

MICHIGAN FARM NEWS



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Soybean Producers Power Great Lakes Vessel

What you may have just run through your combine this fall, was also running through the fuel tanks of the Grayling, a 75-foot, Great Lakes research vessel, this past summer.

Soydiesel, produced through an esterification process of soybean oil, was used in a blend of 80 percent conventional diesel and 20 percent soydiesel to power the Grayling's four, 855-cubic inch, Cummins diesel engines. Fuel consumption for the vessel averages 28 gallons per hour, according to the vessel's captain, Clifford Wilson.

The Grayling, operated by the National Biological Survey, conducts fish population studies across Lake Huron, Lake Michigan and Lake Superior. Two 2,000-gallon fuel tanks were filled with 4,000 gallons of soydiesel in June and then custom blended on board with regular diesel from two 3,000-gallon tanks as the fuel was used.

Performance and fuel consumption did not suffer, according to Wilson, and oil usage actually decreased. More importantly, however, Wilson said researchers and vessel crew members were pleasantly surprised with the elimination of the diesel fuel odor, which was replaced with a much more pleasant smell similar to that of roasted beans.



The Grayling, a 75-foot research vessel powered by Soydiesel, was the subject of a recent news conference while in port at Saugatuck.

"Crew members and researchers immediately noticed the difference - you can't smell petroleum fuel on the vessel anymore," Wilson said. "All you smell is the soydiesel and the exhaust which smells more like fumes from a restaurant than typical exhaust."

Michigan Soybean Promotion Committee Executive Director Keith Reinholt attributes the odor reduction to a reduction of hydrocarbon particulate matter, carbon monoxide, and vola-

tile organic compounds that come from the exhaust stack. The fact that soydiesel also splash blends very well with conventional diesel made the Grayling an ideal vessel to experiment with.

"When you blend soydiesel with a petroleum product, it splash blends very well and won't separate," Reinholt said. "The fact that they

Continued on page 5 -- see **Soydiesel Powered**

Disaster Relief Assistance Approved - Rules Changed

The U.S. House and Senate have passed legislation authorizing funding for disaster relief assistance for farmers suffering losses due to eligible weather conditions such as freezing, frost, flood, drought, etc. The provisions were part of the 1995 USDA appropriations bill, which must still be signed by the president.

The legislation authorizes disaster assistance in the form of a grant to farmers who have suffered crop losses from adverse weather conditions, except for damages due to fire blight.

The disaster relief assistance would operate under the disaster assistance provision of the 1990 Farm Bill. After President Clinton signs the legislation, he must request the dollars needed for the payments and Congress still must appropriate the funds.

One significant change in the program, according to Jim Byrum, executive director for the state ASCS, is the reduction of benefits for producers who did not plant or harvest a crop. He says the change will eliminate the abuses of similar programs in the past.

"Producers who make every effort to plant and harvest obviously have more expenses, and suffer more loss, than a farmer who doesn't do either," said Byrum. "Under the old rules, there was virtually an incentive for farmers to leave poor crops in the field since they received the same disaster benefits regardless."

Eligibility Requirements:

- Must have suffered losses of 35 percent or more if the crop was insured.

- Must have suffered losses of 40 percent or more if the crop was not insured.

Reimbursement Rate:

Reimbursed for the portion of crop loss greater than 35 percent or 40 percent (whichever is appropriate) at a rate of 65 percent of the established price for the crop.

Producers need to contact their local ASCS office to find out the qualifications and what information and documentation will be required, according to MFB Public Affairs Director Al Almy.

"Farmers should complete the documentation as soon as possible, so that they're prepared when the disaster program is ready to be administered," Almy said.

Harvest in Full Swing

The harvest season has been picking up speed, weather permitting. Delays due to rain have been somewhat advantageous, since a late frost has allowed many crops to reach full maturity.

As of presstime, Michigan Ag Statistics was calling corn harvest for silage 75 percent complete, while corn harvest for grain stood at 15 percent complete. Soybean harvest was getting started with 15 percent of the acreage harvested. Dry bean harvest was 75 percent complete, while potato harvest stood at 80 percent complete. Sugar beet harvest activity had also just gotten underway in the Thumb and Saginaw Valley areas.

Wheat planting was running slightly behind, with just 55 percent planted compared to the five-year average of 65 percent.

Apple and concord grape harvest was also in full swing, with some hail damage reported in southwestern Michigan.



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In Brief...

Michigan September Farm Prices Down

The Index of Prices Received by farmers in Michigan for all products as of Sept. 15 was 121 percent of its 1977 base, according to the Federal/State Michigan Agricultural Statistics Service. The September index was down two points from August and six points less than last year's index. The price index for all crops was 112, a three point decrease from last month. Potato prices fell substantially and corn, soybeans and dry beans each decreased 5 percent from August to lead the decline. Winter wheat prices increased 9 percent from the previous month while the all hay price rose 8 percent and oat prices were up slightly.

The livestock and products index, at 132, was one point less than August. Steers/heifers prices increased 1 percent, while prices for slaughter cow and calves decreased 4 percent and 2 percent, respectively. Hogs prices were down 10 percent from August and 22 percent below last September. Milk prices were up 1 percent to \$13.10 per cwt.

Nationally, the September All Farm Products Index of Prices Received was 134 percent of the 1977 base, down three points from August 1994. Price declines from August for hogs, oranges, cattle and potatoes more than offset gains for wheat, milk, lettuce and tobacco.

The Index of Prices Paid by farmers for commodities and services, interest, taxes and farm wage rates for July was 199 percent of its 1977 average. The index was down one point from April 1994 but four points higher than July 1993. The July index was most influenced by a drop in prices since April for feeder cattle and calves, feed grains, feeder pigs and hay.

USDA Reorganization and Crop Insurance Approved

The House passed by voice vote a resolution that incorporates an agreement between House and Senate leaders on both crop insurance and USDA reorganization. Senate approval is expected soon. The reform measure reduces the number of agencies from 43 to 29 and will close 1,200 of the department's 3,700 field offices.

Under USDA reorganization, House members mandated a new undersecretary post for food safety and gave the authority for six other undersecretaries and three assistant secretaries. The bill also mandates an office of risk assessment and cost benefit, and authorizes a consolidated farm service agency (CFSA). Farmers Home Administration county committees were also eliminated.

The bill retains the Conservation Reserve Program under the guidance of the new CFSA and gives state committees the authority to request a vote on any CFSA county committee that is scheduled for elimination under streamlining recommendations.

The agreement included catastrophic crop loss coverage based on a formula that will be calculated at 50 percent of yield multiplied by 60 percent of market price for crop years 1995 to 1998; beginning in 1999, coverage will be based on a formula of 50 percent of yield times 55 percent of price.

To participate in Farmers Home Administration loan programs and price support programs, farmers must purchase minimum crop insurance for \$50 per crop/county up to \$200 per county with a total cap of \$600 per farm, regardless of how many counties are involved.

Arrest Made in 1992 MSU's Vandalism Case

The recent capture of Rodney Coronado, wanted on federal charges for vandalism and damage to MSU's Mink Research Center in February 1992, brought a bittersweet sigh of relief to many people at Michigan State University.

Coronado was arrested on an Indian reservation in Arizona by U.S. Bureau of Alcohol Tobacco and Firearms officials, on a five-count indictment including arson, extortion and possession of stolen property.

Those charges stem from an incident that destroyed over 30 years of research and records, when Coronado allegedly broke into the offices of Dr. Richard Aulerich and Dr. Karen Chou, located in Anthony Hall, and torched the contents. Equipment and storage areas at the MSU mink research facility were also destroyed.

More than \$200,000 worth of damage resulted in the first-ever incidence of animal rights activist activities at MSU. Coronado is suspected of being a member of the Animal Liberation Front (ALF). Ironically, Aulerich's and Chou's research focused on nutrition and the decline of the natural mink population.

According to MSU's Animal Science chairperson, Maynard Hogberg, Aulerich and Chou have done a good job of recovering. "There are some things you'll never get back, but for the most part, their research programs are back up, running and going strong," Hogberg said.

In response to the vandalism incident, MSU evaluated its security and the structure of its research programs. However, in the words of Hogberg, "It is important to maintain openness because MSU is a public institution, specifically a land grant institution."

"We could make this a fortress that nobody could penetrate, but when you do that, you



do several things," said Hogberg. "One is you become a prisoner unto yourself. Secondly, you start raising questions in people's mind that you are trying to hide something."

According to Hogberg, Coronado's arrest sends a message to animal rights activists across the country that the judicial system does work. Previous failures in getting indictments issued against similar cases was starting to send the idea that terrorist acts could be performed without any repercussions.

MSU's future prevention of similar incidents rests on its strong commitment to the advancement of animal agriculture. Hogberg said, "What we're doing here is using a lot of our best knowledge, the use of science to improve animal agriculture, and we're doing it in a way that we feel is right."

1994 Sugar Production Up

The Agriculture Department has forecast sugar production for 1995 to be 7.84 million tons, up 2.2 percent from an earlier estimate. Much of the increase is due to a record year for beets, with 4.5 million tons of beet sugar produced. That is a 450,000 ton jump over the previous year.

Beet farmers are expected to harvest a record 1.44 million acres this year and the combination of better yields and improved sucrose recovery also will contribute to the sugar increase. Cane sugar production is expected to drop 4 percent from 1994 to 3.34 million tons. The department said 873,000 acres will be devoted to cane production.

INS Delays Effective Date of Replacement Green Cards Until March 20, 1995

The Immigration & Naturalization Service (INS) has announced that it will delay the effective date by which all aliens must have replaced their old "green cards" INS Form I-151, with new Form I-551. The new effective date is March 20, 1995.

When completing the I-9 Form, employers will be able to accept Form I-151 as proof of employment eligibility until March 20, 1995. The delay was the decision of the INS to give itself time to process applications for the new replacement cards. **Applications for the new cards may be obtained from the INS by calling 1-800-755-0777.**

GAO Calls Food Safety System Flawed

The General Accounting Office -- the investigative arm of Congress -- criticized the nation's food safety system, saying it is weak, ineffective and rarely punishes persons or companies who violate food safety laws. In two separate reports, GAO said the food safety system, which is overseen by the Agriculture Department, the Commerce Department, the Food and Drug Administration and the Environmental Protection Agency, is too fragmented, lacks enforcement muscle, and needs to be completely overhauled.

The report said despite 21,439 reported food safety violations between 1989 and 1992, only one prosecution was obtained by the government. GAO also said the system is flawed because the government instead relies too heavily on warning letters to violators that carry no penalties. The reports were critical of U.S. agriculture's reliance on crop protection chemicals and animal drugs.

ADM Chief Andreas -- "Farm Policy Hurts Exports"

Archer Daniels Midland Chairman Dwayne Andreas said paying U.S. farmers not to produce is a "world disaster" that is hurting farm exports. "Every time we take an acre out, another country steps in and replaces it," Andreas told members of the National Agri-Marketing Association during an issues meeting in Chicago.

Andreas said U.S. agricultural exports of \$40 billion could double if the government allowed farmers to produce as much as they could and paid them a fair price for their products. He said the assumption that lower production means higher prices is wrong.

Older Consumers Prefer Turkey

Older Americans are eating more turkey, but a lack of interest from younger generations has contributed to flat turkey consumption in the last four years. These are the findings of a study done by the NPD Group for the National Turkey Federation (NTF). The study found females over age 65 and males over 55 are the only age groups that consistently increased the amount of turkey they bought during the last four years.

"Children are not as fond of turkey, and they're tomorrow's consumer," said Teresa Farney, vice president of marketing and consumer information for NTF. "We need to get them involved. Although turkey sales have doubled since 1985, many consumers still think of turkey only at Thanksgiving and Christmas."

According to the survey, nearly one-quarter of all turkey consumed in the U.S. is bought during the holiday season. The report also reflected on how turkey consumption patterns have changed in recent years. In 1994, the study found that 51 percent of all turkey bought is used in sandwiches; one-third is used as a base dish or the main part of a dish. In 1983, those figures were reversed. One-half of all turkey was used as a base dish and 35 percent was used in sandwiches. The NPD Group's National Eating Trends Service compiled the study by monitoring 2,000 households.

Byron FFA Hosting Farm Toy Show and Sale

The Byron FFA Alumni Chapter and Byron FFA Chapter will be hosting a Farm Toy Show and Sale on Saturday, Oct. 22, from 9 a.m. to 3 p.m. at the Byron High School cafeteria. More than 15 exhibitors are expected, with over 900 square feet of exhibit space.

There will be a \$1 admission fee for adults, while children under 12 are admitted free of charge. A concessions stand will also be open. All proceeds from the event will be used to support local FFA member activities. **Call Dave Wyrick at (810) 266-4620 for more information.**

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Espy Resignation Final Dec. 31 – Search on for Replacement

Amid continued controversy and investigation of USDA Secretary Mike Espy's acceptance of gifts from companies the agency is suppose to regulate, the secretary announced his resignation effective Dec. 31. Espy admitted he had been "careless with some of the details" of his personal business, but said he broke no laws and apologized for letting President Clinton and those around him down.

Poultry giant Tyson Foods played a big role in Espy's apparent undoing. Espy has been charged with accepting sporting tickets and travel accommodations from the company in violation of the Meat Regulation Act. A \$1,200 educational scholarship from Tyson

to Espy's girlfriend, Patricia Dempsey, has also resulted in accusations of government ethics rules violations.

Attention has now shifted to finding a replacement for the USDA post by Jan. 1, 1995. Deputy Secretary Richard Rominger was rumored to be at the top of the "Washington short list," according to a *Knight Ridder News* report, since he is already familiar with USDA's current agenda. Rominger, who is from the diverse ag state of California, also has strong ties to conservationists.

Other names in the rumor-mill include Indiana Congresswoman Jill Long, a current member of the House Ag Committee; for-

mer North Dakota governor and farmer, George Sinner, who almost got the job before Espy; and Oklahoma Congressman Mike Synar, who recently lost his primary race for re-election, says *Knight Ridder News*.

Regardless of the final decision, MFB President Jack Laurie believes it's critical that the next USDA secretary understands the role that so-called minor crops like fruits and vegetables play in the total scheme of agriculture.

"We think the next agriculture secretary should be someone who has a broad understanding of total agriculture, including both crop and livestock production," Laurie said.

Laurie said administrative capabilities will also be important qualities in a new secretary. "With the recent reorganization of the U.S. Department of Agriculture, it's important that a strong leader be in place to guide the reorganization through its formative stages of development," he said.

A strong belief in the importance of world trade to agriculture will also be critical. "I'm confident that whoever the president selects will have that commitment to the value of world trade to our agricultural industry," he said. "President Clinton has worked diligently to bring both the NAFTA and the GATT world trade agreement to reality, and I would expect he would select someone who would share that line of thinking."

Governors Backing Ethanol in Legal Battle

Michigan Gov. John Engler caught national interest and support recently when he announced that the Governors' Ethanol Coalition, which represents 13 corn growing states, will join the legal fight against oil interests who have filed suit against the Environmental Protection Agency and its rule to include ethanol in a clean air program. Farm Bureau also has filed an intent to file a friend-of-the-court brief in the case brought by the American Petroleum Institute.

"Both the EPA and the U.S. Justice Department have indicated to me and the Governors' Ethanol Coalition that they share my confidence that the outcome of the court case will be positive," said MDA Gordon Guyer. "However, it is unfortunate that the case could not be decided before the rule was scheduled to take effect."

Health Care – Time for a "Decent Burial"

Health care reform legislation is dead -- may God have mercy on its soul -- for the year and departing Senate Majority Leader George Mitchell is almost resigned to that fact. Mitchell, blamed House and Senate Republicans for the reform bill's demise and is ready to re-focus his attention on other pressing issues, including passage of the General Agreements on Tariffs and Trade Uruguay Round agreement.

House Minority Whip Newt Gingrich (R-Ga.) told President Clinton yesterday that if a health care bill was brought up at this late date, the all-important GATT bill would almost certainly be killed. Other congressional members agreed with his statement and said Congress should try again next year to pass a reform measure.

"The country owes you and the first lady a debt for your leadership," said House Energy and Commerce Committee Chairman John Dingell (D-Mich.) in a letter to Clinton. "But it is time to give health care reform a decent burial and provide for its rebirth." Dingell blamed "greedy special interests" for defeating the reform effort.

Insurance Tax Deduction on the Line – Again

The demise of health care reform in Congress may spell doom for the 25 percent income tax deduction for health insurance premiums paid by farmers and other self-employed people. The deduction expired on Dec. 31, 1993.

Farm Bureau has championed a 100 percent tax deduction for the self-employed. During consideration of health care legislation this year, all the major proposals (including the administration's) have contained language either increasing or extending the tax deduction for self-employed people. Legislation is being introduced to restore the 25 percent deduction for the 1994 tax year, according to Al Almy, MFB director of public affairs. "Whether or not Congress will enact this in the few remaining days that it will be in session this year remains to be seen," he said. "We're pointing out that the expiration of this provision would cause considerable hardship and would result in more people being uninsured."

GATT Bill Finalized – Passage Expected

Members of the House Ways and Means Committee and the Senate Finance Committee announced yesterday that they had agreed on terms of the General Agreement on Tariffs and Trade Uruguay Round implementing bill and that the legislation would pass both houses before the planned mid-October congressional adjournment.

Farmers Call for Changes in Endangered Species Rules

Reforming the Endangered Species Act (ESA) is one of the prime goals of Farm Bureau and a coalition in Washington, D.C.

Congress is beginning to hear the horror stories of people running into conflicts with the ESA, according to Al Almy, director of public affairs for Michigan Farm Bureau. "The move is on to a common-sense, reality-based reauthorization of the ESA," he said.

Farm Bureau is part of the National Endangered Species Act Reform Coalition, and committed to four major reforms in the ESA including:

- Determining which species should be protected must be based on sound science and subject to peer review.
- The act must be implemented in the open with maximum opportunity for public comment.

The socio-economic impact of proposed ESA decisions must be fully considered and the options with the least adverse socio-economic impacts must be selected.

Private property rights, including water rights, must be fully protected and compensation be provided where the use and value of property has been diminished substantially by the ESA.

"If somebody is going to lose the value of their land for society's goals, then the public should bear the cost of that goal," said Almy. "Only then will we be able to get a true measure of the cost of the ESA."

Reauthorization of the ESA has been put on hold until the next Congress. Farm Bureau is supporting a recently introduced bill that would prohibit any further listing of endangered species or habitat creation until the act is reauthorized.

NAFTA's Impact on U.S. Agriculture After Six Months?

Information is now available on U.S. trade with Mexico after the first six months of the North American Free Trade Agreement. Overall, U.S. exports have risen by 17 percent, to \$24.5 billion, in the first six months of this year.

On an annual basis, this will mean exports should reach a record \$48.9 billion in 1994, an increase of \$7.3 billion from 1993. According to the administration, these increased exports plus the increased exports to Canada will mean up to 100,000 new jobs in the U.S. There has been no "sucking sound" of U.S. jobs to Mexico.

In agriculture, U.S. farm exports have risen 11 percent in the first six months, from \$1.93 billion to \$2.16 billion. On an annual basis, U.S. agricultural exports should

reach \$4.1 billion, a half billion dollars more than last year.

Imports of Mexican agricultural products have also increased, by 5.9 percent. On an annual basis, 1994 imports from Mexico should be around \$2.9 billion, which results in a projected U.S. trade surplus of \$1.2

...increased exports will mean 100,000 new jobs in the U.S. There has been no "sucking sound" of U.S. jobs to Mexico.

billion in farm products.

U.S. exports showing

substantial gains include: feedgrains, soybeans, cotton, tobacco, peanuts, soybean oil, sugars and sweeteners, red meats, poultry and fresh fruit.

Imports from Mexico showing gains include: coffee, tea, snack foods, fruit and vegetable juices. Coffee and tea were already duty-free before the NAFTA.



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Weather

30-Day Outlook - Average to Above Average Temps. and Precip. Expected

For most agricultural crops, September weather was near ideal, with mean temperatures in most areas from 1-4 degrees above normal and precipitation generally remaining well below normal levels. The warm temperatures brought many summer crops to near maturity by month's end.

On a historical note, if you consider the present growing season's weather as being anything but normal, you have a keen sense of climatological judgement. Preliminary data indicates that the June-August traditional summer period was the wettest on record since 1985 for the state as a whole (this would come as no surprise to those in the central Lower Peninsula, where rainfall was heaviest).

In addition, the August mean temperature for the state was the coolest on record, a factor which undoubtedly led to slow rates of crop growth and development.

The outlook for the coming weeks is a difficult call, with medium-range computer guidance calling for a highly variable, transitional jet stream pattern. The new 30-day National Weather Service outlook for October calls for temperatures and

9/1/94 to 9/30/94	Temperature		Growing Degree Days		Precipitation	
	Observed Mean	Dev. From Normal	Actual Accum.	Normal Accum.	Actual (inch.)	Normal (inch.)
Alpena	60.2	+ 2.7	2116	2035	1.58	3.47
Bad Axe	61.9	+ 0.1	2222	2454	2.36	2.70
Detroit	66.1	+ 2.4	3073	2673	1.95	2.43
Escanaba	60.8	+ 3.6	1785	1616	4.26	3.55
Flint	62.7	+ 1.4	2518	2673	2.66	2.43
Grand Rapids	64.0	+ 2.0	2641	2723	1.09	3.26
Houghton	59.4	+ 3.8	1734	1845	3.36	3.58
Houghton Lake	62.4	+ 4.1	2332	2035	1.40	3.47
Jackson	62.4	- 1.4	2607	2653	1.92	2.79
Lansing	62.6	+ 0.9	2541	2653	1.90	2.79
Marquette	58.7	+ 4.8	1781	1845	2.85	3.58
Muskegon	64.2	+ 2.6	2378	2338	1.87	3.19
Pellston	59.6	+ 3.7	2019	2109	2.24	3.66
Saginaw	63.8	+ 1.6	2568	2454	1.95	2.70
Sault Ste. Marie	56.6	+ 1.4	1557	1616	1.50	3.55
South Bend	65.4	+ 1.7	2962	2723	4.69	3.26
Traverse City	62.4	+ 1.5	2315	2109	1.87	3.66
Vestaburg	60.8	- 1.1	2316	2414	2.07	3.09

Observed and growing degree day totals are accumulated from April 1. Normals are based on district averages. Jeff Andresen, Ag Meteorologist, MSU

precipitation to average near to above normal. The 90-day outlook (October-December) continues to call for slightly cooler and wetter than normal conditions. Because of the difficulties noted above, confidence in these outlooks is considered lower than average.

Michigan and Major Commodity Area Extended Weather Outlook

T - Temp.	10/15... 10/30	10/15.....12/31
P - Precip.	T.....P	T.....P
Michigan	A.....A	B.....A
W. Corn Belt	B.....N	N.....N
E. Corn Belt	B.....N	N.....A/N
Wint. Wheat Belt	B.....N	B.....N
Spr. Wheat Belt	N.....N	N.....N
Pac. NW Wheat	N.....N	A.....B
Delta	B.....N	B.....N
Southeast	B.....A	N.....N
San Joaquin	N/A.....B	A.....N

A-Above Average, B-Below Average, N-Normal, MA-Much Above, MB-Much Below, NP-No Precip. Source: National Weather Office

Michigan 1994 Small Grain Production a Mixed Bag

Near normal planting and growing conditions were seen throughout most of the small grain growing regions in 1994, according to the Federal/State Michigan Agricultural Statistics Service.

Favorable growing conditions in 1994 allowed small grain yields to improve from last year for wheat and oats. Barley and rye yields, however, were down marginally from 1993 levels.

Michigan's winter wheat production was estimated at 30.7 million bushels, up 39

percent from last year. The crop was harvested from 580,000 acres with a yield of 53 bushels per acre.

Oat production, at 6.3 million bushels, was down 12 percent from 1993. Yields averaged 57 bushels per acre for the 110,000 acres harvested, compared to an average yield of 55 bushels per acre a year ago.

Barley yields dropped three bushels per acre from last year to 51 bushels. However, harvested acreage increased from 18,000 to 32,000 acres, causing production to rise 8 percent to 1.6 million bushels.

Rye production was estimated at 442,000 bushels, up 5 percent from 1993. Yield was estimated at 26 bushels per acre, two bushels less than last year. Acres harvested increased by 2,000 to 17,000 in 1994.

U.S. 1994 winter wheat production was estimated at 1.66 billion bushels, down 6 percent from 1993. The average yield was 40.2 bushels per acre. Area harvested for grain was placed at 41.4 million acres.

Production of oats in 1994 was estimated at 230 million bushels, up 11 percent from last year. Area harvested for grain, 4.02 million acres, was up 6 percent from last year.

Barley was harvested from 6.68 million acres in 1994, producing 375 million bushels of grain, down 6 percent from 1993.

Rye production increased 8 percent from a year ago to 11.1 million bushels. Harvested area was 406,000 acres while planted area, 1.60 million acres, was the smallest on record.

Michigan Dry Bean Stocks Down

Commercial elevators in Michigan held 950,000 hundredweight (cwt.) of dry beans in storage as of Aug. 31, 1994, according to the Michigan Agricultural Statistics Service. This stock level is 500,000 cwt. less than last year. The quantity on hand included 830,000 cwt. of navy beans and 120,000 cwt. of all other classes. This compares to 1,370,000 cwt. of navy beans and 80,000 cwt. of all other classes on hand a year ago.

Stocks on hand Dec. 31, 1993 included 3,550,000 cwt. of navy beans and 950,000 cwt. of all other classes. Carryover stocks account for all beans in commercial off-farm storage and include a small portion of non-Michigan grown products and 1994 crop beans. An estimate of the quantity of dry beans held on farms is not included in this report.

Dry bean stocks are not included in the USDA Agricultural Statistics system of grain stocks reports. Dry bean stocks data included in this report were tabulated from administrative reports supplied by elevator operators filed monthly with the MDA. Dry bean stocks reports are issued twice a year and reflect quantities held in commercial storage on Aug. 31 and Dec. 31. Stocks on hand as of Dec. 31, 1994 will be released at 3 p.m. on Jan. 26, 1995.



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 29 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 Farm	Noon Farm
WABJ	Adrian	1490	5:45 am	11:50 am
WATZ	Alpena	1450	5:30 am	11:30 am
WTKA	Ann Arbor	1050	6:05 am	12:05 pm
WLEW	Bad Axe	1340	6:30 am	12:50 pm
WHFB	Benton Harbor			12:30 pm
WKYO	Caro	1360	6:15 am	12:15 pm
WKJF	Cadillac	1370	5:55 am	11:20 am
WTVB	Coldwater	1590	5:45 am	12:20 pm
WDOW	Dowagiac	1440	6:05 am	12:15 pm
WGHN	Grand Haven	1370/92.1	5:45 am	12:15 pm
WPLB	Greenville	1380	6:15 am	11:45am
WBCH	Hastings	1220	6:15 am	12:30 pm
WCSR	Hillsdale	1340	6:45 am	12:45 pm
WHTC	Holland	1450		12:15 pm
WKZO	Kalamazoo	590	5:15 am	
WLSP	Lapeer	1530	7:20 am	11:50 am
WOAP	Owosso	1080	6:15 am	12:30 pm
WHAK	Rogers City	960		12:15 pm
WSJ	St. Johns	1580	6:15 am	12:15 pm
WMLM	St. Louis	1540	6:05 am	12:20 pm
WSGW	Saginaw	790	5:55 am	12:20 pm
WMIC	Sandusky	660	6:15 am	12:45 pm
WCSY	South Haven	940		12:15 pm
WKJC	Tawas City	104.7		12:45 pm
WLKM	Three Rivers	1510/95.9	6:15 am	12:15 pm
WTCM	Traverse City	580	5:55 am	11:20 am

* Station signs on at different times during the year. Morning farm times change with the sign-on times.
 ** Station airs various farm reports between 5:30 and 6:00 a.m.
 *** Station airs various farm reports between 12:00 and 1:00 p.m.
 Some stations carry additional market reports throughout the market day.

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More Michigan Farmers Discovering the ACA Advantage

5

With the fall harvest season in full swing, many producers are seeing the fruits of their labor and the financial return of their planning and inputs. More and more Michigan farmers are finding that one of those inputs, ACA, is one that improves productivity with minimal costs.

ACA, which stands for Agricultural Crop Additive, was originally developed by AMOCO Oil Company to enhance anhydrous ammonia. This technology was then purchased by United AgriProducts and underwent more testing and development so that it could be sold through all fertilizer and chemical dealers.

When used to its potential, ACA's unique combination of zinc and ammonium acetate

Below: Growers Service ACA Product Technician, Bob VanArkel shows the difference in the root system of treated (left) and untreated corn.



helps to develop an intensive root system in the plant. A better root system improves the plant's uptake of water and nutrients which allows the plant to live longer and healthier, according to Growers Service ACA product technician, Bob VanArkel.

This vigor, says VanArkel, permits the plant to be more productive. "The addition of ACA to a fertility program increases root development, which can reduce stress in any given year and a healthier plant should result in higher yields," he said.

This past summer, several producers in Michigan used ACA on their crops. Grand Ledge farmer Wilbur VanZee experienced a significant increase using ACA on his wheat. "I had two fields that were side by side. The one was 24 acres, I put ACA on that and it went 67 bushels," said VanZee. "The field right beside it had the rest of the fertilizer on but it didn't have ACA on, and that only went 55 bushels."

Each year the ACA advantage has been a positive one, according to test plots across the state. In 1994, Michigan saw an average increase of 6.9 bushels per acre of wheat by using ACA. There were also corn and soybean test plots conducted with ACA. The product can be used on a variety of crops, including mint and even strawberries.

Jim Lonier of ShadyLodge Farms, located in Grand Ledge, conducted ACA corn and soybean test plots. Lonier farms 3,000 acres of corn, soybeans, and wheat with sons Steve, Scott, and Todd.

According to Jim, if he receives at least a two to five bushel advantage in his corn crop this fall, then he will continue to use ACA in his management plan. "It costs a little over \$3 an acre, so you've got to have a little over a bushel of either wheat, two

bushels of corn, or one-half a bushel of soybeans to make it pay for itself," said Jim.

Since ACA is an additive that can be easily applied, the return of using it is a low-risk proposition. According to VanArkel, the best time to apply ACA is at planting time. "If you can get it on as early as possible, close to planting and close to the seed, you're probably going to get your biggest response out of the product," said VanArkel.

Even though many producers are thinking about harvesting crops, this is also the time of year to be planning next year's wheat crop. VanArkel recommends that producers apply ACA to their wheat this fall during planting to get maximum yield.

For more information about ACA, contact your local dealer or call 1-800-292-2701.



Shady Lodge Farms, operated by (l-r) Jim Lonier and sons Todd, Steve, and Scott (not pictured), will soon get the results of several on-farm ACA test plots.

Harvest Losses can be Checked Periodically Using a One-Foot Square Frame

In corn, an average grain loss of two kernels per square foot is approximately one bushel per acre. Aim for a maximum total loss of less than 2.5 bushels per acre or a maximum of five kernels per square foot. Square foot averages should always be calculated across the entire width of the corn head. Your time will be well spent taking a few minutes to make adjustments which minimize losses.

Soydiesel Powered Research Vessel Travels Great Lakes

(continued from page 1)

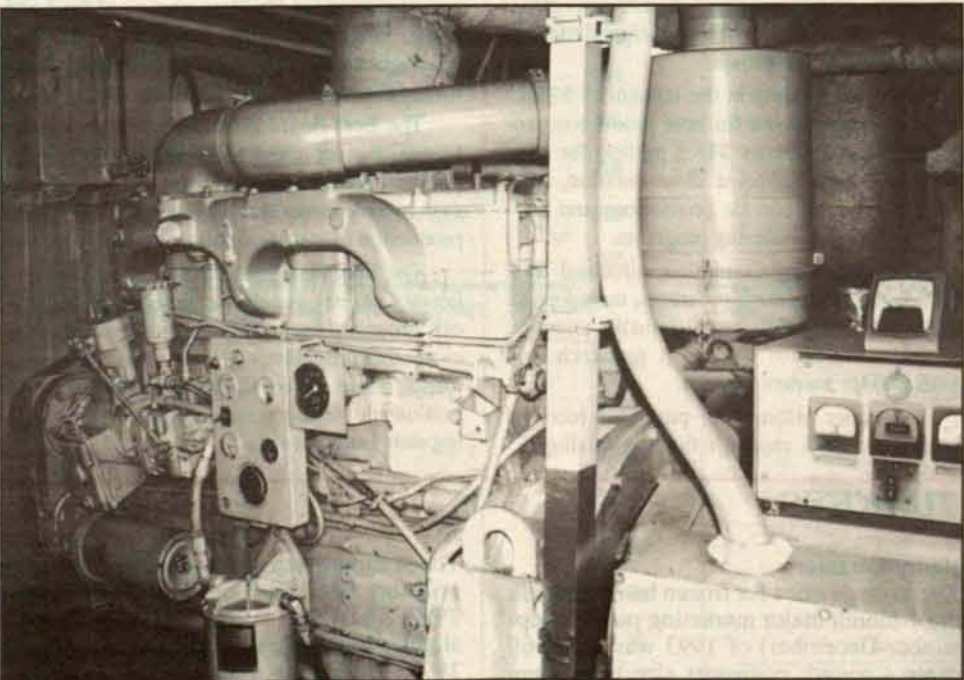
could custom blend this fuel on board, made this project possible and allowed for testing of different blends such as 50/50 or 100 percent soydiesel, if they so desired."

According to Reinholt, although there are other marine uses of soydiesel on saltwater vessels, the Grayling is the only freshwater vessel in the entire country burning soydiesel.

The soydiesel project was funded 50 percent from Michigan producer check-off dollars, and

50 percent from the National Soydiesel Board, which is funded through the United Soybean Board.

"We're pleased to help fund this project because it's good for the environment and for the Michigan soybean industry, which contributes about \$355 million annually to this state's economy," Reinholt said. "We just hope that in the near future, these projects translate back to more dollars in the producer's pocket."



A close look at one of the Grayling's four, 855-cubic inch, Cummins diesel engines. Two of the engines run generators to power the boat's electrical system. The other two engines, equipped with turbos and rated at 275 HP each, power the 75-foot vessel at a top speed of approximately 10 knots per hour.

Maximize your Winter Wheat productivity with



Identifiable Performance Parameters on Winter Wheat

The following are frequently observed plant responses from soil and foliar applications of ACA on winter wheat:

Visual Response	Observation Timing (Stage of Growth)
<ul style="list-style-type: none"> Vigorous early plant growth More winter hardy More fibrous and extensive root system Increased tillering Larger diameter stem Wider, darker green leaves, fuller canopy fill row sooner Earlier pollination Heavier seed weight 	<ul style="list-style-type: none"> Fall - first to fourth leaves unfolded Spring - greenup and vigor Spring - observation on plant stand Fall - first to fourth leaves unfolded Spring - emergence of inflorescence Spring - from stem elongation on Spring - at completion of tillering Spring - at completion of tillering Spring - at flowering At maturity

The identified performance parameters typically result in:

- Increased uptake of soil nutrients
- Increased utilization of sunlight in photosynthesis
- Improved winter hardiness
- Higher yields and/or test weight
- Increased uptake of soil moisture
- Increased tillering and foliage
- Improved standability and ease of harvest

Yield Information Postemergence applications to Winter Wheat (1993)

- 33 total studies • 7.6 bushel per acre increase • 10.5% increase in yield
- Return on ACA investment of \$17.64 (2/3 pint/acre)
- 2/3 pint ACA per acre broadcast [Winter Wheat at \$3.00/bushel x 7.6 bushel increase/acre = \$22.80 - ACA investment of \$5.16/acre (2/3 pint/acre) = \$17.64 R.O.I./acre]

Application Techniques/Procedures

Test results have shown that ACA can be applied to the soil or foliage of winter wheat. ACA can be broadcast incorporated into the soil using water or a fertilizer solution as a carrier with or without a soil applied herbicide. The incorporation or movement of ACA into the soil profile can be by tillage, rainfall, or irrigation. This will position the ACA near the developing root system of the plant.

Foliar applications should be made prior to dormancy break when top dressing wheat. It is not recommended that ACA be applied with any postemergence herbicide or insecticide until further testing has been completed.

Methods of Application

- ACA mixes easily with and fits into the following fertilizer programs:
- Soil Applications**
- Soil broadcast applied with liquid fertilizers
 - Soil broadcast applied with dry blended fertilizers
 - Soil broadcast applied (weed & feed herbicide/fertilizer solution)
- Foliar Applications**
- Application can be made with liquid fertilizers as the carrier.

Other application methods:

- Soil applied broadcast with water as the carrier, with or without a herbicide
- To wheat foliage with water as the carrier



Contact your local Clean Crop Dealer or call 1-800-292-2701 for additional information on THE ACA ADVANTAGE

NOTE: The effect on weed control when ACA is added to post-emergence herbicides is unknown. Thus, it is not recommended at this time to apply ACA with any postemergence herbicide.

6

CORN

Just how big is this corn crop; what will total supply be; and how much will be used? First, check out what the latest USDA Crop Production Report, released Oct. 12, had to say about the size of the 1994 corn crop. Also check out the latest Supply/Demand Reports, released at the same time, to get an estimate of total supply and use for the 1994-95 corn marketing year. While we will discuss these reports in the next issue, it is important for you to start digesting the information now.

Just because there's information for you to look at that came out after this issue went to press, doesn't mean there isn't any information to discuss. The always important quarterly USDA Stocks Report was released Sept. 30, based on Sept. 1 data. For corn, this number is also the ending stocks number for the 1993-94 marketing year and the beginning stocks number for the 1994-95 marketing year.

Sept. 1 corn stocks were 850 million bushels — almost exactly what the trade was expecting and only slightly above the USDA's last Supply/Demand Report estimate. This is a very tight number and is basically saying our supply is coming from this year's harvest, not from carry-in. This means prices were good until we knew we would have a good crop this year. At this point, it appears that use will be strong.

Exports sales are going better than last year at this time, but actual inspections are behind. Feed use with low prices and huge livestock numbers will jump up significantly. See if these match the new USDA supply/demand numbers. The question mark is the projected increase in ethanol use now that it's in the courts.

Strategy: What to do? First, given all the information, how close to the bottom do you think we are? This is your call, not mine, but I will give you some thoughts. If

SOYBEANS

Did the USDA Crop Production Report, released several days ago, increase the soybean crop by as much as the trade expected? What was the market's reaction? As with corn, we have to be thinking about when and what the low will be. Soybeans have marketing loans and LDP's just like corn. In fact, they have for several years — the price just hasn't been low enough to matter.

On Sept. 30, the USDA's Stocks Report showed 1993-94 ending stocks at 209 million bushels. This was a shock to the market which was expecting 160 million. And the last USDA Supply/Demand Report estimated 150 million. This adds 50-60 million bushels we did not expect to this year's

WHEAT

For those of you who were and are bullish on wheat, it has paid off in a big way, and the Sept. 30 USDA reports didn't hurt. The Stocks Report showed we had about 150 million bushels less wheat on hand at the end of the first quarter than the trade expected. USDA also lowered their estimate of the 1994 wheat crop 41 million bushels.

Check this out with the just released USDA Supply/Demand Report, but I suspect projected wheat use for feed in the 1994-95 crop year will be increased by about 50 million bushels. Projected exports will likely be increased as well due to the poor crop in Australia. This should keep projected ending stocks tight.

EGGS

Henry Larzelere

Egg prices at the end of September were about 9 cents a dozen below a year earlier. Feed ingredient costs were about 2-cents per dozen below last year.

Wholesale egg prices in New York are expected to average in the low to mid 70's

Market Outlook...

Seasonal Commodity Price Trends

Corn	?
Soybeans	?
Wheat	↑ ?
Hogs	← ↓
Cattle	→ ↑

Index: ↑ = Higher Prices; ↓ = Lower Prices; TP= Topping; BT= Bottoming; ? = Unsure

the reports were negative, we will probably hit the market lows around the beginning of November. If the reports were positive, we have probably hit the lows, but that doesn't mean we will go up very fast.

At this point, the market is telling us to store. The basis is wide and the spread in futures will easily pay on-farm storage. If you think the market still has a way to go down, or you think there is a danger of the loan rate not putting a floor on the market this fall due to the marketing loan, consider using puts to provide some downside risk protection.

Also, be ready to use the LDP's if the county posted price is lower in your county than the loan rate and you think the market is near the low, or if you are going to sell now anyhow.

The 1995 set-aside (ARP) requirement on corn has been tentatively set at 7.5 percent by USDA, up from zero in 1994. Grain sorghum, barley and oats was maintained at 0 percent ARP. These numbers can be revised any time until Nov. 15.

supply. To account for this, the USDA went back and revised the 1993 soybean crop up about 60 million bushels to 1.87 billion.

Strategy: The soybean basis continues to be wider than normal. This is a signal that the market is willing to pay storage. The spreads between futures tells you how much the market is willing to pay. It appears to me it will surely pay on-farm storage costs. Commercial is less clear; pencil it through for you.

If you think we are still above the bottom, consider puts. With puts you give yourself some downside protection and can still take advantage of the basis tightening.

Strategy: With wheat, we should be looking for the market high. The past several years, that has tended to happen between December and March. If you still have a good deal of wheat left unpriced, you may want to spread your sales over this period.

The wheat basis is also quite wide through March futures. In fact, if you have limited on-farm storage, you may have to pencil through which crop will pay the highest storage — it may be wheat.

If you have wheat stored on-farm and you like the futures price, but don't like the basis, consider a hedge or a hedge-to-arrive.

during the last 3 months of the year. The number of hens and pullets on farms the first of September was 3 percent above last year and the number on Jan. 1, 1995, may be 4 percent above a year earlier. The egg-type chick hatch in August was about the same as in August 1993. Also, the rate of slaughter of spent layers has been less than year earlier for the last several months.

Dr. Jim Hilker, Dept. of Agricultural Economics, MSU

HOGS

Yes, we do have hogs out there; and yes, as of Sept. 1, the industry was still very much in an expansion mode. This is borne out by the latest USDA quarterly Hogs and Pigs Report released Sept. 29. But, as has been the case in the last several reports, it appears the expansion is by the large units, while there is still fairly strong liquidation in the more traditional sector.

All hogs and pigs were shown to be up 4 percent, kept for breeding were up 4 percent, and kept for market were up 5 percent, all relative to the same period a year ago. This is the highest inventory since 1980. Market hogs over 180 pounds were up 5 percent, which matches up fairly well with recent slaughter data. Hogs between 60 and 180 pounds were up 4 percent. These are the hogs we will see through the fall.

The June-August pig crop was up 6 percent. This is the largest June-August pig crop since 1979. Sows farrowing were up 4 percent and pigs saved per litter were up 2 percent, at a record 8.22. Pigs under 60 pounds on Sept. 1 were up 5 percent. These are the pigs we will see coming into slaughter this winter.

CATTLE

While we keep waiting for fewer cattle, slaughter numbers keep coming in significantly above a year ago. And they keep coming in weighing a lot more.

While we do expect some recovery as we move through the fall, we are only talking \$2-3 and probably not breaking \$70/cwt. With the low corn prices and lower feeder prices, I expect at least the larger feedlots to fill up.

Funding Approved for 1995 Beef Checkoff Projects

The Beef Promotion Operating Committee approved \$41.2 million in beef checkoff funding for fiscal year 1995 projects which will begin Oct. 1, 1994.

Project funding requests presented to the Operating Committee were based on a beef checkoff plan and budget previously approved by both the Operating Committee and the Cattlemen's Beef Promotion and Research Board. The beef checkoff fiscal year 1995 budget is designed to increase beef demand in the short-term, thus responding to the current weak cattle market, without jeopardizing the long-term effectiveness of the beef checkoff program.

The Operating Committee allocated funding for beef checkoff activities in six program areas which are: promotion, research, consumer information, industry information, foreign marketing and program development.

Checkoff funding in the amount of \$25.15 million was approved for beef promotion programs, which includes \$18.3 million for consumer advertising/recipe dissemination, \$3.4 million for food service promotions and \$3.4 million for retail featuring programs.

The Operating Committee allocated \$4.2 million to beef research programs, including \$2 million for food safety/product quality research, \$1.25 million for nutrition research and \$968,000 for market research.

Consumer information programs received fiscal year 1995 checkoff funding totaling \$3

TURKEYS

Henry Larzelere

The average price for frozen hen turkeys in the 4-month major marketing period (September-December) of 1993 was about 69 cents a pound; consumer size toms were about 68 cents a pound. These prices were above year earlier levels even though the supplies were above the previous year's level.

Producers intend to farrow 5 percent more sows in the September-November period and 4 percent more sows in the December-February period compared to a year ago. If realized, these farrowings will be at the highest level since 1980. These are the hogs we will see come to market next spring and summer, respectively.

It will be interesting to see how these extremely low prices we have seen in September, after the data for the report was collected, will affect expansion plans. These very large units have never seen prices this low, and while integration may shield them from some of the sting, the returns and the returns to their investors will not be what they have grown accustomed to.

The question is, will others get out fast enough with these low prices to let the large operations continue to expand at the very rapid rate we have seen the last several years?

The low corn prices should help the calf prices from falling completely out of bed, but they will be significantly lower than last year. I suspect the beef cow inventory will be up Jan. 1. However, this fall's calf prices, while still profitable for most, may make cow-calf producers question further expansion.

One thing is for sure, consumers are going to have to eat an awful lot of meat next year.

million. This amount encompasses \$1.2 million for media public relations programs, \$815,000 for food communicator programs, \$660,000 for youth education programs and \$337,000 for the National Beef Cook-Off.

Committee members allocated \$3.7 million to industry information programs, which includes \$1.7 million for beef issues management, \$1.6 million for industry public relations and \$282,500 for quality and value education.

Five million dollars in beef checkoff funds were allocated to foreign marketing programs targeting Japan, China Pacific, the Western Hemisphere, the European Union, the Former Soviet Union, the Middle East and Canada.

Checkoff funding in the amount of \$187,500 was approved for "Implementation of the Long Range Plan," so that the Oversight Committee can continue working on the Beef Industry Long Range Plan and consolidated structure.

The Beef Board Producer Communications Committee approved \$500,000 in funding for projects, which includes producer attitude research, trade media services, media briefings and production of state and national annual reports.

The Beef Board is accountable for overseeing the national, one-dollar-per-head beef checkoff program including planning budgeting, evaluating programs, collecting checkoff assessments, assuring compliance with the Beef Promotion and Research Act and Order and certifying state beef councils.

The 4-month seasonal price in 1994 will probably be 1 or 2 cents a pound above 1993. The hatch so far in 1994 has been slightly higher (less than 1 percent) above 1993. The rate of slaughter has also been slightly above the same period in 1993. The expected higher prices reflect the usual demand strength each year with a slightly larger supply than the year before.

7 Farm Management Records for the Future

John Jones, Telfarm Director
Dept. of Agricultural Economics, MSU

Farm financial records can serve many purposes, although most of us would agree they are a pain in the pencil to keep! While making it possible to file accurate income tax reports may be the first priority, financial records can do a lot more. They can tell you where you stand month by month. They can show you whether that change in production method was successful. They can track your profitability over time.

An individual's farm records can also help a whole industry. This is true when the records are anonymously made available to a public information base that analyzes and publishes averages plus points out trends. Telfarm, a farm analysis system sponsored by Michigan State University Extension, is an example of how individual farms helped the whole state's industry. When the Michigan legislature was wrestling with the impact of the school tax reform, Agricultural Economist Lynn Harvey came to the Telfarm data base for assistance in assessing the impact of the proposed tax reform legislation for a state legislative subcommittee.

Future Attributes

To survive in the future, a farm records program for business management (it's now fashionable to call them a Management Information System, or MIS), must adopt some basic attributes. The MIS program of the future will need most or all of the following features. It should:

- Be flexible and individualized to accommodate diverse and unique situations, yet be compatible with an industry data base.
- Be available when the manager needs the information to make decisions.
- Be compatible with new technologies. Expect, for example, more innovative use of the Global Positioning System (GPS) technology and automatic environmental monitoring and control technology.
- Incorporate more cost accounting information by enterprise or profit center to enhance management control.
- Coordinate financial records with production records for chemical and fertilizer application, genetic tracking, production or yield data, herd health, and manure management to mention a few.
- Assist large agribusinesses and contract producers that are horizontally or vertically integrated.
- Provide "expert" assistance at the farm directly with the decision maker or business manager.
- Provide quality income tax management assistance.

I do not see massive change coming overnight. Some very successful farm managers may continue with needing only some minimal service and support for essentially the rest of their careers, but the trends for the long run seem fairly clear.

As new generations come along with new abilities and methods, the "progress" will inevitably require more of the listed attributes. The speed of adoption will depend on the market's demands, government regulation or intervention and the decreasing cost of the technology relative to the benefits.

Maintaining a Healthy Profit Margin

A "healthy" profit margin per unit of production is a key to long run survival. A healthy profit margin varies significantly from business to business based on the production methods, size, debt structure and other factors. But if profit margins per unit narrow, they will lead to some inevitable consequences, such as:

- Increasing production volume to maintain the same level of net farm income.
- Increasing off-farm sources of income to compensate for the reduced on-farm net profit.
- Decreasing interest for farm continuation or new business start-ups
- Increasing interest in alternative production methods or uses for the farm land and buildings.

All of these consequences are happening in much of Michigan agriculture. Farm business managers must look to the future and make their own strategic decisions on their business' future.

Maintaining a healthy profit margin requires regular monitoring and attention to details. While large volume farms have more to lose with negative profit margins per unit, it is also very important for small and medium size farms to maintain healthy profit margins since they cannot compensate against narrow margins with volume. Some areas to concentrate on:

- Produce premium products that may be differentiated and command higher prices.
- Control costs - cut, cut, cut at unnecessary expenses (easily said and hard to do) and make every dollar spent accountable to an equal or greater increase in income or benefit.
- Make long run investments based on a conservative payback plan and economic profit.
- Be frugal about the withdrawal of business profits to help build up working capital and boost the ability to withstand unexpected disruptions.
- Carry out accurate strategic planning so you are not caught off-guard with future changes. A crystal ball would be nice here.

Cost Accounting is a Must

Cost accounting is necessary to make farm managers aware of the status of their various profit centers. This critical feedback of performance information will enhance a managers ability to respond to future investment opportunities and necessary changes to remain profitable.

Two programs recently initiated through MSU Extension are assisting farm managers with their cost accounting on dairy and swine farms. The Dairy Cost Accounting Team program is being developed by Sherrill Nott, ag economics Extension dairy farm management specialist. The Swine Enterprise Analysis Team program is being lead by Dale Roseboom, animal science Extension swine specialist, and Gerald Schwab, ag economics livestock extension farm management specialist.

These new programs would be a tremendous benefit to any dairy or swine farmer considering cost accounting as a needed activity to provide critical management information.

Two Closing Suggestions

On top of this, and more importantly, I have made more farm visits this year than any other

FARM BUSINESS OUTLOOK

to learn what was and wasn't working. There is no other place except on the farm where this information can be obtained.

From these experiences, I offer two suggestions for the near term. First, the newly developed AMAP Financial Management Workshop module looks like an excellent program to attend. Second, try the Telfarm program for "on-going" assistance with your business management record needs.

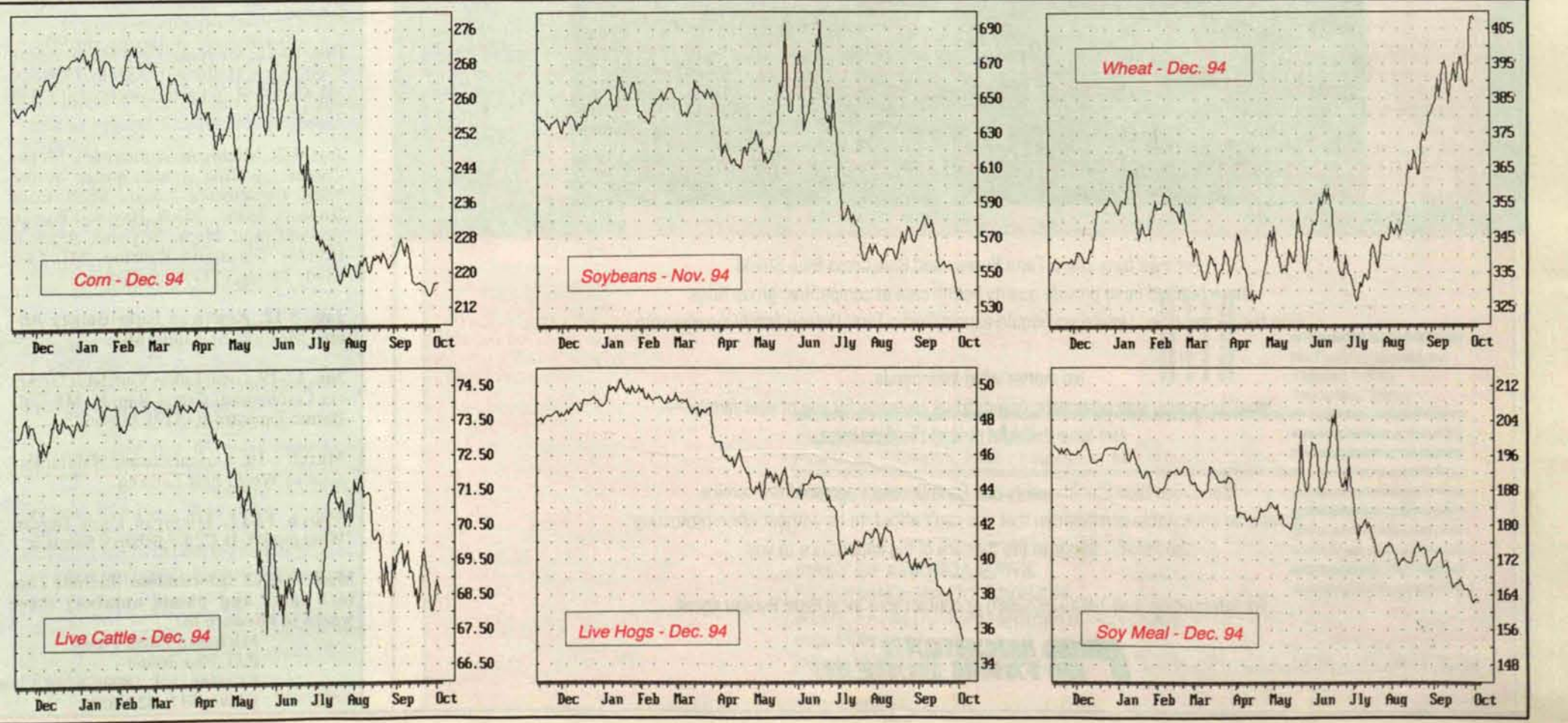
Telfarm is an excellent MIS program. It will help you measure progress towards a healthy profit margin, and can do your cost accounting. Contact your local Extension agent for enrollment details if you are interested.

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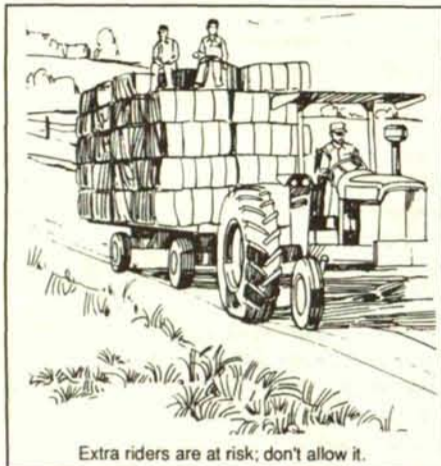
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Charts Provided by Knight-Ridder Financial

8 Farm Machinery/Road Travel Safety Tips

Collisions with other vehicles make up about half of the accidents involving farm equipment on public roads. The rest are single-vehicle accidents – jackknives, turnovers, runs off the road, and collisions with stationary objects like bridges and culverts.



Here's what you can do to prevent roadway accidents while transporting farm equipment this harvest season:

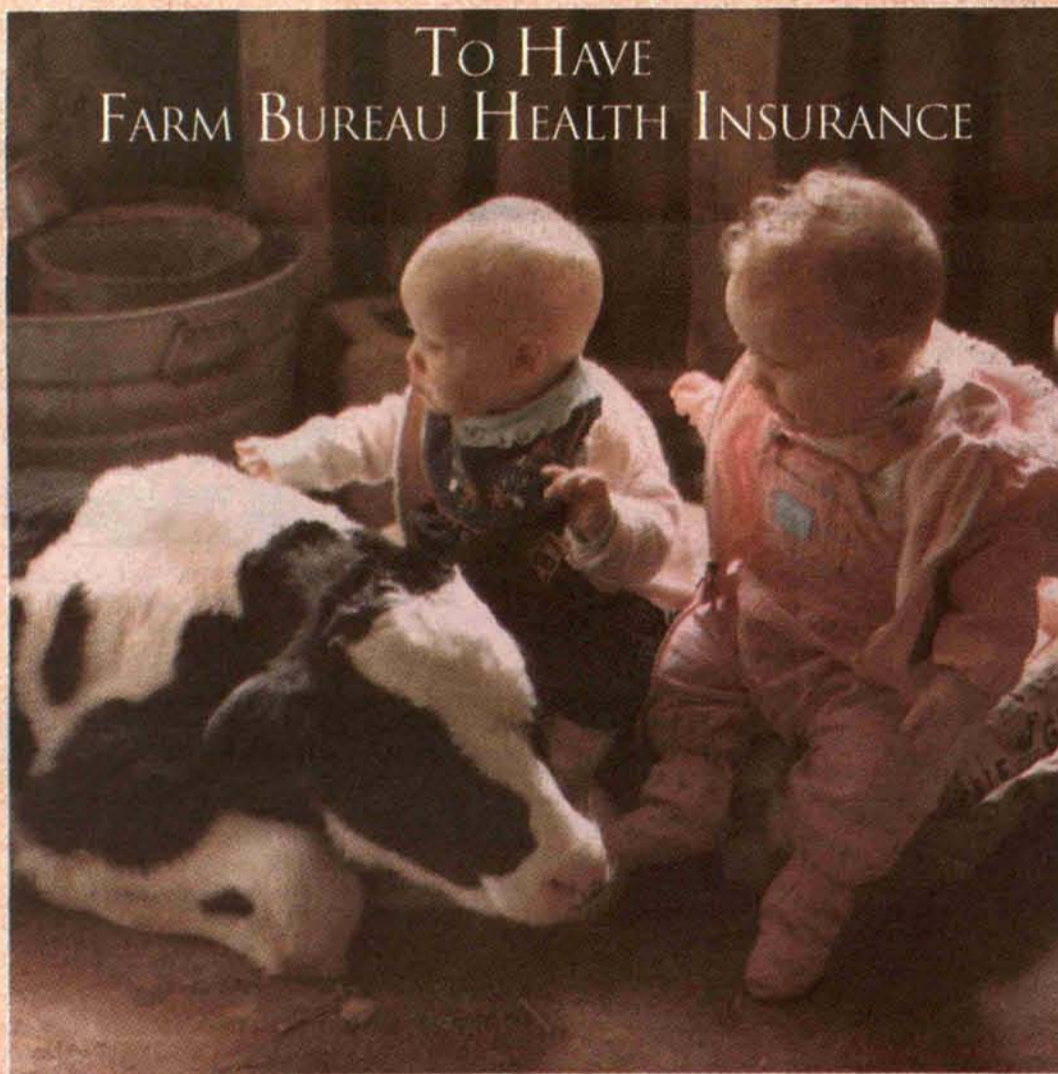
- Be sure you can see. Clean cab windows – and keep your lights and wipers in good condition.
- Be sure you can be seen. Along with your flashing lights, clearly display an SMV emblem on your vehicle. Be sure the emblem is not mud-covered, faded, or improperly mounted. Post left-turn signs on the rear of chopper wagons and other large equipment.
- Keep wagon tires properly inflated, and make sure your hitch and load are secure. Nothing should stick out far enough to catch on tree branches or be struck by passing vehicles. Observe regulations concerning length, width, weight, lights, reflectors, safety chains, and warning placards for big loads or hazardous materials.
- Move wide machinery during daylight hours when traffic is light. Before moving large or heavy loads on unfamiliar roads or driveways, check your route for hazards – underpasses, weak bridges, low power lines, or narrow passages. Use a second vehicle with flashing lights to accompany large equipment.
- Allow only licensed drivers to transport farm machinery for any distance on a public road. Inexperienced workers who operate tractors in the field may lack the knowledge and judgment they need to deal safely with difficult traffic situations.
- Never carry extra riders.
- Keep driveways and access lane sightlines clear. Cut away growth blocking the view.
- Let nearby traffic pass before you enter a roadway. It can take as long as 10 seconds to get fully onto or across a road from a dead stop, and a car moving at 55 mph would travel about 800 feet during that time.



- Try to keep your vehicle on your side of the road. Pull over to let others pass if necessary. Watch for soft shoulders, ditches, culverts, posts, railroad crossings, and other hazards. Obey stop signs and slow down or stop at intersections lacking signs.
- When road and load conditions are normal, drive at full road speed to reduce the speed difference between you and the traffic following you. But if the road is rough or slippery, or your vehicle is hard to handle, slow down.
- Keep the load within your tractor's ability to slow and stop. Be sure your tractor's brake pedals are locked together to ensure even braking when you drive at transport speeds.
- Signal your turns. When turning right, don't swerve into the opposite lane. Before turning left, make sure no one is trying to pass. Extendable rear view mirrors will help you keep track of what's going on behind you.
- If something goes wrong with your vehicle, pull off the road as far as you can. If possible, set out reflectors and flares to warn other drivers.
- Be alert for motorists who may not be watching for you.

A FEW SMALL REASONS

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For information, call 1-800-292-2680 or contact your local Farm Bureau agent.

MICHIGAN
FARM BUREAU

Calendar of Events

Nov. 1-3, MFB Policy Development Committee, Lansing, MI.

Nov. 9-10, 1994 Michigan Rural Health Conference, McGuire's Resort, Cadillac, MI. Call (517) 336-1066 for more information and registration details.

Nov. 28 – Dec. 1, MFB Annual Meeting, Westin Hotel, Detroit.

Dec. 3, Michigan Crop Improvement Association Annual Meeting, Valley Plaza, Midland, MI. Call MCIA at (517) 355-7438.

Dec. 14-15, MFB New Presidents' Conference.

Dec. 14-15, Michigan Crop Management Conference, Holiday Inn-South, Lansing, MI. Call MSU's Larry Copeland at (517) 353-9545.

Jan 4-5, Michigan Agriculture Mega-Conference (first annual, hosted by the Mich. Cattlemen's Assoc., Mich. Corn Growers Assoc., Mich. Hay and Forage Council, and Mich. Soybean Assoc.), Holiday Inn-South Lansing, MI. Call Cindy Reising, (517) 669-8589.

Jan. 8-12, American Farm Bureau Annual Meeting, St. Louis, MO.

Jan. 17-19, Great Lakes Vegetable Growers Convention, Grand Rapids, MI. Call Bernie Zandstra at (517) 353-6637.

March 6-10, Agriculture and Natural Resources Week, East Lansing.

March 14-17, Michigan Farm Bureau Washington, D.C., Legislative Seminar.

Mail or FAX information (include contact name and phone number) three weeks in advance to:

Michigan Farm News
P.O. Box 30960
Lansing, MI 48909-8460
FAX: (517) 323-6793

Know How You'll Vote on November Ballot Issues?

MFB has announced its position on three of the four proposals that will appear on the Nov. 8 ballot. MFB supports a "yes" vote on Proposal C, the referendum to amend Michigan's auto insurance laws and a "yes" vote on Proposal B, the proposal to limit criminal appeals.

The organization is urging a "no" vote on Proposal A which would convene a Michigan Constitutional Convention. Farm Bureau is neutral on Proposal P which would establish a Michigan State Parks endowment fund.

Below, you'll find the exact ballot language for each of the ballot proposals and more details about the position of the Michigan Farm Bureau.

PROPOSAL A:

A PROPOSAL TO CONVENE A CONSTITUTIONAL CONVENTION FOR THE PURPOSE OF DRAFTING A GENERAL REVISION OF THE STATE CONSTITUTION.

Shall a convention of elected delegates be convened in 1995 to draft a general revision of the state constitution for presentation to the state's voters for their approval or rejection?

YES NO

MFB Position:

An affirmative vote on Proposal A would mean a Constitutional Convention would be convened for the purpose of revising our state constitution. **MFB recommends a NO vote on Proposal A.** A major overhaul of the Michigan Constitution is not needed at this time.

In the last 30 years, if changes have been needed, the process of proposing and adopting constitutional amendments has been an effective way to deal with changes. Voters have amended the Constitution 17 times and rejected 34 proposed amendments since it was adopted in 1963.

It has been estimated that the direct cost to the state of Michigan for holding a new Constitutional Convention in 1995-96 would be \$24 million. This does not account for costs to various organizations for the purpose of overseeing the Constitutional Convention.

Proposal B:

A PROPOSAL TO LIMIT CRIMINAL APPEALS.

The proposed constitutional amendment would restrict a criminal defendant who pleads guilty or nolo contendere (no contest) from appealing his or her conviction without the permission of the court. **Currently, someone who pleads guilty or no contest to a crime has the automatic right to appeal. Should this proposal be adopted?**

YES NO

MFB Position:

Currently the Michigan Constitution grants "an appeal as a matter of right" within Michigan courts for all accused.

An affirmative vote on Proposal B would not allow an appeal by an accused who pleads guilty or no contest without permission of the court. **MFB recommends a YES vote on Proposal B.**

It is estimated that frivolous appeals by convicts who originally plead guilty or no contest cost the state of Michigan \$3 million per year. It is Farm Bureau's position that when an accused pleads guilty or no contest, he or she has admitted to the crime and has given up their right to an appeal.

There may be an occasional case where an injustice has occurred and the courts would have the ability to permit an appeal in those instances.

PROPOSAL C:

A REFERENDUM ON PUBLIC ACT 143 OF 1993 -- AN AMENDMENT TO MICHIGAN'S AUTO INSURANCE LAWS.

Public Act 143 of 1993 would:

1. Reduce auto insurance rates by 16% (average) for six months for policy holders reducing personal injury (medical) insurance to \$1 million. Extra coverage made available at added cost.
2. Permit Insurance Commissioner to waive company's obligation to reduce rates if statutory formula would be in excess of 1989-1992 state average.
3. Place limits on personal injury (medical) benefits.
4. Limit fee paid to health care providers.
5. Limit right to sue by setting higher standards for the recovery of damages for "pain and suffering" and prevent uninsured drivers and drivers over 50% at fault from collecting damages.

6. Allow rate reductions for accident-free driving with the same insurer. Should the law be approved?

YES NO

MFB Position:

In 1993, after considerable discussion and debate, the state Legislature passed and the governor signed into law a comprehensive set of automobile insurance reforms (P.A. 143 of 1993). Michigan Farm Bureau strongly supported these reforms. In 1994 the Michigan Trial Lawyers Assoc. was able to delay the enactment of the new law through a court order.

The Trial Lawyers successfully petitioned to have P.A. 143 of 1993 placed on the ballot as Proposal C. An affirmative vote on Proposal C would allow P.A. 143 of 1993 to become law, therefore, allowing the reforms to occur.

MFB recommends a YES vote on Proposal C. Farm Bureau's policies support the reforms under P.A. 143 of 1993 and recognize that the delay in enacting these reforms has cost Michigan consumers millions of dollars.

PROPOSAL P

A PROPOSAL TO ESTABLISH A MICHIGAN STATE PARKS ENDOWMENT FUND, INCREASE THE MAXIMUM ALLOWABLE AMOUNT OF FUNDS IN THE MICHIGAN NATURAL RESOURCES TRUST FUND AND ELIMINATE THE DIVERSION OF DEDICATED REVENUE FROM THE MICHIGAN NATURAL RESOURCES TRUST FUND.

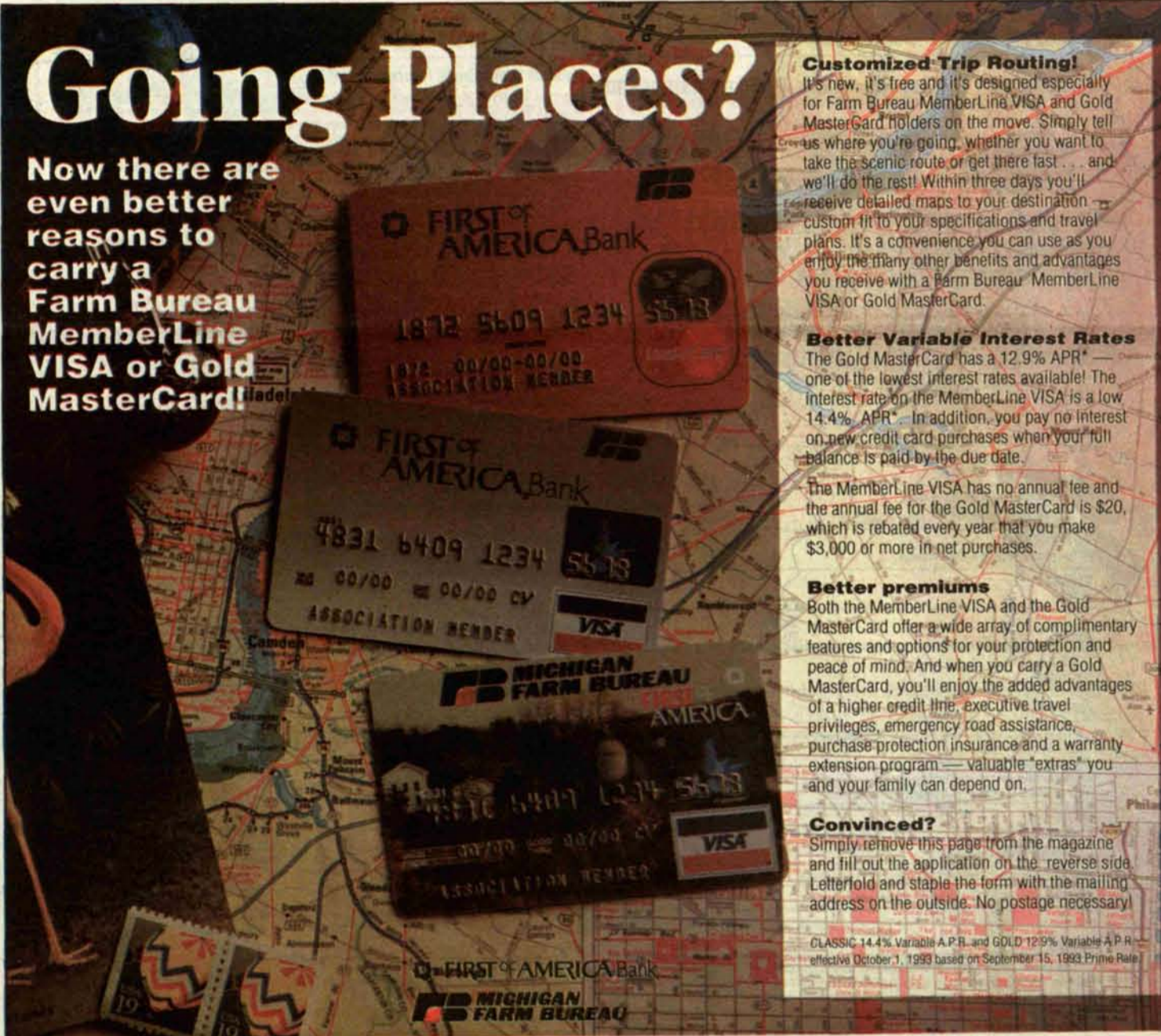
The proposed constitutional amendment would:

1. Establish a Michigan State Parks Endowment Fund to be funded by certain royalties, bonuses and rentals collected by the state from the drilling of oil and gas or mining of minerals on state-owned land.
2. Require that money in the Endowment Fund be used to operate, maintain and improve Michigan state parks.
3. Limit accumulated principal of the Endowment Fund to \$800 million with annual adjustments for inflation.

Continued next page...see *Ballot Proposals*

Going Places?

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The MemberLine VISA has no annual fee and the annual fee for the Gold MasterCard is \$20, which is rebated every year that you make \$3,000 or more in net purchases.

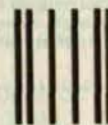
Better premiums

Both the MemberLine VISA and the Gold MasterCard offer a wide array of complimentary features and options for your protection and peace of mind. And when you carry a Gold MasterCard, you'll enjoy the added advantages of a higher credit line, executive travel privileges, emergency road assistance, purchase protection insurance and a warranty extension program — valuable "extras" you and your family can depend on.

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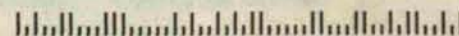
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10 Birch Run Agri-Science Program Back in Action!

After a 30-year leave of absence, 28 Birch Run High School Juniors and Seniors are enrolled in a "pilot program" of animal science. Contrary to common belief, the agri-science curriculum caught enough interest that the school could have easily filled another three sections, according to agri-science instructor Jan Pollard.

Pollard has been instrumental in getting the program re-established, thanks to interest and encouragement from students she knew as a biology and animal physiology teacher, and as a 4-H volunteer. Pollard and her husband Jim, who works for Grower Service, also operate a feeder calf operation just outside of Montrose in Genesee County.

The new program has dispelled a few other myths in its infancy - most notably, interest from kids with no ag background and the "dumping ground mentality." One out of five kids in the animal science class are from a non-farm background, with an eye toward a career in agriculture.

In response to the belief that agri-science programs are nothing more than a dumping



Agri-Science Instructor Jan Pollard welcomed parents and school administrators to a kick-off meeting of sorts for the first agri-science class held at Birch Run in 30 years.

ground, or an easy grade for less than ambitious students, Pollard quickly advises, "I say come sit in the classroom and you'll learn more than you ever learned before," she said.

Pollard has been working closely with Dr. Randy Showerman an assistant professor in Agriculture and Extension Education at Michigan State University, to implement the curriculum which includes four days of

classroom instruction and one day per week of practical experience, including farm visits to do animal health labs, livestock evaluations, and vaccination programs.

"The kids want more details - they want to understand why and how to do things," Pollard said. "What's amazing is that we've got city kids in this program that are dying for a career in agriculture. There's a good likelihood that a lot of these students are eventually going to end up at MSU in an ag major of some kind, because there is a demand out there for students with an agricultural background."

Support from the school administration and local community has been outstanding thus far. That enthusiasm will be put to the test next spring, however, when Pollard hopes to add a plant science course as part of the agri-science curriculum, and add more sections of animal science for the following school year.

Since an agricultural program has been non-existent since 1964, after the retirement of the instructor, Pollard expects that she and the school system both will undergo an extensive learning process to fully understand the implications of an agri-science curriculum. "But we're learning them, and I'm sure we'll have full handle on it by next year," she concluded.

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Position _____ Business Phone () _____

Previous Employer _____ Years There _____

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Source of Other Income* (Alimony, child support, or separate maintenance payments need not be revealed if you do not wish to have it as a basis for repaying this obligation.)

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X _____ / / _____
Co-Applicant's Signature Date

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Coverage will be obtained by First of America and is underwritten by American Bankers Life Assurance Company of Florida and American Bankers Insurance Company of Florida, 11222 Quail Roost Drive, Miami, Florida 33157-6596. In NY, Life and Disability coverage is provided by Bankers American Life Assurance Company, TX Certificate numbers AD9139CQ-0791, AC3181-CB 3.50 & 3.53 R.A. and B2754EQ-1089.

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Applicant's Signature (Your signature constitutes acceptance of this coverage.) _____ Birth Date / / _____

CO-APPLICANT (please print)

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First Name _____ Middle Initial _____ Last Name _____

Social Security # _____ Date of Birth / / _____

Employer _____ Years There _____ Mos. _____

Position _____ Business Phone () _____

Previous Employer _____ Years There _____

Annual Salary \$ _____ Other Income \$* _____

Source of Other Income* (Alimony, child support, or separate maintenance payments need not be revealed if you do not wish to have it as a basis for repaying this obligation.)

Complete the following information if different from applicant

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Minor Use Pesticide Legislation Making Progress

The U.S. House has passed legislation which will make major improvements in the registration and re-registration process for minor use pesticides. The Senate needs to act on this measure before adjournment. The bill offers incentives to registrants of minor use pesticides including:

- Time extensions for developing data to support re-registration of products.
- A six-month deadline for EPA to complete new applications for minor-use registrations.
- Expedited review for registration of newer, safer minor use pesticides.

Ballot Proposals for the Nov. 8, Election

(continued from previous page)

4. Increase the maximum principal of the Michigan Natural Resources Trust Fund from \$200 million to \$400 million.

5. Eliminate the diversion of dedicated revenue from the Michigan Natural Resources Trust Fund. Should this proposal be adopted?

YES NO

MFB Position:
Over the past years, the quality of Michigan parks has slowly deteriorated due to the unavailability of funds. An affirmative vote on Proposal P would mean that the state would establish a Parks Endowment Fund financed by income from the drilling of oil and gas, and the mining of minerals on state lands.

Money in this fund would be earmarked for operating, maintaining and improving Michigan parks. Another part of the proposal would be to increase the cap on the Michigan Natural Resources Trust Fund from \$200 Million to \$400 Million.

It would also prevent diversion of the Natural Resources Trust Fund for any purpose other than to purchase private property in and around state parks, thus removing this land from the tax rolls and adding to the amount of state owned lands. **MFB does not have a position on Proposal P.**



Looking Back



Editor's Note: Michigan Farm Bureau will kick off its 75th Anniversary celebration at the 1994 state annual in Detroit, Nov. 28 - Dec. 1. Commencing with this issue of Michigan Farm News, you'll find news and notes about those early years. MFB staff member Donna Wilber has compiled a chronological accounting of the organization's birth and growth over those 75 years. By the way, Donna has also spent the last three years working on another project that you could soon be reading. Keep your eyes open!

70 Years Ago.....

Tax reform was a big plank in the Michigan State Farm Bureau's program in 1924. An investigation in the spring of that year had revealed that in many Michigan counties, farm property was being assessed at a considerably higher rate than city real estate in the same county.

The State Farm Bureau thoroughly investigated conditions in five counties - Kalamazoo, Washtenaw, Monroe, Ingham and Calhoun - and sought equalization of the tax load. The Bureau presented its findings before the several boards of supervisors and asked for investigation and relief. Farm valuations were lowered and city valuations properly adjusted so that farmers in those five counties saved \$67,000 annually in taxes on the new valuations.

One of the first legislative actions the delegate body of the new farm organization requested was that the Bureau work for a gasoline tax. Roads were then financed by taxing adjoining properties and under the Covert Road Act of 1915, those adjoining properties could be as much as two miles back from a road.

A property could be taxed simultaneously for each of several roads built in its vicinity and it was common for farmers to be delinquent in paying road taxes. Indeed, many were near confiscation. Farmers believed those who used rural roads - mostly city people who owned most of the cars then - should pay for them. It would not be an easily won battle because a powerful governor, who dictated laws to the Legislature and policy to state agencies, was vehemently opposed to a gas tax.

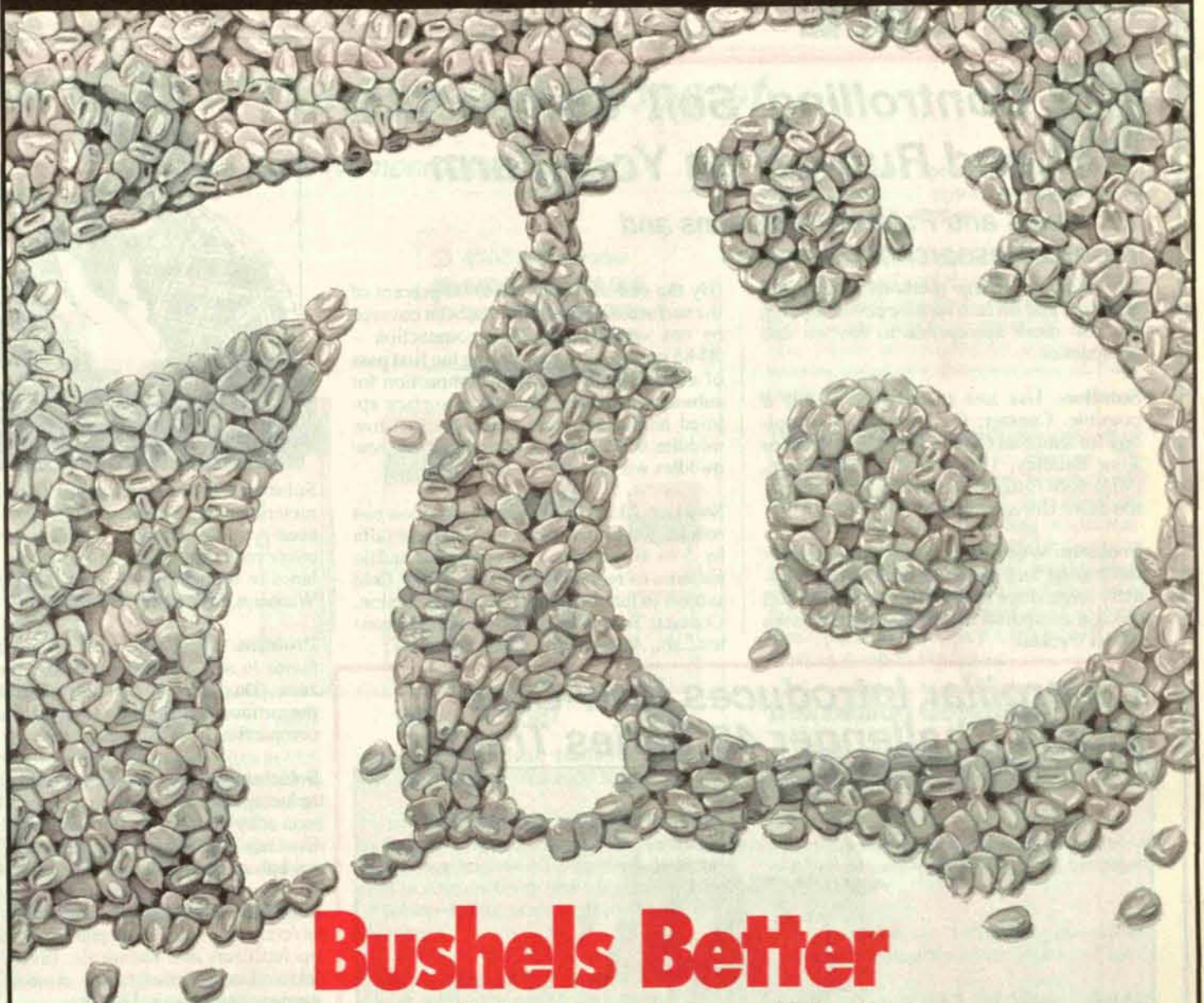
By 1923, the Michigan State Farm Bureau had convinced a strong majority of the legislators that a gas tax was needed. But Gov. Alexander J. Groesbeck was determined that the upstart Farm Bureau would be made to toe the line. The Legislature passed a gas tax by a good majority but Gov. Groesbeck vetoed it.

That didn't stop the Bureau and passage of a gas tax continued to be a priority throughout 1924. In the meantime, the number of autos increased and more improved roads were needed. There simply were not enough farms to be taxed to meet the expense of building the new roads. In 1925, Gov. Groesbeck himself saw the light and led the battle for enactment of a two-cent gas tax.

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JAMES D. CROW CAMDEN, MI 517-254-4512	WILLIAM BRUSE HEMLOCK, MI 517-642-5976	FOUR B PARTS LAWRENCE, MI 616-674-4303	LARRY ROBERTS THREE RIVERS, MI 616-279-2117	



October 15, 1994

12 Controlling Soil Compaction and Run-off on Your Farm

Problems and Potential Solutions and Farmer/Researcher Contacts

Problem: All tillage methods destroy soil structure and surface residue cover, making the soil more susceptible to erosion and compaction.

Solution: Use low disturbance no-till if possible. Contact: Conservation Technology Information Center, (317) 494-9555, or John Bradley, University of Tennessee, (901) 686-7362, or James Cook, Washington State University, (509) 335-3722.

Problem: Wheel track compaction reduces infiltration and produces a disproportionately large share of rainfall run-off and soil erosion compared to soil that has not been wheel tracked.

(By the end of a year, 60 to 90 percent of the surface of most fields has been covered by one wheel track. Most compaction -- 70-85 percent -- occurs during the first pass of a wheel with very little compaction for subsequent passes. Run-off of surface applied herbicides from wheel-tracked row middles is 3.7 times greater than from row middles without wheel tracks.)

Solution #1: Wheel track compaction can reduce yields, particularly corn, and alfalfa by 5 to 40 percent. Use controlled traffic patterns to reduce the percent of the field subject to random wheel track compaction. Contact: Tom Way, National Soil Dynamics Lab., Auburn, AL, (205) 844-4741.

Caterpillar Introduces Row-Crop Model Challenger 45 Series Tractor



Michigan CAT will now be distributing the Challenger 45 Series Tractor. One of the unique features of the midsize 200 PTO HP tractor are the tracks for row crop farming. Until now tracks have only been available with the big tillage tractors. Some of the more prominent advantages to the Challenger 45 Series Tractor are: low PSI (pounds per square inch), from four to nine depending on the track width, and less compaction. It also produces less rutting, less slippage, and provides more floatation. The Caterpillar Challenger 45 Series Tractor will be available from Michigan CAT starting December 1994. Call (810) 349-4800.

The new Challenger 35 and 45 tractors bring the advantages of Caterpillar's exclusive Mobil-Trac System, a well-matched powertrain, state-of-the-art hydraulics and electronics, plus many other operator conveniences to row crop farmers.

Mobil-Trac System

The Mobil-Trac System brings to the field the low compaction and high tractive advantages of track combined with the speed and mobility of rubber tires. Less slippage, due to the long and narrow footprint of the Mobil-Trac System, means more engine power is turned into usable drawbar power. The new tractors can convert 85 percent of PTO power into drawbar power on firm and tilled soil.

The undercarriage on the Challenger 35 and 45 can be adjusted to fit various row spacings using spacers that extend the axles. The tractors can be configured in 60, 68, 72, 76, 80, or 88 inch (1524, 1727, 1829, 1930, 2032, 2235 mm) gauge. Gauge can be changed in the field.

Rubber belt widths range from 16 to 32 inches (406 to 813 mm) to fit a wide variety of row spacing and applications. The belts create low compaction and provide high levels of tractor and floatation, as well as the versatility to work in rows.

Three sets of mid wheels along with the idler and driver create five axles, with a weight distribution of 4,400 lbs. (1996 kg) per axle. The mid wheels are mounted to the undercarriage and provide a superior ride in the field due to excellent bridging capabilities.

Powertrain

The Challenger 45 is rated at 200 PTO horsepower and the Challenger 35 at 175 PTO horsepower. On firm soil, the tractors can generate up to 170 and 150 drawbar horsepower respectively, for an unmatched 85 percent PTO-to-drawbar efficiency.

A Cat 3116 Air-to-Air Aftercooled engine powers the tractors. The tractors produce rated power at 2100 RPM and produce up to 8.5 percent more horsepower at 1750 RPM. This allows the tractors to pull through tough spots with minimal downshifting.

The full powershift transmission properly matches engine speed to draft through a wide range of 16 forward and nine reverse gears. Maximum speed is 17.8 mph. The transmission control lever is conveniently located at the front of the console at the operators' right hand.

The Challenger 45 and 35 tractors have power turn ability due to the exclusive Caterpillar Differential Steering System.

This system never loses power; it simply changes the way power is distributed, unlike a clutch and brake steering system. Spot turns are possible as one track slows while the other speeds. The tractors can turn within their own length and tighter than any tractors in the size class.

The standard 1,000 RPM PTO is constructed with large bearings to handle high torque equipment such as forage harvesters, large square or round balers, and pull-type combines. It features a 1.75 inch (45 mm) 20 spline shaft.



ENVIRONMENTAL STEWARDSHIP

Solution #2: Mount 55-gallon barrels with metering devices behind combine header to seed rye into combine wheel tracks. Rye cover reduces erosion and dries out traffic lanes in the spring. Contact: Nate Andre, Wauseon, OH, (419) 337-0406.

Problem: Total axle load is the biggest factor in soil compaction below the plow zone. (Dual tires provide more floatation on the surface, but do little to reduce subsoil compaction from big equipment.)

Solution: Reduce subsoil compaction by reducing the load per axle to less than five tons or by distributing it to additional axles. Contact: Tom Way, National Soil Dynamics Lab., Auburn, AL, (205) 844-4741.

Problem: Wheel track compacted zones severely limit ability of plant roots to take up fertilizers and chemicals. (Simply put, less soil compaction means more efficient nutrient and chemical use.)

Solution: Reduce wheel track compacted zones by using a system of controlled traffic where wheels of all machinery run in two

row middles. Optimally, this could mean odd-row (7 or 9-row planting and harvesting equipment) which would straddle 3, 30-rows, or larger equipment straddling 120 inches. Also, consider using tramlines (controlled traffic lanes).

Problem: Roots of some types of trees and grass can withstand prolonged periods of soil saturation. (These perennial plants could be used in low-lying areas as energy crops or as narrow buffer strips to filter sediment and process nutrients before they reach streams and lakes.)

Solution: Certain hybrid poplar varieties grow fast, can be harvested for energy and then regrow from the stump. Contact: Lou Licht, University of Iowa, (319) 335-5050

Plant stiff-stemmed, densely tillered grasses such as switch grass, Eastern Gamma Grass or some varieties of miscanthus, in narrow strips across the slope to slow runoff and filter sediment. Contact: Doral Kemper, ARS, (301) 504-6065.

"Wedge-Till" Row Unit Makes Debut in Australia

Those "Down Under" innovators have done it again. First it was the cross slot planter, now it's "wedge-till," a new-style planting method that uses angled disc openers. The Australian-built "Vydrill" row units lift up a wedge of soil and puts seed and fertilizer underneath, then puts the wedge of dirt back without disturbing the soil surface. The angle and spacing of the discs virtually eliminate sidewall compaction, according to the manufacturer.

The spring-loaded discs are spaced about 5-1/2 in. apart at the bottom of the seed trench creating inclined furrow walls. The momentum of seed carries it down the furrow walls to the bottom of the trench. Seed and fertilizer can be placed on each side at the bottom of the trench, allowing small grains to be planted in paired rows. When operated at a depth of 4 in., the discs disturb about a 14-in. wide strip of soil at the surface. By using three ranks of discs, you can completely disturb the soil surface for mechanical weed control.

Contact: FARM SHOW Followup, Terratend Pty. Ltd., Box 228, Esk Qld. 4312, Australia (phone 074-242-030). (FARM SHOW, Vol. 18, No. 5, 1994)

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November Discussion Topic - "The Size and Scope of Michigan Farms"

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It's a common question that farmers hear from consumers, reporters and politicians: "Are you worried about corporations continuing to take over agriculture?"

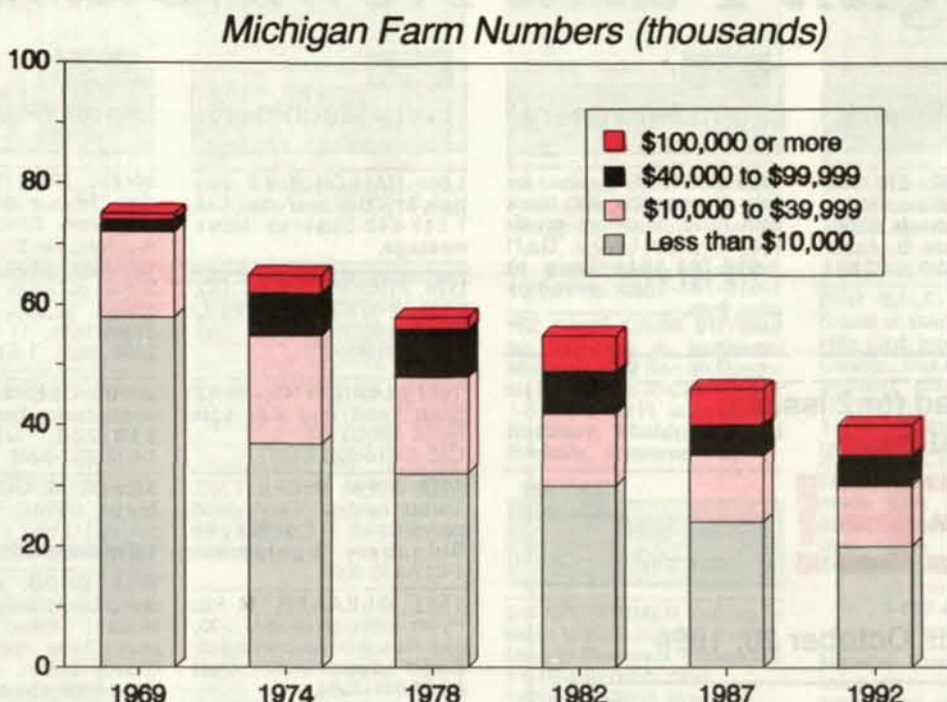
In fact, corporations only represent 3.2 percent of Michigan farms, and these are almost all family-held corporations organized for tax and estate planning purposes. To an overwhelming degree, it is still people rather than faceless corporate entities who own America's farmland. The Bureau of Census reports that 2.6 million farmland owners are individuals or families and they own more than two-thirds of all farm acreage.

Fewer than 32,500 non-family-held corporations own farmland, and they own less than 5 percent of all U.S. farmland.

Unfortunately, while the Bureau of Census figures refute the myth of the corporate takeover of agriculture, statistics show the continuation of another widely-noted trend: fewer farm owners. There are nearly 2 million fewer owners of U.S. agricultural land today compared to 1945.

The U.S. has nearly 3 million owners of farmland. Half are operators who farm all the land they own and another 6 percent farm part of their land and lease part to other farmers. The remaining 1.3 million owners (44 percent) only rent land to other farmers; they do not operate their farms.

Michigan has over 46,000 farms, compared to 51,000 in 1987. Our state has 10.1 million acres of land in farms, compared to 10.3 million acres in 1987.



One of the major structural changes in U.S. farming since 1940 has been the growth in owner-operators. Nearly 90 percent of all operators now own part or all of the land they farm, whereas only 65 percent were owners 50 years ago. This reflects both an increase in part-owner and a decrease in tenant (non-owner) farmers, according to the Bureau of Census.

But landlords are still an important influence in agriculture. Nearly 1.3 million landlords do not farm themselves, and nearly 170,000 owner-operators farm part of their land and rent part of it to other farmers. A landlord may rent land to several farm operators, and the total 1.5 million landlords have some 1.8 million separate rental ar-

rangements. In total, landlords own over one-third of all agricultural land.

Nearly nine out of ten landlords lease land to only one farmer; nearly 70 percent involve female ownership (including 40 percent as sole owners); and about 15 percent of landlords live more than 150 miles from their land.

Another recent change in agriculture is the rise of large contract feeding operations in the livestock industry. Driven by economics and technology, these farms don't resemble the traditional image of a family farm, in large part because the farmer may be a contracted employee rather than an owner. Contract farms can leverage their

risks over many operations and states and provide financial access not available to ordinary family farmers.

Large contract farms bring pluses and minuses to a rural community. They can have a substantial, positive economic impact. But like any large farm operation, they can also create environmental concerns and worries about the disappearance of traditional farmers.

The size and scope of Michigan agriculture is going to continue to change. Entrepreneurial family farmers, however, will always remain a part of the equation. Biotechnology and expanding world markets will require that successful farm operations be flexible, nimble and responsive to ever-shifting consumer demand. Individual farm owner-operators have demonstrated these qualities over the years and will continue to do so in the future.

Discussion Questions:

- 1) What, if anything, should be done to reverse the trend toward fewer, larger farms?
- 2) Are contract feeding operations largely a positive or negative influence on Michigan agriculture?
- 3) Should large, contract feeding operations be treated differently under Right-to-Farm?
- 4) What do you think the future holds for Michigan family farmers?
- 5) Has the trend toward owner-operator (90 percent today compared to 65 percent 50 years ago) been positive or negative for Michigan agriculture?

"What's in the Package at MSU?" - A Degree in Packaging!

by Kristen Zagata

Have you ever stopped and thought about what life would be like without packages? The clothes you wear, food you eat, and products you use are all protected by packages. Packaging is the third largest employer in the United States, employing over 2 million people.

The School of Packaging in Michigan State University's College of Agriculture and Natural Resources supplies a major portion of the world's packaging professionals.

Packaging can be defined as the development and production of packages by professionals. Some of the functions of packaging are containment, protection, preservation, communications, and identification. In addition, they enhance the usefulness and

performance of products. With factors such as cost and market efficiency, package production must consider important issues such as recyclability, biodegradability, safety, tamper-resistance, natural resource use, and laws and regulations.

What do students majoring in packaging do? They design and develop new packages and machinery. Graduates also test and research packaging, and analyze existing packages to improve production and marketability. Distribution is also an essential entity for materials, machinery, and packages.

"A better way of packaging items gives the company the edge in the market," said Packaging Student Advisor Pat Burkhardt.

Burkhardt noted that the packaging major is course-specific, but general categories of study are available in design, testing, analyzing, cost factors, market and distribution. Students majoring in packaging complete a course of study that includes math, chemistry, physics, five courses in packaging, and over 100 hours of lab experience. Computer usage is also important, aiding in student designs. Business and statistics courses are also required. A solid high school background for students entering the major would be chemistry, English, math, and physics.

Seventy percent of packaging students complete professional internships, which provide a link between a student's academic life and professional careers. These positions range from four to eight months, relating to packaging design, development, testing, production or distribution.

"These internships are well paid positions, often resulting in employment after graduation," said Burkhardt.

There are three organizations directly related to the packaging major, including the Student Chapter of the Institute of Packaging Professionals, Pi Kappa Gamma, and Women in Packaging. These groups have many activities that enhance student knowledge of the packaging industry, including learning of innovations within the industry. Students involved in these groups participate in various activities, and make friends with others in their major.

Since packaging practices differ around the world, students have the opportunity to participate in overseas study programs where they see first hand the way companies develop packaging products in England, Sweden and Japan.

The career opportunities in packaging are endless! Students from MSU with a bachelors degree in packaging are sought by employers nationally and internationally. The average annual starting salary for MSU packaging graduates is over \$31,000. Some of the companies looking for these gradu-

ates are Pillsbury, Kraft, General Foods, Upjohn and Helene Curtis.

For students who enjoy solving problems, working independently or as a team, and are eager and excited about change, a major in packaging at MSU may be a good choice! For more information, contact the School of Packaging, MSU, East Lansing, MI 48824-1223, or call (517) 355-9580.

Graduate Profile



Marie Hiatt is a recent graduate from the School of Packaging at Michigan State University. She is currently employed as a project engineer for Abbott Laboratories -- Ross Products Division, Columbus, Ohio.

Hiatt's job entails bringing new product development aspects of packaging into the market. Hiatt pursued a career in packaging because it emphasized components of marketing, material management, engineering, and manufacturing.

"The packaging program at MSU is excellent and very well respected in the field," she said. "Packaging is an excellent career because of its diversity. Packages are constantly changing, creating an increased potential in the field."

MSU College of Agriculture and Natural Resources

Please send more information on the following major(s) to:

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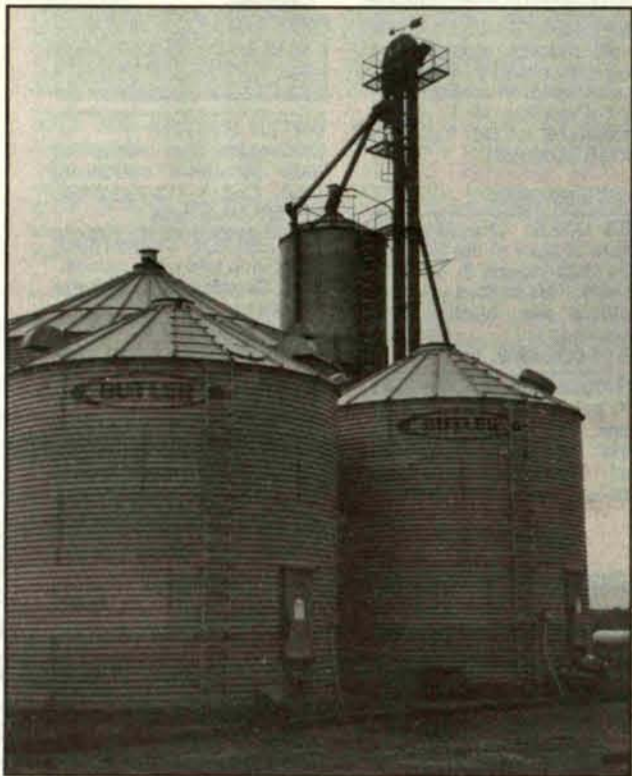
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Protect Your Investment, Make Sure Your Grain Bins Are Clean

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Taking time now to make sure that the combine, grain handling equipment and storage bins are clean is a good way to minimize the potential for costly insect damage later in the year.

"Thoroughly cleaning in and around the bin and cleaning all handling equipment are strongly recommended," says Douglas Landis, MSU Extension entomologist.

Step-by-step recommendations are outlined in Extension bulletin E-934, "Protecting Stored Grains from Insects."

Landis recommends removing all debris from handling equipment, from inside the grain bin and under the false flooring of the bin, which is an especially good place for insects to breed.

"A special effort should be made to clean and spray this area," Landis says.

He also recommends that an insecticide spray be directed into cracks, corners and other hidden places of the grain bin that cannot be adequately cleaned.

Sanitary sprays can be used in any empty bin regardless of the grain that will be stored there later.

Once the grain has been properly dried and cleaned and put into the grain bin, you can use special products registered for use on stored grains. They are listed in Extension bulletin E-1582, "Chemical Control of Insects and Nematodes in Field and Forage Crops."

He cautions farmers to be sure to read all insecticide labels to make sure the product to be used is specifically registered for use in stored grains.

"Insecticides and fumigants are effective only in properly dried and cleaned grain," Landis cautions.

Sprays or dusts of some insecticides can be mixed directly with new grain as it goes into the bin to protect the grain from insects. They are recommended if the grain is to be stored longer than one year.

Surface sprays of insecticides can be applied and raked into the surface of new grain to help prevent insects from getting into the grain and also to control surface-feeding caterpillars such as the meal moth and Indian meal moth.

These caterpillars are often abundant in poorly ventilated grain where moisture has condensed at the surface. Remove the damaged grain before spraying, then keep the grain well ventilated.

Fumigants can be used to kill insects that have invaded the grain mass. They are sometimes applied to newly binned grain in place of sanitary sprays and grain protectants. Fumigants can be costly, however, and can be applied only under certain restrictions.

Growers must be certified by the Michigan Department of Agriculture in the fumigation standard to buy and use fumigants.

New restrictive standards include the use of self-contained breathing equipment (scuba gear) in place of a gas mask and the use of gas detection devices in some situations.

The best practice is to take preventive steps against insect damage by putting properly dried, as clean as possible grain in the bin and carefully managing the bin's operation — temperature, ventilation and moisture content — throughout the storage season.

Michigan Vegetable Chemical Use Survey Slated for Mid-October

The Michigan Ag Statistics Service is gearing up for its third survey of vegetable growers' use of pesticides and commercial fertilizers. The survey will cover chemical use on 14 vegetable crops.

Nationally, the survey will cover 30 crops in 14 states that account for 80 to 85 percent of U.S. vegetable production. The purpose of the program is to maintain an agricultural chemical use data base so that policies can be based on timely, detailed and reliable information.

"The information benefits producers, processors and consumers alike," explained State Statistician Don Fedewa. "All segments of the vegetable industry, along with policy makers and government agencies, rely heavily on the survey results when responding to public concerns about chemical use and its possible effects on food safety. It's essential the information be gathered, analyzed, and released by an impartial organization."

Vegetable growers have a lot at stake in this survey, since these growers also rely on numerous minor-use pesticides. Many producers of specialty crops have no alternative to these pesticides.

Fedewa says that if use of a particular pesticide can't be documented, the manufacturer might discontinue production. More importantly, however, successful registration and re-registration depend heavily on accurate, up-to-date information on actual use of the various pesticides.

Interviewers will visit growers in person to conduct the survey beginning the second week of October. A typical interview takes about an hour. Producers are encouraged to have records documenting their agricultural chemical use on hand to help the interview go quickly and smoothly. All information on individual grower operations will be treated with absolute confidentiality, and used only in summaries of state and national totals.

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