

# *Sustainable Agriculture*

**Volume 10, Issue 9 – September 2002**

## **Making good fall tillage decisions can help reduce soil erosion**

Take advantage of the lull before fall harvest to plan for tillage operations this fall. For starters, be site selective with tillage, advises Gyles Randall, University of Minnesota soil scientist at the Southern Research and Outreach Center at Waseca. An example is avoiding tillage on more erosive parts of fields.

"We're actually seeing more aggressive tillage--leaving less surface residue--now than we did 10 years ago in many fields," Randall says. "Tillage equipment is being pulled deeper and faster, thus burying more residue, especially if there are disks on the implement."

A good place to start reducing tillage is on corn ground going to soybeans next year, Randall says. Soybeans can easily be no-till drilled or planted in wider rows into standing corn stalks. Fall tillage of soybean ground is not necessary unless you're incorporating manure or knifing in anhydrous ammonia; both practices do some tillage.

"We must remember that soil erosion does more than reduce the quality and productivity of soil," Randall says. "It also contributes significant sediment and phosphorus to surface waters, causing eutrophication and serious water quality concerns as well."

This is an excellent time to visit your NRCS office, become acquainted with conservation practices and seek technical and financial assistance supported by the Farm Bill. "It's not too early to start because the process may take time," Randall says.

Conservation practices that include grass waterways, buffer strips, and contour strips planted to grass perennials are excellent erosion control measures. Randall says they're even more effective when combined with reduced or no tillage on the more erodible portions of the landscape.

History tells us the productivity and quality of some of the finest and most productive soils in the world have been compromised greatly by soil erosion and passive concerns toward soil stewardship, Randall says. "It's time we take the consequences of erosion seriously," Randall says. "Otherwise, future generations will only be able to read historical accounts about the rich, highly productive soils we enjoy instead of experiencing them like we have."

Randall may be reached at (507) 835-3620, [grandall@soils.umn.edu](mailto:grandall@soils.umn.edu).

## **A new publication can help you make those tillage decisions**

A new publication from the University of Minnesota Extension Service and Minnesota Pollution Control Agency (MPCA) can help you make fall tillage decisions. Titled "Tillage Best Management Practices for Water Quality Protection in Southeastern Minnesota," it identifies key farm management practices to manage production risks with reduced tillage and no-till systems.

"Fall tillage time is coming fast, and now's a good time to get the publication and do some planning," says Tim Wagar, a crops and soils educator with the U of M Extension Service, Rochester district office. "The publication draws on over 18 years of University of Minnesota field trials to help evaluate how reduced tillage systems perform in different crop rotations and soils," Wagar says. You need an integrated system of reduced tillage and conservation structures for successful soil and water conservation, he adds.

You can see the publication at [www.extension.umn.edu/distribution/cropsystems/DC7694.html](http://www.extension.umn.edu/distribution/cropsystems/DC7694.html) on the Internet. You can also get copies for a nominal charge from the U of M Extension Service Distribution Center by calling (800) 876-8636. Ask for number 07694.

Or, order one from MPCA's southeast office at (507) 280-3592.

## **Family farming produces better socioeconomic conditions for children**

Both owner-operated farms and core industries such as advanced manufacturing and professional services produce positive living conditions for children in rural communities, according to a Missouri rural sociologist. David Peters, who works for the Missouri Department of Economic Development, recently completed a report that analyzed "children-at-risk" data for all rural counties in Iowa, Kansas and Missouri in 2000.

Peters says greater household incomes, farm proprietorships and employment in education, health, information and communication services resulted in better socioeconomic conditions for children. Conversely, greater employment in meat processing, transport and utilities, manufacturing, public administration, construction and industrial agriculture production resulted in worse socioeconomic conditions for children. (Public administration generally reflects employment in state and federal prisons, which are located in the study area).

In an earlier study that examined only Missouri, the higher the number of farmers in a county, the better the outcomes for children. Farming structure is a key in understanding rural development, Peters says. "There is something about farm proprietorships--farm businesses--that really affects the quality of life."

For a copy of the study, contact Peters at (573) 522-2791, or [dpeters@ded.state.mo.us](mailto:dpeters@ded.state.mo.us).

## **Sharing farm machinery can cut crop production costs**

Farm machinery costs make up 20 to 30 percent of the annual per acre cost of producing corn and soybeans on Minnesota farms. But spreading the ownership costs between two or more farms can reduce these costs, says Erlin Weness, former farm management educator with the University of Minnesota Extension Service. Weness says there are several ways to structure shared machinery agreements, including:

- Sole ownership with a custom agreement. One person owns the machine and is responsible for all ownership costs. The owner signs a custom farming agreement with another farmer for a set fee. The fee may or may not include fuel or labor. "This type of ownership keeps everything very simple," Weness says. "Everyone involved in the agreement knows what's expected."
- Purchasing machinery jointly by two or more farmers who wish to work together. If the machine is purchased 50-50, each party is responsible for making one-half of the interest and principal payments. A working bank account can be established to handle transactions, and each person pays an agreed amount into the account.
- Purchasing machinery jointly in the same percentage as acres farmed. If A has 750 acres and B has 250 acres, a 75-25 percent split of all ownership and operational costs is set up. But Weness says ownership adjustments will be required if either partner changes their acreage, which makes this a cumbersome ownership method.

"One key to successful joint ownership is for the partners to agree on when and how each piece of machinery will be used," Weness says. "Any type of agreement is possible, but it's important to determine up front who will use the machine first and how it will be shared through the season."

"Depending on weather conditions, machinery use decisions may have to be made on a day-to-day basis," Weness says. You and your partner must have the temperament to negotiate and work through these decisions.

Another key to success is to make an agreement as to how and when a machine is serviced, maintained and fueled. "Establish some rules of conduct up front," Weness says. Do you want the machine fueled, clean and in good repair when you receive it from your partner? Or is it okay to get it with mud on the tires, weeds hanging from it and with a vital part dragging on the ground. How about half eaten sandwiches, pop cans and junk in the cab?

"When looking for a potential joint owner, look for someone who has similar habits regarding machinery care and maintenance," Weness says. "You may also want to work with someone who has a similar work ethic and personality. If you and your partner have conflicting personalities, expect a short business relationship."

More detailed information is available in a new article Weness wrote titled "Sharing Farm Machinery." You can find it at [swroc.coafes.umn.edu](http://swroc.coafes.umn.edu) or at a county office of the U of M Extension Service.

### **Book on 'Getting Established in Farming' available from U of M**

"Getting Established in Farming" is the title of a book now available from the University of Minnesota. It's published by MidWest Plan Service and is part of a six-part series on "Business Management for Farmers."

The book focuses on the process of deciding whether to farm and how best to get started and established in farming. It emphasizes the decision-making process, and is designed for educators, lenders and consultants as well as those considering farming as a career.

The author of "Getting Established in Farming" and other volumes in the "Business Management for Farmers" series is Kenneth H. Thomas, a farm business management economist retired from the University of Minnesota Extension Service. The series is derived from the author's research and thinking about farm business management during a career that spanned more than 30 years.

The series was developed under the auspices of MidWest Plan Service, a cooperative research and Extension organization representing 12 Midwest land grant universities.

The cost of "Getting Established in Farming," NCR-610E, is \$8 per single copy, plus \$3.50 for shipping and handling and 75 cents sales tax for Minnesota residents. The total is \$12.25 for Minnesota residents and \$11.50 for those outside Minnesota. Quantity discounts are available.

To order this and other volumes in the "Business Management for Farmers" series, send a check for the appropriate amount to MWPS Orders, 219 Biosystems and Agricultural Engineering, University of Minnesota, 1390 Eckles Ave., St. Paul, MN 55108-6005. Orders can be made by e-mail at [mwps@gaia.bae.umn.edu](mailto:mwps@gaia.bae.umn.edu), from the web at [www.bae.umn.edu/extens/mwps](http://www.bae.umn.edu/extens/mwps) or by phone at (800) 322-8642 or (612) 625-9733.

## **Calendar of events, 2002**

These events are sponsored by numerous organizations. More information is available on MISA's website: [www.misa.umn.edu](http://www.misa.umn.edu).

Sept. 12. **50 Years of Weed Observations, Alternative Beef & Hog Production**, Richard and Sharon Thompson, Boone, Iowa, (612) 625-6224 or (877) 258-4647, [marti067@tc.umn.edu](mailto:marti067@tc.umn.edu).

Sept. 17-20. **Third National Small Farm Conference**, Albuquerque, N.M., (505) 852-2668 or [www.cahe.nmsu.edu/smallfarm](http://www.cahe.nmsu.edu/smallfarm).

Sept. 24-26. **Agricultural Enterprise Diversification Conference**, Sheridan, Wyo., [agdiversity.org](http://agdiversity.org), or Boyd Byelich at [byelich@lamar.colostate.edu](mailto:byelich@lamar.colostate.edu).

Sept. 28. **Country Living Field Day**, Carroll County, Ohio, (800) 448-8027.

Sept. 21. **Buckwheat Growers Assn. of Minnesota Open House at the Mill**, Tom Bilek (218) 445-5475 or [tombilek@wcta.net](mailto:tombilek@wcta.net).

Sept. 20-22. **Prairie Festival at the Land Institute**, Salina, Ka. (785) 823-5376 or [www.LandInstitute.org](http://www.LandInstitute.org).

Oct. 23-26. - **On The Road To Sustainable Agriculture: A Nation Conference with a Southern Perspective (USDA SARE Conference)**, Research Triangle Park, N.C., [www.griffin.peachnet.edu/sare](http://www.griffin.peachnet.edu/sare) or (919) 515-2261.

Oct. 31. **Grazing Workshop**, Brainerd, sponsored by USDA-NRCS, Mary Reetz (218) 829-3272.

## **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](mailto:sperb001@umn.edu). Other editorial board members: Helene Murray, (612) 625-0220, [murra021@umn.edu](mailto:murra021@umn.edu); and Bill Wilcke, (612) 625-8205, [wilck001@umn.edu](mailto: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](http://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.