

## Nitrate Testing Offered at NPM Field Day

A potential new component to NPM field days was explored recently when NPM Regional Specialist Richard Proost added free nitrate testing of drinking water to the William Thull field day activities. Farmers were encouraged to bring water samples to the Thull farm, located in Washington County near Kewaskum, though mailings and media announcements prior to the field day.

Using a portable test kit, drinking water samples were tested for nitrates before, during and after the field day presentations. Of the samples brought to the field day, none had nitrate levels exceeding normal background levels of two parts per million. "This is surprising" said featured speaker Ron Hennings, Assistant Director of Wisconsin Geological and Natural History Survey, "because approximately ten percent of Wisconsin's private wells exceed the health standard of ten parts per million." Hennings also explained to the group that drinking water does not come from Canada or Lake

Superior, but rather from rainfall that lands close to the farmstead.

**Said Hennings, "...the quality of the water you drink is influenced by your activities on the land. Its much easier to protect your drinking water from pollution than it is to clean it up!"**

In addition to the water quality portion of the field day, presentations were made on corn rootworm control, whole farm nutrient management, and status of the 1993 corn crop in southeastern Wisconsin.

Bryan Jensen, Program Manager of the Extension Integrated Pest Management program spoke on

the use of nontraditional corn rootworm control methods. Said Jensen, "University studies have shown that nontraditional methods such as molasses, turpentine, sulfur, and a mixtures of diatomaceous earth, molasses, kelp and soybean meal

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The Thull farmstead.

## Grants Fund Innovative NPM Projects

As the result of recent grant awards from the University of Wisconsin-Extension (UWEX) and the UWEX Water Resources Coordinating Council, the NPM Program will be initiating three new outreach projects in the months ahead.

With funding from UWEX Dean Ayse Somersan's Innovative Grants Program, Karen Talarczyk, NPM southwest regional specialist, will head a team to reactivate and revitalize a rural neighborhood network working for improved water quality.

The project will take place in the Little Sugar River watershed of Green County. The network will combine educational programs (such as drinking water testing programs) with social activities to deliver the water quality protection and sound land stewardship message in a relaxed and participant-friendly manner.

NPM outreach specialist Laura Ward Good received funding from the Innovative Grants Program to develop a manure crediting wheel. The wheel will be a pocket-sized publication that will allow users to determine nutrient credit estimates from manure applications without performing any calculations. Farmers can simply dial in their application rate and the fertilizer replacement value of the manure will appear in a window on the wheel. Text on the back of the wheel will explain how to use the wheel and the benefits of crediting manure nutrients.

John Exo and Fred Madison, NPM USDA water quality liaison and NPM faculty advisor, respectively, along with Kevin Erb, nutrient management specialist with the East River (Brown County) Water Quality Project, will explore the feasibility of combining rotational grazing

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## City Residents Learn About Their Links to Water Quality

Urban residents are learning how they affect local water quality and ways they can prevent pollution in runoff from their yards through a project funded by the Wisconsin Department of Natural Resources Priority Watershed Program. The project is located in a Madison neighborhood which drains into Lake Monona.

As part of the project, volunteers from the Schenks-Atwood neighborhood collected water samples from the gutters on residential and commercial streets during three big summer storms. Very high levels of coliform bacteria were found in all the samples from residential streets. Coliform bacteria can come from pet waste and can multiply in moist organic matter (such as leaves and grass clippings in a gutter). Two metals, copper and zinc, were found in samples from a commercial street at levels that would be toxic for warm water sport fish in Lake Monona. These metals can come from vehicles and from building gutters and downspouts. The amounts of phosphorous found in the samples were greater than a proposed DNR water quality standard for Lake Monona.

The *Better Lawns and Gutters* field day, held in July, included a self-guided tour. Participants in the tour could see two yards where lawn care, landscaping, and yard and pet waste practices that reduce runoff pollution were demonstrated. For Madison and Monona residents, as well as those from the immediate neighborhood, the field day was a chance to get personal advice from any of fourteen specialists from the UW-Madison, UW-Extension, state and local agencies who were stationed at points on the tour. The homeowners who installed the demonstration practices were also available to talk about their experiences.

Interested field day attendees were shown how to take proper soil samples and given one free lawn or garden soil sample analysis. Many of the samples turned in were not from the neighborhood, but of those that were, more than a third had



*Dave Eagan (left) storm water sampling volunteer, discusses what he learned about the local storm water quality with Better Lawns and Gutters walking tour participants.*

“excessive” levels of phosphorous and only one had levels low enough that the lawn would benefit from fertilizer phosphorous. Results of the soil and storm water sampling analyses will be explained in the neighborhood newspaper.

The project was coordinated by Dane County Extension, Dane County Lakes and Watershed Commission, and the Yahara/Monona Priority Watershed Project along with the NPM Program. Coordinators plan to continue to use the demonstration yards, primarily for water quality programming at a nearby school. A report intended to assist others in designing similar projects will be available after November 1 from Mindy Habecker, Dane County Extension, at 608-266-4106.

## Livestock Producer Manure Management Meetings

A coalition of Wisconsin livestock producer organizations, headed by the Pork Producers Association, recently formed with the goal of educating their members on the issue of manure management. Specifically, the coalition wants to inform their respective industries on current and pending regulations affecting livestock operations. To meet this objective, the coalition, named *Wisconsin Agriculture for the Environment*, is organizing a series of one-day educational workshops across the state.

The workshops will include presentations and discussions on manure management issues by farmers, government agency staff, and agri-business. In addition to informing the state's meat, milk, and egg industries about current and pending state and federal guidelines, the program will also discuss the local technical and financial assistance available to farmers for meeting animal waste guidelines in the most economically and environmentally advantageous manner.

Six meetings will be held across the state during the first two weeks of February, 1994. Workshop dates and locations are:

Feb. 1-Sparta at the Ranch House; Feb. 2-Arthur at the Arthur Haus; Feb. 3-Lake Mills at the Pine Knoll Supper Club; Feb. 8-Menomonee at Jake's Supper Club; Feb. 9-Marshfield at the Marshfield Research Station; Feb. 10-Appleton at the Columbus Club. The meetings are tentatively set to run from 9:30 a.m. until 3:00 p.m. A registration fee of approximately \$10.00 will be charged and will include lunch. Registration procedures, as well as other workshop details, will be publicized in *Field Notes*, the agricultural press, and via the various livestock associations when finalized.

Questions or comments regarding the livestock producer manure management meetings can be directed to any of the Wisconsin livestock associations or Keri Retallick, Wisconsin Pork Producers Assn.(P.O. Box 327, Lancaster, WI 53813), Sue Porter, Wis. Dept. of Agriculture, Trade & Consumer Protection (608-2736205), Brian Holmes or Scott Sturgul, UW-Extension (608-262-0096 and 608-262-7486, respectively).

## Nitrate Testing

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provide no control of corn rootworm larvae, they are no better than an untreated area." He went on to say that reducing soil-applied corn rootworm insecticides rates by 25% provided acceptable control of corn rootworms, but advised farmers to start in small areas and to be cautious.

Richard Proost informed farmers about the movement of crop nutrients on and off farms. Said Proost, "A tremendous amount of phosphorus and potassium leave the farm in the form of milk. If you can determine the amount of nutrients leaving the farm and balance them with nutrients brought on to the farm, you will not effect the fertility status of the farm." Proost used the Thull farm as an example to show how crop nutrients were moving off and on the farm.

"We need about 35 days of 75 degree weather to get this corn to maturity" said Mike Ballweg, Sheboygan County Crops and Soils Agent. Ballweg told farmers how to determine growing degree days and then how to use that information to calculate out how long it will take for corn to come to maturity. Said Ballweg "This corn I'm holding is in the early dent stage. It will take an additional 440 growing degree days to bring it to full maturity. That means we need 35 days with day time temperatures of 75 degrees. You tell me, is this going to happen?"



**You know how much fertilizer this applies. How about this?**



## Soil Fertility Workshops this December

During the week of December 13, 1993, two soil fertility workshops will be offered by the University of Wisconsin-Madison Department of Soil Science, Integrated Pest Management Program and the Wisconsin Fertilizer and Chemical Association. These workshops will be an opportunity for training of individuals expecting to be involved in soil nutrient management planning efforts, either as an independent or industry-affiliated consultant/agronomist or as agency personnel involved in nutrient management programs.

A basic soil fertility workshop will be held from December 13th through noon of the 15th, and an advanced workshop will be held from noon December 15th through the 16th. The basic session will cover introductory principles of soil fertility and nutrient management. This session is designed for individuals

without extensive training in soil nutrient management or those desiring a refresher course. The advanced session will provide in-depth information on nitrogen management and its behavior in soils. The advanced session is intended for individuals with prior training or experience in soil fertility.

The workshops will be held in Madison at the Best Western Midway Motor Lodge (3710 East Washington Ave. - Hwy 151 and 51 intersection). Cost of the workshops has yet to be determined. For agenda information and registration materials write or call Bryan Jensen at 608-263-4073; UW-Madison Dept. of Entomology, 1630 Linden Drive, Madison, WI 53706. If interested in attending either or both of the workshops, please inquire early as enrollment will be limited to 100 participants.

Farmer response to the free nitrate testing of water samples was very encouraging. "Nitrate screening of drinking water is an important service to farmers; it helps them to relate to the information presented at field days," notes Proost. The nitrate testing will most likely be expanded in the future to other NPM field days in our attempts to keep land-owner interest in NPM field days high.

## Innovative Grants

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and manure composting as an innovative farming system in northeast Wisconsin. Funding for the project was awarded to the trio by the UWEX Water Resources Coordinating Council. Rotational grazing systems have the potential to lower input costs, reduce erosion as well as reduce the volume of manure required for field spreading. Manure composting has generated interest as a technique for reducing the volume of manure generated on farms.

This project will examine combining the two practices. A major focus of the project will involve investigating the potential negative environmental effects of manure composting on bare soil. Specifically, the potential for nitrate movement from the compost piles through the soil profile to groundwater. In addition to the environmental monitoring, the manure itself will be analyzed before, during and after composting process to determine the effect of composting on nutrient content.

### NPM "Tip of the Hat" to Jim Heuer

*A special thanks to NPM cooperating farmer Jim Heuer who supplied the idea for the poster shown to the left.*

*Jim, who hosts a NPM demonstration in the Beaver Dam River Watershed of Dodge County, suggested the poster idea to NPM regional specialist Richard Proost. Jim thought the poster would help farmers associate a fertilizer value to the manure they apply and we agreed.*

*The poster was an important promotional tool used at our 1993 Farm Progress Days exhibit and we continue to use it. Thanks Jim, the poster was a great idea!*



# Upcoming Events

- Nov. 5**                      **NPM Program Technical Advisory Committee Meeting**
- Nov. 7-12**                **American Society of Agronomy Annual Meeting, Cincinnati, OH**
- Nov. 30 - Dec. 2**        **Cooperative Extension All Faculty/Staff Conference**  
**Holiday Inn-West, Middleton, WI**
- Dec. 13-15**              **Soil Fertility Workshop (Basic Session)**  
**Best Western Midway Motor Lodge, Madison, WI**  
**Contact Bryan Jenson for registration materials (608-263-4073)**
- Dec. 15-16**              **Soil Fertility Workshop (Advanced Session)**  
**Best Western Midway Motor Lodge, Madison, WI**  
**Contact Bryan Jenson for registration materials (608-263-4073)**

## **Livestock Producer Nutrient Management Meetings:**

- Feb. 1**   **Ranch House, Sparta, WI**  
**Feb. 2**   **Arthur Haus, Aurthur, WI**  
**Feb. 3**   **Pine Knoll Supper Club, Lake Mills, WI**  
**Feb. 8**   **Jake's Supper Club, Menomonee, WI**  
**Feb. 9**   **UW Research Station, Marshfield, WI**  
**Feb. 10** **Columbus Club, Appleton, WI**

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

University of Wisconsin-Extension  
 Cooperative Extension  
 College of Agricultural and Life Sciences  
 University of Wisconsin-Madison



**NPM**  
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