

MICHIGAN FARM NEWS



December 18, 1992

Vol. 69, No. 20

Policy Development Headlines MFB Annual

The annual meeting of the Michigan Farm Bureau, held Dec. 1-4 in Grand Rapids at the Amway Grand Plaza, included the annual meetings of the Michigan Agricultural Marketing Cooperative, Inc. (MACMA), the Farmers Petroleum Cooperative, Inc. (FPC), and the naming of three new state Young Farmer award winners, as well as a two-day product trade show, and an address by Governor John Engler.

As if that wasn't enough to do, 460 farmer delegates considered a slate of proposals presented by the MFB 20-member Policy Development Committee. The policy recommendations were the consolidated efforts of 69 county Farm Bureaus.

Policy Development Highlights

Among the policies presented, discussed, and eventually adopted, was a school finance policy that supports reduction in property taxes with a shift to other sources to replace the lost revenue. Those sources of revenue could include an increase in the state income tax, sales tax or other taxes.

The delegates also approved policy encouraging the closing of the State Police Detroit Freeway Patrol Post and redistributing those personnel and resources to rural posts that are suffering from budget problems.

Policy was approved in favor of exempting trucks that move highly perishable agricultural commodities to market from the seasonal weight restrictions. Delegates also passed policy in support of a research and promotion program for nursery and greenhouse growers and a marketing and bargaining program for red tart cherry producers.

They also asked for total repeal of the state inheritance tax and for the reestablishment of a task force to study the problem of stray voltage. They opposed mandated auto insurance premium rollbacks, unless they're offset by reforms and reduced costs.

On national issues, the delegates recommended that the American Farm Bureau Federation support NAFTA, oppose national health insurance, support restructured crop insurance and oppose a National Academy of Sciences study of the federal



wetlands delineation manual. They also recommended that any reorganization of local USDA offices be apportioned according to benefits delivered and geographic locations.

Engler - Action on Property Taxes

Gov. John Engler addressed nearly 600 members during the annual AgriPAC breakfast, saying that property tax reform would definitely be on the agenda in the new legislative session.

"I do not interpret the defeat of Proposal C, the Cut and Cap plan, as a defense or an affirmation of 'business as usual' as far as property taxes are concerned," Engler said. "There is a demand and a need, in my judgment, to both limit the rate of increases in assessments and actually reduce the property tax burden as a means of funding education."

Engler went on to say that he didn't believe the citizens of Michigan would be satisfied with the status quo any longer, adding that it meant the legislators would finally have

to make the tough choices that would lead to a fairer tax structure.

"I think the property tax, of all the taxes that people are faced with today, is the most unfair and the most arbitrary and the one in need of change," claimed Engler. "I believe the new Legislature will deal with that."

Engler also said that 1993 will be a year of incredible activism, because "the gridlock is broken."

"We're going to be a state that is going to be very reform-minded...I would say that Michigan ought to fasten some seatbelts and get ready, because we're going to roll in Lansing on some of the issues that for too long have been languishing and been left unresolved," Engler said. "It's time to really write a record that allows Michigan to approach, with a great deal of confidence, the 21st Century."

Continued...See "MFB Annual Meeting Highlights" on Page 5 and Young Farmer winners on 16.

Michigan Corn Information Exchange Program Kicked Off

Farmers who have corn that's high in moisture and/or low in test weight may find a market for at least a portion of that corn crop by selling it directly to northern Michigan livestock farmers. The Michigan Corn Information Exchange (MCIE) is sponsored by the MSU Cooperative Extension Service, Michigan Farm Bureau and the Michigan Farm Radio Network.

With the unusually cool growing season and early frost, many northern Michigan farmers have seen most of their corn crop go to corn silage. According to Osceola County CES Director Gerald Lindquist, many northern Michigan farmers were having corn yields certified by ASCS as zero bushel yields. Many southern Michigan farmers, meanwhile, are finding that with high moisture levels and low test weights, many elevators are reluctant to take their corn, without severe penalties.

"There are farmers in northern Michigan who don't have enough corn to feed livestock through the winter," said Lindquist. "The MCIE can help growers move their corn into a market instead of paying drying expenses and put livestock producers in touch with sources for high moisture corn."

The MCIE will allow interested growers to list their name, county and city, phone number and quantity, in bushels available. Updated lists will be provided to county CES, county Farm Bureau offices, and will be printed in the December, January and February issues of Michigan Farm News, (see page 15 this issue).

To be placed on the list, producers should either call 1-800-968-3129 at Michigan Farm Bureau, or (517) 336-1555 at MSU. Readers can also fill out the coupon on page 15 of this issue and mail it directly to MSU Outreach Communications, c/o MCIE, Room 312 Ag Hall, East Lansing, MI 48824-1039. It's anticipated that the MCIE will run until March 1, 1993.

A Cold Winter's Day

For Bill and Clair Armbrustmacher, of Clinton county, several days of below freezing temperatures in early December meant an opportunity to put the wraps on another harvest season. The brothers, who milk 120 cows in addition to raising 900 acres of crops, had just 40 acres left to go. Corn from this field was running around 30 to 32 percent moisture and was being put up in an "Ag-Bag" for use in the farm's heifer ration.

This marks the first time the farm has used the AgBag for any of their crops. Fortunately, they had booked the machine and bag two months earlier in anticipation of abnormally wet corn.

For additional information and answers to some pretty common questions this fall turn to pages 7-13. MSU dairy, swine, and beef nutritionist have compiled some data you may want consider in your feed management decisions for the coming year.



Michigan Corn Harvest - Market and Storage Strategies: pages 6 - 13
Michigan Corn Information Exchange List: page 15

2



Unleashing Agriculture's Productivity and Potential

(Excerpted from President's Address at MFB Annual Meeting)

There is a tremendous challenge ahead of us in agriculture. Demand for food is going to continue to rise in tandem with world population increases and greater affluence in the formerly impoverished nations of Eastern Europe. The agricultural industry can't afford to be a bound giant. Too much is at stake for us, and for the people we feed here in the U.S. and across the world.

By the year 2020, I believe farmers will have to more than double the production of food in order to feed more people demanding better nutrition than ever before. In some developing countries, food demand will increase as much as four percent a year.

Before the 20th century, almost all of the increase in food production came from bringing more land into production. In the past 90 years, technology has helped make productivity soar and more than keep up with population growth.

But, despite this record of success, can agriculture keep up with the explosion of demand that we see coming in the future? Can farmers continue to boost their productivity to meet the food demands of the 21st century? I think we can. But there are significant "chains" that have to be cast aside if we are to be successful.

First of all, environmental and land use constraints will make it more difficult to improve productivity in the future simply by adding inputs or putting more land into production. As all of you well know, the environmental movement is strong, aggressive and beginning to target agricultural practices. Last year, contributions to environmental groups hit \$2 billion, double the amount they received in 1987.

Before the election, the Gallup poll reported that 57 percent of voting-age Americans wanted to elect politicians who would impose more environmental restrictions on business. And 59 percent of the respondents, if forced to choose, would take environmental quality over economic growth. Right or wrong, consumers feel very strongly about the environment.

The second major hobble for agriculture is profitability. Unless we as farmers become more profitable, it's going to be difficult to maintain the vibrant agricultural economic base needed to meet the food needs of the 21st century. If we are to respond to rising demand for our products, an investment is going to have to be made in research, marketing and production. Our industry can't afford to do that unless it increases its profitability.

So what's the solution? I think that we as farmers must strive more than ever before to help ourselves. We are going to have to work smarter, not just harder, in order to be productive and "environmentally correct" in a complex world. One of the ways we can do this is by applying the fruits of biotechnology and expanding our knowledge instead of cultivated land.

Jack Laurie
Jack Laurie, President
Michigan Farm Bureau

Late Payment Again Drops Russia's Credit Status

The USDA said it was notified by a bank that Russia missed a payment deadline on U.S. backed agricultural loans, thus automatically losing eligibility for more credit purchases under the program, according to a Reuter news report.

If Russia makes a payment of the \$4.5 million defaulted, it is automatically reinstated, the department said. The bank said there was a chance the payment could be received in time to avoid another suspension. The bank said it has been routinely giving Russia a 10-day grace period before filing a late payment notice with the USDA. The U.S. government has allowed the former Soviet Union more than \$5 billion in food credits since the beginning of 1991.

In Brief...

Wheat Not To Enter Reserve

Agriculture Secretary Ed Madigan announced that 1992 wheat will not be allowed to enter the farmer-owned reserve (FOR). Madigan was required to make the determination by Dec. 15, but made the announcement early because it was clear the conditions for entry into the FOR would not be met on the 1992 crop.

The law requires the secretary to open the reserve when the average wheat price drops below 120 percent of the wheat loan rate for 90 days preceding the announcement and the estimated wheat ending stocks-to-use ratio is more than 37.5 percent. If either one of the conditions is met, the secretary may open the reserve, if both are met, he must. But in the case of 1992 wheat, neither condition will be met, so there is no authority to allow entry into the reserve, according to a USDA release.

Late Corn Harvest Could Yield Shipping Problems

The large volume of corn and the weather delayed harvest could mean much of the corn will have to be shipped by rail after the upper Mississippi River is closed to shipping by cold weather. The glut of corn and lack of water transport could mean a shortage of rail cars to transport the grain, especially if there is a surge in exports.

Experts say more than half the U.S. corn exports move down the Mississippi, but that upper tributary is expected to be closed by ice by the end of this month. The late movement of grain from country elevators to ports may put a strain on available hopper cars.

One Of New Congress' First Duties A Sorry One

One of the first things the 103rd Congress will have to do is raise the ceiling on the national debt, if it doesn't want to avoid shutting the government down and defaulting on the nation's indebtedness.

The government will reach its borrowing limit early next year and all those new members of Congress will have to join their free-spending colleagues in raising the limit no matter how hard they campaigned on getting control of spending and reducing the debt. The present debt limit is \$4.145 trillion. The debt level is currently at \$3.980 trillion as of November 5, so the issue cannot be ducked beyond February or March, according to a Knight-Ridder report.

USDA Announces 1993 ARP Signup Dates

The 1993 acreage reduction program signup for feed grains, wheat, rice and upland and extra-long staple cotton will be March 1 through April 30. On Sept. 29, the secretary announced 1993 ARP percentages of 10 percent for corn and 5 percent for grain sorghum. The ARP for barley, oats and wheat were set at zero percent.

Food Labeling Differences Resolved

President Bush took a hand in the decision to put uniform labels on literally hundreds of thousands of food packages by 1994. The decision was due last month, but was held up when differences arose between the Agriculture Department and the Department of Health and Human Services over how much information should be included on the labels. The new labeling rule carries out the 1990 Nutrition Labeling and Education Act and will apply to all packaged foods regulated by the Food and Drug Administration.

Consumer groups praised the new rule, calling it a victory for consumers over special interests. Health and Human Services Director Louis Sullivan said the new labeling requirements will cost the food industry about \$2 billion, but he said the amount will be offset by the many billions of savings in health costs resulting from improved nutrition.

The new rule is effective in 1994, but companies are expected to begin switching to the new labels by the middle of next year. The new rule will define such nutritional terms as light, lite, low fat and high fiber to become more accurately descriptive of the content of those components in each item and relate nutrient content to the average daily requirement, based on specified caloric content.

The same requirements will apply to meats and poultry products regulated by the Agriculture Department as for other packaged foods regulated by the Food and Drug Administration. Restaurant menus and individual meals served at restaurants are exempt.

Statement of Ownership, Management and Circulation (Required by 39 U.S.C. 3685)			
1. Title of Publication	2. Issue Date	3. Issue Frequency	4. Issue Month
MICHIGAN FARM NEWS	12-18-92	Bi-monthly	December
5. Issue Frequency	6. Issue Month	7. Issue Day	8. Issue Year
Bi-monthly	December	18	1992
9. Complete Mailing Address of Known Office of Publication (Street, Town, State and ZIP+4)	10. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)	11. Complete Mailing Address of Publisher	12. Complete Mailing Address of Editor
Michigan Farm Bureau, P.O. Box 30960, Lansing, Michigan 48909-8460	Michigan Farm Bureau, P.O. Box 30960, Lansing, Michigan 48909-8460	Michigan Farm Bureau, P.O. Box 30960, Lansing, Michigan 48909-8460	Michigan Farm Bureau, P.O. Box 30960, Lansing, Michigan 48909-8460
13. Complete Mailing Address of Owner or Owners (Do not check this box unless owner is an individual)	14. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	15. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	16. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
17. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	18. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	19. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	20. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
21. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	22. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	23. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	24. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
25. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	26. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	27. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	28. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
29. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	30. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	31. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	32. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
33. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	34. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	35. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	36. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
37. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	38. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	39. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	40. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
41. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	42. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	43. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	44. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
45. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	46. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	47. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	48. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
49. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	50. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	51. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	52. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
53. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	54. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	55. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	56. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
57. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	58. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	59. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	60. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
61. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	62. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	63. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	64. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
65. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	66. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	67. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	68. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
69. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	70. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	71. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	72. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
73. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	74. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	75. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	76. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
77. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	78. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	79. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	80. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
81. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	82. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	83. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	84. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
85. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	86. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	87. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	88. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
89. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	90. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	91. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	92. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
93. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	94. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	95. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	96. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)
97. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	98. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	99. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)	100. Complete Mailing Address of Principal Officer or Officers (Do not check this box unless officer is an individual)

The MICHIGAN FARM NEWS (ISSN:0743-9962) is published semi-monthly except in the months of November, December, June, and July when only one issue is printed, as a service to regular members, by Michigan Farm Bureau, 7373 West Saginaw Highway, Lansing, MI 48917. Member subscription price of \$1.50 included in annual dues of Michigan Farm Bureau regular members. Additional subscription fees required for mailing Michigan Farm News to non-members and outside the continental U.S.A. Second-Class Postage paid at Lansing, MI and additional mailing offices. Letters to the editor and statewide news articles should be sent to: Editor, Michigan Farm News, P.O. Box 30960, Lansing, MI 48909-8460. POSTMASTER: Send address changes to: Michigan Farm News, P.O. Box 30960, Lansing, MI 48909-8460.

Editorial: Dennis Rudat, Editor and Business Manager. Staff Contributors: Mike Rogers; Connie Turbin; Donna Wilber; Henry Huisjen.

Officers: President, Jack Laurie, Cass City; Vice President, Wayne Wood, Marlette; Administrative Director, Chuck Burkett; Treasurer and Chief Financial Officer, Tom Parker; Secretary, William S. Wilkinson. Directors: District 1, Jim Miller, Coloma; District 2, Blaine VanSickle, Marshall; District 3, Diane Horning, Manchester; District 4, Tom Guthrie, Delton; District 5, Mark Smuts, Charlotte; District 6, Wayne Wood, Marlette; District 7, Larry Snider, Hart; District 8, Richard Leach, Saginaw; District 9, Joshua Wunsch, Traverse City; District 10, Margaret Kartes, West Branch; District 11, Robert Wahmhoff, Baraga. At-Large: Douglas Darling, Maybee; Jack Laurie, Cass City; Faye Adam, Snover; Jan Vosburg, Climax. Promotion and Education, Paul Swartzendruber, Pigeon; Young Farmers, Kurt Inman, Sturgis.



1992-93 EARLY WINTER STEEL SALE

High Quality Steel Replacement Parts

Dependable Performance

Group Purchasing SAVINGS!

December 1 - January 8

Quality • Dependability • Savings

Contact Your County Office for Local Vendor Information or

Call 1-800-292-2680 ext. 2015

CAPITOL

CORNER



Fuel Tax

MFB Position:

MFB was successful in having a proposal to eliminate the 2 percent evaporation allowance removed from the original bill. MFB also expressed concern regarding the change in taxation, and the additional paperwork required to obtain refunds.

MFB Contact:

Ron Nelson, Ext. 2043

Legislation, recently passed by the Legislature and signed into law by Gov. Engler, was intended to reduce the possibility of fraud in the collection of the state's fuel tax. Unfortunately, the new law has created confusion and raised several unanswered questions. The needed detail for the new collection process is currently being clarified by the Department of Treasury.

Under the new law, off-road farm use is still exempt, but will continue to need documentation. Either separate storage for field and road use or a pump which will record the number of gallons pumped into farm tractors vs. farm trucks is required for documentation.

In addition, those farmers who hold a retail license will be required to inventory volume on hand for highway use and pay road tax on that volume. A farmer may secure a separate storage facility prior to the end of the year and pay the road tax only on that portion used for highway use. Additional amendments are expected during the next legislative session.

Property Tax Reform

MFB Position:

None at this time

MFB Contact:

Ron Nelson, Ext. 2043

A group of 12 Legislators have developed a property tax reform proposal that would remove voted millage as a source of funding for school operations. The 10-bill package and an additional two resolutions would shift school funding to income tax and increase the Single Business Tax. In addition, personal property would be totally exempt from taxation.

Income tax would increase to 7.25 percent. Sales tax would increase from 4 percent to 6 percent, if approved by a vote of the people, and income tax would subsequently be reduced from 7.25 percent to 6 percent.

The bills will die on Dec. 31 as the two-year session concludes. It is anticipated that the bills, or the concept, will be reintroduced next session and receive significant consideration. The 12 legislators include both Republicans and Democrats and thus, the bi-partisan effort is receiving some serious attention in Lansing.

Pasteurized Milk Ordinance

MFB Position:

Support

MFB Contact:

Ron Nelson, Ext. 2043

PMO bills H.B. 5590, sponsored by Representative Harder, and S.B. 1058, sponsored by Senator McManus, remain in the Senate Agricultural Committee. Due to the limited session, ending Dec. 4, the bills were not reported out of committee and also will die at the end of the session.

The bills as introduced adopt the Federal Pasteurized Milk Ordinance, which is the standard by which milk moves across state lines. It includes lowering temperature to 45 degrees, increases quality standards, more stringent residue standards, and penalty provisions for violations.

Indications are the bills will be reintroduced early next session to adopt the Federal PMO.

All-Terrain/Off-Road Vehicles

MFB Position:

Support

MFB Contact:

Ron Nelson, Ext. 2043

H.B. 5793, introduced by Representative Muxlow, would allow a farmer to operate an ATV/ORV for farm use within the road right-of-way without obtaining a license for the vehicle. Currently, the vehicles are not licensed for road use and thus are not legal on the road.

Provisions of the bill require operations by a licensed driver, 16 years of age, during daylight hours. Travel must be on the extreme right of the highway right-of-way if it's not practical to operate the ATV off the highway.

H.B. 5793 moved to the Senate Agricultural Committee and because of limited session, was not reported out of committee before the end of the legislative session.

Legislative Note

Thursday, Dec. 4, was the last day of the legislative session for 1992. All bills not considered on that day will expire at the of 1992. No additional session days are anticipated during December. The 1993 session convenes on Jan. 13, 1993.

Local Wetlands Ordinances

MFB Position:

Farm Bureau was involved in the work group that developed the compromise in S.B. 522 (S-3) and strongly supported both bills.

A special THANKYOU to all Farm Bureau members who contacted their legislators on this issue. The phone calls from individual farmers definitely made a difference in the passage of this legislation.

MFB Contact:

Vicki Pontz, ext. 2046

S.B. 522 (S-3) and S.B. 807, sponsored by Sen. Wartner and Sen. Honigman, would allow local units of government to regulate wetlands within its boundaries, by ordinance, under certain circumstances. Both bills passed the House on Dec. 3, and were concurred in the Senate the same day.

Of importance to agriculture are the following provisions:

- The ordinance shall not provide a different definition than is provided in the statewide Goemere-Anderson Wetland Protection Act.
- An ordinance shall not require a permit for uses allowed without a permit by the state act. These uses include farming activities such as plowing, irrigation, seeding, cultivating, minor drainage, harvesting, or upland soil and water conservation practices.

Also exempted from permit requirements is the construction or maintenance of farm or stock ponds, maintenance of drains necessary for the production or harvesting of agricultural products, and the construction of farm or forest roads. If a wetland is altered under the permit exemption, it shall not be used for a purpose other than farming without a permit from the Department of Natural Resources.

IT'S SHOW TIME.

ICI Seeds is opening the research pipeline with hybrids like these. So if you're ready for something completely different see your ICI Seeds sales agent soon. Because these days, just as good isn't good enough.

8883

Setting the standard for stalk strength and late season plant health in its maturity, 8883 is a tall plant type that is excellent for silage. If you're looking for a hybrid with the strong early vigor it takes to make it in reduced tillage, 8883 is right for you.

Numbers identify varieties.
925432 23
©1992 ICI Seeds, Inc.

8700

An exceptional hybrid from start to finish. Comes out of the ground strong, stays healthy throughout the season and dries down fast. An attractive hybrid all season long.



Seeds

6945 Vista Drive
West Des Moines, Iowa 50265
(515) 222-1400

For More Information

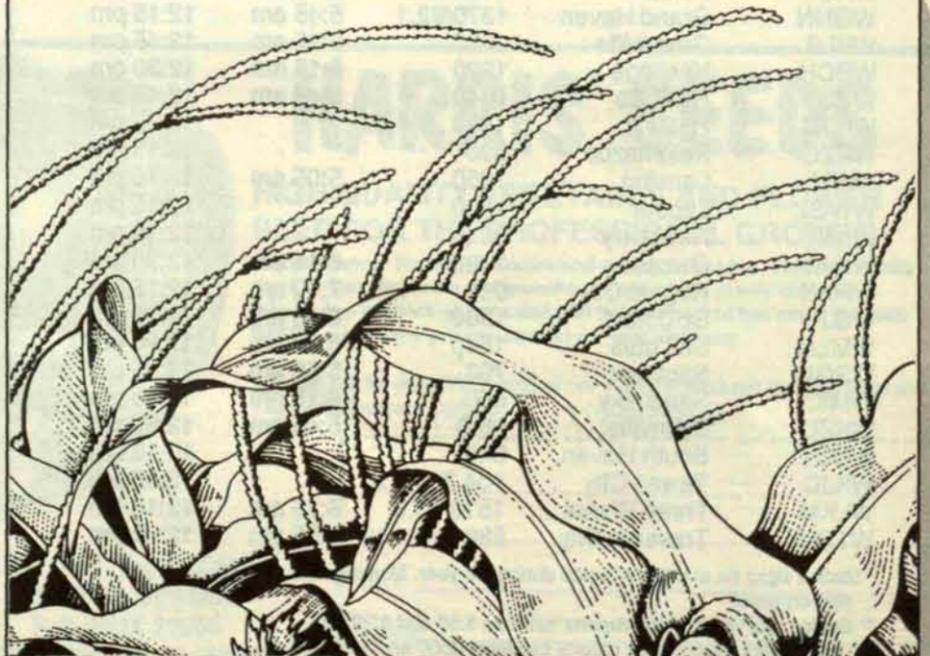
About ICI Seeds in Michigan Contact

Kevin Doneth
Durand
517-743-4826

Wes Kinsey
Coldwater
517-278-8371

Tom Sharai
Benton Harbor
616-927-1363

Or Call ICI Customer Service
1-800-348-2742



Weather

30-Day Outlook - Expect Above Normal Temps/Precipitation

With warmer and wetter than normal conditions during most of the month, November weather made field work impossible in many instances. An active storm track out of the southwestern U.S. through the Great Lakes area was largely responsible.

Because Michigan was largely in the middle of or to the east of the main storm track, warmer than normal air was frequently transported into the state, resulting in precipitation mainly in the form of rain across southern and central sections, and mixed liquid/frozen precipitation further north. By the end of the month, precipitation totals for the month were nearing 200 percent of the normal in some cases.

For those waiting for the weather to allow field work once again, the outlook over the next couple of weeks is not encouraging. The same jetstream pattern that brought all the wet conditions and delays in November is forecast to continue at least for a couple of weeks in December. Besides the problems brought about by normal to above normal precipitation, above normal temperatures (especially during the daytime hours) will keep topsoils unfrozen and largely unsuitable for any field work.

The outlook for the remainder of December indicates above normal temperatures and above normal precipitation. The latest 90-day National Weather Service Outlook predicts that both temperature and precipitation will be closer to normal.

Michigan Weather Summary

11/1/92 to 11/30/92	Temperature		Precipitation	
	Observed Mean	Dev. From Normal	Actual (inch.)	Normal (inch)
Alpena	34.5	-1.0	3.93	2.57
Bad Axe	36.9	-1.7	4.31	2.23
Detroit	41.0	+1.0	4.33	2.44
Escanaba	32.9	-2.3	4.52	2.65
Flint	38.8	0.0	4.05	2.44
Grand Rapids	38.6	+0.1	5.46	2.79
Houghton	30.8	-0.3	2.73	2.54
Houghton Lake	34.2	-1.5	4.64	2.57
Jackson	38.5	-0.7	3.27	2.32
Lansing	38.1	-0.5	3.91	2.32
Marquette	29.7	-0.7	4.83	2.54
Muskegon	38.4	-0.9	6.62	2.88
Pellston	33.5	-1.2	4.92	2.69
Saginaw	37.5	-0.8	4.27	2.23
Sault Ste. Marie	31.8	-1.1	5.10	2.65
South Bend	40.7	+0.2	5.12	2.79
Traverse City	35.1	-2.6	5.03	2.69
Vestaburg	36.7	-1.3	5.28	2.49

Jeff Andresen, Ag Meteorologist, MSU

Michigan and Major Commodity Area Extended Weather Outlook

T - Temp.	12/15... 11/31	12/1	2/28
Michigan	A.....A	N.....N	N.....N
W. Corn Belt	N.....A	N.....N	N.....N
E. Corn Belt	A.....A	N.....N	N.....N
Wint. Wheat Belt	B.....A/N	N/B.....N	N.....N
Spr. Wheat Belt	N.....N	N/A.....B/N	N.....N
Pac. NW Wheat	B.....B	N.....N	N.....N
Delta	N.....A	B.....B	N.....N
Southeast	A/N.....A	N.....A	N.....A
San Joaquin	B.....N	A.....B/N	N.....N

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

Midwest Harvest - Water, Water Everywhere

Michigan

Several dry days the first week of December allowed anxious farmers an opportunity to harvest corn and soybeans in many areas of the state. Reports of wet field conditions, high moisture levels and low test weights continue, according to the Michigan Agricultural Statistics Service.

Corn harvest was reported as 40 percent complete, compared to 100 percent last year, and the five-year average of 97 percent. Little field drying of the crop was observed, and there were reports of mold and wind damage.

Soybean harvest advanced to 90 percent complete statewide, close to the 99 percent five year average. The winter wheat crop

was reported as 55 percent good to excellent, down 5 percent from the previous report.

Ohio

Corn harvest is making moderate progress in Ohio, although it was well behind normal, due to wet fields in many areas of the state. According to the Agricultural Statistics Service, 75 percent of the corn had been harvested, compared to 100 percent in 1991. There were also reports of elevators closing early or altogether because they were full. Most elevators are backed up because of the drying time required for this year's crop with an average moisture content now at 24.8 percent. Lodging was being reported in several areas, and mold was noticed in northeast Ohio.

Indiana

Farmers were making slow but steady progress toward completion of corn harvest, which has been hindered by wet fields, mud and lodging. Below-normal temperatures over the past week should help field conditions as soils freeze. Corn was 79 percent harvested as of Dec. 7,

down from the five-year average of 99 percent. By area, only 69 percent of the corn had been harvested in northern Indiana, 80 percent in central areas of the state.

Illinois

Drier weather had given Illinois farmers a boost in efforts to complete corn harvest, which stood at 88 percent complete, compared with 100 percent in 1991 and the five-year average. Freezing weather should help complete harvest quickly.

Iowa

Wet fields and mud continue to make harvest difficult, with reports of corn that's still standing, deteriorating in condition. Nearly 85 percent of the corn crop had been harvested, as compared to the 99 percent average. The most extensive harvest delays were in the southern 1/3 and east central areas of Iowa. Strong winds had caused some damage, with heavy lodging reported on 3 percent of the acreage, and moderate on 20 percent of the acreage. Slow harvest did help ease a shortage in grain storage space, with 38 percent of the reporters noting shortages of space.



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	12:15 pm
WATZ	Alpena	1450	5:30 am	12:15 pm
WPZA	Ann Arbor	1050	6:15 am	12:05 pm
WLEW	Bad Axe	1340	6:30 am	12:50 pm
WHFB	Benton Harbor	1060	*	12:30 pm
WKYO	Caro	1360	6:15 am	12:45 pm
WTVB	Coldwater	1590	5:45 am	***
WDOW	Dowagiac	1440	6:15 am	12:15 pm
WACY	Fenton	1160	6:15 am	12:15 pm
WGHN	Grand Haven	1370/92.1	5:45 am	12:15 pm
WPLB	Greenville	1380	6:15 am	12:45 pm
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	**	12:15 pm
WJIM	Lansing	1250	5:05 am	12:15 pm
WWGZ	Lapeer	1530	*	12:15 pm
WNBY	Newberry	92.5		12:15 pm
WOAP	Owosso	1080	6:15 am	12:30 pm
WHAK	Rogers City	960	7:10 am	12:15 pm
WSJ	St. Johns	1580	6:15 am	12:15 pm
WMLM	St. Louis	1540	6:06 am	12:20 pm
WSGW	Saginaw	790	5:55 am	12:15 pm
WMIC	Sandusky	660	6:15 am	12:45 pm
WKZC	Scottville	95.9	5:45 am	12:30 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	12:40 pm

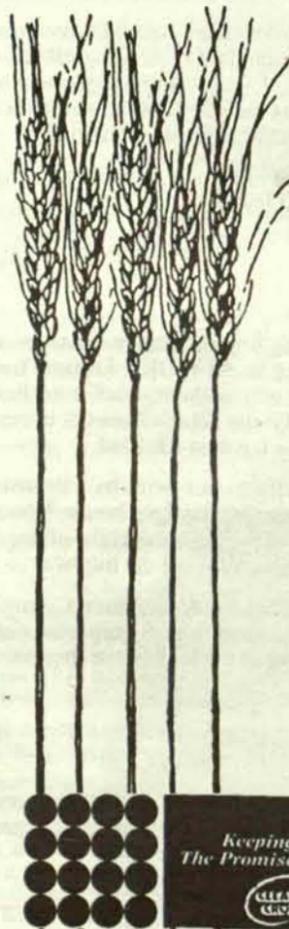
* Station signs on at different times during the year. Morning farm times change with sign-on times.

** Station airs various farm reports between 5:50 and 6:20 pm.

*** Station airs various farm reports between 12:00 and 1:00 pm.

Some stations carry additional market reports throughout the market day.

Roots to Profitability.



Increase Wheat Yields

Spring is the time to treat wheat with ACA to gain your advantage. ACA can be used as a spring dormancy break application with your topdressing fertilizer to boost your yields.

1992 Yields

ACA-treated wheat had an average increase of 10.76 bu/acre with the highest yield increase at 22.22 bu/acre. On farm yield increases in 1992 varied from 5.16 to 22.22 bu/acre. The four-year average yield increase wheat growers have seen using ACA has been 8.53 bu/acre.

See the Benefits of ACA

Better root systems Increased Profits
Healthier Plants Increased Yields
Easier Harvesting Proven Performance

To see the difference apply ACA with anhydrous, liquid 28% N, Liquid Starter, impregnated on dry or sprayed.

Contact Your Local Clean Crop Dealer or call 1-800-292-2701 for additional information on the ACA Advantage!



MFB Annual Meeting Highlights Continued...



Above, Katrina Roy, a delegate from Macomb County Farm Bureau, makes a point during the four days of policy discussion at the MFB annual meeting. In total, the 460 farmer-delegates took action on 160 policy recommendations. Below, Gov. John Engler told MFB members to "fasten their seatbelts," and expect changes.



MACMA - Meeting the Challenge of Change

Michigan Agricultural Cooperative Marketing Association held its annual meeting as well, hearing reports from co-op President Jack Laurie, and MACMA General Manager Randy Harmson.

Laurie said that MACMA had turned some of the major challenges it faced during the past year into opportunities by making changes.

"During the past year, our Feeder Pig Division, recognizing a rapidly changing industry in both the areas of a preferred way of marketing feeder pigs and the genetic make-up of the pig itself, continued to expand its cooperative relationship with the Michigan Livestock Exchange and the Feeder Pig Producers of the Indiana Farm Bureau," explained Laurie. "Today our modern electronic marketing system offers feeder pig producers yet another alternative to successfully market their hogs."

The Cherry Division continued to work throughout the year with growers and processors to develop a program that can meet the needs of this extremely stressed commodity in Michigan, Laurie told co-op members.

"These needs not only include a changing consumer preference, product development, and market expansion, but they also include an awareness on the part of the growers and processors that a highly volatile commodity like red tart cherries needs some form of market and production stability," Laurie said. "Stability will take some of the extreme fluctuations out of grower returns and reinstate some financial integrity in the industry."

Laurie outlined some of the activities that MACMA has been involved in to meet the challenges of change, including helping the state's bedding plant growers to organize a research and promotion program, and a privatization proposal submitted to the Michigan Department of Agriculture to allow MACMA to manage the fruit and vegetable inspection service. He also reported on the development of a new Regulatory Compliance Assistance Program, designed to provide current, up-to-date, critical environmental and labor regulatory information.

FPC - Getting Back to Basics

The recent downsizing of Farmers Petroleum Cooperative, Inc. (FPC), will allow it to better serve its member owners, and return to its basic mission when the co-op was established in 1948, according to co-op President Jack Laurie.

Laurie said the growth of FPC over the years included direct delivery of fuel to farmers, purchase of local cooperative facilities to establish retail farm supply businesses in rural Michigan, and development of a subsidiary crude oil division.

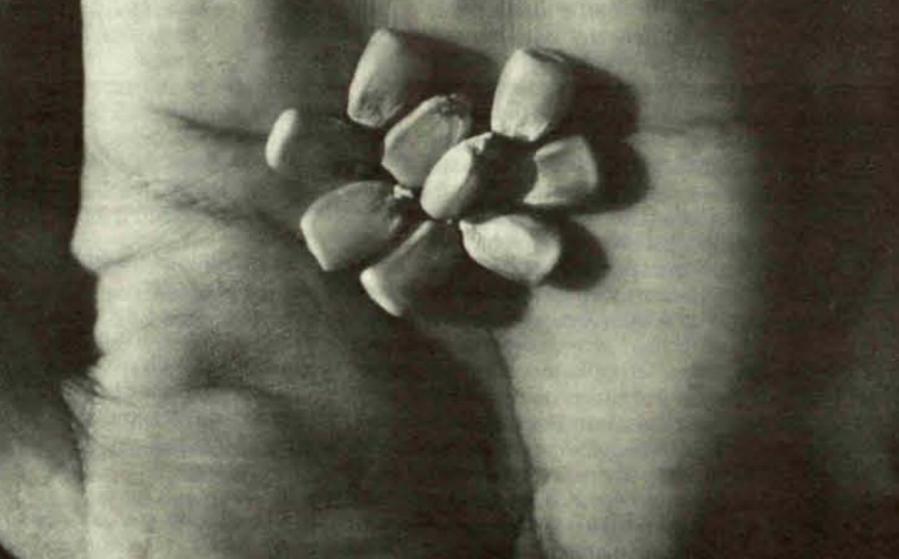
"The business structure that evolved was one that put the cooperative in the very uncomfortable position of competing with its own customers trying to be both a wholesaler and a retailer," said Laurie.

"The decision was made to spin off the highly risky crude oil business to generate cash in a growing, more traditional area - the liquid petroleum gas supply business. The growth of the propane business, plus the concern of how you can be a wholesaler and a retailer in the same marketplace, finally led the FPC Board to the conclusion that perhaps our niche in the marketplace was, as the founders of this co-op had determined, serving the independent cooperative wholesale market."

Laurie said the decision to sell FPC's retail centers to existing independent cooperatives was a good one, and that FPC is positioned to be the regional cooperative that can offer the support services that cooperatives need - services that aren't available from any fuel supplier up and down the street.

"There's no doubt that there's a place for a Michigan-owned and operated regional cooperative in the petroleum farm supply

Performance-driven research and quality seed go hand-in-hand.



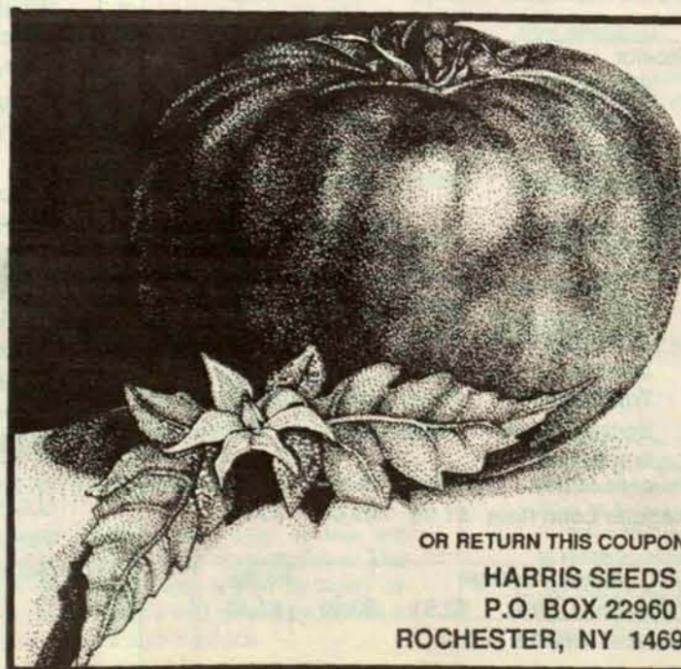
- AP 198** Proven High Yield Hybrid.
 - Performs best under high density
 - Very good early vigor
 - All-around consistence with high yield potential
- AP 250** Cool Soil Emergence.
 - 100-day yield champ - Northern corn belt
 - Excellent emergence in cool soils
 - Excellent early vigor and growth
- AP 484** High Yielding Reliability.
 - Unique genetics with proven high yield potential
 - Tall, showy hybrid during growing season
 - Very large ears with fast drydown

AgriPro corn hybrids are the result of a proprietary germplasm base and a performance-driven research program built over many years. When you're looking for corn hybrids, look to AgriPro. We're not just another seed company, we're an established leader in corn hybrid genetics and developer of high-quality seeds for your success.



Call 1-800-334-4730 for your local AgriPro Representative.

Seeds for success.



HARRIS® SEEDS

HIGH QUALITY VEGETABLE AND FLOWER SEED FOR THE PROFESSIONAL GROWER

Nothing fancy. No hard-to-understand pricing schedules. Just high quality seed for your vegetable and greenhouse operations at very competitive prices. And we back up our sales with the service that has made HARRIS SEEDS a company you can depend on, year after year.

You can call for your FREE copy of our 1993 Professional Bedding Plant and Vegetable Growers' Catalog: 716-442-0410

OR RETURN THIS COUPON TO:
HARRIS SEEDS
 P.O. BOX 22960
 ROCHESTER, NY 14692-2960

NAME _____
 STREET _____
 CITY _____
 STATE _____ ZIP _____
 9311

Market Outlook

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

Corn

I show the corn market as bottoming; the problem is, it may have a long bottom period. As shown below in Table 1, the excess supply of corn this year will be about 26 percent more than we need, despite the strong projected demand, due to the record size of the U.S. corn crop. And in Michigan, as all of you are well aware, we have the worst of both worlds—low prices and a poor crop. The poor crop comes in one of two forms, low yield/low quality or decent yield/poor quality.

There is no clear choice of pricing tools given the poor quality. The choice needs to be made by lining up the alternatives and picking the best one. The first two factors are, do you have on-farm storage, and, if you do, can you store it without large storage losses? No on-farm storage or unstorable corn means cash sales.

Some elevators are offering January prices, which would more that offset commercial storage rates; check those out. The problem is they may not be willing to store it if the quality is too poor. If you are forced to sell it as you bring it out of the field, check around. Drying rates and discounts could be continuously changing as the elevator's needs change.

If you fall into the sell cash now or soon category, that does not mean you have to be out of a possible market rally between now and July. However, we do need to be realistic about the chances.

You could stay in the market with perhaps a basis contract, a minimum price contract, buying futures, or buying a call. The problem is that they all depend on a rally in the futures markets. None of them give you the benefits of a tightening of the basis. We lost that alternative by being forced to sell cash. A rally in the futures market will depend on a weather rally next spring or summer, and you probably have at best even odds. Fundamentally, the futures markets are about where you would expect.

Seasonal Commodity Price Trends

Wheat	?
Corn	BT?
Soybeans	BT?
Hogs	↔ ↓
Cattle	↔ ↓

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

Those with on-farm storage and storable corn (if there are any) have more alternatives to consider. Both the basis relative to on-farm storage costs and the spreads between futures contracts say the market is willing to pay storage.

There are several ways you can take advantage of this. One way is to store and wait to price. At this point, it appears the basis will tighten 25-30 cents by July. Your returns to storage would be the tightening minus your storage costs, which is mostly lost interest. This alternative would be at least a break-even proposition as long as the futures do not drop more than your expected returns to storage, which is unlikely.

Another alternative would be to hedge; this would be a method to lock in your returns to storage regardless of what the futures market does, but you forfeit any gains due to a rally in the futures. Compare the returns of a hedge with a forward contract and a hedge-to-arrive with an elevator. If they are comparable, it would eliminate possible margin calls.

Wheat

There are not many positives in my view of the old crop wheat market. Russia is having trouble keeping up with loan payments, China is upset with us and will likely be more upset with Clinton. Canada and the EC have large stocks like us, and winter wheat conditions are fair for the most part. If you have a substantial amount of 1992 wheat left, consider selling it.

However, continue to monitor the 1993 wheat crop closely. There is no set-aside requirement for the 1993 crop and it does appear that plantings are up a couple of percent for 1993 with the zero versus 1992 5 percent requirement. If you can lock in a floor over \$3.00 prices, consider it on a portion of your expected crop.

Soybeans

At this point, there is both more downside risks and upside potential with soybeans than with corn. This is because projected ending stocks are not as big a negative factor and we have the South American crop to watch all winter. At this point, it appears Argentina's crop will be in the range of last year's, but the Brazilian crop looks like it could be significantly bigger, both in terms of acreage and the fact that planting and early growing season conditions have been good.

For those with commercially stored soybeans, consider selling some on rallies, especially if the basis continues to narrow sharply. If you want to stay in the market, consider doing it with a basis contract, a minimum price contract, or purchasing a

Hogs

I, along with most everyone else, have also been under-estimating hog prices. And despite that, I feel the futures market is over-estimating hog prices in all the out contracts. So unless the futures have collapsed since Dec. 7, there appears to be some good forward pricing opportunities relative to the way I see the fundamentals.

Check it out for your situation. At this time, I would expect first half 1993 prices to be in the low 40's with a significant probability

FARM BUSINESS OUTLOOK

If we do have an average or over crop, I expect ending stocks will grow. This is not to say I am bearish on new crop, but rather I can see a scenario with significant downside risk. On the other hand, expected ending stocks are still relatively tight, therefore, a wheat crop below expectation could be quite bullish.

The futures market does not appear willing to pay commercial storage. Remember, you do not have to buy the call option to replace your cash at the same time you sell cash. You can purchase it later if you feel the market may drop for a while first.

For those with soybeans stored on-farm where your storage costs are only around 2 cents per month, the call gets a little harder. At this point, the market shows it will pay on-farm storage, but it won't take a lot more tightening before it will be time to sell cash and use some of the above methods to stay in the market. At this point, there are downside risks. A portion of your soybean crop should be sold by this time and/or have a floor under it.

ity of seeing some prices under 40. While summer prices may give some relief, fall prices are likely to go back to the same range.

Watch for the Dec. 1 USDA Hogs and Pigs Report to be released on Dec. 30 at 3 p.m. I will discuss it in the next issue, which you will receive in mid-January. While it will still be very relevant at that time, it is important that you get some analysis as soon as possible.

Table 1
Supply/Demand
Balance Sheet For
CORN

	USDA Proj.	Hilker Proj.
	1990-91	91-92 92-93
Corn Acreage (Million Acres)		
Acres Set-Aside and Diverted	6.3	4.7 3.5
Acres Planted	74.2	76.0 79.3
Acres Harvested	67.0	68.8 72.2
Bu./A. Harvested	118.5	108.6 129.3
Stocks (Million Bushels)		
Beg. Stocks	1345	1521 1100
Production	7934	7474 9329
Imports	3	20 10
Total Supply	9282	9016 10,439
Use:		
Feed	4669	4897 5200
Food/Seed	1367	1434 1485
Total Domestic	6036	6331 6685
Exports	1725	1584 1600
Total Use	7761	7915 8285
Ending Stocks	1521	1100 2154
Ending Stocks Percent of Use	19.6%	13.9% 26.0%
Regular Loan Rate	\$1.57	\$1.62 \$1.72
U.S. Season Average Farm Price, \$/Bu.	\$2.28	\$2.40 \$2.20

Source: USDA & Hilker

Table 2
Supply/Demand
Balance Sheet For
WHEAT

	USDA Proj.	Hilker Proj.
	1990-91	91-92 92-93
Wheat Acreage (Million Acres)		
Acres Set-Aside and Diverted	3.2	10.0 3.5
Acres Planted	77.3	69.9 72.3
Acres Harvested	69.4	58.1 63.1
Bu./A. Harvested	39.5	34.1 39.0
Stocks (Million Bushels)		
Beg. Stocks	536	866 472
Production	2736	1981 2459
Imports	37	38 50
Total Supply	3309	2885 2981
Use:		
Food	796	785 835
Seed	90	94 98
Feed	489	259 250
Total Domestic	1375	1137 1183
Exports	1068	1275 1275
Total Use	2444	2413 2458
Ending Stocks	866	472 523
Ending Stocks Percent of Use	35.4%	19.6% 21.3%
Regular Loan Rate	\$1.95	\$2.04 \$2.21
U.S. Season Average Farm Price, \$/Bu.	\$2.61	\$3.00 \$3.40

Source: USDA & Hilker

Table 3
Supply/Demand
Balance Sheet For
SOYBEANS

	USDA Proj.	Hilker Proj.
	1990-91	91-92 92-93
Soybean Acreage (Million Acres)		
Acres Planted	57.8	59.1 59.1
Acres Harvested	56.5	58.0 58.1
Bu./Harvested Acre	34.1	34.3 37.3
Stocks (Million Bushels)		
Beg. Stocks	239	329 278
Production	1926	1987 2167
Imports	2	3 2
Total Supply	2167	2319 22447
Use:		
Crushings	1187	1254 1265
Exports	557	685 730
Seed, Feed and Residuals	94	102 102
Total Use	1838	2040 2097
Ending Stocks	329	278 350
Ending Stocks, Percent of Use	17.9%	13.6% 16.7%
Regular Loan Rate	\$4.50	\$5.02 \$5.02
U.S. Season Average Farm Price, \$/Bu.	\$5.74	\$5.60 \$5.40

Source: USDA & Hilker

7 Corn Harvesting & Marketing - Evaluate Your Alternatives

by Gerry Schwab, Roger Betz, and Roy Black, Michigan State University

Introduction

That feeling of satisfaction and accomplishment that accompanies completion of fall harvest has yet to be felt by many Michigan corn growers. Moisture levels remain high in the corn grain and in the soil profile. Many growers continue to push on the corn harvest as fast as dryer capacity and field conditions permit.

Moisture vapor clouds hang over the dryer indicating the high amounts of moisture being burned off by purchased gas energy. The question being raised with this article is the need to identify and evaluate the economics of other corn harvest and marketing alternatives.

Selected Alternatives

1. HIGH MOISTURE CORN - Harvest as soon as possible (ASAP) and sell high moisture corn (HMC) to livestock producers who can feed this product. The most obvious attraction to HMC is the avoidance of corn drying expenses and the storage risks associated with physical deterioration of a lower-than-normal quality product. Prices being quoted may, at first impression, seem unreasonable but recognize the amount of water that is included in the 56 pound bushel of HMC.

Table 1 presents adjustment factors that are helpful in determining a price for HMC.

Factors in this table are adjusted for moisture and for lower feeding value measured by total digestible nutrients (TDN) associated with lighter test weight corn. By way of example, consider a load of HMC corn weighing 7,000 pounds. Divide by 56 pounds per bushel, and you have 125 bushels of corn on a wet weight basis. If the corn has 30 percent moisture and a test weight of 48 pounds, the calculated adjustment factor from Table 1 is 0.7956. Multiplying the 7,000 pounds by 0.7956 gives 5,569 pounds (or 99.45 bushels) equivalent on an 85 percent dry matter standard.

Using a previously negotiated price of \$.03 per pound of 15 percent moisture corn (or \$1.68 per bushel), the 7,000 pound load of HMC corn is worth \$167.08. This price would be equivalent to \$.024 per pound of 30 percent moisture corn bought on a wet weight basis.

The Michigan Corn Information Exchange (MCIE) being coordinated by MSU's Cooperative Extension Service and Michigan Farm Bureau should facilitate this farmer-to-farmer alternative. Copies of this list should be available through all MSU CES offices and county Farm Bureau offices and the *Michigan Farm News*.

2. Harvest ASAP and Sell Dry Corn - The season is late and the psychological pressure is on to complete the harvest. Unfortunately, the corn produced in 1992 is a far different product from that produced in 1991. Grain standards define U.S. grade #2 corn as 54

pounds per bushel, 15.5 percent moisture or less, 3 percent or less of broken corn foreign material (BCFM), and damage allowance of 5 percent.

Because 1992 produced corn has not been meeting these standards, high shrink adjustments for moisture and possibly BCFM plus price discounts for low test weight and damage, in addition to high corn drying expenses, will be the reality. Because of the large variation in grain trade practices as to how all these practices are implemented, a basic recommendation is to evaluate alternative grain marketing sites as to their current practices and do some comparative shopping. Request that your potential grain buying station provide you a statement illustrating the net return for a representative sample of your corn.

The worksheet presented in Table 2 in the column labeled Example I illustrates a representative example for calculating net returns to the corn after marketing and drying expenses. Quantity adjustments for moisture using a pencil shrink factor of 1.3 or 1.4 are common.

Our example also illustrates a quantity adjustment for BCFM being higher than the elevator standard. Price discounts for low test weight and high damage may also occur. Our example uses a 1.4 shrink factor for each point of moisture and BCFM not meeting the elevator standard. (See lines 7 and 8 in Table 2.) Additionally, the price received is adjusted downward because of damage and low test weight. (See lines 12 and 13 in Table 2.)

Using the same 7,000 pounds of corn from the previous alternative, the net return after drying costs of 3 cents per point of moisture removed is lower even though the initial bid price of \$2.00/bushel was much higher than the \$1.68 in the HMC example.

3. Harvest ASAP and Store - To pursue this option, your implied marketing strategy is that either the basis will narrow and/or the market price will increase. If one or both events occur, your returns to storage should be positive. A check of market advisory resources including this newspaper will possibly provide some insights as to the probability of success for this strategy. Your monetary cost of storage and the risk of physical deterioration or spoilage are critical in evaluating this alternative.

4. Delay Harvest to Spring - storing corn on the stalk until April may not appeal to the majority, but in this most unusual year is an alternative that ought to be explored. In Table 2 in the column labeled Example II is our attempt to explore the economics of this alternative.

The intent is to determine the break-even amount of damage that could occur and still remain at least as well off given the assumptions about field drying and increased damage to the grain. For our example, 5 points of moisture were assumed, which we believe to be conservative if harvest is delayed until April. The bottom line (Line 17 in Table 2) indicates a return of \$177.50 per acre or an increase of \$41.93 over the December harvest and sell alternative.

What is not yet included and needs to be solved for is the tolerable amount of the field losses due to wildlife and ear droppage. By dividing the net difference of \$41.93 per acre by the net price received in April per bushel of (\$2.16 - 0.30 drying cost) \$1.86; the tolerable field loss to make this alternative break-even with the December harvest is 22.5 bushels of corn.

This amounts to a break-even loss of 23.5 percent. If the dry down rate is increased to 10 moisture points, the tolerable field loss increases to 39 bushel or nearly 40 percent.

Table 1: Corn Adjustment Factor for Moisture and Total Digestible Nutrients (TDN)

Test Wt (lbs/bu)	TDN ¹ (%)	TDN ADJ Factor ¹	Moisture Percentage in Corn ²					
			18	22	26	30	34	38
40	90.7	0.940	0.9021	0.8579	0.8137	0.7694	0.7252	0.6809
42	91.3	0.953	0.9146	0.8698	0.8249	0.7801	0.7352	0.6904
44	92.0	0.960	0.9213	0.8761	0.8310	0.7858	0.7406	0.6954
46	92.6	0.966	0.9271	0.8816	0.8362	0.7907	0.7452	0.6998
48	93.2	0.972	0.9328	0.8871	0.8414	0.7956	0.7499	0.7041
50	93.9	0.980	0.9405	0.8944	0.8483	0.8022	0.7560	0.7099
52	94.5	0.986	0.9463	0.8999	0.8535	0.8071	0.7607	0.7143
54	95.1	0.993	0.9530	0.9063	0.8595	0.8128	0.7661	0.7193
56	95.8	1.000	0.9597	0.9126	0.8656	0.8185	0.7715	0.7244
58	96.4	1.010	0.9693	0.9218	0.8742	0.8267	0.7792	0.7317

¹ TDN and Adjustment Factors from paper entitled "Does Test Weight Influence the Nutritional Value of Corn?" A.S. Mimeo 266, by S. Rust et al.

² Moisture shrink calculated using formula below where standard is defined as 85% Dry Matter (DM), 15% moisture

$$\text{Adj factor for moisture} = \left[\frac{\% \text{ DM in Standard}}{\% \text{ Moisture Standard}} \right] - .005 \text{ dry matter shrink adj}$$

Table 2. Calculating Corn Returns after Shrink and Price Adjustment

	Unit	Elev. Mkt. Std.	Example I	Example II
1. Harvest Price	(\$/bu)		December Harv. 2.00	April Harvest 2.30
2. Moisture	(%)	<15	30	25
3. Test Weight	(lbs/bu)	>54	48	50
4. BCFM	(%)	<1.5	4.5	4.5
5. Damage	(%)	<5	6	8
Quantity Adjustment				
6. Lbs Wet Corn			7,000	6533
7. Moisture Shrink (1.4% per 1.0% above Mkt St)	(%) (lbs)		21 (1470)	14 (915)
8. BCFM Shrink (1.4% per 1.0 above Mkt Std)	(%) (lbs)		4.2 (294)	4.2 (274)
9. Shrink	(lbs)		1764	1189
10. Dry Pounds			5236	5344
11. Dry Bushels (Line 10/56 lbs per bu)			93.5	95.4
Price Adjustment				
12. Damage Discount (\$0.02 per point above Mkt Std)			0.02	0.06
Test Weight Adjustment				
13. (\$.01/lb to 50 lbs & \$.02/lb after 50 lbs)			0.08	0.08
14. Sale Price (\$/bu)			\$1.9	\$2.16
15. Gross Sales (Line 11 x Line 14)	(\$)		177.65	206.13
Drying Cost				
16. Dry Cost/Point Moisture (\$.03/bu X # dry bu X points moisture removed) (Line 16 X Line 11) X (Points Moisture Removed as indicated on line 2)		0.03	\$42.08	\$28.63
17. Net Dollars Per Acre after Marketing Costs (Line 15 - Line 16)			\$135.57	\$177.50

Market Outlook Continued...

Cattle

My advice to feedlots is to keep very current; the fed cattle market we have seen the past month has been stronger than expected and prices are expected to drop \$2-3 per cwt. early in the new year. Part of the stronger than expected prices has come from the demand side, and I have no reason not to believe that will continue.

However, on the supply side, fewer are coming to market than expected given early summer placements. Unless the on-feed reports were significantly off base we see more of a year-to-year increase in slaughter the first quarter of 1993.

When I talk about a decrease in cattle prices I mean in reference to today's cash prices,

not in the futures prices. The futures markets have already discounted for the above discussion. Fundamentally, the futures prices through October seem reasonable.

This is somewhat different than has been typical the last several years where the market was generally below what expected supply and demand would imply, and then the prices would increase over time as we approached the contract.

Because of that, there were seldom any good forward pricing opportunities. That isn't always the case today; in many instances the futures will allow you to lock in break-even or above prices.

8 Guidelines on Buying High Moisture Shelled Corn

Compiled by Jerry Lindquist, Osceola County CES Director and Dr. Roger Brook, MSU Ag Engineering Department

Many farms will be short of shelled corn this year in northern Michigan, while many cash crop farm operations in Southern Michigan have corn that cannot possibly all be dried.

With the use of the Michigan Corn Information Exchange program, many of those farmers may be trying to sell their corn to Northern Michigan farmers as a way to market some of their crop. The question then becomes one of how to establish a fair market price for high moisture shelled corn (HMSC).

When negotiating a price with a cash crop farm, determine:

1. How much corn you wish to purchase? Normally quoted in wet bushels (call the Extension office if you need to know silo capacity).

2. What is the maximum corn moisture percentage you will accept? For example, nothing above 30 percent moisture.

3. How will you base price? Routinely it's based on the market price of dry corn at 15 percent moisture with the HMSC price adjusted to an elevator's shrink table (see Table A).

4. Can you offer some guarantee of payment? Understand that many farmers get nervous when they deliver \$20,000 worth of corn to a person they don't know and may never meet. Some farmers are getting a guaranteed note from their lender up to a set dollar amount. Others are setting up an escrow account with a third party like a lender to draw out as corn is delivered.

5. Ask the grower if there is a mortgage on the crop, and if there is, how the payment should be handled. This could avoid legal complications for yourself.

6. Determine pricing for trucking, routinely \$2 per loaded mile or \$.20 - \$.25 per wet bushel.

How To Determine Price For Delivered HMSC:

1. Before delivery, agree to a fair market price for 15 percent moisture corn. The

current market has been in the \$1.75 - \$1.90 per bushel range in central Michigan. If you have a method to determine corn test weight, you may agree to discount the market price if the test weight is below 54 (see Table B). Other possible discounts are for foreign matter and kernel damage, mold, or sour smell.

2. Determine actual corn moisture.

3. Determine delivered wet weight of truck load from the trucker's certified scale receipts.

4. Then use the following equation:

$$(1.00 - \text{elevator shrink factor from Table A}) \times \text{delivered wet weight} \div 56 \text{ (which is the weight of dry corn per bushel)} \times \text{market price of dry corn per bushel} = \text{value of truckload of corn.}$$

Here is an example: 47,458 pounds of wet corn delivered at your agreed market price is \$1.75 per bushel for 15 percent moisture corn. The corn is 30 percent moisture and trucking will be \$2 per loaded mile, delivered from 90 miles away.

$$[(1.00 - .219) \times 47,458] \times \$1.75 \text{ divided by } 56 = \$1,158.27 \text{ value of truckload of corn.}$$

$$\$1,158.27 + (\$2 \text{ per loaded mile} \times 90 \text{ miles}) = \$1,338.27 \text{ delivered price.}$$

$$\$1,338.27 \text{ divided by } 23.7 \text{ tons (47,458 lbs.)} = \$56.47 \text{ delivered price per ton at 30 percent moisture.}$$

Table A: Common Central Michigan Elevator Shrink Table

Shrink factors in this condensed table have a range of 1.4 percent shrink per point of moisture up to 2.0 percent shrink per point of moisture. This increases as corn moisture goes up. It also incorporates a percent dry matter handling loss.

Corn Moisture	Shrink Factor
26.0	.154
27.0	.168
28.0	.182
29.0	.199
30.0	.219
31.0	.239
32.0	.259
33.0	.279
34.0	.299
35.0	.319

Table B: Common Test Weight Discounts

Test Weight	Discount cents/Bu.
53	.01
52	.02
51	.03
50	.04
49	.06
48	.08
47	.10
46	.12

Table Egg Market

Allan Rahn and Henry Larzelere

Table egg prices in early December are trading in the upper 70 cent range, around 3 cents per dozen under a year ago.

These prices reflect a late year rally in which egg prices have sharply advanced from a mid-October level of 64 cents per dozen, 11 cents under year ago levels, to their current trading levels. Layer feed costs have been reduced around 2 to 3 cents per dozen due to lower feed ingredient prices, especially corn.

The egg-type chick hatch in October was 6 percent under last year's, and the number of egg-type eggs in incubators on Nov. 1 was down 19 percent. This continues a trend toward reducing the flock size and reducing production, but the current laying flock remains above year ago levels and table egg production in October exceeded last year's by 2.6 percent.

Producers have reduced hen slaughter rates as prices have strengthened, which implies higher induced molting rates and also that the average age of the flock will be increasing. As the flock gets older, their productivity will also decrease.

Table egg prices during the first quarter of 1993 are expected to average in the low 70 cent range. Typical seasonal price movement patterns suggest that prices during February will be below the average for the quarter, but that January and March price levels will exceed it.

A
**COMPANY
 SO GOOD,
 PEOPLE
 CLING TO US
 FOR LIFE**

Why do so many Michigan families stay with us year after year, decade after decade?

Because Farm Bureau Life Insurance Company of Michigan has the financial strength and stability to guarantee family security for generations to come.

We are the only Michigan-based company to make the latest list of America's top 50 outstanding insurers, as prepared by Ward Financial Group. Based on five-year results, Farm Bureau Life was praised for attaining superior financial performance without sacrificing safety and security.

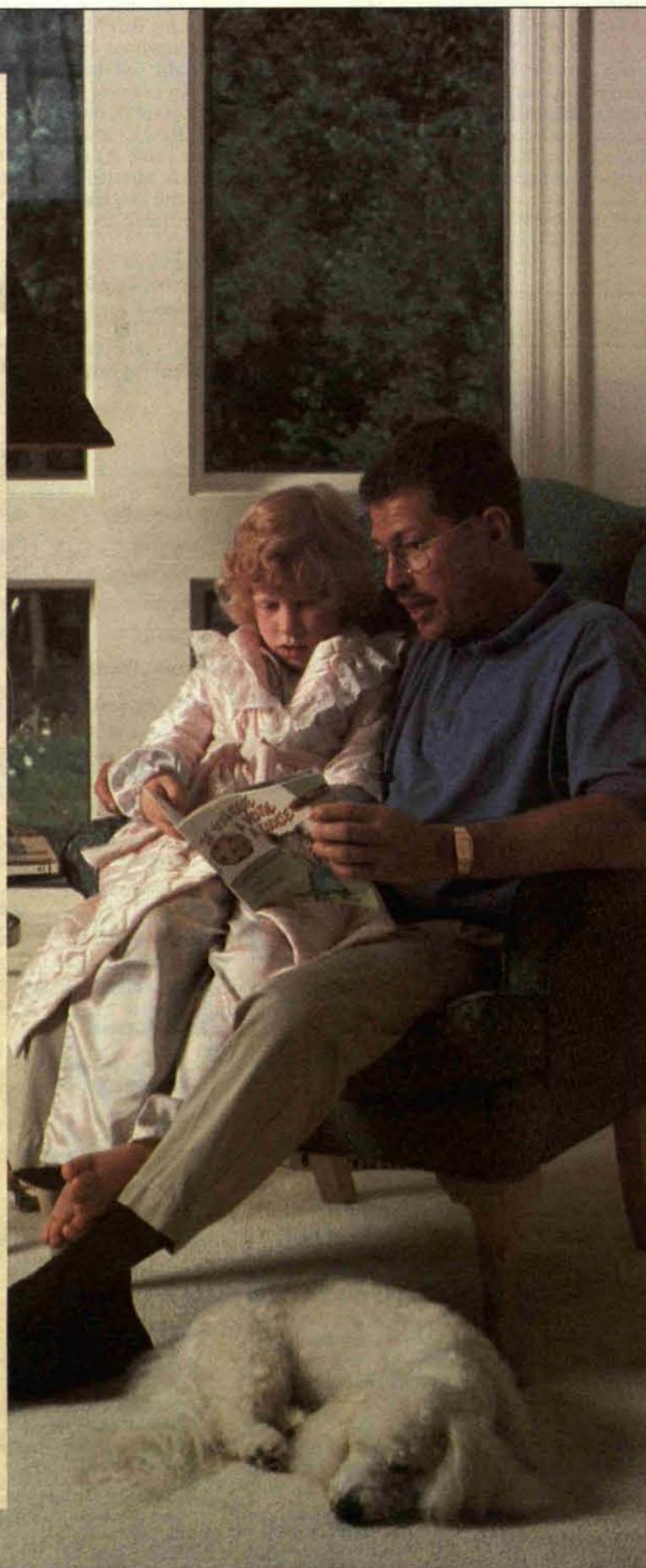
Our investments are safe and secure (we have never purchased junk bonds) and our yields have outperformed the life insurance industry average in six of the last seven years.

Farm Bureau Life has received the A+ (Superior) rating from the A.M. Best Company every year since 1976, one of only a few life insurance companies so honored.

When you want to protect your family, build a college fund, or create a lifetime retirement income, just call your local Farm Bureau Insurance agent.

We're the company you can depend on for life.

Making your future more predictable



9 Disaster Designation Granted to 62 Michigan Counties

USDA Secretary Edward Madigan has designated 30 Michigan counties as primary disaster areas, based on damage assessment reports due to multiple extreme weather conditions in the 1992 growing season.

The designations will allow "family-sized" farm operators in both primary and contiguous counties eligible to be considered for low-interest emergency loans from FmHA, according to USDA.

The primary counties include:

Allegan	Lake
Antrim	Livingston
Baraga	Macomb
Barry	Manistee
Benzie	Mason
Cass	Mecosta
Clinton	Montcalm
Genesee	Muskegon
Gogebic	Newaygo
Grand Traverse	Oceana
Houghton	Ontonagon
Ionia	Osceola
Iosco	Otsego
Kalamazoo	Ottawa
Kent	Van Buren

In addition, another 32 counties were designated as contiguous disaster areas, including the following counties:

Alcona	Leelanau
Arenac	Lapeer
Berrien	Marquette
Calhoun	Missaukee
Charlevoix	Montmorency
Cheboygan	Oakland
Clare	Ogemaw
Crawford	Oscoda
Eaton	Saginaw
Gratiot	St. Clair
Ingham	St. Joseph
Iron	Shiawassee
Isabella	Washtenaw
Jackson	Tuscola
Kalkaska	Wayne
Keweenaw	Wexford

Each applicant will be considered on their own merits, taking into account the extent of the losses, security available, repayment ability, and other eligibility requirements. Local FmHA county offices can provide affected farmers with further information and assist them in completing applications for assistance.

November Farm Prices Down Slightly

The Index of Prices Received by farmers in Michigan for all products as of November 15, was 130 percent of its 1977 base, according to the Federal/State Michigan Agricultural Statistics Service. The November index was one percent lower than last month's level of 131, but five percent higher than last year's index of 124.

The price index for all crops in Michigan fell one percent from its October level. Feed grains and fruit both fell one percent from a month ago, led by corn and apples, which were down seven percent and five percent respectively. Hay rose six percent; potatoes and winter wheat were both up five percent from last month.

The livestock and products index remained unchanged from a month ago. Egg prices rose 34 percent from October, while slaughter cows and hogs fell 8 percent and 5 percent respectively.

Nationally, the November All Farm Products Index of Prices Received by farmers, at 137, was 1.4 percent below October. Price declines for cattle, tomatoes, grapefruit, and lettuce more than offset price gains for oranges, eggs, strawberries, and wheat.

The October Index of Prices Paid for Commodities and Services, Interest, Taxes, and Farm Wage Rates was 192 percent of its 1977 average. The index was unchanged from July 1992, but 1.6 percent greater than October 1991. Lower feed grain, mixed feed, fertilizer, and gasoline prices were offset by higher tractor, combine, feeder pig, and diesel fuel prices.

EPA Reportedly Eases Rules For U.S. Pesticide Safety Testing

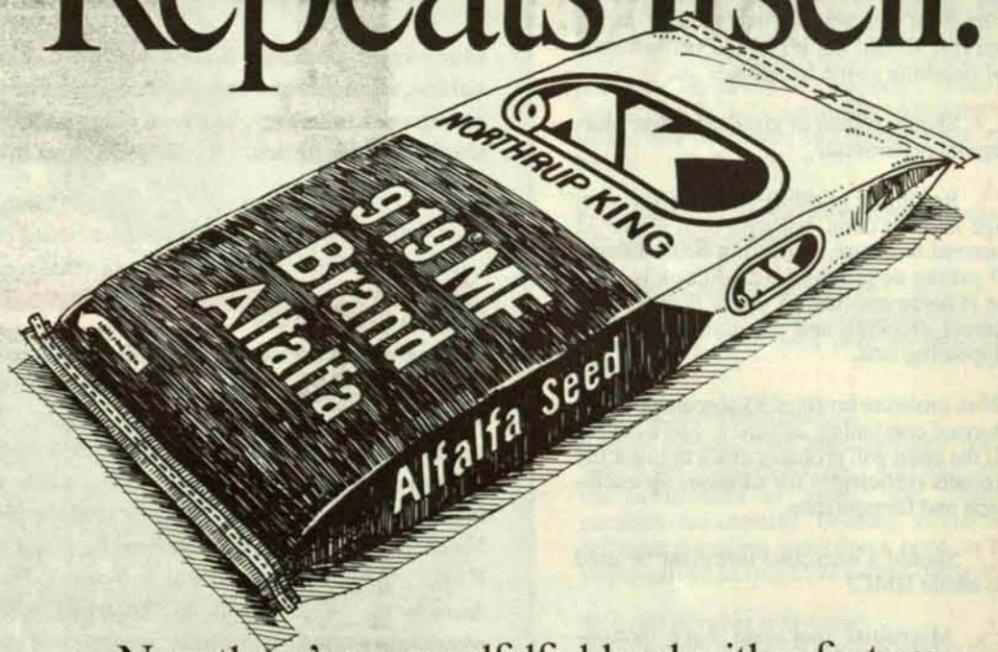
The Environmental Protection Agency has eased guidelines for pesticide safety testing by dispensing with most field tests on birds and fish, according to the Associated Press. Environmentalists criticized the move as a concession to the pesticide industry that could adversely affect human health.

The EPA said the move would speed testing, allowing more pesticides to be evaluated and more potential hazards to be discovered. EPA denied the change involved any political considerations.

YOUR MICHIGAN NORTHRUP KING SEED DEALERS

City	Dealer	Phone No.
Alicia	Con Agra Berger & Co.	517-770-4130
Alma	McClintic Farms	517-463-1140
Alto	Alto Farm Services	616-868-6030
Ann Arbor	Strieter Bros.	313-995-2497
Bancroft	Gerald Cole	517-634-5212
Belding	Jerry Gallagher	616-761-3243
Birch Run	Con Agra Berger & Co.	517-624-9321
Breckenridge	B&W Co-Op	517-842-3104
Carson City	Harvey Milling Company	517-584-3466
Conklin	Arends Farm Service	616-899-2136
Constantine	Ron Weston	616-435-8219
Corunna	Clyde McLosky	517-743-3633
Dimondale	John Oakley	517-646-0629
Dorr Dorr	Farm Products	616-681-9570
Dowagiac	Harold Grabemeyer	616-782-8744
Dowagiac	Joe Van Tuyle	616-782-8275
Homer	Tri-County Agra Services	517-542-3196
Lake Odessa	Mark Erickson	616-374-8538
Litchfield	Blondes Farm Supply	517-542-2996
Merrill	Con Agra Berger & Co.	517-643-7293
Middleton	M.A.C.	517-236-7263
Monroe	Calvin Smith	313-269-2710
New Lothrop	Anderson Fertilizer Services, Inc.	313-638-5868
New Lothrop	Bob Hajek	313-638-5281
Owosso	Anderson Fertilizer Services, Inc.	517-723-5205
Portland	Frank Trierweiler	517-587-6540
Reading	Dick Heffelfinger	517-283-2444
Richmond	Farmers Elevator	313-727-3025
Rockford	Ron Porter	616-874-8196
Saginaw	Seamon Farms	517-777-2054
Silverwood	John Ferkowicz	517-761-7217
Sunfield	Mueller Bean Co.	517-566-8031
Union City	David LaBar	517-741-3204
Vestaburg	Con Agra Berger & Co.	517-268-5300
Zeeland	Zeeland Farm Services	616-772-9042

History Repeats Itself.



Now there's a new alfalfa blend with a feature you'll really appreciate: reliable history. 919[®] MF Brand Alfalfa is the newest addition to the Northrup King 919 Brand family of alfalfa blends that growers have relied on for years. 919 MF is probably the best 919 blend ever. It's a combination of trifoliates with multiple pest resistance and alfalfas with the multi-foliolate trait. Economically priced, too. For reliable performance, 919 MF Brand.

New 919[®] MF Brand Alfalfa.



NORTHRUP KING

A Sandoz Seeds Company

APP

10 Storage and Feeding of High Moisture Corn

Herb Bucholtz - Dairy Nutrition
Harlan Ritchie - Beef Nutrition
Dale Rozeboom - Swine Nutrition
Steven Rust - Beef Nutrition
 Department of Animal Science
 Michigan State University

The 1992 corn harvest has been delayed because of excessive kernel moisture and wet field conditions. Moisture levels have been reported as high as 45 percent in several cases. Livestock farmers have been asking a number of questions concerning the harvesting, storage, and feeding of this year's corn grain as high moisture corn. Following are some commonly asked questions and answers concerning the effect of corn grain moisture.

Harvesting and Storage

Q. What are the consequences of kernel damage?

A. High moisture corn going into storage at kernel moistures above 35 percent will result in the kernels cracking during mechanical handling (augering and blowing into storage). This breakage of the kernel will cause more of the starch to be exposed as fine particles.

The starch in fine particles is more soluble and will ferment very rapidly in the rumen. This rapid starch fermentation can result in a more acidic rumen environment and potentially cause rumen acidosis and digestive upsets.

Cattle that consume in excess of 18 pounds of high moisture corn (dry matter basis) per day are more susceptible to digestive disorders from wet corn. Kernel cracking during harvest should not affect the performance of finishing swine fed HMC.

Q. Should rolling or grinding before storage be performed?

A. Rolling or grinding HMC before storage is often done, but with corn above 35 percent moisture, it may not be necessary. If rolling or grinding is traditionally done or is being considered, check the extent of kernel cracking and the amount of fines appearing first.

With moisture levels of 35 percent or more, normal combining, auguring, and blowing of the grain will probably crack or break the kernels sufficiently for adequate air exclusion and fermentation.

Q. Should a microbial inoculant be used to ensile HMC?

A. Microbial inoculant have demonstrated small and variable effects on preservation of ensiled HMC. As with other silages, inoculant tend to reduce pH faster and increase lactic acid accumulation. Unfortunately, this does not necessarily increase dry matter recovery or bunk stability. Based on recent MSU research on corn under 35 percent moisture, wet corn inoculant appear to be of limited value.

Q. Can propionic acid be used to preserve wet corn?

A. Use of propionic or propionic/acetic acid mixtures have been extensively researched for grain preservation. Acids lower the pH quickly and limit microbial activity. Moisture content and length of storage should determine the amount of acid to use. HMC containing 40 percent moisture and stored for 6 months would need 1.75 percent acid. If the desire is to increase the length of storage, for each additional month and additional 3 percent, more acid is required.

Acids are potentially corrosive metals, especially galvanized metal. It is recommended practice to wash equipment (i.e. augers, etc.) that were in immediate contact with the acid during handling. Once the

acid is absorbed into the grain, it's less corrosive and will not harm feeding equipment.

Companies supplying the acids do not recommend storage of the treated grain in upright silos. There is a tendency for moisture to migrate, dilution of the acid and formation of "hot spots." Recommended storage includes bins, bunker silos, plastic tubes, or piles on hard surfaces.

Pure acids are least expensive, but more difficult and hazardous to work with. Buffered acids, which are less corrosive, are available but more expensive. Estimated costs for grain treatment range from \$.25 to \$.75 per bushel for 1.75 percent propionic acid added to 40 percent moisture corn.

Two suppliers of the acid include:
Kermin Industries, Inc.
 Des Moines, IA
 (515) 266-2111

American Farm Products
 Ypsilanti, MI
 (313) 484-4180

Q. What moisture ranges can corn be stored at?

Table 1

Recommended Moisture Percentages For Different Types Of Storages

Type of silo	Moisture %			Ear Corn*		
	Ideal	Kernel Min.	Max.	Ideal	Min.	Max.
Sealed	27	20	33**	28	23	35
Top Unload	30	22	35	28	23	35
Bagged	27	20	35	28	23	35
Bunker	30	24	35	28	23	35

* Approximate moisture content of kernel, cob, and whole ear.

** Maximum amount of moisture is limited by ability of unloading equipment to handle corn.

Source: Great Plains Beef Cattle Handbook (GPE-2003).

Panama Canal Cruise

February 6-16, 1993

Nothing can compare with the majesty of the Panama Canal. Join us on our 10-day cruise on the Royal Princess and watch this 45,000 ton ship as it is raised and lowered 85 feet using no other power than the force of gravity. Imagine cruising to one sun-drenched port after another. Acapulco for the cliff divers. Cartagena for South America. St. Maarten for the beaches. Costa Rica for the scenery. San Juan for the history.

Our cruise package includes a 20% discount on all cabins, all meals and entertainment, air transportation, group cocktail party, bottle of champagne, and prepaid shipboard gratuities. Cabins begin as low as \$2,322.

Australia/New Zealand

March 2-22, 1993

Farm Bureau members are welcome to join our tour to the "Land Down Under," where it will be late summer, instead of winter, when we get there. Our 21-day package to Australia and both the North-South islands of New Zealand is highlighted by visits to the Great Barrier Reef & Cairns, Sydney and the Sydney Opera House, Melbourne, Christchurch, Mt. Cook National Park, Queenstown, Milford Sound Rotorura, and Auckland. Our flight to Australia will include an overnight stop in Honolulu and we will stop in Fiji for 3 days upon our return to the United States.

Our tour package includes roundtrip air transportation, deluxe motorcoach transportation, all transfers, deluxe and first class hotel accommodations, full sightseeing, 28 meals and a professional guide throughout the tour. Experience the "Land Down Under" plus Hawaii and Fiji all for \$4,999 per person.

Georgetown Home Tour

April 23-26, 1993

Join us for the weekend as we stroll the historic neighborhoods of Georgetown and visit several homes and experience the beauty and grandeur of these stately mansions. Spectacular decorating and colorful gardens await us on each walking tour, to be followed by tea and cookies. Our package includes roundtrip airfare, transfers, accommodations at the beautiful and European styled Georgetown Inn, 7 meals, a city tour of Washington, D.C., and a visit to the National Gallery. Members: \$674. Non-members: \$694.

the FARM BUREAU TRAVEL SERIES

Scandinavian Capitals and Russian Grandeur

June 15-29, 1993

Our 13-day cruise upon the new luxurious Crown Odyssey is highlighted by visits to six great European capitals — Oslo, Copenhagen, Helsinki, Stockholm, Amsterdam, and London, plus St. Petersburg, Russia. Our Farm Bureau travelers also have the opportunity for a one-night land excursion to Moscow.

Our cruise includes airfare, transfers, all meals and entertainment, cocktail party, bottle of wine, as well as prepaid gratuities to cruise staff. An optional two-night "London Showtime" package before or after the cruise is also available. Cabins begin at \$4,036 per person.

Brochure Request Form

Please send, without obligation, the detailed information for the tours indicated below

- Panama Canal Cruise
 Australia New Zealand
 Georgetown Home Tour
 Scandinavian Capitals & Russian Grandeur
 England, Ireland Scotland & Wales
 European Adventure Tour
 Heritage of America
 Copenhagen Plus

(Please Print)

Name _____

Address _____

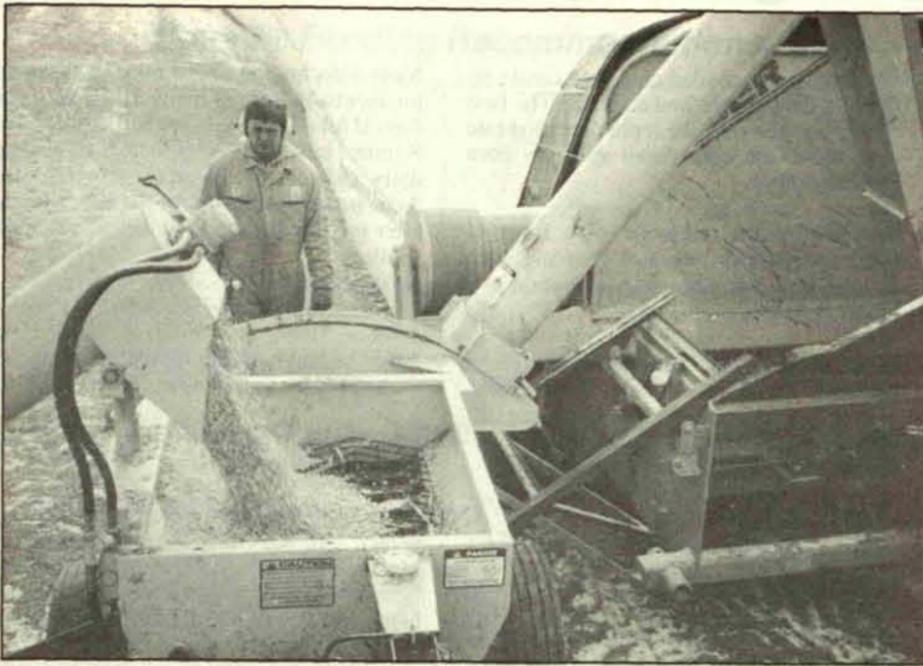
Phone _____

County _____

(Please Mail to)

Member Travel Services
 P.O. Box 30960
 Lansing, MI 48909
 or call
 1-800-292-2680
 ext. 3067

Storage and Feeding of High Moisture Corn



Bagging of high moisture corn for livestock feed may prove to be a popular alternative. Above, Bill Armbrustmacher of Clinton County was planning on using the nearly 5,500 bushels of corn in this bag for heifers and steer rations.

Q. Will Feedout Procedures Need To Be Altered With Wet HMC?

A. HMC with low dry matter is less stable, meaning spoilage will begin sooner at the exposed surfaces. Approximately 3 to 4 inches of grain must be removed daily to prevent spoilage at the surface. This is particularly true in milder weather when temperatures are 70 degree F or greater.

Q. Will a Dry Corn Wet Corn Blend Prior to Ensiling Provide Good Feed?

A. A blend of wet and dry corn is an excellent strategy if the dry corn or other material is available. Blending a dry ground corn with whole wet corn would pack and ensile properly. In addition, it would provide an excellent feed resource. It may also be possible to add dry grain screenings or dry beet by-products to the wet corn as well.

Blending HMC with dry corn before storage would be acceptable for grain that will be fed to swine. However, average moisture content should not go below 22 percent, because fermentation will be decreased and spoilage increased as a result.

Q. Can Corn Be Dried to 30 Percent Before Ensiling?

A. It's unclear how beneficial this strategy would be. The authors are unaware of any research trials evaluating this practice. Partial drying will have only marginal benefits in reducing ration moisture.

For instance, a diet with 50 percent haylage at 50 percent dry matter, and 50 percent HMC at 60 percent dry matter would have a total ration dry matter of 55 percent. If HMC with 70 percent dry matter was used instead of the wetter HMC, it would only increase total ration dry matter to 60 percent. This difference is relatively small and may not justify the expense of removing 10 points of moisture.

Secondly, the problems with high moisture diets is the rapid availability and fermentability of nutrients, not the extra water. If corn is partially dried, a bacterial silage inoculant may be desirable.

The story is slightly different for feeding hogs, however. A pig cannot consume enough energy each day to maximize growth when fed HMC in the 35 to 40 percent range. Thus, partial drying may prove beneficial to improving daily gains.

Q. Will Acidosis and Bloat be More of a Problem With Wet HMC?

A. The potential for digestive disorders is greater with more rapidly degraded substances such as starch. In this case, the immature corn and greater amount of fines increases the rate of starch digestion.

Consequently, digestive disorders are a potential risk. Basically, two alternatives exist. More roughage can be put into the diets or dry corn can be blended with the HMC. Frequent feeding may also lessen the problem. However, the expected benefit would be relatively small. These problems would not be related to feeding HMC to swine.

Q. What are general harvesting and storage guidelines to follow?

25 to 30 percent moisture:
Follow usual harvesting and handling procedures that have been done in previous seasons.

30 to 35 percent moisture:
Can be harvested as high moisture corn. Watch for excessive kernel breakage and the occurrence of "fines" and "flour" particles. If excessive "flouring" is visible, different handling procedures need to be implemented to minimize kernel damage.

35 to 40 percent moisture:
Excessive kernel breakage will likely occur and handling procedures that minimize breakage should be implemented. Mixing of dry corn with high moisture corn going into storage would be an option to reduce total moisture to more acceptable ranges.

Above 40 percent moisture:
Questionable moisture range for storage and feeding. Mixing with dry corn before storage is recommended.

1993 FARM BUREAU TRAVEL SERIES

Travel to England, Ireland, Scotland, & Wales

July 8-23, 1993

One does not need the "Luck of the Irish" to enjoy the many attractions included in this deluxe package. This 16-day tour is full of many great attractions including such things as Killarney, the Ring of Kerry, the Blarney Castle, Waterford Crystal factory, Dublin, Edinburgh Castle, an overnight stay in Ruthin Castle in Wales, theatre tickets to a Royal Shakespeare Theatre production, a Medieval Banquet, a visit to Stonehenge, Buckingham Palace, and a tour of London, as well as London Theatre tickets. Our package includes roundtrip airfare, deluxe hotel accommodations, 24 meals and much more for \$2,799 per person.

European Adventure Tour visiting Austria, Switzerland & Italy

August 14-25, 1993

Our 12-day central European tour takes in the beautiful countryside of Austria, the mountains of Italy and the lakes of northern Italy as we visit Fairytale Bavaria, the Passion play village of Oberammergau, the Italian resort of Stresa and Linderhof Castle.

This European tour includes roundtrip airfare, transfer, deluxe motorcoach transportation, first class and Tyrolean-style hotel accommodations, European-style buffet breakfast daily, 1 dinner, and much more. The Farm Bureau member price is \$1,725. Non member price is \$1,755 per person.

Heritage of America

September 25 - October 3, 1993

The beautiful colors of the fall foliage combined with America's most historic areas makes this a most outstanding tour for Farm Bureau members. Our travels will include New York City, the city of Brotherly love — Philadelphia, the Amish country of Lancaster, as well as Gettysburg and the Shenandoah Valley. Our adventures will then take us to Monticello, colonial Williamsburg, and then to our nation's capital, Washington, D.C.

This deluxe tour includes air transportation, first-class hotel accommodations, deluxe motorcoach transportation, 15 meals, and full sightseeing and admissions to all attractions. This 9-day tour is available for \$1,299 per member.

Copenhagen Plus

October 9-16, 1993

Scandinavia this fall could be the most refreshing, truly different vacation you have ever had. Scandinavia is different, but you will feel very much at home. Our one-week vacation offers you the opportunity to enjoy Copenhagen, Denmark — one of Europe's most exciting capital cities — known for its fun loving spirit! Copenhagen has many fine museums, Royal Palaces, and an old harbour district with colorful cafes and cosy restaurants. The Strogit is the famous pedestrian shopping center — Europe's largest — where you can find the finest of Scandinavian goods and crafts.

Our package includes roundtrip airfare, accommodations at the 4 star Sheraton-Copenhagen, a 2-night cruise to Oslo, the capital of Norway, city sightseeing, Danish breakfast each morning, 2 dinners, and much, much more for the unbelievable price of \$1,235 for members, \$1,255 for non-members.



HERITAGE BUILDING SYSTEMS
800-643-5555

30 x 50 x 10	\$4,295
40 x 50 x 12	\$5,695
50 x 100 x 14	\$11,695
60 x 100 x 20	\$16,795
80 x 150 x 20	\$27,995

BUILD IT YOURSELF AND SAVE MONEY

Commercial steel buildings featuring easy bolt up assembly for the do it yourself builder from America's largest distributor. We have over 1,500 standard sizes of shops, farm, industrial, commercial and mini-warehouse buildings. All are complete with engineer stamped permit drawings to meet all local building codes, 20 year roof warranty, and painted walls. Prices are FOB from our 6 manufacturing plants nationwide. Call us today for a free information package, and a quote on our top quality buildings.

50' x 100' x 16'
ROOF SYSTEM
EQUIPMENT & HAY STORAGE
\$10,985

12

Storage and Feeding of High Moisture Corn

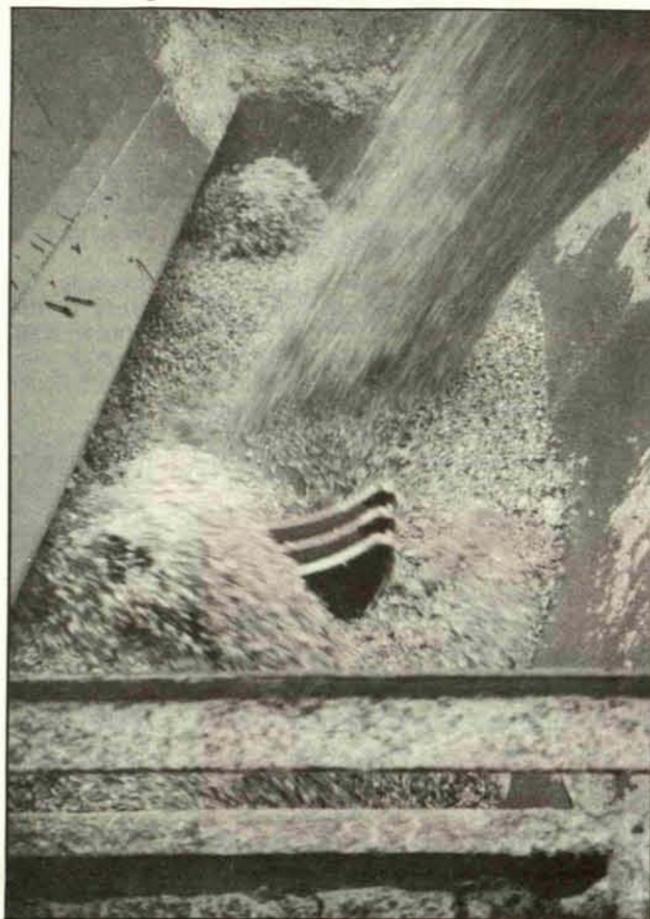
Specific Feeding Recommendations

BEEF

Low test weight corn has a slightly lower energy value but cattle tend to increase intake and weight gain remains constant. Feed conversion efficiency is decreased, but average daily gain and time on feed should remain the same.

General Feeding Guidelines to Follow

- Faster rates of digestion may cause greater problems with acidosis and erratic feed intake. Blending a slower digested form of corn (i.e. dry rolled or whole shelled) with the wet HMC will alleviate some of this problem.
- Feeding additional roughage will stimulate saliva production and lessen acid accumulation.
- More frequent feeding may provide assistance in reducing acid load. Total mixed rations will help ensure that adequate forage intake is achieved by each animal.
- Bunk management may become difficult. Plan frequent feedings and cleanings to alleviate this problem.



Feeding wetter ensiled corn may create erratic intake patterns and acidosis. The best strategy to alleviate the rapid digestion rate is to blend the corn down with dry corn before feeding.

Providing extra roughage or a form of roughage that requires more chewing, such as long hay, will stimulate salivation and buffer the acids produced.

More careful bunk management will be required. Frequent cleaning is necessary. The rate of feedout and face exposure (especially on bunker silos) should be carefully managed to minimize aerobic losses.

SWINE

The best use of HMC would be in the finishing diet. Molds and mycotoxin associated with spoilage have estrogenic activity and reproductive performance may be adversely affected if HMC is fed to breed stock. Unless the grain is tested for the presence and levels of mycotoxin, it should not be fed to the breeding herd.

Grinding and mixing HMC into a complete ration would be the best feeding method for finishing hogs. Less control over actual nutrient intake is obtained by feeding corn and supplement separately.

The amount of HMC and supplement to be mixed into the ration will need to be adjusted to compensate for higher water content of the corn. Hogs eat to meet their energy needs and will consume the high moisture rations until these needs are met. Thus less supplement is needed per pound of corn.

More information about making these adjustments and about using HMC in swine diets is found in Extension Bulletin E-1494. Rations including HMC should be made daily and not stored as spoilage will occur. Acid-treated HMC rations can be stored, after mixing, for one to three days without spoilage.

Low test weight corn is generally higher in protein, fiber, and mineral content, but lower in starch and lipid compared to corn with a 56-lb. test weight. Because of the higher fiber content, low test weight corn is best used in growing-finishing diets or for feeding the breeding herd.

Iowa State University research data has shown that growth performance of growing-finishing pigs fed low test-weight corn is nearly equal to performance when fed heavy corn, when compared on an equal moisture, pound-for-pound basis.

Feeding corn with a test weight below 45-lbs. could reduce average daily gain and feed efficiency by 5 to 10 percent. Adding 2 to 3 percent fat to rations based on low test weight corn should offset much of the decrease in performance.

Low test weight corn swine rations must be calculated on a weight basis. Formulating and mixing with volumetric blenders or grinder mixers will cause inaccuracies.

Even though low-test weight corn may be higher in protein, the relationship between protein content and lysine content is not predictable enough to safely assume lysine content has increased also. Light weight corn should be analyzed for lysine levels to improve accuracy in ration formulation.



CARGILL HYBRID SEEDS

**Alfalfa Savings Will Sprout . . .
Buy 6 Bags and Get 1 FREE!**



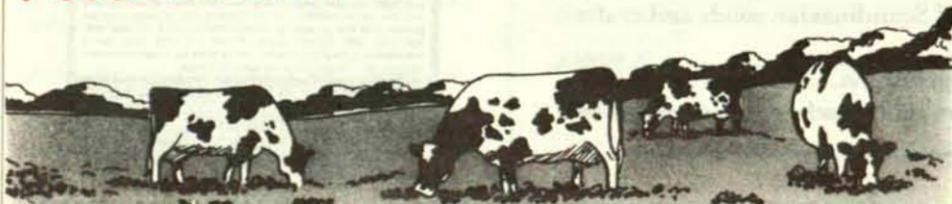
Don't miss these big savings on Cargill's superior alfalfa! Buy six bags of Cargill Royalty or Trident II alfalfa seed or any combination of the two totalling six, and we'll give you one bag of any Cargill alfalfa variety absolutely free!
 • Royalty's your choice for a high-quality, high-yielding, multiple-pest-resistant alfalfa variety.
 • Wet ground? Phytophthora? Aphanomyces? You'll for sure want Trident II.
 Both varieties beat the competition cold for exceptional yield and pest resistance.

No limit on order quantity. You'll get 1 FREE bag for every 6 you buy!
 Offer Ends December 31, 1992, So Order Today!

1-800-248-9414

Your Michigan CARGILL Dealers

Ann Briggs Williamston	Territory Manager 517-349-6969	Jones	Paul Conkright	(616) 435-7124	
Ann Arbor	A&K Seeds	(313) 662-8993	Jones	Reggie Olson	(616) 244-8123
Brown	City Robert Howland	(313) 688-2703	Lawton	Walter Mroczek	(616) 423-8402
Capac	Blumerich Farms	(313) 395-4517	Mendon	Rex Crotser	(616) 496-7204
Croswell	Croswell Milling Co.	(313) 679-3400	Paw Paw	Bill Mihelich	(616) 657-4351
Dexter	Dexter Mill	(313) 426-4621	Quincy	Don Bercaw	(517) 278-2851
Leslie	Dale Swiler	(517) 589-8821	Quincy	Jack Knirk	(517) 659-4611
Marlette	Dale R. Wood	(517) 635-3280	Ravenna	John Bonthuis	(616) 853-6167
Milan	Studnicka Bros.	(313) 451-8326	Sturgis	Lowayne Yoder	(616) 651-2111
Monroe	Clyde Opferman	(313) 269-2154	Constantine	Glen E. Miller	(616) 435-7774
North Adams	D. Black's Equip.	(517) 287-5704	Keith Clark Rockford	Territory Manager (616) 866-1309	
Okemos	Cook Farms	(517) 349-9502	Ashley	Rick Beracy	(517) 847-3591
Osseo	Schmidt Farms	(517) 567-8525	Bay City	Helmreich Crop Serv.	(517) 684-9449
Parma	Lauren Milligan or	(517) 531-4024 (517) 531-4757	Buckley	Frank Lipinski	(616) 269-4040
Reading	Reading Feed & Grain	(517) 283-2156	Cedar Springs	Vernon Starr	(616) 696-1858
Saline	Tom Hammond	(313) 429-2836	Fremont	Ken Stroven	(616) 924-3758
Saline	L&D Finkbeiner Farms	(313) 429-9777	Hale	Dennis Welkie	(517) 728-3012
Stockbridge	Neal Conway	(517) 565-3062	McBain	McBain Grain Co.	(616) 825-2172
Tecumseh	Steven Bishop	(517) 423-8186	McBain	Quist Farms	(616) 825-2614
Williamston	John Hoskins	(517) 655-1692	Merrill	Donald Slodowski	(517) 642-8406
Bob Morse Kalamazoo	Territory Manager (517) 373-5495	Mt. Pleasant	Tom Fox	(517) 644-5127	
Albion	Charles Frederick	(517) 629-5083	New Era	Dan Lombard	(616) 861-4430
Bangor	Greg Piper	(616) 427-8804	Newaygo	Bud Beeler	(616) 652-7264
Centreville	Hillcrest Farms	(616) 467-7805	Ovid	Robert Wilcox	(517) 834-2387
Ceresco	William Densham	(616) 979-3274	Paris	Dick Ford	(616) 796-7939
Charlotte	Charles Bingham	(517) 543-0807	Pentwater	Merton Cummins	(616) 869-5246
Coldwater	Ross & Rick Byers	(517) 278-8690	Perrinton	Gary Minger	(517) 236-5186
Coopersville	Langeland Farms	(616) 857-8951	Pewamo	Larry Simon	(517) 587-6968
Dowagiac	Edward Guse	(616) 782-7065	Posen	Hardies & Sons	(517) 379-3053
East Leroy	Fuller Farms	(616) 729-4443	Saginaw	Rodney Romain	(517) 781-2744
Fennville	Clois Ray McCarty	(616) 561-2369	Saranac	David Walter	(616) 642-9509
Gobles	John Schaendorf	(616) 676-5288	Shepard	Howard/Elmer Feltman	(517) 828-6008
Hastings	Crest Hill Dairy	(616) 367-4451	Sheridan	Richard Thibideau	(517) 291-5745
Holland	Don Boersen	(616) 875-8076	St. Johns	Rhonda Gingrich	(517) 224-4606
Holton	Bob Bean	(616) 821-0159	Standish	Standish Milling Co.	(517) 846-6911
Homer	Dwight Buell	(517) 568-3736	West Branch	Jerry Lehman	(517) 345-3906



Storage and Feeding of High Moisture Corn

Specific Feeding Recommendations



A strategy that may reduce the potential for acidosis is more frequent feeding of HMC, preferably as part of a TMR.

DAIRY CATTLE

If, at the time of feeding, this year's high moisture corn is above 35 percent moisture and contains more fines and small particles than normal, the following recommendations are suggested:

1. Limit the amount of high moisture corn fed to minimize acid load in the rumen. If acid overload occurs, the first observation will be depressed dry matter intake and lower butterfat percentages. Substituting dry corn for wet corn will minimize acid overload, by extending acid production over a longer period of time.

2. Feeding more roughage should also stimulate more saliva secretion and lessen the acid conditions in the rumen. However, roughages have less available energy meaning fat may need to be added to the diet. Don't exceed 6.5 percent of the diet dry matter intake as supplemental fat.

3. Buffers may help prevent some of the potential acidosis by increasing rumen Ph.

4. Feeding buffers alone without reducing the amount of highly fermentable HMC may not be enough to control rumen Ph or reduce acidosis effects.

5. Feeding roughages such as hay stimulate chewing and saliva production which contains large amounts of buffer. Adding more roughage will lower the energy density of the diet, therefore, roughages with higher digestibility should be used.

6. Rapidly fermenting starch in wet HMC can cause lower rumen Ph, rumen fiber digestion, rumen digestive passage rates, and depress dry matter intake. Any depression of dry matter intake is undesirable, particularly with high producing early lactation dairy cows. Monitoring of daily dry matter intake of lactating dairy cows is highly recommended to curb milk production losses and conception problems. Decreased dry matter intake is the first indicator of a potential problem.

Be Watchful for Molds and Mycotoxins

Wet corn and temperatures greater than 40 degree F are ideal conditions for Fusarium mold growth. Fusarium molds can produce mycotoxins such as vomitoxin, zearalenone, and T2. These mycotoxins can depress dry matter intake and animal performance.

Aspergillus mold, the source of aflatoxin, doesn't grow under these conditions. A good indicator for potential mycotoxin problems is an unexplained decrease in dry matter intake. It's thought that the cob portion is the major site where molds grow and the toxins are produced. Therefore, harvesting as shelled corn will reduce the potential for high mycotoxin concentrations.

Although many toxins have been identified, vomitoxin and zearalenone are of greatest concern to Michigan swine producers. Molds producing these toxins are pink in color and can be seen on ears of corn in the field or in stored grain.

Vomatoxin causes feeding problems in swine, with levels over 1 part per million reducing feed intake and rate of gain. Levels above 5 to 10 p.p.m. reduce feed intake to a point where weight loss is significant. Pigs will vomit when levels exceed 10 p.p.m.

Zearalenone affects reproduction in swine (false pregnancy, abortion, infertility, and inconsistent heat symptoms in gilts and sows). Recommended maximum concentrations of zearalenone in swine diets are 1.0, 2.0, and 3.0 for young pigs, breeding herd, and finishing hogs respectively.

For young gilts, estrogenic effects of zearalenone are not permanent and symptoms will subside or disappear after a two week withdrawal from diets containing the toxin.

Obtaining a lab analysis to determine mycotoxins present and respective concentrations is recommended. Care should be taken to collect a representative random grain sample. If levels are not identified in a laboratory, an on-farm test can be conducted by feeding various levels of contaminated grain to a few gilts (100 to 125 pounds), and observing feeding behavior and anatomical changes.

Feed refusal would indicate the presence of high levels of vomatoxin, and swollen vulvas and mammary glands would suggest the presence of zearalenone. Any feed contaminated with mycotoxins should be fed to the class of animals most tolerant (growing-finishing pigs which will be sent to market).

Dilution of contaminated grain with clean corn may help alleviate mycotoxin problems. When toxins are present, the use of absorbing clays or binding agents such as

sodium bentonite or hydrated sodium calcium clays, or binding agents, such as sodium bentonite or hydrated sodium calcium aluminosilicate, may also be beneficial at levels of 5 to 20 lbs. per ton of feed.

Molds and mycotoxins in feeds can be tested for at:
MSU Plant Disease Diagnostics Center
Room 138 Plant Biology
East Lansing, MI 48824-1312
Phone: (517) 355-4535
FAX: (517) 353-1781
Contact Dave Roberts

Testing fees are as follows:
Mold Identification - \$10
Mycotoxin Detection
DON (vomitoxin) \$25
Zearalenone \$25
Aflatoxin \$25
All three mycotoxins \$6'

Dairy Market Outlook

Larry Hamm

The Dec. 1 restart of Michigan's over-order pricing with its reconfigured superpool comes just at the right time given the recent movements in the dairy markets. In addition to adding revenue to all Michigan producers' milk checks, the Michigan superpool is also a market stabilizing mechanism. With rapid movements (up and down) in the Minnesota-Wisconsin (M-W) price, federal order prices, which are keyed off the M-W, move rapidly also. Large monthly federal order prices are disruptive and difficult for the milk processing and milk distribution system to handle. Michigan's superpool has some ability to help smooth out milk price movement.

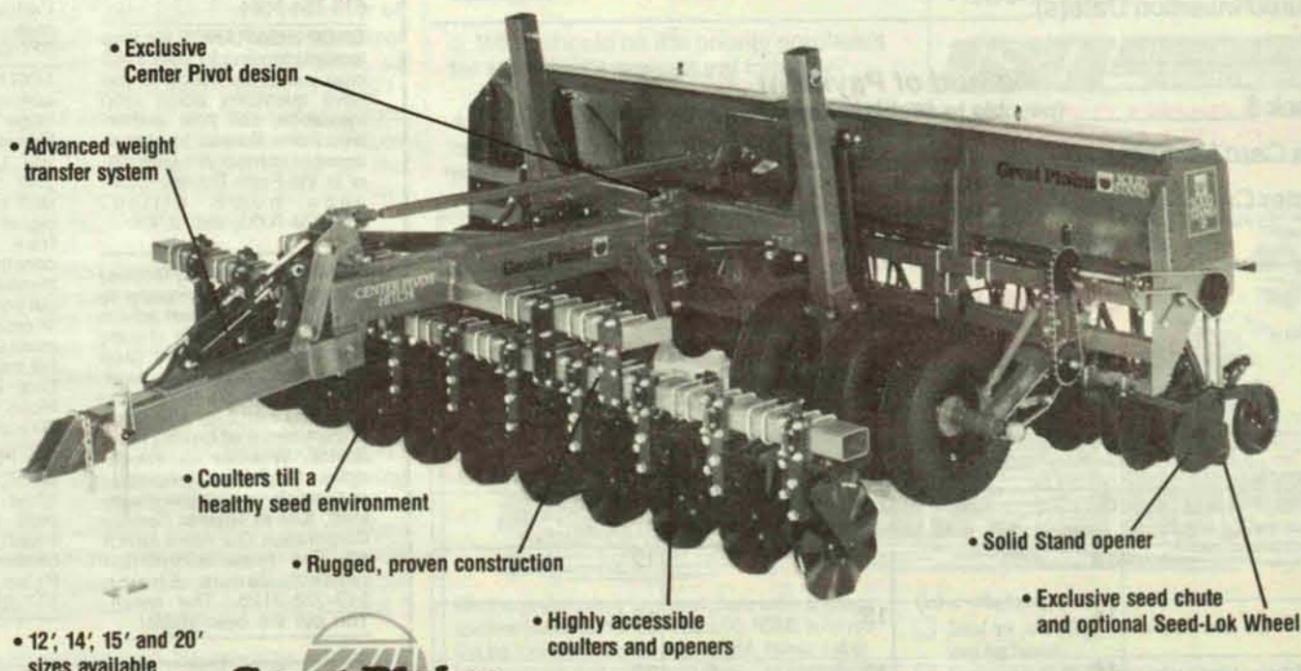
It appears that this ability may be tested in the next few months. The November M-W (announced Dec. 4) fell 21 cents to \$11.84 for 3.5 percent test milk. This is the fourth consecutive monthly drop in the M-W since July. In the last three months, the M-W has averaged a decline of 23 cents per cwt.

This fall's M-W retreat has been orderly. Unfortunately, it appears that the wholesale cheese markets may be in for a full-scale rout. At the National Cheese Exchange on Dec. 4, the price of barrels declined 3 cents a pound and the price of 40 pound blocks dropped 4.25 cents a pound. Using the general rule that a 1 cent cheese price change equals about a 10 cent per cwt. farm milk price change suggests that future M-W's are in for declines bigger than the 23 cent drops that they have been running. Also disturbing is that the cheese market had no buying interest. Generally, this suggests that the bottom of the market has yet to be reached.

This spring (March), cheese prices bottomed out at \$1.1375 for barrels and \$1.1525 for 40 pound blocks. One or two weeks more trading like the Dec. 4 trades will put wholesale cheese prices at or below the lows set this past spring. Then the M-W bottomed out at \$10.98 (3.5 percent test).

SIMPLY THE BEST.

Here's why the Great Plains no-till system leads the industry...



- Exclusive Center Pivot design
- Advanced weight transfer system
- Coulters till a healthy seed environment
- Rugged, proven construction
- Highly accessible coulters and openers
- Solid Stand opener
- Exclusive seed chute and optional Seed-Lok Wheel
- 12', 14', 15' and 20' sizes available

Great Plains

**A Solid Stand 3-Point Drill with a Center Pivot Hitch...
Simply the best no-till system.**

Jim Warczinsky
Manufacturer's Rep.
(517) 682-4523

Buchanan
LaPorte Co. Farm Bureau Co-op
(616) 695-6823

Milan
Schettenhelm's Inc.
(313) 439-1829

North Branch
Dick Coulter, Inc.
(313) 688-3082

Ann Arbor
Charles F. Braun
(313) 663-2717

Frankenmuth
Weiss Equipment, Inc.
(517) 652-6151

Mount Pleasant
Tilmann Hardware, Inc.
(517) 644-5161

Zealand
Modern Power Equipment, Inc.
(616) 772-6410

- Michigan Farm News Classifieds -

WINTER SPECIAL
Buy 2 Issues
Get 3rd Issue
FREE

Deadline for next issue is January 10, 1993

VISA Call 1-800-968-3129 **MasterCard**

to Place Your Classified Ad Today!

or use the coupon below and mail your classified ad to

Michigan Farm News
Classified Advertising
P.O. Box 340, 109 N. Lafayette
Greenville, MI 48838

Classified Ad Codes

- | | |
|--------------------------|-----------------------|
| 1. Farm Machinery | 7. Auctions |
| 2. Livestock Equipment | 8. Building Materials |
| 3. Farm Commodities | 9. Real Estate |
| 4. Livestock | 10. Seeds |
| 5. Help/Position Wanted | 11. Wanted to Buy |
| 6. Agricultural Services | 12. General |

Name _____ Phone () _____

Address _____

City _____ State _____ Zip _____

Classified Ad Code Requested _____ Number of Issues _____

Desired Insertion Date(s): _____

Method of Payment

Check \$ _____ (payable to Michigan Farm News Classified)

Visa Card Number _____ Exp. Date _____

Master Card Number _____ Exp. Date _____

Classified Rates
\$8 for up to 24 words
30 cents each additional word

Write your ad here, including phone number and area code

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36

01
Farm Machinery

GOOSSEN P.T.O. Bale Chopper. Used less than 60 hours. \$1500. Call 616-889-4066.

J.D. GRINDER MIXER 2 1/2 ton capacity, extra screens, fenders, wide tires. Used very little, stored inside. Mint! \$1500 firm. Evenings 313-727-1060.

MASSEY FERGUSON 265D: Low hours, 62hp. JD baler, 336. 12' 3 point drag. 3 bottom, 3 point MF plow. 7' clodbuster packer. 11' International Harvester Disc. 616-794-3808.

NO-TILL DRILLS available for Great Plains Manufacturing in 7 ft. and 10 ft. end wheel models, 12 ft., 14 ft., 15 ft., 20 ft. and 27 ft., pull type non-folding models, and 24 ft and 30 ft folding models. You can order 1993 models in Nov. 1992 at 1992 prices (except 24 ft. & 30 ft. folding) and take delivery in the spring of 1993. Contact Jim Warczynsky, Mfg. Rep. at 517-682-4523.

GENERAL JD 8430 new engine and trans., mounted spray tanks, excellent condition. \$29,000. Call 313-395-7871.

04
Livestock

PRODUCTION SALE January 23rd, 12:00. Selling 80 bred gilts, 40 open, 20 Boars. **Broadview Farms** 4100 Stone School Rd, Ann Arbor 48108. Phone 313-971-1804. Lunch at 11am. Exit I-94 at 177, South 1/2 mile, east 1 1/4 mile.

REGISTERED Polled Herefords, breeding age bulls and heifers and bred heifers. MSU Performance tested. Rocky Banner bloodline. Robert Rye, Rogers City, Michigan. 517-734-3005.

06
Agricultural Services

BIRD FERTILIZER SERVICES. 1100 N Irving, Greenville. Fertilizer, chemicals, seed, lime, feed. Soil testing, truck spreading and custom spraying. Call 616-754-3684.

CROP INSURANCE It's time to start planning for your 1993 crop insurance needs. If you have questions about crop insurance, call your authorized Farm Bureau Insurance agent or contact Jim Gallagher in the Farm Bureau Insurance home office, 517-323-7000, ext. 2741.

NUMBER 1 in quality **Grower Service** is the company to turn to for that expert advice on what products to choose and how to use them. Crop after crop, year after year, Michigan farmers turn to the company with over 400 years of experience when they need advice. Whether its insecticides, fungicides, herbicides or specialty production chemicals, turn to Grower Service Corporation. Our name says it all. For more information contact James Church 517-323-2125. The result: You get the best yields!

06
Agricultural Services

CUSTOM Manure Irrigation by the hour or by the job. Also stir below barn pits, you can then haul it out or I will pump it out. 616-792-2854.

08
Building Materials

BUILD IT YOURSELF and save money. Commercial Steel Buildings featuring easy bolt up assembly for the do it yourself builder from America's largest distributor. We have over 5,000 standard sizes of shop, farm, industrial, commercial and mini-warehouse buildings. All are complete with engineer stamped permit drawings to meet all local building codes, 20 year roof warranty, and painted walls. Prices are FOB from six manufacturing plants nationwide. Call us today for a free information package and a quote on our top quality buildings. **Heritage Building Systems** 800-643-5555.

ORIGINAL EQUIPMENT Manufacturer rated quality tillage parts at discount prices. A full line of replacement wear parts for plows, chisels and discs for all of your fall needs. Additional savings during the "Early Winter Sale" Dec. 1 - Jan 8. For more information call your local Group Purchasing vendor, or call 1-800-292-2680, ext. 2015.

09
Real Estate

10 ACRE PARCELS west of Adrian, tillable, some with woods. Lots of wildlife. \$14,900 each. Discount for cash or easy terms. F-731. **FAUST REALTY** Adrian. 517-263-8666.

160 ACRES near Moscow, Hillsdale County. Partially wooded. Frontage on 2 roads with some nice homesites. \$128,000. F-713. **Faust Realty**, Adrian 517-263-8666.

HOG FARM 84 tiled acres all tillable with or without nice home, or 40 acres, barns, Parkhill loam londo loam soils. Mt Pleasant schools. 517-433-5453.

LOG HOMES Whether you're looking for a small, rustic or a large spacious home, an **Honest Abe Log Home** is for you. Let us help you create your own special, one of a kind home, in-house financing at low, competitive rates, free design services, construction service, large massive logs accurately pre-cut and numbered at our plant to provide the highest quality materials. Send for a FREE full-color brochure at Route 1, Box 84TSR, Dept. MFN, Moss, TN 38575 or call 800-231-3695.

SW FLORIDA Rambler trailer. Spacious lot, fully furnished, many activities, heated pool. Near Bonita Springs, beach, churches, shopping centers, fishing, boats, golf. Price negotiable. Call 517-857-2126 for details.

10
Seeds

AGRIPRO corn hybrids are the result of a proprietary germplasm base and a performance-driven research program built over many years. AP 198 performs best under high density with very good early vigor and high yield potential, AP 250 100-day yield champ, excel, emergence in cool soils, early vigor and growth, AP 484 unique genetics with proven high yield potential, tall, showy hybrid, very large ears with fast drydown. For further details call 800-334-4730 for you local **AgriPro** representative.

FOR MORE INFORMATION about Northrup King Products or dealerships where available, please call the **Northrup King District Sales Manager** nearest you. Dave Smith, Shepard 517-828-6127. Steve Leipprandt, Kentwood 616-956-7136. Mark Klett, Howell 517-546-5874. Lee Everett, Vermontville 517-726-1322.

ICI SEEDS 8883 setting the standard for stalk strength and late season plant health in its maturity, tall plant type excel. for silage, strong early vigor, good for reduced tillage, 8777 excel. plant health and stalk quality, silks early and reaches black layer early, good choice for early planting or no-till. For further information contact your local **ICI Seeds** dealer at 800-348-2742.

PROFESSIONAL Vegetable and Bedding Growers... Write us for a FREE copy of our 1993 Professional Growers Seed Catalog... for seeds of the finest vegetable and flower varieties you can grow. **HARRIS SEEDS** Dept. 9311, PO Box 22960, Rochester, NY 14692-2960.

12
General

1991 DODGE DYNASTY 4 door, loaded, all power, factory warranty, silver in color. \$7800 or trade. Call 517-531-3265.

FOAM SHEETS Priced lower than anyone, all sizes, all thicknesses, all brands. Free delivery. Call **William Insulation** 517-263-5990.

POWER TWIST and adjustable V-Belts at discount prices. For more information, contact your Group Purchasing local vendor, or call 1-800-292-2680, ext., 2015.

GOLF-FARMING... Your sandy farm might be greener than you think. Imagine creating your own profitable golf course just like a professional. Call 517-291-3322.

WATERSTOVE for the safest, most efficient wood heating system on the market today which sits outside and heats your entire home plus domestic hot water, UL listed, thermostatic control, 12 to 24 hour burn time. **S & E Industrial Supply**, 1821 Austin St., Midland, MI 48642, 517-846-0100 or 800-882-8198.

MERRY CHRISTMAS
 From
FARM NEWS CLASSIFIED

- Michigan Corn Information Exchange -

CORN SELLER'S

Larry Wineland, Dewitt, Clinton County. Estm. 76 acres. Trucking available. Call in p.m. 517-482-6556.

Vaughn Vondrasek, Bath, Clinton County. Estm. 300 acres. Trucking available. Call in a.m. 517-641-4584.

Marion May, Quincy, Hillsdale County. Estm. 200 acres. Trucking available. Call in a.m. 517-869-2322 a.m.

Dean Shrontz, Olivet, Calhoun County. Estm. 400 acres. Trucking available. Call in a.m. 616-781-2180.

Edward Feuerstein, Belding, Ionia County. Estm. 100 acres. Trucking available. Call in a.m. 616-642-9798.

Jeff Bristle, Manchester, Washtenaw County. Estm. 20,000 bu. Call 313-428-7113.

Paul Thelen, Fowler, Clinton County. Estm. 3,000 bu. Call 517-587-6874.

Dewitt Grain Corp., DeWitt, Clinton County. Estm. Unlimited. Will deliver and also do grinding. Call 517-669-5950.

John Hamilton, Manchester, Washtenaw County. Estm. 9,000 bu. Call 517-592-8444.

Dave Kent, Alto, Kent County. Estm. 3,500 bu. Call 616-765-3073 or 616-765-3094.

Allen Ackerman, Bad Axe, Huron County. Estm. 25 acres. Call 517-428-4862 (evenings) and 517-269-9585 (days).

Harold Mennernix, Alto, Kent County. Estm. 195 acres. Call 616-868-6639.

Gerald Hubbard, Freeport, Kent County. Estm. 3,000 bu dry & wet ear corn Call 616-765-5301.

Maxwell Seed Farm, Hope, Midland County. Estm. 1,200 acres. Trucking available - large volume (semi's only). Call in a.m. Farm # 517-689-3653; Dirk at 517-689-3667; Scott at 517-689-4060; or Clay at 517-435-9249.

Don Borgic, Wayland, Allegan County. Estm. 8,000 bu. Call 616-792-2627 after 4:30 p.m.

Bob Humpert, Fairgrove, Tuscola County. Estm. 100 acres. Call 517-693-6415 in a.m. Trucking available.

Gerald Resner, Pinconning, Bay County. Estm. 120 acres. Call 517-879-4760 early a.m. or late p.m. Trucking available.

Neil French, Munger, Bay County. Estm. 10,000 bu. Call 517-755-0977 (work) or 517-659-2265 (home). Trucking available.

John Welke, Mayville, Tuscola County. Estm. 4,000 bu. Call 517-843-5320 in p.m. Trucking available.

Bill Buckenmeyer, Swanton, OH Estm. 600 bu. Call 419-829-4717 anytime. Trucking available.

Jeff Reed, Owosso, Shiawassee County. Estm. up to 100 acres. Call 517-723-5205 in the a.m. Trucking available.

Lynn Griffin, Charlotte, Eaton, 400 acres. 517-543-1856

Doug Shepard, Birch Run, Saginaw County. Estm. 100 acres Call 517-642-5677.

Jeff Beebo, Alma, Gratiot County. Estm. 45,000 bu. Call 517-463-4656.

Steve Hord, Breckenridge, Midland County. Estm. 50,000-60,000 bu. Call 517-842-3830.

Robert Hoffmaster, Hopkins, Allegan County. Estm. 5,000 bu. Call 616-793-7116.

Don Day, Ceresco, Calhoun County. Estm. 7,000 bu. (pop-corn) Call 616-781-5097.

Dean Linderman, Dexter, Washtenaw County. Estm. 5,000 bu. Call 313-426-4042.

Peter Kern, St. Johns, Clinton County. Estm. 10,000 bu. Call 517-224-3422.

Robert Friederich, Petersburg, Monroe County, Estm. 50 acres, Call 313-279-2537.

P. John Parrent, Sandusky, Sanilac, 50,000 bu available. Call 313-648-3009 or 313-648-2151, ask for John or Randy.

TRUCKING

Trucking Services (hopper trailers and grain trains) and access to large HMC volume. Vick Parker, Charlotte, Eaton County. Call anytime at 517-543-3761 (office) or 616-967-1554 (mobile).

Michigan Corn Information Exchange Free Listing Coupon

Name: _____
 County: _____
 City: _____
 Phone: _____
 Quantity (in bushels): _____

Fill out this coupon, clip and mail it directly to:
MSU Outreach Communications
 c/o MCIE, Room 312 Ag Hall
 East Lansing, MI 48824-1039

You can also phone your listing in by calling:
Michigan Farm News, 1-800-968-3129
 or
Michigan State Univ., (517) 336-1555
 Be prepared to provide the same information as requested above when calling. No additional information will be taken or used in the listing.

MFB Young Farmers Part of National Conference

Michigan young farmers have an opportunity to be part of a national conference that's taking place in their own backyard, and be able to meet young farmers from across the country. The AFBF's Young Farmer Leaders, Conference is scheduled for Feb. 13-15 at the Hyatt Regency in Dearborn, Mich. Participants will have an opportunity to attend three of 12 available workshops on farm management, leadership and safety. With a Jan. 4, 1993 registration deadline, young farmers interested in attending this conference should contact their county Farm Bureau office as soon as possible. County Farm Bureaus generally pay the \$200 registration fee

Discussion Topic for Jan., 1993 - Status and Potential of Michigan Agriculture

Over the past several years, the Agricultural Experiment Station and Michigan State University have been identifying trends and future prospects for Michigan agriculture through the year 2000. In March 1992, this information was compiled into a special report on the "Status and Potential of Michigan Agriculture" and was reviewed by nearly 150 agricultural industry leaders.

In general, the report predicts that domestic demand for food will grow slowly, increasing only about eight percent between now and the year 2000. But with population outside the U.S. growing by 14 percent by the turn of the century, there is potential for expanding the overseas demand for Michigan farm products.

There are also technological and public policy reasons to feel optimistic about the potential for bio-fuels, thanks to concerns about global warming and air quality.

Environmental issues will continue to be a major concern for Michigan agriculture, according to the report. Animal waste management and groundwater quality will remain major priorities.

Michigan farmers have a number of competitive advantages. Most of the state's agriculture and food industry is near large metropolitan areas and nonfarm employment opportunities. Michigan also has a strong infrastructure. On the other hand, the state is at a disadvantage when it comes to access to overseas markets. It is also deficient in food processing capacity. And our farmers must deal with the handicap of trying to profitably farm while in close proximity to population centers.

The report forecasts the future of dozens of specific commodities. The outlook for the livestock industry is particularly bright. Marketing opportunities for fresh and processed fruit are expected to expand. Flori-

culture and aquaculture also have considerable potential.

But forecasts are simply approximations on the future. How can farmers have a direct and positive impact on the direction their industry is going to go?

"The fact that some of our industries, like cattle feeding, were turned around in the last 15 years is a sign that leadership can play a role," said Jake Ferris, professor of agricultural economics at Michigan State University. "There are constraints, of course, but one of the purposes of the Status and Potential of Michigan Agriculture project was to identify what those constraints were. Hopefully, some of the trends that have been evaluated as undesirable can be turned around."

Ferris noted that while Michigan farmers are close to markets, that also means they must farm in close proximity to non-farmers. "With the direction of livestock operations tending to more sizeable confinement operations which pose manure and odor problems, that means that our research support systems, Extension support systems and farm organizations are going to have to take a hard look at this. Any progress we make in handling that problem would enhance the comparative advantage of Michigan compared to other states that have a much lower density of population."

Perhaps that best competitive advantage Michigan farmers have is their strong and effective Farm Bureau organization. Ask for a report from someone in your CAG who attended the Michigan Farm Bureau annual meeting in Grand Rapids. They'll tell you that when it comes to analyzing and positively affecting the future of the agricultural industry, Farm Bureau members have a tremendous tool in their policy development and policy execution process.

Discussion Questions:

1. What's the primary commodity(s) represented by members in your CAG? What do you see as the major changes on the horizon for those commodities?
2. What commodity or agricultural industry do group members feel has the most potential and brightest future in Michigan?
3. What should be the priority emphasis for Michigan's agricultural industry?
4. How can organizations like MFB help ensure future profitability for agriculture?

Lucas Fluid Power
Hydrostatic Repair Center

Complete Repair Facilities
 Exchange Units In Stock
 Authorized Repair Center For:
Eaton®/Char-Lynn®
CALL TODAY (313) 525-4570

WATERSTOVE

This is the safest, most efficient wood heat system on the market today which sits outside and heats your entire house plus domestic hot water!

- UL Listed
- Thermostatic Control
- 12 to 24 hr. burn time

IS&E THE SAFETY SOURCE
 INDUSTRIAL SUPPLY

1821 AUSTIN ST. • MIDLAND, MI 48842
 (517) 846-0100 * 1-800-882-8198

Home Sweet Home

Whether you're looking for a small, rustic cabin or a large spacious home, an HONEST ABE LOG HOME is for you. Our log homes are special, one of a kind, homes. Let us help you create your own special home. Our company has many years of experience and hundreds of homes as a testimony to this fact.

- In House Financing at low, competitive rates.
- Free design services let you create your dream home.
- Construction service to make it easy for you and assure you the highest quality job.
- Large, massive logs accurately pre-cut and numbered at our plant to provide the highest quality materials.

Call or write today.

Send me your FREE full-color brochure explaining your log homes.

Enclosed is \$8.00 for your color catalog, which includes 40 standard floor plans.

Please send Dealer Information

Name _____
 Address _____
 City _____ State _____
 Zip _____ Phone _____

Please clip and mail to: Route 1, Box 84TSR
 Moss, Tennessee 38575
 1-800-231-3695

HONEST ABE LOG HOMES Dealerships Available.

MFB Young Farmer State Contest Winners Announced

16

James Wagner, of Marcellus, Cass County, was awarded the title of "Distinguished Young Farmer." Below he and his wife, Michelle, accept the award from MFB President Jack Laurie.



The naming of the state finalist in the three MFB Young Farmer contests highlighted the recent state annual. James B. Wagner of Marcellus, in Cass County, was awarded the title of MFB's "Distinguished Young Farmer" for 1992. Wagner won \$1,500 worth of Great Lakes Hybrids seed products and he and his wife, Michelle, will travel all-expenses-paid, to Anaheim, California,

in January to compete for the American Farm Bureau's national title. In addition, he won 100 hours free use of a CASE-IH Maxxum tractor which will be put to good use. Wagner is owner/operator of an 80-acre farrow to finish operation consisting of 300 sows and over 4,000 market hogs. He's active in the Cass County Pork Producers, serving as chairperson of the Mall

Robert Sollman, of Charlotte, Eaton County, won MFB's Discussion Meet contest, and will be competing nationally in January, in addition to winning a Honda Four-Trax ATV.



Committee, Grocery Store Promotion Committee, Pork Fest Committee, and also serves on the Michigan Pork Producers Board as an alternate. He has also served on the Cass County Soil Conservation District. Wagner is currently a member of the Cass County Young Farmer Committee. Wagner and his wife, Michelle, have a daughter, Alysia, age 2.

Runner-up for the "Distinguished Young Farmer" title was Mike Tulgestke, of Hawks, Presque Isle County. Tulgestke is involved in a family partnership on a 65-cow dairy operation which also specializes in alfalfa and corn.

Tulgestke has served as president of the Presque Isle County Farm Bureau and served on the organization's Young Farmer, Promotion and Education, Policy Development, Information, and Membership committees. He also served on the 1992 MFB Policy Development Committee. He and his wife, Kathleen, have two children, Andrew, 3; and Katelyn, 6 months.

Lori Ann Malburg, of Almont, Macomb County, was honored as Michigan Farm Bureau's "Outstanding Young Agricultural Leader" for 1992. Malburg won \$1,500 worth of seed products from the annual contest sponsor, Great Lakes Hybrids, Inc., and an all-expense paid trip to the AFBF annual meeting in Anaheim, in January.

The Malburgs own and operate the 38-acre "Malburg Family Farm," which is dedicated to educating elementary age school children and families with guided tours, educational programs and hayrides. They also operate a 22-stall horse boarding operation.

Malburg's community involvement includes co-developer of the TAC-2000 career orientation program, Almont PTA president and secretary, St. Johns Church teacher, and Macomb County 4-H horse project adult leader.

She serves on the Macomb County Farm Bureau Promotion and Education and Young Farmers committees, Policy Development Committee chairperson, member of the county Farm Bureau Board of Directors, and is a participant of MFB's intensive leadership building program, ProFILE. She and her husband, Thomas, have three children, Kristen, 9; Sarah, 7; and Jessica, 4.

Runner-up in the competition was Gary Buchholz of Harbor Beach, Huron County. Gary and his wife, Linda, are involved in a family dairy farm partnership, and also raise heifers and 430 acres of crops. Buchholz is active in the Michigan Milk Producers Association, Michigan Animal Breeders Cooperative, and the CES Advisory Board.

Robert Sollman, of Charlotte, Eaton County, survived several levels of competition to win MFB's Discussion Meet contest. In the finals, he out-talked three other young farmers on the topic of "What should be the role of the United States agriculture, regarding foreign aid?"

Sollman won an expense-paid trip to Anaheim, California, in January to compete in the national contest. Sollman also won a 1993 Honda Four-Trax 300 All-Terrain vehicle. Lynn Drown, of Lowell, was the runner-up in the Discussion Meet contest.

Williams Insulation

2 1/2 Miles South of (U.S. 223), 5410 S. Adrian Hwy. (M-52)
Adrian, MI 49221

(517) 263-5990

TOLL FREE 1-800-262-5774

MANUFACTURERS & DISTRIBUTORS OF INSULATION, ROOFING AND SILVER SHEETING



Fire Retardant White

★ FOAM SHEETS ★

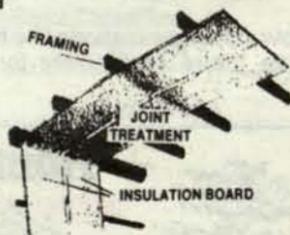
Custom Cut Foam Sheets Up To 18' In Length

We Sell Foam Sheets Below Anyone

OR WE'LL PAY BACK THE DIFFERENCE TWO TIMES — 30 DAYS

- Foam against steel or aluminum stops dripping and condensation.
- Foam sheets are excellent for underground.
- Use foam sheets for aluminum or steel ceilings; heavy aluminum backing.
- Use ground foam to mix with dirt or fill block.
- Use under siding . . .

- 4" WIDE VINYL COVERED FIBERGLASS ROLLS IN STOCK • LARGE HEADED NAILS • FOAM GLUE



Williams Insulation Will Deliver To Your Pole Barn Site For Free!

If you want to insulate part of a new or existing pole building so it can serve as a comfortable heated workshop, you'd be smart to call the folks at Adrian Foam Products . . . a division of Williams Insulation . . . before you begin.

And the same advice holds true if you're planning to insulate your garage, attic or basement or if you're weatherizing a storage area or livestock pen.

For the past 15 years, owner Walter Williams has been selling various kinds of foam sheets . . . in lengths up to 18 feet and in a wide range of thick-

nesses . . . to wholesale and retail customers alike, including contractors, supply houses and lumber yards.

Why? Mainly because Adrian Foam Products offers lower prices than its competitors and stocks a large inventory.

The company also offers complete price lists, and samples can be sent at a customer's request.

But foam sheets aren't its only product.

The firm also handles Dow products, along with nails, glue, tape, roofing foam, celotex and packaging.

And in case you buy more foam sheets than you can carry home in your car or truck, don't worry.

Adrian Foam Products will deliver large quantities anywhere their customers want . . . for free!

More information about the products available can be obtained by calling Adrian Foam Products at (517) 265-5774 or stopping by the office, located at 5410 S. Adrian Highway; in Adrian, anytime between 7:30 and 5, Monday through Saturday.

WE DELIVER FREE—ANYWHERE

Call For Free Samples & Special Prices On Very Large Quantities.

ADRIAN FOAM PRODUCTS DIVISION OF WILLIAMS INSULATION

Dow Styrofoam Supply House

- Foundation Coating
- Tapered Roofs
- Foam Packaging & Insulation
- Siding Backer
- Industrial Forming Blocks
- Sheeting



(517) 265-5774

1000's of Blue Dow Styrofoam Sheets Along With 1000's of White Foam Sheets in Stock
OPEN MONDAY THRU SATURDAY 8 A.M.-5 P.M.



DOW HIGH PERFORMANCE UNDERLAYMENT
In short, DOW High Performance Underlayment blankets your home - gives you an affordable, energy efficient way to keep your home warmer in winter, cooler in summer.