

SPECIAL ISSUE



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# Innovation News

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## **CORN MARKETING PROGRAM OF MICHIGAN SPONSORS INNOVATIVE FARMERS PROJECT**

The Corn Marketing Program of Michigan recently voted to provide financial support for a phase of the Innovative Farmer's project designed to implement narrow row (22") zone-till production techniques.

The Innovative Farmers were organized to develop alternative tillage systems for the production of corn, sugar beets and dry beans that reduce wind erosion while maintaining or enhancing the family's farm income.

After two years, of studying and evaluating various practices at the Innovative Farmers Demonstration Sites, the group was interested in seeing if the zone-till system could be used in a narrow row production system.

The proposal funded by the Corn Marketing Program of Michigan will provide for a three-year lease of a zone-till cart, planter and cultivator. This equipment will be used to implement comparison plots on the IF members' farms.

Gettel Implement of Bad Axe, Pigeon, Pinconning and Sebawaing; Alloway Manufacturing and Unverferth Corporation were also instrumental in developing this project.

Moving the information from the IF demonstration

sites to the members' farms is an important step in the overall success of the Innovation Farm Project.

The Corn Marketing Program has also been very supportive of the Innovative Farmers' Annual Summer Plot Tour. In 1995, over 220 farmers, university and government agency representatives attended the tour.

The 1996 tour will be held on Thursday, August 22. For more information contact the MSU Extension-Project Office, 1460 S. Van Dyke, Bad Axe, MI 48413 or call (517) 269-6099.

## **INTRODUCTION TO THE INNOVATIVE FARMERS**

The Innovative Farmers of Huron County were formally organized in 1994 for the purpose of developing alternative cropping systems which reduce wind erosion while increasing or maintaining the family farm income.

Many of the members had participated in on-farm demonstration plots sponsored by MSU-Extension as well as in the SP53 Program through the Saginaw Bay Water Quality Demonstration Project.

In the SP53 Program, participants followed pest scouting and soil test recommendations and implemented conservation plans. While the program was successful in reducing pesticide and fertilizer use, while maintaining yields, soil erosion wasn't

adequately addressed.

Since the primary tillage system is "fall plow", there was a need to develop and demonstrate that alternative systems (chisel, zone-till, etc) could be successfully used to produce a corn, dry bean and sugar beet rotation.

Two 40-acre parcels were leased for five years. The group was divided into eight planning committees to plan, study and evaluate the various systems being compared; fall plow, fall chisel, trans-till and zone-till. Yields as well as an economic analysis are being used to determine the success of each system.

Currently, over 50 local lending institutions, farm supply, elevator, implement dealers and manufacturers, commodity groups and governmental agencies are supporting the project with grants, the use of equipment, financial support or supplies.

While water quality concerns were the initial focus of the group, discussions now center on reducing compaction, improving water infiltration, reducing operation costs and improving soil tilth. In addition, the group has secured funding from the Michigan Department of Agriculture to cost-share secondary fertilizer containment facilities and herbicide injector systems with members. The group is cooperating with a number of MSU-Extension specialists to further develop their cropping systems. A project is just underway to evaluate opportunities for adding value to their locally grown products.

Some members are interested in evaluating the Soil Doctor and still others are interested in determining if zone-till production can be used to produce their rotation in narrow rows.

The Innovative Farmers Group is a Farmer-To-Farmer organization dedicated to the purpose of making the members more profitable through the use of environmentally sound practices which are

also economically feasible.

As of June 1996, there are 80 Innovative Farmers in the Huron, Tuscola and Sanilac County region. The annual dues are \$100 per farm which entitles them to membership in the Michigan Ag Stewardship Association, subscription to the National No-Till Farmer and Conservation Digest magazines and the Innovation News, published 10 times per year.

Interest is growing in other parts of the state and another group of 13 members exists in the Calhoun County area.

For more information about the Innovative Farmers, contact Jim LeCureux at the MSU Extension-Project Office in Bad Axe.

#### **HURON COUNTY CORN GROWERS AND INNOVATIVE FARMERS**

Over the past few years, some members indicated an interest in the Soil Doctor. Reports about the success of the machine to measure soil nitrate-N and adjust the application rate on the go have been mixed.

Therefore, the Huron County Corn Growers and Innovative Farmers are going to launch a project this year to determine the effectiveness of the Soil Doctor for the Thumb Area. Funding support has been secured from the Corn Marketing Program of Michigan, the Huron County Corn Growers, Michigan Ag Stewardship Association and the Innovative Farmers. Maurice Vitosh, Michigan State University will be assisting with this project.

The Innovative Farmer members will be trying the equipment on limited acreage during the 1996 cropping year. Initially, the Soil Doctor will be set-

up for 22" rows. If there is enough interest, the group may adjust the equipment for other row widths.

The Soil Doctor, which will be leased for one year, is used for applying 28% at sidedress. The IF group hopes to have a few plots to verify the Soil Doctor's effectiveness. Terra of Elkton and Kinde, are assisting with the project by providing the tool bar applicator.

#### **INNOVATIVE FARMERS MISSION STATEMENT**

*"The Innovative Farmers of Huron County will be evaluating the environmental, agronomic and economic impact of agricultural practices in developing a high residue cropping system for the production of dry beans, sugar beets and corn using reduced tillage, cover crops and a total integrated system to reduce soil erosion, improve soil tilth and soil health and to increase family farm income."*

#### **WATER QUALITY POLICY TOUR**

Funds have been secured from the Michigan Integrated Food and Farming Systems Project to sponsor a Water Quality Public Policy Tour. Tentative plans include a one-day tour in August for the purpose of visiting on-farm sites where secondary fertilizer containments, herbicide injectors, cover crops, integrated pest management, integrated crop management and other water quality initiatives are being implemented.

The Innovative Farmers want to educate and inform environmental groups, legislators, government agency representatives and media about the changes farmers are making. The IF group wants the

farmers to explain first-hand why THEY are implementing the changes. At the same time, the Innovative Farmers want to identify two or three policy issues that need to be addressed.

For more information, contact the MSU Extension-Project Office.

#### **SUSTAINABLE AGRICULTURE/ ECONOMIC DEVELOPMENT MEETING**

The next meeting of the Sustainable Agriculture/Economic Development Group will be on Thursday, August 1. The meeting will be held at 6:30 p.m. at Cousins Restaurant in Bad Axe.

John Gardner, North Dakota State Extension, Carrington, North Dakota, will be the guest speaker. John will present information on the growing trend of farmer-owned cooperatives designed to add value to their products. He will identify the characteristics of a successful cooperative, how they are set up and why there is so much interest in North Dakota in forming farmer-owned cooperatives.

The Huron County group is extending invitations to all interested citizens to become involved in the local program and will be forming at least three groups to explore opportunities in the livestock, crops and niche market areas.

Please plan to join us on August 1, 1996.

#### **FFA/4-H WATER QUALITY FIELD DAY**

Last year, members from all of the Huron County Agri-Science Programs were invited to participate in a Water Quality Workshop. It worked very well and

involved students from USA, Harbor Beach, Port Hope and Bad Axe. NRCS and SCD joined us in sponsoring the project.

In September, the second annual program will be held and this year, it will include 4-H members. There will be more hands-on type of activities such as measuring residue, counting worms in a given soil mass, measuring water infiltration, conducting several biological tests on water and visiting the IF plots.

#### **INNOVATIVE FARMERS APPLIED RESEARCH PLOT UPDATE**

The following projects will be conducted in cooperation with MSU Extension Specialists during the 1996 growing year. These plots are in addition to the IF member designed plots:

1. **Effect of Residue on Suppressing White Mold** - Pat Hart

This is the first year of a three-year study where Pat will be working with us to determine if crop residue does in fact suppress white mold. During the initial start-up year, we will be looking at the effect row width (7.5-, 22- and 30-inch) has on white mold in three soybean varieties.

2. **Soil Health and Quality** - Richard Harwood

This is the third year that we will be evaluating the effect tillage has on nutrient stratification, mineralization and organic matter. This year we will begin looking at bulk density and water infiltration.

3. **Soil Nitrate-N** - Maurice Vitosh

We will be looking at the correlation between mineralization rate and soil temperature using a series of soil thermometers that measure soil temperature ever four hours.

4. **Developing A Reduced Tillage Herbicide**

**Program** - Jim Kells

At the request of one grower, we will develop a herbicide "plan" for high residue cropping systems rather than a weed-by-weed plan.

5. **Dry Bean Herbicide Study** - Karen Renner

This is the second year of a dry bean herbicide study designed to develop alternative programs for high residue dry bean production. Five tillage systems (plow, chisel, zone-till with residue managers, zone-till without residue managers and slot no-till) will be used to compare ten herbicide packages.

6. **Evaluation of the Cost of Switching to Zone-Till** - Gerald Schwab

In this project, we are looking at the cost of changing equipment to a zone-till system. What can be sold, what needs to be bought and the overall effect on total farm income.

7. **Manure Management** - Tim Harrigan

We will continue to work and fine-tune various approaches for transferring manure from livestock farms to cash crop operations. An agreement for the cooperating farms has been received from a project in Wisconsin. Tim is conducting actual loading, hauling and application time studies to better determine transfer costs.

8. **Need for Starter Phosphate on High Testing (+80 lbs. P) Soils** - Don Christenson

For several years, we have been conducting plot work on this topic. We will continue this in 1996 and in addition will be looking at the effect of low rates of liquid fertilizer applied on the seed.

9. **Other Activities:**

Additional plots will be conducted to look at Bt corn, corn interseeded to clover and establishing corn on corn in reduced tillage.

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