**Bill Mar Foods drops contracts for five West Michigan growers**

Citing lackluster turkey sales, officials from the Arizona-based Bill 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 sent shock waves throughout the turkey industry and is prompting growers to question the long-term plans of the 50-year-old company.

"This wasn't a decision made quickly—we've struggled for months," explained Michael Westphal, Bill Mar's director of farm operations, at a meeting of producers and state legislators at the Ottawa County Farm Bureau office. "There is a serious oversupply situation in the turkey market that has been there for many other facets of Michigan agriculture," said Kirk Westphal, who is in charge of Bill Mar's farm operations in Michigan.

Declining demand
"Consumption of turkey meat averaged nine pounds per person in 1980," said Westphal, who is the son of Bill Mar's farm operations in Michigan and Iowa. "That's doubled to 18 pounds per person in 1996. Everyone thought that trend would continue. It hasn't.

Michigan State University Agricultural Econ. Jim Helming confirmed that turkey consumption has slowed and even dropped over the past year. "The USDA estimates 10.5 pounds per person in 1996 and projects to dip slightly back to 18 pounds per person in 1997. Everyone thought that trend would continue. It hasn't.

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"We have 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.

**Farm Bureau pleased with road funding package**

The 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 $200 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 Lareau, president of the Michigan Farm Bureau. "It's now time for our U.S. congressman 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 legislatures 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 $20,000 miles of Michigan highways. Although the final package approved by the state legislature removed that portion of the original Bipartisan 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 50-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. Legislation also included a $100-per-child 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 $3,200.

"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."
Michigan Farm News
August 15, 1997

News in Brief

MU5 Field Day to focus on developments in turfgrass management

The Michigan State University Turfgrass Management Program will host a course management schools to local managers to turf care specialists—will hear about current research on soil and grass plant care Aug. 8 at Michigan State University. "We're working with Couch Turfgrass Research Center at Farm Lane and Mr. 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 tour will be the demonstration and discussions 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 be discussion and demonstrations on biological control of diseases and weeds, insect research, putting green quality and precision turf management.

A trade show of turfgrass and landscape prod- and services will accompany the field day. An auction of new and used turfgrass equip- ment and landscape supplies will follow the noon meal. The auction begins at 1 p.m.

Registration before the field day will be $20 per person. To register, send a check payable to the Michigan Turfgrass Foundation to Ray Pack, Box 80071, Lansing, MI 48906.

MEGA Conference adds Nobal/CRI to its lineup

ECA recently announced that Nobal/CRI will be holding its district membership meeting at the annual conference held next Janu- ary. As Nobal is a subsidiary of Cooperative Resources International, Inc., it will participate in the largest member-owned Al Cooperative in the nation. Nobal, 21st Century Genetics and Genetix market dairy and beef cattle seed improvements worldwide.

Santo Solimine, Nobal president, and Howard Kelly of Michigan Farm Credit Services of Michigan's Heartland peel." Weserve 6,000 farm customers and rural equipment loans, said Kelly, Michigan Farm Bureau's legislative costs," said Kelly, Michigan Farm Bureau's legislative group in Lansing, MI 48906.

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 will be Bill Kirk, of Paragould, John Ruhls, of Dewitt, and Jerry Dixon, of Climax.

A free booth at the MEGA Conference trade show was given away by Barry and John Markham.

Newly elected MEGA officers include Chair Pearl Weibel and Vice Chair Chuck Markley, Pearl, who recently retired as president of the Corn Mar- keting Board by Gov. Engler, hopes that, with Mich. Chuck is a beef producer from Byron and a member of the Michigan Sugar 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, call the Michigan Agri- cultural MEGA Conference, c/o Betty Driscoll, 1100 West St. Rd., St. Joseph, MI 49089-1106; phone 517-224-9033; fax 517-227-2007.

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

Farm Credit Services of Michigan's Heartland broke ground for a new corporate office on June 4, 1997, for a new state-of-the-art 6,000- square-foot corporate office facility to be located on West Road in Eaton County. With 14 branch offices throughout central and western Michigan, Farm Credit Services is a leading provider of operating loans, equipment loans, real estate loans, crop insurance, livestock, inventory, country business loans, records, 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. Brenner, presi- dent/CEO for its location and environmental ap- peal. "We serve 6,000 farm customers and rural residents," Brenner said, "and this site is at the center of Michigan's agricultural community while being easily accessible from the freeway."

The building will be a natural in a natural pond, with a 100-foot pedestrian bridge connecting the parking area and building entrance. Farm Credit plans to occupy the 15,000-square foot, with the balance available for lease.

John Peckdam, 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

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

"At this time of the year, farmers have to pay unemployment during the specified grow- ing and harvest seasons. But once the season is over, there's no obligation to remain. Many farmers continue to work for employers who have this designation."

"About 38 seasonal employees applied for the Workers' Compensation form, but that was based on previous experience and any…and any…" said Kelly, Michigan Farm Bureau's legislative group in Lansing, MI 48906.

"Unfortunately, farmers and other businesses that received the seasonal employer designation have been the subject of a so-called blacklisting, and we're doing everything we can to help. Michigan has the Michigan Migrant Legal Assistance Project, Inc." Kelly said one grower wanted to hire 50 work- ers, but the workers required paperwork in order for the employer to meet the seasonal employment designation."

"When you're presented with that kind of evidence, something has to be done."

Michigan Sugar parent company merges with Florida business

Sanatarah Foods & Industries Inc., a sugar re- finer 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-based Sugar Foods Inc. (FSI). "The talks that we've had with the officials from Michigan Sugar are that business will continue as usual," explains Dick Leach, executive vice presi- dent of the Great Lakes Sugar Beet Growers Associa- tion. "The contracts for the growers that were signed for this year and for the next two years will be honored. The merger will be to produce a company with a much stronger financial base and a view of the United States sugar policy much the same as the sugar processors."

FloSun, one of Florida's largest sugar produc- ers, will hold 19.4 percent of the equity under the merger. Other Florida Sugar Company shareholders will hold 51.2 percent, and the remaining 31.4 percent will be held by Savannah Sugar's shareholders.

The merger, expected to close in October, is subject to approval by Savannah Sugar shareholders. FloSun is a privately held diversified agricul- tural, real estate and resort company. Flo-Sun's Dominican Republic operations and other holdings were not part of the deal.

Has PETA finally met its match?

According to a Washington Post article, chair- persons of the Oscar Mayer promotion didn't know how to react. As kids tried to sing, PETA members delayed the event.

"The PETA protest made the mistake of making a few mothers angry. "Oh, that makes me so mad," said another mother. "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 do leather shoes. She wondered whether the protest- ers understood the source of the.leather.

Farm Bureau seeks climate change treaty delay

Klecker 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," said Klecker.

"The administration must not accept a final agreement without complete analysis and a full and open public debate which includes agriculture," said Klecker.

Farm Bureau is concerned that the interests of farmers and ranchers are not being considered in international climate negotiations, Klecker said.
Apple fireblight research funding

changes. Thenew rule requires EPA to conduct a full scientific review of the health effects of particulate matter. Non-attainment areas will have two years to submit plans and an unspecified time to comply with the new rule.

On June 26, President Clinton announced his support for a new rule that would limit the amount of particulate matter in the air. The new rule requires EPA to conduct a full scientific review of the health effects of particulate matter. Non-attainment areas will have two years to submit plans and an unspecified time to comply with the new rule.

The Coastal Shipping Competition Act, H.R. 1991, is another example of legislation introduced to address ergonomic injuries. The bill would require employers to conduct ergonomic assessments and make necessary changes to prevent ergonomic injuries. The bill was introduced by Congressman Nick Smith (R-Addison). The bill would also require employers to provide ergonomic training to workers. The bill was introduced as an amendment to the Jones Act, which provides for a five-year moratorium on setting new standards for marine, agriculture, and labor.

The Land Division Act, H.R. 1991, is another example of legislation introduced to address ergonomic injuries. The bill would require employers to conduct ergonomic assessments and make necessary changes to prevent ergonomic injuries. The bill was introduced by Congressman Nick Smith (R-Addison). The bill would also require employers to provide ergonomic training to workers. The bill was introduced as an amendment to the Jones Act, which provides for a five-year moratorium on setting new standards for marine, agriculture, and labor.

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## Capitol Corner

Continued from page 3

### Transportation funding and reform package

Following 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 PA 51 formula.
- The PA 51 transportation distribution formula will sunset in 1998 if not reauthorized. If the state and local governments are unable to agree on a new formula by this time, the funds will be distributed at a rate of 20 percent less than is currently distributed.
- A lowering of 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.
- A 40 percent increase in the state income tax, increasing it 30 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 $60 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 increases.
- Increases in overweight and oversized 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.
- An increase on the state Workers' Compensation Insurance Fund totaling $90 million. (This is not a new fund, but a one-time increase in the Workers' Compensation Fund totaling $90 million.)
- A three-year phaseout of funds diverted from the transportation fund to other state departments ($45 million for fiscal year 1997-98).
- A one-time, $49 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 $500 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.

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### The A “MAIZE”ING POWER of the Penny

- Increased Exports 1 Billion Bushels
- Made Bio-degradable Plastics a Reality
- Increased Ethanol Production to 500 Million Bushels
- Supported “Animal Initiative” Research to Increase Michigan Corn Consumption
- Increased the “Floor” Price for Corn
Each day we light the way for you and other farmers across the state – providing the power that keeps you in business. But our commitment to you doesn’t stop there.

We have a 24-hour, toll-free number to answer your energy service questions. Plus, we’ve established a dedicated, toll-free number so we can respond to your questions about animal contact current. And, with 39 Customer Service Centers state-wide, we’re ready to serve you.

We’re also working with key agricultural organizations like Michigan State University Extension and the Michigan FFA on issues that impact your productivity and profitability.

We’re proud to serve 20,000 farms – more farms than any other utility in the state – and we’re committed to helping you succeed every step of the way.

For questions about animal contact current, call 1-800-252-8658.

For other service questions, call 1-800-477-5050.

Consumers Energy
Count on Us
**CORN**

Wheat was certainly the focus of USDA Crop Report, released Aug. 12. As before, mention of corn production, given Aug. 1 condition, is to remain just that, aBest guess 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, which are the report bullish, neutral or bullish? You then need to look at the weather since Aug. 1, perhaps by studying the Aug. 16 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 grain course picture suggests may pick up a little more than the markets are now showing. If the market reaction was bullish, December futures are still around $2.60, back closely at your situation. If you have already priced a harvest, consider holding off on further new crop pricing until the market's neutral reaction was inspite of weathersince Aug. 1, perhaps by studying the report by Dr. Jim Hilker, Department of Corn production, given Aug. 1 conditions? In Table 1 below, available Aug. 5, and it matched up pretty well with market prices at that time. Compare the numbers in Table 3 below, how do they compare? Are they bullish, neutral or bearish? How did the market react? For many, the question may seem somewhat. What was in the wheat was sold out of the market.

At this point, the market is telling us that it will not pay for all of commercial storage, but is willing to pay for farm storage, given no quality losses. If the report was neutral or bearish and the market reaction was the same, and you can order, 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 on the rally.

If you have decided to wait to price or 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 some basis to support your crop by buying a call option.

**SOYBEANS**

The biggest question with soybeans maybe how much rain the soybean belt has received in the past 8 days varies anything the report has to say. However, if the report suggests 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 consider 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 contract or a minimum price contract versus an H-7 or an ARC-H-7A. At this point, the futures market, through the spreads, is telling us that they will enough to make storage profitable, so be ready to consider basis contracts if the situation suggests buying 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 this present themselves.

**WHEAT**

A 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. What was in the wheat was sold out of the market.

At this point, the market is telling us that it will not pay for all of commercial storage, but is willing to pay for farm storage, given no quality losses. If the report was neutral or bearish and the market reaction was the same, and you can order, 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 on the rally.

If you have decided to wait to price or 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 some basis to support your crop by buying a call option.

**CATTLE**

While things may not be as 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 lower prices than expected. Now if we could just get ex- ports moving a bit better, along with the expected drop-off in slaughter by mid-fall, we will have enough making some money. That is, if feed prices don't jump up and we won't do all the profit away buying feeders.

The July Cattle-On-Feed Report showed we still placed a lot of cattle in June, up 13 percent from May 1996, however, we need to put in perspective by saying placements were small in total. Cattle on feed are up 17 percent. This, along with increased demand, will mean prices will 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. Beef cow numbers are down 5 percent and beef herds kept for replacement are down 4 percent. This shows the cattle sector is still in the liquidation phase caused by the feeder cattle prices the first few years. The 1997 calf crop was placed 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 cowcalf operators are paying commercial to close out the majority of their cows in order to get back in some cattle to support their own crop by buying a call option.

**HOGS**

Supply has not been as strong as expected, and the big futures market. The United States had expected to fill the gap in Japanese needs that is being caused by the lack of a domestic beef supply. The report was bullish, neutral or bearish? How did the market react? For many, the question may seem somewhat. What was in the wheat was sold out of the market.

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Budget and tax deal good news for state's farmers

The budget-balancing, tax-cutting package agreed to by the Clinton administration and the Republican congressional leadership good news for 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 taxpayers in the 28 percent bracket and to 18 percent, respectively, for assets held more than five years.

Producers will also be able to use income averaging to lessen their tax hit starting next year. "A combination of these two I believe, is a critical issue for agriculture to take some of the capital 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 entire 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 is 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."

Bill Mar Foods drops five contracts

Continued from page 1

The future of Bill Mar

Turkey producers at the tense, two-hour meeting held to negotiate a portion of the contracts said the new year would see a dramatic change for the company.

"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."
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

Producers looking for a 15 percent yield increase in corn have turned to practical position systems, yield mapping and the latest seed varieties to achieve that goal—but one MSU crop and soil scientist says planting wheat to see that level of yield increase.

In all of our research here in Michigan for many years, we’re only getting 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 70cwt/acre level, that’s another 22 to 23 bushels of corn.”

Cash crop producers look to crops like corn and soybeans as their primary 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 buildup, 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.

“Some people ask how you maximize the conditioning effect of wheat so that you really get that downy disadvantage? One of the things you can do at reasonably low cost is front seeding of clover,” Harwood explained. “It costs about 15c an acre to get the clover into the wheat.”

He adds that the clover seeding rate is about 10 pounds per acre. “That’s key to plant early in the 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. Because there is good moisture, we will have an excellent stand of clover, and we’ll benefit from that as we are planning 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 $13 an acre, which just pays for your seed.”

The real short-term incentive is the increase in pulse 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 health and quality.”

“I would put wheat in most situations and it doesn’t matter 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, you’ve got those continuous sugar beets, you can get those real top sugar beet yields.”

“In another way of thinking— we’re pushing 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 the leg 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 and a bit of the frost, because we want our soil temperature to be cool enough to save the survivors. If you kill the clover too early, it just breaks down and mineralizes and the nitrate is lost over the winter.”

On your 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 off 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.”

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.

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

Anne E. Desjardins, Roben H. Proctor, Susan L. McCormick and Thomas M. Hohn of USDA’s Agricultural Research Service (ARS) pinpointed and deleted the genetic codes for an enzyme that the fungus uses to produce the toxin that causes the head scab disease.

The research team is based at the ARS National Center for Agricultural Utilization Research here.

Gene discovery could help breeders reduce head scab in wheat

The research team is based at the ARS National Center for Agricultural Utilization Research here.

The disease gets its name from the scab-like marks that 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.

The disease gets its name from the scab-like marks that recently began appearing in soybean fields across the Pacific Northwest. The disease gets its name from the scab-like marks that recently began appearing in soybean fields across the Pacific Northwest.

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

The symptoms are not caused by Septoria nodorum or any other fungus, says Pat Hart, MSU Extension pathologist. “Pathogenic fungal pathogens have been isolated from these lesions.”

The symptoms generally start in the spring, and widespread and enlarge to large blotches with yellow halos. Sometimes the blotches have brown centers.

The symptoms are not caused by Septoria nodorum but rather another fungus, says Pat Hart, MSU Extension pathologist. “Pathogenic fungal pathogens have been isolated from these lesions.”

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Financial measures vary widely on Michigan fruit farms

Ralph E. Hepp
Department of Agricultural Economics
Michigan State University

Financial measures are a key tool for assessing the financial health and performance of fruit farms. These measures provide a snapshot of the farm’s financial position and can help stakeholders understand the farm’s ability to meet financial obligations, generate income, and sustain profitability. The measures outlined in this article are groupings of five criteria—liquidity, solvency, profitability, repayment capacity, and efficiency—each providing a unique perspective on the farm’s financial well-being.

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. A ratio of 1.0 or higher is generally considered desirable, as it suggests the farm has sufficient assets to cover its short-term obligations.

Solvency measures the amount of borrowed capital used by a business relative to the amount of owner’s equity. A high solvency ratio indicates that the farm has a strong financial position to finance next year’s operations and capital purchases without resorting to borrowed funds.

Profitability measures the extent to which a business generates a profit from the use of land, labor, capital, and management. The operating profit margin is a ratio of profit before interest charges to net farm income. A high operating profit margin indicates that the farm is generating a strong profit from its operations.

Repayment capacity measures the ability of borrowers to repay debt from income. The debt service coverage ratio is a measure of the ability of the business to cover all term debt payments. A number greater than 1.0 indicates the business generated enough cash to pay all term debt payments. For example, a coverage ratio of 2.0 indicates 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 suggests 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.

The data in Table 1 summarizes the measures for 18 fruit farms and the average for high and low income farms. The table provides a clear overview of the financial performance of these farms, allowing stakeholders to assess their strengths and weaknesses.

### Table 1: Financial Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Average for all Farms</th>
<th>Average for high 33%</th>
<th>Average for low 3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Farm Sales</td>
<td>$199,746</td>
<td>$218,610</td>
<td>$185,836</td>
</tr>
<tr>
<td>Total Crop Acres</td>
<td>709,967</td>
<td>929,903</td>
<td>587,298</td>
</tr>
<tr>
<td>Total Farm Assets</td>
<td>780,962</td>
<td>929,903</td>
<td>587,298</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>4.50</td>
<td>4.61</td>
<td>4.36</td>
</tr>
<tr>
<td>Net Worth</td>
<td>$11,046</td>
<td>$12,924</td>
<td>$9,775</td>
</tr>
<tr>
<td>Farm Debt to Asset Ratio</td>
<td>34%</td>
<td>74%</td>
<td>9%</td>
</tr>
<tr>
<td>Farm Equity to Asset Ratio</td>
<td>66%</td>
<td>26%</td>
<td>91%</td>
</tr>
<tr>
<td>Farm Debt to Equity Ratio</td>
<td>39%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Rate of Return on Farm Assets</td>
<td>3.7%</td>
<td>-2.4%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Rate of Return on Farm Equity</td>
<td>2.9%</td>
<td>-4.0%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Operating Profit Margin</td>
<td>12.6%</td>
<td>-11.1%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Net Farm Income</td>
<td>$48,655</td>
<td>$36,083</td>
<td>$122,861</td>
</tr>
<tr>
<td>Rate of Return on Equity</td>
<td>12.6%</td>
<td>11.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Rate of Return onNet Income</td>
<td>12.6%</td>
<td>11.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Farm Debt Service Coverage</td>
<td>118%</td>
<td>119%</td>
<td>105%</td>
</tr>
<tr>
<td>Capital Replacement Margin</td>
<td>$14,037</td>
<td>$6,624</td>
<td>$83,790</td>
</tr>
<tr>
<td>Asset Turnover Ratio</td>
<td>29.5%</td>
<td>18.6%</td>
<td>76.3%</td>
</tr>
<tr>
<td>Operating Expense Ratio</td>
<td>81.4%</td>
<td>99.3%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Depreciation Expense Ratio</td>
<td>6.7%</td>
<td>7.6%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Interest Expense Ratio</td>
<td>5.4%</td>
<td>-11.3%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Net Farm Income Ratio</td>
<td>14.8%</td>
<td>-11.3%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Repayment capacity measures the ability to generate sufficient cash to make debt payments. The debt service coverage ratio is a measure of the ability of the business to cover all term debt payments. A number greater than 1.0 indicates the business generated enough cash to pay all term debt payments. For example, a coverage ratio of 2.0 indicates 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.

### New JCB Fastracs

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**Business Strategies**

MICHIGAN FARM NEWS

August 15, 1997
New apple cider management production guidelines are good news for apple producers and consumers

Although the BMPs, which take effect immediately, do not require costly pasteurization of apple cider, they do specify several steps, primarily in the apple-cleaning stage and processing equipment sanitation, to prevent incidences of E. coli. Nye said FDA 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 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.

Producers beware of price-later agreement details

Farmers 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 an 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 UCCI form.

“UCCI 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 UCCI. 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 UCCI 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.

“Talks down to knowing who you do business with, knowing the financial condition of the elevator 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.”

Safe on corn.

All-ways crop safe

Because Permit combines exceptional control with crop safety, you can tackle large or small weeds in large or small corn. It extends your application window from spike all the way through canopy closure. Yet, Permit does not carry over from one season to the next. Unlike atrazine or Exceed, Permit degrades in both low and high pH soils. It also does not pose volatility problems, eliminating worries of damage to adjacent crops from vapor drift.

Safe on corn.

Savage on broadleaves,
MDA's Food Safety Efforts Enhanced by Food Safety Awareness Campaign

Department debuts food safety website during kickoff! 

Assuring Michigan 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 about what they can do to prevent food-borne 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 utilize print, broadcast and Internet communications 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 MDX's food technologist, including some of the most interesting tips from his files—like "Why Crab Legs Glow in the Dark" and "Why Green Pineapples 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 Bologna?"
- Three years of data from MDX'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 MDX's role in assuring food safety for Michigan's consumers.

The theme for MDX's booth at this year's Michigan State Fair is food safety, where visitors will receive vital information about safe food handling practices. MDX 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 a science-based food safety lessons for elementary school children (grades 4 and 5). The lesson 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 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 show case 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.
Double trouble mayloom ahead for deer tick

Nature's own fungicide and microscopic worms could help stop black-legged ticks in parks and backyards before they say tuck in onto a hu-
man.

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

The new approach could offer a natural alter-
native to outdoor spraying of tick-killing chemicals called acaricides. One nematode species, Serracini-
na, wriggles into natural body cavities of engorged female ticks. Another, Filonthesis, uses a sharp spine to penetrate through the tick's cuticle and the outer covering.

The nematodes kill by unleashing bacteria that liquefy the tick's tissues. But they don't harm peo-
ple or animals - only ticks and specific insects.

The fungus secretes enzymes that eat away the soft cuticles of immature tick larva and nymphs. Then the tick falls off the deer it was on.

Bodes nymphae are the most likely tick stage to be the culprits when people contract Lyme dis-
ease. That's because the nymph stage of the tick travels long distances to find more hosts. So, the more ticks you can get off in the first place, the less you have to worry about them carrying the bacteria that causes Lyme.

The MSU scientists discovered one of the tick-infecting fungi. They're tentatively identifying it as a new species of Glomus. In lab tests, it killed 60 percent of tick nymphs in two weeks. Another fungus, Metarrhizium anisopliae, killed 100 percent in one week.

Both 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, and how best to apply the nematodes and fungi to tick-infested areas - and which con-
centrations work best.

The study's results, such as those to make sure the fungus's enemies are safe for humans and deer, would be needed before this approach to tick con-
trol could be approved for use.

MDA announces new U.P. State Fair manager

Michigan Department of Agriculture (MDA) Director Dr. Michael McDonnell has announced the appointment of Joseph K. McDonnell as the new Upper Peninsula State Fair manager. McDonnell, of Escanaba, has been the MDA's Multi-million Dollar Environmental Budget Manager since 1986.

Since 1986, the U.P. State Fair has showcased a variety of environmental programs and activities, such as recycling programs, wildlife conservation programs, and educational exhibits. The fair has also offered a variety of educational programs and activities for visitors of all ages.

The fair has a long history of providing educational programs and activities for visitors of all ages. In 1986, the U.P. State Fair sponsored an environmental program that focused on recycling and waste reduction. The program was a huge success and helped to raise awareness about the importance of recycling and waste reduction.

McDonnell's background in environmental issues and his experience as Multi-million Dollar Environmental Budget Manager will be valuable assets as he takes on the role of U.P. State Fair manager. Under his leadership, the fair will continue to provide educational programs and activities that promote environmental awareness and conservation.
Farmer co-ops continue to break income and sales records

Farmer-owned cooperatives in the United States posted record net income for the second consecutive year. Agriculture Secretary for Rural Development, Long Thompson, speaking to cooperator leaders from around the nation, announced that the nation's 3,884 farmer cooperatives reported record net income of $2.37 billion for 1996, a 13 percent increase from the previous record of $2.1 billion in 1995. Cooperatives also enjoyed record net business volume of $23.2 billion, up from $21.6 billion in 1995.

"For more than 100 years, cooperatives have played a vital role in helping farmers improve their ability to market and process their crops and live better and 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 communities."

The record business volume for the nation's farmer cooperatives was due primarily to increases in sales and services to farmers and other farmers and farm supplies. Cooperatives' sales of grains and oilseeds increased by $7.8 billion, or nearly 59 percent, from 1995. Farm supplies for beverages increased by $3.6 billion, or more than 11 percent.

Total marketing sales by cooperatives climbed 14 percent from 1995. The cooperative net business volume was up for all commodity groups except rice and cotton. Rice revenues were stable, while cotton revenues increased more than 6 percent. Income from services provided by cooperatives and other miscellaneous income was down $182 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 to ensure that others in rural America have the opportunity to share in economic growth." Cooperatives sold farm supply sales worth nearly $2.4 billion in 1996. Increases in premiums (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, farm and livestock supplies. It also includes business done with other cooperatives. The total also includes receipts from services provided by cooperatives, such as trucking, storage, grain 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 does demonstrate among some types of cooperatives. Net income for farm supply cooperatives — those that primarily obtain fertilizer, crop, livestock, etc., for their members — increased nearly 17 percent, from $806 million in 1995 to $942 million in 1996. Marketing cooperatives — those that primarily sell, handle and/or process crops, livestock and livestock products for their members — increased net income 21 percent, from $507 million to $625 million.

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Court upholds AFBF's trademark judgment

A federal appeals court has affirmed a judgment of more than $2.3 million in favor of the Alabama Farm Bureau Federation (AFBF) against the Alabama Farmers Federation (AFF) and its affiliated ALIN Insurance Companies for federal trademark infringement and breach of a settlement agreement.

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 for AFBF. The AFBF, which was rendered without a written opinion, came only nine days after the case was argued before a three-judge panel in Montgomery, Ala., according to AFBF.

USDA solicits grant proposals to improve rural access to information

The U.S. Department of Agriculture is soliciting grant proposals for projects that will improve rural America's access to and use of information technology.

Agro-extension specialist for designating manure-storage facilities use an av-

New equations reduce chance of water pollution from dairy manure

New, single-equation estimates 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, phosphorus and other nutrients.

More jurisdictions now monitor water quality and hold dairy farmers accountable for polluting waterways. But farmers are using manure in growing crops and other holding units and it can be applied to fields or recycled as compost. The trouble is, a heap may be an easy place for more than just nitrogen to escape. Some manure systems 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 farm manure by characterizing their complex cycle— from the soil into the forage and back to the soil. A scientist at ARS U.S. Dairy Forage Research Center in Madison, Wis., developed the new models for designing manure-storage systems that use an average value for manure output, gleaned from many scientific observations. The new equations make it easier to calculate more accurately the manure in the farmer's own herd. These include the animals' body weight, milk production and composition, feed, and growth rate.

Many farmers use manure for fertilizer to reduce spending on commercial nitrogen fertilizer. But this can be more expensive than manure. It can be applied to fields. The new equations estimate the manure's initial nutrient content — encouraging design of storage systems that save the nitrogen and help farmers manage and store manure more effectively.

The new equations also can give policy makers more accurate reading on nitrogen escaping into the atmosphere from dairy farms.
by Dr. Jeff Andresen, Agricultural Meteorologist, Dept. of Geography, Michigan State University

A very active weather pattern continued across much of Michigan during early July, with frequent 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, severe weather and associated rain events have led to at least initial symptoms of water stress and a general slowing of pheno logical 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 Pacific Ocean monitored for changes in the El Niño Southern Oscillation (ENSO), current climatic indices 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 seasonal 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-than-normal 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.
NorthStar-Select Sires to manage Michigan DHIA

Two 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 as part of the retirement of longtime Michigan DHIA General Manager Al Thielen.

The search to find a 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.

NorthStar-Select Sires is a cooperative consisting of board members from Michigan DHIA and NorthStar-Select Sires who was appointed to develop an agreement that was then presented to the Michigan DHIA board of directors. Upon careful review, the association's origin, how Michigan DHIA is currently structured, and exploring market needs and opportunities, the board chose to sign a three-year agreement with NorthStar-Select Sires.

"This agreement is not a merger between the two organizations. It is, however, a strategic alliance which will give Michigan DHIA the opportunity to enhance its service delivery in the best interest of dairy farmers," said Robert O'ree, Michigan DHIA president.

"The past several years have been challenging for Michigan DHIA, specifically in the last couple of years, and we know our dairy farmers are in need of sound, reliable and consistent service," he said. "NorthStar-Select Sires is a cooperative with a long and successful history in the dairy industry. They will provide the strength and expertise we need to ensure excellent service to our membership and to the dairy farmers in Michigan."

NorthStar-Select Sires is an AL cooperative with over 50 years of experience. Originally founded to serve the economic improvement needs of dairy farmers and producers through the use of NorthStar-Select Sires, now provides services and sales for direct transfer of embryos and the development of bull configurations. As of today, the organization is one of 10 members of the nationally recognized NorthStar Select Sires federation.

"The board used the findings of the strategic planning process to help us decide which organization would be the best fit for Michigan DHIA," Thielen said. "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 factoring efficiency, a steering committee consisting of board members from NorthStar-Select Sires and Michigan DHIA has been designated.

NorthStar-Select Sires and Michigan DHIA are committed of many of the same people, therefore this agreement to share management services is a plan that will benefit everyone. "It's always 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 Garner, NorthStar-Select Sires president.

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For more information, contact: Robin Eisler, Director Member Relations and Promotions, NorthStar-Select Sires, P.O. Box 2515, Lansing, Mich 48909-2515, telephone (800) 631-6516, fax (517) 930-9319, email: reisler@nsselectsires.org

Susceptibility to infection varies during the dry period

Mammary 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 quarters at risk 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 position, and exploring market needs and opportunities, the board chose to sign a three-year agreement with NorthStar-Select Sires.

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Susceptibility to infection again increases near calving. This may be due to 1) increased fluid volume and dilution of the teat canal, 2) decreased lactococcal concentration, 3) reduced leukocyte concentration, and 4) the loss of milk components for bacterial growth.

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

"When grain flows from a large grain wagon, it can pull a person down like quicksand. An adult may be pulled from a small truck or wagon or out of an auger. The injuries most often involve the loss of a foot or hand when operators attempt to remove debris or unplugging the auger flighting entrance," Doss says. "If a grain auger is plugged, never cut off power to the grain auger or stick a stick to remove the plug. Never use your hand or foot to push material into or out of a plugged auger opening."

"Watch kids around grain handling equipment at any time," says Howard Doss, Michigan State University Extension agriculural safety leader. 'The injuries most often involve the loss of a foot or hand when operators attempt to remove debris or unplugging the auger flighting entrance," Doss says. "If a grain auger is plugged, never cut off power to the grain auger or stick a stick to remove the plug. Never use your hand or foot to push material into or out of a plugged auger opening."

"It doesn't occur often, but once in a while a Michigan youth drown in wheat that is being unloading from a combine, a grain-unloading wagon or a truck. In many instances, children should be allowed to ride on or even play near a load of grain, at times," says Howard Doss, Michigan State University Extension agriculural safety leader.

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Dingell critical of global climate change treaty action

I t's the United States being busy 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 agriculture. 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 mean for American agriculture and what will that mean to American agriculture's ability to compete in the 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 or need.

"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 of 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." •

Drought pushing North Korea to critical stage

A 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 precipitating international aid workers to call for more food donations to reach the United Nations estimate of 800,000 tons of wheat, rice and other food staples 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 Kari

Rumph receives MCA/Merck Scholarship

O 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 "Heroes: 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 Interfraternity Livestock Judging Team. Since July 1996, she has also served as managing editor of The Michigan Cattlemen, the official publication of MCA and the state's only all-beef magazine. After receiving her bachelor of science degree in May, she hopes to work toward a master's degree in animal breeding and genetics.

Purchasing home 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 home 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) 336-2190 or write P.O. Box 24041, Lansing, MI 48909-4041.
Potato blight fungicide receives registration

Michigan potato producers approve assessment increase

Shopping cart ads prove effective for potato industry

Food safety: What to do during a power outage

Michigan potato acreage down 6 percent

China’s WTO entry hits wall

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Market basket prices increased in second quarter of year

A 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 Market Basket Survey. The average price of selected grocery items jumped 56 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 steak tip roast represented the largest increase in the survey. The price of pork chops increased 23 cents to $3.51 per pound. A pound of sirloin cost $2.43 per pound, up 21 cents; cheddar cheese, $3.15 per pound; and ground beef, $2.29 per pound, up 5 cents. An increase of 2 cents was also registered for whole milk, now $2.46 per gallon, down 5 cents, and ground chuck, $1.65 per pound, down 5 cents.

A pound of bacon remained unchanged at $2.60. AWFUB, the nation's largest market research organization, conducts an informal quarterly Market Basket 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 survey's farmers' and ranchers' share remains fairly steady. The farm value of each food dollar spent in the United States is approximately 22 cents. The farmers' and ranchers' share represents the largest component of the consumers' food dollar.

Volunteers stop at 60 to 80 locations in 16 states participating in this informal 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 4-cent increase in prices per year over an eight-and-a-half-year span. "These numbers surprise me a little," said Francl.

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 7 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; and ground beef, $2.29 per 52-ounce jar, up 5 cents; and corn oil, $2.41 per 52-ounce jar, up 2 cents. A pound of white potatoes dropped 10 cents to 94 cents, the largest decline in the survey. Other decreases included eggs, 96 cents per dozen, down 8 cents; mayonnaise, $2.63 per 52-ounce jar, down 8 cents; white bread, $1.13 per 28-ounce loaf, down 7 cents; whole milk, $2.46 per gallon, down 5 cents; and ground chuck, $1.65 per pound, down 5 cents.

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

Prolonged stressful or even moderate activity on sun- soaked days at high temperatures and high humidity could be a double whammy for individuals who do not take the proper self-protection measures.

"Unless a person paces him/herself and drinks plenty of water, he or she could be a candidate for heat exhaustion or heatstroke," said Howard Dow, Michigan State University Extension agricultural safety leader. "Unfortunately, most people don't think they will get it 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 suntan, 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," Dow says. "Skin cancer constitutes the most common form of cancer in the United States, where one-third of the melanomas in the world -- about 50,000 new cases each year -- occur.

"People that make them 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 exposed to the sun without protection."

Dow says that proper clothing in hot weather can substantially reduce the potential for heat exhaustion or heatstroke and help prevent sunburns.

"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 undershirt has been described as a "towel on the skin" and burdensome 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 intense between 11 a.m. and 2 p.m.

Heat and 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 women 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 lightheadedness -- 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 proteins, such as fruit and vegetable juices. Avoid consuming caffeinated beverages and alcohol on hot days -- they will contribute to dehydration, which increases the risk of heat-related illness.

Eat lots of carbohydrates and avoid fats and proteins. Try to produce more body heat than do carbohydrates. Protein increases water loss. Dow says a recent government medical report on heatstroke warned that some drugs -- such as tranquilizers, antidepressants, and stimulants 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.

WHERE BELONGING MAKES A DIFFERENCE. THE STATES LARGEST GENERAL FARM ORGANIZATION
Christine E. Lietzau, agriculture development liaison for food, farms and families with the Michigan Department of Agriculture, has just been appointed to the Administrative Council for the North Central Region Sustainable Agriculture Research and Education Program, according to MDA Director Dan Wyant.

"We're very excited that Christine has been appointed to a prestigious national position 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 other partners.

Lietzau has been with MDA since 1980 and currently serves as division director of the Farm and Environmental Services Division. She has also served as chair of the steering committee of the Michigan Integrated Food and Farming Systems Project (MIFIPS), and as 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 Moomaw, MIFIPS coordinator. "MDA's commitment to sustainability through its support of Christine is an important and historic dedication."
Armyworm damage reports in corn fields do not necessarily mean action should be taken

Several reports of armyworm damage in corn fields in various states across the country suggest that armyworms are a significant problem. However, it is important to note that armyworms do not necessarily mean that corn is in immediate danger. Armyworms are a type of caterpillar that feed on crops such as corn, soybeans, and alfalfa. While they can cause significant damage to crops, their impact can vary depending on the stage of development of the plants and the overall health of the field.

Guidelines for determining armyworm threshold levels in other crops:
- Alfalfa: 3 or more larvae per row foot
- Grass hay and pasture hay: 4 or more larvae per square foot
- Small grains and legumes: 4 or more larvae per row foot
- Perennials: 5 or more larvae per row foot

For field treatment options for the insects, check with your local agricultural extension office or pest control experts.

1997 county annual meetings

<table>
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<tr>
<th>COUNTY</th>
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<tr>
<td>Alcona</td>
<td>Oct 14</td>
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For more information on armyworm management, contact your local agricultural extension office or visit the Michigan State University Extension website.
New laws may fix Michigan roads

WHEN IT COMES TO QUALITY AND DURABILITY, AN
OFFERING THAT EXCEEDS EXPECTATIONS CAN MAKE
THE DIFFERENCE...

Sow behavior can help predict reproductive traits

Good tempered sows may also be good for the wallet

Behavior traits can help sell sows that will fit your operation, said Keith Irvin, Ohio State University animal scientist. Irvin, who has studied hog behavior for 15 years, has found that sow temperament can be used to look at 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 pig, overall mothering score and crate adaptability scores.

Temperature 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. Rate of farrowing describes how difficult birth was, whether assistance was needed and how much time elapsed between the farrowing of the first and last piglet.

A sow that is cross with her piglets also is cross with people, and this poor temperament means the sow may not be a prime money earner, Irvin said. Easily irritated sows also tend to be excessively fat at farrowing.

Sows that are at farrowing will have a higher probability of experiencing a delayed and difficult birth," he said.

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

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

Behavior is a good indicator of which are the best sows, but it should not totally substitute for the performance records that are kept on hand to answer questions about 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 army career 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 the movement of the sow and piglets — for several days after birth to prevent them from accidentally lying on their piglets, and so producers can easily care for 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, with no milk problems

and a superior mothering score, "he said. "I've 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 frequency weigh piglets, as well as the cost of purchasing the equipment to make those measurements. But Irvin warns that while white 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 weight" 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.

"One of the genetics of the pig population is always changing, and the way a pig reacts in the future may be different from how it reacts now," he said.

"There's more interest in behavior today than when I started 15 years ago." •

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For a complete itinerary call: 800-292-2693.

For a complete itinerary call: 800-292-2693.
This is the time of year when most manure pit deaths occur

More 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. Dusch, Michigan State University Extension, says there have been no documented cases of BSE in the United States, the Center for Science in the Public Interest says plans to conduct studies to determine whether their theory on the stun gun is accurate. Representatives of the meat industry said they planned to join the Center in conducting the studies.

"While the BSE is on the rise, and many people are concerned, it is important to note that this is not a new disease," said Dusch.

"The BSE is a disease that is caused by a prion, a protein that is different from the normal protein in the brain. It is a slow disease that affects the central nervous system, and it is not infectious to humans. It is important to note that the BSE is not a threat to human health, and the risk of transmission to humans is extremely low."
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