MICHIGAN FARM NEWS

MICHICAN'S ONLY STATEWINE FARM NEWSDADER

MICHICAN FARM RUREAU



MICHIGAN FARM BUREAU

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Bil Mar Foods drops contracts for five West Michigan growers

Zeeland-based Bil Mar Foods informed five West Michigan producers in late July that at the end of this year, their multi-year marketing agreements will not be renewed. The news sends shock waves throughout the turkey industry and is prompting growers to question the long-term plans of the 59-year-old company.

"This wasn't a decision made quickly — we've struggled for months," explained Michael Westphal, Bil Mar's director of farm operations, to a roomful of producers and state legislators at the Ottawa County Farm Bureau office. "There is a serious oversupply situation in the turkey market and consumption has been flat."

"We're reducing the amount we are putting through the plant and we've decided not to renew contracts in 1998," Westphal said. "Fifteen producers will be impacted for 1998 — five locally and 10 out of state in Ohio, Illinois and Ontario. The contracts we have in place we will honor. We have not done anything beyond contracts renewing on Jan. 1, 1998."

"This is going to have a rippling effect on many other facets of Michigan agriculture," said Michigan Farm Bureau Livestock Specialist Kevin Kirk. "All parts of the system will be affected, from input suppliers to cash-grain farmers. More than just West Michigan's local economy will be affected by this move."

Last year, Bil Mar processed more than 10 million birds at its plant in Borculo — more than half coming from Michigan, specifically top-producing Ottawa and Allegan counties with more than 270 turkey farms.

Declining demand?

"Consumption of turkey meat averaged nine pounds per person in 1980," added Westphal, who is in charge of Bil Mar's farm operations in Michigan and Iowa. "That doubled to 18 pounds per person in 1990. Everyone thought that trend would continue. It hasn't."

Michigan State University Agricultural Economist Jim Hilker confirmed that turkey consumption has slowed and even dropped over the past year. "The USDA estimates 18.5 pounds per person in 1996 and is projected to dip slightly back to 18 pounds per person in 1997. If everything was right in 1996, according to the USDA, there was probably a little shift back in 1997."

"We have not done well in the last four months and we can no longer take these substantial losses," Westphal said. "As we look to the future, this situation is not going to correct itself for a long time. It's a survival issue."

Continued on page 7

FARM BUREAU

FARM BUREAU

A Publication of the Michigan Farm Bureau

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Wanted: Michigan's white wheat



At the recent Wheat 2000 technology tour, Michigan millers, processors and food companies joined together to encourage Michigan's wheat farmers to consider planting more white wheat. Premiums have grown to as much as 40 cents this year for winter wheat in hopes of promoting an increase of wheat acres for next year and beyond.

Farm Bureau pleased with road funding package

he 4-cent gas tax road funding package approved by the state Legislature is receiving high marks from Michigan Farm Bureau, the state's largest farm organization. In total the package, which includes the fuel tax increase and several reform measures, is expected to generate an additional \$300 million in revenue for road and bridge repair in the state.

"This long-awaited package is definitely good news for rural Michigan and farmers who depend on a well-maintained infrastructure to move inputs to the farm and raw commodities to processors, and ultimately, finished products to the consumer," said Jack Laurie, president of the Michigan Farm Bureau. "It's now time for our U.S. congressmen to deliver, by getting the necessary reforms to the federal highway program to improve the rate of return of federal highway funds to our state. We're also hopeful that legislators will put an end to the 4.3-cent diversion of gas tax dollars to use in deficit reduction."

Officially known as the Intermodal Surface Transportation Efficiency Act, or ISTEA, the program distributes highway trust funds to states for the construction and repair of highways. Unfortunately, Michigan is considered a "donor state," with an 87 percent rate of return on funds contributed to the program. Reform proponents are seeking at least a \$100 million increase in funding to Michigan.

Congress is scheduled to reauthorize the ISTEA this year and, according to Michigan Farm Bureau Associate Legislative Counsel Tim Goodrich, passage of the state transportation funding package should send a clear signal to Washington, D.C. "Not only does this package set the stage to potentially attract more dollars matching-wise, but it also sends a message to DC that Michigan's willing to do their part,

and now Washington needs to do theirs," he said.

According to Goodrich, the biggest roadblock to the state-level funding package focused on the jurisdictional issue between state and local control of some 23,000 miles of Michigan highways. Although the final package approved by the state Legislature removed that portion of the original Engler proposal, Goodrich says the issue is far from resolved.

"The Legislature ended up keeping the current formula intact; however, that formula is set to expire in September of 1998, meaning the state and county road commissions will have to come to an agreement on the jurisdictional issue soon," Goodrich said.

Several reform measures were included in the final package, including provisions that require additional audits of county Road Commissions, a 10-percent administrative cap on all state and county projects, and most importantly, says Goodrich, county road commissions can no longer require a funding match from townships for state highway dollars. A 30-percent, across-the-board, truck registration fee was also included in the package.

Goodrich says that while the typical Michigan motorist will spend approximately \$30 more in fuel taxes, it's estimated that they will save \$120 in annual car repairs. Legislators also included a \$600-perchild income tax credit, an increase in the college tuition tax credit from 4 percent to 7.5 percent, and an increase in the personal income tax exemption from \$2,500 to \$2,800.

"It's estimated that these tax cuts will cost the state general fund about \$72 million in lost revenue," Goodrich explained. "Those tax cuts, combined with the savings in car repairs, should result in an economic savings to the average motorist."

COVER STORY

Wanted: Michigan's white wheat

Premiums offered for white wheat needed in food industry

n July, over 200 wheat producers, university experts and industry officials gathered at Stuart Reinbold's 1,300-acre farm near Saginaw to preview new wheat varieties and the technology being developed to service future wheat crops — but what everyone really came to hear was how growing wheat in Michigan can be profitable to a producer's bottom line.

The event sponsored by Wheat 2000, MSU Extension, DuPont, Growers Services, Novartis, Pioneer, Michigan Farm Bureau, Star of the West Milling, Terra International, and Zeneca brought together all levels of the wheat production chain to discuss one simple fact — how can Michigan increase the amount of white wheat produced in the state? In the mid-1980s Michigan totaled almost 1 million acres of wheat, 75 percent of which was soft white.

"Last year we had about 550,000 acres of total wheat crop," explains Jim Thews, white wheat coordinator for Wheat 2000. "There has been a decline in acreage and in the amount of white wheat that is grown. The usage of Michigan white wheat is estimated at somewhere between 16 to 18 million bushel for end use. Some early estimates for this year are 11 to 12 million bushel. So we are considerably short there."

Total U.S. wheat production is forecast at 2.43 billion bushels, up 7 percent from 1996 according to USDA's Economic Research Service

Premiums offered for Michigan's white wheat crop

"Today we have a 40-cent premium on white wheat over red," explains Art Loefler, president of Continued on page 8

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News in Brief

MSU Field Day to focus on developments in turfgrass management

urfgrass management professionals — from golf course managers to home lawn care specialists — will hear about current research on soil and grass plant care Aug. 28 at Michigan State University.

The turfgrass field day will be held at the Hancock Turfgrass Research Center at Farm Lane and Mt. Hope Road. The program will run from 8 a.m. to 1 p.m.

The program will be divided into a golf turf tour and a sports and commercial turf tour. Included in the golf turf tour will be discussion and demonstrations on biological control of diseases and weeds, insect research, putting green quality and precision turf management.

The sports field and commercial turf tour will be discussion and demonstrations on biological control of diseases and weeds, insect research, putting green quality and precision turf management.

The sports field and commercial turf tour will include stops on tall fescue cultivar trials, lawn care and soil organisms, irrigation scheduling, nitrogen trials on commercial lawn turf, growing sod on plastic, and turf weed control.

A trade show of turfgrass and landscape products and services will accompany the field day.

An auction of new and used turfgrass equipment and turfgrass management supplies will follow the noon meal. The auction begins at 1 p.m.

Registration before the field day will be \$20 per person; walk-in registration will be \$25.

To register, send a check payable to the Michigan Turfgrass Foundation to Kay Patrick, Box 80071, Lansing, MI 48908

MEGA Conference adds Noba/CRI to its lineup

EGA Conference recently announced that Noba/CRI will be holding its district membership meeting at the annual conference held next January. As Noba is a subsidiary of Cooperative Resources International (CRI), Noba is part of the largest memberowned AI Cooperative in the nation. Noba, 21st Century Genetics and Genex market dairy and beef cattle semen in the United States and internationally under Stud Code One. At 55 years old, Noba is the oldest continually operating AI Cooperative in the nation.

Their meeting is open to anyone interested in agriculture and has been scheduled so producers can attend both that and the Professional Dairy Farmers annual meeting, Jan. 21, 1998.

During Ag Expo, three drawing sites were held for people interested in winning free registration packages to the MEGA Conference, which will be held Jan. 20 and 21, 1998, at the Lansing Center. Winners were Bill Kirk, of Fairgrove; Joan Huhn, of Dewitt; and Jerry Dinzik, of Climax.

A free booth at the MEGA Conference trade show was given away to Ward Forquer, of IMC Kalium.

Newly elected MEGA officers include Chair Pearl Wirbel and Vice Chair Chuck Markley. Pearl, who was also recently appointed to the Corn Marketing Board by Gov. Engler, hails from Hope, Mich. Chuck is a beef producer from Byron and a member of the Michigan Cattlemen's Association.

Dates for this year's convention are Jan. 20 and 21, 1998. It will be held at the Lansing Center in downtown Lansing. For more information, contact the Michigan Agricultural MEGA Conference, c/o Betty Driscoll, 1100 West Taft Rd., St. Johns, MI 48879-9104; phone 517-224-0930; fax 517-227-2067.

Farm Credit Services of Michigan's Heartland breaks ground for new corporate office

arm Credit Services of Michigan's Heartland broke ground on June 4, 1997, for a new 30,000-square-foot corporate office facility to be located on West Road in East Lansing. With 14 branch offices throughout 40 counties in rural Michigan, Farm Credit Services is a leading provider of operating loans, equipment loans, real estate loans, crop insurance, leasing services, country living mortgages, AgBase records services/software, tax planning/preparation, financial planning, retirement/succession planning, and life/disability insurance.

The eight-acre wooded site was selected by the board of directors and James E. Bremer, president/CEO for its location and environmental appeal. "We serve 6,000 farm customers and rural residents," Bremer explained, "and this site is at the center of Michigan's agricultural community while being easily accessible from the freeways." The building will be adjacent to a natural pond, with a 100-foot pedestrian bridge connecting the parking area and building entrance. Farm Credit plans to occupy 15,000 square feet, with the balance available for lease.

John Peckham, president of Martin Property
Development Inc., is coordinating the development
of the project for Farm Credit, with architectural
services being provided by Keystone Design Group.
Building completion is planned for early 1998.

Worker shortage could threaten harvest

shortage of workers could hamper the harvest of high-value specialty crops in Michigan, according to Howard Kelly of the Michigan Farm Bureau. He said one reason for the shortage is the state's new seasonal employer designation.

Under the new program, seasonal employers have to pay unemployment during the specified growing and harvest seasons. But, once the season is over, their obligations end. Many workers refuse to work for employers who have this designation.

"About 58 seasonal employers applied for the

designation during the first year, which will cut the number of unemployment claims and reduce labor costs," said Kelly, Michigan Farm Bureau's legislative counsel. "Unfortunately, farmers and other businesses that received the seasonal employer designation have been the subject of a so-called blacklist published by the Michigan Migrant Legal Assistance Project, Inc."

Kelly said one grower wanted to hire 60 workers, but the workers refused to go to work because the employer achieved the seasonal employment designation.

Senators bemoan Canadian wheat exports

aying that Canada is ignoring voluntary export limits agreed to three years ago, Sens. Byron Dorgan and Kent Conrad of North Dakota are asking the Clinton administration for "immediate U.S. action" to enforce the agreement.

In 1994, Canada agreed to limit its annual exports to the United States to 11 million bushels of durum and 38.6 million bushels of wheat. The North Dakota Wheat Commission says Canada exceeded those limits last year.

"These figures aren't even close to the voluntary

targets that they agreed to," said a spokesman from the Wheat Commission. "They have blatantly disregarded the agreement and flooded our markets."

Dorgan and Conrad hope to meet with U.S. Trade Representative Charlene Barshefsky and Agriculture Secretary Dan Glickman soon to discuss the matter.

"New figures have come out that indicate Canada has no intention of abiding by the limits it agreed to in 1994," said a spokesman for Sen. Dorgan's office. "When you're presented with that kind of evidence, something has to be done."

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Michigan Sugar parent company merges with Florida business

avannah Foods & Industries Inc., a sugar refiner and distributor based in Savannah, Ga., and parent company of Saginaw's Michigan Sugar Company, announced in late July an agreement to merge with Florida Crystals Inc., which will include the Florida-based sugar operations of Flo-Sun Inc.

"The talks that we've had with the officials from Michigan Sugar are that business will continue as usual," explains Dick Leach, executive vice president of the Great Lakes Sugar Beet Growers Association. "The contracts for the growers that were signed for this year and for the next two years will be honored. The merger will produce a new company with a much stronger financial base and a view of the United States sugar policy much the same as the sugar beet industry."

Flo-Sun, one of Florida's largest sugar producers, will hold 39.4 percent of the equity under the merger. Other Florida Crystal shareholders will hold 19.1 percent, and the remaining 41.5 percent will be held by Savannah Foods' shareholders.

The merger, expected to close in October, is subject to approval by Savannah Foods shareholders.

Flo-Sun is a privately held diversified agricultural, real estate and resort company. Flo-Sun's Dominican Republic operations and other holdings were not part of the deal. Alfonso Fanjul, chairman and chief executive officer of Florida Crystals, will assume the same positions in the combined company. The merger will combine two complementary businesses and integrate sugar operations "all the way from the farm to the supermarket," Fanjul said in a statement.

"The merger of Florida Crystals and Savannah Foods makes strategic sense, financial sense and has the right chemistry for growth," he continued. "It combines to complementary businesses, a low-cost, raw sugar producer with a low-cost refiner, and positions us to realize significant operating benefits."

"This merger will integrate operations all the way from the farm to the supermarket," Fanjul said.

The Fanjul family, in its fifth generation in the sugar business, established its Florida operations in 1960 in the aftermath of Cuba's communist takeover.

The merged company would have estimated annual revenues of \$1.5 billion and assets of more than \$1 billion.

Savannah Foods, an 80-year-old company that supplies grocery and industrial sugars, employs 2,000 people. It reported net income of \$22.5 million for the 12 months ending March 31.

Florida Crystals reported net income of \$19.1 million at March 31.

Has PETA finally met its match?

he People for the Ethical Treatment of Animals (PETA) has proved in the past that it will stoop to any level to serve up its anti-meat propaganda. But the radical animal rights group may have bitten off more than it could chew during a recent protest at a Maryland supermarket.

Oscar Mayer's Wienermobile was conducting a talent search, hoping to find cute children to sing the popular "Oscar Mayer Wiener Jingle" for upcoming commercials. Kids approached the microphone to sing the song, only to be drowned out by PETA chants of "Cruelty we won't tolerate! Get the slaughter off the plate."

Other protestors carried signs calling for "Vegetarians Attack Wienermobile" and "Company Uses Children to Promote Cruelty to Pigs." According to a Washington Post article, children at the Oscar Mayer promotion didn't know how to react. As kids tried to sing, PETA members drowned them out with bullhorns.

The PETA protestors made the mistake of making a few mothers angry. "Oh, that makes me so mad," said mother Angel Brown. "They're doing more harm to these kids than any hot dog could."

Brown approached some of the protesters and noticed many were wearing leather shoes. "Wait, wait!" said Brown to the protesters. "I do see leather shoes." She wondered whether the protesters understood the source of the leather.

The protesters backed away a bit, according to the Post. But it didn't stop them from hanging around until the bitter end.

Farm Bureau seeks climate change treaty delay

he Clinton administration should withdraw its support for legally binding and enforceable caps on greenhouse gases in a proposed Global Climate Change Treaty, American Farm Bureau Federation President Dean Kleckner told a House committee recently.

"Until scientific research can verify the connection between greenhouse gases and agriculture, the administration should be very skeptical about applying any controls to U.S. agriculture," Kleckner told the House International Relations Committee. "If such controls are eventually justified, they should be accomplished voluntarily and all countries should be bound by them." Kleckner said Farm Bureau and other farm groups are calling for a public debate involving agricultural policy makers on the treaty. They also want the final climate change agreement, scheduled for completion this December in Kyoto, Japan, to be delayed.

"The administration must not accept a final agreement without complete analysis and a full and open public debate which includes agriculture," Kleckner said. "This cannot realistically be completed before the scheduled final negotiations."

Farm Bureau is concerned that the interests of farmers and ranchers are not being considered in international climate change negotiations, Kleckner said.





Capitol Corner

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

NATIONAL

Particulate matter standards

arlier this year, the Environmental Protection
Agency published proposed standards restricting emissions of ozone and particulate matter into
the air. The standards can significantly impact agriculture because it is impossible to farm without
stirring up some dust.

On June 26, President Clinton announced his administration will proceed to adopt and implement the proposed standards with some slight changes. The new rule requires EPA to conduct a full scientific review of the health effects of fine particles before designating any new non-attainment areas or requiring new controls. EPA will be allowed up to five years to monitor and analyze data on particulate matter. Non-attainment areas will then be given three additional years to submit air quality plans and EPA will have 18 months to review

the plans and an unspecified time to comply with the new standards.

The delayed implementation and slightly modified standards were an attempt to defuse growing bipartisan opposition in Congress and from business, agriculture and labor. However, the decision to finalize the standards has sparked many Congressmen to take action to block the regulations.

H.R. 1984 has been introduced by Michigan Congressman Fred Upton and others to place a five-year moratorium on setting new standards for ozone and particulate matter. The bill would also provide \$75 million in funding new research into fine particulate matter. Farm Bureau supports H.R. 1984 and has asked Michigan's other U.S. Representatives to cosponsor the bill.

MFB contact: Al Almy, ext. 2040.

NATIONAL

Apple fireblight research funding

ireblight is a bacterial disease that poses a serious threat to the apple industry in Michigan and other states. Last year, Michigan Farm Bureau and MACMA led an effort to obtain \$325,000 to begin a joint five-year fireblight research project by Michigan State University and Cornell University.

Earlier this year, MFB submitted a request to Congress for renewal of the appropriation to conduct the second year of the fireblight research project. Both the House and Senate have approved an appropriation bill containing \$325,000 for the second year of the research project.

MFB contact: Al Almy, ext. 2040.

NATIONAL

Coastal shipping competition

The Coastal Shipping Competition Act, H.R. 1991, has been introduced by Michigan Congressman Nick Smith (R-Addison). The bill would reform the Merchant Marine Act of 1921, commonly referred to as the Jones Act, and the Passenger Vessel Act. The bill would introduce competition to the movement of commodities by ship between U.S. ports.

The reform that would be provided by H.R. 1991 is needed because the Jones Act and Passenger Vessel Act require that vessels engaged in domestic shipping and passenger trade be:

- American-built
- American-crewed

The Coastal Shipping Competition Act would reform the Jones Act by:

- Allowing foreign owned and built vessels otherwise eligible to ship into the U.S. to compete in U.S. trade as long as they employ U.S. crews and adhere to U.S. labor and environmental laws.
- Allowing foreign bulk carrying vessels, not otherwise qualified, to participate in six domestic trips each year.
- Allowing foreign owned and built passenger vessels to operate under the U.S. flag with American crews.
- Continue to reserve all shallow-water inland shipping to U.S. controlled and built vessels.

If enacted, H.R. 1991 would increase the number of vessels available for transporting commodities between U.S. ports. This in turn generates competition, which would lower or control costs of shipping commodities.

MFB position: Farm Bureau supports H.R. 1991. MFB contact: Al Almy, ext. 2040.

NATIONAL

Ergonomics

The Occupational Safety and Health Administration (OSHA) has been planning to issue a new regulation designed to protect workers from ergonomic injuries. Ergonomics refers to any workplace factor relating to repetitive motion, working in hot or cold conditions, exerting force, gripping objects, lifting objects, climbing, stooping or bending, working in awkward positions, use of vibrating tools or any number of other conditions that might be encountered in farm and other workplaces.

At recent hearings on ergonomic injuries, several leading experts testified there is little consensus on the causes of and remedies for ergonomic injuries. There is clearly a lack of scientifically demonstrated need for ergonomics regulation.

During consideration of the FY 1998 Labor — Human Health and Services appropriations bill by a subcommittee, an amendment was proposed mandating a National Academy of Sciences (NAS) study on ergonomics and a moratorium on any ergonomics regulation until the study was complete. A total of 168 Congressmen, including Michigan Congressmen Dave Camp, Vern Ehlers, Pete Hoekstra, Joe Knollenberg, Nick Smith and Fred Upton, had signed a letter supporting the amendment. Groups supporting an ergonomics regulation strongly opposed the amendment because they feared the NAS study would show their position to be wrong.

The subcommittee reached a compromise by not considering the amendment and instead approved language prohibiting OSHA from proposing or issuing any regulation pertaining to ergonomics during FY 1998. Farm Bureau continues to support a NAS study on ergonomics and will attempt to have language mandating the study included in another bill.

MFB contact: Al Almy, ext. 2040.

STATE

Amendments to P.A. 591, The Land Division Act, and voting record (correction)

The vote published on page 4 of the July 15, 1997 issue of The Michigan Farm News, was the vote on S.B. 345 as reported by the House

Agriculture Committee. Farm Bureau supported a YES vote on S.B. 345 as reported by the House Agriculture Committee.

STATE

Truck rider legislation

B 4255, introduced by Rep. Deborah Cherry (D-Burton), would prohibit a person from riding in the open bed of a pickup truck on the highway. The bill as introduced would allow persons to ride in the open bed of a pickup truck during official parades, in military vehicles and authorized emergency vehicles. The violation of this proposed bill would be a civil penalty.

MFB position: Farm Bureau is requesting an amendment allowing a farmer's use of trucks for transporting farm employees in the course of farming operations.

Contact your state representative and ask them to support Farm Bureau's amendment.

MFB contact: Ron Nelson, ext. 2043.

STATE

Seasonal employer update, possible labor shortage

A gricultural employers need to be aware of a situation that may create a potential migrant labor shortage this year.

Farm Bureau has received information from growers stating they are having difficulty finding enough workers. One grower placed an order for 60 workers with the Michigan Employment Security Agency (MESA). The agency advised Farm Bureau that the workers would not work for this grower because he held the "Seasonal Employer" designation. The Seasonal Employer designation mandates the employer pay the employee unemployment compensation only during a self-designated season when work is not available. The employer does not have to pay unemployment compensation during time outside the designated season. The employer has to apply to and be approved by the MESA before they receive this designation. The MESA must disclose if an employer has a Seasonal Employer designation to any prospective employee.

Migrant advocates dislike this program and last year indicated that an employer who had a Seasonal Employer designation would see potential employees reject employment at their farm.

Last month, the *Under the Burning Sun* newsletter, of the Michigan Migrant Legal Assistance Project Inc. (MMLAP), published the list of employers who applied for the Seasonal Employer designation. In the list of over 140 names, many farms were listed along with resorts, golf courses, tax services,

marinas, camp grounds, race tracks and landscapers. The published list could be inaccurate because a grower may not have been granted the designation or withdrew from the program, which they can do at any time. They also can have both seasonal and non-seasonal designated employees at the same time. The purpose for printing this list was to alert potential agricultural employees that they may not receive unemployment benefits. It also may prevent workers from applying for work when in fact the employer is not a Seasonal Employer.

The latest figures from the MESA indicates there are 58 employers in agriculture with the Seasonal Employer designation, employing 3,306 seasonal employees. Migrant advocates have for years estimated the agricultural migrant worker population to be 45,000 to 50,000 or more workers. An inaccurate list like MMLAP distributed and word of mouth rumors that were reported at a meeting last month in Benton Harbor on the status of migrant workers, could contribute to shortages of migrant employees in Michigan.

If employers find they need more agricultural workers, the local Michigan Employment Security Agency office can help. Placing an Interstate Clearance Order is a tool to help employers secure needed employees in a timely fashion. Requesting H2a workers, from other countries, is also an option.

MFB contact: Howard Kelly, ext. 2044.

Capitol Corner continued on page 4

ISTEA bill will be waiting when members return

House Transportation and Infrastructure Committee Chairman Bud Shuster (R-Pa.) said when lawmakers return form the August recess, a bill to reauthorize the Intermodal Surface Transportation Efficiency Act (ISTEA) will be waiting on their desks. Shuster plans to mark up the bill and bring it to the floor before the end of September.

The current law, a six-year \$157 billion behemoth, expires Sept. 30. Attempts to reauthorize it appeared just weeks ago to be all but dead for the year.

While putting off writing his bill, Shuster has apparently won an agreement to shift 4.3 cents of

the federal gas tax, money previously earmarked for deficit reduction, back into the Highway Trust Fund. The shift would add about \$6.5 billion per year to the fund, which currently has a positive balance of \$23.9 billion—money members of Congress are reluctant to spend because it appears as an asset on the federal ledger.

Shuster hopes the additional \$6.5 billion per year will convince Congress to spend the money on needed highway projects. The 1998 appropriations bill would lift highway spending to a record \$23 billion.

CRP sign up announced

The Agriculture Department announced the next chance for producers to offer land for the conservation reserve program will be in early to mid-October.

The last round of enrollment for the program took place in May, when the department accepted 16.1 million acres into the idling program. Currently, 27.6 million acres of farmland are idled under the CRP, with the program's ceiling set at 36.4 million acres.



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	Morning Report	Noon Report
WABJ	Adrian	1490	5:45 am	11:05-12:00 pm
WATZ	Alpena	1450	5:30 am	11:30 am
WTKA	Ann Arbor	1050	6:05 am	12:00-1:00 pm
WLEW	Bad Axe	1340	6:30 am	12:50 pm
WKJF	Cadillac	1370	5:45 am	11:10 am
WKYO	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 AM	Grand Haven	1370	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
WHTC	Holland	1450		12:15 pm
WION	Ionia	1430	6:45 am	12:30-1:00 pm
WKZO	Kalamazoo	590	5:00-6:00 am	12:00-1:00 pm
WPLB FM	Lakeview	106.3	6:15 am	12:15 pm
WOAP	Owosso	1080	7:15 am	12:40 pm
WHAK	Rogers City	960		12:15 pm
WMLM	St. Louis	1520	6:05 am	12:20 pm
WSGW	Saginaw	790	5:55 am	11:30-12:30 pm
WMIC	Sandusky	660	6:15 am	12:45 pm
WKJC FM	Tawas City'	104.7	Company of the last	12:40 pm
WLKM	Three Rivers	1510	5:45 am	12:15 pm
WTCM	Traverse City	580	5:45 am	11:10 am

Visit our web site at: www.mfrn.com



Capitol Corner

Continued from page 3

STATE

Transportation funding and reform package

- ollowing is a brief summary of the contents of the package of bills passed by the Michigan Legislature:
- A 4-cent increase in the state gasoline tax starting August 1, 1997. The new gas tax rate will be 19 cents per gallon. The new 4 cents will be distributed as follows: 1 cent will go to the critical bridge fund for state bridges; 3 cents will be distributed as directed in the P.A. 51 formula.
- The P.A. 51 transportation distribution formula will sunset in 1998 as stated in the statute. If the state and local governments are unable to agree on a new formula by that time, the funds will be distributed at a rate of 20 percent less than is currently distributed.
- An increase in the personal exemption of \$200, raising it to \$2,700 on the state income tax. The exemption will be indexed to inflation beginning in 1998.
- An increase in the college tuition credit on the state income tax, increasing it to 8 percent for attendance at a Michigan public college or university.
- A new child care credit on the state income tax (\$600 for children under age 6, and \$300 for children ages 7 to 12).
- An across-the-board 30 percent increase in truck registration fees for all trucks with a gross vehicle weight (GVW) over 8,000 pounds. This raises nearly \$40 million. The Farm and Log plate trucks are exempt from any increase. Michigan Farm Bureau led the charge to keep any increases equitable across all truck weights and to exempt the Farm and Log plates from any fee increases.
- Increases in overweight and oversize hauling permits an amendment was added, with MFB's support, to exempt farm implement dealers from these permits when hauling from dealer to farm. Currently, farm-to-dealer hauling is exempt; this amendment makes all farm implement hauling exempt.
- A three-year phaseout of funds diverted from the transportation fund to other state departments (\$43 million for fiscal year 1997–98).
- A one-time, \$69 million transfer from the state's Rainy Day Fund will be used for state road construction projects for this year only.

Reform measures include a required warranty by construction contractors, a 10 percent administrative cap on all local and state road authorities, state performance audits of local road authorities, and a pavement management system to determine the use of concrete versus asphalt.

The package of bills passed will raise an estimated \$300 million in additional funds per year for highways. Governor Engler has signed the entire package.

MFB contact: Tim Goodrich, ext. 2048.

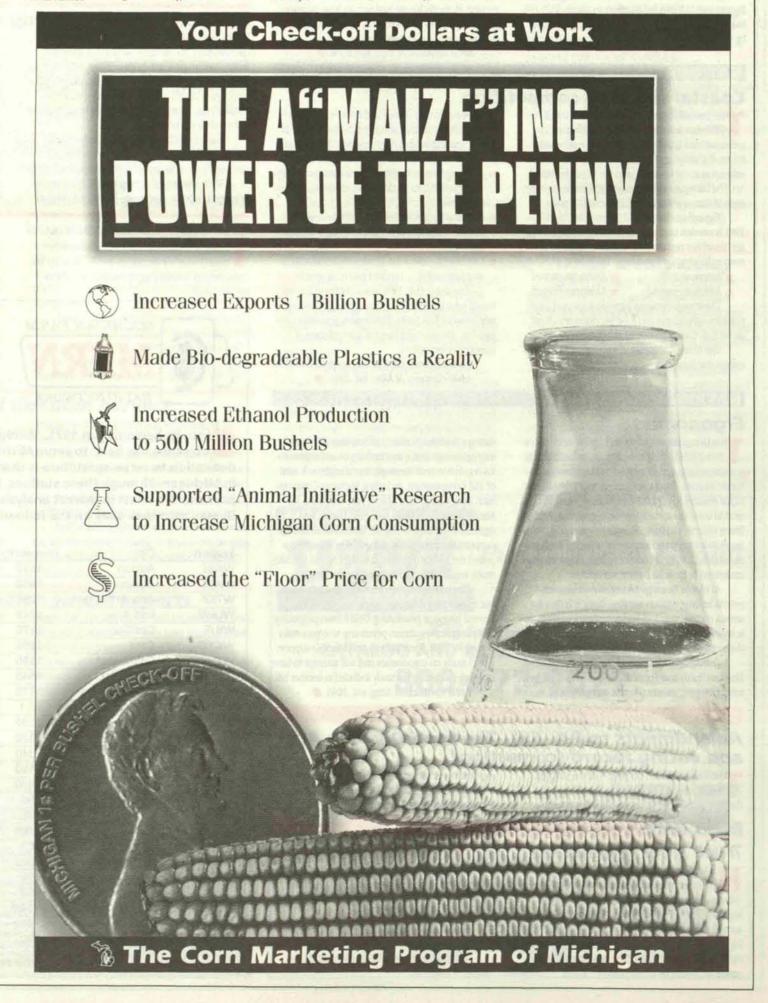
Voting record on H.B. 4872 (Harder), which raises the gas tax by 4 cents — Farm Bureau supported a YES vote.

Here's how the h	louse of	Representatives voted
Name	Party	Legislator's Vote
James Agee	D	N
Tom Alley	D	Did not vote
David Anthony	D	N
Paul Baade	D	Y
Laura Baird	D	N C CONTRACTOR
Lyn Bankes	R	Y
Ray Basham	D	Did not vote
Patricia L. Birkholz	R	Y
Bill Bobier	R	Y
Beverly Bodem	R	N
Rose Bogardus	D	Number
Bob Brackenridge	R	Y
Elizabeth Brater	D	Y
Lingg Brewer	D	N
Bob Brown	D	Co - Notes -
William Byl	R	Y
William J. Callahan	D	N
Nancy Cassis	R	N
Deborah Cherry	D	N
Nick Ciaramitaro	D	N
Penny Crissman	R	Y
Alan Cropsey	R	N
Candace Curtis	D	N N
Jessie Dalman	R	Y
Eileen DeHart	D	N
Larry L DeVuyst	R	Y
Barbara J. Dobb	R	N N
Agnes Dobronski	D	N
Robert L. Emerson	D	Y THE RESIDENCE
Frank M. Fitzgerald	R	Y
A.T. Frank	D	N N
John F. Freeman	D	Y
Pat Gagliardi	D	N

Name	Party	Legislator's Vote
David Galloway	R	Y
Terry Geiger	R	Did not vote
John Gernaat	R	Y
Donald H. Gilmer	R	Y
Sharon Gire	D	Did not vote
Patricia Godchaux	R	Y
Michael J. Goschka	R	N
Mike Green	R	Y
Michael J. Griffin	D	Y
David M. Gubow	D	N
Dan Gustafson	R	Y
Derrick F. Hale	D	Y
Beverly Hammerstrom	R	Y
Michael Hanley	D	Y
Clark Harder	D	Y
Curtis Hertel	D	Y
Morris W. Hood Jr.	D	N
Jack Horton	R	N
Mark C. Jansen	R	Y
David Jaye	R	N
Ron Jelinek	R	Y
Jon Jellema	R	Y
Shirley Johnson	R	Y
Greg Kaza	R	N
Thomas Kelly	D	N
Kwame M. Kilpatrick	D	Y
Alvin H. Kukuk	R	N
Edward LaForge	D	Y
Gerald H. Law	R	Did not vote
Burton Leland	D	Y
Clyde LeTarte	R	Y
John Llewellyn	R	N
Terry London	R	Y
Allen Lowe	R	N
George W. Mans	D	N
Lynne Martinez	D	N
Thomas Mathieu	D	N

Name	Party	Legislator's Vote
Jim McBryde	R	N
Michelle McManus	R	N
James McNutt	R	Y
James Mick Middaugh	R	Y
Thomas Middleton	R	Y
Raymond M. Murphy	D	Y
Michael E. Nye	R	N
Dennis Olshove	D	N
Lynn Owen	D	N
Glenn Oxender	R	Y
Joseph Palamara	D	Y
Mary Lou Parks	D	Y
Charles Perricone	R	Y
Hubert Price Jr.	D	Y
Kirk Profit	D	N
Michael Prusi	D	N
Nancy L. Quarles	D	N
Andrew Raczkowski	R	N
Kim Rhead	R	N
Andrew C. Richner	R	Y
Vera B. Rison	D	Y
Sue Rocca	R	N
Mark Schauer	D	Y
Gloria Schermesser	D	N
Mary Schroer	D	Y
Martha G. Scott	D	Y
Judith L. Scranton	R	Y
Ken Sikkema	R	Y
Keith B. Stallworth	D	Y
Paul Tesanovich	D	N
Samuel Buzz Thomas III	D	Y
Ilona Varga	D	Y
Ed Vaughn	D	Y
Harold Voorhees Sr.	R	N
Timothy L. Walberg	R	Did not vote
Ted Wallace	D	Y
Howard Wetters	D	Y
Deborah Whyman	R	N
Karen Willard	D	N
Paul Wojno	D	N

1	Name	Party	Legislator's Vote
1	Loren Bennett	R	N
j	lim Berryman	D	N
1	Michael Bouchard	R	Y
1	Willis Bullard	R	Y
1	Dianne Byrum	D	N
1	Douglas Carl	R	Y
J	John Cherry	D	N
j	lon Cisky	R	Y
J	loe Conroy	D	N
1	Ken DeBeaussaert	D	N
1	Dan DeGrow	R	Y
(Christopher Dingell	D	N
	Mat Dunaskiss	R	Y
J	loanne Emmons	R	Excused
1	Harry Gast	R	Y
1	R. Robert Geake	R	Y
j	loel Gougeon	R	N
(George Zaven Hart	D	N
1	Philip Hoffman	R	Y
1	Donald Koivisto	D	Y
.(George McManus	R	Y
1	Arthur Miller	D	N
1	Walter North	R	Y
1	Michael O'Brien	D	N
(Gary Peters	D	Excused
1	Dick Posthumus	R	Y
1	Michael Rogers	R	Y
	Bill Schuette	R	Y
J	lohn Schwarz	R	Y
1	Dale Shugars	R	Y
	Alma Smith	D	N
1	Virgil Smith	D	N
	Henry Stallings	D	N
	Glenn Steil	R	Y
1	Leon Stille	R	Y
	William Van Regenmorter		Y
	lackie Vaughn	D	N
	loe Young	D	N



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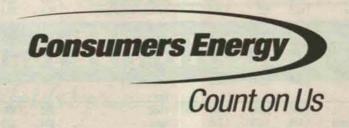
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Market Outlook



by Dr. Jim Hilker, Department of Agricultural Economics, Michigan State University

CORN

hat did the August USDA Crop Report, released Aug. 12, show about U.S. 1997 corn production, given Aug. 1 conditions? In Table 1 below, I have given my best shot at both the production and use numbers, given the information available Aug. 5, and it matched up pretty well with market prices at that time. Compare the numbers below with the USDA numbers; was the report bearish, neutral or bullish? You then need to look at the weather since Aug. 1, perhaps by studying the Aug. 18 Crop Progress Report. Has the market reacted as you would expect?

If the market reaction was bearish, perhaps we should just wait to make any further pricing decisions. The world coarse grain picture suggests use may pick up a little more than the markets are now showing. If the market reaction was neutral and December futures are still around \$2.65, look closely at your situation. If you have already priced a bunch, consider holding off on further new crop pricing unless the market's neutral reaction was in spite of negative information. If the market reaction was bullish, consider further pricing, especially if December futures have moved toward \$2.85 to \$2.95.

New-crop basis offerings were near-normal as of early August. This would indicate using a forward contract versus an H-T-A. At this time, the market is saying it will pay on-farm storage for new crop, but not commercial storage.

Seasonal Commodity Price Trends

Corn	
Wheat	** 7
Hogs	**
Cattle	

WHEAT

s with corn, compare the numbers from the August Crop Report for wheat with my numbers in Table 2 below; how do they compare? Are they bullish, neutral or bearish? How did the market react? For many, the question may seem somewhat mute as the wheat was sold out of the field.

At this point, the market is telling us that it will not pay for all of commercial storage, but is willing to pay on-farm storage, given no quality losses. If the report was neutral or bearish and the market reaction was the same, and you can store on-farm, consider doing so with a portion of your crop. While there is some downside risk, there is more upside potential. If the report was bullish and the market has taken off, consider being ready to price most of your crop into the rally.

If you have decided to wait to price and are paying commercial storage, consider moving to a basis contract and not paying storage. This would be the case if the market reaction was neutral or bearish. If it was quite bullish, consider moving it into the rally. If you have already sold all of your wheat, that's just fine, but if the market dropped sharply you might want to consider getting back in on a portion of your crop by buying a call option.

SOYBEANS

he biggest question with soybeans may be how much rain the soybean belt has received in the past 10 days versus anything the report has to say. However, I would suggest going through the same process as suggested for corn and wheat. Compare the USDA numbers with those in Table 3 below and trade expectations to determine whether the report was bullish or bearish, and then compare that to the market reaction you have already seen.

As of early August, the market was offering a

good new-crop basis. If that is still the case, and your analysis of the situation given your farm suggests some further forward pricing, you should use a forward contact or a minimum price contract versus an H-T-A or an MPC-H-T-A. At this point, the futures market, through the spreads, is telling us they will enough to make storage profitable, so be ready to consider basis contracts if the situation suggests staying in the market.

The soybean market will still be subject to a lot of volatility over the next couple of weeks due to domestic production concerns and world production and use questions. Be a market watcher and be ready to grab some good prices if they present

CATTLE

hile things may not be great, they are turning out better than my expectations. And the main ingredient seems to be stronger than expected domestic beef demand. We have moved a lot of beef over the past couple of months at better than expected prices. Now if we could just get exports moving a bit better, along with the expected drop-off in slaughter by mid-fall, we may even start making some money. That is, if feed prices don't jump up and/or we don't bid all the profit away buying feeders.

The July Cattle-On-Feed Report showed we still placed a lot of cattle in June, up 15 percent from 1996; however, that needs to be put in perspective by saying placements were small in 1996. Total cattle on feed were up 17 percent. This, along with increased slaughter weights, will mean we need to continue to move a lot of beef through October.

The mid-year Cattle Inventory Report was also released in July. It showed all cattle down 2 percent from the previous July 1. Beef cow numbers are down 3 percent and beef heifers kept for replacements are down 4 percent. This shows the cattle sector is still in the liquidation phase caused by the low feeder calf prices the past few years. The 1997 calf crop was placed at down 2 percent. This will mean good feeder prices this fall.

The stronger feeder prices we have seen recently seem to be having some impact in that cow slaughter has dropped off sharply the past couple of months. While this may temper the liquidation phase, we are not likely to see expansion until the

January 1999 report. At this point, heifer slaughter is still large.

HOGS

og demand has not been as strong as expected due to lower-than-expected exports. The United States had expected to fill the gap in Japanese needs that is being caused by the hoof and mouth situation in Taiwan, Japan's biggest supplier. However, due to a combination of factors, this has not happened to the degree expected. Japan has been in a bit of an economic downturn recently, which, along with food safety concerns in Japan due to several food poisoning outbreaks, has caused a large cutback in Japanese pork demand.

Sow slaughter continues to run way below yearago levels and the five-year average. This is an indication that the expansion seen in the last Hogs and Pigs Report is continuing, which you would expect given hog prices. Pork slaughter and weights are running above year-ago levels which has finally pushed pork production over year-ago levels. I expect this trend to continue from now through at least 1998.

DAIRY OUTLOOK

by Larry G. Hamm

arm level milk prices are caught in the dismally low price trap caused by the collapse of the Basic Formula Price (BFP) from May and June. Although wholesale cheese prices have begun to strengthen, there is little hope for significantly stronger farm prices over the next two months.

The May BFP of \$10.70 guaranteed that July Class I prices in the Federal Order system would be at dramatically low levels. Although the June BFP increased 4 cents per hundredweight (cwt.) to \$10.74, it did little to raise Class II prices for July or Class I prices for August. Therefore, any improvement in Michigan farm pay prices for July would depend on the degree to which the July BFP increased in price.

Throughout July, dairy industry observers have been heartened by some significant price strength on the wholesale cheese markets at the Chicago Mercantile Exchange (CME). However, effective with the May BFP, the adjustment for changes in component values was no longer based on cheese prices at CME or the National Cheese Exchange. Rather, adjustments to the BFP are now assigned to a cheese price transaction series collected by the National Agricultural Statistics Service (NASS). For the BFP to show strength, the CME wholesale prices must translate into increases measured by the NASS weekly cheddar price series.

For the month of July, the weighted average price of cheese sold nationally as reported by the NASS price series increased only 18 cents per pound for 40-pound cheddar blocks. During July, the CME wholesale price for 40-pound blocks increased 12 cents per pound. Under the old BFP (before May 1997), the 12-cent increase in the wholesale cheese price would have been expected to have added at least \$1 increase to the BFP. However, the 12-cent increase during July on the CME wholesale price has translated only into an 18-centper-pound increase on the NASS cheese series.

Using the generally accepted old rule of thumb that a 1-cent increase in cheese equals approximately a 10-cent increase in farm pay prices as measured by the BFP, the July BFP might rise at most 20 cents per cwt. Unfortunately, the butter markets showed some weakness during the month of July. This would temper whatever the strength which has been shown in the cheese market.

As a result, the July BFP (announced Aug. 5) was \$10.86. A BFP of this continued low level assures that the current milk prices being experienced by Michigan producers will likely be here through August and most likely September milk checks.

Ag committee expected to approve **USDA** nominees

he Senate Agriculture Committee was expected to approve several nominations to new posts at the Agriculture Department in early August.

The committee likely will vote to approve: the promotion of Foreign Agriculture Service Administrator Gus Schumacher to the new position of Undersecretary for Farm and Foreign Agricultural Services; Catherine Wotecki's move to become the Undersecretary for Food Safety; Shirley Watkins to be Undersecretary for Food and Consumer Services; and Miley Gonzalez to be Undersecretary for Research, Education and Economics.

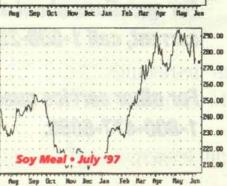
If all goes according to plan, the new nominees will be confirmed by the Senate before the body recesses for the August break.

COMMODITY PRICE TRENDS



Aug Sep Dct Now Dec Jan Feb Mar Apr May Jun







COMMODITY SUPPLY/DEMAND BALANCE SHEETS Table 2 — Wheat Table 3 — Soybeans

Table 1 — Corn				
(Million acres)	Estimated 1995–1996	Projected 1996-1997	Hilker 1997–1998	
Acres set-aside/diverted	6.2	0.0	0.0	
Acres planted	71.2	79.5	80.2	
Acres harvested	65.0	73.1	74	
Bu./harvested acre	113.5	127.1	129.0	
Stocks (million bushels)	0/-	1	S 1811	
Beginning stocks	1,558	426	891	
Production	7,374	9,293	9,546	
Imports	16	12	13	
Total supply	8,948	9,731	10,450	
Use:	BACK		-	
Feed and residual	4,696	5,350	5,640	
Food/seed & Ind. uses	1,598	1,690	1,760	
Total domestic	6,294	7,040	7,400	
Exports	2,228	1,800	2,050	
Total use	8,522	8,840	9,450	
Ending stocks	426	891	1,000	
Ending stocks, % of use	5.0	9.9	10.6	
Regular loan rate	\$1.89	\$1.89	\$1.89	
U.S. season average	- 3			
Farm price, \$/bu.	\$3.24	\$2.70	\$2.50	

(Million acres)	Estimated 1995–1996	Projected 1996–1997	Hilker 1997-1998
Acres set-aside & diverte	ed 5.2	0.0	0.0
Acres planted	69.1	75.6	70.8
Acres harvested	60.9	62.9	63.5
Bu /harvested acre	35.8	36.3	39.0
Stocks (million bushels)	the Table	2700	13.53
Beginning stocks	507	376	444
Production	2,182	2,282	2,477
Imports	68	90	89
Total supply	2,757	2,748	3,010
Use:			40
Food	883	890	900
Seed	104	103	105
Feed	153	316	275
Total domestic	1,140	1,309	1,280
Exports	1,241	995	1,075
Total use	2,381	2,304	2,355
Ending stocks	376	444	655
Ending stocks, % of use	15.8	19.3	27.8
Regular loan rate	\$2.58	\$2.58	\$2.58
U.S. season average	LIL VE	-	Billion.
Farm price, \$/bu.	\$4.55	\$4.35	\$3.30

(Million acres)	Estimated 1995-1996	Projected 1996–1997	Hilker 1997-1998
Acres planted	62.6	64.2	70.9
Acres harvested	61.6	63.4	69.8
Bu/harvested acre	35.3	37.6	38.3
Stocks (million bushels)	1545	200	
Beginning stocks	335	183	125
Production	2,177	2,383	2,673
Imports	4	20	
Total supply	2,516	2,586	2,805
Use:	ALL S	4 7 4	
Crushings	1,370	1,435	1,465
Exports	851	890	935
Seed, feed & residuals	112	136	135
Total use	2,333	2,461	2,535
Ending stocks	183	125	270
Ending stocks, % of use	7.8	5.1	10.
Regular loan rate	\$4.92	\$4.97	\$5.20
U.S. season average		STORES OF	
Farm price, \$/bu.	\$6.72	\$7,35	\$6.35



Budget and tax deal good news for state's farmers

he budget-balancing, tax-cutting package agreed to by the Clinton administration and the Republican congressional looks good from Farm Bureau's perspective, according to Jack Laurie, president of the Michigan Farm Bureau, the state's largest farm organization. The tax package provides the first significant tax cut since 1981, while purporting to balance the federal budget by 2002.

"The estate tax provision that includes agriculture in the small business portion, I think, answers a lot of the questions that farmers had about what happens to their estates," Laurie said. "Capital gains reform, in my opinion, didn't go far enough, but I think it probably went as far as could be expected right now."

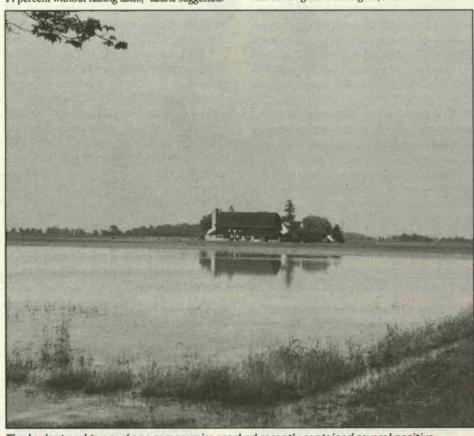
Under the new budget deal, farmers will see the estate tax exemption climb from the current \$600,000 to \$1.3 million immediately. The capital gains rate will be cut to 20 percent for those tax-payers in the 28 percent bracket and to 10 percent for those in the 15 percent bracket. However, there will be no indexing for inflation, as Farm Bureau had sought, and a capital gains cut is available only to individuals, not corporations. Beginning in 2006, the capital gains rate will drop to 18 and 8 percent, respectively, for assets held more than five years.

Producers will also be able to use income averaging to lessen their tax bite starting next year. "Income averaging over a three-year period, I believe, is a critical issue for agriculture to take some of the cyclical impact of adverse weather out of our tax liability," Laurie said.

Laurie said the organization is also pleased that funding for food safety, agricultural research and export enhancement was retained in the final budget package, saying it will be instrumental to keep the agriculture industry focused in the right direction for future growth and export market competition.

"However, as we look at this successful tax package, we need to remember that the extreme productivity we're having in America today is largely responsible for increasing federal revenues by about 14 percent without raising taxes," Laurie suggested.

"We need to continue to look at how much we pay in taxes, especially to the federal government. If we can keep our economy in the productive mode that it's in today, we ought to look at a tax cut every year of the magnitude that we're looking at now so that individuals can keep more of what they earn rather than sending it to Washington, D.C.



The budget and tax package compromise reached recently contained several positive provisions for agriculture including an increase in the per-person exemption for the estate tax, and a reduction in the rate on the capital gains tax.

Bil Mar Foods drops five contracts

Continued from page 1 The future of Bil Mar

Turkey producers at the tense, two-hour meeting slowly lost hope for regaining a portion of the contracts voided out when the clock rings in the next new year. They turned their attention to the long-term plans Bil Mar has for its remaining turkey production.

"Do I sit and wait out a year?" asked one affected turkey producer of the company representatives.

"I'm not going to sit here and tell you to wait by the phone," Westphal replied.

"A lot of people have built turkey barns in the last five years with the anticipation of continuing their agreements with Bil Mar," Kirk said. "What they are going to do with those facilities now is the next big question to be answered."

Answering another producer if the cutback in live turkeys was because of a loss of market share, Westphal replied, "Clearly we have lost some market share. There are people out there willing to virtually give it away just to move it. But everyone else is struggling.

"It won't do any good if no one else cuts back, but unless we all do it, it won't be fixed," he added. "At this time there has been no decision on contracts beyond 1998 and there has been no decision to phase out live production in Michigan at all."

Diane McNulty, another Bil Mar spokesperson, added that the company did not have any plans to lay off any employees because of this move.

According to Westphal, in order to keep the plant fully functional with a large cutback in the amount of live turkeys contracted for next year, the company will be forced to go out on the open market and supplement with that specific turkey part they want.

"I'm disappointed with Bil Mar," Michigan
Allied Poultry Industry President Doug Dreyer told
the company representatives. "They've taken a long
time making this decision without involving producers. Any hope the five individuals had has been
shattered. It's a bad decision."

Brothers Bill and Marv DeWitt began the turkey hatchery in 1938. Sara Lee Corporation purchased Bil Mar in 1987 and employs 2,300 in Ottawa County and 700 in Iowa. In 1996, sales topped \$610 million.

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How rotating with a wheat and clover combination benefits you

Mott Professor of Sustainable Agriculture explains the benefits of using wheat alongside clover as a conditioner crop

roducers looking for a 15 percent yield increase in corn have turned to global positioning systems, yield mapping and the latest seed varieties to achieve that goal – but one MSU crop and soil scientist recommends planting wheat to see that level of yield increase.

"In all of our research here in Michigan for many years, we've never seen less than a 15 percent increase in corn yield following wheat," explains Dr. Richard Harwood, Mott Professor of Sustainable Agriculture for Michigan State University's Crop and Soil Science Department. "If you are at the 150-bushel level, that's another 22 or 23 bushels of corn."

Cash crop producers look to crops like corn and sugar beets as their big cash crops, according to Harwood. "The reason that producers just don't grow continuous corn, continuous sugar beets or continuous anything is that you get disease build-up, insect buildup in the soil, and declining and decreasing soil quality."

Using wheat and clover together

To minimize those impacts, Harwood has often recommended using wheat as a conditioner crop to improve soil quality and, if done correctly with clover as a cover crop, improve the amount of nitrogen available for the next growing season.

"How do you maximize the conditioning effect of wheat so that you really get the benefits downstream? One of the things that you can do at reasonably low cost is frost seeding of clover," Harwood explained. "It costs about \$15 an acre to get the clover into the wheat."

He adds that the clover seeding rate is about 10 pounds per acre. "The key is to plant early in the



C.S. Mott Professor of Sustainable Agriculture Richard Harwood explains the conditioning effect a wheat/clover combination will have on a corn/sugar beet rotation to producers at the Wheat 2000 field day held recently at Reinow Acres in Saginaw.

season in March before the wheat really starts to grow. You want the clover established and up to about 2 inches in height before the wheat closes in. If there is good moisture, we will have an excellent stand of clover, and the benefits we get from that if we are planting corn next year will be a 60-pound nitrogen credit right off the top. So in saving 60 pounds of nitrogen, you are saving about \$12 an acre, which just about pays for the clover seed."

The real short-term incentive is the increase or pulse in yields that you'll see in the following year's cash crop. "You get the short-term benefits when you are improving the soils for the long term," he adds.

"If the grower comes out of beans and leaves the soil fallow, there's not much soil cover there, and you have seven months rain and moisture conditions during which the soil is not protected and you get a deterioration in soil quality," he adds.

"With wheat, not only do you have a physical cover there, but you have an active root system right through July, when the crop matures, and those roots are the living things that provide a good environment for soil organisms that contribute to soil tilth and quality.

"I would put wheat in most sugar beet rotations and, if they can manage it, on a four-year rotation, rather than a three, for really optimum soil quality," Harwood explains. "The three-year rotation is pushing it a bit, but if you could go to four years, get the clover in and really work on soil qualities, you can get those real top sugar beet yields.

"In another way of thinking—we're pulsing the system," the MSU crop and soil scientist said.
"We're using these conditioner crops to position the soil for that real pulse in productivity that we want for our cash crop, our big cash crop—corn or sugar beets."

Once the wheat is taken off and the clover remains as the cover crop, Harwood recommends taking it off in either late fall or early spring to realize the maximum amount of nitrogen credit.

"It depends what they are going in with next year — on some soils, growers prefer to kill the clover in the fall," he explains. "You use a combination of Round-up and 2,4-D for the chemical kill, but you don't want to do it too early. We tell them wait until at least mid-October when the clover is killed back a bit by the frost, because we want our soil temperature to be cool enough to save the nitrogen. If you kill the clover too early, it just breaks down and mineralizes and the nitrate is lost over the winter.

"My own preference is to kill in the spring, particularly if you are going to plant corn," he adds. "I'd rather get a bit of spring growth you have from active rooting through the winter, and then either plow it in, chisel it or kill it in the spring. One of the dangers is if you leave it too late in the spring, you can begin to reduce soil moisture and then you reduce yield of the corn in particular."

Gene discovery could help breeders reduce head scab in wheat

S. Department of Agriculture scientists have discovered a useful chink in the genetic armor of the fungus behind head scab disease that causes billions of dollars in crop losses annually.

Anne E. Desjardins, Robert H. Proctor, Susan P. McCormick and Thomas M. Hohn of USDA's Agricultural Research Service (ARS) pinpointed and deleted the genetic codes for an enzyme that the fungus needs to produce the toxin trichothecene. The research team is based at the ARS National Center for Agricultural Utilization Research here.

The head scab fungus — Fusarium graminearum — uses trichothecene to infect and weaken cereal crops such as wheat and barley. Head scab disease cuts crop yields and leaves the plants vulnerable to other diseases and insect damage. The disease gets its name from the scab-like marks it leaves on the infected plant.

Hohn, a microbiologist, says studying the

genetic makeup of the fungus is a different approach in fighting cereal crop diseases.

"The work we have done characterizes the disease from the fungal perspective and demonstrates how the toxin affects the virulence of the disease," he noted. "This new information could have a great impact on wheat breeding strategies and development of disease-resistant crop varieties."

In field tests, wheat plants were infected with a form of *F. graminearum* from which the enzyme gene had been deleted. "The wheat plants still developed some disease," says Hohn. "But we saw less damage and yield losses."

Head scab disease has baffled plant breeders and growers alike because it severely infects crops one year, then disappears for a year or two before reappearing. Its sporadic nature has caused head scab disease to receive less attention from researchers than more frequently seen crop diseases. But severe head scab outbreaks over the last four years have devastated crops in some regions of the country and emphasized the need for effective control strategies.



A recent discovery has established the genetic codes for the trait that produces head scab fungus. The common fungus has baffled scientists for years and can severely reduce wheat yields.

Cause of lean spots on Freedom Wheat may be physiological

ysterious lesions that recently began appearing on the wheat variety called Freedom may be due to weather conditions.

After several weeks of research and consultations with their counterparts in other states, Michigan State University plant pathologists are for the time being attributing the problem to "physiological factors."

The lesions generally start as small yellow spots and enlarge to large blotches with yellow halos. Sometimes the blotches have brown centers.

"We are confident the spots are not caused by Septoria nodorum or any other fungus," says Pat Hart, MSU Extension plant pathologist. "No pathogenic fungi have been isolated from these lesions."

He says that data from the Pacific Northwest indicate that, as the severity of the leaf spotting increased, the yield decreased. However, the amount of yield loss could not be accurately predicted. How great the yield loss may be in Michigan is not yet known.

The data also show that fungicides did not reduce the incidence of the spots or increase yield.

Hart also found information from Germany that describes physiological leaf spot as being associated with an extended period of overcast weather followed by several days of intense sunlight. The damage was suspected of being UV-B radiation injury.

Wanted: Michigan's white wheat

Continued from page 1

Michigan Millers Association and president and treasurer of Star of the West. "In the past, that hasn't always been the case." Loefler adds that Michigan also used to have over 500 facilities milling wheat and today there are only seven left.

"Kraft really needs Michigan white wheat," explains Gary Allen, Kraft Foods purchasing category manager for commodities. "Because of our wheat used in cereals, which is several million bushels a year, about three-fourths of that is white wheat."

"White wheat is a product that is value-added and we need to capitalize on it," Loefler adds. "But it comes down to dollars and cents, and it is a lot easier on use when wheat is \$4."

"To me this year's crop looks very good,"
Allen adds. "By the same token, I don't know
whether there is going to be enough or not — and
I mean that literally — we don't know whether or
not we are going to have enough for all our facilities to run this next year."

"I see this as a collision course in our bigger plants in Battle Creek and Napierville, Ill. needing a source. They were built around using Michigan white wheat, and with last year being a real disaster, we had to go to Idaho and other places. It was very difficult from a processing point of view. It was very costly from a freight point of view and very costly from an additional processing point of view," Allen adds.

"Today I hope that we've encouraged those growers by identifying the need that we have for wheat by identifying the fact that our usage for wheat is not going away, in fact it is increasing," he explains. "Our use of white wheat is increasing and we are expecting Michigan growers to produce some better quality wheat."

"We're very pleased to see premiums being offered on white wheat," explains MFB's Manager of Field Crops and member of Wheat 2000 Bob Boehm. "With the expanded flexibility available under the current farm bill, growers are free to plant to the market. Price is an important indicator and will influence growers' crop rotation decisions relative to other crop returns."

From the growers

"Wheat to us has been a crop to diversify with," explains Stuart Reinbold, who has been growing wheat on his farm for over 30 years. "The benefits come from rotation in our dry bean, corn and sugar beet acres."

"The bottom line tells the story, however," Reinbold adds. "Marketing the crop is very important. Look at what wheat did in the spring – you could contract wheat for \$4.30. But, I'm sure a lot of wheat acres have gone into soybeans."

Another grower attending the event was Iosco County Farm Bureau member Brian Bellville, who grows about 80 acres of wheat each year. "I learned there are a lot more varieties than I thought, and they have different practices out here than we do a little farther north."

What about wheat's future in Michigan?

"We have to look at in the long term and what the economics of soybeans, wheat and corn are," Thews adds. "We need to look at the economics of the rotation and where wheat fits into that. Can't have a losing crop in a rotation, but when you look at some of the other benefits that it does for other crops, than we need to look at the economics of rotation."

"There needs to be that kind of encouragement and commitment from the millers," he adds. "That is one of the reasons they came up with the project and they need to show the industry and the farmers that it's in for the long term. It's not a one-timer when they are going to raise the price, but everyone is in the thing together."



Business Strategies

Ralph E. Hepp Department of Agricultural Economics Michigan State University

inancial statement analysis using ratio measurements and trend analysis assists man agersof farms to make informed judgments and decisions about the entity's financial condition and results of operations. The financial measures outlined in this article are grouped into five criteria — liquidity, solvency, profitability, repayment capacity and efficiency. For each criterion, financial measures and ratios provide meaningful relationships between individual values in the financial statements.

This article defines the financial criteria and ratios and provides values for 18 Michigan fruit farms for the 1996 calender year of operation.

The source of the financial data are records analyzed for fruit farmers by the Telfarm record program through Michigan State University Extension. Additional data about the fruit farms can be obtained from Department of Agricultural Economics Staff Paper, Michigan Fruit Farm Database, available from the Department of Agricultural Economics or county Extension offices. The data provides the managers of fruit operations of comparable size with industry standards to compare the results from their business.

The data in Table 1 summarizes the measures for 18 fruit farms and the average for the high and low one-third of the operations based on net farm income. In addition to the five financial criteria, farm size measures describe the operations. Over 80 percent of the cash sales on the fruit farms came from apples and cherries with the remaining income generated from other fruit and vegetable crops. Family labor provided about one-third of the labor hours on the farms.

Financial measures vary widely on Michigan fruit farms

Liquidity measures the ability of a business to meet financial obligations as they come due in the ordinary course of business, without disrupting the normal operations of the business. The current ratio indicates the extent current assets cover current liabilities. Working capital is the amount of funds available to purchase inputs and inventory items, or make advance payments on debts. The high-income farms have more than twice the working capital of the low-income farms and a higher current ratio. The high-income farms are in a strong financial position to finance next year's operations and capital purchases without resorting to borrowed funds.

The solvency criteria measures the amount of borrowed capital used by a business relative to the amount of owner's equity. Three ratios showing the relationship of debts, assets and equity to each other and measuring the financial position of the business and the creditor's and owner's claim against the assets are given in the table. The fruit firms have 26 percent debt and 74 percent equity. There is little difference in financial position between the high- and low-return farms by debt levels.

Profitability measures the extent to which a business generates a profit from the use of land, labor, capital and management. The rate of return on assets and equity applies all of the residual income to capital after charges are made for family labor and management. The operating profit margin is a ratio of profit before interest charges to revenue. The average fruit farm returned 3.7 percent on assets and 2.9 percent on equity. High-profit farms had a rate of return on assets of 9.7 percent compared to a negative return of 2.4 percent on lowprofit farms. Since the high- and low-profit farms are separated by net farm income, the other profitability factors show very positive values for highprofit farms and unfavorable numbers for low-profit farms. Low-profit farms need to determine the causes of low income and correct those deficiencies.

Repayment capacity measures the ability of borrowers to repay debt from income. The term debt coverage ratio is a measure of the ability of the business to cover all term debt payments. A number greater than 100 indicates the business generated enough cash to pay all term debt payments. For example, a coverage ratio of 200 shows that the firm generates twice the amount of cash needed to make debt payments. The capital replacement margin shows how much cash is available above the amount needed to pay operating expenses, taxes, family living costs, and scheduled debt payments. The high-profit farms are in a strong position to service debt commitments and finance growth from cash flows, while the low-profit operations are generating just enough funds

to meet the obligations with a small amount for capital purchases.

Efficiency ratios measure the degree of effectiveness in the use of land, labor and capital. The asset turnover ratio measures how efficiently assets are being used to generate revenue. A high number says that less capital is needed to generate a dollar of sales, while a low number indicates farms require more capital to raise a dollar of revenue. In most cases, a business is more profitable if it can generate more revenue from fewer dollars invested in machinery, inventory, land and other assets. The other efficiency ratios are a comparison of expenses, depreciation or interest expense to revenue. Lower expense ratios should result in more residual income to the business.

FINANCIAL GUIDELINES MEASURES,	1996
Michigan Facil Farms (Farms control by Mat Farm Income)	

	Average for all Farms	Average for low 33%	Average for high 33%	
NUMBER OF FARMS	18	6	6	
SIZE	CANADA STATE OF THE STATE OF TH	CONTRACTOR OF THE PARTY OF THE	CORE CURE	
Cash Farm Sales Total Farm Assets Total Crop Acres	\$199,746 780,962 163	\$158,619 929,903 147	\$258,636 895,235 228	
LIQUIDITY	A STATE OF THE PARTY OF THE PARTY.		A PERSONAL PROPERTY.	
Current Ratio Working Capital	4.94 \$103,846	4.61 \$87,424	6.36 \$177,842	
SOLVENCY				
Farm Debt to Asset Ratio Farm Equity to Asset Ratio Farm Debt to Equity Ratio	26% 74% 36%	26% 74% 35%	20% 80% 25%	
PROFITABILITY				
Rate of Return on Farm Assets Rate of Return on Farm Equity Operating Profit Margin Net Farm Income	3.7% 2.9% 12.6% \$48,429	-2.4% -6.0% -13.1% \$-16,928	9.7% 11.3% 26.6% \$123,480	
REPAYMENT CAPACITY	Service Control	C. E. S. C.	The second second	
Term Debt Coverage Ratio Capital Replacement Margin	222% \$34,037	119% \$6,624	389% \$83,796	
EFFICIENCY		The second second		
Asset Turnover Rate (market) Operating Expense Ratio Depreciation Expense Ratio Interest Expense Ratio Net Farm Income Ratio	29.5% 67.4% 8.7% 5.6% 18.3%	18.6% 93.3% 7.8% 10.2% -11.3%	36.3% 50.8% 12.7% 2.3% 34.3%	



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New apple cider management production guidelines are good news for apple producers and consumers

he new Best Management Practices (BMPs) announced by the Michigan Department of Agriculture for the production of unpasteurized apple cider are good news for Michigan apple producers, according to Michigan Farm Bureau's Ken Nye, director of the organization's Commodity and Environmental Division. He calls the announcement a textbook example of the agricultural industry being proactive in ensuring food safety.

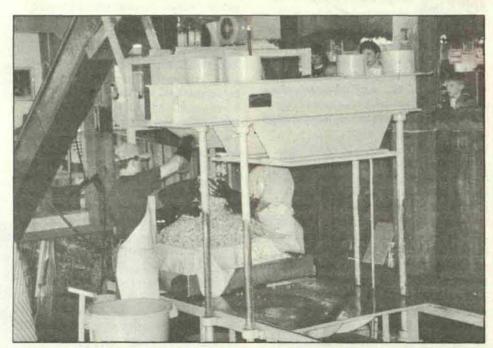
"There were concerns last fall about cider contaminated with *E-coli* in a number of places around the country," Nye explained. "Although we haven't had any problems in Michigan, an industry task force made up of apple growers, cider processors, specialists from the Department of Agriculture, food scientists from Michigan State University and Michigan Farm Bureau worked for the last seven months."

"As a result, we have a set of guidelines that everybody can live with, yet at the same time, make sure our apples and the apple cider are as wholesome as possible. This will assure consumers the product they are receiving here in Michigan meets the highest standards," Nye said.

Although the BMPs, which take effect immediately, do not require costly pasteurization of apple cider, they do provide several steps, primarily in the apple-cleaning stage and processing equipment sanitation, to prevent incidences of *E.-coli*. Nye said MDA inspectors will be working with apple cider producers to implement the BMPs prior to this fall's apple harvest season.

Nye expects there will be a continued emphasis on research, technology and education for cider mill operators, regulatory officials and, ultimately, consumers. "Cider, by its definition, is not pasteurized," he said. "We do have a lot of pasteurized juice here in the state, with very specific guidelines that must be followed. We want to make sure that the smaller cider operations are following the best possible practices to make sure those products are extremely healthful, while also keeping those operations economically viable."

Last year, Michigan farmers produced a record 1.22 billion pounds of apples on 54,000 acres. The state ranks second nationally in total apple production, accounting for 11.5 percent of the total U.S. production.



Last fall's outbreak of E.coli in apple cider can now be avoided in Michigan with the new best management practices outlined by the Michigan Department of Agriculture.



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Producers beware of price-later agreement details

armers in the midst of wheat harvest should be mindful of payment details when delivering grain to minimize risks. Producers using price-later agreements on grain that has been delivered to the elevator are considered an unsecured creditor, meaning they're at the end of the line in collecting payment in the event of a bankruptcy.

Michigan Farm Bureau Commodity Specialist Bob Boehm says producers using price-later agreements should also be using security agreements and a UCC1 form.

"UCC1 stands for Uniform Commercial Code. It's a form filed at the county Register of Deeds," Boehm explained. "It puts on public record that you have a secured interest in the grain that you have delivered at that elevator. However, in the event of insolvency at the elevator, all the secured creditors would be paid in the order of the date of the filing of the UCC1. Unsecured creditors would then be paid any remaining assets. So, it puts you ahead of the unsecured creditors, but it's not a perfect situation, either."

Price-later agreements are commonly used by producers when they want to deliver the commodity at harvest, rather than store it on their own farm, but postpone pricing the crop in anticipation of better prices. "You deliver the commodity to an elevator, and enter into a price-later agreement that simply says that at some point in the future you are going to price it, but you have no secured interest in that commodity," Boehm warned. "So in the event of an elevator bankruptcy, you are treated as an unsecured creditor and would only have an opportunity to receive payment after all of the secured creditors' debts have been met."

Under the Michigan Grain Dealer's Act, licensed grain dealers are required to have security agreements and UCC1 forms available at the elevator for producers who request them. Boehm also recommends producers keep a watchful eye on who they're doing business with.

"This boils down to knowing who you do business with, knowing the financial condition of the elevators and the businesses that you deal with; even if you have dealt with them for a period of years, times change," Boehm said. "There are certain signs that you want to watch for, such as a late payment, not following through on payments in a timely fashion or offering prices that are significantly above the competition without any justification for doing so. In other words, make sure you're aware of the financial solvency of the company you're doing business with. It's just good business!"



MDA's food safety efforts enhanced by Food Safety Awareness Campaign

Department debuts food safety website during kickoff

ssuring consumers a safe and wholesome food supply has always been the
Michigan Department of Agriculture's
(MDA) number one priority, and with its key role
in a new Michigan Food Safety Awareness Campaign, the department will focus efforts on informing consumers what they can do to prevent foodborne illness in their own homes, announced
MDA Director Dan Wyant.

The campaign, spearheaded by U.S. Sen. Spencer Abraham, Gov. John Engler and Wyant, in partnership with Michigan State University Extension and the food and agriculture industry, will use print, broadcast and Internet communication to help consumers better understand the critical role they play in keeping food safe and wholesome.

"Through inspections, licensing, and educational and training programs, MDA helps assure consumers a safe food supply," said Wyant. "But the consumer can play a pivotal role in preventing food-borne illness once the food is purchased and taken home for preparation."

There are millions of cases of food-borne illness reported each year in the United States — occasionally resulting in death. According to the Centers for Disease Control, 97 percent of all food poisoning cases are the result of improper food handling. The World Health Organization regards food poisoning as one of the most widespread health problems in the world.

According to Wyant, if consumers heed some basic common sense tips about food handling, the number of food poisoning cases can be dramatically reduced. "The goal of the campaign is to reduce the incidence of illness by informing consumers about the role they can play in protecting the wholesomeness of the food they serve," he said.

"The Michigan Food Safety Awareness Campaign will complement industry and federal efforts to help consumers better understand the basics of food handling in the home. It will also strengthen the partnerships MDA has formed over the years to promote food safety from the farmgate to the consumer's plate," he added.

Wyant said one of the new ways MDA will communicate safe food handling practices is through a new section on its world wide website at http://www.mda.state.mi.us. From the site's homepage, consumers should click on "Food Safety" under "Information You Can Use" to access the section. Included in the section are:

- Tips for consumers, including the basics of safe food handling from shopping for food to cleaning up after eating.
- Stories from MDA's food technologist, including some of the most interesting tips from his files – like "Why Crab Legs Glow in the Dark" and "Why

Study shows NAFTA is good for ag

sserting that the North American Free Trade Agreement has been good for America's farmers, the American Farm Bureau Federation, together with other agriculture-related groups and businesses, recently released a report highlighting the trade pact's benefits to agriculture in its three-and-a-half-year existence.

"Farm Bureau strongly supported the creation of NAFTA," said Minnesota Farm Bureau President Al Christopherson, who serves on the AFBF board of directors and heads up the AFBF Trade Advisory Committee. Christopherson applauded the trade agreement for its positive impact on the U.S. agricultural economy, saying, "NAFTA has reduced barriers and increased our trade with Canada and Mexico."

The report, commissioned by a coalition of agriculture groups and agribusinesses, showed that U.S. agricultural exports to Canada and Mexico increased dramatically as a result of NAFTA. In 1996 alone, the United States exported more than \$6.4 billion in agricultural products to Canada and more than \$5 billion in farm goods to Mexico.

Christopherson noted that some sectors of agriculture have had trouble under NAFTA, but said, for the most part, the agreement has been beneficial for agriculture and "there are issues that must still be addressed" with Mexico and Canada.

Green Potatoes Can Be Poisonous."

- A special feature on raw eggs, "Why You Shouldn't Eat Raw Cookie Dough or ... What in the World Ever Happened to Eggs?!"
- Three years of data from MDA's annual Food Monitoring Program to detect chemical residues in Michigan fresh fruits and vegetables. Since the testing began in 1991, the majority of samples with detectable levels of residues have been well below the tolerances established by the U.S. Environmental Protection Agency.
- A detailed description of MDA's role in assuring food safety for Michigan's consumers.

The theme for MDA's booth at this year's Michigan State Fair is food safety, where fairgoers will receive vital information about safe food handling practices. MDA will be joined in the effort by Michigan's commodity organizations.

In September, MDA will kick off a Food Safety Consumer Education Program in conjunction with Michigan Food Safety Month. It will feature four science-based food safety lessons for elementary school children (grades 4 and 5). The lessons will stress the dangers of food-borne illness and the responsibility each person has in protecting themselves and their family from getting sick.

In September, the department will also debut

its first Food Safety Issue Update, a regular publication that will feature MDA food safety initiatives.

"The Michigan Food Safety Awareness Campaign provides an exciting opportunity to showcase our efforts in protecting the state's food supply and to forge new alliances to improve communications among government, the agriculture and food industries, and consumers," said Wyant.



U.S. Sen. Spencer Abraham and MFB President Jack Laurie teamed up with the Michigan Department of Agriculture to kick off the Michigan Food Safety Awareness Campaign at numerous central Michigan grocery stores.

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Innovative Farmers tour is scheduled for Aug. 28

he Fourth Annual Innovative Farmers Plot Tour has been scheduled for Thursday, Aug. 28. The Innovative Farmers were organized four years ago for the purpose of developing alternative cropping systems that reduce erosion, improve soil tilth and increase family farm income.

The group plans and designs applied research demonstrations for two 40-acre parcels in Huron County. In addition, the members are involved in evaluating and interpreting the plot results.

The Innovative Farmers (IF) are aided in this effort by 42 sponsoring partners including local lending institutions, equipment dealers and manufacturers, agriculture suppliers, and various governmental agencies.

This year, the tour will start at the Voelker Site south of Pigeon on Caseville Road at 9 a.m. Parking is available at the site, as there will be no bus transportation provided this year.

At the Voelker Site, tour participants will view sugar beets being produced with four tillage systems. Stand counts were taken on three different occasions. The last counts, 40 days after planting, indicated the average number of plants per 100 feet were in the 197 to 206 range.

Participants will also view the corn and dry bean tillage plots along with a dry bean variety plot that includes kidney and black bean varieties. In cooperation with the Sugar Beet Advancement Initiative, the Innovative Farmers Site has a sugar beet variety plot consisting of nine popular varieties planted in strips eight rows wide and 580 feet long.

There is also a seed spacing study at this site. The sugar beet varieties were planted with the Rally 590 planter; a representative will be on hand to discuss the planter's characteristics.

The tour will move to the Shaw Site on Wadsworth Road east of M-53 with lunch beginning

at 11:30 a.m. A number of activities are taking place and participants will have the opportunity to pick and choose which sites to visit beginning at 1 p.m.

In addition to the tillage comparison studies, participants will be able to view two white mold studies. One study is looking at what effect tillage and previous crops have on white mold, while the other is looking at the effect of row width and variety.

The sugar beet tillage demonstration was established into three covers this year, including sovbean residue, corn stalks and a dense wheat cover. Stand counts were taken in each cover situation and will be available during the tour. Dr. Richard Harwood, MSU Crop and Soil Science Department, will bring the tour participants up to date on the soil quality taking place at the two IF sites and provide insight on trends resulting from the use of the various tillage systems.

Chris DiFonzo, MSU entomologist, will be at one location to review corn borer information for 1997 and explain the use of borer traps in managing corn borer outbreaks. Chris will also discuss leafhopper control in dry beans.

This year, a series of "Crazy Strips" were established to evaluate the effect of strip cropping, corn with and without in-furrow starter, and impact of planter speed on sugar beet seed spacing.

Carrie Andrich, Huron County Extension agricultural agent, will report on the alternative crop garden that was established. Ten different oilseed crops were planted to see how they might respond to soil and climatic conditions in Michigan's Thumb area. Fact sheets on each crop will be available.

In addition, there will be equipment on display, as well as an area for equipment demonstrations. The IF planter will be in operation for tour participants to view and evaluate.

Industry representatives will be on hand, along with MSU Extension and specialists, to discuss various topics being evaluated at the IF sites.

Parking will be available at both sites and the meal is complimentary. A registration fee of \$5 per person is payable the day of the tour. For more information, contact the MSU Extension-Project Office, 1460 South Van Dyke, Bad Axe, MI 48413, phone (517) 269-6099.



The fourth annual Innovative Farmers Plot Tour will be held Aug. 28 in Huron County. Featured this year will be tillage systems for sugar beets, dry bean variety plots, corn borer information for 1997, the effects of strip cropping and corn planter speed trials.

A new kind of mosquito repellent

esearchers in Illinois have developed a product that could place bug-zappers in the junk pile. A soybean-oil-based compound has been formulated that has proved effective in controlling the pesky mosquito. The product could replace the arsenal of insecticides and pesticides in controlling the insect. "In a pan of 100 larvae, we will get 100 percent mortality," said entomologist Robert Novak of the University of Illinois.

The larvae suffocate from the soy oil, just as they do when immersed in petroleum-based products. The mosquitoes also die when sprayed with

Bryan Hieser of the Illinois Soybean Checkoff Board believes the product would help control the worldwide population of mosquitoes, the world's top transmitter of disease to man and animal. "I think a national product would make an impact, but worldwide the potential is huge for this in developing countries," said Hieser. "Hopefully, they'll have the wherewithal to use this product."

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Sensing the soil's depth cuts fertilizer use and pollution risk

S. Department of Agriculture scientists are helping Midwest corn farmers take the guesswork out of using nitrogen fertilizer. Preliminary results of a two-year field study on Midwest claypan soil showed that farmers can maintain good crop yields and still reduce both the use of fertilizer and the risk of groundwater contamination.

Farmers usually apply nitrogen fertilizer for the best crop yield based on a field's past history and its average soil condition. Once the equipment is readied, they spread the fertilizer at a single rate over the entire field. The problem with this practice is that all of the soil in one field isn't the same. Soil quality varies from one point to another within a field.

To measure this variability, scientists with USDA's Agricultural Research Service in Columbia, Mo., tested an electromagnetic conductivity sensor on 300 acres of claypan soil in north central Missouri. The sensor allowed the scientists to measure the topsoil depth - a key factor that controls production on claypan soils. The more topsoil, the more productive the soil is because of the soil's increased water-holding capacity.

The scientists began using the sensor in 1992 and two years later hooked it to a global positioning system receiver and laptop computer. Using the data from the automated system and sensor, the scientists applied the same amount of nitrogen fertilizer that a producer normally would use, but they redistributed the fertilizer to areas in the field where it was most needed.

Some portions of the field got less than the conventional rate of nitrogen fertilizer and others got more. Where less fertilizer was applied, the corn crop was more efficient in its nitrogen use and yields were the same as with the conventional rate. In areas where it was deemed necessary to add more, yields averaged 10 bushels more per acres

Double trouble may loom ahead for deer tick

ature's own fungi and microscopic worms could help stop black-legged ticks in parks and backyards before they try to latch onto a hu-

The ticks can transmit Lyme disease. But scientists at USDA's Agricultural Research Service (ARS) have found that certain fungi and wormlike nematodes have potential to thin populations of the ticks, Ixodes scapularis. White-tailed deer often carry the ticks into residential areas.

The new approach could offer a natural alternative to outdoor spraying of tick-killing chemicals called acaricides. One nematode recruit, Steinernema, wriggles into natural body cavities of engorged female ticks. Another, Heterohabditis, uses a single sharp tooth to gnaw through the tick's cuticle, or outer covering.

The nematodes kill by unleashing bacteria that liquefy the tick's tissues. But they don't harm people or animals - only ticks and specific insects. The fungi secrete enzymes that eat away the soft cuticles of immature tick larvae and nymphs. Then the fungi kill the ticks by growing inside them.

Ixodes nymphs are the most likely tick stage to be the culprit when people contract Lyme disease. That's because the nymphs' small size allows them to feed undetected long enough to transmit the bacterium that causes Lyme.

The ARS scientists discovered one of the tickinfecting fungi. They've tentatively identified it as a new species of Gliocladium. In lab tests, it killed 60 percent of tick nymphs in two weeks. Another fungus, Metarrhizium anisopliae, killed 100 percent in one week.

But the nematodes are the quickest, killing engorged adult female ticks within 24 hours. The researchers plan to follow up their lab findings with small-scale field studies. These will also help show where, when and how best to apply the nematodes and fungi to tick-infested areas - and which concentrations work best.

Toxicity studies, such as tests to make sure the fungi's enzymes are safe for humans and deer, would be needed before this approach to tick control could be approved for use.

MDA announces new U.P. State Fair manager

ichigan Department of Agriculture (MDA) Director Dan Wyant has announced the appointment of Joseph K. McDonnell as the new Upper Peninsula State Fair manager. McDonnell, of Bark River, replaces Richard Ostrander, who will retire after this year's fair.

McDonnell was one of five candidates interviewed for the position. Ostrander will work with McDonnell until the end of August in order to allow for a smooth transition.

"We were pleased by the caliber of applicants interviewed for this position and even more pleased that a person of Joe's qualifications and experience has agreed to accept the challenge of continuing to offer a fair that Michigan can be proud of," said Wyant.

McDonnell has worked for MDA since 1986 as a dairy field scientist, where his duties included prefair inspections of county fairs and working as an on-site representative with the U.P. State Fair's livestock exhibition. He has worked at the fair over the past 11 years.

As an environmental engineer for Copper Range Co., where he worked prior to joining MDA, McDonnell managed four of the five environmental programs at the world" largest underground copper mine and a multi-million-dollar environmental budget.

Since 1927, the U.P. State Fair has showcased regional crops and livestock as well as handcrafts and hobby collections. The fairgrounds in Escanaba are used year-round to promote agricultural awareness and related resource promotion such as forestry and tourism. The annual fair is held each August. Marking its 70th year, the fair runs Aug. 12-17

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Farmer co-ops continue to break income and sales records

armer-owned cooperatives in the United States have set new business volume and net income records for the second consecutive year. Agriculture Under Secretary for Rural Development Jill Long Thompson, speaking to cooperative leaders from around the nation, recently announced that the nation's 3,884 farmer cooperatives reported record net business volume of \$106 billion for 1996, a 13 percent increase from the previous record of \$94 billion set in 1995. Cooperatives also enjoyed record net income of \$2.37 billion, up from \$2.33 billion in 1995.

"For more than 100 years, cooperatives have played a vital role in helping farmers improve their

Table 1 — Farmer cooperatives' net business volume¹, 1996 and 1995² In million dollars **Products marketed:** Cotton 2,621 2,799 Dairy 22,924 21,784 Fruits and vegetables 9,395 9,272 Grains and oilseeds³ 27,631 19,864

8,477

23,647

106,069 93,847

8,065

21,213

Livestock and poultry

Total farm supplies

900 900 Sugar 1,933 1,869 Other products⁴ 5,448 4,796 Total 79,330 69,349 Supplies purchased: Crop protectants 2,829 2,628 5,386 5,017 Fertilizer 5,201 4,692 Petroleum 6,292 5,211 658 583 Seed Other supplies⁵ 3,281 3,083

Services and other income: 6 3,092

Excludes intercooperative business. Volume includes value of products associated with cooperatives that operate on a commission basis and bargain for members' products.

³ Preliminary. Totals may not add due to rounding.

Excludes cottonseed.

* Includes dry edible beans and peas, fish, nuts, tobacco.

wool, and other miscellaneous products.

Sincludes building materials, containers, hardware, tiresbatteries-accessories (TBA), farm machinery and equipment,

and other supplies.

Includes trucking, ginning, storage, artificial insemination, rice drying, and other.

ability to market and process their crops and livestock and to secure farm supplies and other services at reasonable costs," Long Thompson said. "These new sales and income records show that the cooperative form of business is alive and well in our nation's rural communities."

The record business volume year for the nation's farmer cooperatives was due primarily to increased prices for grains and oilseeds and farm supplies. Cooperatives' sales of grains and oilseeds increased \$7.8 billion, or more than 39 percent, from 1995. Farm supply sales increased \$2.4 billion, or more than 11 percent.

Total marketing sales by cooperatives climbed more than 14 percent, to \$79 billion, in 1996. Cooperative net business volume was up for all commodity groups except rice and cotton. Rice revenues were stable, while cotton revenues dropped more than 6 percent. Income from services provided by cooperatives and other miscellaneous income was down \$192 million, or nearly 6 percent.

With the changes enacted in the Federal Agriculture Improvement and Reform Act of 1996, the cooperative way of doing business in rural America makes more sense than ever," Long Thompson said. "Secretary Glickman and I are both committed to doing all we can do to ensure the farmers and others in rural America have the opportunity to share in economic growth."

Cooperatives sold farm supplies worth nearly \$24 billion in 1996. Increases in petroleum (nearly 21 percent) and fertilizer (nearly 11 percent) sales were primarily responsible. Favorable weather was a major contributing factor.

Cooperatives' total net business volume includes sales of crops, livestock and farm supplies. It excludes business done with other cooperatives. The total also includes receipts from services provided by cooperatives, such as trucking, storage, ginning and livestock breeding, as well as interest income and other miscellaneous income.

While net income for all cooperatives changed only slightly from 1995, the change was dramatic among some types of cooperatives. Net income for farm supply cooperatives - those that primarily obtain fertilizer, crop protectants, etc., for their

members - increased nearly 17 percent, from \$808.2 million in 1995 to \$942.7 million in 1996.

Marketing cooperatives - those that primarily sell, bargain and/or process crops, livestock and livestock products for their members - saw net income dip 5.6 percent. Sugar cooperatives' net income increased significantly due to decreased losses in 1996. Fruit and vegetable cooperatives' net income decreased from \$175.9 million in 1995 to \$58 million in 1996, a drop of 67 percent. Depressed prices of certain vegetables was the major reason for the lower net income in this sector.

Combined assets of \$42.6 billion were up \$2.3 billion, or nearly 6 percent. Total liabilities of \$25.2 billion increased more than 6 percent. Net worth of \$17.4 billion was up nearly 5 percent.

Fourteen percent of cooperatives, up from 11 percent in 1995, experienced a loss in 1996. Losses totaled \$122 million, up from \$99.5 million in 1995.

Table 3 — Farmer cooperative numbers and memberships, 1996 Cooperative type Cooperatives² Memberships Marketing: 42,561 Cotton³ 16 237 113,920 Dairy Fruit and vegetable 267 46,621 Grain and oilseed 1,066 783,427 287,146 Livestock and poultry 105 19 14,831 Rice 49 11,800 Sugar Other products⁴ 253 360,470 Total 2,012 1,660,776 Farm supply 1,403 1,794,671 Related-service Total 3,884 3,641,952

 Preliminary.
 Operations of many cooperatives are multiproduct and multifunctional. They are classified in most cases according to predominant commodity or function as indicated by busin

3 Cooperative cotton gins included with related-service

cooperatives.

4 Includes bean and pea (dry edible), nut, tobacco, wool, fish, and miscellaneous marketing cooperatives.

There were 3,884 U.S. farmer cooperatives in 1996, 122 fewer than in 1995. Two of every five cooperatives removed from USDA's list of U.S. farmer cooperatives were due to mergers/consolidations. About the same ratio was removed because of discontinued operations. Nearly one in five were sold or removed from the list for various other reasons. Twelve cooperatives were added to the list.

Memberships in farmer cooperatives totaled 3.6 million in 1996, down more than 3 percent. The number of memberships is larger than the number of farms because many farmers belong to and use the services of more than one cooperative.

Estimated number of full-time employees in cooperatives totaled 174,365, down from 175,399 in 1995.

Table 2 — Farmer cooperatives' net income, 1996 and 1995'

in million dollars			
Cooperative type To			
	1996	19951	
Marketing:			
Cotton	84.1	83.5	
Dairy	375.1	345.3	
Fruit and vegetable	58.0	175.9	
Grain and oilseed	377.1	384.9	
Livestock and poultry	228.9	231.9	
Rice	12.3	11.6	
Sugar	9.1	1.2	
Other products4	159.9	147.2	
Total	1,304.7	1,381.5	
Farm supply	942.7	808.2	
Related services	125.0	135.9	
Total	2,372.4	2,325.6	

Preliminary. Totals may not add due to rounding.

Includes bean and pea (dry edible), nut, tobacco, wool, fish,

and miscellaneous marketing cooperatives.

Includes trucking, cotton gins, storage, artificial insemination, rice driers, and other service cooperatives.

Organic standards pending

ational standards for organically produced food could be on the way by the end of this year. The National Organic Standards Board, established by the 1990 farm bill, has sent recommendations to Agriculture Secretary Dan Glickman, who can accept or change them before making an official proposal.

Currently, no uniform standards apply to the \$3.5 billion organic food industry. The American Farm Bureau Federation favors federal legislation to standardize certification and labeling of foods claimed to be produced as "natural" or "organic."

Kathleen Merrigan, a member of the standards board, said the current situation does little to stop "organic fraud," when food is termed organic although it may be produced with the aid of farm chemicals. "We want to get the bad apples out of the system," she said. The board's recommendations include provisions to certify producers, processors and packagers of food and fiber crops, such

as cotton, that are labeled organic. Certification will be allowed when:

- Crops are grown on farms where synthetic herbicides and pesticides haven't been used for at least three years.
- Livestock are fed organic feed free of growth promoters or plastic pellets for roughage. Animals must have access to the outdoors and sunlight and can't be kept in crowded conditions. Antibiotics and other medications can't be used as preventative measures.
- Processed foods such as canned goods do not contain additives or artificial colorings or flavors and at least 95 percent of the ingredients are

In addition, use of genetically modified products is banned or restricted. The Agriculture Department is currently reviewing the proposed guidelines, but a deadline for official action has not been set.

Court upholds AFBF's trademark judgment

federal appeals court has affirmed a judg ment of more than \$2.5 million in favor of the American Farm Bureau Federation (AFBF) against the Alabama Farmers Federation (AFF) and its affiliated ALFA Insurance Companies for federal trademark infringement and breach of a settlement

The ruling was issued July 25 by the United States Court of Appeals for the Eleventh Circuit, which includes Alabama and other states in the Southeast. The appeals court decision affirmed the lower court's ruling in all respects. The appellate decision, which was rendered without a written opinion, came only nine days after the case was argued before a threejudge panel in Montgomery, Ala., according to AFBF

General Counsel John J. Rademacher.

The total amount that AFF and ALFA will be required to pay AFBF could exceed \$2.75 million because AFBF is entitled to interest on the judgment and its attorneys' fees for the appeal.

According to Rademacher, the decision culminates "a 16-year effort by AFBF to stop the Alabama Farmers Federation and ALFA from continuing their unauthorized uses of the Farm Bureau trademark."

In 1981, the Alabama Farmers Federation then known as the Alabama Farm Bureau Federation - withdrew its affiliation with AFBF, but refused to relinquish the "Farm Bureau" name. After unsuccessful negotiations, AFBF sued its former Alabama affiliate in 1983 for federal trademark infringement.

New equations reduce chance of water pollution from dairy manure

ew, simple-to-use equations estimate how much manure a specific dairy herd produces. Developed by scientists with USDA's Agricultural Research Service (ARS), these equations will help agricultural engineers design waste storage systems to prevent pollution of streams and rivers with nitrogen and other nutrients in the manure.

More jurisdictions now monitor water quality and hold dairy farmers accountable for polluting waterways, so farmers are storing manure in pits and other holding facilities until it can be applied to fields or recycled as compost. The trouble is, a herd may produce more manure than the holding facilities are designed to contain - especially with high milk-producing cows that eat more.

The manure production research at ARS' Beltsville (Md.) Agricultural Research Center is part of a broad effort at the center to improve management of manure nutrients by studying their complete cycle-from the soil into the forage into the

cow and back to the soil. A scientist at ARS' U.S. Dairy Forage Research Center in Madison, Wis., collaborated on the equations. Traditional methods for designing manure-storage facilities use an average value for manure output, gleaned from many scientific observations. The new ARS equations make for a more accurate estimate by plugging in the farmer's own herd statistics. These include the animals' body weight, milk production and composition, feed makeup and number of lactating cows.

Many farmers use manure for fertilizer to reduce spending on commercial nitrogen fertilizer. But some nitrogen in fresh manure vaporizes before it can reach the field. The new equations estimate the manure's initial nitrogen content - encouraging design of storage systems that save more of the nitrogen and thus help farmers save more on fertilizer outlays. The new equations also can give policy makers a more accurate reading on nitrogen escaping into the atmosphere from dairy farms.

USDA solicits grant proposals to improve rural access to information

he U.S. Department of Agricuture is soliciting grant proposals for projects that will improve rural Americans' access to and use of information technology. Agriculture Secretary Dan Glickman announced the request for proposals that will provide \$2.1 million in grants from the Fund for Rural

The most critical part of economic growth in our increasingly science- and technology-based economy is access to information and the knowledge to use it," Glickman said. "Improving access and use are the core of the Clinton administration's initiative to connect rural America to the informa-

People who live in rural areas should have access to the same technology as those who live in more urban areas. These grants will help us build a rural information infrastructure to deliver more opportunities for economic growth to rural America," Glickman added.

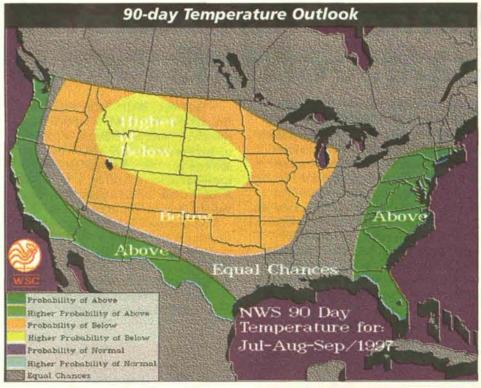
The research, education and Extension grants are part of USDA's Rural Information Infrastructure Program, established by Glickman through the Fund for Rural America.

The program will fund projects in three areas: Rural telecommunications technologies and systems projects that examine the special needs, limitations, applicability, and use of existing and cutting-edge telecommunications technologies and systems in rural America

- Information infrastructure projects to examine ways to enhance information technologies to improve access to research, education and Extension materials
- Human capacity-building projects to examine ways to expand everyday use of telecommunications for citizens of rural America through the creation of new and more user-triendly applications of the information and technology. The formal "Request for Proposals" is published in the July 31 Federal Register. Grant proposals may be submitted by Federal research agencies, national laboratories, colleges or universities or their associated research foundations, or private research organizations.

The Fund for Rural America, established under Section 793 of the Federal Agriculture Improvement and Reform Act of 1996 (FAIR), provides \$100 million annually for the next three years for research, education and Extension or rural development. Secretary Glickman has designated part of this for competitive research grants through the Rural Information Infrastructure Program. Information on the Fund for Rural America and the Rural Information Infrastructure Program is available from the Fund for Rural America Website at http://www.reeusda. gov/fra or from Cathy Bridwell, USDA Cooperative State Research, Education, and Extension Service, at (202) 720-6084#





Weather Outlook

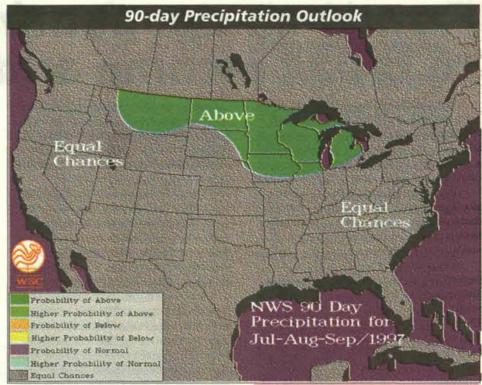
by Dr. Jeff Andresen, Agricultural Meteorologist, Dept. of Geography, Michigan State University



very active weather pattern continued across much of Michigan during early July, with fre-

quent reports of severe weather and associated crop and property damage. For the most part, however, the most important weather factor at this point in the growing season has become the increasing lack of moisture, with below-normal precipitation totals across many areas of the state since late May or early June. While moisture stress symptoms have been slow to develop due to cooler-than-normal temperatures earlier in the season and a full soil moisture profile entering the growing season, recent episodes of hot weather and a continuing lack of precipitation have led to at least initial symptoms of water stress and a general slowing of phenological development. Michigan is not alone in the current dry spell, with drier-than-normal conditions currently reported across much of the mid-Atlantic and New England regions, as well as scattered sections of the Midwest.

In mid-July, a full-blown El Nino event was in progress across equatorial sections of the Pacific Ocean. In at least two of the four regions of the Pacif-



ic routinely monitored for changes in the El Nino Southern Oscillation (ENSO), current climatic indicies are at their lowest level since the major El Nino event of 1982/1983. Climatic anomalies associated with El Nino conditions have developed in several areas of the world, including drier-than-normal conditions in Indonesia and wetter-than-normal off-season weather in crop areas of southern Brazil and northern Argentina. Not surprisingly, latest long lead guidance from NOAA's Climate Prediction Center is almost entirely based on the occurrence of a strong El Nino event during the next six to 12 months. The outlook calls for an increased chance of above-normal precipitation during August, with near equal odds of above-, near-, and below-normal temperatures. Further ahead, the outlook calls for increased odds of cooler and wetter-thannormal weather during the late summer and fall seasons, with milder and drier-than-normal conditions forecast for Michigan and much of the Upper Midwest during the upcoming 1997/1998 winter.

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	Obs.	Dev. from	Actual	Normal	Actual	Normal
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Houghton	64.5	1.6	739	855	1.82	3.54
Marquette	65.4	2.4	775	855	2.02	3.54
Sault Ste. Marie	63.6	2.0	684	686	2.00	3.20
Lake City	66.1	-0.2	849	978	3.63	3.12
Pellston	65.9	2.0	808	978	2.85	3.12
Alpena	66.9	1.9	821	939	2.90	2.92
Houghton Lake	66.9	0.7	845	939	1.67	2.92
Muskegon	68.4	-0.1	944	1102	2.31	2.57
Vestaburg	69.0	-1.0	989	1164	3.24	3.25
Bad Axe	68.8	0.5	907	1168	3.15	3.08
Saginaw	71.7	1.7	1116	1168	3.78	3.08
Grand Rapids	70.9	1.0	1061	1299	3.53	3.25
South Bend	72.4	1.9	1161	1299	2.63	3.25
Coldwater	71.1	0.3	1069	1282	1.33	3.35
Lansing	69.8	0.5	985	1282	2.27	3.35
Detroit	72.6	2.4	1143	1267	3.64	3.25
Flint	70.1	1.2	999	1267	2.46	3.25
Toledo	72.5	1.0	1153	1267	2.99	3.25
* Growing degree day accumulations are calculated with the						
86/50 "corn" met						

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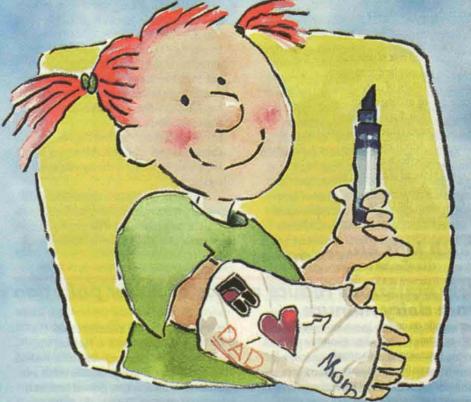
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NorthStar-Select Sires to manage Michigan DHIA

wo of Michigan's oldest agricultural organizations recently signed a short-term agreement to share management services. Michigan Dairy Herd Improvement Association (DHIA) has hired the management services of NorthStar-Select Sires, effective August 1. This change comes at the heels of retirement of long-time Michigan DHIA General Manager Al Thelen.

The search to find new leadership for the association began last fall as the Michigan DHIA board of directors contacted various organizations. Upon careful review of three such organizations, the board chose to work with NorthStar-Select Sires.

A seven-person task force, consisting of board members from Michigan DHIA and NorthStar-Select Sires was appointed to develop an agreement that would meet the future needs of dairymen. On May 22, 1997, a letter of intent was signed in which Michigan DHIA would contract the management services of NorthStar-Select Sires.

"This agreement is not a merger between the two organizations. It is, however, a strategic alliance which the Michigan DHIA board of directors feels is in the best interest of dairymen," said Bob Cnossen, Michigan DHIA president.

Three years ago, Michigan DHIA completed a Strategic Planning Process, which helped identify the organization's strengths, weaknesses and opportunities. Three key areas that were identified as having an impact on the future of Michigan DHIA included the association's origin, how Michigan DHIA is currently positioned, and exploring market needs and opportunities to remain successful in the future.

Cnossen said, "The board used the findings of the strategic planning process to help us decide which organization would best complement Michigan DHIA. We believe NorthStar-Select Sires is a great fit for our

association as they can provide the marketing leadership we are looking for to move us into the future."

The agreement is designed for a six- to 24-month period, during which NorthStar-Select Sires will maintain current operations of Michigan DHIA while evaluating future customer needs. To focus on potential marketing opportunities and facilitate efficiency, a steering committee consisting of board members from NorthStar-Select Sires and Michigan DHIA has been designed.

"NorthStar-Select Sires and Michigan DHIA are comprised of many of the same people, therefore this agreement to share management services is a plan that will benefit everyone. We believe this arrangement is a good decision because both organizations are interested in advancing the economic well-being of all dairy producers. What better way to do that than to have two of the most vital services available to dairy producers working closely together?" said Ken Gasper, North-Star-Select Sires president.

NorthStar-Select Sires is an A.I. cooperative with over 50 years of experience. Originally founded to serve the genetic improvement needs of dairy and beef producers through the use of A.I., NorthStar-Select Sires now provides sales and service for direct transfer embryos and is the exclusive distributor of Uddermint®, HoofTect™, Woolover™ and Bovine Beacon™. Headquartered in Lansing, NorthStar serves producers in Michigan, Indiana and northern Wisconsin and is one of 10 members of the nationally recognized Select Sires federation.

For more information, contact: Kelly Bristle Ekovich, Director Member Relations and Promotions. NorthStar-Select Sires, P.O. Box 23157, Lansing, Michigan 48909-3157; telephone (800) 631-3510; fax (517) 351-5610; e-mail: northstarselectsires@ibm.net

MSU's Dairy Expo crowns supreme champion



Gold Medal Breeders of Swartz Creek proudly display the supreme champion of the first annual Michigan Dairy Expo. The prize-winning Holstein C Verlin Broker Nelda competed against the winners of five other breeds on Saturday, July 26, at Michigan State University's Pavilion for Agriculture and Livestock Education. More than 500 of Michigan's top dairy animals and 60 commercial exhibitors from 10 states participated in the first ever Michigan Dairy Expo. Besides the breed shows, 4-H contestants competed in judging, quiz bowl and showmanship contests.

IBP reports loss, hints at vertical integration

BP Inc. reported its earnings for the last quarter fell 61 percent over the previous quarter, with company officials blaming tight hog supplies for bumping their costs of doing business. IBP recently had to cancel some shifts and layoff workers at some of their hog processing facilities because they could not secure enough animals to run at full capacity.

Last quarter, IBP earned \$33.9 million, down from \$87 million the previous three months. Sales for the last quarter were up 6 percent to \$3.45 billion for the world's largest processor of fresh pork and beef.

The answer to the hog shortage is for IBP to align itself "closer" to pork production, according to

lease financing.

IBP Chairman Robert Peterson. What does that mean? It means IBP likely will begin raising more of its own hogs so the company can have full control over the quantity of animals available to it as well as control over the quality of animals.

"I think it's the trend that's going to happen," said market analyst George Dahlman. "IBP's got the financial stability and capability to do it. It's the only way, I think, the processors are going to be able to control quantity and quality of supply.

Smithfield Foods Inc. of Virginia is one of the other major pork processors involved in production of its own hogs.

Susceptibility to infection varies during the dry period

ammary glands are highly susceptible to new infections during the early dry period and near calving. Increased incidence of infection during the dry period results in an elevated number of infected quarters at calving and is responsible for the high level of intramammary infections during lactation in many herds. Without dry cow therapy, approximately 8 to 12 percent of quarters in herds with average infection levels will become infected during the dry period. Such infections cause inflammation and affect mammary cell differentiation prior to calving, resulting in decreased milk production during lactation.

The elevated rate of new infections during the early dry period may be due to one or several of the following: 1) flushing of colonized bacteria in the teat canal during milking is terminated; 2) udder sanitation and teat dipping are discontinued; 3) the teat canal becomes dilated and shortened due to milk cessation, which allows organisms to enter the udder; 4) phagocytes are involved in removing milk components instead of bacteria; and 5) reduced activity of lymphocytes.

Conversely, the rate of new infections during the mid-dry period is very low. Mammary gland

resistance during this time may be attributed to: 1) formation of a keratin plug in the teat canal that prevents mastitis pathogens from entering the udder; and 2) antibacterial factors such as lactoferrin and immunoglobulin are present in the udder and provide protection against invading pathogens.

Susceptibility to infection again increases near calving. This may be due to: 1) increased fluid volume and dilation of the teat canal; 2) decreased lactoferrin concentration; 3) reduced leukocyte numbers and phagocytic ability; and 4) utilization of milk components for bacterial growth.

Although not effective against all species of bacteria, dry cow treatment with antibiotics is the most effective method of reducing the rate of new intramammary infections during the early dry period. However, antibiotic therapy at drying off is not effective in preventing infections at calving. Therefore, clean, dry environmental conditions are necessary to reduce infections at this time.

The National Mastitis Council is a non-profit organization devoted to reducing mastitis and enhancing milk quality. The NMC promotes research and provides information to the dairy industry relative to udder health, milking management and milk quality.

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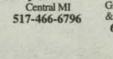
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Watch kids around grain handling equipment

t doesn't occur often, but once in a while a Michgan youth drowns in wheat that is being unloaded from a combine, a gravity-unloading wagon or a truck.

"Under no circumstances should children be allowed to ride on or even play near a load of grain at any time," says Howard Doss, Michigan State University Extension agricultural safety leader.

"When grain flows from a large gravity wagon, it can pull a person down like quicksand. An adult may become helpless in a few seconds and completely covered in 10 or 20 seconds and then suffocate," Doss says. "Children will be overcome sooner. Most victims of grain wagon drowning are 16 years old or younger."

He says the best rule is to allow no riders on any farm equipment. Before unloading grain, the operator should make sure that no one will be in the immediate area as the grain is being handled. He also advises combine operators to look inside empty grain wagons or trucks before augering grain from the combine just to make sure a curious child has not crawled inside.

"People not required for the operation should not be allowed in the area, especially children," Doss says. "If children are working in the area, make sure the task is appropriate for their age and they are properly supervised - do not allow children to work alone."

When grain trucks are being unloaded - they could become trapped in the grain or crushed by the grain box as it is lowered.

Make sure that auger grain intakes are properly guarded. Augers are considered one of the more hazardous types of farm equipment.

"The injuries most often involve the loss of a foot or hand when operators attempt to remove debris or unplug the auger flighting entrance," Doss says. "If a grain plug occurs, turn off all power and use a rod or stick to remove the plug. Never use your hand or foot to push material into or out of a plugged auger."

For problems in the combine grain tank, disengage the auger and turn the engine off before working on the problem with a stick, rod or small shovel.

"Never use your hands or feet to remove trash or to push the last bit of grain into the unloading auger," Doss says. "You can get caught in the auger and pulled in before you can react. Stop the engine, take the key out of the ignition and use a broom."

Doss says the best rule is not to permit anyone around grain handling equipment unless they have a specific task and know how to handle it, know what needs to be done if a problem develops and are capa-



Dingell critical of global climate change treaty action

s the United States being hasty in embracing the Global Climate Change Treaty? Rep. John Dingell (D-Mich.) worries that the Clinton administration is signing on to the deal before it studies the immense impact the treaty could have on the nation's economy and environment.

"I am concerned there are people within the Clinton administration who are so eager to close any deal on climate change that they would accept a bad one," Dingell told a group of state Farm Bureau presidents during the annual Council of Presidents' meeting in Washington, D.C. "That would be a serious mistake. I would suggest approaching these negotiations the way I would approach a high-stakes poker game. Do it with an open mind and a closed pocketbook."

The treaty would impose strict emissions standards on developed nations, such as the United States, but not require developing nations to follow similar regulations. The emissions standards, according to Dingell, would place tremendous costs on American industry. The veteran legislator says the treaty will compromise U.S. competitiveness in the world market. "If we subject ourselves to restrictions that our competitors don't have to meet, what will that gain for American industry and what will that mean to American agriculture's ability to compete in a

global marketplace?" Dingell said.

Dingell is not convinced that sufficient evidence exists for the United States to commit itself - and its farm and business communities to an agreement without knowing the full impact

"The State Department has concluded that the current science proves that global warming is dangerous and required immediate emissions reductions," said Dingell. "But we don't know to any degree of precision how big the problem is, what the problem is, how fast it's moving and what we should do about it.'

Dingell asked the administration to collect more thorough evidence proving that a problem exists - and the proposed solutions will work before rushing forward. "Has the administration bothered to do its homework?" Dingell asked. "It's obvious that the administration did not study the (treaty's impact) before the positions of the United States were cast in concrete.

"I am not opposed to the U.S. participating in international negotiations on global climate change. But I am concerned that we have plowed forward without proper information at a time when we need to make an intelligent judgment about the impact on the U.S. environmentally and economically."

Rumph receives MCA/Merck Scholarship

n April 4, 1997, the Michigan Cattlemen's Association (MCA) and Merck AgVet presented MSU animal science student Janice Rumph with a \$1,000 scholarship as part of Merck's "Ivomec: Generations of Excellence" program. This scholarship is just one of the many ways in which MCA is working to achieve the mission of the Generations of Excellence program, which is "to help prepare the next generation to become future [cattle] industry leaders."

Rumph has recently completed her third year in the animal science department at Michigan State University. The daughter of Gerald and Geraldine of Clarkston, she grew up raising cattle, hogs and rabbits for the Oakland County 4-H Fair and continues to be involved with various Oakland County Fair activities. Since entering Michigan State, she has been active in many clubs and organizations. She is a member of Block and Bridle, Alpha Zeta and the MSU Department of Animal Science Curriculum Committee, and competed on the 1996 Michigan State University Intercollegiate Livestock Judging Team. Since July 1996, she has also served as managing editor of The Michigan Cattleman, the official publication of MCA and the state's only all-beef magazine. After receiving her bachelor of science

next May, she hopes to work toward a master's degree in animal breeding and genetics.

Purchasing Ivomec brand products not only aids beef producers in their efforts to optimize herd health, it also strengthens the future of the cattle industry in Michigan by supporting MCA's programs. For every Ivomec product purchased in Michigan through the end of 1997, Merck will continue to donate a portion of the proceeds to MCA for use in scholarships, leadership and educational programs, mentoring initiatives, and any other activities that support the mission of the Generations of Excellence program. To date, Merck has donated more than \$4,000 to MCA.

Established in 1960, the Michigan Cattle Feeders Association was established to form an organization where Michigan's cattlemen could speak with a unified voice. Due to the growth of the organization, its name changed in 1976 to the Michigan Cattlemen's Association to provide not only the feedlot segment, but all of Michigan's cattle industry with a way to work together to achieve their common goals. For more information on MCA or any of its activities, contact the MCA office at (517) 336-6780 or write P.O. Box 24041, Lansing, MI 48909-4041.

Drought pushing North Korea to critical stage

severe drought on top of already acute food shortages in North Korea is threatening to make the situation in that country even more critical. The food shortage and threatened harvest is prompting international aid workers to call for more food donations to reach the United Nations estimate of 800,000 tons of wheat, rice and other foodstuffs needed to sustain the North Koreans through the October harvest.

We are moving into a very, very serious situation if we don't help them now," said Kathi

Zellweger, of the Roman Catholic aid agency Caritas. Zellweger said more than a third of the nation's children under age six are suffering from malnourishment.

The hardest hit drought areas are in the country's central, east and northeast regions. Lakes, rivers and reservoirs in the area are rapidly drying up and rice paddies are cracking from high temperatures and lack of precipitation. July is usually a month replete with rain that benefits North Korean crops when they need it the most.



MCA President Gary Voogt and Merck AgVet Sales Representative Glenn Elliott present MSU Animal Science student Janice Rumph with Merck's Generation of Excellence scholarship.

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Potato blight fungicide receives registration

riffin Corporation of Valdosta, Ga., announced that the Michigan Department of Agriculture granted a Special Local Need (SLN) registration (EPA SLN No. MI-970001) on June 26, 1997, for Super Tin®. The SLN reduced the pre-harvest interval (PHI) for Super Tin 80WP from 21 days to 7 days.

Super Tin 80WP is a fungicide registered for use on potatoes for control of late and early blight. University trials have shown that Super Tin applied alone or in combination with an EBDC fungicide is one of the most cost-effective means of controlling these diseases. In recent years, the A-2 strain of late blight (metalaxyl resistant), has become widespread and has been difficult to control with many of the fungicides currently available. Super Tin (triphenyltin hydroxide) effectively helps prevent infection by late blight spores (all strains) and stops disease by interfering with the fungus' ability to sporulate.

By allowing the use of Super Tin 80WP closer to harvest, growers have an added option for managing the late blight disease late in the season. Lateseason use helps prevent sporulation of the late blight fungus, which can infect tubers and reduce the storage life of potatoes. According to Dr. Bond McInnes, director of field operations at Griffin Corporation, "Super Tin 80WP is an excellent fungicide

for full-season use. Having the flexibility to use the product close to harvest gives a grower an effective way to reduce late blight infection at harvest and improve tuber storage quality. Of particular benefit is the ability to use Super Tin as a tank mix partner with vine desiccation products such as Diquat®. Trials have proven that a tank mix of Diquat plus Super Tin plus a spray adjuvant provides improved spore kill. Super Tin is an affordable and effective fungicide and growers should incorporate it as part of an integrated disease management program."

The SLN label allows Super Tin use up to and including the first vine desiccation spray. Spray adjuvants may be used with Super Tin during the

ccording to the latest research obtained by

For four years straight, the NPPB has conduct-

The National Potato Promotion Board

(NPPB), putting potato ads on shopping carts

should put potatoes in more shopping carts.

ed independent research on cart ads that has

Shopping cart ads prove

effective for potato industry

first vine desiccation spray. Spray adjuvants should not be used with Super Tin in pre-desiccation sprays unless prior experience has proven the mix non-phytotoxic to the crop.

Support from the Michigan Potato Industry Commission and Michigan State University helped demonstrate the need for new late blight control

For more information about the expanded uses of Super Tin 80WP for potato disease control, contact Bob VanArkel of Griffin Corporation (517) 626-9902 or Griffin's Technical Service Team at (800) 237-1854.

Michigan potato producers approve assessment increase

ichigan potato producers have approved an increase in the grower assessment for the Michigan Potato Industry Commission, according to Dan Wyant, director of the Michigan Department of Agriculture (MDA).

Michigan potato producers approved the change, which will increase the grower assessment from the rate of 1.5 cents per hundred pounds of potatoes to the rate of 3.5 cents per hundred pounds of potatoes (which would be implemented as a 1-cent increase for each of the next two years).

The referendum was held from June 9 through June 20, 1997.

As indicated by the June 20, 1997, postmarks, 58 ballots were cast. Five ballots were declared invalid because of incomplete date and one ballot was received past the due date.

Of the remaining 52 ballots, on the question whether to increase the grower assessment as described above, 28 growers voted yes (54 percent) representing 4,605,411.15 hundredweight of potatoes (82 percent) and 24 growers voted no (46 percent) representing 1,004,768.00

The law requires that more than 50 percent of the voting producers, representing over 50 percent of the volume of Michigan potatoes sold by those voting, must approve the referendum

Additional information about the referendum may be obtained by contacting MDA's Marketing and Communications Division at (517)373-1104.

shown sales increases each year for fresh, frozen, shelf stable and chips. According to Jack Dempster, of ActMedia, the advertising research firm that places and monitors the ads, 64 percent of U.S. adults are exposed to the carts with ads at least once in the average four-week period. The reason for this high level of reach is because ActMedia is concentrated in 8,000 of some of the most important stores in the country. These 8,000 cart stores only represent a little over 6 percent of the 128,000 grocery stores in the United States. However, grocery sales volume is highly concentrated into the largest stores, with the ActMedia stores accounting for 42 ower outages can happen any time of the

percent of the total ACV (All Commodity Volume) of the U.S. grocery industry.

Taking those figures into account, the most recent cart research once again demonstrates that this advertising medium can sell potatoes. Based on a 30-store test in the Detroit area, sales of fresh potatoes increased 9.6 percent in the first month the cart program ran.

This positive response to the NPPB's cart ads has led to the decision to increase the run of the ads from two to four months. Larry Noedel, president of Noedel Marketing Research, and an independent consultant for the NPPB, says, "When you look at ActMedia's reach and the research that indicates a 20-40 percent residual effect in the period following the cart ads, I think we can conclude that the potato market is very responsive to point-of-sale reminder ads and it's an area in which the potato industry should continue to be visible."



Earlier this summer, potato growers voted by 54 percent to 46 percent to increase their production assessment by 2 cents over the next two years.

Michigan potato acreage down 6 percent

ichigan's potato farmers planted 49,000 acres in 1997, down 6 percent from a year ago, according to the Federal/State Michigan Agricultural Statistics Service. Harvested acreage is forecast at 47,500, up 3 percent from the flood damaged 1996 crop. Potato planting was completed ahead of schedule, but emergence was delayed by a record cool month of May. Growing conditions were favorable in June. Yield and production for the 1997 Michigan potato crop will be released Nov. 10.

Seventy-two percent of the Michigan potato acreage are white potatoes, mainly used for potato chips. Russet potatoes make up 25 percent and reds comprise the remaining 3 percent. Seed potato acreage entered for certification in 1997 is 2,500 acres compared with 2,434 acres certified last year. The Michigan Crop Improvement Association supplied information on acreage certification.

Potato farmers across the United States have planted an estimated 1.37 million acres of potatoes in all four 1997 seasons, down 6 percent from last year and 2 percent below 1995. Area for harvest is forecast at 1.35 million acres, down 5 percent from a year ago and 2 percent below 1995. Area planted to fall potatoes in 1997 is estimated at 1.2 million acres, down 6 percent from last year's record high and 2 percent below 1995. Harvest is expected from 1.18 million acres, 5 percent less than a year ago and 2 percent under 1995. Planting of fall potatoes started later than normal in most areas of the United States. Progress east of the Rocky Mountains was slowed by floods and cool, wet weather. Planting finished on time, however, as fields dried in late May and early June.

China's WTO entry hits wall

here has been little progress on China's bid to join the World Trade Organization, but there is still chance that an agreement might be reached this year.

A New York Times report quoted anonymous U.S. officials as stating that it was unlikely an agreement on China's accession into the WTO would be reached this year. Speaking at a Monday briefing, White House spokesman Mike McCurry denied the White House had concluded China would not be ready for membership in time for Chinese President Jiang Zemin's planned meeting with President Clinton in Washington this October.

McCurry said the administration would con-

tinue negotiations with China on the issue. He also said the administration expects Beijing to make a new proposal in September.

"We are determined to continue our good faith negotiations with the Chinese to achieve commercially viable terms that would allow China to comply with international norms accepted by all WTO members and provide for improved market access by U.S. companies to Chinese markets," McCurry said.

U.S. Trade Representative Charlene Barshefsky, the chief U.S. trade negotiator, was quoted by the New York Times as describing the Chinese negotiating offers as being "tepid."

Food safety: What to do during a power outage

year - during winter ice storms and as a result of violent weather in spring and summer when tornadoes and thunderstorms threaten transformers and power lines. We saw a recent example when a line of strong storms cut power to hundreds of thousands of Michigan homes.

During and after outages, pay attention to the drinkability of tap water, the safety of canned food and food that may have been sitting near a window or doorway, and the food in refrigerators or freezers.

Keep the cold inside the refrigerator by opening the refrigerator and freezer doors only when it is absolutely necessary. A full, freestanding freezer will stay at freezing temperatures about two days; a half-full freezer about one day. If your freezer is not full, group packages together so they form an "igloo" protecting each other. And if you think power will be out several days, try to find some dry ice. Twenty-five pounds should hold a 10-cubic-foot full freezer three to four days.

The following foods could keep at room temperature (above 40°F) a few days.:

- Monitor items such as butter, margarine, fresh fruit and vegetables, dried fruits and coconut, open jars of salad dressing, peanut butter, jelly, relish, mustard, ketchup, olives, hard and processed cheese, fruit juices, fresh herbs and spices, flour and nuts, fruit pies, bread, rolls, cakes and muffins.
- Discard the following foods if kept over two hours at above 40°F: raw or cooked meat, poultry or seafood; yogurt; soft cheese; pasta; pasta salads; custard, chiffon or cheese pies; fresh eggs; egg substitutes; meat-topped pizza; lunch meats; casseroles; soups or stews; mayonnaise and tartar sauce; refrigerator and cookie dough; and cream-filled pastries.

Anyone with questions about food safety should call their local Cooperative Extension Service office, the U.S. Department of Agriculture's Meat and Poultry Hotline (1-800-535-4555) or the Food Division at the Michigan Department of Agriculture (517-373-1060).

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Marketbasket prices increased in second quarter of year

mericans had to delve a little deeper into their wallets to pay for food during the second quarter of 1997, according to the American Farm Bureau Federation's Marketbasket Survey. The average price of selected grocery items jumped 36 cents from the year's first quarter.

The 16 selected items on the survey cost \$32.64, up from the first quarter's \$32.28 figure. It marks the second consecutive increase in the average price since the 52-cent drop during last year's fourth quarter.

This quarter's average follows a trend that has occurred since the survey began in 1989. In all but one year, the average price of the survey items increased during the second quarter.

Terry Francl, a senior economist with the American Farm Bureau Federation, believes the higher prices reflect the market's anticipation of the summer cooking season. The survey was conducted just prior to the Memorial Day weekend, the busiest grilling-out weekend of the year.

"The higher prices could be the result of the anticipated demand," said Francl. "But that anticipation was not fulfilled by virtue of the lousy weather throughout the country. Consequently, the great grilling-out weekend of Memorial Day turned out to be less than spectacular." Chilly temperatures during Memorial Day weekend frustrated many would-be outdoor chefs.

A one-pound package of pork chops and a one-pound sirloin tip roast represented the largest increase on the survey. The price of pork chops increased 21 cents to \$3.31 per pound. A pound of sirloin cost \$2.87, a 17-cent hike. "If you did the numbers now, you may get a lower number, especially on the beef," said Francl, who said the increased prices could reflect supermarkets establishing prices for holiday demand.

"These numbers surprise me a little."

Of the 16 items on the survey, nine increased in price. A 10-ounce box of cereal cost \$2.70, a 12-cent increase. Other increases included apples, \$1 per pound, up 9 cents; potatoes, \$1.46 per 5-pound bag, up 5 cents; flour, \$1.43 per 5-pound bag, up 5 cents; cheddar cheese, \$3.15 per pound, up 4 cents; vegetable oil, \$2.19 per 32-ounce jar, up 3 cents; and corn oil, \$2.41 per 32-ounce jar, up 2 cents.

A pound of whole fryers dropped 10 cents to 94 cents, the largest decline in the survey. Other decreases included eggs, 96 cents per dozen, down 8 cents; mayonnaise, \$2.61 per 32ounce jar, down 8 cents; white bread, \$1.13 per 20-ounce loaf, down 7 cents; whole milk, \$2.46 per gallon, down 5 cents; and ground chuck, \$1.65 per pound, down 5 cents.

A pound of bacon remained unchanged at

AFBF, the nation's largest general farm organization, with more than 4.7 million members. conducts its informal quarterly Marketbasket Survey to help track retail food prices to ensure they are in line with prices received by the nation's farmers and ranchers. While most grocery prices have increased during the past year, the farmers' and ranchers' share remains fairly steady. The farm value of each food dollar spent in the United States is approximately 22 cents. Labor, at 37 cents, is the largest component of the consumers' food dollar.

Volunteer shoppers from 34 states participated in this latest survey in mid-May. The average total price of this quarter is only \$4.14 higher than the \$28.50 average price of the inaugural survey conducted in 1989. That averages into just a 49-cent increase in prices per year over an eight-and-one-half-year span.

High humidity and heat, too much sun, could be deadly, now or later

rolonged strenuous or even moderate activity on sun-scorched days of high temperatures and high humidity could be a double whammy for individuals who do not take the proper self-protection precautions.

"Unless a person paces him/herself and drinks plenty of water, he or she could be a candidate for heat exhaustion or heatstroke," says Howard Doss, Michigan State University Extension agricultural safety leader. "Unfortunately, most people don't think about that until they are on the verge of becoming ill."

He says the second mistake people make in hot weather is wearing as little clothing as possible, which in itself may contribute to heat exhaustion or heatstroke while exposing the skin to the damaging effects of the sun's ultraviolet rays, which can cause skin cancer.

"Most people give little consideration to a sunburn, not realizing that the effect of the sun on a person's skin is cumulative and that, as a person ages, the chance of developing skin cancer increases," Doss says. "Skin cancer constitutes the most common form of cancer in the United States, where one-third of the melanomas in the world - about 450,000 new cases each year - occur."

He adds that males are more susceptible to skin cancer than females and that all people, regardless of skin color, are likely to suffer some degree of skin damage when overexposed to the sun without

Doss says that proper clothing in hot weather can substantially reduce the potential for heat exhaustion or heatstroke and help prevent sun-

For surviving excessively hot weather, his recommendations are:

Dress for hot weather in lightweight, white or light-colored clothing because it tends to reflect heat and sunlight and helps you maintain body

temperature. Cotton is cooler than polyester. A broad-brimmed hat, long-sleeved shirt and bandanna to cover the neck and liberal amounts of sunscreen (SPF of 15 or more) on exposed skin help reduce damage from the sun's ultraviolet rays, which are most intensive between 11 a.m. and 2 p.m.

Heed the early warnings of heat stress such as headache, heavy perspiration, high pulse rate and shallow breathing. If these symptoms occur, immediately take a break in a cooler place. If the symptoms persist or worsen within minutes to lethargy, disorientation or delirium, the onset of heatstroke may be occurring. Heatstroke can kill, so anyone showing these symptoms should receive immediate medical attention.

■ Heat exhaustion — characterized by dizziness, weakness or fatigue - can occur following several days of sustained exposure to hot temperatures. A common treatment for heat exhaustion is replacing fluids and electrolytes. Some victims may require hospitalization.

Drink plenty of water and consume plenty of potassium-rich foods, such as fruit and fruit juices. Avoid consuming caffeinated beverages and alcohol on hot days - they will contribute to dehydration, which increases the risk of heatrelated illness.

Eat lots of carbohydrates and avoid fats and proteins. Fats tend to produce more body heat than do carbohydrates. Proteins increase water loss.

Doss says a recent government medical report on heatstroke warned that some drugs such as tranquilizers, antidepressants, antihistamines and some over-the-counter sleeping pills - may increase the risk of heat-related illness by interfering with the body's physical heat regulatory system. Your physician or pharmacist should be able to advise you about medications you are taking.

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Lietzau appointed to Administrative Council for North Central Region Sustainable Agriculture Research and Education Program

hristine E. Lietzau, agriculture development liaison for food, farms and families with the Michigan Department of Agriculture's (MDA) Office of Agriculture Development, has just been appointed to the Administrative Council for the North Central Region Sustainable Agriculture Research and Education (SARE) Program, according to MDA Director Dan Wyant.

"We're very excited that Christine has been appointed to a prestigious national council that defines policy and recommends funding for programs that promote sustainable agriculture in our country," said Wyant. "Christine brings to the council many years of experience working with farmers, soil conservation districts, environmental organizations and organic groups. She also has a very close working relationship with Michigan State University, the United States Department of Agriculture (USDA) Natural Resource Conservation Service and the Michigan Farm Bureau."

Lietzau has been with MDA since 1980 and until recently served 12 years as division director of the Farmland Services/Environmental Division. She has a bachelor of science degree in physical geography with honors from Michigan State University. Her enthusiasm for sustainable agriculture is most evident through her close association as a charter member of the Steering Committee of the Michigan Integrated Food and Farming Systems Project (MIFFS), part of the W.K. Kellogg Foundation's Integrated Farming Systems Initiative.

"This appointment will provide Christine and the Michigan Department of Agriculture an opportunity to interact with a broad cross section of sustainable agriculture leaders on the Administrative Council and will help Michigan learn about initiatives in other states and regions," said Meg Moynihan, MIFFS coordinator. "MDA's commitment to sustainability through their support of Christine is an important and historic direction." "We wish to congratulate Christine on this national appointment and Michigan Farm Bureau looks forward to continuing to work with her on sustainable agriculture research and education in Michigan," said Jack Laurie, president of Michigan Farm Bureau. "There is a need for increased research for sustainable agriculture, integrated pest management (IPM), water quality, reduced tillage and biotechnology, but this should be accomplished through increased funding and not by transferring funds from existing production research programs."

The Administrative Council is composed of 25 members represented by one member of each of the following organizations in the 12-state North Central Region: non-profit organizations; agribusiness; state agencies; U.S. Geological Survey; USDA Research Services; Natural Resources Conservation Services; and the Cooperative State Research, Education and Extension Service.

Lietzau will represent a state agency. Terms on the Administrative Council are for four years and the council generally meets in April, June and November.

For more information, contact Christine E. Lietzau. Office



Christine E. Lietzau

of Agriculture Development, Michigan Department of Agriculture, at (517) 241-2178, or Steven S. Waller, regional coordinator, North Central Region Sustainable Agriculture Research and Education Program, University of Nebraska, Lincoln, Neb., at (402) 472-7081.

Farm Bureau supporting clean-air research proposal

Flawed air standards would choke ag

espite growing public outcry and mounting congressional pressure, the Environmental Protection Agency's (EPA) new air quality standards have taken effect. That could change quickly, however, if legislators have their way, according to Michigan Farm Bureau's Al Almy. He says the controversial standards are the target of legislation introduced by several congressmen, including Rep. Fred Upton (R-Mich.)

"This bill would put the issue on a fast-track process by requiring a five-year study before any final rules are imposed by the EPA," Almy said. "The study would prove conclusively whether or not current ozone and particulate matter standards are injurious to public health and what some of the alternatives may be to address this situation, if it is found that the public health is at risk."

The legislation, if approved, would also provide \$75 million in funding for new research into fine particulate matter. The Environmental Protection Agency's new standards apply primarily to the emissions of ozone and particulate matter. Almy predicts the impact of these regulations upon agriculture, and the economy as a whole, would be detrimental.

"It is virtually impossible, in the case of particulate matter, to conduct farming operations without stirring up some dust," he said. "We do not believe this issue is of the magnitude to warrant the added cost that agriculture will experience through new emission standards; equipment costs and energy costs will far outweigh any benefits that the public might realize."

Farmers are concerned because EPA lacks actual measurements of what agriculture emits in the form of fine particulates. One estimate is that 34.3 percent of primary fine particulate matter can be attributed to agriculture and forestry. Another suggests an amount as low as 5 percent, not including diesel emissions, fertilizer and chemical sources, unpaved roads, organic and ammonia sources, and many others.

Almy says the proposed study should give a basis for determining the economic impact of such standards on the public sector before regulations are implemented. "Without the evidence to show that a problem does exist, it would seem nearly impossible to determine what the true impact of any costs may be," Almy concluded.

e detrinental.

olorado State University researcher Louis
Bjostad has found an all-natural way to battle
the Western corn rootworm, which costs \$1 billion
in crop losses per year. The ingredients found in
Bjostad's cure can be found in your grocery store.

Bjostad's solution is a mixture of baker's yeast and a nutrient mixture of sodium bicarbonate (the main ingredient in baking soda), citric and other acids. The combinations of these ingredients naturally produce carbon dioxide, confusing rootworm

Researcher uses natural chemicals on corn pest
olorado State University researcher Louis
larvae into not attacking emerging corn plants.

"These larvae must find the corn roots within 24 hours after hatching or they die," said Bjostad, noting that the larvae are attracted to the roots by the carbon dioxide they emit. "We are essentially sending them away from the plant so by the time they realize their mistake, we've dealt them a lethal blow."

Bjostad said his discovery has attracted the attention of major chemical manufacturers and he intends to keep working.

Fractals for farming

nyone bored by drawing ordinary circles, triangles and cones in geometry class would be pleasantly surprised by what Agricultural Research Service scientists are doing with fractal geometry. They are using this math of the rugged shapes of nature to evaluate how organic farming and other practices affect soil productivity.

Yakov Pachepsky and Larry Sikora use fractals, endlessly repeating shapes, to map the irregularities of the pores that riddle soil. These spaces between soil particles are critical to crop yields. They allow air and water to pass through. They also provide a home for beneficial microbes.

Fractals give scientists a microbe's eye-view of the minute twists and turns of soil pore edges. These edges are as rugged and diverse—in their own microscopic way—as the U.S. east coast. If you measure that coastline on a map, it "grows" longer every time you increase the scale, revealing ever more coastal nooks and crannies. The same is true for soil pores.

Fractal dimensions are independent of scale, yet allow accurate extrapolations from one scale to another. A fractal length has a value of 1 to 2. A straight line is 1.0, a typical river 1.1 to 1.5. A tangled mass of branching filaments of soil fungi could be a 2.

The scientists use special software to measure fractal length of pores on computer-scanned images. In one study they scanned thin slices of soil from an organic farm. Pores from a field where red clover was grown and mixed into the soil as "green manure" had a value of 1.6. Pores from a field planted to grass or treated with manure or fertilizer scored about 1.4. The findings indicate the clover would most promote the soil's ability to store water and harbor beneficial microbes. Based on this study, the scientists believe 1.6 is an ideal level of pore ruggedness.

States estimated to receive \$233.2 million in national forest payments

ike Dombeck, chief of the U.S. Department of Agriculture's Forest Service, announced recently an estimated \$233.2 million in payments will be shared among 41 states and Puerto Rico from fiscal year 1997 National Forest receipts.

Dombeck said receipts are collected from landuse fees and sale of resources on 191 million acres of national forests and grasslands. States use their share of the receipts for public schools and roads.

"Providing advance estimates of the state payments helps local budget planners complete their work," said Dombeck. "The final payments will be based on actual receipts collected and may vary from the estimates announced today."

Interim payments totaling 75 percent of the estimated state shares of national forest receipts will

be made in October. The balance will be paid in December, when final revenue figures for fiscal year 1997 are available.

Counties in some of the states also share in the national grassland and land utilization project receipts, which are based on calendar year 1997 revenues. Dombeck said these receipts will be paid in March 1998.

States received more than \$255.7 million as their share of 1996 national forest revenues. Counties participating in the national grasslands program received \$4.6 million in revenue from land use fees.

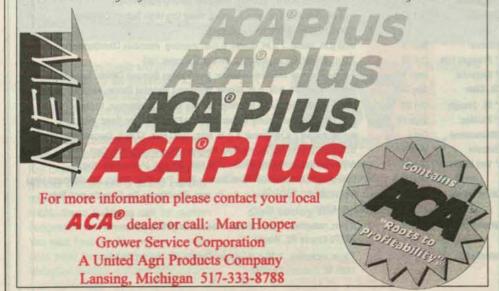
It is estimated that Michigan will receive \$2,545,585 in payments from National Forest receipts and \$154,750 from the land utilization fee on national grasslands.

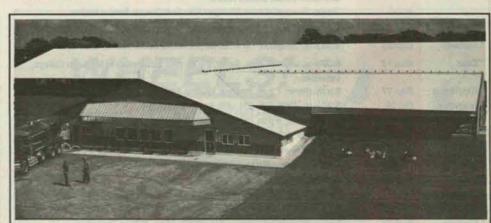
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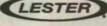




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Portland's Crop Production Services earns premier environmental award

rop Production Services of Portland, Mich., is one of 19 state winners of the 1997
Environmental Respect Awards. The effort recognizes environmental stewardship efforts among U.S. fertilizer and agricultural chemical retailers.

A panel of eight previous award winners and industry experts met to review the field of top entries from retail supply businesses across the United States. The selection committee chose Crop Production Services as the winner from Michigan using criteria that included proper site design, in-plant storage and handling procedures, proper application, leadership in environmentalism, safety, and stewardship among farmer-customers and employees.

"Honoring fertilizer and ag chemical retailers who excel in stewardship goes along with DuPont's own mission to preserve the environment for future generations," says Bill Kirk, vice president and general manager for DuPont Agricultural Products. "This effort is designed to reward dealers for their excellence in stewardship and to motivate others to improve stewardship practices." DuPont partners with Dealer PROGRESS magazine to support the endeavor.

Crop Production Services will receive the distinctive Environmental Respect crystal trophy with a kit to help plan and host a company "Environment Respect Celebration Day" to further build community awareness on the importance of agriculture's role in environmental stewardship.

"The folks at these businesses live out their commitment to environmentalism every day as they help farmers grow more food for more people," says K. Elliott Nowels, publisher of *Dealer PROGRESS*. "These winners epitomize the success stories in agriculture that we should be holding up as industry role models every day."

The state winners also competed for eight regional awards, which will be announced at a later date. In addition to the unique crystal trophy, each regional winner receives financial support for hosting a Celebration Day event and a trip to Washington, D.C., to be recognized at a Capitol Hill reception, attended by elected officials and dignitaries, July 29. The national winner will be named on Capitol Hill.



Crop Production Services of Portland won a 1997 State Environmental Respect Award for outstanding environmental stewardship among agricultural retailers across the nation. Pictured from left are Assistant Manager Ken Lehman, Foreman Tim Miller and Manager Tom Kreiner.

Armyworm damage reports in corn fields don't necessarily mean action should be taken

several reports of armyworm damage of field corn in several areas of the state suggest that growers should be checking fields to determine if insect control is necessary.

Chris DiFonzo, Michigan State University Extension field crop entomologist, says that a corn field in Jackson County was plowed down following an armyworm attack that could not be controlled.

The armyworm usually begins feeding on crops when the growing degree-day (GDD) accumulation reaches 450 (base 50). Several generations of the insect will be produced from that point on during the summer.

Generally, it is the season's first armyworm generation in late May to early June that causes the most damage in Michigan. The second generation usually appears in July in a normal growing season — this year's is about two weeks behind "normal" and rarely causes damage because small grains are too mature and corn is too large to be attractive. The later generations feed on grasses and pose no problems to crops.

DiFonzo says serious armyworm infestations are most likely to occur in fields with cover crops or large populations of grassy weeds.

The armyworm prefers to feed on grasses, including corn, small grains and grass hay, but it will also attack alfalfa, dry edible beans, soybeans and sugar beets.

Armyworm caterpillars are typically black but may be greenish to tan and have a broad, light-colored stripe on each side of the body. The caterpillar will have six jointed legs behind the head and 10 fleshy legs near the rear of the body. The army-

worm caterpillar can grow to 2 inches long.

DiFonzo says corn plants can withstand some defoliation but growers should treat if they find three or more caterpillars per corn plant whorl, or if there are five or more larvae in tasseled plants and the majority of the larvae are not more than 1.25 inches to 1.5 inches long.

Larger larvae will not cause much more damage because they soon pupate, she relates.

Examine all sides and the middle of the corn field. Sometimes the infestation is fairly confined to grassy patches or the edges of the field. Spot treating such areas saves money.

If treatment is warranted, try to make the application in the evening when the larvae move up the plant to feed.

Guidelines for determining armyworm threshold levels in other crops:

Alfalfa — three or more larvae per row foot.

Grass hay and pasture — six or more larvae per square foot.

Small grains and legume hay — four or more larvae per row foot.

Dry beans, soybeans and sugar beets four or more larvae per row foot or one quarter of the leaves are destroyed.

Field treatment options for the insect are contained in the MSU Extension bulletins "Insect and Nematode Control in Field & Forage Crops" (E-1582) and "Protecting Field and Forage Crops From Armyworm" (E-2068). They are available from the county MSU Extension office.

1997 County annual meetings

COUNTY	DATE	TIME & LOCATION	COUNTY	DATE	TIME & LOCATION
Allegan	Sept 25	6:30 p.m., Hamilton Reformed Church	Lapeer	Sept 11	7 p.m. social, 7:30 p.m. dinner, Lapeer Co. Vo-Tech Center,
* Antrim	Oct 8	7 p.m. dinner, 8 p.m. meeting, Kewadin United Methodist Church			690 Lake Pleasant, Attica
* Arenac	Sept 9	7 p.m., Omer Community Center	* Lenawee	Sept 16	6:30 p.m. reception, 7 p.m. dinner, The Landing, 5447 Rogers Hwy, Tecumseh
Barry	Sept 15	6 p.m. registration, 6:30 dinner with meeting to follow, Barry Expo Center	Livingston	Oct 8	6:30 reception, 7 p.m. dinner, Woodshire Place Banquet Facility, Fowlerville
Bay	Sept 9	6 p.m. dinner, Monitor Township Hall, 2483 E. Midland Rd, Bay City	Mac-Luce-Sch	Oct 4	7 p.m., American Legion, Newberry
Benzie	Sept 22	6:30 p.m. dinner, 7:45 p.m. meeting, Sail Inn Restaurant, Benzonia	Macomb	Oct 18	6:30 p.m. social, 7 p.m. dinner, Michigan Meadows Golf Course, Casco
Berrien	Sept 4	8 p.m., policy development & business mtg, S.W. Michigan Research &	* Manistee	Aug 9	6 p.m., John Urka's Farm, 16919 Pole Rd, Brethren
	Section 1	Extension Center, Benton Harbor	* Mason	Oct 9	6:30 reception, 7 p.m. dinner, Mason Co Reformed Church, US 10-31 & Amber Rd
-	Nov 6	Supper Banquet at Lake Michigan Hills Golf Course, Benton Harbor	Mecosta	Oct 13	7 p.m., New Hope Methodist Church, 7296 9 Mile Road, Mecosta
* Branch	Sept 15	6:30 p.m. dinner, 8 p.m. meeting, Branch Area Career Center, Coldwater	Menominee	Oct 14	7:30 p.m. C.S.T., Carney Legion Hall, US 41
* Calhoun	Sept 23	6:30 p.m. reception, 7 p.m. dinner, Belcher Auction Facility, Marshall	* Midland	Sept 11	6:30 p.m. dinner, Ingersoll Township Hall, corner of Freeland & Sasse Road
* Cass	Sept 16	6:30 p.m. social, 7 p.m. dinner, 8 p.m. mtg, Southwestern Michigan College.	Missaukee	Oct 6	7 p.m. social, 7:30 dinner, Clam Union Township Hall, Falmouth
		Dowagiac	Monroe	Sept 13	600 p.m., Prince of Peace Church Community Center, 1920 Lewis Ave., Ida
* Charlevolx	Sept 27	6 p.m. dinner, 7 p.m. meeting, Whiting Park, Boyne City	Montcalm	Oct 23	7 p.m. dinner, 8 p.m. meeting, Masonic Temple, 514 N. New Street, Stanton
Cheboygan	Oct 13	6:30 p.m., VFW Hall, 901 VFW Road, Cheboygan	* Montmorency	Sept 30	6 p.m., Montmorency Township Hall, 20841 County Rd 459, Hillman
* Chippewa	Oct 7	7 p.m. dinner, 8 p.m. meeting, Bruce Township Hall, Dafter	Muskegon	Oct 7	7 p.m., Whitlow's Forerunner, 4610 Airline Rd, Muskegon
* Clare	Sept 25	5:30 social, 6:30 dinner, Harrison Knights of Columbus Hall	Newaygo	Oct 2	7:30 p.m., Newaygo Co. Senior Resource & Community Center, White Cloud
Clinton	Sept 20 or 27	St. Johns High School (confirm in Aug)	* Northwest	Sept 24	6:30 p.m., Twin Lakes 4-H Camp, Traverse City
Copper Co.	Oct 25	7 p.m., Grandma Grooters Restaurant, Bruce Crossing	Oakland	Oct 16	6:30 p.m., Clarkston United Methodist Church, 6600 Waldon Rd, Clarkston
* Eaton	Sept 30	6 p.m., VFW., Charlotte	* Oceana	Oct 20	6:30 p.m. reception, 7 p.m. dinner, New Shelby Cafetorium, Shelby
* Emmet	Oct 2	7 p.m. dinner, 8 p.m. meeting, VFW Hall, Harbor Springs	* Ogemaw	Oct 23	7 p.m. dinner, 8 p.m. meeting, Ogemaw County Fairgrounds
* Genesee	Sept 16	6 p.m. reception, 6:30 p.m. dinner, Walli's East, 1341 S. Center Rd, Burton	Osceola	Oct 21	7:30 p.m. dinner, 8:30 p.m. meeting, Reed City High School Cafeteria
* Gladwin	Sept 13	1 p.m., Gladwin Ice Carnival Grounds Building, Billings Township	* Otsego	Oct 19	1:30 p.m., Livingston Township Hall
* Gratiot	Aug 25	6 p.m. hog roast, 7:30 p.m. meeting, North Star Golf Course, Ithaca	Ottawa	Sept 9	6:30 p.m. social, 7 p.m. dinner, 8 p.m. meeting, Allendale Christian School
Hiawathaland	Oct 27	6:30 p.m., Terrace Bay Inn, between Gladstone and Escanaba	* Presque Isle	Oct 14	7 p.m. dinner, 8 p.m. meeting, Motlke Township Hall
Hillsdale	Sept 11	6:30 p.m. reception, 7 p.m. dinner, 8 p.m. mtg, DOW Conf. Center,	* Saginaw	Sept 17	6 p.m. dinner w/ meeting to follow, Swan Valley Banquet Center, Saginaw
	A CONTRACTOR OF THE PARTY OF TH	Hillsdale College	St. Clair	Aug 26	6 p.m. reception, 6:30 p.m. dinner, Wahdams Banquet Center, Kimball
* Huron	Aug 28	6 p.m. trade exhibits, 7 p.m. dinner, Ubly Heights Country Club,	* St. Joseph	Oct 25	6:30 p.m. dinner, 8 p.m. meeting, Sturges Young Auditorium, Sturgis
To a pro-		2409 E. Atwater, Ubly	* Sanilac	Sept 10	6:30 p.m., Sanilac County Career Center, 175 East Aitken Road, Peck
Huron Shores	Oct 4	6 p.m. potluck dinner, St. Matthews, 7109 Wolf Creek Rd., Herron	Shlawassee	Oct 1	6 p.m. social, 7 p.m. dinner, 8 p.m. mtg, ZCBJ Hall, 1775 E. Owosso Ave, Owosso
* Ingham	Sept 25	6:30 p.m. reception, 7 p.m. dinner, Ingham Co. Fairgrounds-	Tuscola	Sept 4	6:30 p.m. dinner, 8 p.m. meeting, Knights of Columbus Hall, Caro
		Community Bldg, Mason	* Van Buren	Oct 28	6:30 p.m. social, 7 p.m. dinner, VFW Hall, Decatur (Annual Meeting)
Ionia	Aug 12	7 p.m., Ionia County Fairgrounds		Oct 21	7:30 p.m., Van Buren Co. Farm Bureau Bldg, Paw Paw (Policy Development Mtg)
losco	Oct 9	7 p.m. dinner, 8 p.m. meeting, St. Pauls Lutheran Church, Hale	Washtenaw	Oct 9	6 p.m. social, 7 p.m. dinner, 8 p.m. mtg, Washtenaw Co. Farm Council Bldg,
* Iron Range	Oct 28	6 p.m. CST, Sagola Township Sportsman's Club			Ann Arbor
Isabella	Aug 24	1 p.m., Finnerty Park, Beal City	Wayne	Oct 15	6 p.m. reception, 7 p.m. dinner, Woodlands of Van Buren,
Jackson	Sept 18	7 p.m., Bullinger's Restaurant, 501 Longfellow Ave., Jackson	1-125 300		39670 Ecorse Rd, Wayne
Kalamazoo	Oct 7	6:30 p.m. dinner, 8 p.m. meeting, The Birches, 3082 S. 9th St., Oshtemo	Wexford	Oct 14	7 p.m. reception, 7:30 p.m. dinner, Temple Hill Baptist Church,
* Kalkaska	Sept 20	5:30 p.m., Kalkaska County Civic Center		4 4 10 10	1601 W. Division, Cadillac
Kent	Oct 14	6:30 p.m. reg., 7 p.m. dinner, Duba's, E. Beltline, Grand Rapids			



Discussion New laws may fix Michigan roads Topic

September 1997
A monthly resource for the Community **Action Groups** of Michigan Farm Bureau



f you haven't driven into any potholes lately, you probably haven't been driving on Michigan roads.

But thanks to a new road-funding package passed by Michigan legislators in the wee hours of the morning July 16, the deteriorating roads are about to take a turn for the better.

We've heard a lot about Build Michigan II, truck registration fees, gas tax, and more, but what do all these things really mean for our roads? And what about our road funding on a federal level?

Build Michigan II Build Michigan II is the plan proposed by Gov. John Engler to bring genuine reform to our transportation system. Many parts of the plan were passed into law, some were not. The additional 4-cent-per-gallon gas tax did pass and Engler said that by the end of this year, more than \$230 million will be spent on road repair. Of that, \$91 million will resurface more than 392 miles of road.

Here are components of the transportationfunding package of bills passed into law July 16. This package is expected to generate \$300 million

more for Michigan road and bridge repair.

The gas-tax hike

The 4-cent increase in the state gas tax is one of the most well-known parts of the road-reform package. By now, most of us have bought gas and paid the extra tax at the pump.

Farm Bureau policy supported an increase of up to 7 cents per gallon, so the increase was welcome news for members.

A penny of the 4-cent increase will go into the critical bridge fund, while the remaining 3 cents will be distributed to state and local governments under a formula known as Public Act 51.

Jurisdictional control

The issue of whether or not the state will take over some 23,000 miles of Michigan highways proposed by Gov. Engler - is yet to be resolved.

P.A. 51, which determines what money will go to the state and to local governments for road repair, will expire in September 1998. If the issue of jurisdictional control isn't resolved by then, 20 percent less money will be distributed to everyone. That makes a strong incentive for the state and county road commissions to figure it out soon.

Truck registration fees

A 30 percent, across-the-board increase in truck registration fees will take effect for trucks with a gross vehicle weight of more than 8,000 pounds. However, trucks with special farm license plates or log plates are exempt from the increase.

Fund diversion Michigan citizens weren't happy during the road-reform talks when they realized that some

money was diverted from the transportation fund to help pay for other state departments. That will all change since legislators passed a three-year phaseout of that practice.

Other parts of the package

The transportation-funding package also requires more audits of county road commissions. Administrative costs for road projects can't be more than 10 percent of the total cost. And county road commissions can no longer require townships to match funding for state highway dollars.

New tax deductions

Because legislators didn't want to approve a net increase in state taxes after all the road-funding increases, they passed some additional tax deductions, including:

- An increase in the personal exemption on the state income tax from \$2,500 to \$2,800.
- An increase in the college tuition credit from 4 percent to 7.5 percent.
- A \$600-per-child income tax credit.

All in all, the typical Michigan driver will spend about \$30 more in fuel taxes every year, but save \$120 in car repairs.

On the federal level

Michiganders also pay a federal gas tax. Michigan money put in to pay for federal highways goes through a program called the Intermodal Surface Transportation Efficiency Act. ISTEA (pronounced like "ice tea") spells out how the money is distributed to states so they can build and repair highways.

ISTEA sends 4.3 cents of the gas tax money to the country's general fund to reduce the deficit, so that portion never pays for any road repair.

Unfortunately, Michigan is considered a "donor state," meaning we put more into ISTEA than we get out. In fact, we get back just 87 cents out of every dollar we put in.

Once the U.S. House of Representatives returns from summer recess, reauthorization of ISTEA will be on their agendas. Michigan is hoping to get \$200 million more in federal dollars back next year.

U.S. Rep. Nick Smith (R-Addison) said things need to change. "We came up with language in this budget resolution that says, 'Let's use the 4-odd cents that have been going into the General Fund and start putting it into the Highway Trust Fund.' Our appropriation bill for transportation in the House reflected that," he said.

Smith is also co-sponsoring a bill that could prevent states from ever sending ISTEA money to Washington, D.C., as long as they impose the tax within their states.

Discussion Questions

- 1. The gas-tax increase was 4 cents per gallon. Is that enough to fix our roads?
- 2. Some people say that rather than worry about reforming ISTEA, federal gas tax money should remain in the states to begin with. Would this be a more effective way to build and maintain highways?
- 3. Do you think this funding and legislation is far-reaching enough to improve the local roads you drive on? Why or why not? What should be done?

Sow behavior can help predict reproductive traits

Good tempered sows

may also be good for the wallet

ehavior traits can help tell which sows will be the most productive, said Keith Irvin, Ohio State University animal scientist.

Irvin, who has studied hog behavior for 15 years, has come up with eight ways to measure how a sow's actions relate to her ability to produce healthy piglets: sow temperament with pigs, sow temperament with workers, condition of sow at farrowing, ease of farrowing, milking problems, strength of pigs, overall mothering score and crate adaptability score.

Temperament refers to a sow's level of comfort with and attitude toward its piglets or people. Condition at farrowing looks at how fat or thin the sow is at the time it gives birth. Ease of farrowing describes how difficult birth was, whether assistance was needed and how much time elapsed between birth of the first and last piglet.

A sow that is cross with her piglets also is cross with people, and this poor temperament can mean poor survival for the piglets, Irvin said. Easily irritated sows also tend to be excessively fat at far-

" A sow that is extremely fat at farrowing will have a higher probability of experiencing a delayed

Poor temperament also affects the supply of milk at birth. Sows with no milk problems usually have an increased number of piglets born alive, a better survival rate after 21 days and larger piglets at weaning, Irvin said.

"Sows with a good temperament often have stronger piglets, no milking problems and a desirable mothering score," he said.

Researchers evaluate piglets at 21 days after birth and consider the number of piglets, piglet size, the uniformity of the litter, their overall appearance and the sow's behavior when they determine mothering scores. Sows with good mothering scores usually have no milk problems and an easier farrowing. A sow that has an easy birth has more pigs born alive, stronger pigs and a better survival rate at 21 days, Irvin said.

Sows are often put into crates - pens that restrict their movement - during and for several days after birth to prevent them from accidentally laying on their piglets, and so producers can easily care for the sow and piglets.

Crate adaptability score refers to the sow's ability to regularly get up and down or in and out of the crate. Sows that adapt well to crates often have heavier piglets after 21 days, no milking problems

and a superior mothering score.

"You can look at pork production subjectively and be able to predict objective measurements, such as piglet weight at birth, 21 days and at weaning," Irvin said. "And I pretty much found the same things regardless of breed."

Using sow behavior to help make production decisions can save a producer the time it takes to frequently weigh piglets, as well as the cost of purchasing the equipment to make those measurements. But Irvin warns that while behavior can help predict the best sows, producers who want to make genetic improvements should still weigh their piglets.

"Behavior is a good indicator of which are the best sows, but it should not totally substitute weighing," he said.

Swine behavior research is conducted at Ohio State's Western Branch of the Ohio Agricultural Research and Development Center. This research is ongoing, because new technology and new genetics constantly change the pork industry, Irvin said.

"The genetics of the pig population is always changing, and the way a pig reacts in the future may be different from how it will react now," he said. "There's more interest in behavior today than when I started 15 years ago."

Dry bean variety tour scheduled for Sept. 2

he Annual Dry Bean Variety Plot Tour will be Tuesday, Sept. 2, at 7 p.m. This year's plot is located one-half mile north of Filion on the west side of M-53 on the Steve Errer Farm.

Greg Varner, research director for the Dry Bean Research Advisory Board, will be discussing the varieties in this year's trial. There are 115 dry bean varieties and experimental lines being evaluated this season in seven variety trial locations throughout the dry bean production area. There are 28 navy, 10 black, 10 pinto, 18 cranberry, 13 light red kidney, 10 dark red kidney, nine great northern, nine alubia, four azuki, three small red, two yellow-eye and a few miscellaneous dry beans in the plots.

Plots are replicated four times with an additional replication for demonstration. Greg will also be on hand to answer questions about dry bean diseases and insect problems.

A market report will be given to update growers, not only on the price outlook, but on the condition of the dry bean crop in other growing areas.

In addition to the market update, the Michigan Bean Commission will be giving a report.

For more information, contact the MSU Extension office in Bad Axe at (517) 269-9949.

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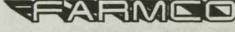
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This is the time of year when most manure pit deaths occur

ore livestock manure pit work-related deaths occur in July, closely followed by August and September, than at any other time of the year.

Howard J. Doss, Michigan State University Extension agricultural safety leader, says the gases found in manure pits pose a major risk to humans and livestock.

Manure pit gases – methane, hydrogen sulfide, carbon dioxide and ammonia – either are toxic or displace oxygen. When sufficiently concentrated in a confined area, such as a manure pit under a livestock building, the gases can kill an unprotected person by suffocation in seconds. The gases can also be explosive, he relates.

"Agitation of the manure pit prior to pumping causes a rapid release of the gases that are formed during the decomposition of the manure," he says.

Manure pits are dangerous because the gases tend to hover near the surface of the manure when it is agitated prior to pumping. Moreover, the gases can linger in lethal concentrations in the pit after it is partially or completely emptied.

Manure pits should not be pumped when winds are calm. Doss says that the most recent fatal accidents occurred when temperatures and humidity were high and there was no wind.

Glickman announces new oil — could lower cholesterol

griculture Secretary Dan Glickman announced the discovery of an oil — developed by agriculture researchers — that is expected to have significant health benefits for consumers.

The oil is developed from corn fiber, a lowvalue by-product of the industrial process that converts corn into sweeteners, starch and fuel grade ethanol. The corn fiber is now used in animal feed.

"People frequently ask me why we should spend money on agriculture research — and here's just one of the reasons. This oil, the result of agriculture research, will have a significant effect on improving our nation's health," Glickman said.

USDA researchers isolated the oil from the corn fiber, primarily the outer hull or seed coat of the kernel. Conventional corn oil comes from a different part of the corn kernel called the germ.

Robert Moreau, Robert Norton and Kevin Hicks, research chemists with USDA's Agricultural Research Service (ARS), discovered the new oil.

In recent animal trials conducted by Robert Nicolosi of the University of Massachusetts, the oil significantly lowered the serum cholesterol and LDL cholesterol in hamsters. And researchers believe this oil could produce similar results for people.

Private industry will now develop commercial products from the oil. As with any newly developed food or pharmaceutical product, the corn fiber oil products will have to be approved by the Food and Drug Administration. As required by the licensing agreement, any products must be manufactured in the United States—creating jobs and furthering the benefits of agriculture research dollars for the American people.

Consumer group: stun gun increases mad cow risk

consumer group recently said a stun gun used on cattle before slaughter can send brain tissue scattering throughout the animal, providing a route for bovine spongiform encephalopathy to spread to humans.

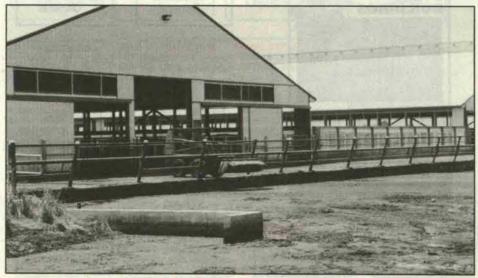
BSE can be transmitted through brain matter.
Although there have been no documented cases of
BSE in the United States, the Center for Science in
the Public Interest says it plans to conduct studies to
determine whether their theory on the stun guns is

Representatives of the meat industry said they planned to join the Center in conducting the studies.

"Some of the steaks and hamburgers Americans eat today may contain small bits of brain matter," said David Schardt of the Center.

The Center says recent research conducted by Texas A&M University and by Canada's Food Inspection Agency found that a method of stunning delivered such an explosive force that it splattered brain tissue throughout a cow's system.

Meat industry organizations, including the National Cattlemen's Beef Association, looked into conducting studies on stunning methods several months ago after learning of the research.



During the summer months when many Michigan manure pits are emptied, farmers need to be cautious of the dangers of opening and agitating manure management structures.

If possible, time the manure pumping so it takes place when a high pressure weather system brings moderate to brisk winds to the area to help dissipate the gases.

If the pit is near or beneath a livestock structure, make sure that animals and humans are out of and away from the structure and the pit before starting to agitate the manure.

If mechanical ventilation is used in a livestock building that contains a manure pit, make sure backup power is available in case of an electric power failure. Also have a plan for equipment backup if any part of the ventilating system fails.

Do not allow open flame or smoking in the vicinity of the pit as the manure is being agitated and pumped. Methane gas, one of the byproducts of decomposing manure, can be highly explosive under certain conditions.

Do not enter a manure pit, even if there is a mechanical failure. It is best to call the equipment dealer, who should have trained and properly equipped service representatives who can correct the problem. The equipment should be removed from the pit if repairs are required. Use a gas testing meter to detect a lack of oxygen or presence of toxic gases before working on pumping equipment.

No one should enter a manure pit without wearing a self-contained breathing apparatus and a lifeline and harness with adequate retrieval equipment – a hoist, body harness, lifting tri-pod, lifelines, etc.

There must be enough people available to make a rescue if something goes wrong. The rescue people should be equipped with complete self-contained breathing apparatus and trained in rescue procedures.

Farm managers should remember that employees who are not family members are covered by the confined space regulations that are part of the Michigan Safety and Health Act.



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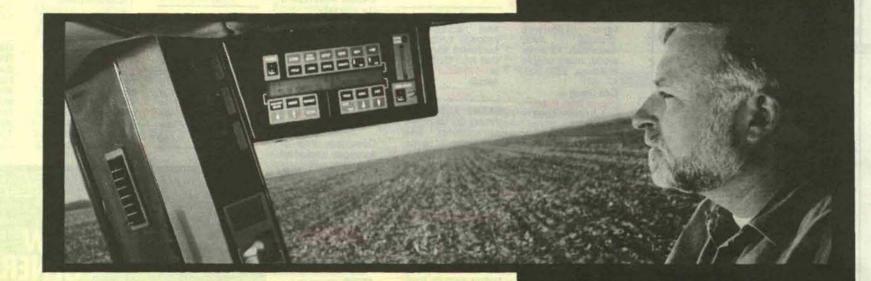
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