

Buffalo County Pilots New Approach

A new program in Buffalo County is taking the direct route to get nutrient management information to farmers. Carl Duley, Buffalo County Agriculture Agent, and Paul Kivlin, NPM Northwest Regional Specialist, with the help of Brian Ristow, a UW-River Falls student intern, have teamed to provide on-farm manure spreader calibrations through the county Extension Office.

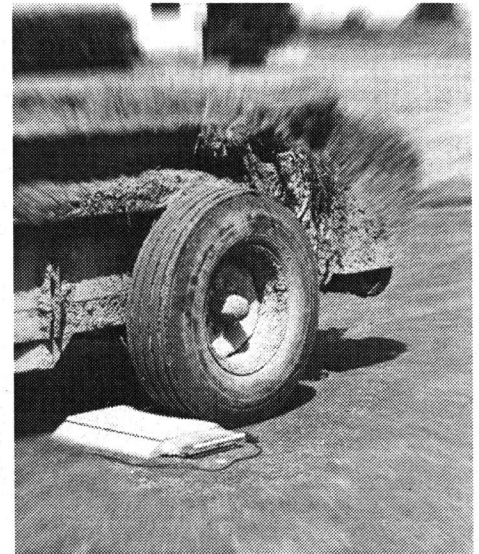
In February, Brian began calling farmers in the county and offering to weigh their manure-spreader loads using portable axle scales. When a farmer accepts the offer, Brian visits the farm and after finding the weight of a load of manure, he provides information on the fertilizer value of the manure.

While on the farm, Brian asks about nitrogen use on first year corn following alfalfa. If the farmer is using commercial nitrogen fertilizer on fields where legume and manure credits already exceed corn nitrogen needs, he asks the farmer to consider setting up a test plot on one of these fields to demonstrate that the

commercial fertilizer is not helping the crop. The field is split; one half receives the farmer's routine nitrogen application and the other does not. As of June, Brian has weighed spreaders on over 80 farms (about 8 % of the farms in Buffalo County) and set up seven of these test plots. On the test plot fields, he has taken soil samples for the farmer.

The biggest management change ... prompted by the project so far is that growers are cutting back on their starter fertilizer when they find out the fertilizer value of their manure applications.

"The project has been real well received by farmers in the county," says Carl. "So far it has shown that many farmers are doing a better job than they are sometimes given credit for - we haven't found that many people that are over-applying nitrogen." In fact, of the first 70 farmers visited, only about 20%



were applying commercial fertilizer nitrogen to first year corn. The biggest management change he sees prompted by the project so far is that growers are cutting back on their starter fertilizer when they find out the fertilizer value of their manure applications. He notes that

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Whole-Farm Project Update: Rotational Grazing Farm

Larry and Brigitte Mundth of Sauk County joined NPM's whole-farm research/demonstration project last fall. The Mundths and their three children began rotational grazing for their sixty cow dairy herd in 1991, and data collection began at their farm in October of 1992. Kevin Shelley, NPM Southcentral Regional Specialist, is working with the Mundths along with Karl Hakanson, Watershed Information and Education Specialist for the Narrows Creek and Baraboo River Priority Watershed. This part of the project is funded by a grant from the UW Center for Integrated Agricultural Systems (CIAS).

The Mundths are keeping detailed records that will be key to evaluating the rotational grazing operation in two areas: nutrient cycling efficiency and labor and management requirements. As with three other cooperating farms, one of the primary goals of

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Karl Hakanson and Larry Mundth measuring forage yield with pasture probe.

Agronomist Ron Doersch Retires

Ron Doersch will move out of the Agronomy Chair's office on July 3. After a distinguished career serving Wisconsin producers, Ron will retire from active University duty. He will move his 6 pound 10 ounce trophy bass as well as his weed science books across the hall to his original Moore Hall office. This summer he'll be enjoying Wisconsin's lakes more than our fields. Ron will see some plots, however, stopping at the Arlington Research Station to rate soybean weed control trials and helping out the "Weed Doctors" at Farm Progress Days.

When asked what he sees in the future for Wisconsin field crop farmers, Ron predicted, "The growers who survive over the next 10 years will have to be making longer range plans. They'll be figuring their options for three to five years in advance rather than season by season. When they choose a herbicide, they'll be weighing environmental concerns, residue carryover, herbicide resistance, their crop bases, and markets for more than one year."

Ron has some ideas of what might help producers, adding "I think we need a significant, interactive computer program which could help growers make pest management decisions. It would include herbicide choice, interactions with insecticides and fungicides, conservation and management considerations. Growers may not think they can afford such a program, but the information and choices are increasingly complex and mistakes are costly. If my computer skills were better, that's what I'd work on next."

NPM has benefited from Ron's expert knowledge and willingness to help. We wish him many happy and productive years. For the next year, researcher Stan Duke will serve as

Buffalo County (continued from page 1)

the project has created a lot of interest and some farmers have asked about doing whole-farm nutrient management plans. "It has been a little more work (to train an intern), but we are reaching more people because of it."

Brian says he has enjoyed meeting new people and seeing how they farm. He thinks "the most important part of this project is saving farmers money" as well as the environmental benefits resulting from better use of on-farm nutrients including reducing chances of ground and surface water contamination from unnecessary or excessive applications of nitrogen and phosphorous fertilizers. In September, Tim Poppel will take over the on-farm manure spreader calibration and will concentrate on working with as many farmers as possible in a single watershed in the Mondovi area.

An important part of the project is to evaluate whether the farm-visit approach actually results in growers using better nutrient management techniques. "We know that there are a lot of different ways to get information to farmers," says Paul Kivlin. "In this project, we are going on the farm directly and working one-on-one to see if that will aid in adoption of crediting." A Farm Practices Inventory Survey was conducted in Buffalo County before the project began. Area farmers will again be surveyed following the project to determine if their nutrient management practices have changed. ●

interim chair of Agronomy. The Department, College, and Extension are working toward filling Ron Doersch's position and continuing his tradition of exemplary service to agriculture. ●

Publications for Wisconsin Water Quality Programs

Credit Nitrogen on Corn—and Reap the Profits

In July, NPM will release a pocket-sized card titled *Credit Nitrogen on Corn—and Reap the Profits*. It is similar to our previous cards dealing with legume and manure nutrient crediting. One side outlines how to determine the right nitrogen fertilizer application rate on corn fields, starting with the base nitrogen recommendations for corn in Wisconsin (which are shown on the flip-side) and deducting credits for residual soil nitrate, legumes, and manure.

The card was developed by UW-Madison soil scientist Larry Bundy and Manitowoc County UWEX Agent Scott Hendrickson. It (UWEX pub. A3589) will be available through county Extension offices, Extension Publications (608-262-3346; 30 N. Murray St., Madison, WI 53715), or NPM program staff.

A3589

Credit Nitrogen on Corn—and Reap the Profits

Using the right nitrogen (N) rate for corn production is the single most important N management decision for optimizing profits and protecting the environment. Use the list below to determine the right rate for your fields.

Field No. _____ lb/acre

Find the base N rate for your soil. (See other side) _____

Determine preplant soil nitrate credit where appropriate. _____

(Check the boxes below that apply to your field. If you check two or more, the preplant soil nitrate test will be beneficial)

Corn following N fertilized corn

Second-year corn after alfalfa that received manure

Previous year's rainfall was normal or below

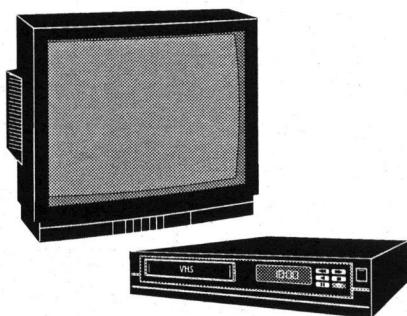
Long history of manure application

Take legume N credits. (See legume N card or UWEX pub. A3517) _____

Take manure N credits. (See manure N card or UWEX pub. A3588) _____

Adjusted N recommendation (Adj. N Rec. = Base N - Soil N - Legume N - Manure N) _____

New and Revised



SCS Releases Manure Management Video

The USDA Soil Conservation Service (SCS) has recently released a 15 minute videotape production entitled "Naturally Fertile Fields - Increasing Dairy Profits Through Proper Manure Management." The video illustrates management techniques for taking advantage of the nutrients in manure while protecting water quality. Farmer testimonials on the advantages of improved manure management are featured.

The tape is available through county SCS offices - inquire with your local District Conservationist. University of Wisconsin - Extension staff can borrow a copy of the videotape from the UWEX Bureau of Audio Visual Instruction (608-262-1644).

1993 Cooperating Farmers and Demonstrations

Northwest Region

Contact Paul Kivlin, (715) 425-3112,
NPM Northwest Regional Specialist

- 1 Larry Samson. Nutrient and herbicide management.
- 2 Jeff Volrath. Nutrient management.
- 3 Irv and Gary Christenson. Nutrient management.
- 4 Curt & Debra Johansson. Nutrient and herbicide management.
- 5 John & June Sendelbach. Herbicide management.
- 6 Gaylord, Dan & Russell Weltzien. Herbicide management.
- 7 Buffalo County Test Plot: Bork, Hayden, Grotjahn, Castleberg, Averbeck, Wink, and Quarberg Farms. Legume and manure N crediting on first year corn. (see related article page 1)
- 8 Trempealeau County Farm: Norman Nordby. Nutrient and herbicide management.
- 9 Tom & Linda Nehring. Nutrient, herbicide, and insecticide management.
- 10 .. Ervin & Barb Nuttleman. Nutrient management.

Southwest Region

Contact Karen Talarczyk, (608) 723-2240,
NPM Southwest Regional Specialist

- 11 .. Howard & Margaret, Tom & Alice Zastoupil. Herbicide and manure management. Field day - Oct. 7 at 1:00 pm.
- 12 .. Gerald and Ann Klinkner. Manure, legume and soil profile N crediting. Field day - Aug19 at 11:00 - 1:00 pm.
- 13 .. Gene & Mary Fritsche. Manure and legume N crediting. Field day - Aug 3 at 10:30 - 12:00 noon.
- 14 .. Studnicka Brothers Farm. N management. Field day - Aug 31 at 1:00 pm.
- 15 .. Lancaster Research Station. Manure nutrient crediting.
- 16 .. Steve & Cheryl Mergen. Herbicide management. Field day - Sept 9 at 1:00 pm.
- 17 .. Lee & Tammy Montgomery. Whole farm management. Field day - Sept 2 at 11:00 - 2:30 pm.
- 18 .. Larry & Zenda Klassy. N management. Field day - Aug 26 at 1:00 pm.
- 19 .. Troy & Cristy Klessinger, Russell & Sandy Kundert. Manure and soil profile N crediting. Field day - Sept 15 at 2:00 pm.

Southcentral Region

Contact Kevin Shelley, (608) 262-7846,
NPM Southcentral Regional Specialist

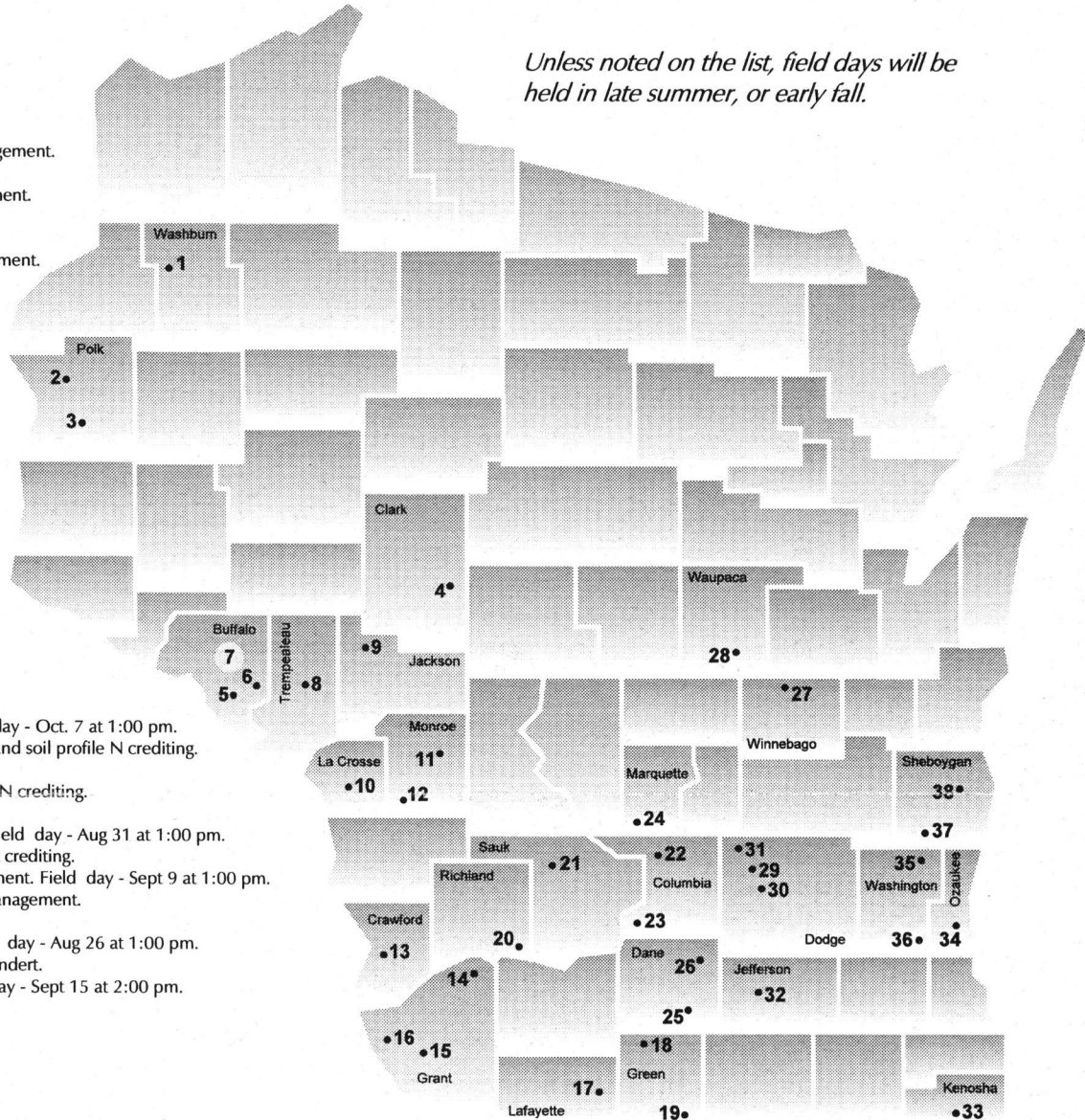
- 20 .. Greenheck Family Farm. Weed control and manure nutrient crediting. Field day - July 1.
- 21 .. Larry and Brigitte Mundth. Nutrient cycling with rotational grazing.
- 22 .. Randy and Vicki Miller. Weed control and N crediting for no-till corn following alfalfa.
- 23 .. Herman Miller. Manure allocation and nutrient crediting.
- 24 .. Ben and Gail Brancel. Manure and legume N crediting.
- 25 .. Alan Kelly. No-till weed control and production economics.
- 26 .. Klein Farms. Manure composting, weed control without herbicides, legume crediting.
- 27 .. Ron & Shelby Becker. Legume and manure N crediting and residual nitrate testing.
- 28 .. Duwayne & Susan Nickel. Legume N credits and residual nitrate testing.


Southeast Region

Contact Richard Proost, (608) 262-7845
NPM Southeastern Regional Specialist

- 29 .. Jim & Jeanne Heuer. Manure and legume N credits, preplant soil nitrate testing.
- 30 .. Charles Hammer. Preplant soil nitrate test, no-till corn.
- 31 .. Steve Perry. Tillage options for corn and preplant soil nitrate testing.
- 32 .. Steve & Jody Knoebel. Preplant soil nitrate testing and weed management options. Field days - July 8 at 1:00 - 5:00 and Aug 20, 12:00 - 3:00 pm.
- 33 .. Wilfred & Connie Meier. No-till, chisel plow, and weed management for soybeans.
- 34 .. John and Annette Guttman. Whole farm management.
- 35 .. William Thull Farms. Whole farm management, Insecticide trial.
- 36 .. Jerry Skomski. Manure and legume nutrient credits.
- 37 .. David & Angelita Heidel. Manure credits, barley production. Field day - July 9, 11:00 - 2:00.
- 38 .. Edward & Sandy Strauss. Manure and legume nutrient credits, preplant soil nitrate testing, insecticide rates, N on soybeans. Field day - July 27, 11-2 pm.

Unless noted on the list, field days will be held in late summer, or early fall.





WISCONSIN FARM PROGRESS DAYS

CALUMET COUNTY
JULY 20 - 22, 1993

Look for the NPM display at Farm Progress Days - 1993. This year's event will be held at the Schneider Farms near Hilbert in Calumet County on July 20, 21, and 22. In keeping with the dairy theme of the show, the NPM display will focus on manure management, featuring information on the nutrient value of manure and techniques for calibrating manure spreaders to determine application rates.

We will be located in the "Clean Water & Farmers" Tent. Visit us and earn dung dollars. See you there!!

Caring for Our Lawns and Lakes

An alternative yard care practices field day will be held for the Yahara/Monona Priority Watershed at Olbrich Botanical Gardens, 3330 Atwood Ave, Madison on July 10 from noon to 4:00 p.m.

There will be exhibits and a self-guided walking tour of demonstrations of ways that urban/suburban dwellers can prevent nonpoint source pollution of both groundwater and surface water. Along with NPM, this project is being coordinated by Dane County Extension, Dane County Lakes and Watershed Commission, and the Yahara/Monona Priority Watershed Project. Contact 262-6140 for more information.



Rotational Grazing *(continued from page 1)*

the project is to develop a whole-farm nutrient budget to determine how many nutrients are going on and being taken off the farm. Daily labor logs will provide valuable information on the time and management requirements for the adults and children and identify challenges and constraints to making changes.

Weekly samples are being taken to allow the Mundths to compare forage yields and quality on pastures and hay fields. The twenty-two pasture paddocks vary in their legume and grass species composition. Initial pasture samples indicate high protein content and quality, averaging 23% crude protein and an average Relative Feed Value (RFV) of 189.

The next issue of *Field Notes* will include an update on the other three dairy operations in NPM's whole farm project. These farms are well into a second phase. Changes are now being made based on an extensive information base such as the Mundths are presently building. ●

Wisconsin Nutrient and Pest Management program provides educational and informational opportunities for Wisconsin farmers, farm supply businesses, and agricultural dealers. NPM is administered through:

University of Wisconsin-Extension
Cooperative Extension

College of Agricultural and Life Sciences
University of Wisconsin-Madison

NPM

NPM Field Notes
1575 Linden Drive
University of Wisconsin
Madison, WI 53706



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