Changing your P.A. 116 agreement? April 1 filing deadline closing fast

Last summer, Gov. John Engler signed into law sweeping reforms to the Farmland and Open Space Preservation Program. PA. 116, including provisions for early termination of the contracts and reducing the length of the contracts to a maximum of seven remaining years. But if you want to take advantage of these revisions to the 25-year-old law, you'd better hurry and make your request in writing by April 1 or your window of opportunity will be closed.

According to the Department of Natural Resources (DNR), if a landowner wishes to terminate an existing agreement, simply submit a written request to the Farmland Preservation Office, listing the number(s) of the agreements sought for termination.

"If they take land completely out," says Michigan Farm Bureau Legislative Counsel Ron Nelson, "they will be required to pay back any credits received in the last seven years."

One of the following requirements is needed, according to the DNR, to reduce the length of the contract to that of seven years.

- Agreements in existence for at least 10 years may be reduced to only seven years remaining.
- Agreements in existence for at least 10 years may be reduced to only seven years remaining.
- Agreements not in existence for at least 10 years may be reduced to any number of years up to and including the agreement's initial length.
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The Department of Natural Resources will determine the maximum number of years that would be allowed for any agreement, and the landowner will be given a minimum of seven years to make the change.

So, a 70-year agreement can become a 17-year agreement; they can reduce that to seven years without penalty.

Three Michigan congressmen supporting legislation correcting deferred payment ruling by IRS

If increasing pressure from members of Congress and financial advisors to change tax law by Farmlands and Open Space Preservation Program (DNR) is to revolve in position on the tax treatment of deferred payment contracts. In late January, the IRS announced it will grant a temporary exclusion for deferred payment contracts.

Farm Bureau contests that deferred payment contracts—which allow farmers to even out their income taxes from year to year by deferring income from one year to the next for tax reporting purposes—should not fall under alternative minimum tax (AMT) requirements as the IRS contends.

The response on deferred payments contracts announced by the Internal Revenue Service is good news for Michigan farmers in the process of filling their 1996 taxes. The temporary reprieve states that farmers who use deferred sales contracts should be allowed to defer income from one year to the next for tax reporting purposes only if the contract is a deferred payment contract and the income is received in a single year.

The IRS had ruled last year that farmers must treat the income received under a deferred payment contract in the year the contract was signed rather than when the income was actually received, creating a great deal of confusion and concern about the agency's sudden change in tax policy interpretation.

According to Al Almy, director of MFB's Public Affairs Division, farmers face wide swings in income due to factors that are beyond their control. "This ruling can result in additional tax liabilities for farmers," he adds. "Farm Bureau believes the IRS has taken a position that is inconsistent with the intent of Congress and the historical treatment of deferred payment contracts. The tax code specifically allows farmers to use the cash basis method of accounting, and farmers have used deferred payment contracts for years without penalty."

While the announcement eliminates the short-term concerns for producers, legislative action and clarification will be needed for long-term relief, according to Almy. He says the organization is aggressively seeking additional support from Michigan congressional delegation for legislation recently introduced.

"The Farm Bureau-supported legislation that Sen. Abraham has co-sponsored, Senate Bill S. 161, would allow a farmer to treat the income as income for tax purposes in the year it was actually received rather than when the contract was signed," Almy explained. "H.R. 426, an identical bill that's been introduced in the House, has over 100 co-sponsors at this time. The only Michigan member of Congress who has agreed to co-sponsor H.R. 426 are Rep. Nick Smith (R-Addison) and Rep. Dave Camp (R-Midland). But we know that several other representatives are taking a close look at the bill."

Almy said Michigan Farm Bureau is going to be urging additional congressmen, including Sen. Carl Levin, to co-sponsor the measure, as well as requesting that respective legislative committees hold prompt hearings and report the bill favorably for immediate floor action.

Pressure results in IRS change of tax rules

Three Michigan congressmen supporting legislation correcting deferred payment ruling by IRS

Ruling increases pressure from members of Congress and financial advisors to change tax law by the Internal Revenue Service for farmers who use deferred sales contracts to even out their income taxes from year to year by deferring income. The temporary reprieve states that farmers who use deferred sales contracts should be allowed to defer income for tax purposes only if the contract is a deferred payment contract and the income is received in a single year.

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Cover story

Michigan gains Crop Revenue Coverage for corn and soybeans

The USDA is significantly expanding a crop revenue insurance program for corn and soybeans to Michigan and 10 other states that was available only in Iowa and Nebraska last year.

"Crop Revenue Coverage (CRC) is a new form of insurance that covers both yield and price risk," explains MFB Commodity Specialist Bob Boehm. "It started in Nebraska and Iowa and was received very well by producers who saw a benefit to being able to protect themselves from impacts of both price and yield."

The CRC is a private form of insurance that guarantees a stated level of revenue in the event of low yield due to poor growing conditions or low prices. It is an alternative to the federal government's Multi-Peril Crop Insurance Program.

USDA Secretary Dan Glickman said the expanded insurance program will help USDA ensure adequate "safety net" for farmers.

"By having that assurance," explains Boehm, "it allows producers to be more aggressive in forward pricing their commodity. Because CRC provides a revenue guarantee based on the higher of the planting or harvest price, farmers do not need to be as concerned about the impact of a crop failure in a rating market. CRC will provide the revenue to allow them to meet contract obligations."

CRC policies have proved popular because they guard against not only losses from floods, drought and other acts of nature, but protect against price drops between planting and harvest.
Bacteria may provide biofuel, cheap nitrogen fertilizer

A quick of nature may someday provide an inexpensive biofuel or improve the productivity of man-made fertilizers. Some soil microorganisms use enzymes that contain iron or iron and vanadium, elements naturally present in soil, to convert nitrogens into the atmosphere into a form of nitrogen that can be used by plants. Many of these enzymes are produced in the nitrogen-conversion process—but not by the plants—could be collected and put to use as a biofuel, scientists say. Another plus: Bacteria that use iron in this process could provide fuels as easy to handle as liquid fuels and could be refined to diesel fuel. Current alternative technologies use extremely high temperatures and pressure, a process that requires loss of fossil fuel. An alternative process is inexpensive and preserve fuel.

When the governor signed Public Law 209, he encouraged legislators among other things to review the planting process to simplify the bureaucratic process. We agree the planting process must be reformed. We must face the problems associated with the number of exempt divisions before proceeding with the reform of the planting process. Finally, under provisions of the new legislation, which will basically allow the proliferation of mini-subdivisions, the planting process will need to be reformed. The review process by the local unit of government is still intact; however, there is a big difference between a review for low-density developments and requirements by public agencies that are needed for high-density developments. Long-term—in the next to 10 to 15 years this is going to be so important because local communities may not have the ability to require the expensive infrastructure needed for this many divisions.

For many years now, Michigan Farm Bureau members have recognized the need to change the law governing land divisions that are exempt from the taxing process. That is why the Farm Bureau supported the original provisions of Senate Bill 132.

Our objective was to develop an exemption division that provides an incentive for wise land use. Unfortunately, Public Act 591 will not allow the creation of "bowling alley" shapes of land where allowing for the necessary depth-to-width ratios on parcels larger than 10 acres. The number of divisions exempt from planting is also excessive and is a negative aspect that will not meet farm preservation need.

Public Act 591 attempts to provide incentives to place developments on 40 acres of land, preserving the remaining 60 percent for agricultural purposes. However, if these incentives are used, 65 percent of the parcels can be developed within 20 years. Put simply, Michigan agriculture cannot compete with a land division policy that is exempt from planting when creating high-density developments.

Purebred Council adds Maine-Anjou

The Maine-Anjou Association of Michigan is the newest affiliate to join the Michigan Cattleman's Association (MCA) Purebred Council. Deb Veliquette, of Kent City, is the Maine-Anjou Association of Michigan's president, and their representative for the Michigan Beef Expo is Katai, of Mason. As the name suggests, the Purebred Council represents the purebred breeders who are members of the Michigan Cattleman's Association. The Purebred Council founded two of MCA's annual meetings and the MCA MSU Ball and Sale. The Purebred Council rules board is made up of one representative of each affiliated breed association. The Maine-Anjou representative for the council is Janet Hillman, of Conklin. The current chairman of the council is Phil Buchman, of Onocunda, and the current vice chairman is Bill Kube, of Gobles. Quentin Harwood, of Ionia, MCA president, and Mark Veliquette, of the MSU president elect, are both past chairmen of this group.

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**Capitol Corner**

**For more information on legislative topics in the Michigan Farm News, call 800-292-2680.**

**Michigan Farm News**

**February 15, 1997**

**NATIONAL ISSUE**

**Balanced Budget Amendment**

Both the U.S. House and the U.S. Senate are scheduled to vote on a balanced budget amendment during the week of Feb. 10 - 14. The Senate is expected to vote first.

On Jan. 9, Reps. Schakowsky (D-Ill.) and Stenholm (D-Texas) introduced H.J. Res. 1, the consensus balanced budget amendment. The amendment requires the following:

- A balanced budget each year unless waived by a two-thirds vote of both houses
- A three-fifthsvote. budget cuts. These alternatives do not improve the current system

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**High-speed railway**

The Michigan Department of Transportation (MDOT) is pursuing a high-speed rail system from Detroit to Chicago. Improvements to the current system will add train service to travel up to 110 miles per hour — up from the current safe speed of 79 miles per hour. When the project is finished, the trip between Detroit and Chicago will take 3½ hours.

To implement this system, MDOT is utilizing the existing railway corridor. MDOT intends to improve the project in various phases with track and signal upgrades over several years. In addition, several stations may be closed. Affected counties will be Berrien, Calhoun, Cass, Jackson, Kalamazoo, Van Buren, Washtenaw and Wayne.

MDOT has performed a cost-benefit analysis of the project to determine if the $3.1 billion cost will provide adequate return on investment.

**Purchasing Development Rights**

Senate Bills 573, 574 and 575, sponsored by Sen. Bill Schuette (R-Midland), were signed by the governor Jan. 16 as Public Acts 570, 571 and 572.

The law provides the authority for townships, counties or municipalities to develop and conduct buy-outs through the use of purchasing development rights (PDR) program utilizing local funds.

The PDR program may be used only to protect agricultural land and other eligible land. Other eligible land is defined as land that is not part of a non-agricultural property line with agricultural land from which development rights have been purchased and is not protected by a state or federal agency.

**Land Division Act**

The Land Division Act, Senate Bill 112, has been signed by the governor and is now Public Act 57. The law will take effect April 1. Sen. John Stille sponsored the bill. For details, see the Jan. 30 issue of the Michigan Farm News.

**Labor to look at poultry plant conditions**

Secretary Robert Reicks said his department will look into complaints about mistreatment of workers at processing plants and said, “Swinehot conditions, whatever the gain in factories, fields or poultry processing plants, will not be tolerated.”

Reicks was joined by several other pork producers, or groups, other farm groups — the National Farmers Union and the National Farm Cost Alliance — and religious groups who are critical of the poultry industry.

Although not challenging a specific investigation of the industry, the department said it had to establish a rule to target “specialized and targeted enforcement.”

U.S. chicken consumption has risen to an average of 63 pounds per person, up from 50 pounds in 1990. The increase has led to broader production of up to 5 percent per year over the last 20 years. Last year, slaughter plants produced more than 20 billion chickens from 2.6 billion turkeys. An estimated 29,000 people work in the broiler industry, and worker complaints include repeated injuries, long hours, lack of rest and bathroom breaks, and initiation from high carbon dioxide levels in the plants.

In a related move, the National Pork Producers Council filed a petition with the U.S. Department of Agriculture asking the secretary’s jurisdiction.

Gov. Engler disagreed with NAFTA decision on Canadian imports of U.S. dairy and other agricultural products

Gov. John Engler recently announced his decision to support the final report of the North American Free Trade Agreement (NAFTA) dispute settlement panel, which examined and upheld a U.S. tariff policy applied to imports of dairy and certain other agricultural products.

In December, the NAFTA panel agreed that producers in the Canada-U.S. Free Trade Agreement (FTA) countries were entitled to higher prices for these agricultural products for which the United States and other trading partners should be able to more fairly and equitably compete. Engler said, “I can’t support the panel’s rulings under NAFTA provisions in the Canada-U.S. Free Trade Agreement.”

**Cattle Industry Act draws Farm Bureau support**

The introduction of the Cattle Industry Improvement Act of 1997 opens a dialogue about improving livestock marketing conditions, according to the American Farm Bureau Federation. The message, introduced by tours. Don Breyer, executive vice president and chief executive officer, did not support these provisions, which include, among other things, to do everything possible to seek the elimination of these trade tariffs and to improve American dairy access to the Canadian market.

Michigan Department of Agriculture Director Dan Wyant said, “I applaud the governor on his strong stand for free and fair trade. Gov. Engler has been a long-time, staunch advocate of international free trade agreements to help America go out in a partnership for economic cooperation and growth in an increasingly competitive global economy. He demands that dairy is the largest sector of Michigan’s agricultural economy, and it would be a shame for our dairy farmers and marketers when this market opens up.”

**Some farmers sitting tight on their corn**

The longer the producers hold off, it’s going to get more expensive, according to a new analysis in Des Moines. “You could have the market under pressure in the middle of July, when the producer just says, ‘I’m not going to sell my corn anymore.’”

Barry said producers likely will have to wait a long time to see corn prices back into the record area, conceding, “We, as farmers, are going to have to be patient and be patient.”

Study shows NAFTA’s impact on jobs slight

The impact on trade-related employment during the first three years after NAFTA is estimated to be, at the very least, a near-zero net impact, and might have a no change to negative note,” the study says.

NAFTA has produced a mixed bag for certain categories of workers, according to the University of Texas at Austin study, which ranked the United States as an estimated 28,166 jobs the last three years, compared to the creation of 31,940 jobs produced by increased exports.
USDA to expand crop revenue insurance program

**Expansion of coverage to small crops?**

"Because it's needed on the Chicago Mercantile Exchange, Trade, CRC in its present form is somewhat limited to those crops that are traded off the futures market," states Booth. "We're looking at a new insurance program to cover crops not currently insured. One of the options is a product known as business interruption insurance. Rather than insurance based off yield and price records, business interruption insurance covers a portion of the average revenue stream from the crops. Most businesses, such as a local hardware store, can purchase this type of coverage. A hardware business has a fire, for example, the policy covers the lost income and the business reopening. Farm Bureau is working to develop insurance products that will address risk management for specialty crop producers, the lack of which continues to be a significant need in Michigan."

**States with expanded CRC coverage?**

"Crop Revenue Coverage prices guide producers as to what kind of a loss they've sustained, so you have a formula to calculate the revenue guarantee, which is based on the greater of the Minimum Guarantee or the Harvest Guarantee. A loss occurs when the Calculated Revenue is less than the Harvest Guarantee. This chart shows the formula, with an example of a farmer's payout is in red."

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**Agriculture and Natural Resources Week is March 1-9 at MSU**

From presenting historic barns to growing herks for profit – that's the range of topics planned for Agriculture and Natural Resources Week, March 1-9 at Michigan State University.

Approximately 80 educational programs, meetings and other activities will take place during the eight-day period, says Sandy Bauer, AGR Week program coordinator.

Programs focusing on the environment will include sessions on improving wildlife diversity, conserving farmlands into parks, toxic chemicals in the Great Lakes and land use in Michigan.

Oxidized-oriented programs will include foraging for wild foods, pleasant habitat management, home garden composting, quiet water sports, growing and selling herbs, and community play-ground design that are kid compatible.

Agro-educational programs will focus on animal manure management, community organic food production, heirloom horticulture and narrow-row crop production.

The Michigan Association of FFA annual conv, expected to attract about 1,000 high school students, will run from Monday through Wednesday afternoon.

AGR Week will also feature a day-long discussion of Michigan's tourism outlook, a session on community-based tourism and a day-long session on managing home-based businesses.

Other programs include a day-long program on human nutrition, a session on managing bed and breakfast operations, and programs on broad-based principles of home and garden design.

Rabbits shows will be held both Saturdays of AGR Week. There will also be programs on organic gardening and farming and dairy goat management.

The MSU President's Luncheon, honoring the Distinguished Service to Agriculture award winners, will be Thursday. Recipients will be Gordon Laffont, of Houghton Lake; Herb and Florence Boley, Bel- lefonte, and Dee V. Stump, Morden. Luncheon tickets can be obtained by calling 517-355-6580, ext. 217.

The College of Agriculture and Natural Resources Dean's Luncheon, on Tuesday, will feature an auction to support scholarships and will honor distinguished CANR alumni. Tickets can be obtained by calling 517-355-6282.

AGR Week details are listed in a free guidebook available through the county MSU Extension offices. Free copies can also be obtained by contacting the MSU Bulletin Office, 108 Agriculture Hall, MSU, East Lansing, MI 48824-1059, or by calling 517-355-5420.

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**Serving Michigan farm families is our only business**

Since its beginning in 1971, Michigan Farm Radio Network's only objective has been to serve Michigan's farm families. This dedication to serve agriculture is shared by 27 local radio stations in Michigan. Through these stations, Michigan Farm Radio Network provides the latest in market analysis, weather and news to Farm Bureau members daily on the following stations:

**Station** | **City** | **Frequency** | **Morn Report** | **Noon Report**
---|---|---|---|---
WABJ | Adrian | 1430 | 5:45 am | 11:05-12:00 pm
WATZ | Alpena | 1450 | 5:30 am | 11:30 am
WATK | Ann Arbor | 1050 | 6:05 am | 12:00-1:00 pm
WLEW | Bad Axe | 1340 | 6:30 am | 12:50 pm
WHFB | Benton Harbor | 1260 | 10:50 am | 
WKFI | Cadillac | 1370 | 5:45 am | 11:10 am
WKYD | Caro | 1360 | 6:15 am | 12:10-1:00 pm
WTVB | Coldwater | 1590 | 5:45 am | 12:00-1:00 pm
WDOW | Dowagiac | 1440 | 6:05 am | 12:15 pm
WGHN | Grand Haven | 1340 | 5:45 am | 12:15 pm
WGHN FM | Grand Haven | 92.1 | 5:45 am | 12:15 pm
WPLB | Greenville | 1380 | 6:15 am | 11:50 am
WBCH | Hastings | 1220 | 6:15 am | 12:30 pm
WCSR | Hillsdale | 1340 | 6:45 am | 12:45 pm
WHIC | Holland | 1450 | 12:15 pm | 
WION | Ionia | 1430 | 6:30 am | 12:30-1:00 pm
WKZO | Kalamazoo | 590 | 6:00-6:00 am | 12:00-1:00 pm
WPFL FM | Lakewood | 106.3 | 6:15 am | 12:15 pm
WOAP | Oosso | 1080 | 7:15 am | 12:40 pm
WHAK | Rogers City | 960 | 12:15 pm | 
WJJS | St. Johns | 1580 | 6:15 am | 12:05-1:05 pm
WKLM | St. Louis | 1520 | 6:15 am | 12:20-1:05 pm
WSGW | Saginaw | 750 | 5:55 am | 11:30-12:30 pm
WMIC | Sandusky | 660 | 6:15 am | 12:45 pm
WRFC | Traverse City | 1240 | 6:15 am | 12:45 pm
WLKM | Three Rivers | 1510 | 5:45 am | 12:15 pm
WTCM | Traverse City | 580 | 5:45 am | 11:10 am
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Consumers Energy
Count on Us
The Jan. 1 USDA-Cattle Inventory Report, released Jan. 31, confirmed the belief that the cattle cycle has turned from the growth pattern of the last several years and began to liquidate. This is not surprising given the poor cow-calf returns of the past two years and the large cow slaughter this past year. Total cattle and calves in the U.S. was 101.2 million down 2 percent from last year. However, Michigan beef cow replacements, at 53,000, are up 10 percent from last year. The U.S. crop in 1996 totaled 30.6 million, down 3 percent from the previous two years. Michigan's calf crop totaled 400,000 to 1996, down 5 percent, but these numbers included dairy calves and Michigan milk cows that have calved, which are up 10 percent from last year. Michigan's strong milk marketingsystem throughthe Great Market Crash of 1996. The Michigan milk market is nationally known for its strong calf/cow operations, this backlog the trend and expanding should pay off over the next three to five years in the form of good returns. 1997 calf prices may not be as strong, but 1998 through at least 2000 returns should be profitable.

**Commodity Price Trends**

**Corn**
- Soybeans: 2.20
- Wheat: 1.20
- Hogs: 1.20

**Soybeans & Wheat**
- Soybeans: 2.20
- Wheat: 1.20

**Hogs**
- Hogs: 1.20

**Costs**
- Corn: $2.20
- Soybeans: $1.20
- Wheat: $1.20
- Hogs: $1.20

**Revenue**
- Corn: $4.30
- Soybeans: $4.50
- Wheat: $3.50
- Hogs: $1.20

**Net Income**
- Corn: $2.10
- Soybeans: $3.30
- Wheat: $2.30
- Hogs: $0.40

**Market Outlook**

**CATTLE**

For Michigan's cow-calf operations, this buck dropped 5 percent over the past year to 310,000. Michigan milk cows that have calved, which cent, but the numbers included dairy calves and Michigan's calf crop totaled 400,000 in 1996, down 5 percent from last year. Michigan milk cows that have calved, which are up 10 percent from last year. Michigan's strong milk marketingsystem throughthe Great Market Crash of 1996. The Michigan milk market is nationally known for its strong calf/cow operations, this backlog the trend and expanding should pay off over the next three to five years in the form of good returns. 1997 calf prices may not be as strong, but 1998 through at least 2000 returns should be profitable.

**CORN**

The Jan. 1 Cattle On-Feed Report, released Jan. 27, showed total U.S. cattle on feed at 15 million, up 2 percent from the previous year. Cattle and calves on feed for slaughter in feedlots over 1,000 head total 9.6 million, also up 2 percent. Placements in these feedlots in December 1996 were 2 percent below December 1995. Marketings from these lots were up 1 percent in December. The Cattle Inventory Report showed there were 200,000 cattle on feed in Michigan Jan. 1, equal to the previous January. Plenty of cattle on feed, as discussed above, should keep a lid on prices in the near-term. However, lighter weights and gradually fewer cattle compared to last year, as indicated by the lower December placements, should mean gradually increasing steer prices from now through April or May. And, while we will have a seasonal downturn this summer, prices should be back into the $60 to $65 range versus the less than $60 early last summer. Prices should then come back in near $70 by the end of the year. While there doesn't appear to be any further pressure pricing opportunities now, if futures jump over $75, consider them.

**HOGS**

 Hog slaughter continues to run below year ago levels and will probably continue that trend all year. At the same time, sow slaughter continues to run below levels, although low 1996 sow slaughter was not a very good indicator of breeding herd size as the December Hogs and Pig Report indicated. However, the trend is the real concern as the breeding herd will begin to expand and I think we will see in the March 1 report, to be released March 27. Placements are good, and with good hog prices and reasonable feed prices, they expect to stay good throughout the year. On top of that, add low corn prices expectations for 1995/96 and I think that spells expansion. Does this mean prices will go down the tubes soon? No. While it means that prices will work their way down toward cost over 1998. Lean hog futures are close to what fundamentals would project for the first half of the year. Futures in the second half saw a little less optimism. The December Hogs and Pig Report is correct. If we see a repeat of previous highs through July, consider some forward protection. If we see a fall lean hog futures near $70, consider some protection before the next report. Remember, to get approximate live hog prices from the lean hog futures, multiple lean hog futures by 74.

**SOYBEANS**

One crop continues to tell us that you should not be paying storage, even on-farm, unless you have a particular situation that gives you a tighter basis in the future. And, for most producers, that is not the case. What pays for storage is, sooner or later, the spread between futures months and when they are negative, it's saying you will pay the market to store. Does this mean you cannot participate in any market rallies in the spring? The answer is no. It is saying that you need to price at least the basis, and willingness to store some protection for the futures. If you have already priced a majority of your 1996 crop and are willing to take the risk of lowering prices in the future in a position to take advantage of a premium on old crop calls, a basis option on the July futures for the last portion of your crop. If you want some protection under the futures, sell your crop for September at a very good margin. A basis contract on the July futures here is the key. For the last part of your crop. If you want some protection under the futures, sell your crop for September at a very good margin. A basis contract on the July futures here is the key. For the last part of your crop.
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America's Truck Stop The New Dodge
Merillats give quarter horse farm to MSU for teaching, research efforts

Lynette Merillat has been bringing her prized quarter horses to Michigan State University for specialized veterinary care for many years. She knows and trusts the equine program staff. That relationship became the foundation for a historic new gift to MSU—the Merillat horse farm in Adrian, Mich.

The 80-acre farm, home to Merillat's nationally recognized quarter horse breeding and show operation, will become the MSU Merillat Equine Center, providing unique opportunities for teaching, research and service to the horse industry in Michigan and throughout the country. The farm and its 46-plus horses represent the largest single gift ever by an individual to the College of Agriculture and Natural Resources and the largest gift so far given to the university.

"This farm has means so much to our family. It's been so wonderful here," Lynette Merillat said. "But our daughters are grown up now and have moved on; our family has kind of outgrown it at this point. We couldn't think of a better way to ensure that it would keep going the way we want, than giving Michigan State Take it over."

Neither Lynette nor her husband, Richard, attended MSU, but giving their farm to the university is a little like keeping it in the family. "My brother graduated from the veterinary school, I remember visiting him there when I was a young girl," Lynette said. "And our veterinarian graduated from MSU. She encouraged me to take our horses there when they needed special treatment."

"I believe the faculty and staff at Michigan State are very well qualified. They're very caring, and they have great programs. We're very excited about giving the farm to them," Lynette said. "We started showing them, and pretty soon we got into breeding them as well." Their daughters shared their mother's love of horses. "It was a lot of work and a lot of responsibility, but the girls loved it, and they won a lot of ribbons and trophies at shows. It really helped them grow up," Richard added.

The couple built their farm in Adrian in 1990. They are eager to see how it continues to grow under MSU's ownership. "I think the hands-on experience will still provide students in fields like equine breeding and farm management will be tremendous," Lynette said. "You can teach students in a classroom, but, like a doctor who serves an internship in a hospital, they need to go out and experiment for themselves."

"It also should benefit the horse industry in the state of Michigan because of the enhanced education the students going out into the industry will receive," Richard agreed. "And with the extension programs they'll be doing, the people in southeast Michigan—and the whole state—will benefit more directly from the work the faculty does."

University officials are equally excited about the possibilities the farm offers MSU faculty and students. "This is truly a remarkable gift, and the opportunities it presents are tremendous," stated Fred Poston, vice provost and dean of the College of Agriculture and Natural Resources. "Without a doubt, it will boost the equine program in our college and the College of Veterinary Medicine to a new level of excellence."

"This kind of commitment to the educational programs at Michigan State University is immensely gratifying," said MSU President Peter McPheeters. "It will create new partnerships between departments and colleges within the university, as well as between the university and the horse industry, which should be served very well by the research and outreach efforts at the MSU Merillat Equine Center."

The new center will provide "real-life" educational experiences to "a controlled, professional, realistic environment," Poston said. Students will have internship opportunities in facilities management, reproduction, health care, housing, nutrition and evaluation of quarter horses and more. "The facilities also will provide an excellent rotation for equine reproduction for the College of Veterinary Medicine," he said.

Students also will be involved in the promotion of the breeding stallions at the center. MSU will honor all the Merillats' current breeding contracts and continue to accept new contracts. "We expect that the facilities will be at full capacity during the breeding season, from mid-winter to early summer, with extensive research programs conducted the rest of the year," Poston said.

"This center has the potential to greatly enhance equine research at Michigan State, particularly in the areas of nutrition, exercise physiology and reproduction," added MSU Provost Lou Anna Simon. "With the size of the facilities at the center, including the indoor arena and otherenced buildings, a number of projects can be conducted simultaneously."

"It's also an ideal location for livestock extension and outreach programs because southeast Michigan has the highest percentage of horse population in the state. The kind of outreach programs we can offer are numerous," Poston said. "On-farm demonstrations and classes, housing and reproduction clinics, horse breeding and judging clinics, youth horse handling and riding clinics, county extension agent training programs—are just some of the possibilities."

I'm looking forward to still being around occasionally and seeing what develops," Lynette Merillat said. "We really want them to be successful, anything we can do to help, we will."

"There's a saying—I don't know by whom—that really sums up how we feel about the farm and why we decided to make the gift. Blessed are they who not only count their blessings, but make their blessings count. This farm has been a blessing to us, and we want it to be that way for others as well."

EPA approves Monsanto registration for YieldGard insect-protected corn

Monsanto Company has received a registration from the U.S. Environmental Protection Agency for the company's YieldGard insect-protected corn, protected against the European corn borer.

The latest EPA approval is the second one for a YieldGard gene and completes federal regulatory reviews to allow more seed companies to offer YieldGard corn to next spring's planting. YieldGard corn is a trademark used on the best hybids of Monsanto's partner seed companies, offering their best yield potential and the highest level of insect protection. The Monsanto registration covers a new technology licensed to such leading companies as CargillHybrid Seeds, DEKALB Genetics Corp., Golden Harvest Seeds Inc. and Pioneer Hi-Bred International Inc. Monsanto and DEKALB have a long-term research and development collaboration in agricultural biotechnology and other crops, including the development of insect-protected corn products. Another seed company, Northrup King Co., completed reviews and received the first registration for seeds with a YieldGard gene Aug. 5.

"This additional registration is further progress in our efforts to provide farmers with the performance they need to be successful," said Robb Fraley, president of Monsanto's Genomics unit, which develops new agricultural products.

"We think YieldGard corn will be the grower's best choice for protection against corn borers, one of the worst pests in corn," he said.

Borer reduce yield by causing damage inside the plant, where external treatments cannot reach.

Control is difficult and can quickly become uneconomical, so many growers just don't treat at all, Fraley said.

"YieldGard provides protection throughout the plant, throughout the season—simply by planting the seed. Once the target insect larva begin to feed on a protected plant, they stop eating and die. Damage from these insects is reduced and elite corn hybrids have a better chance to reach their full yield potential."

YieldGard uses a naturally occurring protein to protect corn plants against the European corn borer, a hard-to-control pest that causes significant reductions in corn yields. The protective protein is identical to one found in nature in a common soil microorganism called Bacillus thuringiensis (Bt). The protein is harmless to people, livestock, wildlife and even beneficial insects.
Facts about limited liability companies

Ralph E. Hopp, Agricultural Economist, Dept. of Agricultural Economics, Michigan State University

An LLC is a new form of business entity for Michigan that was authorized by Act No. 25, Public Acts of 1989. The new entity is a limited liability company (LLC) which is defined as an unincorporated organization that limits the liability of its owners so they can invest in the enterprise without providing them with pass-through tax treatment.

Prior to the limited liability company alternative, new business owners had to choose between organized business entities or partnerships. The unincorporated business entity is a joint or association of individuals, the business, or both. A limited liability company is not liable for the actions, debts, or obligations of the individual or the business.

The liability of a member or manager, or both, of a limited liability company is limited to the amount of their capital contribution. The liability of the members is determined according to their capital contribution and the terms of their membership agreement.

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- Jim Mac Kay: Central MI 517-743-4630
- Ann Briggs: Western MI 517-349-8689

Business Strategies

Ralph E. Hopp, Agricultural Economist, Dept. of Agricultural Economics, Michigan State University

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Value-added processing begins
the push for new-wave cooperatives

Conference introduces concept to more than 120 people interested in adding value to their commodities

If you're a producer in Michigan and you haven't heard of value-added processing (VAP), you'd better pull up a chair and start learning, as much as you can, if you want to learn new ways to improve your bottom line.

That was the consensus of more than 120 participants who attended a Jan. 20 workshop in Frankenmuth designed to introduce the concept of establishing new-wave cooperatives throughout Michigan in an effort to add further value back to commodities grown in Michigan.

What are new-wave co-ops?

If producers want to expand their income potential beyond what they sell directly from the farm, explains MFB Commodity Specialist Bob Boehm, "they need to investigate ways to join with other producers to add value and vertically integrate their product to compete further up the marketing ladder—that's what new-wave co-ops and value-added processing can do."

According to recent American Farm Bureau Federation figures, consumers spent $511 billion for food last year. Of each dollar spent on food, only 21 cents was returned to the farmer. The rest of that dollar was spent on wages and materials for processing, marketing, transporting and distributing the finished product to the consumer.

"Value-added processing is an exciting concept that allows farmers to realize a bigger return on their farm investment and, consequently, an improved profit margin," MFB President Jack Launius told the group at the conference. According to North Dakota State University professor and presenter at the conference, Frayne Olson, there were two major things to learn about forming a value-added cooperative: Number one, in order for these projects to work and be effective, they have to be farmer-driven. Second, there are some real advantages with the cooperative structure; hopefully, individuals can motivate people to try and do something different. Agriculture is changing rapidly—we have to be ready to change."

"North Dakota is very uniquely populated, with Fargo being the largest city at 71,000," Olson added. "The general attitude about starting new co-ops is if we don't do it, no one else will. The number of farmers is decreasing, while farm size is increasing. In Michigan, when a farmer doesn't have enough income, he looks to the nearest city. In North Dakota, what happens is you end up leaving the state."

"We're different from North Dakota or Minnesota," Boehm explains. "We have strengths such as our climate, crop diversity and our proximity to large population centers and markets. We also have an extremely supportive feeling right now for the development of value-added processing—from state and federal programs like renaissance zones to university support through value-added portions of Project GREEEN and the recent farm bill giving producers flexibility for alternative crops."

Olson explained to the participants that the new cooperatives formed in his home state have ranged from the very traditional—a corn sweetener facility—to the unusual one created by the North American Bison Co-op to market meat, hides and other parts of bison throughout the world, especially in Europe where demand is high for their product.

Impact on Michigan Producers

"Those of us in production agriculture hear a great deal from the marketing experts that we as producers need to start producing for the end consumer," adds Laurie. "As owners of value-added processing, farmers could—and should—have a clear grasp of what their customers want and then produce it accordingly. That's vertical integration in its purest sense."

"Producers need to evaluate the idea for themselves that if they work together they could do things as a group that they themselves as individuals could not."

"Producers need to find a way to set up a group that is extremely supportivefeeling right now for the development of value-added processing—from state and federal programs like renaissance zones to university support through value-added portions of Project GREEEN and the recent farm bill giving producers flexibility for alternative crops."

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Chairman of the PCA board, Robert Weaver, sees the patronage refund program as an important advantage to doing business with Farm Credit Services, both as a board member and as a borrower: "I am pleased to announce that, based on a decision the board made in 1995 to do business as a credit cooperative, we are able to offer our members patrons refunds," Weaver said. "It is a way for us to reward our members for doing business with Farm Credit Services, as a borrower myself, the prospect of a patronage refund on my loan is an attractive advantage to doing business with Farm Credit Services."

"Because of the PCA board's decision to do business as a cooperative, Michigan's Hearthland members will receive patronage refund checks in February for the first time in our association's history," said James E. Brenner, president and CEO of Farm Credit Services of Michigan's Hearthland. "This decision not only helps well for individual members, but also for the association as a whole. Our strong capital position allows us to offer our members even more competitive rates and services," he added.

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Cold spell blamed for $10 million damage to vegetables

Three nights of cold weather south of Miami will cost vegetable producers at least $10 million and could mean higher consumer prices.

Prices plunged to 24 degrees in the southernmost part of Florida, destroying up to 90 percent of the zucchini and yellow squash crops, and at least three-quarters of the green bean, pole bean and sweet corn crops.

The price of green beans rose from $12 per bushel Friday to $22 Monday after word of the damage spread. Some growers plowed their frozen plants under and may have to replant.

Some citrus producers had fruit and leaf damage. They reported no tree damage, but citrus producers did experience icing, meaning that the juice crystallizes inside the fruit. These crops can still be taken to the processing plant, but the amount of juice they yield may be less.

Most crop damage was on the west side of Florida. Growers unprepared for the low temperatures blamed a federal budget cut that eliminated National Weather Service farm forecasts.
February 15, 1997

Michigan Weather Summary

Temperature

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<th>Actual</th>
<th>Dev.</th>
<th>Precipitation</th>
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Detroit 23.6 0.5 1.69 1.74
Flint 21.4 -0.6 1.20 1.74
Toledo 24.1 -0.5 2.54 1.74

Total accumulated from April 1. Normal precipitation based on district averages.

Weather Outlook

by Dr. Jeff Andresen, Agricultural Meteorologist, Department of Geography, Michigan State University

In late January, the orientation of the jet stream changed from a northwesterly pattern to a flatter, more west-to-east pattern. This change allowed a series of mild air masses of Pacific Ocean origin into the state, resulting in generally cloudier and warmer than normal weather conditions and the gradual reduction of snow cover across central and southern sections.

Mean temperatures for the month of January generally ranged from near- to slightly below normal, although the means were actually the average of a series of Arctic-origin air masses and later cold weather with record-setting warmth during the first week of the month.

Precipitation for January ranged from slightly below normal in southeastern sections to much above normal in the north, including very heavy lake-effect snowfall across much of Upper and northeastern Lower Michigan.

The NOAA long-lead outlook for the remainder of February still calls for near equal probabilities of below-, near-, and above-normal temperatures and precipitation.

While temperatures early in the month have moderated to above-normal levels, latest medium-range computer guidance suggests the formation of a pool of cold, polar-origin air in the northern reaches of North America, which ultimately should move southward toward the Great Lakes region. I would thus expect at least one or two outbreaks of colder than normal temperatures during the middle to latter part of the month.

The 90-day outlook for February through April calls for an increased likelihood of below-normal temperatures, with odds of the below-normal scenario increased to 95 percent, and odds of the above-normal scenario decreased to 28 percent (the near-normal scenario still has a 33 percent chance of occurrence).

Precipitation odds for this period are considered to be equal for below-, near-, and above-normal scenarios.

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Michigan Farm Bureau's pharmacy discount program is only a phone call away. Heartland Prescription Service, located in Omaha, Nebraska, can service all your pharmacy needs. They carry over 5,000 prescription, non-prescription, diabetic, ostomy and incontinence supplies, and durable medical equipment.

Heartland not only helps you to lower your pharmacy costs, but also provides the convenience of having the order delivered to your door.

The next time you need a prescription filled, take advantage of this member benefit by calling Heartland Prescription Service for a free price quote. Also, make sure you ask for their free catalog that contains coupons for additional savings.

Call 800-228-3353, between 8 a.m. and 5 p.m., Monday through Friday. It's a simple telephone call that will save you time and money!
Case answers ultra-narrow-row trend with new corn head

Case Corporation has solidified its commitment to ultra-narrow-row corn producers by acquiring the rights to a unique corn head that will harvest crops planted in rows as narrow as 15 inches.

With the acquisition of exclusive development, manufacturing and marketing rights for the head, Case becomes the industry's first equipment manufacturer to announce development of a corn head capable of harvesting ultra-narrow-row corn in all rows spacing ranging from 15 through 22 inches.

Case acquired the corn head design from Marion Calmer, a farmer in Alpha, Ill. Calmer, also owner of Calmer Agricultural Research Center, is a pioneer of ultra-narrow-row corn and designed and more corn producers realize the benefits.

Calmer's innovative corn head, Case is positioning itself as a leader in providing customers the equipment they need to take full advantage of producing narrow-row corn.

Calmer's design - named on a Case IH All-Flow - combines during this year's harvest - stems from his own experimentation at his research center with planting narrow- and ultra-narrow-row corn.

Conventional corn heads have a gathering chain and fingers on each side of the row that direct ears of corn into the combine. To meet his harvesting needs, Calmer invented a corn head that uses one gathering chain with large, single paddles to direct the corn into the narrow-row combine opening.

While Case still has to put its prototypes of the ultra-narrow-row head through the company's rigorous product development testing, Calmer said he is optimistic about what the new offering means to Case and its customers.

"In a manufacturer, Case will be in a position to offer corn heads that can harvest a wide range of row-width configurations, from conventional to ultra-narrow," said Calmer. "This means our customers will have the flexibility to explore new and promising corn production practices with equipment that meets the quality and standards synonymous with the Case IH brand."

Case enhances ultra-narrow-row systems

According to Calmer, this acquisition allows Case to offer a complete system of equipment, from planting through harvest, for ultra-narrow-row corn and soybean growers.

He said Case made the decision to pursue equipment systems solutions for spacing as narrow as 15-inch rows because of the added benefits this narrower spacing offers to farmers. Calmer's research has shown definite advantages for additional profitability in both corn and soybeans for ultra-narrow-row versus narrow-row practices, and more recently shows advantages for 15-inch spacing versus 20-inch spacing.

"In addition to lower input costs and increased yields, 15-inch spacing allows farmers to reduce their capital investment because they can plant both corn and beans with a single planter," said Calmer.

He noted that Case IH 955 series Early Riser planters are designed in a "splitter" configuration, meaning farmers can plant in either 15- or 30-inch rows with the same machine.

USDA pushes for more ag research money

Saying agriculture research is a victim of its own success, the American Farmers and Ranchers Association has stepped up its support for increased federal funding for agricultural research.

"Farmers are unwilling to continue to support agricultural research as a primary priority, stating that they are unwilling to support agricultural research because it is not a product, but a service," said Bill Woteki, USDA's chief of research.

Woteki noted that agriculture has been "starved" for the past few years, with no new funds expected to be pumped into needed research. He said one of the reasons for the lack of growth in research funds is due to urban and suburban members of Congress and their constituents who take an abounding food supply for granted and are unwilling to set aside a portion of their taxes for agricultural research.

"We have a huge infrastructure that has been productive and has paid off, but we cannot financially sustain that. ... The dilemma is that we don't have a good a job of telling our story and science is losing its priority in society," Woteki said at a recent conference of farmers at Rocky Mountain College in Montana.

The USDA Agricultural Research Service is allocated $66 million per year for its work, but Woteki's farm bill only extended research dollars for one year, forcing USDA to again go into battle to secure desperate research money this year.

New alliance benefits farmers

A recent alliance gives farmers a new option for dealing with the phase-out of the government price support program. Mike Fasler, vice president and co-owner of Salisbury Management Services, Eaton Rapids, Mich., announced his company has formed an alliance with Harley & Associates Agri-Marketing Centers Inc., with offices in Missouri, Illinois, Kentucky, Tennessee, Arkansas and Mississippi.

"We believe that commodity markets will be more volatile than in the past due to the government removing itself from the role of managing supply. Producers now have flexibility regarding what crops to plant, therefore supply will adjust more rapidly which leads to an increase in price volatility. We feel farmers will want assistance with their marketing and financial planning to increase their profitability," states Fasler.

Fasler adds, "the result of this alliance is the Comprehensive Risk Management Service. This service utilizes the resources of two of the nation's leading experts in the agricultural marketing arena - The Production Expertise of the producer, Salisbury Management Services' financial planning expertise, and Harley & Associates' marketing expertise. Both companies are well known and respected in the agricultural arena. Marketing plans under the program are based upon the production and financial realities of the individual farm business. The crops covered by the service are commercial corn, seed corn, soybeans and wheat."

The Comprehensive Risk Management Service is available on a fee-per-acre basis. The service begins with developing a financial plan based on the financial realities of the individual farm business. The plan, combined with cropping data and yield projections, is used to develop a specific marketing plan for each commodity. The plan will be continually evaluated and updated as needed.

You can never predict the weather. Or how it will affect pest pressure. But you can predict your control. One Insecticide gives you more of it, more consistently, than any other, even in the extremes. COUNTER CR®

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You may not know the weather. Or how it will affect pest pressure. But you can predict your control. One Insecticide gives you more of it, more consistently, than any other, even in the extremes. COUNTER CR®

LOCK LEAF. LOAD LONGER. LASTING. SAFER TO HANDLE. COUNT ON IT.
**Precision Agriculture**

by Neil R. Miller

Michigan farmers are rapidly adopting GPS as a tool to manage soil fertility and monitor crop yields. Pest management activities, in contrast, have lagged behind.

This contrast is not due to a lack of interest or creativity. The farm press is full of schemes reminiscent of Star Wars. farmers are using satellites that monitor crop fields and identify diseases from 11,000 miles away, spotters with sensors that distinguish between weed species, and inject appropriate herbicides. Why aren't these ideas being used commercially?

### Farming is a dangerous occupation

According to the National Institute for Occupational Safety and Health in Morgantown, W. Va., American farmers are three times more likely to be killed on the job than the average U.S. worker.

"The fatality rate has remained fairly constant during the 1980s and into the '90s," said Inmate spokesperson John Myers. "It has run somewhere in the area of 22 to 23 deaths per 100,000 farm workers annually. It's one of the more hazardous industries."

Experts blame many farm accidents on impatience or carelessness. One Ohio farmer who lost portions of his right hand to a corn harvester said he might not be in the situation he is today if he had just taken the time to do his job right.

"No matter how big a hurry you're in, shut the engine off before you get down and do any work on a piece of equipment," said Greg Matre, who continues to farm to help pay off his more than $100,000 worth of medical bills. "$100,000 worth of medical bills. It may take you a little longer, but it's worth staying alive and keeping your fingers and your body parts intact."

### New magazine to cover "revolution" in agriculture

A new magazine focusing on precision agriculture debuted in January. Precisely Illustrated is devoted to the "how-to's" of site specific farming, a new technology and information system that is being adopted by crop producers across the United States.

Precisely Illustrated will be directed to crop producers and those who serve them, says K. Elliott, Nowels of Clear Window MultiMedia, St. Louis, publisher of the new magazine. "New technologies like global positioning systems or GPS, field mapping and remote sensing with satellites are being applied to farms across the country," says Nowels. "It's exciting, and agriculture will never be the same — and that probably qualifies precision agriculture as a revolution. We want to see an integration of these revolutionaries and developments to make high-technology agriculture easier to put to use."

Nowels and his partner, Robert J. Wanel, developed their understanding of precision agriculture after covering the issue for five years for another magazine they publish, Dealer PROGRESS, a publication for 25,000 farm supply retailers. Wanel is senior editor of both magazines.

Precisely Illustrated will focus on how-to-do-it articles, with a highly visual, illustrated format of photos, illustrations, charts and graphs, Nowels says. The magazine will also be made interactive with links to the Internet offering updated information to producers, the address is http://www.precisionag.com.

**Star Wars pest management: The myth and the reality**

**Debunked by Tom C. Schlicht**

While we have reliable economic thresholds for many of our insect pests, the vast majority of pest management decisions are still made with a farmer's or an agronomist's informed intuition. Even Microsoft hasn't learned how to program intuition into computers!

W.Va., American farmers are three times more likely to be killed on the job than the average U.S. worker. Because of the work involved, elevator personnel might not be in the situation he is today if he had just taken the time to do his job right.

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### Cost and time involved in registering agricultural chemicals is already monumental

**Label Inadequacies.** The cost and time involved in registering agricultural chemicals is already monumental. Site-specific labeling, detailing recommendations for various conditions, will require additional research expenditures. If these labels lead producers to target pesticide use, rather than taking a shotgun approach, they may result in both increased liability and decreased chemical sales. Companies will face difficult dilemmas in deciding to develop site-specific labels.

**Prohibitive Economics.** Site-specific pest management should result in lowered chemical costs and/or reduced pest damage. Will these benefits outweigh the cost of GPS receivers, computers and injective equipment? Most producers will also need to buy geo-referenced recommendations. Because of the work involved, elevator personnel are not willing to provide these services free, as they have with conventional technologies. Independent crop consultants, such as our company, will need to raise fees to cover the added costs of equipment, software and labor.

**Likely uses of site-specific management in the near future**

Despite the above reservations, I am convinced we will see commercial uses of site-specific pest management in the next few years. Likely applications include:

- Weed Mapping During Field Operations. Many combine yield monitors already allow operations to map weed problems during harvest (e.g., quackgrass patches). The same unit can be transferred to a tractor to map weed escapes while side dressing corn. These geo-referenced maps can then be used to spot-spray problem areas. Reductions of 40 to 60 percent in chemical costs have been documented with such approaches.

- Sensors for Directing Nonselective Herbicides on Resistant Crops. Rounding Bt soybeans and Liberty Link corn offers a second herbicide application to catch perennial weeds. Since these herbicides are non-selective, sensors will not need to distinguish between weed species, and sprayers can simply be turned on and off rather than using expensive injection systems.

- Variable Rate Application of Precumference Herbicides. Herbs rates according to soil texture and organic matter levels has reduced herbicide costs by $4 to $8 per acre. Despite the equipment costs and label inadequacies described above, I expect we will see this technology used in Michigan in the near future.

- Remote Sensing to Target Scouting. Efforts. Satellite imagery or aerial photos can scan large areas to pinpoint areas where crops are stressed. Although these images can't identify the causes of the areas, they can help direct crews to problem areas. This technology is most cost-effective in areas that are difficult to scout from the ground. In Michigan, our smaller fields may limit its use to high-value specialty crops.

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Medical savings accounts now available to Farm Bureau members

Blue Cross Blue Shield of Michigan (BCBSM) has teamed up with two other Michigan-based companies to offer tax deductible medical savings accounts to small businesses in the state under new federal legislation that took effect Jan. 1. A medical savings account (MSA) is based on a high-deductible health-care plan linked to an investment account similar to an IRA, which helps purchasers pay for medical expenses.

The new product will be a BCBSM qualified Comprehensive Major Medical plan called Blue MedSave and will be administered by Michigan-based FLEXBEN Corporation, a national employee benefits administration and management firm. Michigan National Bank will offer an investment plan for the accounts.

The Michigan Blues will be the first health-care insurance company in the state to offer the new medical savings accounts through organizations such as Michigan Farm Bureau. This will provide small businesses, such as farming operations, in Michigan that purchase MSAs access to every community-based hospital in Michigan, 9 out of 10 Michigan physicians, and providers throughout the nation through BCBSM’s affiliation with other Blue plans.

“We’re pleased to have the opportunity to offer an MSA to the Michigan Farm Bureau membership,” says Doug Fleming, manager of MFB’s members services. “Our organization has been a long-time advocate of the principal benefits of MSAs through our members’ policy development process.”

Richard Whitmer, CEO of Blue Cross Blue Shield of Michigan, said, “Blue MedSave is a unique health-care product with tax benefits for small businesses, sole proprietors and their employees in Michigan.”

“Every farm in the state has the opportunity to participate in the MSA program,” adds Fleming. “It’s another way in which Farm Bureau is working to improve our members’ net farm income.”

Medical savings accounts use tax-free dollars to cover eligible medical expenses as defined by section 213(d) of IRS code. This includes medical expenses, such as physician and hospitalization costs, if they are for essential medical care.

Throughout the year, when an employee or dependent needs medical care, the employee pays the deductible with funds from the medical savings account. Here’s how it works:

- The employer (10 employees or less) or sole proprietor purchases a Blues-qualified Comprehensive Major Medical (CMM) plan.
- The employer or employees contribute to a medical savings account for each employee (federal law prohibits employees and employers from both contributing during one year).
- Contributions and eligible medical expense reimbursements are not subject to federal income taxes.
- Contributions are used to meet plan deductibles of $1,500 per year for individuals and $3,000 per year for families.
- The annual maximum contribution is 65 percent of deductibles for individuals ($975) and 75 percent for families ($2,250).
- Unlike flexible spending accounts, unused dollars may be rolled over for expenses in subsequent years.
- When an employee or dependent receives health care, the health care provider bills Blue Cross Blue Shield of Michigan. The Blues then generate an explanation of benefits (EOB) and credit the employer’s deductible. The EOB details the service and informs the employee that the amount applied to the deductible must be paid. The employee can then submit his or her claim to FLEXBEN for payment, tax-free, for eligible unpaid expenses.

The medical savings account is portable. Employees are free to contribute in their medical savings accounts with firm if they leave an employer, although they may be responsible for administrative fees to maintain the account.

The medical savings account also works as a safety net for an employee who has been laid off or has terminated his or her employment. It can even be used to pay premiums for extended coverage under the federal government’s COBRA program.

Money remaining in a medical savings account from previous years is rolled over to pay for medical expenses in following years. Rollover funds may also be used to pay for medical services that are not covered by qualified Comprehensive Major Medical (such as copayments for prescription, vision and dental costs).

To withdraw funds to pay for medical services that are not covered, members will need to submit a reimbursement request to FLEXBEN Corp.

Individuals eligible for Medicare cannot participate in the MSA program, according to federal law. Those covered by other non-Blue Cross Blue Shield of Michigan health insurance plans cannot participate in the Blues program.

The new federal MSA program is currently limited to the first 750,000 people nationwide to establish tax-deductible MSAs. For more information, interested small business owners are asked to contact their local Farm Bureau Insurance agent or county Farm Bureau office.

Good health insurance is no accident.

Member Health Insurance from Michigan Farm Bureau

For over 40 years, Farm Bureau and Blue Cross Blue Shield have teamed up to provide quality health care at competitive group rates with the personalized service you would expect from a Farm Bureau membership.

No matter what your needs...small business, sole proprietor, Medicare supplemental or individual coverage for you or your family — we have the right plan at the right price.

Where Belonging Makes a Difference.
Want more bite from your insecticide buck?

** michigan farm news february 15, 1997**

each spring growers across the corn belt invest millions of dollars in granular insecticides to protect their crops from damaging soil insects. however, some spend more than they have to, while others may lose control because they are applying their insecticides with planters that are improperly calibrated.

"insecticide applications that aren't properly calibrated could deliver application rates that are off by as much as 30 to 50 percent," says debbie ventura, of renova ag products. "applying too much product wastes money, while low rates can open the door for rootworms, cutworms and other insects."

Ventura adds that growers can't rely solely on the manufacturer's recommended settings because product flows through each planter, and even each row unit, at different speeds. even a brand new properly calibrated planter can have settings that differ by up to three inches from one row unit to another. the recommended settings on insecticide bags should be used only as a starting point, "she explains. "with any insecticide, it's important to fine-tune the settings for accurate application."

An ongoing process

every planter should be calibrated every year, according to ventura. just checking the settings is not enough, she adds. growers should run product through the application to make sure they're delivering the right rate.

"Normal wear and tear can affect your planter settings from one week to the next, and even one field to the next," she says. "even if you plan to use the same product in the year before, it's essential to calibrate at the beginning of the season and to re-check calibration halfway through planting."

ventura says calibrating a planter is not a difficult or time-consuming process. calibrating an 8- or 12-row planter will typically take about an hour.

these calibration points apply to all granular soil insecticides, she adds. for convenience, some newer products are formulated for application at lower rates. for example, renova's force 3g is applied at 4 ounces per 1,000 feet of row, compared to 8 ounces per 1,000 feet for lumbr. 15g.

ventura says the newer product was designed to work well with existing applicators' equipment. "controlled tests and grower experience over millions of acres show excellent application accuracy with force 3g," she reports. "most of the force we sold last year was the force 3g formulation. growers like only having half as many bags to handle and being able to cover twice as many acres between refills. in many cases, they're able to run the planter all day without having to refill their insecticide hoppers."

an independent study conducted by midwest research in york, neb., found that delivery of force 3g was extremely accurate during a simulated planting procedure over a nine-hour time period. actual delivery at the end of this period was within 1 to 3 percent of the desired target application from three different planters - max-emerge i, max-emerge ii and max-emerge plus.

**how to properly calibrate your planter**

many soil insecticide manufacturers offer pre-season calibration as a service to growers using their product. however, some growers prefer to take care of the job themselves. here's how to properly calibrate your planter:

• check the product bag for the recommended rate per 1,000 feet of row. the instructions will recommend an initial planter setting based on planter type, application rate and running speed. set each planter box to the recommended setting.
• disconnect the delivery tube from each planter box and direct the product flow into containers or calibration tubes.
• with product in the planter boxes, run the planter 50 feet at the same speed you will be running when planting. "the speed is very important," emphasizes ventura. "the application setting determines how fast the insecticide flows out. if you calibrate your planter at six miles per hour and then run five miles an hour in the field, you may be applying too much insecticide."
• weigh the product in each container and then subtract the weight of the container itself. if you're using calibration tubes, check the level of product in each calibration tube. after a 50-foot run, half of the amount needed for a 1,000-foot row should be deposited in the containers or tubes.
• adjust the settings on the planter boxes as needed and repeat the test until all the boxes are delivering the correct amount of product.

basf purchase of sandoz corn herbicide business finalized

basf announces it has finalized the purchase of a portion of sandoz ltd.'s worldwide corn herbicide business and is moving forward in integrating the companies.

the purchase agreement of $595 million, plus approximately $55 million in net working capital, includes all rights for agricultural uses of sandoz corn and wheat herbicides in the united states and canada, including the broad, clarity and marketman brands, plus frontier and guardian worldwide.

"we are proud to have these well-respected products in our portfolio, complementing our existing and future products for soybeans and corn," says hans j. loose, group vice president, agricultural products, north america.

with the addition of these brands, basf will become one of the top north american suppliers of corn and soybean crop protection products, and will significantly increase its product share in the u.s. and canada wheat markets. the agreement also includes sandoz agro inc.'s benton, texas, manufacturing facility.

basf headquarters will remain in research triangle park, n.c. sandoz agro employees who accepted a position with basf will begin transferring to raleigh durham and other locations immediately. according to loose, more than 490 sandoz agro employees have joined basf, which includes a large portion of the sales force. "dedicated and committed people are the key to success in our business and we're fortunate to have attracted so many talented sandoz staff," the sales force is set up and they're ready to provide the same level of quality service our customers have relied on in the past," says loose.

although the company will operate with one combined sales force, there will be separate marketing programs and packaging designs for the 1997 season to ease the transition, according to loose. "because it will take several months to transfer all contracts, trademarks and other legal items, we will conduct separate programs. this way, we'll ensure there will be no disruption in the availability of product," says loose.

**pigs more corn more profits**

informational meetings for corn producers increasing farm profits

**topics**

- is the hog industry right for me?
- the pork industry—what it is and what it is not
- manure nutrient management
- budgets and profitability
- odor concerns
- contract business arrangements & financial assistance
- land use—right to farm—zoning

**locations**

decatur: vfw hall . march 17th 3:00 pm
grandville: jerry's country inn . march 18th 3:00 pm
 cass city: colony house . march 19th 9:00 am
mt. pleasant: embers . march 19th 4:00 pm
jackson: giberts . march 20th 5:00 pm

dinner
free dinner for you and your guest. sponsored by the corn marketing program of michigan and michigan pork alliance

**registration form**

informational meetings for corn producers increasing farm profits

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tell us how to contact you:

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Agriculture holds key to China's entry into WTO

U.S. trade officials said farm trade issues will be a key factor in determining whether China is admitted into the World Trade Organization. Agriculture Secretary Dan Glickman also denied that the Clinton administration is ignoring agricultural trade ties between Washington and China.

The American Farm Bureau Federation and other agricultural groups are aggressively campaigning to make sure farm interests aren't ignored in U.S.-China talks.

"Our negotiators on WTO have to be with agricultural officials in China, and we don't see any sign of that," said Barbara Shaffer of AFBF. "We have to get the U.S. Trade Representative involved in this.

A spokesperson for the USTR said they are serious to work with the Agriculture Department to help work out trade barriers between the two nations.

Sen. Richard Lugar (R-IN), chairman of the Senate Agriculture Committee, voiced his disappointment that agriculture did not receive sufficient discussion during the WTO's ministerial meeting in Singapore in December. Sen. Tom Harkin (D-Iowa), agricultural official in China, and we don't see any sign of that," said Barbara Spangler of AFBF. "We agree with Lugar. "Our trade office has got the focus of that," he said. "But we wish more acreage had been planted this fall, the market price, unfavorable harvest of other crops, in many cases prevented winter wheat planting."

As a consequence, acreage planted to wheat this fall may have dropped by 30 percent or more, Poindexter surmises. That could mean around 160,000 fewer acres planted to winter wheat this fall than were planted a year ago.

"What wheat was planted looks really good at this time," he says. "While we wish more acreage was planted this fall, the market price, unfavorable weather, and planning weather forced growers to make a management decision, and for many, it was not to plant wheat," Poindexter says.

Though it is not unusual to see year-to-year fluctuations in acreage planted to wheat, statistics show that wheat acreage has been trending downward since the early 1960s, when upwards of 8.1 million acres were being planted to wheat each year. In 1995 (most recent statistics), 635,000 acres were planted to wheat.

The focus of Wheat 2000 is to reverse the decline in wheat acreage and increase per acre yield. The program was begun by a group of growers, agribusiness representatives, NASS Extension agronomists and Michigan Agricultural Experiment Station researchers in 1994.

In spite of the past growing season, Poindexter sees substantial value in what Wheat 2000 has accomplished for the nearly 1,000 growers participating in the program.

"Had the Wheat 2000 program not been in place, we could not have responded nearly as well to the problems that best growers throughout the past growing season," Poindexter says. "As it was, we had a communication mechanism in place that kept growers and industry apprised of the problems as they developed. And working through the program, the university and industry were able to provide growers with the best possible advice available when it was needed."

He adds that Wheat 2000's effect on production practices is apparent.

"Growers are now planting seeds per row foot or per row rather than bushels per acre, they are more aware of the importance of fertility to attain maximum yield according to soil type, and they see the merit of planting two or several varieties of wheat rather than just one," Poindexter says. "They are also more aware of the importance of insect and disease identification and control using integrated pest management practices. I think we have made a qualitative difference in growing wheat skills," Poindexter says.

Those skills will continue to be augmented through a series of meetings being planned in the state's main wheat-growing region this winter.

"In those meetings, we will look at the problems of the past year but focus on practices that will emphasize the value and ultimately the profitability of growing wheat while minimizing risk," Poindexter says. "The potential for growing wheat in Michigan is the same as it always has been. We do have a good wheat-producing climate, when wheat yields across the United States are examined, it is evident that, on average, Michigan's wheat yield is a yard above what producers in other states are attaining."

He adds that in spite of this year's problems, wheat remains a viable part of the farm's rotation, economically and environmentally, and that the potential for wheat as a major crop in Michigan is good.

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Focus on Savings with NuVision

Member Vision Care Plan from Michigan Farm Bureau

The Importance of Eyecare

NuVision was founded on the principle that great eyewear starts with professional eyecare. That's why you'll find an independent licensed Doctor of Optometry in every NuVision office. Comprehensive eye examinations and contact lens fittings are easily arranged. Simply call ahead for an appointment.

Cross your eyes have been examined by a Doctor of Optometry at NuVision, your vision records will be maintained on file for your convenience.

We invite you to compare our service. You'll find that what others call special care, NuVision provides as standard procedure.

Family Plan Benefits:

- 20% to 50% off frames
- 20% off lenses and lens treatments
- 10% off contact lenses
- 15% off non-prescription items
- FREE UV protection on plastic lenses

Don't forget to use your Farm Bureau VISA at NuVision Optical centers nationwide.

Where Belonging Makes a Difference.

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Wheat 2000 project remains optimistic about production
Animal Initiative dollars in action: MSU’s new pavilion is up and running

by Kara Endsley

Michigan State University’s Pavilion for Agriculture and Livestock Education opened early this winter by showcasing the Michigan Winter Beef Show, where area producers got the first glimpse of the newly completed pavilion.

"Exhibitors were really quite amazed at the size and scope of it," Livestock Extension Specialist Ken Geunss said. "It just seemed to be a completely different atmosphere. People were really enjoying themselves, and they got a chance to visit with others and to look at livestock and learn.”

The pavilion, which was completed Oct. 1, 1996, was part of the $79 million Revitalization of Animal Agriculture Initiative. "The exhibition center is probably the most visible component of the Animal Initiative to the general taxpayer in the state of Michigan," Geunss said. "They can have direct benefit from it.

The 187,000-square-foot building, located south of the MSU campus, hasn’t gone without notice. Most weekends in 1997 are already scheduled for an event, and requests have even been made into the year 2000.

Although the majority of scheduled events are agriculture-related, the facility is designed for trade shows, flea markets and single-day meetings. “We attempted to think about as many things as we possibly could in designing the facility to accommodate not only livestock shows but large trade shows and things of that nature,” Geunss said.

The pavilion includes a 76,000-square-foot exhibition area, an auditorium and auction facility with seating for 350, an arena seating 2,000 people, and four classrooms seating 35 people. The pavilion also has a campground with 75 sites and a 700-car parking lot.

The pavilion was designed by representatives from all walks of livestock. Architects traveled to the North American International Livestock Pavilion in Louisville, Ky., and to Middle State University in Tennessee to acquire design ideas.

“It was a merger of all the different designs and facilities seen around the country,” Geunss said.

The committee, which represented the beef, sheep, swine, horse and goat industries, compiled a series of lists. The first established the necessary specifications for the facility. The second was a “nice to have list,” and the third was the “laisy list.”

After negotiations over the design table, a final plan, which included all the necessities and a few luxuries, was completed. In just over a year, the pavilion went from blueprints to a facility ready to open its doors.

The 14th Annual Michigan Horse Council’s International Stallion Exposition and Trade Show, March 14-15, will host the pavilion’s official grand opening ceremony.

The pavilion is yet another asset for the agricultural community—a direct result of the Animal Initiative in action. “It will provide a great home for Michigan agriculture events. I think the industry will have a lot of enjoyment in it in the years to come,” Geunss said.

To reserve the pavilion or for more information, contact Gerry McCully at (517) 432-5566.

Above: The Pavilion for Agriculture and Livestock Education rests on 50 acres of land just south of the MSU campus.

Left: The 2,000-seat arena is well prepared for livestock shows and barrel racing.

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**Ventilator Schedule of Events**

<table>
<thead>
<tr>
<th>Month</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>February</td>
<td>15  Michigan Elk Breeders Association 1st Annual Select Elk Auction</td>
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<tr>
<td></td>
<td>21-23  MSU Spartan Stampede</td>
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<td>28  Michigan Quarter Horse Paint Sale</td>
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<td>March</td>
<td>1-9  AHAl Week</td>
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<td>14-15  Annual International Stalfon Exposition and Trade Show</td>
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<td>20-23  Mid Michigan Home &amp; Garden Show</td>
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<td>April</td>
<td>6-6  Michigan Beef Expo</td>
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<td>18-20  Mid Michigan Horse Sale</td>
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<td>24-26  4-H Small Animals Day</td>
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<td>May</td>
<td>5-5  FFA Ag Skills Contests</td>
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<td>15  MSU Sheep Sale</td>
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<td>June</td>
<td>11-13  Eastern Regional Jr. Sesinal Show</td>
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<td>18-21  Michigan All Breed Beef and Sheep Show</td>
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<td></td>
<td>23-27  Beef Industry Seminar Event</td>
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<td></td>
<td>24  National Jr. Holstein Program</td>
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<tr>
<td>July</td>
<td>5-8  Michigan 4-H Animal Science Week</td>
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**MSU Animal Science to sponsor workshops on expected progeny differences in beef cattle**

Early in March, MSU’s animal science department will hold five workshops around the state on the use of expected progeny differences (EPD) in beef cattle production.

According to Dr. Dan Badke, MSU Extension specialist, the workshop will give participants down-to-earth explanation of EPD’s and their use in improving beef cattle production criteria. Participants will be given the opportunity to practice cattle selection using EPD’s and will be able to apply the use of EPD’s to realistic situations and resources of Michigan cattle producers, “adds Badke.

Workshops will be held:

- March 3  Delta Co. Extension office, Escarabula
- March 4  Gaylord Holiday Inn, Gaylord
- March 5  Kien’s Country Kitchen, Marchchelt
- March 6  Van Buren Co. Extension office, Paw Paw
- March 7  Brown Bungalow Resort, Paris

The fee is $45 for the first family member, additional are $1 each. Please send checks payable to MSU to Teri Walter, 113 Anthony Hall, East Lansing, MI 48824-1225 or call (517) 355-8401.

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USDA seeks comment on use of National Cheese Exchange data in determination of milk prices

Agriculture Secretary Dan Glickman announced recently he is taking steps to address concerns raised by dairy producers about how milk prices are calculated.

Glickman is seeking public comment on whether National Cheese Exchange (NCE) price data should be used in the determination of the Basic Formula Price (BFP) used in federal milk marketing orders. This action is in addition to the process currently underway in the department to consolidate and reform federal milk marketing orders by April 1999, as mandated by the 1996 farm bill.

The BFP is determined by USDA each month based on a formula that uses the previous month's producer price paid by unregulated manufacturing plants in Minnesota and Wisconsin, adjusted for changes in dairy product prices between the previous and current month. The price of cheese on the NCE is used in this adjustment.

The BFP serves as the price that handlers must pay dairy farmers for milk used to manufacture Class III products (i.e., butter, nonfat dry milk powder, cheese) under the federal milk marketing order program. It also is used to arrive at the price that processors must pay dairy farmers for milk consumed as fluid milk and soft products usage of milk (i.e., yogurt, ice cream).

"Many dairy producers and producer organizations, as well as Sens. Roth and Bingelis and Congressmen Obey, have indicated their concern with using NCE prices to establish the BFP," Glickman said. "There are concerns that NCE prices may not be reflective of market conditions for cheese nationally, because only a very small share of total U.S. cheese is traded on the NCE, and NCE prices have been subject to abnormally high volatility."

"We must address these concerns now so that dairy producers have confidence that the prices they receive reflect market conditions," Glickman said. "We cannot wait until April 1999 to address this issue. Based on the comments we receive, we will determine whether we should proceed with a national hearing on replacing NCE prices in establishing the BFP.

In response to concerns about the accuracy of reported prices, this month, USDA's National Agricultural Statistics Service (NASS) began conducting a national survey of cheddar cheese prices. "We must have broad participation in the survey if it is to be useful to the dairy industry and to be considered as a possible substitute for NCE prices," Glickman said.

The department will continue to review the BFP as part of Congress' mandate in the 1996 farm bill to reform and consolidate federal milk marketing orders. During the next several weeks, in preparation for meeting the April 1999 deadline, USDA will release several studies addressing options for milk order reform, including the role of the BFP and other longer-term pricing issues.

To comment on the use of NCE prices in the determination of the BFP write to: Dairy Division, AMS, USDA, Attn: BFP Evaluation, Room 2908-S, P.O. Box 9644, Washington, D.C. 20009-0644. Comments should be postmarked by March 31.

Corn will gain importance in high-population future

A series of Safety Challenge Seminars, co-sponsored by Michigan Farm Bureau and Michigan State University Extension, will provide Michigan farmers the help they need to develop safe farms.

Craig Anderson, manager of the Regulatory Compliance Assistance Program for Michigan Agricultural Cooperative Marketing Associations, says the meetings, which are free of charge, are funded through a grant received from the Safety Education and Training Division of the Michigan Department of Consumer and Industry Services.

"The program is designed to bring attention to the areas where we see a lot of injuries occurring within the agricultural industry and establish a program within each operation to try and reduce the number of injuries that might otherwise occur," Anderson explained. "These seminars provide participants, farmers andcooperators, a chance to determine how to develop a safety plan, and key points that each operation should consider.

Avery pointed out that major export demand will come from Asia, where Indonesia's broiler flock has more than doubled in the past two years, and where the United States has been exporting chicken feedstuff.

"There's nothing the world will need more than corn," said Dennis Avery of the Hudson Institute. "It's the biggest, most glittering opportunity in the history of agriculture.

Avery pointed out that major export demand will come from Asia, where Indonesia's broiler flock grew 25 percent in the past year. The Philippines recently renewed its policy of food self-sufficiency, and two-thirds of India's milk cows are fed a diet of beans, branches and stubble.

Avery said new technologies, such as breeder corn and high-tech forming techniques, will help the United States meet booming export demands.
New technique expands chestnut industry

by Steve Tomac

For many growers, chestnut harvest means a pain-staking, backbreaking process that involves visiting each tree every day for many weeks. "Chesnut trees will drop their nuts for approximately two weeks once the maturity of a particular tree is achieved," said Dennis Fulbright, professor of botany and plant pathology at MSU. "If you have different trees in an orchard that come into bearing at different times, you could be out there basically for a month picking up nuts underneath the tree."

This is one of the reasons the Midwest doesn't have a thriving nut industry. The variable climate makes predicting harvest difficult and the gathering of the nuts labor-intensive.

But now, Fulbright and a team from MSU have worked to develop a process that makes harvesting more predictable, easier, and less labor intensive. They have found that by spraying Ethephon on the chestnut tree, it shortens the span of the harvest.

"We've found that probably within about seven to eight days after spraying, the trees are ready for harvest," said Fulbright. Ethephon is a chemical that turns into Ethylene once it is sprayed on the tree, which causes the chestnuts to ripen at the same time.

Fulbright stressed that chestnuts aren't like ordinary nuts. They are perishable and need to be handled like a fruit. He compared the chestnut to strawberries, saying they need to be kept cool. If not, he said, "they're going to mold and dry out and turn into little pebbles."

Fulbright said the chestnut industry in Michigan is on the verge of expansion - there are about 70 members of the Michigan Nut Growers Association and only about 20 orchards. He warns, however, that the only ones who make money are those who step in during the middle of the project. He said the pioneers lose money because they are exploring how to be successful, and the late entries deflate the market by flooding it.

For more information on the Michigan Nut Producers Association of the Midwest Nut Producers Council, call (517) 935-3950.

Michigan growers named to tart cherry board

Gregory elected chair of committee

USDA Agricultural Marketing Service Administration's Lon Ratnam announced recently 11 appointments to the initial six-member Cherry Industry Administrative Board. The tart cherry marketing order became effective Sept. 25. Since then, USDA has conducted mail notification and balloting to nominate members to the board. The board is the administrative agency for the marketing order regulating the handling of tart cherries grown in Michigan, New York, Pennsylvania, Oregon, Utah, Washington and Wisconsin. Producers and handlers from the production area are represented on the board. A public member and alternate public member will be nominated at the first board meeting.


Northwest County Farm Bureau member Don Gregory was elected chairman of the committee earlier this year.

Newly appointed alternate producer members are: District 1 - Norman E. Yukhnette, Elk Rapids, Mich., and Jerry J. Send, Suttons Bay; District 2 - Douglas R. Fuehring, Hart, Mich.; District 3 - Jerry Jolly, Columba, Mich.; District 5 - Phillip J. Joffay, Salem, Ore.; District 6 - M. Everett Weiser, York Springs, Penn.; District 7 - Kay Relye, Salt Lake City, Utah; District 8 - Al Denis, Othella, Wash.; and District 9 - Martin H. Held, Sturgeon Bay, Wis.


USDA's Agricultural Marketing Service, a marketing and regulatory agency, monitors the operations of the board. The order authorizes marketing, grade, size and maturity regulations, including mandatory inspection for compliance with grade requirements. The order also authorizes production, processing, and marketing research and promotion projects, including paid advertising. Assessments on tart cherries will finance the order.

Senators propose action against E.U.

A bipartisan group of senators has introduced legislation that would force action against Europe if the European Union does not recognize U.S. meat inspection and safety standards and open its market to U.S. beef and pork.

The bill would require the Clinton administration to review certification of European meat processing facilities. It will also require a formal determination of whether European countries have violated their trade agreement with the United States.

The White House warned the European Union that unless it recognized U.S. meat inspection and safety standards, European meat not processed in facilities meeting U.S. standards could be kept out of the country. The White House set an April 1 deadline.

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Where Belonging Makes a Difference.
Overpopulation of white-tailed deer causes extensive crop damage

You'd be hard pressed to find a Michigan cherry producer who hasn't had to put up with deer enjoying moolah dinners in the orchard. Bob Gregory is one farmer who's had enough. Gregory, part owner of Cherry Bay Orchards, Inc., near Traverse City, estimates his operation loses $10,000 to $20,000 from deer damage every year. And it's not because he stands idle. He says he and his partners spend $3,000 to $5,000 annually in an attempt to ward off the feasting animals. His methods range from hanging strips of mylar from branches to setting up a sound system to create the sound of barking dogs.

Gregory isn't alone. Farmers throughout the state have reported increasing wildlife crop damage, and many are fed up. A Michigan State University study determined that deer destroyed nearly $32 million worth of crop in 25 southern Michigan counties alone, in 1994. This is not a new problem, either. In each of the last 10 years, Farm Bureau members passed policy at the annual meeting asking the Department of Natural Resources (since it is no longer an agency, but rather an Action Group) to take steps to control the deer herd. Unfortunately, the herd has only grown—now more than 2 million strong. The DNR has stated that 1.3 million head is their population objective.

After a decade of increasing deer populations, several county Farm Bureau organizations passed resolutions calling for aggressive action. At the state annual meeting, a 4-H member delegate body approved policy stating that if the white-tailed deer population is not reduced to the DNR's stated objective of 1.3 million by Jan. 1, 1999, Michigan Farm Bureau may consider a class-action lawsuit on behalf of Michigan farmers who have suffered crop damage. Members also recommended numerous steps the DNR could implement, including:
- Extension of the firearm deer season, for antlers only, prior to Nov. 15 and following Nov. 30.
- Liberal issuance of non-hunting season permits, with no license required to hunt in overpopulated areas, or to farmers with damage during that year.
- Early hunting of deer from Sept. 15 through the end of the firearm deer season. The Natural Resources Commission should scientifically study the effects of hunting on overpopulation and disease, then enact a quota restriction that will help avoid these problems.
- The use of tree stands for deer hunting during firearm season.
- Any other technique to increase the antlered harvest.

The emphasis for these deer management strategies is on harvesting antlered deer. Experts say doing so is the most efficient method for reducing the population.

When members passed this resolution, it captured headlines. Since that time, NBF representatives have met with the DNR, sportsmen organizations and others to find a solution to the deer overpopulation problem. Few disagree there are too many deer in Michigan. The question lies in the best, most efficient way to reduce the numbers.

Discussion Questions
1. Why do you think the deer herd has grown so rapidly over the past decade?
2. Farm Bureau has always supported sound, scientific wildlife management. What are your ideas for bringing the deer population to a more reasonable level?
3. What can farmers do to help manage the number of deer in your county?
4. How do members of your group allow a reasonable number of hunters to hunt on their farms?
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**2nd Place**
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**3rd Place**
Lennis Troyer of Burr Oak
199.3 bu/a with Pioneer hybrid 3394
This publication is the sixth in a series reporting results of farmer-driven on-farm research and demonstrations sponsored by the Michigan Agricultural Stewardship Association.

In 1991, MASA and its on-farm research committee began offering financial help, moral support and technical advice to farmers who wanted to try a new idea to see if they would work on their farms.

The project is on-going. Kalamazoo dairyman Roger French chairs the committee that 1) solicits and selects new projects, 2) helps farmers set up scientifically meaningful on-farm experiments, and 3) collects and publishes the results.

Most projects attempt to optimize use of inputs, enhance environmental protection and in general help to identify sustainable practices.

MASA pays farmers up to $500 to help defray their costs in carrying out experiments and demonstrations. Each project is assigned a coordinator who helps the farmer set up the experiment and collect and compile the results. Again, the on-farm research committee is looking for farmers wanting to do a project (see box).

**A Call for Projects**

Have an idea you'd like to try on your farm and need just a little help? The farmers who, in this publication, are reporting results of their on-farm tests were in that situation when they made their application to MASA's On-Farm Research Committee.

They received up to $500 and some advice on how to structure their experiments to get meaningful results. MASA sponsors demonstrations as well as scientifically rigorous experiments.

The committee is accepting ideas for projects. Deadline is March 1. Those whose projects win support will know in time to get field projects underway this spring.

Farmers try ideas to reduce fertilizer and pesticide impact, improve soil quality and control erosion, use new methods to combat pests or tare manure. How about odor control in hog barns or strip cropping as a way of gaining biodiversity while rotating crops?

Try out some new ideas. Contract Roger French at Daawnera Farms, 10004 Stadium Drive, Kalamazoo 49009, or call 616/375-0658. Or contact MASA headquarters (Russ LaRoe) at 605 N. Birch St., Kalkaska 49646 (616/258-3305).

You can receive and fill out an application or just describe your project in a letter.

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**MASA Picks President, Board Members**

MASA members re-elected their president and a board member and elected two new board members at the annual meeting during the Michigan Agriculture Mega-Conference January 9. Cindy Dutcher, from Goetzville in Chippewa County, was re-elected president. She and husband John own a farm devoted to forage production for beef, sheep and Angora goats. They also have blueberry planting they are developing into a U-pick operation.

The new board members are Tom Foltz, a dairyman from Petoskey in Emmet County, and Chuck Comillie, a cow-calf producer from Byron in Shiawassee County. Board member Greg Mund, a fruit and vegetable grower from Rothbury who works for the Natural Resources Conservation Service in Muskegon County, was re-elected.

The Michigan Agricultural Stewardship Association is a non-profit organization, the goal of which is to foster sustainable agriculture practices among Michigan farmers. Executive Director is Russ LaRoe, located in the MASA office at 605 N. Birch St., Kalkaska, MI 49646, who may be contacted for membership information or other matters. Phone: 616/258-3305 Fax: 616/258-3318.

MASA officers are: President, Cindy Dutcher, Goetzville 909/297-2120; Vice-President, Paul Lutterbacher, Clio 810/666-1370; Secretary Martin Goebel, Hillman, 517/517-4505; and Treasurer, Tom Guthrie, Delton 616/623-2261 or -2255.

Other directors are Jerry Wirbel, Hope, 517/689-3857; Greg Mund, Rothbury, 616/773-0008; Richard Lauwers, Imlay City, 313/724-2263; Tom Foltz, Petoskey 616/347-1619; and Chuck Comillie, Byron 810/266-4708.

Leadership Development Coordinator is John Darling, Michigan State University, 517/353-3209 Fax 353-7186.

Roger French, Kalamazoo, 616/375-0658, chairs the On-Farm Research Committee. If you have sustainable agriculture news to share, send it to Newsletter Editor Dick Lehnert, 2700 E. Cavanaugh Rd., Lansing MI 48910. 517/882-2794 Fax 887-4964.

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A Call for Projects

Have an idea you'd like to try on your farm and need just a little help? The farmers who, in this publication, are reporting results of their on-farm tests were in that situation when they made their application to MASA's On-Farm Research Committee.

They received up to $500 and some advice on how to structure their experiments to get meaningful results. MASA sponsors demonstrations as well as scientifically rigorous experiments.

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Gene Vogel, Huron County

Will Corn in Twin Rows Give More Yield?

After 30 years with 30 inches being a national norm in corn row width, intense interest has developed for growing it in narrower rows, 15 or 22 inches.

Steve Poindexter, Extension ag agent in Saginaw County, says narrow rows are the hottest topic in the northern Corn Belt and that farmers are poised "to make a major change in production practice."

"I know of no other practice a corn grower could adopt that would give him 10 percent more yield right now," he said. He became an advocate of narrow rows after working with Michigan State University crop scientist Don Christenson on a five-county, three-year (1990-91) comparison of crops grown in 22-inch rows compared to 30.

The results: Corn yields averaged 160 bushels per acre in 22-inch rows, compared to 147 for 30-inch. For navy beans, yields went from 24.1 to 26.8 bushels per acre. For 30-inch, 24.1 to 26.8 tons--all statistically significant yield increases.

Planting more rows per acre costs more money. Farmers who plant narrower usually plant more seeds per acre, need planters to unit to plant the same acreage in the same time, need narrow combine heads to harvest and narrower tractor tires for field operations.

This year, Gene Vogel of Minden City decided to grow corn in twin rows to see if he could get the best of both worlds--higher yields without much cost increase. He grew 150 acres of corn and 250 acres of dry edible beans and soybeans in dual rows - 7.5 inches apart on 30-inch centers.

Vogel hooked two conventional eight-row planters together, one behind the other and offset 7.5 inches.

He hand-applied herbicides and cultivated between the rows. And he used a conventional 30-inch corn head to harvest the oats. "It costed well," he said. "I used the same sweeps as the guys who plant 22-inch rows."

How'd harvest go? "The corn fed into the header better than I expected. Harvest losses weren't even a factor," he said.

One disappointment was the lack of increased yield. "This year was not a fair test," he said. "I intend to try again next year. Other farmers in the Thumb who used 22-inch rows this year didn't get a yield increase either." But last year he took on 30,000 to 40,000 ears of corn.

In alternating eight-row strips so he could compare emergence date and plant population. At the end of the season, he'd compare yields.

the wet spring prevented Vogel from planting until June 6. Serious hail damage occurred September 12. At harvest November 22, yields were 90 to 100 bushels per acre of high-moisture, low-test weight corn, regardless of plant population (four trials from 30,000 to 40,000) or row width.

Vogel uses a zone tillage system. He uses a Trans-Till in a separate tillage operation ahead of the planter. Two wide-ripple coulters do surface tillage, much as a no-till planter does, while a depth-adjustable shank between the coulters reaches deeper and breaks up compaction where the row will be. Because it's used before the planter comes, the ground can dry and be planted with a conventional planter. "That was a real advantage this year," he said. "It was really too wet to no-till."

Vogel planted dry edible beans and soybeans in twin rows in 1995 and got favorable yield increases.

Ross Voelker and Steve Koroleski, Huron County

Thumb Weather Hurt On-Farm Research

Terrible weather in Michigan's Thumb last year turned several farmers' on-farm research projects to no good end.

Ross Voelker tried fall planting mammoth clover in wheat. But it - and the wheat - were killed by the cold, open winter. Voelker's farm near Pigeon has wintered weights and sugar beets went from 23.5 to 24.7 tons--all statistically significant yield increases.

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Bernard Wall, Isabella County

Leaves Too Much of a Good Thing

After three years of effort, Bernard Wall is back to square one. He takes tree leaves bagged from the lawns of friends and uses them to bed his beef cows in the barn.

He thinks that's a good idea. That way, he needs to grow only pasture and needs to buy or raise no straw for bedding.

But last year he took on a mountain of leaves, the entire output of the city of Coleman. His idea was to mix them with cattle manure and compost the two together. But he had too few cows and not enough manure.

"He worked his head off on those leaves," said Barney's wife Dolores. "People want to recycle if they can," he said. "People call here and want to bring leaves out. They seem happy when I tell them they'll be used for something." He has "regular customers" who've been bringing leaves for 10 years. He stores them inside, where they're dry, and beds the barn with them.

The shortage of manure relative to the leaf supply last year resulted in a poorly composted material. And taking everything the city had to offer resulted in "dirty" leaves - leaves mixed with sticks and plastic. He had hoped to sell compost to gardeners. "They shied away from this," he said.

The closing of landfills to leaves and grass clippings has created a need for a place for these organic materials. They do fit well into composting systems with livestock manure, and MASA members in western Michigan have incorporated urban leaves into their manure composting.
Interest in Hazel Nut Orchards Is Increasing

Oriette Easlick hopes spryly up onto her Massey-Ferguson tractor and cues her rider to watch his step. We ride to the site of her new hazelnut orchard at the back of her 55-acre sheep farm near Owosso. She used her MASA demonstration grant to plant 52 trees for "future income and the hope of increasing the value of the property." The new trees are staked and encased in tree guards to protect them from deer and temperature extremes.

Now age 81, in fine health and used to taking care of herself, she’s looking forward to harvesting hazelnuts four years from now. "It should pay better than corn or soybeans," she said. Nuts are worth nearly $1 a pound and should yield 2,500 pounds per acre when trees are mature, she said. Most tree nuts are used by U.S. consumers, and there appears to be a market for exported hazelnuts as well.

Hazel nuts have captured the interest of some orchardists. They bloom early, in March, but frosts don’t seem to affect fruit set. And they are harvested in September, after most fruits except apples. Cherry shakers are used to harvest the nuts.

Oriette gathered production information from Cecil Farris, of Lansing, a breeder of hazel nuts, and from Sid Grinnell, who sells grafted trees from Grinnell Nursery in Perry. The trees are not self-fertile, so Oriette planted trees from five varieties. Oviott Easlick does not have irrigation available and is using mulch to reduce competition. Oriette keeps careful records. She itemized her costs from planting about a third of an acre of trees. Trees cost nearly $8 each, about two-thirds of the establishment cost.

Oriette’s main farm enterprise is a flock of ewes. She has selected them to breed in February and lamb in July. This gives many more twins than early breeding, she says, and positions the lambs to come to the highest-price May market without feeding them or their mothers much grain. Summer lambing makes the best use of pasture, she says. Her careful records show that clearly, too.

Paul Guenther, Washtenaw County

Crimson Clover Interplanted Did Well in Corn

Paul Guenther is determined to make it work. He equipped his cultivator with spotters (converted from insecticide boxes) to intercrop cover crops in the row middles of his corn fields.

Last year, across each six row middle he seeded five middles — two with crimson clover, two with burseem clover and the center one with buckwheat. Last year, crimson clover was the star and burseem did poorly. But in past years, the opposite has happened. He’s dropped Australian medic from his on-farm trials because it doesn’t seem shade tolerant enough to establish between rows of growing corn.

He seeded into the corn last July 20, at the same time he sidedressed nitrogen, dribbling the seed behind the applicator shank and covering it slightly with a scratcher.

Guenther is looking for several benefits from an interplanted legume. He wants something growing late in the season, as corn matures, to pick up surplus fertilizer and, hopefully, fix some nitrogen for the next crop. The ground cover prevents erosion, provides food for wildlife and provides organic matter. The buckwheat is to serve a different purpose. He hopes its attractive blossoms will provide a nectar source that attracts parasitic wasps that prey on corn borers.

But first, the planted seed has to germinate and get established. Ideally, Guenther says, that means getting moisture and two weeks of sunshine before the corn canopy closes in. There would be little sun during July and August until the corn begins to ripen.

Guenther applies herbicide, both to reduce costs and to keep the row middles amenable to growth of the interseeded cover crop. He uses half rates of atrazine (1 quart) and Dual II (1 pint) in a band 12 inches wide, an 80 percent herbicide reduction. By cultivating, he provides loose soil for the interplanted cover crop.

What Guenther wants to achieve is a healthy legume stand coming on strong as the corn matures.

Loren Roslund, Gratiot County

Frost-Seeded Mammoth Clover a Superb Performer

Michigan mammoth clover, frost seeded into wheat, outgrew other interseeded legumes in a MASA-sponsored comparison on the Loren Roslund farm in 1996. The Roslunds raised 1.70 acres of corn, soybeans, wheat and cucumbers in Gratiot County.

The frost-seeded Michigan mammoth clover produced more green growth than any interseeded legume. Loren observed on his farm. Observations by Loren Roslund and Extension Ag Agent Dan Rossman are recorded in the table below. Michigan mammoth clover performed so well that Roslund plans to frost-seed it into all his wheat when he broadcasts nitrogen in February 1997. The local fertilizer dealer will blend the seed with the fertilizer. Seed costs $1.10 a pound and is broadcast at about 8 pounds per acre.

Roslund believes the luxuriant Michigan mammoth clover that he plowed down last fall will very favorably affect the 1997 corn crop. He also believes he can decrease his need for purchased nitrogen with the clover plowdown. For next year Roslund is considering on-farm research to measure the clover’s nitrogen contribution to corn.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall-Seeded Michigan Mammoth Clover</td>
<td>Poor, winter killed</td>
</tr>
<tr>
<td>Fall-Seeded Crimson Clover</td>
<td>Poor, winter killed</td>
</tr>
<tr>
<td>Frost-Seeded Michigan Mammoth Clover</td>
<td>Excellent growth</td>
</tr>
<tr>
<td>Frost-Seeded Crimson Clover</td>
<td>Poor, didn’t grow</td>
</tr>
<tr>
<td>Frost-Seeded 20% Alsike, 80% Red Clover</td>
<td>Very good stand, moderate growth</td>
</tr>
<tr>
<td>Frost-Seeded Annual Alfalfa</td>
<td>Thin stand, fair growth</td>
</tr>
</tbody>
</table>

(Note: Last winter was cold and snow cover did not provide protection for any fall-seeded crops)
Gaining Experience with Whole Farm Planning

Farmers are gradually getting used to the idea of whole farm planning; a few MASA members gave it a try last year. Lew Coulter, a cherry grower on the Old Mission Peninsula north of Traverse, became involved in it for personal reasons as well as though his job with the Grand Traverse Conservation District.

Whole farm planning can come to a farmer from several sources. The Natural Resources Conservation Service is developing whole farm planning as a way of helping farmers evaluate the sustainability of the resource base of their farm. At one level it is a basic farm conservation plan, but it also concerns itself with the satisfaction level of the farm family. And at another level, it tries to help farmers assure themselves they will meet all federal, state or local environmental regulations.

Holistic Resource Management also is a form of farm management that emphasizes the long-term interaction of farm resources and farm family goals. Within these larger systems are specific, tools like Farm\*A\*Syst, which helps farmers evaluate their farmsteads and deal with problems they will want to correct in the long run.

A workshop last March drew 18 farmers last year, some of them trying to cope with problems in new ways. "Many of the dilemmas farmers face are not resource management problems but a problem of choices," Coulter said. His farm has been identified as one eligible for purchase of development rights and he is in the process of trying to understand what can mean to the choices he makes for the future.

George Shetler and Tom Foltz, two dairy farmers in northern Michigan, participated in whole farm planning as well. George and Sally Shetler are now considering forming an advisory council for their farm to gather insights and ideas in those plots with the highest biomass. Collemboles (springtails) populations were more then three times higher in the annual ryegrass plots than in the no-cover plots. Various arthropod groups showed a positive response to one or more covers: Spiders and Orbitalid and mites were more numerous in hairy vetch plots, springtails more common in plots with the largest biomass, while Diptera larval populations were equal in all plots.

Since ground cover and cover crops do influence arthropod numbers and diversity, they have potential for inclusion into pest and crop management programs. "Detritus feeding segments of the food chain should be considered equal in importance to predators and parasites," Manley said, in creating stability and increasing potential for natural controls with the agricultural ecosystem.

As well as being a MASA-supported project, his on-farm work was part of a larger study of cover crops being done by Dale Mutch, an IPM and cover crops Extension specialist at Kellogg Biological Station.

### Soil Arthropod Evaluation in a Soybean/Cover Crop System

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Biomass</th>
<th>% Cover</th>
<th>bu/a</th>
<th>Yield</th>
<th>Faun</th>
<th>Lithobiomorpha</th>
<th>Araneoida</th>
<th>Orbitalida</th>
<th>Entomobryridae</th>
<th>Sminturidae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Ryegrass</td>
<td>46.72</td>
<td>100</td>
<td>40</td>
<td>319</td>
<td>5</td>
<td>2</td>
<td>69</td>
<td>131</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Annual Ryegrass</td>
<td>46.72</td>
<td>100</td>
<td>40</td>
<td>319</td>
<td>5</td>
<td>2</td>
<td>69</td>
<td>131</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>+ Crimson Clover</td>
<td>52</td>
<td>100</td>
<td>41</td>
<td>301</td>
<td>2</td>
<td>4</td>
<td>66</td>
<td>116</td>
<td>147</td>
<td>86</td>
</tr>
<tr>
<td>Crimson Clover</td>
<td>5.76</td>
<td>37</td>
<td>39</td>
<td>215</td>
<td>4</td>
<td>3</td>
<td>61</td>
<td>56</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Hairy Vetch</td>
<td>37.6</td>
<td>73</td>
<td>40</td>
<td>334</td>
<td>2</td>
<td>6</td>
<td>197</td>
<td>135</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>No Cover</td>
<td>0</td>
<td>5</td>
<td>37</td>
<td>177</td>
<td>2</td>
<td>3</td>
<td>44</td>
<td>36</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Fertilizer and organic matter are a food source and kind of cover influenced arthropod populations positively: More bio-diverse whole farm planning, more diverse arthropod populations.

Annual ryegrass plus crimson clover plots produced the largest biomass (see table) by mid-November. Annual ryegrass alone was close behind, followed by hairy vetch. Crimson clover plants remained small.

Arthropod populations were highest in plots with the highest biomass. Collemboles (springtails) populations were more than three times higher in the annual ryegrass plots than in the no-cover plots. Various arthropod groups showed a positive response to one or more covers: Spiders and Orbitalid and mites were more numerous in hairy vetch plots, springtails more common in plots with the largest biomass, while Diptera larval populations were equal in all plots.

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### Chicken Soup for the Soul

If MASA had a "chicken soup for the soul" project this year, the Wagbo Peace Center was it. Under the direction of Rich and Tracy Meisheimer, the center uses a working farm to help troubled youths develop the character and discipline necessary to lead fruitful lives.

The youth program is only one of the educational outreach tools the center has, but one that is most intriguing. In 1996, more than 300 students from northern Michigan and as far away as Minnesota toured or stayed at the farm. Experiential learning is the key. Sustainable agriculture is the model.

When the MASA board of directors visited the center in early December, students were participating in the one-on-one education that makes the center's approach so interesting. Every young person is important, so important that a teacher-to-student ratio of one-to-one is not too much to expect.

That day, we met a young man named Steve. He came from a poor, single-parent home. He'd been labeled irresponsible and unteachable, and hadn't been taught simple things like responsibility, hard work, or maybe even love. He's learning these things at the center.

He does chores on the farm, and said he likes feeding calves best. When asked if he wouldn't rather sleep in on a cold December morning, he informed us seriously that he didn't sleep in because the calves needed him.

A van load of emotionally disturbed youngsters from upper Minnesota were there to stay a week at the center. Rick and Tracy are Mennonites, and Rick wears a pair of suspenders with a single strap down the back. After a couple days working around the farm with Rick, the aspiring young farmers were fashioning suspenders from bailer twine. The whole crew wanted suspenders like Rick. Imitation is the sincerest form of flattery, they say, but also a sure sign of a positive connection made.

The center is located just south of East Jordan. One part of the farming operation is producing pure maple syrup each spring. Kids like Steve do the work, gathering the sap and firing the boilers. People like MASA members buy the syrup to help out kids like Steve - because Rick and Tracy show us Steve's worth it.

For more information write or call: Wagbo Peace Center 5745 N. M-66 East Jordan MI 49772 616/536-6333

**Students and intern at Wagbo Peace Center**
Getting Started with Limited Resources

How can a young farmer get started with limited resources? That's the question Jim and Tara Good have been attempting to answer with their MASA on-farm demonstrations since 1994. Both in their late twenties, the Goods have started newborn calves in the fall, fed them in the barn through the winter, and put them on pasture in the spring. However, with winter corn prices around $5 a bushel, they decided to wait until March 1996 to purchase calves. They were encouraged by reports from New Zealand and from Ann Clark at the University of Guelph, Ontario, that show success in putting 200-pound calves on grass at 8 to 10 weeks of age.

Newborn calves purchased by Goods in March got off to a poor start. Scours and pneumonia pushed death rates toward 25 percent. Calves were put on pasture early May, supplemented with a couple of pounds of grain per calf per day. By that time the calves were established on pasture, it quit raining. Only traces of precipitation were recorded from mid-June through mid-September. By mid-July the pasture had stopped growing and the steers had to be put back on grain and baled hay. Neighboring growing corn in the area averaged yields of only 30 bushels per acre. Calves was disappointing, they are optimistic about their future in production agriculture, but stemming from a different opportunity. Jim has decided to return to the family farm near Caledonia. There he will assist in managing one of the world's largest herds of registered red and white Holsteins on Med-O-Bloom Farm, where Jim grew up farming with his father Jerry Good and Elton Smith.

Richard Hand, Charlevoix County

Annual Forages Have Place on a Dairy Farm

Double cropping annual forages could provide some real advantages for a dairy farm. For one thing, the land would be open spring, summer and fall for manure application.

Rich Hand, a dairyman from Charlevoix, tried double cropping this year. The weather didn't help him much, but he was encouraged enough to try it again.

Using seed from Wolf River Seeds, White River, Wisconsin, he planted a prepared seed mix of 60 percent field peas and 40 percent triticale. "The idea is to plant early, mid-April, on fall-manured ground," Hand said. When the triticale comes into the boot stage about 55 days after planting (peas will be in bloom), chop the mixture and ensile. Hand puts up the silage in the long plastic bags.

Then, about June 10, spread manure on both crops and plant either corn or a mixture of soybeans and sorghum-sudangrass. Wolf River offers the seed mix and varieties of short-maturity corn (68 to 80 days).

Hand said the triticale/pea mixture has been improved by the addition of a new pea, Arvica, which has 3 percent points higher protein than the Canadian Trapper pea and yields about 3/4-ton more dry matter per acre.

This annual forage program captures the attention of dairy farmers in northern areas where alfalfa is less adapted or frequently winter-killed. Dairymen anywhere would benefit having this program in their back pockets because alfalfa can be killed anytime conditions are too cold or too wet.

But the annual forage doublecrop isn't perfect, either. Hand said it was cold and wet early this year, delaying planting. Then it was dry, which hurt the yield of the second crop.

Hand owns only 30 acres and milks 100 cows. He rents 220 acres of land, but is still short of land, both for forage and for spreading liquid manure. He's trying to make the double crop work to help out in two ways.

John Densmore, Gratiot County

Ten Years of Plowing Hurt Soybean Yields

Does tillage history affect the yield of no-till soybeans? That was the question MASA farmer-cooperator John Densmore and Gratiot County Extension Ag Agent Dan Rossman attempted to answer with this on-farm research.

No-till soybeans were planted into fields that had been continuously managed with moldboard plow; chisel plow; or ridge till/cultivated no-till crop production.

Results of this study show we can say with some certainty that tillage history affected the yield of no-till soybeans on the Densmore farm in 1996. Soybean yield and crop value were significantly higher for no-till following the three reduced tillage systems following moldboard plowing.

While we can say with some certainty that tillage history affected no-till soybean yield in 1996, the effect of till history may be different in another year or at another location.
How Extension Plans To Support Graziers

In Ionia County, pasture walks have evolved into the primary vehicle for information-sharing among graziers, say Extension agents Kevin Gould and George Atkeson. Farmers who graze their animals together come on a summer evening, look over the pasture, ask questions and offer suggestions.

As graziers learn, they need more detailed information and technology to increase productivity and profit, they say. "Graziers are showing increasing support for on-farm trials and demonstrations that can be easily understood and targeted toward specific needs of the grazing group. This is where Extension can help. We can offer the organizational support for information gathering and compiling results that will be accurate and supported by specific data and visual evaluations."

Most graziers are guessing at intake and forage values, Gould and Atkeson say. They see "a great deal of need" for better ways to evaluate the quantity of forage available and its feed value. "We feel there is a definite need to better understand the calculations associated with stock density, carrying capacity and forage quality."

Last year, the two Extension agents requested MASA support for a planting of 30 grass/legume mixture plots that could be pastured and visited by pasture walkers. Samples from the plots could be analyzed for feed value and yield, and graziers would be able to associate these with the visual appearance of the plots.

This work is going on across Michigan. Local Extension agents are working with Rich Leep and Ben Bartlett, Michigan State University Extension grazing specialists with statewide responsibilities. They want to be able to incorporate sample information into the SPARTAN DAIRY or BEEF computer evaluation programs, producers use to balance rations.

The pasture demonstration plots planted in Ionia County last June 5 were seeded to 20 pounds per acre of oats and 13 pounds per acre of berseem clover. A no-till plot was also planted.

They are considering purchase of a bottling plant as a way of adding value to milk from their farm. The Shetler farm consists of 275 acres devoted to forage production. The farm dropped corn production three years ago. George's goal of reducing labor needs and cost of production have been largely successful.

Although production per cow dropped in the initial years, it has stabilized (see figure). Last year it increased. Last year offered challenges to all dairymen, including graziers. Prices of hay, feed and milk were all erratic. George made a month-by-month call on the cost effectiveness of grain feeding.

After some experimentation with exotic grasses, George has settled on conventional grass and legume mixtures. Seed prices of the exotics were high and performance didn't meet expectations. In 1996, he intersowed clover and orchard grass into pastures needing a boost. Earlier dependence on annual ryegrass for last season feed has been tempered by its poor performance in cool or dry conditions.

This last year, George returned to using sawdust for bedding. He has been using locally shredded newspaper for bedding and, and found that worked very well in manure composting, which also has become a permanent practice on the farm. Local suppliers have discontinued paper shavings.

Overall, George and Sally were pleased with the 1996 season. The winter has been spending research markets and studying regulations for an on-farm milk bottling plant.
Starter Fertilizer on Corn Paid Marginally

For several years now, Sid Hawkins and his son-in-law Tony Igl have conducted on-farm research to determine whether starter fertilizer pays off when soil tests don’t particularly call for added nutrients.

They farm Hawkins Homestead, their 2,300-acre farm near Mason in Ingham County, on which they use a corn-soybeans-wheat rotation. This year’s test was conducted on corn planted on land in soybeans the previous year.

The four treatments compared:

- 95 pounds of 18-46-0 dry fertilizer applied below and to the side, costing $12.30 per acre
- 15 gallons per acre of 10-34-0 liquid placed below and to the side of the row, costing $15 per acre
- 5 gallons per acre of Alpine 6-24-6 applied in the seed row, costing $13.50, plus additional 28 percent nitrogen solution to balance (total cost $17.25)
- Control

Plots were planted with the aid of Bill Moyer from Alpine Plant Foods in Coldwater. Harvest weights were taken by John Oakley and Dave Voss from Gutwein Seed.

Last year’s cold, wet spring prevented planting until May 29, and the crop grew afterward with virtually no rainfall, depressing yield. Forty gallons of 28 percent nitrogen solution were sidressed over all treatments.

As the results show, there was a spread of nearly 10 bushels per acre from low to high yield. The dollar income spread, after paying starter fertilizer expenses, was $7.50. While the trend was to reward the starter fertilizers with somewhat higher yield, income generated by the added fertilizer was quite small.

Tests with soybeans last year brought no additional yield to offset added fertilizer cost.

Lower Herbicide Rate Performed Well in Soybeans

“My goal is a find a soybean herbicide I can apply at planting and get complete weed control, then work to cut the rate as low as possible,” says Richard Ekins, a farmer from Rives Junction in Jackson County.

This year, he tried Canopy as that herbicide. “I sprayed everything one week before planting with Canopy at 3.5 ounces, blending it with one quart of vegetable oil (Landoil). That’s half the label rate. I also used 2,4-D at two-thirds full rate as a burndown. Cost of that treatment: $11.25 per acre ($8.09 for Canopy, $1.75 for oil, $1.41 for 2,4-D).

He planted his soybeans no-till in 30-inch rows on May 18. By mid-June, weeds were appearing and he planned a program of post-emergence applications to attack foxtail, a heavy infestation of black nightshade and volunteer corn. Each treatment was applied to 12 rows (his sprayer width) the length of the field (one-fourth mile).

One treatment was a full rate (1.44 ounces) of Pursuit (cost: $21.05), with a pint of oil and one gallon of 28 percent nitrogen solution. Total cost $22.79.

A second treatment was the same plus the addition of Assure II herbicide for added grass control used at 7 ounces per acre, that cost an added $6.35.

For several years now, Richard Ekins, a farmer from Rives Junction in Jackson County, has been using a low-herbicide rate management system to treat foxtail, black nightshade and volunteer corn.

A sharp line divides the nightshade-infested soybeans (right) from soybeans treated with Pursuit. But Richard Ekins found, Pursuit at two-thirds label rate (0.9 ounce), with a pint of oil and a gallon of 28 percent N. That cost to $14.90.

Yields are shown in the table. The check plot was severely infested with black nightshade, reducing yields and delaying maturity. The reduced rate of Pursuit didn’t reduce yields — in fact, those plots showed the highest yield.

One visual difference was a higher incidence of marestail in the low-Pursuit strips.

One of Ekins’ goals is to reduce herbicide rates to the lowest level he can, both for economic and environmental reasons.

Sustainable Agriculture 7
The "churning" side of Richard Bilinsky's farm is that he raises exotic animals in an exotic place. But the other side of the story is that it's hard to raise anything on his sandy, acidic soils and cut-over jack pine land in central Marquette County.

This last year, he worked with Extension Ag Agent Jim Iselb to test plantings of 33 species and mixed species of forages that would provide pasture for his livestock. He raised "Russian boars" and Barbados sheep that provide game stock for hunting preserves and the trophies of the walls of hunters.

The plots were set up with four replications, two receiving 10 tons of lime per acre to bump the pH from 4.2, two receiving no lime. All were fertilized with 100 pounds nitrogen, 85 phosphorus and 250 potassium.

In general, most unlimed plots did poorly. "The legumes germinated and died," Iselb said. "The perennials were failures. The large-seeded annuals did fairly well: ryegrass, buckwheat, Japanese millet and sorghum sudangrass."

Warm-season grasses - big bluestem, switchgrass, side oats grama, little bluestem, indiangrass - established poorly, whether limed or unlimed, but since they normally take off slowly, plots with these grasses may look better next year.

Richard Bilinsky wants pasture for his trophy "razorback" hogs, but his land is acid land. He and County Agent Jim Iselb tested 33 forages.

The only two "real keepers" on the unlimed plots were Toga deertongue and showy tick trefoil. The deertongue, a low-growing broad-leaved grass, was fairly aggressive at establishing itself, but the plant has poor relative feed value. Showy tick trefoil, reputed to grow well on infertile sites, established poorly but the plants that grew looked good, Iselb said. Seed is expensive.

The hogs Bilinsky raises are more hairy than the usual domestic breeds, and he says they do well even with the cold and snow. He uses hut shelters, and the sows burrow down into the straw pack, farrow and raise their pigs no matter what the weather.

The hogs get too fat easily, he said. They grow slowly and fare best on a high-protein, low-calorie diet like alfalfa, rape, sorghum sudangrass, and barley. He feeds about two pounds of ground corn a day. The hogs, weighing 250 pounds or more and two years old, are worth $1 a pound, but they must look like wild razorbacks, not prime pork.

He's looking to find soil amendments that would build soil organic matter and pH, without having to invest in 10 tons of lime per acre, at $25 a ton. Paper mill wood ash and sludge may be available much cheaper.

Grazing Made More Beef in This Test

Grazing beef cows is more profitable and less input-intensive than either feedlot beef or cash-crop corn on Chuck Cornillie's farm. Cornillie's angus, limousin and simmental cows/calf operation is in southeast Shiawassee County.

This year Cornillie compared intensively grazed sudangrass with cash-crop corn. Side-by-side comparison plots of sudangrass and corn were established in the spring. Actual production costs ($/acre) for both crops are shown in the budgets below.

Eighty-five percent of corn was grazed the 5-acre sudangrass plot for 2.5 days in July, 1 day in August, and 1.5 days in October. Farm records show calves gain an average of 2.7 pounds per day on pasture. The value of the beef produced on the sudangrass plot was calculated as:

- Total grazing days x $5 calves x 2.7 lbs/day x $2.65/lb harvest price + 5 acres = $149.18/acre
- The above budgets show a $14 per acre advantage for the beef/sudan system compared to corn. Other benefits that Cornillie sees to the beef/sudan system include its utilization of land not suited for permanent pasture because of flooding or other factors. Grazing sudangrass in late summer and early fall also allows stock-