-half to one inch of soil, says Rehm. "Since incorporation by tillage isn't practical, we must rely on moisture for incorporation," he says. "If temperatures go above freezing this fall and allow for some thawing during the day, broadcast urea will dissolve and move into the top one-half to one inch of soil. This would allow urea to

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convert to ammonium nitrogen and become attached to soil particles, preventing the loss in runoff water."

Denitrification is also an avenue for potential nitrogen loss. Through this process, nitrate nitrogen becomes nitrite nitrogen, which becomes nitrogen gas or nitrous oxide and is lost from the soil. "Microorganisms are responsible for denitrification, so soil conditions that favor the growth of microorganisms favor this process," says Rehm. "Soil pH, oxygen concentration in soil air, and temperature affect the process. Favorable temperatures are approximately 50 degrees F and warmer."

Unless soil temperatures warm dramatically, loss of nitrogen due to denitrification from broadcast urea shouldn't be a major concern this fall, says Rehm. However denitrification will take place if soils warm and remain saturated next spring, he adds.

"Those still thinking about applying urea this fall should check the best management practices for nitrogen for their area," Rehm says. "Copies are available from county extension offices. Fall application, regardless of soil conditions, isn't suggested for sandy soils and soils in southeastern Minnesota.

"It's also important to remember that nitrogen fertilizer can be applied in the spring or as a sidedress application as a substitute for fall application."

# # #

GOPH,MNF,DTN,V2,F4 NAGR5156

Source: George Rehm (612) 625-6210
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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NEWS/ INFORMATION

November 16, 1995

Soybeans Need To Be Dry for Safe Storage

Soybean producers who harvest beans that are too wet for safe storage need to dry the beans. Soybeans need to be 13 percent moisture or less for safe storage, says Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"Drying beans with unheated air, or natural-air drying, usually works well," says Wilcke. "However, it's a slow process that takes two to six weeks, depending on initial moisture, airflow, and weather. Bins used for natural-air drying should have full perforated floors and fairly large drying fans. Use 0.5 to 1.0 fan horsepower per 1000 bushels, depending on desired airflow and depth of beans."

Wilcke says management of natural-air soybean dryers is similar to that for natural-air corn dryers. The exception is that soybean moisture values need to be about two percentage points lower than those recommended for corn. Wilcke recommends an airflow of one cfm/bu (cubic foot of air per minute per bushel of beans in the bin) to dry 17-18 percent moisture beans. Use 0.75 cfm/bu for 15-17 percent moisture, and 0.5 cfm/bu for 13-15 percent moisture. The publication "Natural-Air Corn Drying in the Upper Midwest," BU-6577, has information on equipping and managing natural-air dryers. It's

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available from county offices of the Minnesota Extension Service and from the MES Distribution Center at (612) 625-8173.

"Because natural-air drying is a slow process, it's difficult to use one bin to dry both beans and corn in the same year," says Wilcke.

Many kinds of gas-fired corn dryers can be used to dry soybeans. But be careful when using heat because soybeans split easily if they are dried too fast or handled roughly, says Wilcke. "Set the drying air temperature lower than you would for corn and avoid dryers that recirculate the crop during drying," he says. "Column-type dryers can often be operated at 120-140 degrees F without causing much soybean damage, although some trial and error may be necessary to set dryers properly. Carefully examine beans leaving the dryer and reduce the temperature if you're getting too many splits. If the soybeans will be saved for seed, keep drying temperatures under 110 degrees F to avoid killing the embryo."

Wilcke says crops dried in gas-fired dryers need to be cooled within a day or so to remove dryer heat. "This can be done in the dryer or in aerated storage bins," he points out. "Stored beans should be aerated again later in the fall to cool them to 20-30 degrees F for winter storage."

# # #

GOPH,MNF,DTN,V2,F4,X3 NAGR5158

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

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NEWS/ INFORMATION

November 16, 1995

Make Sure Green Soybeans Going into Storage Are Clean

If you put green, immature soybeans into storage, make sure the beans are clean. That's the recommendation of Bill Wilcke, agricultural engineer with the University of Minnesota's Extension Service.

"Clean, immature soybeans don't necessarily present any greater storage risk than fully mature beans if the moisture content is the same," says Wilcke. "But make sure you remove as much chaff and green plant material as possible before binning the beans."

Don't assume that green soybeans will turn yellow in storage, says Wilcke. "We haven't seen much color change in green soybeans stored in our lab," he points out. "It might still be worthwhile to store green soybeans for a few months after harvest, though, to avoid the high discounts that are applied when large quantities of green soybeans are delivered during harvest. Just make sure that any green beans going into storage are clean, evenly distributed throughout the bin, and cooled as soon as possible after harvest."

# # #

GOPH,MNF,DTN,V2,F4,X3 NAGR5159

Source: Bill Wilcke (612) 625-8205
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

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November 16, 1995

Dairy Goat Conference at U of M Will Be Jan. 13, 1996

Producing milk and meat from dairy goats will be the focus of the upcoming Dairy Goat Conference at the University of Minnesota. The 18th annual Dairy Goat Conference will be Jan. 13, 1996 in the Classroom Office Building on the university's St. Paul campus.

The conference is designed for those with an interest in any phase of dairy goat production, including producers, veterinarians, veterinary technicians, 4-H members, 4-H leaders and persons just deciding whether to raise goats.

Conference registration begins at 8 a.m. and the program runs from 8:50 a.m. to 4:45 p.m. Topics and speakers during the morning will be:

--Marketing and exporting dairy goats, Linda Campbell, Luray, Va., past president of the American Dairy Goat Association (ADGA);

--American Dairy Goat Product Association, Laura Jacobs Welsh, Darien, Wis., president of the American Dairy Goat Product Association;

--ADGA and you, Campbell;

--A visit to the Heldt family farm, Heldt family, Watertown, Minn.

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Topics and speakers during the afternoon will be:

--Farmers markets and burnout, Mary Doerr, Kenyon, Minn., cheese producer;

--Meat goats and export, Dan Considine, Portage, Wis., meat goat exporter and past ADGA president;

--Pathology at the vet school, Pat O'Leary, U of M veterinarian;

--Small-scale fluid milk production, Deanna Hedrick, Byron, Minn. producer; and Vince Maefsky, Scandia, Minn. producer;

--Market for Boer goats, Earl Kitchen, Grandy, Minn., producer;

--Comments and questions, Cindy Wolf, U of M veterinarian; Joni Scheftel, Watertown, Minn. veterinarian; and Campbell.

Bev Nohr, Delano, Minn. 4-H leader and producer, will lead a concurrent session for 4-H members and leaders in the afternoon.

Registration fee for the conference is $20 for the first adult from a family and $8 for each additional adult family member. There is no charge for family members under 18. A box lunch is available for $5. To register, send a check payable to the University of Minnesota to Registrar--Dairy Goat, Extension Special Programs, P.O. Box 64780, St. Paul, MN 55164-0780. For a conference brochure or additional information, contact Leon Meger at 1-800-367-5363 or (612) 625-1214.

# # #

GOPH,MNF,V2,P1,S1,21,24,25,26,27,30,33,59,76,78,91 NESP5160

Source: Leon Meger (612) 625-1214
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 20, 1995

FINPACK Software Can Help Track Farm Financial, Production Trends

As you evaluate the financial performance of your farm business this year and make plans for next year, the newly-revised FINPACK software from the University of Minnesota may be beneficial.

FINPACK was developed by the university's Center for Farm Financial Management. It has been used by thousands of agricultural producers across the U.S. to develop financial statements, "what if?" alternative plans, cash flow plans, and annual financial and production analyses. The lastest FINPACK revision allows users to create reports on any historical financial or production information for their farm or ranch. A few of the available historic reports include income statements, cash flows, balance sheets, per acre crop production and expenses, and livestock production and expenses. New reports can also be defined by the user. These reports allow users to detect trends over time and make adjustments to increase profitability.

FINPACK can be customized by individual users for any specific type or size of operation. The software comes with a comprehensive user's manual and toll-free technical support.

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The personal version of FINPACK retails for $295. Hardware requirements include an IBM or compatible computer, MS-DOS 3.1 or higher and 640K of RAM. For further information, write the Center for Farm Financial Management, 249 Classroom Office Building, 1994 Buford Ave., St. Paul, MN 55108; or call (800) 234-1111 or (612) 625-1964.

# # #

GOPH,MNF,DTN,V2,V5,A2 NAGR5162

Source: Dave Nordquist (612) 625-1964
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 21, 1995

U of M Plans Agricultural Tour to Sweden, Norway, Denmark

A tour focusing on the agriculture and scenic sites of Sweden, Norway, and Denmark will be available next summer through the University of Minnesota.

The 15-day tour will leave the Twin Cities June 26 and fly to Stockholm, returning from Copenhagen July 10.

In Sweden tour participants will visit a farm with Swedish Red dairy cattle. There will also be a visit to a typical Swedish farm with mixed enterprises of dairy cattle, small grains, and forestry. In Stockholm there will be a boat trip to the Royal Canal and a guided sightseeing tour of the Swedish capital, including the Cathedral, Gamla Stan and the Town Hall. At Mora there will be a visit to the Dalarna wooden horse factory.

In Norway the farm visits will include a stop at a goat farm. There will also be a visit to an agricultural school. The Norway tour will include a cruise on the Sognefjord, a visit to the Maihaugen Folk Museum in Lillehammer, a tour of Oslo, and the scenery of the Norwegian countryside.

The stay in Denmark will include farm visits, a tour of Odense, and a chance to visit the former home of Danish

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storyteller Hans Christian Andersen. In Copenhagen there will be a visit to Roskilde Cathedral, the Viking Ship Museum, the Stock Exchange, the Little Mermaid, the Royal Palace and Tivoli Gardens.

The tour price is $2,995, double occupancy, from the Twin Cities. The tour group will be limited to 46 people or bus capacity. For further information or a tour brochure, contact Gerald Wagner or Leon Meger at 1-800-367-5363.

# # #

GOPH,MNF,DTN,V2,V4,V5,A4,T1 NESP5166

Source: Leon Meger 1-800-367-5363
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

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UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

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November 21, 1995

Dairy Producers Can Exercise Some Control over Milk Prices

Controlling the price of their milk is one strategy dairy producers can use to achieve success. A certain amount of milk price control is possible, says Joe Conlin, dairy scientist with the University of Minnesota's Extension Service.

"A recent analysis across several years of dairy farm business records showed that there is often a 10 percent difference among producers on milk prices within a region," says Conlin. "Much of this difference can be attributed to producing and marketing high quality milk with attention to milk composition."

Conlin says the recent development of a cheddar cheese and non-fat dry milk futures and options market provides dairy managers with another tool for managing milk price risk. "Futures contracts allow a hedger, such as a producer or dairy products manufacturer, to lock in a set price for an upcoming cash market purchase or sale," says Conlin. "Options contracts provide the hedger with the ability to create a minimum price floor for a sale or a maximum price ceiling for a purchase. If cash milk prices move below the minimum price floor, the options are

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valuable and provide protection. If prices remain favorable, the options are not exercised and the hedger loses only the premium payment of the options contract. At the same time, the hedger can take advantage of the more favorable market price."

Conlin predicts that, as more and more dairy producers become familiar and comfortable with it, this risk management tool will play a more important role in managing price risk.

# # #

GOPH,MNF,DTN,V2,A2,D1 NAGR5168

Source: Joe Conlin (612) 624-4995
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 21, 1995

Program Recognizes Farmers Who Help Clean Up Minnesota's Rivers

The new River-Friendly Farmer (RFF) Program sponsored by the Minnesota Alliance for Crop Residue Management gives public recognition to farmers who are helping clean up the state's rivers. The University of Minnesota's Extension Service (MES) is a partner in the program, along with nine other government agencies, agricultural organizations and private firms, according to Donald Olson, assistant MES collegiate program leader.

Farmers can earn the designation as River-Friendly Farmers by applying and completing a questionnaire that asks for details on their crop residue management practices, soil loss on erodible land, fertilizer management, manure storage and application, pesticide management and crop yields and profitability. Any farmer who satisfies the criteria correlated with protection of rivers may earn the River Friendly Farmer distinction and the right to display the RFF sign on his or her property. RFF program organizers hope to designate 200 or more River-Friendly Farmers in this first year of the effort.

"Many Minnesota farmers are doing a good job of managing their crop and livestock operations in a manner that protects the

(over)

state's rivers," Olson says. "Through the River-Friendly Farmer program, these farmers will start to receive the public recognition they deserve for their excellent stewardship."

Once the application forms are completed, they must be co-signed by a Natural Resources Conservation Service (NRCS) district conservationist, a local county extension educator, or a member of the RFF alliance. All applications will be reviewed by local RFF alliance members. Selected farmers' names will be announced late this winter or early in the spring. All applications are due at local NRCS or Minnesota Extension Service offices by Jan. 1.

# # #

GOPH,MNF,V2MN,V4MN,A2,A4,T2 NAGR5167

Source: Donald Olson (612) 625-9292
Writer: Deedee Nagy (612) 625-0288; dnagy@mes.umn.edu

River-Friendly Farmer Program Criteria

Farmers who satisfy all of the following criteria applicable to their operations may be designated River-Friendly Farmers.

1. All crop land has 30 percent surface residue coverage after planting, as a rotation average. (Alternately, equivalent sediment control can be provided from measures such as conservation structures, contour farming, and including hay in the crop rotation.)

2. Soil loss on highly erodible land is at or below the tolerable (T) level.

3. Fertilizer application rates are based on soil testing, manure testing, realistic yield goals, and credits from previous legume crops and manure applications.

4. Statewide and applicable regional best management practices for nitrogen, as recommended by the University of Minnesota, are observed.

5. Phosphorus is banded below the surface or incorporated within 24 to 48 hours of surface application.

6. Manure storage facilities are adequate and permitted by the MPCA.

7. Liquid manure is injected, or incorporated within 24 to 48 hours of surface application.

8. Within 300 feet of surface waters, drainage ditches, tile intakes, and other areas needing special protection, manure is applied in a manner that minimizes contamination (use MPCA guidelines).

9. Pesticides are used together with cultural pest-control practices, at no higher than labeled rates, observing guidelines for water quality protection (atrazine setback distances, for example). Containers are stored, handled, and disposed of in ways that minimize contamination.

10. Crop yields are close to area average, adjusted for soil productivity, or farm is profitable despite somewhat below-normal yields.

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NEWS/ INFORMATION

November 21, 1995

'Reclamation' Costs Affect Rents when CRP Returns to Crops

Crop producers and landowners considering cash rent arrangements on Conservation Reserve Program (CRP) acres returning to crop production need to assess "reclamation" costs on the land. Bob Byrnes, extension educator in Lyon County with the University of Minnesota's Extension Service, defines these costs.

"Reclamation costs are expenses associated with the elimination of weeds and vegetation, leveling of gopher mounds, and the re-establishment of conservation practices," says Byrnes.

A CRP research and demonstration project in Lincoln County by the Minnesota Extension Service sheds some light on these costs. The project began earlier this year and seeks to duplicate potential scenarios that landowners and operators may face when converting CRP acres to crop production. One of these scenarios reflects the cash rent issue. With corn, soybeans and wheat planted, the average cost of the variable inputs in the project is $108 per acre. This does not include returns for labor, management, or land. Projecting historically normal crop yields and prices, the gross return would be $168 per acre, says Byrnes.

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"In this scenario, $60 per acre remains to pay cash rent," says Byrnes. "This should be considered a maximum amount, since there is no allowance for lower-than-normal yields or return for management. This scenario also assumes that the landowner applies and pays for the burndown herbicide. The justification for this assumption is that the burndown herbicide is a cost attributable to CRP rather than crop production. It is necessary to bring the land into rentable condition and the cost is therefore the landowner's responsibility."

Byrnes says share rental that would be appropriate on this land would be a two-fifths/three-fifths or one-third/two-thirds arrangement. "The issue of the burndown application still needs to be addressed," adds Byrnes, "either by sharing the cost proportionately between the landowner and renter, or by the landowner assuming all costs."

# # #

GOPH,MNF,DTN,V2,A2,F4 NAGR5165

Source: Bob Byrnes (507) 537-6702
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 22, 1995

Photo available. Editor: To obtain a black-and-white photo of Ruth Dill-Macky inoculating a wheat plant with scab, call Joseph Kurtz (612) 625-3168 or 1-800-367-5363, or Jennie Y. Rominger (612) 625-6294.

Asian Wheat Varieties Help U of M Scientist Fight Costly Scab

Wheat varieties from China and Japan are offering hope to Minnesota farmers in their fight against scab, a disease that's causing millions of dollars in crop losses.

Scab has been devastating for Minnesota wheat producers in recent years. It cut yields across Minnesota by about a third in 1993, according to Roger Jones, plant pathologist with the University of Minnesota's Extension Service. The total economic impact of the disease in Minnesota in 1993 was an estimated 1.8 billion dollar loss, says Jones.

In 1994, scab took a bite of about 18 percent out of normal yields of 55 bushels per acre, Jones adds. Losses this year were about 8 percent.

For wheat producers in some geographic areas, planting varieties resistant to scab is an effective strategy against the disease. Unfortunately, most of the varieties currently available and adapted to Minnesota have only limited resistance to scab.

Developing varieties that have more scab resistance is an ongoing project of University of Minnesota Agricultural Experiment

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Station scientists. "Our best sources of resistance are lines coming from China and Japan," says Ruth Dill-Macky, U of M plant pathologist. "These lines are adapted to a very different environment and have very different end uses than the varieties we grow in Minnesota. The Asian varieties are spring wheats with very different head shapes. They shatter easily and tend to yield poorly under our conditions."

U of M scientists cooperate with scientists in China and Japan in exchanging germplasm of wheat and other crops, says Dill-Macky. The U.S. Department of Agriculture also maintains germplasm collections that are sources of genetic material for plant breeders at the U of M and other universities.

"We have tried to target materials from other parts of the world that we know have resistance to scab," says Dill-Macky. "It appears that resistant lines will express their resistance in all environments. However, there is tremendous variability among lines in the type and degree of resistance they express. There is no complete source of resistance. Looking at resistance among varieties is like looking at many shades of gray on a black-white scale."

The focus of Dill-Macky's work is screening varieties for scab resistance. She works closely with plant breeders, who take some of the most resistant lines she identifies and cross them with varieties adapted to Minnesota. She also screens the crossbred lines that result from these crosses.

Dill-Macky's work is part of a research effort against scab that was expanded following the 1993 outbreak. The major source of funding for the research is an allocation from the Minnesota legislature. The allocation was made to support a comprehensive research effort to develop management practices that will eliminate or significantly reduce scab. The funding for the 1996-97 biennium was $1 million, or $500,000 for each of the two years of the biennium. A grant from the Minnesota Association of Wheat Growers also helps support the research.

(more)

"Our work has greatly expanded the last two years on the St. Paul campus, and also at the West Central Experiment Station at Morris and the Northwest Experiment Station at Crookston," says Dill-Macky.

The U of M scientist uses wheat plants growing in the field and plants grown in greenhouses in her research. The scab fungus tends to thrive with an abundance of moisture. One technique she uses in the greenhouse is to inoculate the central floret of the heads of wheat plants with the scab disease organism, then incubate the plants in a moist chamber for three days. This occurs after the organism has been grown on agar plates in a laboratory.

"There are no techniques for screening seedlings," she says. "We have to grow the plants until they are headed out." By growing plants in the greenhouse she can sometimes do two screenings through the fall and winter.

To inoculate wheat in the field, the organism is mixed in a liquid suspension and sprayed on the plants. Dill-Macky and her colleagues sometimes use irrigation or misting to promote development of scab.

To monitor the spread of the disease in the inoculated heads, the scientists do both a visual assessment of scab infestation and check levels of a toxin produced by the scab fungus. "The toxin level is probably a good indication of the amount of fungus and the length of time it has been in the plant tissue," Dill-Macky says.

Checking toxin levels alone, however, is not an effective way to screen for resistance, she points out. "Sometimes two varieties appear to have the same level of infestation but vary in the amount of toxin showing up," she says.

Dill-Macky also screens barley varieties for scab infection. "We have no satisfactory greenhouse screen for scab in barley," she says. "But this was the second year we did a major screening in the field."

(more)

Dill-Macky is confident that some of the lines she is working with will lead to more scab resistance in Minnesota wheat and barley. "We have some germplasm sources that look like they are vastly improved," she says. "In the wheat program, some lines that are better than currently available varieties could be released in two years, and in barley, there may be varieties with improved resistance available in 3-4 years.

"It takes eight years from the time resistant lines are first crossed with varieties adapted to Minnesota until a new variety incorporating the resistance is commercially available. So while we're making good progress in the short term, long-term progress should be much greater."

# # #

GOPH,MNF,V2,F4,R1,X4,SelMedia NAGR5164

Source: Ruth Dill-Macky (612) 625-2227
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
EDUCATIONAL
DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 28, 1995

Cutting Winter Feeding Costs for Beef Cows Boosts Profits

Cutting the cost of feeding beef cows through the winter is one of the best ways to increase profit margins in the cow-calf business. Alfredo DiCostanzo, beef cattle scientist with the University of Minnesota's Extension Service, suggests some strategies to use.

Making good use of crop residues through grazing or gleaning is a good place to start, says DiCostanzo. In some areas there are more ears of corn left in the fields than usual this year because of the corn borer infestation that caused ears to drop.

Another key step is to know the feed value of your winter forage supply. "Test for dry matter, total digestible nutrients (TDN), crude protein, calcium and phosphorus content," says DiCostanzo. "Assume dry matter intake for pregnant cows will be 1.8, 2.0 and 2.2 percent of their body weight for low, medium, and high quality forage, respectively. Assume dry matter intake for lactating cows will be 2.0 and 2.2 percent of their body weight for low/medium and high quality forage, respectively. That's how much of the forage the cows will eat if it's available to them all the time."

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Another step is to feed according to the cows' nutrient needs. These are highest for lactating, heavy cows and for growing heifers. They need a diet with at least 62 percent TDN and 11 percent crude protein, says DiCostanzo. Nutrient needs are lowest for mature, early pregnant cows. They need a diet with at least 55 percent TDN and 8 percent crude protein.

Managing the body condition of the cows is another useful cost control strategy.

Cows that are on the thinner side in late summer need to gain weight on pasture, says DiCostanzo. And cows that are still thin at the beginning of the winter drylot period need to gain weight before calving. "These cows need supplemental energy regardless of the quality of forage they are getting," he says.

It will cost less to winter cows that are in better condition. DiCostanzo says cows in good condition can winter on five 1000-pound bales of forage containing 65 percent TDN, or six 1000-lb. bales of forage containing 55 percent TDN.

# # #

GOPH,MNF,DTN,V2,B1 NAGR5169

Source: Alfredo DiCostanzo (612) 624-4995
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
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DEVELOPMENT SYSTEM
405 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

NEWS/ INFORMATION

November 29, 1995

Varietal Resistance to Disease Provides Tool for Crop Producers

Many of today's corn and soybean varieties have resistance to various diseases incorporated into their genetic makeup. This resistance is becoming increasingly important as a management tool for producers, says a University of Minnesota plant pathologist.

"Today's growers need to be better informed about resistant varieties and quicker to change varieties in order to grow what is suitable for their local problems," says Ward Stienstra. "Resistant varieties are becoming more important because the availability of other disease prevention management tools, such as rotations and tillage, is becoming more limited."

Corn leaf diseases such as gray leaf spot, eyespot, and northern leaf blight have been on the increase in recent years, says Stienstra. In soybeans, downy mildew, Septoria brown spot, white mold, and leaf symptoms from brown stem rot and root rot have been on the increase.

"Tillage systems are believed to be an important factor in these diseases," says Stienstra. "Selection of varieties with genetic resistance is one method of improving crop performance."

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Stienstra notes that sales of soybeans with cyst nematode resistance have been low. But in infested fields, he adds, soybean varieties with cyst nematode resistance have nearly always out-yielded varieties that are susceptible.

# # #

GOPH,MNF,DTN,V2,F4 NAGR5171

Source: Ward Stienstra (612) 625-6290
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 8, 1995

Help Your Trees Survive Damaging Effects of Road Salt

Winter is here and that means trucks will be out on the streets spreading salt and plowing snow. Salt is used on our roads to simplify our lives as drivers, but it is harmful to plants. Trees and shrubs planted along the roadside are hit with salt spray, which causes bud death and twig dieback on broadleaf trees and shrubs.

The salt spray affects plants above ground as well as below because salt accumulates in the soil. Common symptoms of plants that have been damaged by high salt accumulation include abnormal fall color, needle tip burn, and browning that starts on the edge of the leaf and progresses toward the leaf's middle vein.

"Extensive use of salt causes widespread damage, causing disfiguration of trees and shrubs," says Gary Johnson, urban forester with the University of Minnesota's Extension Service. He says there are several things you can do to prevent salt-related problems:

--Avoid planting salt sensitive plants close to heavy traffic areas and busy intersections. Salt sensitive trees include Littleleaf Linden, Sugar Maple, Red Maple, Crabapple, White Spruce and White Pine. Instead, plant salt tolerant tree species such as Norway Maple, Black Hills Spruce, Ginkgo and White Ash.

--Plant trees at least 60 feet from the road. Plants that are closer to the road stand a higher chance of being affected.

--Avoid using de-icing salts on your sidewalks or use smaller quantities.

--Protect plants with barriers made out of plastic, burlap or snow fencing.

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--Keep your plants healthy. A healthy plant is better equipped to survive the damaging effects of salt spray and accumulation.

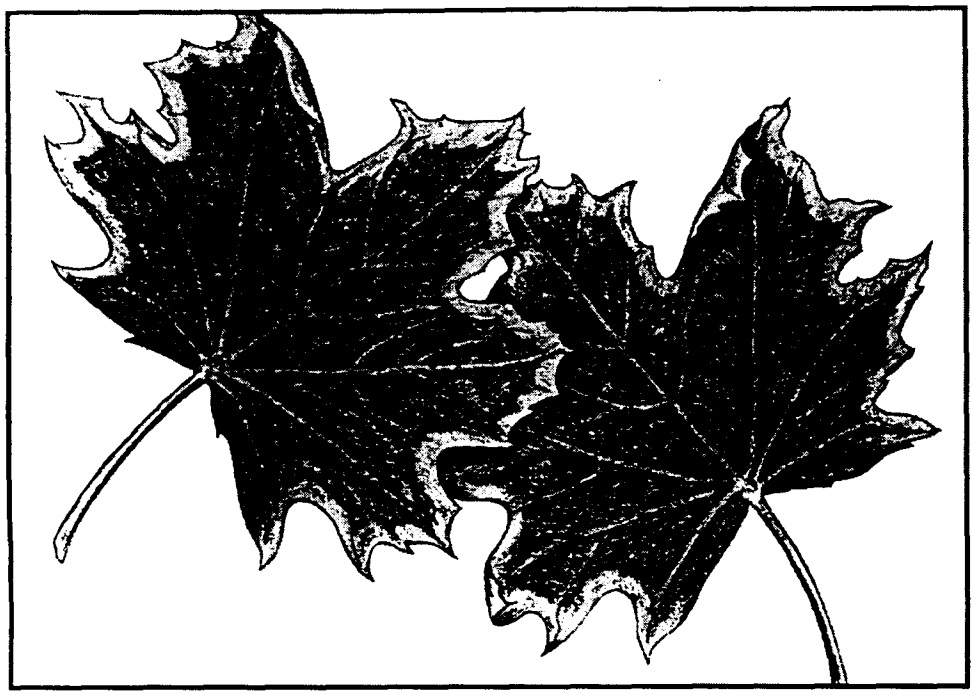
If you would like additional information, consider purchasing a copy of "Minimizing De-Icing Salt Injury to Trees," item FO-1413-NR1, from the University of Minnesota's Extension Service. It's available for $3 plus $2 shipping. Call (800) 876-8636 or (612) 625-8173 for more information. This item is available to disabled persons in alternate formats upon request.

This information is cosponsored by the Minnesota Shade Tree Advisory Committee (MnSTAC) which is a forum for tree advocates to form a collective vision for Minnesota's community forests. Its members represent nurseries; commercial tree services; academic institutions; federal, state and local agencies; and nonprofits.

# # #

GOPH,MNF,V4MN,V7,G1 NNRD5176

Sources: Gary Johnson (612) 625-3765
Gail Steinman (612) 920-9326
Editor: Martin Moen (612) 625-6243; mmoen@mes.umn.edu



Marginal leaf burn, or "scorching," is often caused by high soil salt accumulation. (Figure copyrighted by, and reproduced with the permission of, the Minnesota Extension Service, University of Minnesota.)

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UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 8, 1995

U of M Swine Days Will Be at North Mankato, Ghent, Morris

Current pork production topics such as networking and odor control will be on the agenda at three University of Minnesota Swine Day programs in January. The 1996 Swine Days will be Jan. 9 at North Mankato at South Central Technical College, Jan. 10 at Ghent at the elementary school, and January 11 at Morris in the Edson Hall auditorium on the University of Minnesota--Morris campus.

The program is similar at each location. Registration begins at 9:30 a.m. and the program runs from 10 a.m. to 2:45 p.m. Topics and speakers during the morning will be:

--Networking strategies, Bill Lazarus, University of Minnesota agricultural economist, and Bob Koehler, Murray County extension educator;

--Sources of information on networking, local extension educator;

--Pork production under grower contracts, Bob Morrison, U of M veterinarian;

--Principles of odor reduction, Larry Jacobson, U of M agricultural engineer.

In the afternoon there will be three concurrent one-hour discussion sessions; each will be repeated once. One session will be on designing successful networks. Discussion leaders will be Koehler, Lazarus, Morrison, and Roger Walker, U of M animal scientist. Another session will have discussions on packer contracts and packer cutout sheets.

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Leaders will be Brian Buhr, U of M livestock marketing specialist, and Jerry Hawton, U of M swine scientist. A third session will cover nutrition to reduce swine odors and environmentally friendly methods of carcass disposal. Leaders will be Lee Johnston and Jerry Shurson, both U of M swine scientists.

Registration fee for the conference is $10 per person. For further information contact Roger Walker for the North Mankato site at (507) 835-3620, Bob Byrnes for the Ghent site at (507) 537-6702, or Lee Johnston for the Morris site at (612) 589-1711.

# # #

GOPH,MNF,DTN,V2,S2,X5,21,26,63,83 NAGR5175

Source: Lee Johnston (612) 589-1711
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 15, 1995

U of M Crop Production School on ITV Scheduled at 3 Sites in January

An in-depth University of Minnesota crop production school focusing on fertility, soil management, and crop disease management will be available at three Minnesota locations in January.

The course, which begins Jan. 8, is for agricultural professionals and crop producers. University of Minnesota faculty members will teach the course on interactive television (ITV) in eight class sessions, each lasting two and one-half hours. The sites will be at the University of Minnesota--Morris; at the U of M Rochester Continuing Education Center, and at the U of M St. Paul campus.

The course includes eight hours on soil fertility, two hours on soil management, and 10 hours on crop disease management. The ITV format provides a two-way video and audio link that allows students and instructors from any of the locations to interact.

The course can serve as preparation for the Certified Crop Advisor examination. For those already certified, it will provide 20 continuing education units.

Registration in advance is required; early registration is recommended. There will be no on-site registration. The fee is $35 for all eight sessions, or $20 for four soils sessions or four crop disease sessions. To register by phone or obtain a course brochure,

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call Tracey Benson at 1-800-367-5363 or (612) 624-3708. For further information about the course, call George Rehm at (612) 625-6210 or Ward Stienstra at (612) 625-6290.

# # #

GOPH,MNF,DTN,V2,F4MN,06,20,21,23,25,26,50,55,63,80,81,83,84,90 NAGR5178

Source: George Rehm (612) 625-6210
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 22, 1995

Farming without Government Subsidies Will Be Program Topic

The federal government has a history of subsidizing farm units to provide a steady flow of reasonably-priced food products for consumers. The new farm program will provide less financial support for agriculture.

The University of Minnesota's Extension Service is sponsoring a program called "Transition 2000: Farming without Government Subsidies" on Jan. 5 at Cosmos, Minn., at the American Legion beginning at 1:15 p.m. It's one of a series of programs the Minnesota Extension Service has sponsored over the past three years regarding transitions in agriculture. The program will focus on how a typical farm unit has been subsidized in the past and how this may change in the future.

Speakers include two Farm Service Agency county executive directors from the area--Wes Nelson from Kandiyohi County and Byron Hogberg from Renville County. They will show examples of typical payments that go to farm operators in the area.

Two speakers from the University of Minnesota will discuss what we can expect in future government payments and how the new farm program will affect rural communities. They are former congressman Tim Penny, now a senior fellow at the university's Humphrey Institute, and Ford Runge, professor of applied economics.

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There is no charge for the program. For more information, contact the extension office in Kandiyohi, McLeod, Meeker, or Renville County.

# # #

GOPH,DTN,V2MN,A2 NAGR5182

Source: Dave Schwartz (612) 693-2801
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 22, 1995

Editors, broadcasters: Please check the list of workshop locations at the end of this release to localize this story.

Dairy Management Workshop Series Set at 6 Locations

Reaching the goal of more profitable dairying is the theme of a three-part series of dairy management workshops the University of Minnesota is planning at six locations across the state.

The workshops will be at Melrose, Mora, Edgerton, Winthrop, Janesville, and Rochester. They are part of the university's Dairy Initiatives Program, which involves the Department of Animal Science and Minnesota Extension Service. University dairy scientists and dairy extension educators will be workshop speakers.

The first workshop session will focus on discovering profit opportunities. It will cover benchmark milk production and economics. Participants will identify strengths, weaknesses, opportunities, and threats, and explore problem-solving options.

Setting the road map for the future is the theme for the second session. In the third session, participants will develop an action plan for the future, learning to use management talents to reach goals.

The registration fee for the workshop series is $25 for up to two people from the same farm. To obtain a registration brochure, contact your county extension office or call (612) 625-9757, or contact one of the people listed below.

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The workshop locations, dates, and contact persons are:

Melrose, Countryside Restaurant, Tuesdays, Jan. 30, Feb. 6, Feb. 13; contact Jim Salfer, (612) 255-6169.

Mora, Arthur Town Hall, Wednesdays, Jan. 31, Feb. 7, Feb. 14; contact Lee Raeth, (612) 682-7394.

Edgerton, Pizza Ranch, Thursdays, Feb. 1, Feb. 8, Feb. 15; contact Bill Crawford, (507) 235-3341.

Winthrop, City Hall, Tuesdays, Feb. 27, March 5, March 12; contact Tim Dolan, (612) 237-5531.

Janesville, Janesville State Bank, Wednesdays, Feb. 28, March 6, March 13; contact Tim Dolan (612) 237-5531.

Rochester, Olmsted Co. Extension Office, Thursdays, Feb. 29, March 7, March 14; contact Dave Kjome, (507) 285-8250.

# # #

GOPH,DTN,V2MN,X3,A2MN,D1MN NAGR5181

Source: Dave Weinand (612) 625-9757
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 22, 1995

Midwest Ridge-Till Conference Will Be Jan. 23 in Sioux Falls

The ridge-till system for producing row crops will be the subject of a conference in Sioux Falls, S.D. on Jan. 23. The Midwest Ridge-Till Conference is designed for those using and those thinking about using ridge-tillage.

The conference is at the Best Western Ramkota Inn in Sioux Falls. Registration begins at 8 a.m.; the program runs from 10 a.m. to 4:15 p.m. Sponsors are the University of Minnesota and the Natural Resource Conservation Service.

The keynote speaker will be Ernie Behn, a well-known ridge-till farmer from Boone, Iowa. His topic will be "Why Doesn't Everybody Do It?" After his presentation, there will be three concurrent sessions before lunch and three after lunch. All six concurrent sessions will be repeated once. Some of the session topics include getting started in ridge-till, how ridge-till fits precision farmers, solving weed control problems, manure management with ridges, and twin rows of corn on ridges.

Presenters besides Behn include seven ridge-till farmers from Minnesota, Iowa, and Illinois; scientists from the University of Minnesota and Iowa State University; and two agribusiness persons.

The registration fee is $20 per person if postmarked by Jan. 5 and $25 at the door. To obtain a brochure and registration form, call Tracey Benson at 1-800-367-5363 or (612) 624-3708.

# # #

GOPH,DTN,V2,F4,Z6 NAGR5185

Source: George Rehm (612) 625-6210
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 27, 1995

1995 Corn Borer Outbreak in Minnesota Was Worst Ever

The 1995 corn borer outbreak in Minnesota was the worst ever, according to a University of Minnesota entomologist. "It was the worst infestation since the insect first entered the state in the mid-1940s," says Ken Ostlie of the university's Minnesota Extension Service.

"Recent outbreaks have occurred every four years," says Ostlie. "They occurred in 1983, 1987, 1990-91, and 1995. The causes of this cycle are unknown, but weather and natural enemies, particularly diseases, are prime suspects."

There is a trend toward increasingly severe infestations over the last 30 years, says Ostlie, with outbreaks becoming worse and more frequent.

Ostlie says many changes in corn production over the last 30 years may unwittingly bolster corn borer numbers. Some of these are:

--Earlier planting. Taller corn is less resistant to hatching first-generation corn borers, so more survive to produce the second generation.

--Increasing plant populations. Higher plant populations and narrower row widths may be creating a more hospitable environment within the corn canopy. Increasing corn populations definitely means more borers produced per acre.

--Changing corn genetics. Contemporary hybrids tolerate corn borers better, but may be less resistant and thus leave more surviving corn borers. The hybrid development process used by

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seed companies screens out highly susceptible inbreds. However, the screening emphasizes tolerance (ability to yield well despite attack) over antibiosis (ability to kill corn borer larvae).

--Reduced tillage. While this factor is the most widely suspected by farmers, it's important to point out that corn borer outbreaks also happened when moldboard plowing was the rule. Many other aspects of corn production (for example, fertility and weed management) have also changed, but don't appear related to increasing severity of outbreaks.

"Besides corn production practices, the corn borer population itself may be changing as new forms, or biotypes, invade and the borer adapts to Minnesota conditions," says Ostlie. "At least two forms currently occur in Minnesota, a single generation biotype and a multiple generation biotype. The multiple generation biotype usually has two generations per year in southern Minnesota.

"In 1995, conditions were warm enough to produce a suicidal third flight of moths from the multiple generation biotype. Adult moths of these biotypes emerge at slightly different times, which creates prolonged moth flights. Prolonged flights confound scouting efforts and make optimal timing of insecticide applications difficult."

# # #

GOPH,DTN,V2MN,V4MN,F4 NAGR5183

Source: Ken Ostlie (612) 624-9272
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE

UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

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December 27, 1995

Gray Leaf Spot Can Cut Corn Yields

Gray leaf spot is a corn disease that could cut yields in some Minnesota fields in 1996, especially in continuous corn planted in low-lying areas. Tillage, crop rotation, and resistant hybrids are weapons against the disease, says Ward Stienstra, plant pathologist with the University of Minnesota's Extension Service.

"Gray leaf spot, also called Cercospora leaf spot, was reported in much more of Minnesota in 1995 than before," says Stienstra. "This southeastern corn belt disease was seldom seen in Minnesota until 1993 and 1994. At least three independent isolations of the fungus in 1995 and multiple reports of the problem from a much wider area indicate this disease is now established in Minnesota."

Stienstra says the disease overwinters in corn leaf and stalk debris. Fungal activity begins with spring warm weather or later periods of high humidity or frequent rains.

"In 1995 the symptoms developed late in the season and apparently didn't reduce yields," says Stienstra. "But the disease can infect plants early, any time from the four-leaf stage until maturity. Spots begin on the lower plant leaves and progress up the plant. The symptoms are different from most leaf spots seen in Minnesota in that the leaf veins limit the spot, giving it a square or rectangular, rather than rounded, look. The parallel sides or straight edges are common in most hybrids. Spots are tan to pale brown at first, but the lesion has a gray appearance when the leaf tissue dies.

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"Extensive blighting of leaves is followed by stalk breakage and increased lodging. If conditions are favorable, the disease can cause a yield loss of 5-15 bushels per acre."

Stienstra says gray leaf spot has a history of being more common and serious in fields of continuous corn, especially in no-till. Problem fields are often reported in river bottoms or low-lying areas where dew and fog provide the moisture needed for an epidemic.

"The history of this disease in Minnesota will be developed in the next few years," says Stienstra. "I expect it will follow the pattern reported, being more severe in the high-residue, continuous corn sites in low areas, but also appearing in additional no-till fields when the weather permits wind-blown spores to be dispersed. Tillage and rotating crops every year are control options. If these don't fit your situation, you must depend more on resistant hybrids."

Several hybrids that are popular in Minnesota don't have any significant resistance to gray leaf spot, says Stienstra. "If you produce continuous corn in reduced-till fields with a potential for long morning dews or fogs, it's a good idea to check the resistance of the hybrid you plan to grow," he points out. "Contact your county extension office if you have seen this problem."

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GOPH,DTN,V2MN,F4 NAGR5184

Source: Ward Stienstra (612) 625-6290
Editor: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu

NEWS INFORMATION

MINNESOTA EXTENSION SERVICE
UNIVERSITY OF MINNESOTA
405 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108-6068
FAX: (612) 625-2207
E-Mail: news@mes.umn.edu

December 29, 1995

S.M.A.R.T. Goals Help Farm Business Operators Measure Success

It's hard for a farm business operator to measure success without a target. Joe Conlin, dairy scientist with the University of Minnesota's Extension Service, recommends setting "S.M.A.R.T." goals. This means goals that are Specific, Measurable, Attainable, Relevant, and Time-dimensioned.

Conlin says goals should be written as specific actions, not just general statements or general feelings (specific). Goals should be written so than an event or happening tells you that the goal has been reached (measurable). Goals should be within your means; unrealistic goals can be a source of great frustration and discouragement (attainable). Goals should be written so that they have meaning to you (relevant). Goals should be written with specific time limits (time-dimensioned).

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GOPH,DTN,V2,A2,D1 NAGR5186

Source: Joe Conlin (612) 624-4995
Writer: Joseph Kurtz (612) 625-3168; pkurtz@mes.umn.edu