

UNIVERSITY OF MINNESOTA DOCUMENTS  
FEB 19 1997  
*Initiatives*



N E W S L E T T E R

Contents

1  
*Safety First  
Around Animals*

3  
*Beat the Mud*

4  
*What Does It Cost  
to Grow Alfalfa?*

5  
*It's a Dirty Job,  
but You've Got to  
Do It!*

6  
*Dairy Profile:  
Scherbrings'  
Heifer Hotel*

7  
*The Winning  
Edge: Treating  
Mastitis Without  
Drugs*

8  
*Managing the  
Herd Bull*

9  
*Beyond the  
Bottom Line: Risk  
Protection*

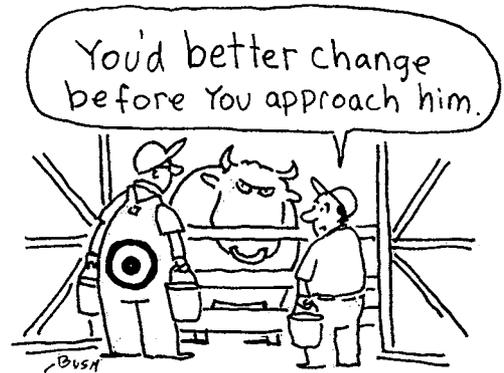
SEE INSERT FOR  
**Dairy  
Events  
Calendar**

# Safety First Around Farm Animals

**W**e hear a lot about farm accidents involved with machinery, but what about tangles with farm animals? In the past five years, at least eight people have died in Minnesota after encounters with farm animals. Many more have been seriously hurt with back problems, broken limbs, or internal injuries. Two-thirds of work-related injuries involving animals occur on dairy farms. Almost all of these injuries involve cattle, especially bulls. These farm animals have gored or crushed workers to death. All of these deaths and injuries probably could have been prevented by better understanding animal behavior or having proper animal handling facilities. People are typically impatient, hurried, angry, or preoccupied when these accidents happen.

## Understand Animal Behavior

Although animal-handling techniques are usually learned by watching others as we grow up on the farm, understanding animal behavior is one of the keys to avoiding these needless deaths or injuries. This is particularly important on dairy farms. "Large animals tend to cooperate better when they're handled with knowledge and skill," says



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Dennis Murphy, professor of agriculture engineering and farm safety specialist at Penn State. Cattle are color-blind and have poor depth perception. They are extremely sensitive to contrasts, such as being led from a dark barn into bright sunlight, and may react aggressively. Cattle are also easily frightened by noise. If they bolt to get away from strange noises, cows may crash into or through gates, walls, machinery, or people.

Cattle and horses also have panoramic vision and see everything around them, except what is im-

*Continued on page 2*

## Minnesota Dairy Development Guide

**If you've ever wondered about various business management concepts, financing, herd health, obtaining permits, or other issues related to your farm business but didn't know who to ask or where to start looking, the *Minnesota Dairy Development Guide* is for you! This new guide has a wide range of information to help you strengthen your operation. The cost is only \$25. Send your check to Dairy Initiatives, 1404 Gortner Ave, St. Paul, MN 55108.**

This archival publication may not reflect current scientific knowledge or recommendations.  
Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>.

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**Veterinarians attribute 75 percent of animal-related human injuries to a lack of sufficient restraining equipment and facilities on dairy farms.**  
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## Safety First

*Continued from page 1*

mediately behind their hindquarters. Approaching from the side or front will seem less threatening to these animals. Moreover, cows kick forward and out to the sides and have a tendency to kick toward sides with inflammations or pain. Therefore, cows being treated for mastitis should be approached from the side not infected.

Another behavioral trait in cattle is their territorial instincts. They have a strong sense of "homeland" in pens, corrals, and pastures. For example, cattle often create well-worn paths in pastures or between feed bunks and water troughs. Cattle may react unexpectedly if forced to move from these "homelands."

Cattle are herd animals and become very agitated when separated from their herd. Cattle that are isolated may cause serious injury to workers, to themselves, or to gates. If possible, place a second animal in the pen with the first one, or position isolation pens near other pens.

When moving animals, prepare equipment and facilities to ensure safety for handlers and animals alike. Each time an animal refuses to enter an area, it will become more and more excited and dangerous. Moving animals without proper preparation often ends up in battles between handler and animal. Make sure to plan ahead for extra time and stay calm when moving animals.

### Maintain Safe Facilities

The next step after understanding animal behavior is to make sure your facilities are in good shape for handling your cattle. Good facilities allow you a safe environment to control animals and perform routine chores. Provide adequate lighting and slip-resistant footing for both workers and cattle.

Veterinarians attribute 75 percent of animal-related human injuries to a lack of sufficient restraining equipment and facilities on dairy farms.

When looking at your facilities, ask yourself these questions:

- 1) Will it be safe for animal handlers?
- 2) Will it be safe for animals?
- 3) Will it accomplish the intended purpose?

Watch an animal in an open pen, corral, or pasture for the following kinds of warning behavior:

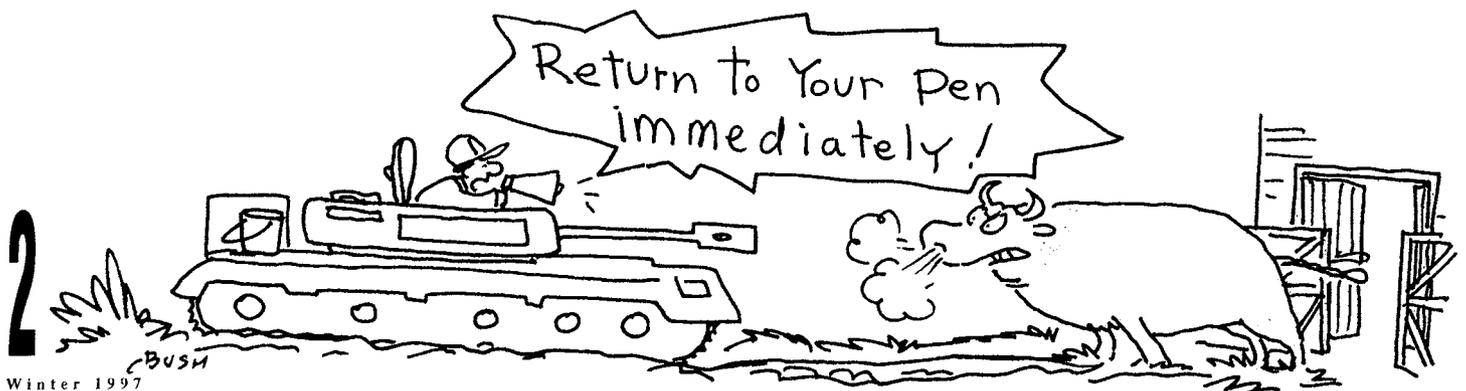
- Lowering its head in an aggressive manner (neck extended with forehead positioned nearly parallel to the ground)
- Pawing at the ground, rubbing its head and neck on the ground
- Butting, kicking, and crushing (cattle that are handled several times a day)

Bulls often pose the greatest risk of injury from farm animals. Mature bulls may weigh more than 2,000 pounds, and you must be even more careful around them than other farm animals. Bulls also exhibit more spectacular behavior than cows. They will dig soil with their forefeet, throw dirt over their backs, bellow repeatedly, and carve ruts into the ground with their horns.

Remember these things about bulls:

- Bulls of any age can be dangerous.
- Never underestimate a bull's strength
- Use extreme caution if a bull is near cows or heifers
- Never turn your back on a bull; always have an escape route planned
- Get rid of a bull if it displays aggression; mean streaks won't go away
- Hang a short chain from a nose ring to aid in catching a bull

While it is important to realize that all large animals are unpredictable and can be dangerous, and to understand animal behavior and have proper facilities, the best thing dairy farmers can do is exercise common sense in handling their cattle. 🐄



# Beat the Mud

*You, too, can be a member of the Clean Cow Club*

**S**pring may turn a young man's fancy to thoughts of love, but for too many dairy farmers it's more likely thoughts of a herd that looks like it has been wading through melted Hershey bars.

How can you keep your cows cleaner when the frost goes out? Extension engineer Kevin Janni offers seven suggestions for reducing the muddy milk cow look—two that will help this year, and five others you can work on over the summer to help head off problems next year:

- **Remove Deep Snow.** A foot of snow is the equivalent of one to two inches of water just waiting to make mud. If you get a big snowfall or develop a large drift in the cow yard, plow or scrape it off to the side. This will reduce the snowmelt come spring.
- **Pile Snow Strategically.** When you do move snow around the farmstead, think about where you put it. Locate piles so the snowmelt they produce will drain away from the lot rather than through it.
- **Divert Drainage.** Take a good look at the overall farmstead drainage pattern in the vicinity of the cow yard. If other parts of your property drain through the cow yard, invest some time this summer in regrading the slope or adding shallow diversion ditches so that runoff water flows around the cow yard.
- **Manage Roof Runoff.** On many farms, water runs off the barn roof into the cow lot. A shallow trench or ditch beneath the overhang can help direct this water out of the yard. Better yet, install gutters and downspouts that empty away from the cows.
- **Add a Pad.** A concrete pad along feed bunks and around waterers can help keep eating and drinking cows high and dry. Pour pads 10 to 12 feet wide for best results.
- **Raise Your Grade.** Another long-term solution is to grade your cow yard to provide continuous drainage away from the animals. A 4 percent to 6 percent slope is recommended.
- **Make Mounds.** Mounds of earth 5 to 6 feet high with a 16 to 20 percent slope are used in beef feedlots to help keep animals dry. If you decide to build mounds, it's a good idea to stabilize them by adding bedding or disking in barn lime at a rate of one pound per square foot on top of the mounds.

*Interested in learning more? Ask your county extension educator for help in finding additional information on improving drainage and reducing mud problems in the Midwest Planning Service Handbooks (MWPS-6 and MWPS-9). 🐄*



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## More Than Good Looks

**DON'T CARE TOO much how pretty your cows look? It's still worth your while to minimize water in your cow yard, says extension engineer Kevin Janni. Mud also makes it hard for cows to move around, increases the risk of profit-draining mastitis, and makes milking messier and more complicated for you.**



## What Does It Cost to Grow Alfalfa?

*If current forage prices make you shudder, consider this sobering thought: without even knowing it, you might be paying almost as much to make your own*

**W**ould you like to routinely produce hay at costs of more than \$100 a ton? Probably not. But that's what many mid-western producers are "paying" to produce alfalfa on their own farms—even in years of low hay prices, says University of Wisconsin forage agronomist Dan Undersander.

Speculating that today's high costs of buildings and machinery may be wreaking havoc on the profitability of operations that depend on them, Undersander did enterprise analyses for alfalfa production on approximately 50 farms between 1993 and 1995. He found that when inputs such as taxes, insurance, and depreciation are factored in, the cost

### Quality Considerations

**ARE YOU AFRAID** to hire a custom forage harvester because you've heard quality suffers? According to Wisconsin agronomist Dan Undersander, your fears are probably unfounded.

Undersander says that in many cases forage quality is actually better with custom harvesting. That's because custom harvesters don't have to fit the job around other farm chores like you do. They can do the job quickly, reducing on-the-ground loss and increasing the proportion harvested at the peak quality. Bonus: quick harvesting also means more uniform forage quality, making ration balancing easier and more accurate.

of producing hay can become unreasonably high, especially for farmers who harvest less than 130 acres of forage.

What to do about it? Undersander suggests the following moves for improving profitability in forage harvesting:

- **Maximize your yield.** Under today's economic conditions, the increased cost of pursuing higher yields is outweighed by the payoff in more alfalfa. In other words, it's worth the added cost to use better seed, optimize your fertilizer use, and make other changes that increase your per-acre yield.

- **Harvest more acres.** You can also reduce per-acre costs by spreading your

overhead costs across a larger number of acres. You can do this by increasing your farm size or by sharing harvesting equipment with neighbors. Even though maintenance costs may increase as you use equipment more, it's still a good deal.

- **Decrease overhead.** But what if you're not interested in producing more alfalfa or sharing equipment? Then decrease your overhead instead. This could mean selling equipment, dropping to a single harvesting system (i.e., make hay or haylage but not both), using a custom harvester, buying hay, or grazing. 🐄

# It's a Dirty Job, but You've Got to Do It!

**M**anure management is not the most glamorous part of a dairy operation. It is, however, one of the most necessary, especially these days with increasing emphasis on environmentally friendly practices. If you're planning an expansion, or just looking to revamp your existing manure management system, it will be helpful to take a look at some alternative waste management options.

Keep in mind that there is no "right" way for the entire industry, but that different systems work better for different dairy operations. It is possible for each dairy operation to have a system that fits its needs and protects the environment. In choosing and designing your waste management system, it is important to commit to pollution prevention, document this commitment, and follow through on this commitment.

## **Commit to Pollution Prevention— Choose Bedding**

Committing to pollution prevention starts with deciding which type of bedding to use for your cattle. Your choice should be based on cow health, bedding availability, and personal preference. Which type of bedding would work best with the system you had in mind? Many manure-handling options don't work with sand or long straw.

## **Know the Laws**

You also need to check out the many state, county, and township regulations dealing with waste handling. These laws may restrict manure application times to certain months of the year or limit the type of storage facility you may build. Being aware of these limitations will help in putting your ideas down on paper. If you don't know who to contact to find out about regulations affecting you, call the Minnesota Department of Agriculture's agricultural development specialist toll-free at 800/967-2474.

## **Write It Down—Know Where You're Going**

In documenting your commitment to pollution prevention, it is important to write down all of the facts, plans, and farm requirements. This needs to be done so that employees are properly trained on and aware of basic pollution control issues and how the new system works. Likewise, many of these details are required if you need to apply for a permit through the National Pollution Discharge Elimination System (NPDES). Perhaps most importantly,

these written documents will show a "good faith" plan if you are ever a defendant in a lawsuit over water pollution or a manure spill. But the best way to avoid being in this situation is to follow through on these careful plans.

## **Follow Through**

Carrying through on your commitment to prevent pollution is the final step to implementing a new manure management system. Too many farm operations show good intentions of responsibly handling their new facilities, but don't follow through because they never allow time or resources for managing the system.

Keep in mind that certain systems won't work as well as others in some areas. For example, a flushing system requires no extra labor, but may freeze up in the harsh Minnesota winters. A grazing system requires hardly any handling costs during the grazing season, but will need equipment similar to that of a regular 12-month system during late fall, winter, and early spring.

Furthermore, be aware that a manure storage facility is only as good as its design and construction. It is essential to check references on contractors and not just consider the lowest bidder. Extra money spent at the onset can save you money in the long run with better quality construction. Besides this, farmers need to be involved in these projects by knowing laws and regulations and watching over the construction phase.

By paying close attention to these details, committing to and documenting pollution prevention, and following through with your plans, you will be able to design a manure management system that is right for you and your dairy operation as well as right for the environment. 🐄

*Exploring  
alternative  
waste  
management  
systems*



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**PROFILE**



# Scherbrings' Heifer Hotel

By **DAVID WEINAND**  
Dairy Initiatives coordinator

**FARM FACTS:** Ron and Marianne Scherbring live and work near Minnesota City on a former third generation, 90-cow dairy farm they converted into a 600-plus head custom heifer-raising business.

The Scherbrings had facilities that were in good condition and wanted to continue to be a part of the dairy industry. So 2-1/2 years ago they started to raise heifers and steers. They began by raising heifer calves for dairy farmers in the area and their business has continued to grow ever since. They raise heifers from birth to 600 pounds. Then another custom raiser raises them until they are ready to calve or the owners take them back. The farm's 390 acres (257 tillable) supply most of the feed required to raise the heifers.

The Scherbrings have a true business partnership. Ron works more closely with the animals and manages two full-time employees. Marianne, more detail-oriented, keeps the records and organizes business activities. Ron says that Marianne's style and approach works well when she picks up calves from the farms and helps keep lines of communication open between the farms and their business. "It is the little things that make a big difference," he says.

**RECENT MOVES:** The Scherbrings remodeled their older facilities into housing for groups of heifers. "Take time to realize the resources you have . . . and seek outside help," Ron says. "This business is a continuous learning process." They are continually looking for ways to improve.

Shortly after getting started in the custom heifer raising business, Ron and Marianne built a greenhouse to house newborn calves. After more



Ron and Marianne Scherbring are committed to maximizing the performance of animals in their custom heifer-raising operation.

David Weinand

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**A business plan will help to define the reasons for your structure, profit, and services you will provide.**

.....

than a year with the first greenhouse, they built a second one this summer. The ventilation in the greenhouses is controlled by raising and lowering curtains. Individual stalls inside the greenhouses allow them to give young calves the individual attention they need.

The Scherbrings are committed to maximizing the performance of the animals they raise. "Take time to watch the animals and know what they are doing," Ron says. Water intake is very important and they clean and bed the animals every five days in the dry lots and clean the freestalls daily. It is more than just the looks of the animal, it is performance, too, Ron says. He explains that by continuously upgrading the health of the animal, you upgrade the performance and increase the level of excellence. He calculates that simply by offering new hay to the calves daily he increases gain by 0.1 pounds per day for a 30-pound improved animal performance over 300 days.

Ron added that the level of management is different from when they were milking because the cycle time is shorter, so he is better able to recognize a problem such as scours. Instead of only see-

*Continued on page 7*

## MINNESOTA DAIRY LEADERS ROUNDTABLE

In 1992, dairy farmers, and CEOs of 32 dairy related businesses and organizations made a formal commitment to revitalize Minnesota's dairy industry by forming a structure to unite their effort. That structure is the Dairy Leaders Roundtable. This newsletter highlights Roundtable accomplishments as well as on-going projects and plans.



### Dairy leaders focus on 'building the dairy industry through cooperation'

On the threshold of its fifth anniversary, participants attending the Winter meeting of the Dairy Leaders Roundtable were welcomed by Don Otterby, head of the department of Animal Science, University of Minnesota. Otterby urged the group to celebrate its successes, but remain focused on efforts to continue to build the dairy industry through cooperation.

Cooperation became the theme of the meeting as one dairy industry representative after another spoke to a wide ranging number of initiatives that are now in place to stimulate growth, development and awareness throughout the industry.

Tom Cochran, Minnesota Agri-Growth Council, made note of Governor Carlson's Agricultural Summit in early December and said, "the interest and enthusiasm expressed by the Governor indicates to us that we can count on his support when we come together as a group -- agribusinesses, agricultural organizations, the

Department of Ag and the University of Minnesota."

At the Summit meeting Governor Carlson noted that agriculture was a key asset for the state and that to win in the international marketplace "we need to learn how to capitalize on this asset." Carlson said he

would make technology and exports a major focus on his administration and he would work to develop appropriate state policy that would help agriculture competitor the world's dollars.

Carlson also noted his strong support for uniform laws and regulations to avoid a patchwork of rules governing the state's agricultural industry.

#### PROPOSAL TO CREATE UPPER MIDWEST DAIRY CONSORTIUM

The Roundtable's Legislative Coalition has proposed the development of a new alliance that would link Minnesota, Iowa, North Dakota, South Dakota and Wisconsin in a joint effort to maintain and promote the Upper Midwest dairy industry through public and private support of dairy education, research and development strategies.

Gerber said the proposal is built on the belief that the challenges and opportunities facing Minnesota's dairy industry are common to the surrounding states, as well. "We have talked about moving beyond the narrow thinking that limits us to what is occurring in Minnesota," said Gerber. "This initial draft of a legislative proposal would be a step in that direction."

States would be asked to pass the enabling legislation (in 1998) to permit partnership efforts across state lines and public / private matching funds.

Dairy leaders participating in the Winter meeting of the Roundtable indicated broad support for a regional effort.

State legislators attending the meeting, including Ken Otremba, Howard Swenson and Steve Dille, spoke out forcefully about the need for a clear proposal for funding the Roundtable and statewide dairy initiatives during 1997.

Senator Dille recommended the Roundtable be more aggressive in its request for assistance for the dairy industry. Following discussion at the Winter Roundtable meeting, dairy leaders agreed to ask the legislature for \$3.6 million to establish the Dairy Development Fund, to enhance and create programs that directly benefit producers.

## Tri-state dairy initiative produces video to promote development

**N**orth Dakota Dairy Commissioner, Bob Dykshoorn expressed serious concern about the future of the dairy industry in his state and indicated his strong support for a three-state initiative (MN, ND and SD) to strengthen the industry. "We can learn a lot from the Minnesota Dairy Leaders Roundtable," he told participants at group's Winter meeting. "We have watched what you've been doing and we appreciate what you have been able to accomplish," he said.

Dykshoorn said the three states face a very similar set of challenges to their dairy industry and that by working in cooperation more could be done to take advantage of the region's agricultural assets and strong infrastructure. "If you're going to milk cows, this is the place to do it," he commented.

Dairy leaders viewed a video presentation introduced by Mark Helling, Otter Tail Power, who said, "Dairying means jobs and dairying means creation of wealth -- that's why dairying is important to our region." The 10+ minute video will be used in communities throughout the region to promote understanding and cooperative efforts to stimulate dairying as a community economic development tool. The video is available through the Minnesota Department of Agriculture.

## Dairy Development Guide Available

**A** 220-page guide for producers considering expansion and/or modernization of their dairy facilities has been produced with the assistance of the Dairy Leaders Roundtable.

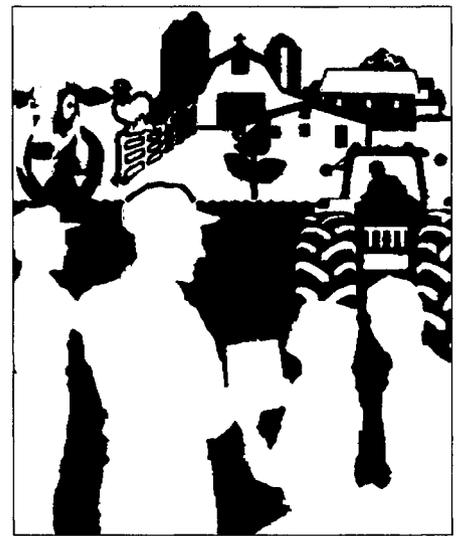
According to Dave Kjome, dairy specialist, the guide is a resource for producers interested in details of the planning process for an expansion including information about facility financing and other facets of a modernization.

Further information about the guide is available by calling the Dairy Initiatives office, 612-625-9757. Cost of the guide is \$25.

## New video promotes dairy advisory team concepts

**A** new video that promotes the team approach to helping producers develop "a stronger dairy operation and achieve their success goals," was previewed by individuals attending the Winter meeting of the Roundtable. Introduced by Vern Oraskovich, the video illustrates the value of using a diagnostic team approach. This concept has been very successful in raising producer profitability and keeping producers on the farm," said Oraskovich.

The video, funded by the Roundtable, will be available through the Dairy Initiatives office and through the Extension Service and will be used at a variety of dairy meetings.



## Dairy Farm Advisory Teams offering services to producers

**I**n 1996 the Minnesota Legislature contributed to the funding of a Dairy Farm Advisory Team project. As conceived and implemented, this program which is underway in Carver, Becker and Otter Tail counties and other areas, is designed to plan a more profitable future of dairy producers through teamwork with agricultural professionals.

Reporting on the program at the recent Roundtable meeting were Gerald Steuernagel, University of Minnesota and David Wesen, Carver County Extension. The primary objective for the project is to increase the number of Minnesota dairy producers receiving one-on-one advice from a local team of agribusiness professionals.

A first step in the program is to develop and train local dairy farm advisory team members using a standardized process. Following this, the team will be available to work directly with interested producers. Additional goals of the program will be to identify and seek community and industry support and to create a

self-sustaining service that is available to producers following the programs introductory year.

The first year cost of the program to the producer is \$500. According to Steuernagel and Wesen this is about one-third of the actual cost -- the remainder being funded by the grant from the Minnesota Legislature.

Producers participating in the program receive:

- A complete analysis of their dairy operation by the advisory team
- Financial assistance for services, education, or other expenses as recommended by the advisory team
- Help in setting goals -- and creation of a goal monitoring system
- Follow-up visits and written reports by the advisory team coordinator.

To qualify, a producer must plan to be in business for at least five more years; be willing to make management changes based on team recommendations; be enrolled in a farm business management program (such as FINPACK) and in a production management program (such as DHIA).

## DHIA shows gains

In a report presented to the Roundtable, John Halverson the DHIA effort to increase the number of herds on test had shown gains during 1996. At the end of November nearly 4,900 of the state's 10,600 dairy herds were using DHIA. These herds represent more than 320,000 cows or 54 percent of the state's total.

## Developing an Upper Midwest dairy education and research facility

In a far reaching cooperative effort, the land grant universities in Minnesota and Wisconsin, and other Upper Midwest states are discussing the development of a large scale (1,000 cows) Upper Midwest dairy research and education facility at Marshfield, Wis.

The discussions, according to Don Otterby, University of Minnesota, are proceeding very well. If the regionalization effort is successful it may result, said Otterby, in the repositioning of some existing dairy facilities being used by the universities.

## SURVEY RESULTS SHOW GROWTH EXPECTATIONS FOR TRI-STATE REGION

Results of a dairy plant survey, conducted by the Minnesota, North Dakota and South Dakota department's of agriculture, indicate there are expansion/modernization plans for a majority of the region's facilities in spite of a continuing decline in milk production.

In presenting the survey results to the Dairy Leaders Roundtable, Dairy Development Specialist Harold Stanislawski said the anticipated growth in plant capacity and utilization that is revealed in the survey will require a raw milk supply "from beyond traditional sources or an increase in the number of dairy cows within this area."

Plants unable to secure to procure the raw milk needed to maintain acceptable levels of production may seek additional milk from outside the Upper Midwest. The survey report speculates the increase in distance of raw milk from the plant location "will increase procurement costs as well as transportation costs. This will, in turn, reduce any existing competitive advantage for tri-state region dairy plants."

Milk production in the tri-state region has declined nearly 14 percent between 1983 and 1995, while the number of cows has dropped 33 percent and the number of dairy farms has shrunk by 55 percent.

In the survey of dairy processing plants, questions were asked regarding milk volume and capacity, distance of farm milk supply from the facility and expansion/modernization plans.

The milk processing capacity in the tri-state region exceeds 43 million pounds of milk per day with individual plant capacity ranging from 4,500 pounds to 3.8 million pounds daily. On a daily basis, about 36 million pounds of milk are processed, representing an 84 percent utilization. Thirty seven plants reported getting at least a portion of the total milk processed from area producers. In addition, plants reported receipt of milk from other areas within and outside the Upper Midwest.

Stanislawski said the region must develop and maintain an adequate local supply of raw milk to retain and enhance the region's existing processing facilities. He believes this can be achieved by:

- developing and implementing programs to assist producers with expansion plans,
- attracting new producers to the tri-state region,
- using technology, improving farm management, reducing government regulations and/or implementing value-added marketing efforts.

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If you have questions about regulations, permits or other dairy development issues you can get advice toll-free from an Agriculture Development Specialist, Minnesota Department of Agriculture by calling

**1-800-967-AGRI (2474)**

# Calendar of Events

Educational opportunities open to all producers and other professionals in the dairy industry

## FEBRUARY

- 11 MN DHIA District 1 Meeting, Rushford, MN. Contact: MN DHIA 612-682-1091
- 11 4th Annual Meeting Minnesota Dairy Advisors, Best Western Victorian Inn, Hutchinson, MN. Contact: Brant Groen 320-235-5114 or Minnesota Dairy Advisors 320-259-6680
- 12 Dairy Management Workshops II, Melrose, MN. Contact: Jim Salfer, 320-255-6169
- 12 MN DHIA District 3 Meeting, Oronoco, MN. Contact: Minnesota DHIA, 612-682-1091
- 13 MN DHIA District 2 Meeting, Owatonna, MN. Contact: MN DHIA 612-682-1091
- 15 Red River Valley Dairy Days, Crookston, MN. Contact: George Marx 218-281-8606
- 17-19 National Mastitis Council Annual Meeting, Albuquerque, New Mexico. Contact: Anne Saeman 608-224-0622
- 18&25 Dairy Management Workshops I, Maple Lake VFW, Maple Lake, MN. Contact: Lee Raeth, 612-682-7394
- 18 MN DHIA District 7 Meeting, Glenwood, MN. Contact: MN DHIA 612-682-1091
- 19 MN DHIA District 8 Meeting, Freeport, MN. Contact: MN DHIA 612-682-1091
- 20 MN DHIA District 10 Meeting, Mahanomen, MN. Contact: MN DHIA 612-682-1091
- 27 SE Minnesota On-Farm Dairy Workshop #5: Mastitis & Milk Quality, Dee Bee Holsteins, Goodhue County. Contact: Neil Broadwater 507-457-6440

## PERSONNEL ISSUES TASKFORCE LOOKS AT LABOR NEEDS ON DAIRY FARMS

One of the newest Roundtable task forces is working to address the issues surrounding the need for additional hired labor on dairy farms. One key issue, identified by Jim Kelm, Red Wing Technical College, is the supply issue, "Where do you find qualified help?"

Kelm indicates the "dairy labor problem" is different depending on who you ask.

- Some producers are looking for help milking — the issue is supply and retention,
- Some producers may have questions about training and compensation for hired help, and
- Some producers want information about managing their hired help.

"There is no quick fix to the dairy labor issue," says Kelm and the taskforce will be exploring a variety of options and approaches to the issues involved.

## MARCH

- 3-7 Four-State Dairy Management Seminars, Breeze, IL; St. Cloud, MN; LaCrosse, WI; Fond Du Lac, WI; Dubuque, IA. Contact Jeff Reneau 612-624-9791
- 5 Dairy Management Workshops I, Maple Lake VFW, Maple Lake, MN. Contact: Lee Raeth, 612-682-7394
- 10 Dairy Leaders Round Table Meeting, Sheraton Midway. Contact: Ed Frederick, 507-835-3422
- 17-19 Midwest Animal Science Meetings, Des Moines, IA. Contact: Jim Linn 612-624-6789
- 18 MN DHIA Annual Meeting, St. Cloud, MN. Contact: MN DHIA 612-682-1091
- 19-20 Four-State Dairy Science Meetings, Des Moines, IA. Contact: Jim Linn 612-624-6789
- 20 SE Minnesota On-Farm Dairy Workshop #6: Bunker to Bunk Forage Management, Quarry Hill Dairy Farm, Winona County. Contact: Neil Broadwater 507-457-6440
- 25 Dairy Expo, Waconia, MN. Contact: Vern Oraskovich, 612-422-4496

## MAY

- 20-22 Minnesota Dairy Health Conference, Earle Brown Center, U of M, St. Paul Campus. Contact: Charles Casey 612-624-1711

## JUNE

- 24-26 Dairy Tour, Minnesota and South Dakota. Contact: Lee Raeth 612-682-7394

## AUGUST

- 5 & 6 Four-State Nutrition Conference (location to be announced). Contact: Randy Shaver 608-263-3491

Any changes to the Minnesota Dairy Calendar may be directed to:  
Dave Weinand, Dairy Initiatives, U of M,  
122 Peters Hall, St. Paul, MN 55108

## MINNESOTA DAIRY LEADERS ROUNDTABLE

MISSION: "To develop and implement a shared vision of the Minnesota dairy sector through strengthening its competitiveness, profitability and social vitality."

### 1996 STEERING COMMITTEE:

- Pat Irrthum, *Women Involved in Farm Economics (WIFE)*  
Dennis Hovelson, *Minnesota Veterinary Medical Association*  
Bill Dropik, *Minnesota Milk Producers Association*  
Mark Furth, *Associated Milk Producers, Inc.*  
Paul Kent, *Land O'Lakes, Inc.*  
Don Otterby, *University of Minnesota*  
David Peterson, *First District Association*  
Gene Hugoson, *Minnesota Department of Agriculture*  
Vern Smith, *Minnesota Bankers Association*  
Ed Frederick, MDLR facilitator, Southern Experiment Station Annex,  
12298 350th Ave. Waseca, MN 56093-5160



## Heifer Hotel

Continued from page 6

ing one to two sick calves a year he may see a case every month and is more able to recognize the problem and remember how to react to it.

**FUTURE PLANS:** Being very customer driven is what the Scherbrings' business is all about, and their plans for the future reinforce that. They plan first of all to, in Ron's words, "run a healthy, strong business"; if it makes good business sense to raise more animals, they will.

The Scherbrings are taking on challenges that go along with some growing dairies. Animal waste is a critical issue. They are working very aggressively, using the MAP (Manure Application Plan) program, to match animal waste with crop needs. Odor is also a concern, and they are working with Larry Jacobson of the University of Minnesota to address this issue. They want to be environmentally friendly and plan to develop their pastures into wildlife habitat. They are working with the Minnesota Department of Natural Resources to plant prairie grasses. They believe that this can be another use and demonstrate that being proactive and developing their land by working with others for mutual benefit will help to decrease the amount of mandating needed.

**ADVICE:** Ron recommends that if you're considering custom heifer-raising, you develop a business plan. A business plan will help to define the reasons for your structure, profit, and services you will provide.

Surround yourself with talent. Extension educators, lenders, and other ag advisors can help make your goals into reality while keeping your ideas realistic. The Scherbrings work with an advisory team. As Ron points out, there are individuals who can find the answers for you, but you have to allow them to do that for you.

Finally, market your services on an individual basis. Whatever you can do to help the producers is critical, Ron says—after all, they are the ones who write the checks. It is also important to get your business rolling, then work to improve marginal items so that your business begins to flow.

For those considering having their heifers custom raised, Ron recommends having written performance guidelines. This will help both parties understand expectations. Keeping open lines of communication is also important. 

## Treating Mastitis Without Drugs

Is antibiotic treatment a "must-do" for mastitis? Not always.

According to extension veterinarian Ralph Farnsworth, infections caused by gram-negative bacteria—perhaps one-fourth to one-half of all mastitis cases—often clear up on their own. In such cases you can skip the antibiotic, saving money, reducing time off line, and decreasing the likelihood of residue problems.

But how do you tell if the mastitis is caused by gram-negative bacteria? One way is to send a milk sample out for a lab test. Another is to use a new on-farm test called Hy-Mast.

Marketed by Pharmacia and Upjohn Animal Health, the Hy-Mast test lets you know in 8 to 36 hours whether gram-negative bacteria are the culprits. If they are, you can try to resolve the problem without antibiotics by giving fluids and anti-inflammatory agents and milking out the cow.

Farnsworth cautions that not all cases of gram-negative mastitis will clear up on their own, and that the Hy-Mast test may not always give easily interpreted results. As with any treatment decision, work with your veterinarian to make sure you do what's right for your herd. 



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# Managing the Herd Bull

—JERRY OLSON, extension veterinarian

In the 40 years since artificial insemination first became widely available to dairy herds, the practice of keeping a bull on the farm has largely joined milking-by-hand and plowing with draft horses as symbols of a bygone era. Still, today there are some producers who choose to keep bulls. If you are one of them, it's important to recognize that the use of natural service sires is not an excuse for no management. It simply requires different management and a different allocation of resources.

Bulls can be used either as the reproductive program (natural service) or as clean-up sires in an AI program to reduce the risk of having to cull a cow for either being open or having a pregnancy that is not far enough along to justify keeping her through an extended dry period. (The cost of a culling a cow is as high as \$1,000 per animal.)

Following are some guidelines for using natural service sires.

- **Safety First.** Dairy bulls can be dangerous and should always be respected. All dairy bulls should have a ring in their nose with a short piece of chain attached. The chain makes it hard for the bull to attack with his head down without first stepping on his chain. The chain is also a potential handle should the bull attack. Sell the bull for slaughter at the first sign of aggressive behavior or lack of avoidance. Do not keep a bull beyond 2 to 2-1/2 years of age.

- **Choose Carefully.** Since most dairy-breed heifer calves sired by natural service sires become replacement heifers, consider the genetic merit of the



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## To Bull or Not to Bull?

DAIRY PRODUCERS WHO keep a bull on the farm do so for a variety of reasons—to cut down on work, to improve pregnancy rates, to salvage cows that are not getting pregnant with AI. But Joe Conlin, extension dairy specialist, says these are rarely good enough to outweigh the disadvantages and risks. Studies show natural service has no advantage over a well-managed AI program when it comes to detecting heat or reducing calving intervals and days open.

According to Conlin, natural service drastically slows the genetic improvement that is so critical to the advancement of dairy production and profit. Bulls are a hefty risk—17 Minnesotans have died since 1980 as a result of keeping bulls on the farm. They also introduce the potential for reproductive diseases and are not as cost-effective as a person might think, once the expense of housing and feeding a bull is factored in.

But extension veterinarian Jerry Olson disagrees, suggesting that poor performance in natural service herds is more a mark of poor management than of underlying flaws in the system.

"The use of natural service sires is not an excuse or substitution for poor management," he says. "Natural service management has frequently gotten a bad image because marginal managers have gone from AI to natural service to solve herd reproductive problems and have poorly managed natural service as well. The management of natural service herds needs to be as intense as AI herds."

Where does that leave you, the producer? Weighing the pros and cons of AI, natural service, or a combination, and deciding what's best for your unique circumstances. And, perhaps most important, making sure that good management is a priority whichever option you choose.

sire. Choose sires that are sired by AI bulls, ranking them by averaging the PTAs of the dam and the sire for the desired trait. Go for the bull with the highest estimated breeding value. If you use beef bulls, select breeds that promote calving ease.

Ideally, bulls should pass a breeding soundness evaluation. At the very least, have your veterinarian check the testicles and seminal vesicles for reproductive soundness.

• **Manage the Bulls.** Dairy bulls should be 14 to 16 months old when first turned in with cows. Since young bulls have limited sperm reserves, keep the bull-to-cow ratio at 1 per 20 to 25 cows eligible to be bred. Do not use a bull more than a year.

• **Avoid Disease Problems.** To reduce the risk of introducing venereal diseases into your herd, don't bring a bull in that has been used in another herd. Vaccinate your cow herd for vibrio, a venereal disease, if you bring in cows of unknown origin. In particular, open cows from natural service herds may bring vibrio into a clean herd.

Bulls should be vaccinated for most of the infectious diseases that the cow herd is vaccinated for and should be vaccinated for vibrio. The exception is that you should not vaccinate bulls for Bang's disease (brucellosis) because they could spread a modified form of disease after receiving the vaccine.

• **Time Pregnancy Exams Right.** The main reason for the pregnancy exam in natural service settings is not to identify open cows but to accurately stage the duration of pregnancy so cows can be given an appropriate dry period. Keep accurate records so that cows are examined when they are less than 90 days pregnant. Otherwise, the veterinarian may not be able accurately stage the pregnancy.

• **Monitor Fertility.** Keep records that allow you to monitor the average interval from exposure to the bull to conception. This helps you assess the fertility of the bull. 🐄

## Beyond the Bottom Line: Risk Protection

*Being prepared for the "what ifs" is an important part of running a farm business*

Life is risky business, and life on a dairy farm probably more than most. Besides the threats you share with your city friends—car accidents, investment risk, and so on—you also have ones like crop loss and farm-related injuries to cope with. What's a person to do? You can't just hide in the back corner of the machine shed the rest of your life. But you can take positive steps to minimize the financial and other costs of the unexpected and unwanted cards life sometimes deals.

Extension farm management educator Jim Christensen offers the following checklist (pages 10 and 11) of the main risks you face as a dairy producer and things you can do to manage them. Put a check mark in the first box beside each suggestion you already have in place. Check the second box for those you'd like to explore.

*Continued on page 10*

## More than Insurance

WHEN WE HEAR the words "risk management," many of us think of insurance. But it's much more than that, cautions McLeod County extension educator Cindy Petersen—it's also doing what you can to minimize the likelihood that bad things will happen.

For instance, don't just buy health insurance; make sure family members eat right and exercise, too. Don't just hedge the market; educate yourself on how prices change with time and circumstance. Don't just buy vehicle insurance; check to see that your truck is in proper running order. Plant disease-resistant crops. Put a handrail on the back steps. Keep dogs that bite under control. Stop smoking.

In short, be an active member of the team that's working to protect your family and farm from the down side of life.



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## Risk Protection

Continued  
from page 9

### PRODUCTION RISK

*relates to your success in raising crops and livestock. To minimize production risk:*

HAVE DONE	WILL DO
--------------	------------

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Use advisors such as crop and livestock consultants and seed and feed company representatives |
| <input type="checkbox"/> | <input type="checkbox"/> | Join cooperative ventures so you can compete with larger-scale operations                     |
| <input type="checkbox"/> | <input type="checkbox"/> | Buy crop and hail insurance   |
| <input type="checkbox"/> | <input type="checkbox"/> | Participate in government programs such as the seven-year transition payment crop program     |
| <input type="checkbox"/> | <input type="checkbox"/> | Use extension and other educational opportunities to stay informed                            |

### MARKET RISK

*is caused by changing prices for commodities you buy and sell. To reduce market risk:*

HAVE DONE	WILL DO
--------------	------------

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Lock in acceptable profits on the futures market for future production |
| <input type="checkbox"/> | <input type="checkbox"/> | Lock in feed prices during harvest lows                                |
| <input type="checkbox"/> | <input type="checkbox"/> | Use hedging and forward contracting to reduce risk                     |

### LEGAL RISK

*is the risk of being liable for damages to another. You can reduce your legal risk if you:*

HAVE DONE	WILL DO
--------------	------------

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Use business arrangements such as C or S corporations or limited liability partnerships                             |
| <input type="checkbox"/> | <input type="checkbox"/> | Carry \$1 million to \$3 million in umbrella liability insurance in case auto and farm liability reach their limits |
| <input type="checkbox"/> | <input type="checkbox"/> | Train employees in safety and environmental care  |

### DEATH RISK

*is related to the expense and reduced income involved in the loss of a life. To minimize the impact of death on your financial picture:*

HAVE DONE	WILL DO
--------------	------------

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Carry life insurance on yourself and your spouse to provide for the survivor and children (enough to cover your real estate debt) |
| <input type="checkbox"/> | <input type="checkbox"/> | Develop an estate plan that will cover debts, minimize tax, and ensure that the farm can carry on                                 |
| <input type="checkbox"/> | <input type="checkbox"/> | Ask a tax advisor to help you find out if you are fully covered for social security survivor benefits                             |
| <input type="checkbox"/> | <input type="checkbox"/> | Draw up a will and review it every three to five years  |

### DEBT RISK

*is the risk of not being able to repay money you borrow. You can reduce debt risk if you:*

HAVE DONE	WILL DO
--------------	------------

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Get advice from farm management associations and consultants  |
| <input type="checkbox"/> | <input type="checkbox"/> | Share machinery through joint ownership with other producers  |
| <input type="checkbox"/> | <input type="checkbox"/> | Periodically set goals, measure achievements, and redirect resources to the most profitable enterprises |
| <input type="checkbox"/> | <input type="checkbox"/> | Develop a business plan and discuss it with your lender   |

- Communicate often and well with your lender
- Liquidate unused assets, retire debt, and improve your working capital

**PROPERTY LOSS RISK**

*is the chance that you'll lose things you own through disaster, theft, or other means. To reduce this risk:*

- |                              |                            |   |
|------------------------------|----------------------------|---|
| <small>HAVE<br/>DONE</small> | <small>WILL<br/>DO</small> |   |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Review property and liability coverage annually with your insurance agent |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Update coverage as your operation changes                                 |

**HEALTH AND DISABILITY RISK**

*relate to loss of income if you are injured or sick and can't do your job. Ways to minimize this risk include:*

- |                              |                            |  |
|------------------------------|----------------------------|--|
| <small>HAVE<br/>DONE</small> | <small>WILL<br/>DO</small> |  |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Consider disability and accident insurance if you have a lot of debt   |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Ask your tax advisor to help you determine social security disability coverage for you and your spouse (spouses receiving commodity wages do not pay self-employment tax and generally are not covered for disability) |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Be sure you have major medical coverage  |

**RETIREMENT AND FARM TRANSFER RISK**

*is the uncertainty involved in leaving farming and passing the farm to someone else. To minimize this risk:*

- |                              |                            |  |
|------------------------------|----------------------------|--|
| <small>HAVE<br/>DONE</small> | <small>WILL<br/>DO</small> |  |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Work with a financial planner to develop a retirement savings plan   |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Find out how much risk your investment portfolio will stand (if you're 20 to 40 years old, you can afford more risk; if you are 55 to 60, move to more risk-free investments, even if return is lower) |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Develop a farm transfer plan that will meet both your needs and those of the incoming farmer   |
| <input type="checkbox"/>     | <input type="checkbox"/>   | Develop a "retirement from farming" plan to minimize income tax bite (strategically plan your grain, cow, building site, and machine sales; consider selling your farmstead on a contract for deed)    |

Does this seem overwhelming? If so, remember that you don't have to put these ideas all into place tomorrow. Rather, adopt them as you are able and as they make sense for your circumstances. Then

periodically reevaluate your situation to make sure you are adequately protected from risks as your circumstances change. 🐾

\*\*\*\*\*  
**Knock on Wood?**

**WHY DO PEOPLE avoid making risk management plans? Two common reasons are "It won't happen to me," and "If I think about it, it might."**

**It's a known fact that disaster has no special attraction for people who plan ahead. And it's equally well-known that those who do plan ahead are far better equipped to play the hand they're dealt.**

**Knock on wood if you have to, but take the time to imagine the worst things that could happen—and then protect yourself against the financial losses that might accompany them.**

\*\*\*\*\*

**Life insurance not only protects survivors from income loss, it also can help you manage your financial future. Consider, for example, the situation in which Mom and Dad plan to split their assets—including the farm—among the three kids when they die, but only the youngest son plans to keep on farming. One way he can make sure he has the money to buy out the other two when the time comes is to take out life insurance policies on his parents. The cash he receives upon their death can then be used to pay his siblings for their shares of the farm.**



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DAIRY

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