

Sustainable Agriculture

Volume 10, Issue 3 – March 2002

Strategic management important for both small, large farms

Strategic management is just as important for a one-family farm as it is for a larger farm with many employees.

"All farms can benefit from strategic thinking and management," says Kent Olson, farm management economist with the University of Minnesota Extension Service. "Much is written about strategic management for businesses, but very little is specifically targeted for farmers." Olson has just completed a 47-page paper, "A Strategic Management Primer for Farmers."

He uses a sports metaphor to illustrate: "Good team players read the playing field before deciding what to do during the game," Olson says in his paper. "They know their own strengths and weaknesses and those of their team members. They know where their team members are. They see where the ball is relative to the goal. And they see the opportunities and threats and move to the best position to help the team accomplish its goal."

"Former hockey star Wayne Gretzky summed it up very well," says Olson. "Gretzky said, 'I don't skate to where the puck is. I skate to where the puck will be,' in describing his strategy for hockey."

Within this sports metaphor, Olson says a farmer crafts a strategy by understanding the business environment, seeing where and what is happening, and looking for strengths and weaknesses in both his or her own farm and the competition. Then the farmer moves the farm to the best position to take advantage of opportunities, to protect the farm from threats and to help accomplish goals and objectives.

Crafting a strategy can help the farmer-manager focus on what is truly important when making decisions (even day-to-day decisions) that will affect the success and survival of the business. Olson says short-term opportunities such as a good deal on machinery or threats ("sign now or lose this chance") may create distractions.

"Short-term decisions may also lead to decisions that don't fit the chosen strategy, and may not contribute to long-run goals. However, short-term opportunities and threats should not be ignored completely," Olson says. "They may be a signal that the business environment has changed so a farm's strategy needs to change."

"Paying attention to short-term events is part of scanning the overall farm business environment," Olson says. You can find his paper at agecon.lib.umn.edu on the Internet. Or, ask a county office of the University of Minnesota Extension Service to download it for you.

Gestating sows in deep-litter group housing at Morris

The University of Minnesota's West Central Research and Outreach Center swine unit now has gestating sows in a deep-litter group housing system (gestation hoop).

The gestation hoop replaces the existing conventional confinement housing for our pregnant sows. The hoop will allow sows to be housed in groups of 15 on deep litter (60 sows in total). This housing system has perceived welfare benefits in terms of the ability for locomotory behaviors and social and physical interactions with other sows and the bedding (an enriched environment).

The welfare of gestating sows in confinement systems, in particular gestation stalls, is generating considerable interest from all realms of the pork industry. Deep-litter, group housing systems have been developed as an alternative to confinement stalls for gestating sows. These systems provide approximately 45 square feet of floor space per sow with a floor base of deep litter. There are individual feeding stalls and sows are housed in groups of 15 to 60.

These alternative systems are perceived as being welfare friendly. However, there is limited scientific literature on the welfare of sows in deep-litter, group housing systems versus confinement gestation stalls. Therefore, we plan to conduct controlled experiments comparing the welfare, reproductive performance and economics of gestating sows in deep-litter, group housing systems versus confinement gestation stalls and group pens.

We have received funding from the Minnesota Pork Producers Association (MPPA) for this research, which is to be conducted in collaboration with John Deen (director of the Swine Center, University of Minnesota) and Sam Baidoo (Southern Research and Outreach Center, University of Minnesota). This research will contribute to our knowledge on the welfare and performance of sows in deep-litter, group housing systems and conventional confinement systems.

We have been overwhelmed by the success of this alternative housing system for gestating sows. Management procedures such as feeding, checking pigs, heat checking and breeding have been successful and we have received many positive comments from the stock people working with the sows. I believe that deep-litter group housing systems for pregnant sows will be a viable alternative to conventional confinement housing systems.

If you would like further information on alternative swine housing systems please contact Rebecca Morrison at (320) 589-1711. --By Rebecca Morrison

Earthworms damage the soils in hardwood forests

Earthworms may perform magic in compacted garden and farm soils. However, University of Minnesota researchers say the worms harm the soils and ecosystem in hardwood forests.

Earthworms are especially hard on sugar maple forests, says Cindy Hale, a researcher with the U of M Department of Forest Resources. "Worms chomp and churn leaf litter so rapidly that soil life is altered, nutrient cycling is changed and erosion becomes a problem," Hale says.

The worms inhabiting our forests are exotic species--like zebra mussels and purple loosestrife. They arrived in Minnesota and throughout the Midwest in animal feed and vegetation that European immigrants brought with them. Native earthworms were presumably killed or pushed back during the

glacial period 10,000 years ago. The native worms were poor colonizers and never came back. As a result, all earthworms we know of today are of European origin.

The worms advance slowly--five to 10 meters per year. We unknowingly transport them with animal bedding and plant seedlings. "And anglers need to know that dumping unused worms at a boat landing after a fishing trip is no longer appropriate," Hale says. "Earthworm damage radiates out around lakes where unused worms have been released at favorite fishing spots."

With a seed money grant of \$11,750 from the Northeast Minnesota Sustainable Development Partnership, Hale created the Minnesota Worm Watch program. It's a statewide research effort to determine worm distribution and damage in forests and other natural habitats.

Kids love worms, so Hale is recruiting schools and environmental learning centers to collect the data. "We are pleased to be supporting this project," says Okey Ukaga, executive director of the Northeast Minnesota Sustainable Development Partnership. "It is an excellent example of an integrated application of research, education and outreach to address an important subject--earthworm invasion of our forest ecosystems." Ukaga is also an educator with the U of M Extension Service. More information is available at the Minnesota Worm Watch website at www.nrri.umn.edu/worm.

Living snow fences have advantages over slatted fences

Living snow fences (LSFs) offer a promising solution to problems caused from blowing snow, according to a new University of Minnesota publication.

LSFs--designed plantings of trees, shrubs or native grasses--have many advantages over wooden slatted fences, according to research by the Center for Integrated Natural Resources and Agricultural Management (CINRAM) at the U of M.

The living fences are often more cost effective than structural snow control methods. They're more attractive, provide wildlife cover and last longer than wooden structures. Once established, they require little maintenance for up to 50 years. "Experience and research have brought windbreak technology a long way in the past 30 years," the publication says. "Living snow fences can be made much more effective than in the past."

It's also possible to make some money by marketing the products from LSFs. Examples include a system with single rows of walnut and high-bush cranberry, and another system with single rows of hawthorn and chokecherry.

You'll find more details in "Producing Marketable Products From Living Snow Fences," available from county offices of the U of M Extension Service. Or, call (800) 876-8636 or (612) 624-4900 in the Twin Cities area and ask for publication number 07646.

New study: anti-corporate farming laws good for rural communities

Communities in states with anti-corporate laws fared better than communities in states without such laws, according to a new study by Rick Welsh of Clarkson University and Thomas Lyson of Cornell University. The study examined variables of rural community welfare in the 433 counties throughout the nation that met the definition of "agriculturally dependent counties," of which about two-thirds are located in states with anti-corporate farming laws.

The report uses three measures of community welfare--percent of families in poverty, percent unemployed and percent of farms in a county realizing cash gains. In all three measures, communities in states with anti-corporate laws benefited when compared to communities without such laws--lower poverty levels, lower unemployment and a higher percentage of farms reporting cash gains.

The report also says the data suggest that "rural communities tend to benefit from lower levels of agricultural industrialization but might fare poorly as agriculture industrialization intensifies and begins to dominate a county's agriculture." The report concludes "diversity in agricultural structural forms at the county level appears to have positive impacts on rural communities..."

More details are available in the February 2002 newsletter of the Center for Rural Affairs at www.cfra.org. Rick Welsh may be contacted at (315) 268-3988.

Midwest Food Alliance seeking farm evaluators

The Midwest Food Alliance (MWFA) is a seal of approval (eco-label) program that promotes sustainable agriculture in the Midwest by recognizing and rewarding farmers who produce food in environmentally and socially responsible ways. MWFA is currently seeking individuals interested in serving as MWFA farm evaluators. Evaluators visit farms throughout the Upper Midwest and using MWFA certification criteria, evaluate farms for the program. An evaluator training will be held this spring.

MWFA evaluators must have a combination of agricultural experience and education sufficient to guide their farm evaluations. Well-qualified MWFA evaluators would include current or former farmers, Extension agents and graduate students in agricultural studies. Evaluators must have strong verbal and written communication skills and be willing and able to travel.

If you're interested in being a MWFA farm evaluator, or would like to know more about the position or program, please contact MWFA Farm Coordinator, Ray Kirsch at (651) 653-0618 or rkirsch@landstewardshipproject.org.

Calendar of events, 2002

These events are sponsored by numerous organizations. More information is available on MISA's website: www.misa.umn.edu.

March 23. Annual meeting, South Central Chapter, SFA of Minnesota, Baptist Church, Clarks Grove. Contact Marlene Vogelsang (507) 256-4839 or Jim Tjepkema (507) 256-4876.

April 27. 112th Annual Reunion, School of Agriculture, University of Minnesota (SAUM), St. Paul Campus Student Center. Contact Karen King (612) 624-4285.

What we're about

This newsletter is supported by the Minnesota Institute for Sustainable Agriculture (MISA). It's also supported by the University of Minnesota Extension Service, the North Central Region Sustainable Agriculture Research and Education (NCRSARE) Professional Development Program (PDP), and the Minnesota Department of Agriculture (MDA). MISA is a partnership between the Sustainer's Coalition and the University of Minnesota College of Agricultural, Food, and Environmental Sciences (COAFES).

Send story ideas to the editor: Jack Sperbeck, 405 Coffey Hall, 1420 Eckles Ave., University of Minnesota, St. Paul, MN 55108, (612) 625-1794, fax (612) 625-2207, e-mail: sperb001@umn.edu. Other editorial board members: Helene Murray, (612) 625-0220, murra021@umn.edu; and Bill Wilcke, (612) 625-8205, wilck001@umn.edu. Please send address changes directly to: Bill Wilcke, Biosystems & Agricultural Engineering, 1390 Eckles Ave., St. Paul, MN 55108.

Also check MISA's home page at www.misa.umn.edu.

Our mission statement: **To help bring people together to influence the future of agriculture and rural communities to achieve socially, environmentally, and economically sustainable farms and communities.**

To stimulate thinking and discussion about sustainability, we try to present items that reflect different points of view. This being the case, we aren't promoting and don't necessarily agree with everything we publish.