

Nutrient Management Briefings - 1996

A Quality Assurance Team review of this growing season's nutrient management plans

This report summarizes the findings from the Quality Assurance Team's review of 15 nutrient management plans written for the 1996 growing season. Forms listing required and recommended components of the nutrient management plan are enclosed.

In an effort to ensure the quality of nutrient management plans, a multi-agency and agri-business group was formed in 1995. The intent of this Quality Assurance Team (QAT) is to review nutrient management plans for adherence to the 590 nutrient management standard. This means following the University of Wisconsin fertilizer recommendations and using a certified soil testing lab. In addition, the plan must be planned or approved by a certified planner addressing the components of the *Nutrient Management Plan Checklist* (enclosed).

An additional charge of the team is to improve the quality and implementation of future nutrient management plans. To achieve this, the QAT will forward constructive comments for improving the quality of nutrient management plans to individuals involved in preparing the plans. Members from the QAT based these constructive comments on the information collected during the review of nutrient management plans.

HELP WANTED: Nutrient Management Planners

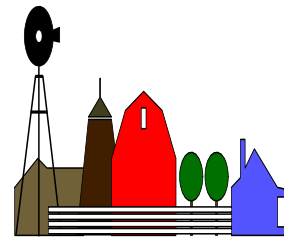
Wisconsin farmers and county conservation departments need your assistance planning for the wise use of on-farm produced and purchased nutrients.

Excess application of plant nutrients, particularly nitrogen and phosphorus, can cause severe water quality problems. Additionally, applying nutrients at rates greater than crop needs can result in unnecessary expense to the farmer.

Under county, state, and federal programs, a nutrient management plan is required when a landowner accepts government cost-share dollars for the installation of a manure storage facility or barnyard runoff control structures. Cost-share assistance for nutrient management planning, is also available to farmers as stand alone practice. Contact the county conservation offices in your area for more information on the opportunities available.

The 1996 Quality Assurance Team members were:

Keith Kelling - UW Soils,
Scott Bullington - UW Soil Lab,
Paul Schlaefer - Tomorrow Valley Cooperative,
Bob De Wolfe - Jefferson County Farmco Cooperative,
Bill Stangel - Soils Solutions Consulting,
Shawn Esser - Marathon County Land Conservation
Vic Price - NRCS Eau Claire Technical Center,
Jim Enlow - NRCS Madison,
Terrence Kafka - DNR Madison,
Len Olson - DATCP Madison.
Sue Porter- DATCP Madison.



In 1996, 265 Wisconsin farmers in 28 counties received nutrient management plans on a total of 75,767 acres.

Over the past five years, 3,760 nutrient management plans have been developed for farmers across the state. These plans have been written in accordance with the USDA-Natural Resources Conservation Service (NRCS) 590 Nutrient Management Standard.

The majority of these plans have been developed for participants in Wisconsin's Priority Watershed Program. This program is administered by Wisconsin's Departments of Natural Resources and Agriculture, Trade and Consumer Protection. Land Conservation Departments implement the watershed program at the county level. Outside of priority watersheds, nutrient management plans have been developed for programs - such as the Integrated Crop Management (ICM) program, the Soil and Water Resource Management (SWRM) program, county manure storage, and zoning ordinances.

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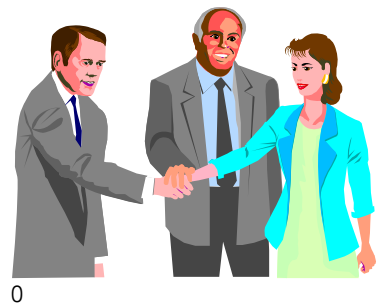
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Increase your customer's profits

In a 1996 publication, by P. Nowak, R. Shepard, and F. Madison, "Farmers and Manure Management: A Critical Analysis," survey data from 1,179 Wisconsin farmers was assessed. Data from 1990 to 1994 analyzed current agronomic and manure behavior in eight geographic locations.

The study found that if on-farm nutrient sources are used properly, an average saving for the cost of commercial nutrients was \$15.70 per acre. The research did not include additional long term monetary benefits derived from improvements associated with soil quality .



Three Ways to Have More Repeat Business

Your business can have more customer contacts and increase the amount of customers asking for your help next year by involving the farmer in developing the nutrient management plan.

1. Having good communication

during the nutrient management planning process will allow for an understandable plan that will be implemented.

The Quality Assurance Team saw improvements in the quality and content of the plans written for the 1996 growing season. The plans had improved soil test information and the manure calculations were easier to find. This made the plans more understandable to us and hopefully, to the farmers.

As part of good communication, the Quality Assurance Teams believes that organizing the nutrient management plan by the crop to be grown can be very useful and easy to understand. Additionally, the plan could be presented in such a way as to summarize field applications rates of manure, fertilizer, lime, and pesticides. Including this information in an easy to read summary should make implementation easier.

The issue of implementing manure management practices is addressed in a 1996 publication, "Farmers and Manure Management: A Critical Analysis," by P. Nowak, R. Shepard, and F. Madison.

The study revealed that for every farmer crediting manure within a plus or minus range of 10 percent of university recommendations ; there are 35 farmers who make no attempt to credit this on-farm nutrient source. Farmers may recognize the positive aspects of manure, yet, in actuality few farmers are taking advantage of any economic or soil quality benefits of proper manure management.

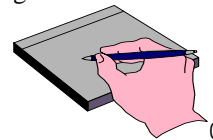
One of the reasons depicted for this inaction was that nutrient replacement values associated with manure represent only several percent of a livestock operation's total input budget.

Implementing nutrient management will only become a cost effective activity when manure crediting is made simple. It is not a question of teaching farmers how to take advantage of on-farm nutrient sources. Rather, the application of this knowledge should be made convenient and uncomplicated.

2. Having effective maps

will help simplify nutrient management plans when placed in the hands of the farmer. We found that the maps could be more effective if they had easily identified field numbers, boundaries, and manure spreading restricted areas that are critical to implementation.

Color coded maps are very helpful in showing where manure should not be applied. These places would include areas of concentrated flow and fields exceeding the tolerable soil loss rate. Other areas that should be highlighted are those where manure should not be applied without incorporation. These would be areas within the 10 year floodplain or within 200 feet of streams, rivers, or lakes, whichever is greater. Other areas where manure should be incorporated are within 200 feet upgradient of direct conduits to groundwater.



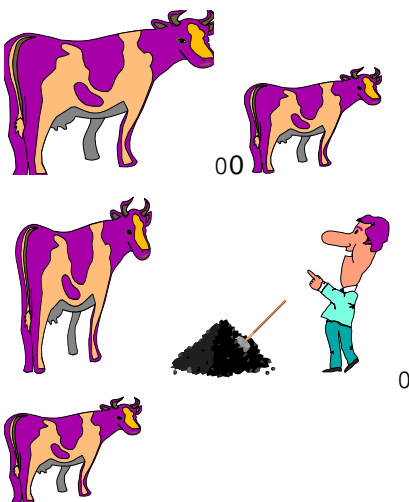
3. Translating fertility recommendations to product

reduces inconvenient calculations for the farmer. The Quality Assurance Team saw plan improvements in many of the (continued on page 3)

3. Translating fertility recommendations to product *continued*

plans which presented complete fertilizer recommendations. The nutrient management planners started with the fertilizer recommendations using University of Wisconsin soil test recommendations, credited manure and legumes, and transferred the remaining nutrient need into actual pounds of fertilizer product needed per acre.

In other plans, we noticed that many application rates for fertilizer and manure were being suggested in the nutrient management plans. The QAT realizes that only a few application rates and products are likely to be used on a single farm. We believe the nutrient budget must first start with the University of Wisconsin's fertility recommendations and then be translated into fertilizer product that will be available to the farming operation. The QAT believes that if the nutrient management planner focuses on providing an effective plan that is easy to use, the farmer will reference it. As a long term result, nutrients will be better managed and water quality will improve.



The future of Nutrient Management Planning and Quality Assurance Reviews

595 pest management

During this year's Quality Assurance Team review of nutrient management plans, we noticed that some of the plans had pest management components. We could not easily review these components. We realized that the pest management standard, 595, needed a technical note listing required components. A technical note would provide some criteria for writing and reviewing pest management plans in a fashion similar to nutrient management.

Members of the Quality Assurance Team believe that if pest management is being cost shared, a technical note that outlines the general acceptable criteria for a pest management program is needed. The Quality Assurance Team requested that the Standards Oversight Council develop a technical note for the 595 pest management standard. This council will address issues according to their priority. The council will coordinate the development of a multi-stakeholder group to discuss the issue and develop a solution.

Nutrient Management Plan Effectiveness

The farmer's response

As part of the Quality Assurance Team's review of plans written for the 1997 growing season, the teams will be talking to the farmers receiving the plans. We will be trying to determine how well farmers are being served by state wide nutrient management planning and related educational programs. We would like to know what farmers think about their nutrient management plan and how they think the plan's usefulness could be improved.

Seven questions we might ask farmers are:

1. Did your nutrient management planner work with you to learn about your operation and take your preferences into account?
2. Did the planner go over the plan with you?
3. Did you find the plan useful and easy to reference?
4. What percentage of your plan recommendations did you follow?
5. How can it be improved?
6. Did you use on-farm nutrients more effectively or see your profitability improve because of the plan?
7. Will you continue to update and follow a plan in the future, if this practice is not cost shared?

QAT Review Timeline - 1997

Date	Activity
May '97	Wisconsin conservation offices are reminded to submit their nutrient management plan checklists for 1997 plans to the Department of Agriculture, Trade & Consumer Protection (DATCP) members of the QAT.
June '97	Deadline for all Wisconsin conservation offices to submit their nutrient management plan checklists for each plan they received for the 1997 growing season.
June '97	DATCP members of the QAT will request copies of 15 randomly selected nutrient management plans. The entire plan, including all items listed on the nutrient management plan checklist, must be sent for review. NOTE: The nutrient management plan sent to the QAT for review should be the same plan the farmer receives.
July and Aug. '97	The submitted nutrient management plans are given a preliminary review by the DATCP members of the QAT. Issues to discuss with the full QAT are prepared.
Sept. '97	QAT Review
Nov. '97	Individual letters identifying specific QAT review comments will be sent to the respective plan preparers. A report containing a summary of the QAT findings will be sent to all certified nutrient management planners.

Questions, comments, or suggestions about the Quality Assurance Team reviews of nutrient management plans should be forwarded to:

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