UW – DISCOVERY FARMS BRIEFING PAPER

Dennis R. Frame [1/]

What is a Discovery Farm?

A Discovery Farm is an operating, commercial Wisconsin farm cooperating in on-farm systems evaluation and demonstration projects. The network works with a systems farm at UW-Platteville and researchers at UW-Madison to evaluate nutrient management strategies and practices aimed at reducing nonpoint source pollution while protecting farm profitability. A primary objective is to establish baseline data that can be used to determine environmental impacts of various farm management practices.

We hope to establish 20 to 30 Discovery Farms that span the state's diverse soil types, physical and water characteristics, and livestock and cropping systems. As of today we have established one farm with two monitoring sites, two farms with three sites, and another farm with a upstream / downstream study design. In addition, we are working with four other operations on studies ranging from whole farm mass balance, the Wisconsin Buffer Initiative, and the fate of nitrogen losses on grazing systems.

Who proposed the Discovery Farms idea?

Faculty members in the UW-Madison College of Agricultural and Life Sciences and UW-Extension Cooperative Extension proposed the concept after exploring farm-based, systems research efforts in the Netherlands. Since the proposal, we've received additional input from Wisconsin dairy and livestock farmers; farm organizations (including Wisconsin Milk Marketing Board, Professional Dairy Producers of Wisconsin, Wisconsin Farm Bureau and Wisconsin Pork Producers Association); faculty from UW-Platteville, -River Falls and -Stevens Point; and the Department of Natural Resources (DNR), Department of Agriculture Trade and Consumer Protection (DATCP), and USDA's Natural Resources Conservation Service (NRCS).

What are the goals of the Discovery Farms program?

- Promote the economic viability of Wisconsin's agriculture across the state's diverse livestock and cropping systems.
- Increase understanding of agricultural impacts on soil, water and air quality and work toward reducing adverse impacts.
- Provide research-based information on agricultural production and natural resource management to public policymakers.
- Integrate outreach and research programs with environmental management and regulatory efforts.

How do Discovery Farms fit into the Wisconsin Agricultural Stewardship Initiative?

In Spring 2000, Governor Tommy Thompson announced the Wisconsin Agricultural Stewardship Initiative (WASI) -- an effort to help Wisconsin farmers meet environmental and economic challenges confronting them. WASI consists of three related programmatic efforts: a) the Discovery Farms network; b) a systems farm, which will conduct nonpoint pollution systems research and evaluate practices or technologies that may be too financially risky to undertake on

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[1]/ Co-Director, UW Discovery Farms, 40195 Winsand Dr., PO Box 429, Pigeon Falls, WI 54760.

Discovery Farms; and c) component research conducted primarily at UW-Madison and its Agricultural Research Stations across the state, and also at agricultural and natural resources consortium colleges at UW-Platteville, -River Falls, and -Stevens Point. Component research consists of carefully controlled and replicated research projects that will lead to strategies and practices that can be tested on-farm at a Discovery Farm or the Platteville systems farm.

How is oversight of the Discovery Farms program organized?

WASI emphasizes farmer input and direction. The **Wisconsin Agricultural Stewardship Initiative Coordinating Council** is made up of farmers, environmentalists, and other citizens. These voting members direct and coordinate the Platteville systems farm and Discovery Farms, and advise on component research needs. Council members work with agency and university personnel, and the council coordinates fund-raising efforts.

The **Discovery Farms Steering Committee** solicits input on nonpoint pollution information needs, identifies evaluation/demonstration project possibilities, select projects for funding, and solicits Discovery Farms cooperators. It will also coordinate the gathering and reporting of data and information generated. The committee, chaired by a farmer, includes representatives from Wisconsin farm, agribusiness and environmental organizations.

Each Discovery Farms project is crafted by a **Project Design Team** made up of agricultural producers, state and federal agency representatives, and UW researchers. The team will evaluate project proposals for relevance and feasibility.

An On-Farm Project Team supports each producer who conducts a Discovery Farm project. Chaired by the farm cooperator, the team helps implement the project, monitor progress, collect and analyze data, and share results. The team includes neighboring farmers; fertilizer, feed and financial consultants; county and other local extension personnel; local representatives of NRCS and Land Conservation Departments; local Wisconsin Technical College System (WTCS) instructors; and others. Project teams receive support and advice from university and agency specialists.

Who decides the Discovery Farms evaluation and demonstration project agenda?

Farmer input and direction at all levels of the WASI ensure that its programs address problems most relevant to producers. Discovery Farms projects also respond to needs of state and federal agencies such as DNR, DATCP, and NRCS. Scientists evaluate opportunities created by new findings and determine scientific feasibility of various study approaches. Paramount in the process, however, is the needs of farmers themselves.

Who selects and designs Discovery Farm projects?

Following input from farmers and others, the Discovery Farms Steering Committee selects the most important and relevant projects. Then a Project Design Team develops details for each project, including required characteristics of participating farms, variable measurements, measurement protocols, data handling and analysis, and study length. The design team determines the compensation paid to the Discovery Farm cooperator and overall project budget needs.

How are Discovery Farms projects conducted?

Discovery Farms evaluates and demonstrates best management practices and determines their effectiveness on working Wisconsin farms. Although cooperating farmers are compensated for the substantial effort and additional costs the project may require, every cooperator must agree to do what is necessary to successfully complete the project. The cooperating farmer is key to project success, but he/she does not stand-alone. An On-Farm Project Team helps set up the experiments, devise measurement strategies, and gather necessary data. Help is also available from the project's statewide research support team.

How are project findings shared with Wisconsin farmers and others?

Results from various demonstration farm projects is combined and interpreted to produce the best recommendations possible. The results are communicated in a timely fashion to interested parties. Much of the information moves to farmers, consultants and other agri-businesses through Cooperative Extension efforts and the county educational network. Findings are distributed through Extension publications, mass media, and other routes that reach farmers and agribusinesses. Field days at Discovery Farms, the Platteville systems farm, and other UW System campuses and research stations will also disseminate results. Special efforts are made to communicate findings at annual meetings and other gatherings of participating organizations. Web-based computer technologies can create searchable databases, chat rooms and e-mail lists for exchanging ideas and sharing information. Distance education facilities of UW Extension in Madison and new outreach facilities at UW-Platteville and -River Falls will further facilitate timely information dissemination. Project progress and results are also reported at an annual conference of all participating and supporting organizations.

For More Information:

Judy K. Goplin
715-983-5668
jgoplin@wisc.edu