What is a Discovery Farm?

A Discovery Farm is an actual working farm or ranch whose operators are cooperating with local, state, and federal natural resource managers to demonstrate and evaluate the effectiveness of various management practices in reducing environmental impacts while maintaining farm profitability.

Origins of Discovery Farms

» Modeled after the Wisconsin Discovery Farms Program which was developed after a trip to the Netherlands where faculty evaluated a farming systems research program.
» Wisconsin agricultural leaders, producers, and university personnel made several trips to the Netherlands before organizing the agricultural commodity groups, the state agencies and the university to design a program that would solve the water quality issues facing Wisconsin Agriculture.

» In Wisconsin, it is a 2-part program: Discovery Farms coordinating with UW-Platteville Pioneer Farm. The Discovery Farms Program and the Pioneer Farm have combined their steering/advisory committees and work together on projects. Discovery Farms does the on-farm systems research while Pioneer Farms does the more risky intensive research. An environmental monitoring project in cooperation with the North Dakota State University Extension Service, North Dakota Agricultural Experiment Station, North Dakota Department of Health, United States Environmental Protection Agency, North Dakota State Water Commission, and North Dakota's farming community.

NDUE LEXEM 1 Inural Expe iversity INORTH DAKOTA DEPARTMENT of HEALTH INUTED STATES



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U.S. Department of the Interior U.S. Geological Survey

science for a changing world

North Dakota Discovery Farms

An Agricultural Runoff Monitoring Project

North Dakota Discovery Farms

» Selected three agricultural operations for the program - two livestock feeding operations and one crop production system.

» Multi-year program designed to evaluate the effectiveness of management practices installed to address documented agricultural impacts to water quality.

» Basically monitoring agricultural runoff.

» Data collection includes: water quality (emphasis on nutrient and phosphorus loading), sediment loads, soil analysis, and meteorological information.

» Producers will coordinate with state and federal resource managers to implement the most feasible management practices for their agricultural system.



The North Dakota Discovery Farms are:

» <u>Doyle and Patsy Johannes Farm</u> - west of Underwood, ND - cattle and grain operation - 300 cows and up to 300 calves backgrounded - drainage to Missouri River

» <u>Kim and Denise Amann Farm</u> - southeast of Dazey, ND - cattle and grain operation - 350 Angus/Angus crosses with about 300 calves backgrounded - drainage to Baldhill Creek and Sheyenne River

» <u>Kent and Sandy Bartholomay Farm</u> - south of Embden, ND - crops in drain-tile fields - drainage to Maple River and Red River of the North



