Ethanol: Bag Big Oil With Your Seed Corn Tags!

Under intense pressure from big oil, 47 U.S. senators and 135 U.S. representatives have signed a letter condemning the Environmental Protection Agency's "Renewable Oxygenate Requirement" proposal, jeopardizing ethanol's inclusion in the Reformulated Gasoline (RFG) program, according to Michigan Corn Growers Association Executive Director Keith Maucoup.

To counter the big oil campaign, a wide-spread effort has been launched by National and State Corn Growers' Associations, American Farm Bureau, Michigan Farm Bureau and a host of other groups. They're encouraging farmers to send their seed corn tags to President Bill Clinton, USDA Secretary Mike Espy, and their respective U.S. congressmen to remind them of the commitments they've made and the benefits of ethanol in the RFG.

"President Clinton had proposed a Renewable Oxygenate Requirement (ROR) as part of the RFG program, but he later backed out as a result of pressure from certain oil companies," Maucoup explained. "Under this agreement, renewable fuels such as ethanol must be used to replace a minimum of 30 percent of the oxygenates required for reformulated gasoline. This directive has the potential to double, possibly triple, the corn usage for ethanol by the year 2000."

The EPA had published the proposal and accepted public comments until the Feb. 14 deadline. Since that time, however, the oil industry has launched an intense campaign to stop this proposal dead in its tracks. In addition to lobbying U.S. congressmen to sign a letter to EPA opposing the ROR, they've also placed advertisements in major publications and threatened lawsuits if the proposal is enacted.

"We in the agricultural industry need to rally together as never before to show our support for ethanol and, in particular, the Renewable Oxygenate Requirement," said MFB President Jack Laurie.

"Since corn farmers all across Michigan are now either in the field or getting ready to go, this is an ideal opportunity to remind our president and U.S. congressmen just how important this issue is by sending them the seed tags from their farm along with a handwritten note."

Mพวกเขา suggests farmers include a note when they mail their seeds tags stating in effect, that "The seed from this bag will produce 750 gallons of renewable fuel," and/or "Each tag represents about 300 bushels of corn this fall. Renewable ethanol provides a market for that corn, please don't let us down."

"I would advise farmers to send all of their seeds tags in this spring," Mcuador said. "The more tags they send in, the bigger impact it will have. The handwritten notes don't need to be long or complicated - we're just trying to remind our elected officials of the commitment they made and to show our support for the ROR."

Pesticide Storage Facilities Open for Tours!

Tired of reading about pesticide storage facility design? Would you prefer to see some operating facilities in person, ask some questions and get help in locating and designing your own facility?

Thanks to a Saginaw Bay Watershed Initiative project, you now have an opportunity to do so. Funds obtained from the Environmental Protection Agency through the initiative were used to cost-share the construction of three different pesticides facilities in Bay County, on three different farm operations to serve as educational models for farmers, according to Gratiot County Agricultural Agent Dan Rosman.

"There was a lot of talk about pesticide storage facilities, but very few that farmers could tour and inspect," Rosman explained. "We felt there was a need to have some different models that would be available for farmers to see in operation and to get ideas from."

As a result, grant funds were used to construct three different facilities in the Bay City area, including a 10' x 12' storage facility at the David Duyck farm, a 24' x 32' storage facility at the Johnson Potato Farm, and a 40' x 40' facility that doubles as a storage and covered loading and mixing facility at the Reif Farm.

"Many farmers have situations that are less than ideal for chemical storage - what we want to do is to help them into a situation where their liability will be greatly reduced, in the event of a spill or fire," Rosman said. "In many cases, if the chemical isn't stored in a separate facility..."
**In Brief...**

**Meteorologist Says Wet Spring Not Likely**

Both historical and climatic trends point away from any likelihood of an extremely wet spring, according to Jon Davis, meteorologist in a report produced by Smith Bearnex Sherman's Forecast Department in Chicago.

Consequently, the odds do not support any widespread massive flooding this spring. Minor flooding occurs almost every spring, even with normal precipitation, but problems this year will be compounded as a result of the saturated subsols combined with runoff from rain and melting snow over saturated levee problems.

Flooding that occurs is most likely to be on a small-scale, regional basis, not widespread and general as it was last spring and this summer, Davis said. The manger of spring rains in the next month to six weeks will determine whether plantings is to be normal or delayed, according to the meteorologist's report. **Pesticide Protection Rules Delayed**

The Senate passed a bill to delay until Jan. 1, 1995 new federal regulations for protecting farmworkers who handle pesticides. Senate approval sends the measure to President Clinton for signature.

The new rules that require protective clothing and other safeguards for workers who apply and mix pesticides were attacked last week by farmers and farm organizations and state departments of agriculture had requested more time for farmers and their suppliers to become more familiar with the rules. Sen. Thad Cochran, a major sponsor of the bill to delay enforcement, said the delay was needed because the Environmental Protection Agency was late in making guidelines public. **EPA Proposes Pesticide Container Rules**

The Environmental Protection Agency has proposed extensive rulemaking that would establish standards for pesticide containers. The proposed rule covers design, labeling, storage, and disposal of pesticide containers. The proposed container would be cost-effective requirements for use of bulk pesticide containers, including the design, spill prevention, notification, refilling, storage and disposal.

The EPA will be accepting comments on the proposed rulemaking through May 12, 1994. The American Farm Bureau and state Farm Bureaus will prepare comments, says Mark Maslyn of the AFBIF governmental relations division. **U.S. Forest Service Drops Walkskinshaw Litigation Against Oceana County Drain Commissioner**

After a 17-month battle, $92,000 in legal fees for Oceana County, and an unfavorable ruling against them by U.S. Magistrate Judge, the U.S. Forest Service announced it was ending litigation against the Oceana County Drain Commissioner, Calvin Ackley. According to Assistant Deputy Drain Commissioner, Connie Carrig, the U.S. Forest Service has also agreed to settle the county's claim of the $92,000 spent in legal fees.

In a news release, Huron-Muskeat National Forest Supervisor Steve Kelly said that although the Forest Service disagreed with the magistrate's rule that seriously questioned the uniqueness of their property bordering a county drain, they felt the ruling left little doubt they cannot continue to litigate the issue.

The court battle focused on a 1992 county drain improvement project the U.S. Forest Service said threatened property known as the Walkskinshaw Wetlands. As a result, they said it would adversely affect sandhill cranes using the property as a staging area for migration. Even so, as of posthumously, Carter said the Forest Service still had not taken any steps to impede the flow of water from their property.

**Aliens Need New ID Cards After September**

The Immigration and Naturalization Service has issued its final rule on replacement of "green cards." After Sept. 20, the service announced it was ending litigation against the Oceana County Drain Commissioner, Calvin Ackley. According to Assistant Deputy Drain Commissioner, Connie Carrig, the U.S. Forest Service has also agreed to settle the county's claim of the $92,000 spent in legal fees.

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**Farmers to Find Adequate Credit Available**

The four major farm lending sources are in a good position to meet farm credit needs for 1994, according to USDA's Economic Research Service (ERS). "Farmers who are good credit risk will have no trouble acquiring necessary credit in 1994, mostly from commercial banks and the Farm Credit System (FCS)," according to the monthly Agricultural Outlook.

Banks' loan-to-deposit ratios remain relatively low, despite some recent modest increases, the ERS said. In addition to FCS and banks, the major other farm credit sources include Farmers Home Administration and insurance companies.

Total farm debt is expected to increase 1 to 2 percent, representing the fourth consecutive annual increase after six previous years of debt write-down, the report said. Most farmers remain cautious about taking on debt for expansions, according to the report. "Debt, in relation to cash farm income, is at its lowest level since 1973-74. With moderate loan demand expected, lenders are looking to generate high-quality loans to maintain market share," the report said.

Farm production loans are expected to increase slightly this year as farm inputs rise in response to lower energy prices and increased planted acreage, which will result from lowered acreage reduction program requirements.

**Michigan Tart Cherry Producers Approve Referendum**

Michigan red tart cherry producers have approved a referendum for the continuation of the Michigan Red Tart Cherry Information and Development Program, according to Dr. Gordon Geyer, director of the Michigan Department of Agriculture (MDA).

Michigan red tart cherry producers approved the referendum to continue the Michigan Red Tart Cherry Information Program for another five years beginning June 28, 1994 and ending June 27, 1999. A total of 389 ballots were cast in the referendum which was conducted by MDA from Feb. 7, 1994 through Feb. 18, 1994. Thirty-two ballots were disqualified. There were 276 producers voting yes (77 percent) representing 102,516,178 pounds (71 percent) and 81 producers voting no (23 percent) representing 42,649,604 pounds (29 percent).

The assessment rate is determined by the Red Tart Cherry Advisory Board annually at a meeting in July. The advisory board consists of eight producers, four from the northern district and four from the southern district of Michigan. The assessment rate is determined by the Advisory Board annually at a meeting in July. The assessment rate is determined by the Red Tart Cherry Advisory Board annually at a meeting in July. The assessment rate is determined by the Red Tart Cherry Advisory Board annually at a meeting in July. The assessment rate is determined by the Red Tart Cherry Advisory Board annually at a meeting in July. The assessment rate is determined by the Red Tart Cherry Advisory Board annually at a meeting in July.
School Operating Millage Elections

Even with the recent passage of Proposal-A, some local school districts will need to conduct millage elections as their current operating millages expire. Under the Michigan Constitution, the state is limited on the total amount of revenues it can raise through taxation. Therefore, the school operating property tax on non-homesteads had to be levied by both the state and local school districts. Property taxes for school operating purposes will be levied in the following way:

**Millage**
- **Homestead Non-Homestead**
  - State Levied: 6 mills 6 mills
  - Local Levied: 2.5 18.5
  - Total Millage: 6 mills 24 mills

If the school district is unable to pass and maintain the 18 mills levied on non-homesteads, they will not receive their entire pupil foundation grant from the state. The amount of the per pupil foundation grant will be directly proportionate to how much of the local levied 18 mills the school district was not able to have approved by the voters.

**Example**
XYZ School District, in the 1993-94 fiscal school year levied 36 mills for operating. Scheduled as follows:

If the school district is unable to pass and maintain the 18 mills levied on non-homesteads, they will not receive their entire pupil foundation grant from the state. The amount of the per pupil foundation grant will be directly proportionate to how much of the local levied 18 mills the school district was not able to have approved by the voters.

Farm Land Property Tax Measure Makes Progress in Lansing

Legislation to allow most farmland to receive the same six-mill property tax rate as homesteads made significant progress before lawmakers left for their Easter recess.

A bill (S.B. 1027), sponsored by Sen. Joel Gougon (R-Bay City) has been approved by the state Senate and sent to the House for assignment to committee. On the House side, H.B. 5329 (H-4), sponsored by Rep. Dan Gustafson (R-Hastings) and Rep. Kirk Profit (D-Ypsilanti) is on the House floor and is expected to be considered when legislators return after Easter.

"We believe there is broad and strong support to create a situation whereby all ag land is treated alike," said MFB Legislative Council Ron Nelson. "That's a very critical issue in the implementation of Proposal-A. Otherwise it creates some serious administrative problems and probably a constitutional challenge. There was strong vote in the Senate in support of the farmland definition, so with that strong vote, we'll be watching the House very carefully when they take that issue up on the floor."

MFB is asking members to contact their legislators immediately, and urge them to support both S.B. 1027, and H.B. 5329 (H-4). If your state Senator voted yes on S.B. 1027, please contact him or her to show your appreciation for their support.

For more information, contact Ron Nelson at (517) 323-7000, Ext. 2643.

**How Your State Senator Voted on S.B. 1027**

<table>
<thead>
<tr>
<th>Yeas</th>
<th>Nays</th>
<th>Excused</th>
<th>Not Voting</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>11</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

**MFB POSITION**
Michigan Farm Bureau continues to support this legislation and will work to allow it to take effect.

**MFB CONTACT**
Darcy Cypher, Ext. 2048

Rail Reflectors

**MFB POSITION**
Michigan Farm Bureau has had a long-standing policy regarding the need to reflectorize rails. Our members should be made aware of this new safety sign.

**MFB CONTACT**
Darcy Cypher, Ext. 2048

The Michigan Department of Transportation has researched what the other states have found to be successful. They have refectorized material on their reverse sides. If the crossbuck signs need replacement on state or county highways because of destruction or decay, the road authority chooses to replace the signs, just to meet the new design standards, they alone must cover the cost.

USDA Still Hopes for New Crop Insurance Plan

There may yet be some hope for a crop insurance program that will work, despite major budget snags in both the House and Senate, according to Ken Ackerman, manager of USDA's Federal Crop Insurance Corp. The House-approved, five-year budget plan included an increase of only $3 billion for crop insurance, while the Senate version of the budget for that period did not provide any increased funding for crop insurance.

The USDA's proposal to revamp the insurance program called for about $5 billion over the next five years to provide free catastrophic coverage for most farmers. The department said its plan would save over $750 million over five years by eliminating the need for Congress to pass emergency disaster relief measures whenever there is a major crop loss.

**USDA Still Hopes for New Crop Insurance Plan**

<table>
<thead>
<tr>
<th>50 Year Protection</th>
<th>5 Year Protection</th>
</tr>
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<tbody>
<tr>
<td>Against wind load damage to the structure with no weight limit.</td>
<td>Against wind load damage to the structure with no weight limit.</td>
</tr>
<tr>
<td>Against decay or insect attack on protective treated columns and preservative treated lumber.</td>
<td>All warranties include materials and labor and are not prorated.</td>
</tr>
<tr>
<td>20 Year Protection</td>
<td>800-447-7436</td>
</tr>
<tr>
<td>Against red rust including damage caused by atmospheric pollutants.</td>
<td>Morton Buildings, Inc.</td>
</tr>
<tr>
<td>10 Year Protection</td>
<td>Morton Buildings, Inc.</td>
</tr>
<tr>
<td>Against wind load damage to our optical AlumaStud® sliding doors with no wind velocity limit.</td>
<td>P. O. Box 399, Morton, IL 61550</td>
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</tbody>
</table>

© 1994 Morton Buildings, Inc.
March weather was truly transitional in nature, beginning the month with warmer than normal conditions and a major heat wave and ending colder than normal. The cause of the change was a shift in the upper air steering currents from a southwesternly to northeasterly orientation. Mean temperatures averaged near to slightly above normal for the period, while precipitation was generally lighter than normal across the state.

The new National Weather Service long-range outlooks call for a general continuation of the northwesterly flow aloft. Given that frigid air persists in northern sections of North America, it is only a matter of time before some of the Canadian-origin air makes its way into the Great Lakes region.

While these air masses will likely be modulated due to the lack of snow cover over most of the state, below normal mean temperatures are still a good bet.

The official outlooks for April and April-June both call for below normal temperatures and normal to above normal precipitation. Impacts of these outlooks would be highly dependent on crop type, ranging from significant spring fieldwork delays for summer crop planting on wet, soggy soils to a reduced risk of spring freeze damage for overwintering crops which would remain dormant longer than usual.

**Michigan Weather Summary**

<table>
<thead>
<tr>
<th></th>
<th>3/1/94</th>
<th>to 3/31/94</th>
<th>Temperature</th>
<th>Growing Degree Days</th>
<th>Precipitation</th>
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<td>16.9° F</td>
<td>Dev. From</td>
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<td>Actual</td>
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<tr>
<td>Normal</td>
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<td>14.0° F</td>
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<td>Normal</td>
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<td>Bad Axe</td>
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<td>11.2° F</td>
<td>+0.1° F</td>
<td>23.4 days</td>
<td>0.0 in</td>
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<td>Dansville</td>
<td>16.9° F</td>
<td>16.0° F</td>
<td>+0.9° F</td>
<td>33.7 days</td>
<td>1.5 in</td>
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<tr>
<td>Escanaba</td>
<td>12.9° F</td>
<td>12.7° F</td>
<td>+0.2° F</td>
<td>29.5 days</td>
<td>0.0 in</td>
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<tr>
<td>Fishe Lake</td>
<td>13.4° F</td>
<td>13.2° F</td>
<td>+0.2° F</td>
<td>29.5 days</td>
<td>0.0 in</td>
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<tr>
<td>Grand Rapids</td>
<td>14.5° F</td>
<td>14.5° F</td>
<td>0.0° F</td>
<td>33.4 days</td>
<td>0.0 in</td>
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<tr>
<td>Houghton</td>
<td>12.7° F</td>
<td>12.7° F</td>
<td>0.0° F</td>
<td>22.8 days</td>
<td>0.0 in</td>
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<tr>
<td>Houghton Lake</td>
<td>12.7° F</td>
<td>12.7° F</td>
<td>0.0° F</td>
<td>22.8 days</td>
<td>0.0 in</td>
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<tr>
<td>Jackson</td>
<td>12.3° F</td>
<td>12.3° F</td>
<td>0.0° F</td>
<td>21.5 days</td>
<td>0.0 in</td>
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<tr>
<td>Lansing</td>
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<td>11.7° F</td>
<td>0.0° F</td>
<td>21.5 days</td>
<td>0.0 in</td>
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<tr>
<td>Marquette</td>
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<td>13.9° F</td>
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<td>0.0 in</td>
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<tr>
<td>Muskegon</td>
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<td>12.2° F</td>
<td>0.0° F</td>
<td>33.4 days</td>
<td>0.0 in</td>
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<tr>
<td>Pellston</td>
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<td>12.7° F</td>
<td>0.0° F</td>
<td>22.8 days</td>
<td>0.0 in</td>
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<tr>
<td>Traverse City</td>
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<td>11.3° F</td>
<td>0.0° F</td>
<td>21.5 days</td>
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**Michigan and Major Commodity Area Weather Outlook**

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<td>E. Corn Belt</td>
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<td>Pac. NW Wheat</td>
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<tr>
<td>Mich.</td>
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<td>N</td>
<td>N</td>
<td>N</td>
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<td>N</td>
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</table>

A-Above Average, B-Below Average, N-Normal.

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**ASCS Program Sign-Up Continues Through April 29**

The sign-up period to enroll in the 1994 deficiency payment program for wheat and feed grain continues through April 29 at County Agricultural and Conservation Service (ASCs) offices.

According to Jim Byrum, state executive director of Michigan ASCS, the 1994 program should be attractive to farm producers. "There are no acreage reduction requirements for corn, barley, oats, wheat and grain sorghum," said Byrum. "Producers can plant their entire base program after the sign-up period with no penalties. Advance deficiency payments are available at sign-up and will be paid at the rate of 50 percent of the projected deficiency payment for 1994. Advances will be required to be repaid if producers withdraw from the program.

Bob Bethel, ASCS state director, noted that producers may withdraw from the program at any time prior to the 1993 corn "marketing year" ends.

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**ACA on Sugarbeets**

ACA applied preplant incorporated or in-furrow has shown improved productivity of sugarbeets. ACA applications can be made with fertilizer or water as the carrier.

---

**Visual Response**

- Vigorous early growth.
- Earlier green more erect leaves and full canopy
- More extensive hair roots
- Darker green more erect leaves and full canopy
- Row Closure

**Yield Information**

- Sugar beets with ACA shows a significant increase in recoverable sugar per acre.

**Application Techniques/Procedures**

- Soil application (University and grower studies)
- 3.1% (33 pounds per acre) or 2.0% (20 pounds per acre) or 2.0% (20 pounds per acre)
- Return on ACA investment of $25.68 (1/2 pint/acre) or $22.64 (1 pint/acre)
- Return on ACA investment of $25.68 (1/2 pint/acre) or $22.64 (1 pint/acre)
- Application rate for ACA soil broadcast is 16 fluid ounces/acre (1 pint/acre)
- Application rate for ACA soil broadcast is 16 fluid ounces/acre (1 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
- Application rate for ACA in-furrow application is 8 fluid ounces/acre (1/2 pint/acre)
GET $500 CASH BACK OR $1000 WORTH OF DEWALT TOOLS.

It's looking like another good year for American farmers. First we introduce the new Ram Pickup, "The Truck Of The Year" according to Motor Trend. And now the truck that changes all the rules also comes with a special $500 cash incentive. Available to Farm Bureau members only, on all '94 5.9L Magnum gas and Cummins diesel Ram models. We've added cash back to most '94 mid-size Dakota pickups, too, along with all full-size Ram Vans and Ram Wagons. And your cash back is on top of any other national offer." Or if you prefer, select up to $1,000 in quality DeWalt tools. All you need is a certificate from your state's Farm Bureau before you see your Dodge dealer. Cash back or DeWalt tools — expect a record harvest.

* This cash-back offer is valid for members of participating Farm Bureaus, expires 12/31/94, and may not be used in combination with any other Chrysler Corporation incentive program or certain other special programs. Ask for restrictions and details.
CORN

It now appears it's going to take a weather market for higher prices. The USDA Quarterly Stocks Report, released March 31, showed corn stocks were near expectations. And while the USDA Planting Intentions Report, released at the same time, showed corn planting intentions about 1 million acres lower than expectations, this is not low enough to sustain a big rally. However, it is low enough to help out a weather market "if" one occurs.

The Corn Stocks Report indicated that corn used for feed in the second quarter was about 10 percent lower than last year's record usage. However, about 80 percent of this decrease was made up by heavier feeding of wheat, barley and sorghum. This shows strong feed demand, in spite of higher prices this year, which is in line with 1993-94 USDA projections (Table 1). It also matches up fairly closely to livestock numbers.

The other big disappearance number is exports which are projected to be down dramatically for 1993-94. And, at this point, looking at exports to date and booked sales, it looks like we may have a problem even reaching this low number.

U.S. corn producers intend to plant 78.6 million acres of corn. With the zero set-aside, the opportunity was there to plant at least 82 million acres. However, it is low enough to help out a weather market.

SOYBEANS

The reports showed soybean stocks to be very near expectations -- it was the Planting Intentions Report that was a surprise. The report showed producers intended to plant 61.1 million acres of soybeans, over a million more than average expectations. In Michigan, farmers intend to plant 1.5 million acres of soybeans, up 3 percent compared to the last 2 years.

Exports to date would indicate that we should reach USDA 1993-94 projections seen in the Table 3. However, booked sales are very low and will have to pick up to keep exports running at a rate to meet the projection.

Strategy: The soybean basis is very tight and the futures markets will not pay storage, either off-farm or on-farm. This means we should be out of the bean storage business and be watching the futures for market gains. This can be done with futures, basis contracts, call options and minimum price contracts.

HOGS

The Quarterly March 1 USDA Hogs and Pigs Report was released March 25. It showed inventory 2 percent below the same date a year ago. Hogs kept for breeding were equal to two years ago. This was a surprise to the trade which expected them to be lower. All hogs and pigs kept for market were down 2 percent. Overall, the report was negative for the market.

Hogs over 180 pounds on March 1 were shown as equal to last year, but March slaughter was up 3 percent. Was this due to holders of new crop on April 1. To me, this would indicate there is a little more upside potential than downside risk as long as the threat of a weather market is possible. As we go through the year, those odds will even out.

In Michigan, corn producers intend to plant 2.6 million acres, about 4 percent more than a year ago and about 4 percent less than they planted two years ago. Corn stocks being held in Michigan are up about 2 percent, while total U.S. stocks are down 30 percent.

Strategy: The corn basis has continued to tighten. There should be no commercially farmer-stored corn at this point and we probably ought to be moving corn stored in the farm's own hands.

WHEAT

The Wheat Stocks Report showed 30-80 percent lower than last year's record usage. The previous number two state, Illinois, dropped their numbers by 6 percent. The largest hog state as they increased their numbers by 22 percent this past year. The previous number two state, Illinois, dropped their numbers by 6 percent. The largest hog state as they increased their numbers by 22 percent this past year.

Strategy: Over the next several weeks -- keep current, especially if the market is at its highs. For the second half of the year, look for forward pricing opportunities on rallies. I expect cash prices to be in the $72-75 range. Consider pricing a portion of your production if you have opportunities in the upper part of that range.

CATTLE

The March USDA Cattle-On-Food Feed Report showed inventory up 2 percent from last year. Along with this, slaughter weights are up about 4 percent. This will put a lid on very high prices, but we should see prices in the $75-78 range for April and reach of May.

Placements in February were up 7 percent compared to the low placements of a year ago, but down 10 percent from two years ago. Marketings were up 4 percent, which was near expectations and shows even with the higher weights not too far from current levels.

Strategy: Over the next several weeks -- keep current, especially if the market is at its highs. For the second half of the year, look for forward pricing opportunities on rallies. I expect cash prices to be in the $72-75 range. Consider pricing a portion of your production if you have opportunities in the upper part of that range.
MSU Telfarm Program Picks 1994 Farm Managers of the Year

John D. Jones, Telfarm Director
Department of Agricultural Economics
Michigan State University

The excellent farm management skills of four Michigan farm families were recently recognized by the Michigan State University Department of Agricultural Economics Telfarm Center. Selected as the Telfarm Farm Managers of the Year were Bernard and Shirley Brinks, of Falmouth; David and Beverly Sturgis, of Sturgis; Kenneth and Jane Gasper, of Belding; and Jim and Lloyd Ruesink, of Adrian.

The awards recognize the owners’ managerial skills and the economic progress made by their farm operations over the past several years. Other criteria include community service and activities that contribute to improving agriculture in general. The awards were presented at the Ag Tech Luncheon, March 12, at the Kellogg Center in East Lansing during the Ag Tech Program’s 100th anniversary celebration.

David and Beverly Sturgis

The Sturgis family, along with their daughter Pam, and her husband, Edward Schlubach, manage a swine and cash crop operation near Sturgis in St. Joseph County. The swine operation markets about 3,000 hogs each year. The Sturgis farming system employs on the Sturgis farm. Pam is beginning to assume some of the Telfarm accounting work from Dave and long-time assistant recordkeeper, Marilyn Beal. Teamwork and shared responsibilities is a very important part of the efficient management of the Sturgis family farm.

Dave and Beverly are both strong leaders in their community and are active members of Farm Bureau and United Methodist Church.

Kenneth and Jane Gasper

The Gaspers, and their children, own and operate Lew-Max Holsteins, near Belding in Ionia County. In 1988, Ken and Jane took over the management of the farm from Ken’s parents, Lewis and Maxine, who started using the Telfarm program in 1976. Jane is now using MicroTel, Telfarm’s microcomputer option, to keep the business records. Lewis and Maxine still serve as dependable consultants when needed.

The Gaspers are recognized for their advancement in herd genetics and nutrition, and in the environmental management of their farm. They are active with DBA, MABC and Select Sires. Ken serves on the MSU Animal Science Advisory Committee. With the assistance of MSU, the Gaspers developed, a low cost, environmentally sound milking parlour water disposal system.

The farming operation consists of 690 acres and a 140-cow dairy herd that currently produces about 25,000 pounds of milk per cow per year. Ken was MSU Animal Science Department’s 1992 Dairy Farmer of the Year. The Gasper family is also active with their church, their community and are active members of Farm Bureau and United Methodist Church.

Jim and Lloyd Ruesink

The Ruesink family manages an 80-cow dairy herd that currently has a rolling herd average of over 25,000 pounds of milk and 1,100 pounds of butterfat per cow per year. Their Missaukee County dairy farm located near Falmouth consists of approximately 300 acres owned and 50 acres rented that produce corn and alfalfa hay.

Bernard Brinks has farmed for 57 years and has used the Telfarm system for 25 years. Shirley is responsible for keeping the Telfarm business records. The Brinks’ son, Ronald, and his wife, Barbara, are also involved full time in the farm.

Bernard serves on the Prosper Christian Reformed Church Board of Elders, Clan Union Township Board of Trustees, and Falmouth Coop Board of Directors.

Bernard and Shirley Brinks

The Brinks family manages an 80-cow dairy herd that currently has a rolling herd average of over 25,000 pounds of milk and 1,100 pounds of butterfat per cow per year. Their Missaukee County dairy farm located near Falmouth consists of approximately 300 acres owned and 50 acres rented that produce corn and alfalfa hay.

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Bernard serves on the Prosper Christian Reformed Church Board of Elders, Clan Union Township Board of Trustees, and Falmouth Coop Board of Directors.

Jim and Lloyd Ruesink

The Ruesink operation, known as the J & L Ruesink Farm, consists of 700 acres of alfalfa, corn and oats for the support of the 230-cow dairy operation, near Adrian in Lenawee county. Jim joined his father, Lloyd, after graduating from MSU in 1978 with a dairy science degree. The Ruesinks have been active with soil conservation, FFA, Farm Bureau, Michigan Department of Agriculture and Michigan State University.

Lloyd Ruesink’s father, William, began using the Telfarm recordkeeping system in 1928. Lloyd continued using the system and in 1992, at the age of 81, taught himself how to use the MicroTel software option of Telfarm. The books balance to the penny, according to Jim. Lloyd says, “I might as well get started now, I’ll never learn any younger.”

According to Lloyd, the Telfarm program allows a farmer to know his strong points and weak points. The Telfarm program showed the Ruesinks the dairy end of their operation was more profitable than the cropping end. In 1971, the family invested $300,000 in a milking parlor.
Clinton County dairy farmers Larry and Wayne Webster took top honor during the recent annual meeting of the Michigan Dairy Herd Improvement Association (DHIA). They were named the 1993 Progressive Dairymen of the Year.

Milk production over 300 cows, the Websters have improved their rolling herd average by 9,800 pounds of milk in just the past five years to 26,950 pounds in 1993. Likewise, dollar value per cow has improved $1,401 during those same five years to the 1993 average of $3,445 per cow.

Production increases, according to DHIA General Manager Al Thelen, are attributed to improved rations using the Spartan II program, switching to a total mixed ration feeding program, use of body scoring, and most recently switched to a three times per day milking schedule.

The MSU Animal Science Dairymen of the Year Award was presented to the Lyle Ball and Doug Chapin families of Mecosta County.

In other award programs, the following dairymen were recognized for their achievements:

- **Highest 365 Day Dollar Value - 1993 Average:** Paul Wardin, Remus, Mecosta County, 40 cows, $3,554 value, on 27,880 lbs. of milk, 1,101 lbs. of butter fat, and 872 lbs protein.

- **Highest 365 Day Herd Average:** Jeff Alexander, Hanover, Jackson County, 93 cows, $3,532 value on 27,880 lbs. of milk, 996 lbs. of butter fat, and 861 lbs of protein.

- **Highest Individual Cow, 365-Day Actual Milk and Dollar Value:** Nobis Brothers, St. Johns, Clinton County, 5-Year average: 352 Cows, $3,422 Dollar Value, 26,149 lbs. of milk, 971 lbs. of butterfat, and 831 lbs of protein.

- **1993 Five Year Gold Award Club Winner:** Nobis Brothers, St. Johns, Clinton County, 5-Year average; 352 Cows, $3,422 Dollar Value, 26,149 lbs. of milk, 971 lbs. of butterfat, and 831 lbs of protein.

Calendar of Events

- **April 23, West Branch Bull Sale, noon.**
- **April 30, 4th Annual Key to Profit Sale, Escanaba, 1 p.m.**
- **May 23 - 24, National Agricultural Biotechnology Council. MSU Kellogg Center, Call Eddie Hansen (517) 355-0123.**
- **June 20-24, Young People's Citizenship Seminar, Calvin College, Grand Rapids, 1-800-292-2680, ext. 3234.**
- **June 22-24, College Week, Michigan State University.**
- **July 19-21, MSU-AG Expo, Michigan State University.**
- **July 20, Summerfest, MFB Center, Lansing.**
- **July 26, Plant Problem Diagnosis Field Day, Michigan State University, Call Jim Kells 355-2173.**

For information, call 1-800-292-2680 or contact your local Farm Bureau agent.
and it catches on fire, the fire department would likely let the whole thing burn." During a recent tour of the three facilities, approximately 65 farmers from the Bay County area had a chance to listen, look, and ask questions about site location, facility design, and regulatory requirements.

Although each facility was designed differently, they still had some common elements, including building code requirements in terms of electrical wiring, and containment needs via sloped concrete floors and concrete sump pits.

"In each of these facilities, if we do get a spill, we can contain it as well as possibly be able to reuse the chemicals, thanks to the containment system," Rossman said. "Building codes also require that if products with a flashpoint below 100 degrees are going to be stored in the structure, you must have explosion proof wiring. As a result, many chemical manufacturers are trying to reformulate their product so the flashpoint is above 100 degrees."

Explosion proof wiring doesn't come cheap either. According to Dave Duyck, the wiring bill alone on his 10' x 12' structure was $2,500 for just two light bulbs and a fan. Total construction costs for his facility were $5,000. The walls are insulated and have steel siding both inside and out.

The structure, located on the main farm site, was required to be at least 200 feet from the house, 100 feet from any other building, 200 feet from his potato storage facilities, and at least 100 feet away from any ditch, lake, pond or well, Duyck said.

The concrete floor slopes to the back of the building to a concrete sump pit, and is designed to hold up to 150 gallons in the event of a spill. A good rule of thumb in determining containment capacity is 25 percent of the total chemicals stored or 125 percent of the largest container.

Duyck, in a partnership with his father Art, farms 450 acres, raising approximately 250 acres of potatoes, in addition to corn, soybeans and wheat annually. He explained that with potatoes there are number of different chemicals that are used each season. Although he prefers not to store chemicals from one season to the next, he does need a facility in-season until they're applied. "Our goal in using this facility is to store as little chemical as possible," Duyck said. "We prefer to leave that up to the manufacturer. However, there are times when we need a place to store chemicals until they're applied."

According to Rossman, there are cheaper alternatives for chemical storage if resources are limited. "We're not advocating that every farmer go out and spend $40,000, $20,000 or $10,000 for a facility," Rossman advised. "But even a very small producer can reduce his liability by moving his chemical storage from the farm shop or house basement into a separate structure, even if it's just a cargo box off an old refrigerated truck."

Duyck concurs with Rossman in addressing the liability issue, as well as the environmental benefits of a properly constructed and maintained storage structure. "Farmers don't really want to create a liability for themselves and they really don't want to end up contaminating the groundwater. I think it's a good idea for every farmer to have a chemical storage structure on their farm for their own peace of mind," he concluded.

Who to Call and Where to Go to Tour These Facilities
Contact Dan Rossman, Gratiot County Extension Agricultural Agent, at (517) 875-5333

1. David Duyck Farm - 589 Cotter Road, Approximately 8 miles east of Bay City, on M-52, then 1/4 mile south on Cotter Road, facility on the west side. (517) 694-4016
2. Johnson Potato Farm - Approximately 9 miles east of Bay City, on M-52, near the county line, facility located on the south side. (517) 693-2564
3. Reif Farms - Approximately 5 miles east of I-75 on M-81, facility located on north side. (517) 753-2146

Pesticide Storage Facilities Open for Farmer Tours. Continued from page 1

Selecting Planter-Mounted Row Cleaners
These Yetter Row Cleaners, running in combination with coulters, are ideal in heavy residue situations.

In my conservation tillage systems, crop residue on the soil surface at planting time is a concern for early planted crops such as corn and sugar beets. Surface residue delays soil warm-up and may improve seed-soil contact or fertilizer placement. A narrow zone can be cleared by using coulters to till a narrow band of soil and chop and incorporate most of the residue or by using row cleaners to sweep clean a strip of soil 6-10 inches wide. There are several types of row cleaners. In tilled fields with light residue, V-configured tine harrows in front of the planter unit may work well, but they will drag heavy or long residue. In tilled or no-till conditions with light residue, brush wheels may work well. Solid, 15 inch finger wheels, with or without cutting edges harrowing in front of the planter unit may work well and may help prevent soil crust forming. Surface residue may benefit from a narrow zone of a deep seed furrow if the soil has a tendency to get hard, tilling a narrow band of soil may improve seed-soil contact or fertilizer placement. Adding single coulters with the row cleaners or a separate topdresser may be a good choice in these conditions. The coulters may improve residue flow if the residue is long, damp and too wet for the conditions, evaluate the coulters primarily on its tillage benefits.

I don't believe it is necessary or even desirable to remove all of the residue from the cleared zone. A small amount of residue (10-20 percent) will not noticeably delay soil warm-up and may help prevent soil crusting.

settings.
Starter Fertilizers for No-Till Corn

Maury Vlacho, Crop & Soil Sciences

Research has shown that the probability of response to banded starter fertilizer increases markedly as reduced tillage systems are used. Soil temperature is the major factor affecting nutrient availability in these systems.

As soil temperatures increase, more nitrogen (N) and phosphorus (P) is mineralized from soil organic matter. Plant roots also have greater ability to absorb nutrients under warm conditions.

In early spring, no-till soils tend to stay cool and wet causing slow release of plant nutrients. In these situations, wet soils will have a higher potential for providing a yield response.

N Likely to be Responsible for Starter Fertilizer Response

Traditionally, farmers and agronomists thought that phosphorus (P) was the nutrient responsible for most starter fertilizer responses. Recent work in Indiana, however, has shown that N was responsible for most of the starter fertilizer responses.

In 11 experiments where starter fertilizer treatments were used on both no-till and conventional till corn, starter fertilizer responses were obtained only once in conventional tillage, but in eight of the 11 experiments with no-till.

In six studies, where the P and K soil test levels were high, they found that N was responsible for a seven bushel yield increase in the no-till system, three bushels in the ridge till system and two bushels in the chisel system. Similar starter fertilizer responses have been observed in Wisconsin and Minnesota.

Current MSU fertilizer recommendations for corn are to use 30-40 pounds of starter N when planting in a high crop residue system. P use should be based on a soil test.

When the P soil test is less than 120 pounds per acre but greater than 40 pounds per acre, use 20-30 pounds of starter P in high residue systems. When the P soil test is less than 40 pounds per acre, larger amounts of starter P may be used. When the P soil test exceeds 120 pounds per acre, P is unnecessary and should be discontinued for environmental reasons. Growers in this situation should still use N at corn planting time.

The options available for applying starter N without applying P are somewhat limited, however, the best choice is probably 28 percent liquid N. The use of urea as a starter fertilizer is not encouraged due to the potential for free ammonia developing near the seed. One solution to this problem is to move the urea placement further from the seed.

There are limits as to the amount of N and K fertilizers that can be applied in the band two inches to the side and two inches below the seed. Do not use more than 40 pounds of N (any source) and 60 pounds of potash in this placement.

Farmers who want to use more N and K at planting, should move the placement 4-6 inches from the seed to prevent salt injury to emerging seedlings. N can also be broadcast to immediate planting to N to small seedlings, however, this is not the most efficient placement for N in high residue systems. Repeated from MSU Crop Advisor Team Alert

Nine Easy Steps to Calibrate Your Spray Equipment

To avoid needless chemical waste and potential water contamination, calibrate your spray equipment at least once a year. Just follow these nine easy steps:

1. Fill your sprayer with water.
2. Measure the distance between the nozzles on your spray boom.
3. Choose the Test Course Length (in ft) from the calibration test chart (below), measure and mark the course distance.
4. Drive the test course at your normal spraying speed and record the number of seconds it takes to drive the measured distance. Be sure to operate all equipment.
5. Stop, set the brakes, but keep the engine r.p.m. at the same setting used to drive the test course.
6. Set the desired pressure on your sprayer.
7. Using a container marked in ounces, collect the water弃ted from nozzles during the same number of seconds it took to drive the test course.
8. Measure the flow of each nozzle. If the flow rate of any tip is 10 percent greater or less than the others, replace it.
9. The water collected per nozzle equals gallons per acre applied. Fine tune your sprayer pressure accordingly.

Please letterfold and staple this form with the mailing address on the outside (reverse side)
**Environmental Stewardship**

**No-Till Planter Trouble Shooting**

At the business end of the planter, pay special attention to seed openers, seed depth control, and leveling your planter once it's in the ground. Make sure residue isn't hair-pinned in the seed trench to avoid poor seed to soil contact.

Proper corn planter preparation this spring could mean big returns this fall. According to studies conducted at Purdue University, proper row spacing, for example, can make a big difference, according to Northrup King Agronomist Dan Coffin.

Every one inch increase in the standard deviation of plant to plant spacings can cost you 2.5 bushels per acre. If you were shooting for an average spacing of 7.5 inches and you end up with an average of 8.5 or 6.5 inches, you're losing at least 2.5 bushels per acre.

Purdue researcher Dr. Bob Neilsen found standard deviations ranging from two inches to nine inches in a study he conducted on Wisconsin farms. Nearly 48 percent of the fields were in the four to six inch range.

Nearly 10% of the fields were in the four to six inch range. These depths are not ideal and are only obtainable when the planter is level.

### Level Planter

* Notice the planter frame and boxes are level with the soil. In most cases, the planter frame is approx. 20" above the ground. The planter frame is approx. 20" above the ground. The planter frame is approx. 20" above the ground. The planter frame is approx. 20" above the ground. The planter frame is approx. 20" above the ground.

* The planter hitch is set too low. Ensure that it is set to the correct height (consult the planter's operator manual).

* The unit mounted coulters are not providing enough soil disturbance. Use a way coulters blade.

### Unlevel Planter

* Check the hydraulic system and the hitch to make sure the planter is level and aligned between tire tracks properly.

* Planter tires should be properly inflated.

* Adjust row markers and units to maintain proper spacing.

* Replace worn sprockets, gears, and chains, and make sure the correct ones are used for the desired planting rate.

* Clean and inspect the seed hoppers and reservoirs. On air planters, check all seals and gaskets for leaks.

* Check the accuracy of planter monitor systems.

### Preliminary checklist for all planters regardless of make and model

It is recommended that the following items be checked before planting:

* The seed and double disc openers should be sharp.

### Problem

<table>
<thead>
<tr>
<th>Seed trench not closing</th>
<th>Insufficient down pressure on the closing wheels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting rate too low.</td>
<td>Increase the down pressure on the closing wheels.</td>
</tr>
<tr>
<td>Closing wheels too deep.</td>
<td>Ensure that in operation the planter's hitch is set to the correct height (consult the planter's operator manual).</td>
</tr>
<tr>
<td>The unit mounted coulters are not providing enough soil disturbance.</td>
<td>Use a way coulters blade.</td>
</tr>
</tbody>
</table>

### Seed being planted too shallow

* Excessive down pressure on the closing wheels.

* The planter needs additional leveling. Add a leveling board to the planter.

* The double disc fertilizer openers are causing too much soil disturbance in the path of the seed double disc opener gauge wheels. Use a way coulters blade.

* Planting unit depth is improperly set. Adjust the depth setting of the planter unit.

### Erratic seed placement

* Excessive residue in the seed trench. Use a residue clearing device.

* Low tire pressure. Inflate tires to the recommended psi.

* Excessive speed causing the planter unit to bounce. Decrease planting speed and increase down pressure spring tension.

* Dry drive chains causing jerky movement. Lubricate drive chains.

| Planter unit bounces. | Add leveling board to the planter. |

### Starter fertilizer is not being placed in the proper zone by the double disc fertilizer openers.

* Most double disc fertilizer openers are not built for pinpoint fertilizer placement. Use a unit mounted coulters blade or adjust angle of marker blades.

* Equipment is not being used. Use an after-market marker blade or adjust angle of marker blades.

| Most double disc fertilizer openers are not built for pinpoint fertilizer placement. | Use a unit mounted coulters blade or adjust angle of marker blades. |

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**April 15, 1994**

Michigan Farm News
I[12

Rotational Grazing Popularity Growing in Michigan

If attendance at the second annual Michigan Grazing Conference, sponsored by MSU, is any indication, rotational grazing has moved from just a novel idea, to a serious management consideration. Approximately 400 farmers from across Michigan were in Mt. Pleasant in mid-March to listen to, talk with and learn from other farmers and university resources on the merits of grazing.

"We're a high-tech society and grazing is not considered a high tech management tool, so we have a lot of what I call closet grazers in this state," suggested Dan Bartlett, an Upper Peninsula dairy and livestock Extension agent. "We've been working with rotational grazing for 15 years, and we're starting to see a real movement to increased grazing because it can have a tremendous and positive effect."

Bartlett, a grazer himself with over 400 ewes, and 100 head of stocker cattle, estimates that as many as 500 Michigan farmers now utilize grazing in some shape or form right now. He prefers to call rotational grazing an alternative that, based on an individual basis, may be a better way to harvest forages.

"Rotational grazing is a personal decision - it's an alternative," Bartlett said. "It's not necessarily better than conventional methods, it's not worse than conventional. It depends on what kind of farm you have, what goals you have, what kind of skills you have that should determine if grazing is an appropriate technology for you."

For Lenawee County dairy farmer, Greg Hardy, 1993 was the year he decided rotational grazing was for him and his 150-cow dairy herd and 200 heifers. Hardy, a producer panel speaker, said he wanted to maintain his 22,000 rolling herd average while reducing feed costs and providing a better environment for his cows. He ran all of his milking cows on 50 acres from May through October. Average feed costs were 63 cents per cwt. lower on pasture, while daily production per cow was down 4 pounds per day.

After his first year of rotational grazing, Hardy's overall costs were down $107,000, thanks to lower fuel, utility and building repairs. Income was also down, but when it was all said and done, he figures he netted an additional $60,000 from his operation last year as a result of rotational grazing.

Rotational grazing studies done in New York, Wisconsin and Michigan have shown that grazing can reduce annual production costs for milk from $1 to $2 per cwt., according to Bartlett. The largest dairy herd in the state that he's aware of using rotational grazing is a 1,200-cow dairy herd in Wisconsin.

Other speakers included a host of livestock producers such as Matt Wiley of Schoolcraft, who runs 500 ewes, 700 lambs and 300 stockers on rotational grazing. University resource people were also on hand, all of which practice rotational grazing on a regular basis. According to Bartlett, the fact that all of the speakers are experienced grazers themselves adds a great deal of credibility to the conference.

"You can read the books; you can go to classes, but you're not a grazer until you're the one that opens and closes the gates," Bartlett said. "There's a great deal of education and information exchange going on here, both formally and informally.

For the farmer considering rotational grazing, Bartlett advises attending conferences such as this one, working with university resource people and then find out who else is doing it locally. "Go visit them, see what they're doing, and then sit down and determine why you want to graze, and then go from there," Bartlett concluded.

MSU to Participate in Scholarship Program

Mutual of Omaha's Wildlife Heritage Trust announced that Michigan State University has been selected to participate in the Mutual of Omaha Marlin Perkins Scholarship Program. The scholarship is intended to help ensure that a future generation can follow in the footsteps of the pioneer conservationist.

Michigan State is one of five schools included in the expansion of the program. In 1993, 20 schools participated in the program nationwide.

The $1,000 scholarship will be awarded each spring to a junior or senior who is studying in the Fisheries and Wildlife Department. The recipient must meet high academic standards, and have shown his or her interest in conservation through extracurricular activities or volunteer work.

Gary Prysock, general manager for the Mutual of Omaha Companies' Troy office, explained that Michigan State was selected for its outstanding program of study in wildlife ecology and management.

"The Trust is proud to continue Marlin's conservation education legacy through these scholarships so that future generations will benefit," Prysock said.

The scholarships are funded by the Mutual of Omaha Companies through the Wildlife Heritage Trust. In addition, a portion of the proceeds from the sale of the Trust's wildlife videos and Jim Fowler's book, "Jim Fowler's Wildest Places on Earth," will go toward the scholarships. Fowler is executive director of the Trust.
Profile: Paul Knorr 

Cropping and Soil Sciences Graduate Student 

By Karen Geiger 

Identifying methods for greater and more efficient crops and land management is a major focus of Paul Knorr's research. 

Knorr, who received his bachelor's degree in Cropped and Soil Sciences in 1991, is now a graduate student in that department and has concentrated his attention on weed management. 

His interest in weeds was launched after he served as a field student and research assistant for the Michigan Crop Improvement Association scholarship program as an undergraduate and began working with Dr. James Kells on the weed science research team. His learning experience through this summer internship taught him that research is detail-oriented, labor intensive and necessary. 

"Through all of my involvement (at Michigan State), I learned that there are always better ways to do things and that you have to cooperate and work hard to be successful," he notes. 

With that dedication, Knorr is continuing his education in the weed science program, focusing on weed control in sugar beets. He is also currently involved on his family's 2,500 acre cash crop farm, which includes sugar beets and dry beans. 

Knorr, along with two others of his own, is a member of the Michigan Farm Bureau Young Farmers, and Project ProFLE and the Saginaw County Innovative Farmers. 

"The crop and soils program has given me the background to take farming to the next level. More production and better efficiency with lower inputs can keep American agriculture competitive," he adds. 

According to Paul, not only is the dedication of the teachers extraordinary, the equipment, field research stations and greenhouse space availability is among the best in the nation, as well. "It is hard to compare other universities' agronomy departments to that of Michigan State's department," he said. 

What does all of this mean to individuals looking to further their agricultural education? "They will find opportunity within the agronomy courses. The Crop and Soil Sciences Department is noted for the high level of graduate placement it provides for students who have gained experience through internships. There are also several scholarships available. The Michigan Crop Improvement Association gives out several thousand dollars per year in scholarships alone, providing between $250 and $1,000 per scholarship, along with jobs in the department."

In constituency meetings Crop and Soil Sciences Department staff meet with representatives from related fields to make sure the department is adequately prepared to meet the needs of the agricultural industry. 

These positions are more valuable than just dollars. Students find a niche in the agronomy field and are able to gain practical experience and an area of study to focus on. Others from the industry providing scholarships include Du Pont, and Miles/Mobay, to name a few. 

There are four different options available within the crop and soil major. The two-year crop production program focuses on the technological aspects of crops and soils with an 18-week internship requirement. This includes classes in weed management, forage management, and soil management. 

The four-year crop and soil sciences general options offers study for crop production-oriented individuals with careers ranging in weed management, soil fertility, crop physiology (anatomy of plants) and plant pathology (plant disease and management of disease). Crop and soil sciences advanced option deals more with the science involved and provides course study for those planning on attending graduate school or returning to the research aspect of agronomy. 

The environmental soil science option is relatively new to the department, focusing on areas of soil management and effects of agriculture and related industries to the soil. 

Currenty, there are 100 graduate students, 38 of which are international students; 47 undergraduate students in the general and advanced crop and soils four-year program and seven in the two-year general program; and 10 in the environmental soil science option. Opportunities in the agronomy field include pesticide, seed, and equipment sales, farm management, research and consulting.
Michigan Farm News Classifieds

April 15, 1994

01 Farm Machinery
10 (6) DAWN TRASH row cleaners. Fit John Deere 7000 or Kinze planters. Used very little. Call 1-419-836-0674.

WOOD BALE kicker wagons. Choice, $700 or all $2750. Also, have approximately 15 miles of equipment. Call Bob Ryan 1-517-834-2574.

FOR SALE: Fisker shaker double in-line trash shaker, $2000. Also, 10 cherry tansis, $350 each. Call 1-618-834-7040.


HARRI H-BOTY, Model 300. Good $2500, Owner is retired. Call 1-313-439-2771.


BUZZ SAW, 3-point back up pull-bal, New two wheel trailer, 42" cut. 1970 Crafts, 4-cow, 78,000 actual miles, good tires. Runs very good. 1-615-643-1762.

DUETZ, RUDDER 60 engine for sale. 6-cylinder with Carter pump, approx. 7500 hours of 5' aluminum rear. Remarkable 60 M fitting tool. Call 1-618-746-4548.


IH-153 CULTIVATOR, like new, $1,000. 4-section, $1900. Hygholl, 4-section. 517-982-6342.


HY-MOISTURE 1993 shell dresser. 12 1/2" wide. Will deliver Call 1-618-743-3803.

6. Poultry

VISA CARD NUMBER

Master Card Number

City

State

Zip

Trade Name

Address

Phone ( )

Fax

Email

Mail

 Classified Ad Code Requested

Desired Insertion Date(s)

Method of Payment

Visa Card Number

Master Card Number

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02 Farm Machinery


John Deere 9960 planter. Excellent condition, $7500. 1-618-782-6476.


SPRING & COMING: Flower puppies, one male, one female. Born 1-1-93. Ready now $250 each. Call 1-618-626-0272.

03 Farm Commodities

HELPER WANTED: 1-2000 lbs. of 80% stand. Room for 2,000 lbs. or more. Call 1-618-746-4548.


7. DOGS AND PUPPIES


PONIES/HORSES

10. VISA CARD NUMBER

MasterCard Card Number

Deadline for next issue is April 22, 1994

FREE!

Classified Ad Codes

1. Farm Machinery

10. General

5. Business Commodities

11. Agricultural Services

6. Livestock

12. Business Services

7. Dogs and Puppies

3. Farm Commodities

8. Help Wanted

4. Seeds

9. To Give Away

5. Livestock

11. Agricultural Services

11. Real Estate

HONEY BEE for sale. Call 1-517-972-2941, Cass City.

HONEY BEE: Rent your pasture to honey bees. We have 25 acres. We will guarantee your pollination also available. Call 1-610-420-0179.

POLENTATION SERVICE: Bees available for pollination of fruit and vegetables. Contact Joe at 616-924-4151.

SALVAGE: Recycle your grain and industrial air intake filters using the Save Dry Clean System. No leoids or deter- gents used. 50% savings over new filters. Call 517-431-9610, Fax 517-431-9610.

WEST MICHIGAN BARN MANAGERS: We repair or replace building of all types, new, older, wood. Rotted, bowed, beams, windows, doors, Veterinary. Broom Structural Inspections, and painting. Call 616-824-4151.


DIAMOND IN THE RIVER, Bay City, MI 1-800-668-6000.

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361 ACRE Christmas Tree Farm, Hillsdale County. Sophisticated, are new and used, very accessible. $200,000. For Sale.

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ATTENTION DARY MEN: Selling your grazing services, Terms to suit. Call 1-618-734-5467.


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UNITED NATIONS CASHEW PECAN, CASHEW PRODUCTION FOR SALE: Call 1-775-884-8105, for details.

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SPECIAL EVENTS

20. Wanted To Buy

21. Special Events

22. Networking

23. Financing

24. To Give Away

25. Building Supplies

26. Renting-Homes

27. Help Wanted

28. Classified Ad Codes

29. Advertisement

30. Classified Ad Codes

31. Classified Ad Code Requested

32. Desired Insertion Date(s)

33. Method of Payment

34. Visa Card Number

35. Master Card Number

36. Classified Rates

$8 for up to 24 words

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Circulation over 46,000 in State of Michigan.
Michigan Farm News

April 15, 1994

15

Discussion Topic for May — Tourism and Agriculture

Michigan is one of the major tourist destinations in the Midwest. With thousands of miles of beaches and millions of acres of park and forestland, our state provides a vast array of outdoor experiences. But Michigan is also the most diversified agricultural region in the Midwest. The variety of crops is produced in or around the same tourist attractions that have visitors to the state. Over the years, Michigan farmers have taken advantage of this situation by developing a variety of agricultural tour resources. Maybe surprising is that orchard blossom tours take place in the spring. Fruit and vegetable markets and "pick-your-own" operations fill the summer and fall months.

Christmas tree farms draw folks out in the winter. And ag-oriented bed and breakfast facilities provide people with year-round encounters with the rural way of life. These activities offer real opportunities for creative engagement between the people who work the land and the visitors who visit to enjoy our natural wonders. Some compromises have had to be made to help ensure the compatibility of tourism and agriculture. One example involves Farm Bureau's successful efforts in the passage of the Michigan Trailways Act. The Act provides some parameters that allow peaceful coexistence between users of "trails to trails" and the adjacent private property owners. For instance, the Act provides for protective fencing and agricultural crossings. It also permits a trail to be temporarily shut down for farm spraying. The Model is designed to help minimize potential conflicts between users and property owners. Many property owners have even found that a established and regulated trail is a much better alternative to the previously abandoned mid-lane. And the traffic on the trails can often serve as a marketing opportunities for ag products and rural/urban interchange.

Future cooperation between agricultural and tourism interests depends upon developing a sense of mutual understanding and cooperation. This will always be points of potential conflict.

DARIY OUTLOOK

Dr. Larry G. Hamm, Dept. of Agricultural Economics, MSU

The good dairy market news is getting better. Recent price increases on the National Cheese Exchange virtually assure that farm pay prices will continue to increase in the months ahead. The short milk supply situation in the upper Midwest and fierce competition for available milk supplies. This has held the Minnesota-Wisconsin (M-W) up this winter. It appears that the M-W market will continue to hold itself at $1.21 per cwt. in February. Lower cheese production also. Lower cheese production has reduced cheese supplies. The price of cheddar cheese has increased 14.7c per cwt. in February. Cheese in 40-pound blocks is now trading over $3.14 a pound. Barrel cheese is at $3.17 per pound. The prices are 9 cents higher than at the beginning of the year. The rule of thumb is that when examining a venture that combines agriculture and tourism your community? What are some ways farmers can use the tourism industry to benefit their farm? What precautions should be taken when examining a venture that combines agriculture and tourism? What resources are needed to make a profitable and successful combination of agriculture and tourism? How can Farm Bureau help?

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**Michigan 1993 Corn and Potato Chemical Use Survey Results Released by MDA**

1993 Chemical Use on Corn in Michigan

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<th>Nitrogen</th>
<th>Phosphate</th>
<th>Potash</th>
<th>Atrazine</th>
<th>Dual</th>
<th>Blades</th>
<th>Insecticides</th>
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Of the estimated 2.5 million Michigan acres planted to corn in 1993, a full 98 percent received an application of nitrogen at an average of 1.9 times for a total use of 118 pounds per acre, according to the recently released Agricultural Chemical Usage Survey compiled by the Michigan Ag Statistics Service.

Nearly 93 percent of those corn acres received an average of 53 pounds of phosphate, while 88 percent of the same acreage received nearly 83 pounds per acre of potash.

Herbicides were used on 98 percent of the corn acreage, with atrazine the chemical of choice on 70 percent of Michigan corn acreage in 1993. Dual and Blades were the second and third most common chemicals used at 32 and 26 percent respectively. Meanwhile 27 percent of the corn acreage was treated with insecticides.

Nearly all of the 40,000 Michigan potato acres received nitrogen and phosphate, while nearly 97 percent were served an application of potash. Nearly 90 percent of the potato acres were treated with herbicides, while insecticides and fungicides were used on 100 percent of the acreage.

An estimated 61 percent of Michigan’s potato acreage was treated with dithane. The most commonly used herbicide was Dual used on 68 percent, while the most common insecticide, Phosmex, was used on 79 percent. Mancozeb was the preferred fungicide with 84 percent of the acres receiving treatment.

Nationally, nitrogen was applied on 97 percent of the corn acreage at a rate of 125 pounds per acre. Phosphate and potash was applied to 82 percent and 69 percent of the acres respectively. Atrazine was again the preferred herbicide on a full 68 percent of the corn acreage.

**State FFA Winners ... continued from page 13**

**Proficiency Award Winners**

State awards were also presented to FFA members who have demonstrated exceptional proficiency in 10 areas of production agriculture, agribusiness, and natural resources. Selection was based on the skills, knowledge and leadership ability.

The state winners by category were:
- Dairy Production - Lake Faywood, Hastings Chapter
- Diversified Crop - Darcy Haag USA
- Horse Management - Travis Smith Alma
- Placement in Agriculture - Mike Allen St. Louis
- Beef Production - Ryan Kohl USA
- Specialty Crop - Scott Reihel USA
- Diversified Livestock - Andy Zagata USA
- Ag Sales and Service - Chad Bichoff USA

Poultry Production - Mike Haag USA
- Swine Production - Chad Benjamin Webberville

**Outstanding Juniors**

Fifty-nine FFA members from across the state also received the Outstanding Junior Agricultural Award. The award, sponsored by the Michigan Association of FFA and the Alpha Gamma Rho Fraternity, recognizes high school juniors who have demonstrated outstanding leadership qualities.

Of the 59 winners selected from 96 applicants, a state winner and two runner-ups were named. Troy Bowman of the Caledonia FFA Chapter was named the 1994 state winner. Troy will receive a $500 scholarship upon enrollment at MSU. Runner-ups in the contest were Matthew Kofter of the Laker FFA Chapter, and Wayne Smith of the Laingsburg FFA Chapter. Each will receive a $100 scholarship to MSU.

Other Outstanding Juniors, by chapter were:
- Alma Jason Lee Cary Alpera
- Trevor L. Schaeffer Melanie Cripps
- BACC Edward Reif
- Breckenridge Jason Wessell
- Byrons Keith Adams, Brad Ritter, Kevin Smith, Matt Streeter
- Caledonia B.L. Watson
- Coopersville Nick VandelenBink
- Corunna Scott Janiec
- Durand Kim Tronge
- Fennville Erick Aaskey
- Fremont Jane Bennett, Brad Hinton, Prudence Lubbers, Charlotte Santom, Georgie Stroven
- Grant Missy Arends
- Homer Gary Hughes Jr., Derek Williams
- Hopkins Greg VanKonneberg
- Lansingburg Carolyn Alwin, Chris Smith
- Laker Danielle Dumaw, Matt Echle, Sheila Iseler, Heather Knoss, Torenda}
- Lakewood Rebecca Vandermeer
- Lowell Lore Kerk, Krista Posthumus
- Marshall Andrea Ray
- Mason Derek Crowl, Sarah Miller
- Montague Brian Wemstrom
- North Huron Thomas Hoerken, Daniel Thomeel
- Ogemaw Heights Brian Devine
- Orchard Lake Laci Ventline
- Owossoom Croff, Mike Nelson
- River Valley Jill Ann Zehlke
- Saline Jeffery Feldkamp II, Nathan Girbach
- Sand Creek Carrie Griffith
- Saranac Bradley Wittenbach
- Standish-Sterling Karen Wilson
- St. Louis Jerry McRae
- Tipton Jason Westall
- USA

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