

Michigan Inheritance Tax Reform Takes First Step -- Finally

Calling it a definite step in the right direction, but asking for eventual elimination of Michigan's Inheritance tax that would be replaced by a federal "pick-up" tax, Gov. Engler recently signed S.B. 1, to begin a significant reduction of Michigan's "death tax." The bill includes an eventual \$50,000 exemption for all estates and an exemption on real and personal property for family owned farms and most family owned businesses.

"It's been a long time in coming and it isn't quite where we want it to be yet, but this measure will reduce the inheritance tax burden that Michigan has placed on its familyowned farms and businesses," announced Engler. "I want to stress that today's action is only a beginning and I renew my commitment and my urging to the Legislature to continue to work until we've eliminated the inheritance tax completely."

Engler said the legislation will finally stem the flow of capital and resources from Michigan by people who were simply trying to

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pass more of their hard-earned possessions on to their families instead of the state.

"We want to make sure that our family farm enterprises can pass from one generation to the next without the tax man interrupting the ability of the operation to stay in business," explained Engler. "We've literally had situations where it was time for the next generation to take over the farm to be literally dismantled by Michigan's inheritance tax."

Under provisions of the bill, Michigan taxpayers could save as much as \$51 million in inheritance tax payments over the next four years, according to state estimates. The bill gradually increases the amount of the exemption allowed for transfers to close relatives from its current \$10,000 exemption to \$50,000 by the year 1995.

"It's a mixed blessing in some ways," said Engler. "While we're celebrating this legislation, Michigan is only catching up with what other states have already done. It took too long to get this, but I'm delighted it's finally in place."



Above, Gov. Engler signs S.B. 1, in what hopefully will be the first step to Inheritance Tax reform in Michigan. In attendance for the occasion, were (left to right) Ron Nelson, MFB Legislative Counsel; Tom Reed, general manager of Michigan Live Stock Exchange, Dave Crumbaugh, Michigan Ag Commission; Ben Kudwa, executive director, Michigan Potato Industry Commission; Elwood Kirkpatrick, president of Michigan Milk Producers Association.

Memorial Day Freeze Will Last All Year For Many Producers

For many people, Memorial Day meant an extra day off from work and an extended weekend. For fruit producers along Michigan's west coast fruit belt, it meant several nights of the worst and latest frost that many could recall, which cut yield potential and will force producers to rethink planned purchases this year.

"In my lifetime of farming, I have never seen a freeze this late," said MFB Board member Jim Miller, a fruit producer from the Coloma area. "We had fruit as big as the end of your thumb that was frozen solid. We were looking at the best crop we would have had in five years before the frost."

According to MSU Cooperative Extension Service's Crop Advisory Team field reporters, damage was widespread but varied. In Southwest Michigan, after lows of 20 degrees, apple damage was reported scattered and concentrated in inland areas on lower fruit sites. Stone fruits, which tend to be on higher ground, escaped damage in most areas. Southern Berrien County was in better shape than the northern half. Frost damage was most extensive in grapes with an estimated 50 percent of the vines damaged.

"It's a multi-million dollar loss, to say the least," said Al Mandigo of Van Buren County. Mandigo, who has over 400 acres of strawberries, blueberries, apples grapes, cherries and asparagus, said that apples and grapes were the hardest hit, while blueberry damage was very spotty.

The Grand Rapids area received four nights of frost, with temperatures ranging between 20 to 32 degrees in the orchards. Significant fruit damage was reported throughout the district, with many fruits showing checks, cracks and considerable discoloration.

Three consecutive nights of temperatures in the low to mid 20s in the West Central area resulted in significant frost damage. In Oceana County, the fruit crop doesn't appear as bad as originally thought, according to CES reporters. The newest assessment is 1/2 to 2/3 of a crop left. Further north, cherries, peaches, and apricots were not hurt as badly as apples. made, but noted a great deal of size variability in sweet and tart cherries due to the frost and uneven development.

Southeast Michigan fruit farms located in an east/west band with Flint at the center, were hardest hit. Apples received the greatest amount of injury, with fruit loss in the range of 80 to 100 percent. Cherries, peaches, blueberries, and plums were also injured. Grape shoot death occurred in the range of 40 to 80 percent.

Vegetables

The development of vegetable crops also slowed because of the frost. Irrigation remained active throughout the month of May. The asparagus harvest is reported 60 percent complete, with several pickings lost due to the frost. Celery planting was also slowed due to the frost, with development of the crop reported 5 to 7 days behind normal.

Below, Van Buren County farmer Al Mandigo inspects damage to his grape vines which were turned brown by the frost. The vineyard in the background also suffered severe frost damage, eliminating hopes for any grape harvest this year.

Field Crops

There were several reports of yellow corn due to the frost and dry conditions, according to the Michigan Agricultural Statistics Service. Corn that was emerged is showing the signs of stress with 43 percent of the crop currently rated good to excellent.

Soybeans are feeling the impact of cold temperatures, with emergence behind last year and the five year averages. Wheat development was well behind last year. Only 5 percent of the wheat reported headed as of June 1, compared to 45 percent for last year. Alfalfa yields are also reported down due to the cold and dry weather.

Replanting of corn, soybeans and sugar beets were not uncommon, with sugar beet replanting due primarily to dry conditions and resultant poor germination. However, replanted sugarbeet acreage, thus far, was considerably less than last year.

A Publication of Michigan Farm Bureau P.O. Box 30960, 7373 W. Saginaw Hwy., Lansing, MI 48909

In Northwestern Michigan, CES reporters called frost damage in the area the worst in 20 to 30 years, according to grower memory. Plums were the hardest hit, completely defruited at the worst sites. Poor apple sites with early varieties were significantly damaged also, while some of the later varieties fared much better on good sites.

Sweet cherries were substantially injured, depending on site and bloom stage. Tarts generally did better, but certain orchard sites were severely injured. Reporters in that area are estimating that it will be some time before accurate crop estimates can be



1992 Ag Expo Extra Pullout Section In This Issue!



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Election Year Priorities and Issues Need Your Support

Because of the short attention span of the media (particularly television) presidential campaign coverage seems to increasingly focus on simple snapshots of the personalities of candidates. Is he trustworthy? Sincere? Confident? Do they have skeletons in the closet?

Personality is important because it provides clues to the character of a candidate. But I think that most of us ultimately decide to cast our vote based on the ideas and philosophy of the party which the candidate represents. Political parties provide a way for people to debate and agree upon broad principles (or "platforms") that, it is hoped, will guide the actions of candidates once they are elected.

Farm Bureau recently suggested, in a non-partisan manner, a series of ideas that we would like to see included in the Democratic and Republican platforms. Here is a summary of our suggestions:

Property Rights and the Environment: Many new environmental rules and regulations overlook constitutionally protected property rights. Environmental policy decisions should be based on scientific proof of real problems, and lawmakers and bureaucrats must carefully consider the human impact of their decisions. Environmental improvements can often best be accomplished through incentives and performance standards, rather than by imposing land use restrictions and penalties, rigid regulations and government-prescribed technologies. Just compensation must be made when a landowner's use of property is impaired by government.

Health Care: Individual initiative should be used to bring about health care delivery system improvements. There's an immediate need for a 100 percent federal income tax deduction for health insurance premiums paid by the self-employed. Health care policy changes should promote personal wellness, fitness and preventive care. Federal tax policies should encourage individuals to prepare for future health care needs. There should be minimal government intervention in decisions between providers and receivers of health care.

Economic Issues: We urge a cut in the capital gains tax rate and indexing of capital gains for inflation. Depreciation schedules should be amended to allow for quicker recovery of capital investments. Social security taxes, especially on the self-employed, should be lowered; personal income tax exemptions should be increased; and a permanent investment tax credit should be reinstated. Government spending should be brought under control through a freeze on federal expenditures, a constitutional amendment for a balanced federal budget through spending control, and a line-item veto for the president.

International Trade: We favor reform of international trading rules to promote growth in world trade. Current trade negotiations should result in a significant cutback in export subsidies, open foreign markets to U.S. products, reduced trade-distorting domestic subsidies and eliminate health and sanitation standards as barriers to trade. The U.S. should avoid unilateral elimination of import restrictions and subsidies.

A general theme running through Farm Bureau's suggestions is reliance on the power of individual initiative rather than discredited government mandates. I urge all Farm Bureau members to take the initiative to encourage the political party of your choice to adopt these guiding principles.

Jack Laurie, President Michigan Farm Bureau



In Brief...

MSU/A.L.F. Investigation Progressing

The investigation into Animal Liberation Front (A.L.F.) terrorist activity at Michigan State University, following the destruction of the mink research center and data, as well as destruction at the mink research farm, is continuing and could be nearing the final stages, according to MSU's Department of Public Safety.

Since the forming of the investigative task force, shortly after the events at MSU, nearly 150 interviews have been conducted as the task force follows up on tips and leads. Items of evidence from the crime scenes have been sent to two different federal crime labs for further analysis, and an undisclosed number of search warrants have been served in Michigan and several other states. Although the department refused to comment specifically on the warrants, the evidence they said was collected through the warrants were linked directly to the MSU/A.L.F. event.

Task force members are currently working closely with federal investigators from Washington and Oregon investigating similar A.L.F. incidents. No arrest warrants have been issued as yet, and no specific time line would be given as to when those arrest warrants might be issued.

Genetically Engineered Food Passes Hurdle

The Bush administration has ruled that biologically altered food products will not require Food and Drug Administration approval unless a totally new substance has been added, or the composition of a food has been altered enough to raise safety concerns. This decision clears the way for the marketing of bioengineered fruits, vegetables, oilseed and grain products without the long, expensive process of FDA approval, according to spokesmen for the biotechnology industry.

Brokers say the decision will make investors more favorable to backing bioengineering projects, from sweeter tomatoes to longer lasting peppers, leaner pork and healthier cooking oils, as well as drought-resistant grains and insect-resistant cotton.

U.S. May Farm Prices Unchanged From April; Down 6.6 Percent From a Year Ago

The index of prices received by U.S. farmers for their products in May was unchanged from the April level, but was down 6.6 percent from May 1991. Higher prices in May for hogs, milk, soybeans and broilers were offset by lower prices for grapefruit, tomatoes, onions and cattle, USDA said in its monthly agricultural prices report.

USDA said fresh apple prices in May continued a trend of record monthly highs which began in September. Most field crop prices were down or remained unchanged from April, except those for hay, soybeans and sunflowers. Most livestock and livestock product prices were up from the previous month, except those for beef, cattle, steers, heifers, calves, sheep and eggs.

The index of prices paid by farmers for commodities and services, interest, taxes and farm wage rates for May was 6.6 percent lower than a year ago, USDA said. Lower prices for tomatoes, hogs, cattle and potatoes helped push the index down, but they were offset by higher prices for wheat, milk, corn and soybeans, USDA said.

USDA Raises Farm Export Forecast to \$41 Billion

U.S. farm exports in fiscal 1992 (Oct.-Sept.) are forecast at \$41 billion, the second-highest level on record and up \$1 billion from the last quarterly estimate, USDA said in an advance summary of its Agricultural Exports report, according to *Knight Ridder News*.

Improved prospects for soybeans, coarse grains, livestock products and horticultural goods helped lift the forecast. In fiscal 1991, the U.S. exported \$37.5 billion worth of U.S. farm goods, turning in its worst performance in several years. The record for farm exports is \$43.8 billion in fiscal 1981.

U.S. farm imports are forecast at a record \$23 billion, also up \$1 billion from the February estimate. However, with exports growing faster than imports, the U.S. farm trade surplus is expected to widen \$3 billion to \$18 billion, USDA said.

E.C. Ag Ministers Approve Farm Subsidy Cut

The European Community's agriculture ministers recently approved a 3-year farm reform package that includes a 29 percent cut in guaranteed EC cereal prices. The approval was 11-1 with Italy opposed. The announcement, treated as positive in England and Germany, touched off angry responses from French farmers, who called it a cave-in to U.S. pressure.

The livin' is easy at Summerfest '92

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City/State/Zip	
County Farm Bureau	
AMOUNT ENCLOSED (TOTAL)	

They engaged in emotional demonstrations in the Atlantic Port city of Bordeaux, pelting the U.S. consulate and government office with eggs, according to a *Knight-Ridder* report. Tires and straw bales were burned in other demonstrations by French farm groups. Paul Drazek, international trade specialist for the American Farm Bureau Federation, said the European plan wouldn't move the GATT talks forward because it doesn't address farm export subsidies. "That's the key," he said.

The MICHIGAN FARM NEWS (ISSN -------) 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. Application to mail at Second-Class Postage rates is pending 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.

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ISSUES

Comprehensive National Energy Policy Act

MFB Contact Al Almy, Ext. 2040

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House Resolution 776 passed by the U.S. House of Representatives and a separate bill passed by the Senate last November is headed to a conference committee for further discussion to resolve differences between the two packages.

Included in the House bill are provisions to streamline the process for licensing nuclear power plants, relieve independent oil and gas producers from Alternative Minimum Tax requirements, and make state action to limit natural gas production in order to raise prices illegal.

It also establishes electric efficiency standards, promotes greater competition in electrical generation, toughens standards for government buildings and promotes renewable energy sources such as ethanol.

Neither bill promotes domestic oil production nor would allow drilling in the Arctic National Wildlife Refuge. The House also defeated (211-198) an amendment that would have mandated that all fuel sold in the U.S. be blended with ethanol.

North America Free Trade Agreement (NAFTA)

MFB Position

MFB sent a letter to Michigan Congressmen and the U.S. Trade Representative asking the U.S. Trade Representative to oppose any efforts to phase out tariffs on both processed and fresh asparagus in less than 15 to 20 years.

MFB Contact Al Almy, Ext. 2040 Representatives from the United States, Canada and Mexico continue to negotiate on the terms of a NAFTA. The negotiators were instructed to complete their work by June 5. This date may have been impossible to meet because of several major issues. Congress must approve any agreement before it would become effective.

MFB has received reports that the proposed NAFTA may establish a short or intermediate time period for a phaseout of tariffs on processed asparagus and a longer phaseout period of tariffs on fresh asparagus.

A letter addressing this report was sent by MFB to the U.S. Trade Representative and Michigan Congressmen who represent asparagus production areas. The letter explained the large initial cost of establishing asparagus plantings before realizing income and the several years required to recover the initial costs. It also noted that only 10 percent of Michigan asparagus is marketed as fresh and 90 percent is marketed as processed product.

MFB was subsequently informed that the U.S. Trade Representative had placed both processed and fresh asparagus on the "super sensitive" list, which would result in a long phase-out period of tariffs. U.S. negotiators will now attempt to retain the "super sensitive" listing in the final NAFTA.

Ethanol Regulatory Roadblocks

MFB Position

Farm Bureau has written to EPA and testified before a House Agriculture Subcommittee to oppose the ethanol regulatory road-blocks.

MFB Contact Al Almy, Ext. 2040 Congress amended the Clean Air Act in 1990 and included new provisions to reduce air pollution. In passing the amendments, Congress clearly understood and agreed that ethanol-blended gasolines would benefit from increased market opportunities in both the oxygenated fuels program for carbon dioxide nonattainment areas and the reformulated gasoline program for ozone nonattainment areas.

ethanol-blended gasolines in clean air nonattainment areas. Congressman Fred Upton (R-St. Joseph) and 44 other Congressmen have written EPA to urge removal of the regulatory roadblocks against ethanol. The letter noted the Clean Air Act now requires oxygenated fuels in carbon dioxide nonattainment areas to contain at least 2.7 percent oxygen and that this oxygen level is a minimum, not a maximum.

However, recent actions by the Environmental Protection

Agency will establish a regulatory roadblock to the use of

Commercial Drivers License - CDL Seasonal Waiver

MFB Position Support

MFB Contact Ron Nelson, Ext. 2043 Senate Bills 943 and 944, sponsored by Sen. McManus, passed the Senate and are awaiting House action. The bills would implement the federal waiver which allows seasonal agribusiness employees to operate smaller vehicles, trucks, and pick-ups, up to 180 days without obtaining a CDL

The bill, as amended, provides exemptions for the period of April through June and September through October or 180 days from the time the individual requests the waiver.

The federal optional waiver is in response to the unique needs of agriculture for seasonal operations of agribusiness and, as stated earlier, does not include transport of hazardous material or the operation of combination vehicles such as semi's or the large truck and trailer combinations.

Budget Appropriations for Fiscal Year 1992-93

MFB Position

Supports adequate funding for agriculture programs, particularly for food-inspection, food quality, weights and measures and adequate funding for education.

MFB Contact Ron Nelson, Ext. 2043 Most of the appropriation bills have passed both Houses with substantial differences and will now move to conference committee to work out the differences between the two versions.

It's anticipated that further revision will be made to a number of budgets because of revised estimates in revenue, which is approximately \$150 million more than earlier anticipated. Current estimates place next year's revenue at approximately a 6.1 percent increase over current year.

As the budgets are debated in conference committees, there may be adjustments to several budgets to reflect the revised revenue estimates. These revisions may encompass several or most of the budgets for agriculture and higher education.

Biological Diversity

MFB Position

The Seante adopted amendments rquested by Farm Bureau. MFB will continue to monitor the legislation and, if enacted, carefully follow develop-ment of the state strategy for biological diversity.

MFB Contact Vicki Pontz, Ext. 2046 Rep. Jerry Bartnick (D-Temperance) sponsored H.B. 4719, which calls for conservation of biological diversity in the state in order to avoid the loss of plant and animal species. The goals of the legislation include determining whether there are any biological diversity considerations when land and water management decisions are made.

The bill would ask several state agencies to identify ques-tions, concerns and issues related to biological diversity across a range of resource management practices and recommend alternatives to current practices. Under the bill, a two-year legislative committee of three members each from the House and Senate would review reports from departments and devise a recommended state strategy for conservation of biological diversity.

The bill defines biological diversity as the full range of variety and variability within and among living organisms and the natural associations in which they occur. It includes ecosystem diversity, species diversity and genetic diversity.

Farm Bureau offered several amendments to the bill to clarify that the legislation is non-regulatory and to ensure that economic studies and sound science are included in any future state strategy to conserve biological diversity. Other Farm Bureau amendments will ensure that someone from the House or Senate Agriculture Committee is included on the study committee, and that the committee must also report on the costs, benefits, and implications of the strategy on human habitat. Farm Bureau asked that the committee consider the effects of conserving biological diversity on agriculture and forestry.

The EPA has proposed regulations which would discourage the use of fuels with more than 2.7 percent oxygen. Therefore, the market for 10 percent ethanol-blended fuels which contain 3.5 percent oxygen would be sharply reduced. The letter also addressed the regulatory roadblocks imposed by EPA in the reformulated gasoline program for ozone nonattainment areas.

Farm Bureau strongly supports the effort by Congressman Upton and his colleagues. Currently, nearly 10 percent of all gasoline sold is blended with ethanol. In 1990, more than 400 million bushels of corn were converted to ethanol. As a fuel oxygenate, ethanol can dramatically reduce engine emissions while reducing dependence on imported oil and improving our balance of trade.

Michigan Farm Bureau (517) 323-7000

The substitute version of HB 4719 passed the full Senate in late May. The bill now goes back to the House for concurrence.

No-Fault Automobile Insurance

MFB Position

Because of the mandated rate reduction and rating restrictions contained in this substitute, Farm Bureau does not support Senate Bill 692.

MFB Contact:

Darcy Cypher, Ext. 2048

On May 20, the Michigan Senate approved a No-Fault Automobile Insurance substitute to S.B. 692. This substitute, introduced by Senator Koivisto, contains reforms to limit lawsuits, allows consumers to choose the medical coverage protection they need and can afford, and sets controls to limit medical costs.

The substitute mandates an 18 percent rate reduction and restricts the way companies can price their products by enacting standards for establishing territories and loss ratios.

The substitute received bi-partisan support in the Senate. The bill is also expected to receive bi-partisan support in the House when it is taken up.



June 15, 1992



Michigan an	d Major Co	mmodity Area
Extended W		
T - Temp. 6	/15 6/30	6/15 8/31
P - Precip.	ТР	TP
Michigan	N B	AN
W. Corn Belt	N N/A	AB
E. Corn Belt	N N	A N/B
Wint. Wheat Be	t B A	AN
Spr. Wheat Belt	N N/B	AB
Pac. NW Wheat	A B	AN
Delta	N/B A	A B/N
Southeast	N N/A	A B/N
San Joaquin	A B	AN

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

An abnormally strong arctic air mass settled over the Great Lakes region in late May resulting in frost and freezing minimum temperatures from the 25th through the 28th. The real extent and degree of damage from the freezing temperatures were highly dependent on location.

Besides the record cold temperatures the last week of May, abnormally dry conditions were prevalent across the state. Precipitation totals since April 1 are now running 2-3 inches below normal in many northern and western sections of the state.

Unfortunately, the newest National Weather Service 30-day outlook indicates a continuation of drier than normal weather for most areas of the state.

Rainfall is forecast to remain somewhat below normal over all but southwestern sections of the Lower Peninsula, where near normal amounts are predicted. Temperatures for the 30 days are expected to be near normal over all but eastern sections, where the readings may trend above normal.

30-Day Outlook, Temperatures Normal With Below Normal Rainfall

5/1/92	Ten	nperature	Growing Deg	aree Davs	Precip	oitation
	bserved Mean	Dev. From Normal	Actual Accum.	Normal Accum.	Actual (inch.)	Norma (inch)
Alpena	52.9	0.8	236	280	1.10	2.76
Bad Axe	55.9	+ 0.4	306	385	1.37	2.63
Detroit	59.0	+ 0.5	430	434	0.83	2.85
Escanaba	50.3	- 0.1	106	164	2.47	3.01
Flint	58.2	+ 1.7	409	434	1.46	2.8
Grand Rapids	The Second Second	+ 0.8	413	466	1.11	3.0
Houghton	54.8	+ 5.4	269	253	2.13	3.3
Houghton Lak	and the second se	+ 0.1	298	280	0.39	2.7
Jackson	57.2	- 1.4	395	455	1.62	2.9
Lansing	57.3	0.0	397	455	1.89	2.9
Marguette	53.1	+ 2.8	259	253	1.75	3.3
Muskegon	55.9	- 0.3	328	367	0.27	2.6
Pellston	54.7	+ 3.2	301	301	0.38	2.6
Saginaw	57.9	+ 1.0	374	385	0.74	2.6
Sault Ste. Man	ie 52.3	+ 2.7	204	164	1.36	3.0
South Bend	59.4	+ 0.2	501	466	1.19	3.0
Traverse City	56.0	+ 2.9	330	301	0.48	2.6
Vestaburg	55.7	- 1.2	339	391	0.75	2.7

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

Midwest Crop Updates - Moisture Concerns Getting Serious

Ohio - Soybeans were rated 1 percent excellent, 55 percent good, 30 percent fair and 3 percent poor as of June 1, according to the Ohio Agricultural Statistics Service. Corn was reported 79 percent emerged, compared to 95 percent in 1991 and was rated 13 percent excellent, 55 percent good, 29 percent fair, and 3 percent poor.

Winter wheat was 44 percent headed, compared to 90 percent last year and was rated 6 percent excellent, 44 percent good, 33 percent fair, 13 percent poor, and 4 percent very poor. Top soil moisture supplies were 5 percent surplus, 70 percent adequate and 25 percent short.

Indiana - Corn height averaged 6 inches compared to 13 inches a year ago. Corn was rated 3

percent excellent, 36 percent good, 48 percent fair, 12 percent poor, and 1 percent very poor. Soybeans were rated 2 percent excellent, 39 percent good, 47 percent fair, and 12 percent poor.

Wheat was 78 percent headed, compared to 91 percent for the same time last year, and was rated 1 percent excellent, 24 percent good, 46 percent fair, 22 percent poor, and 7 percent very poor. Topsoil moisture was 7 percent surplus, 41 percent adequate, and 52 percent short.

Illinois - Cool weather and dryness were causing considerable concern for row crops. Soil moisture supplies were 72 percent short, 24 percent adequate and 4 percent surplus. Soybeans were rated 36 percent good, 56 percent fair, and 8 percent poor. Corn was rated 1 percent excellent, 30 percent good, 59 percent fair, and 10 percent DOOL

Iowa - According to the Iowa Agricultural Statistics Service, corn emergence was well ahead of 1991's level of 64 percent, and was rated 4 percent excellent, 50 percent good, 43 percent fair, 2 percent poor, and 1 percent very poor.

Soys were 97 percent planted, well ahead of 1991's 43 percent level, and was rated 4 percent excellent, 56 percent good, 38 percent fair, and 2 percent very poor. Topsoil moisture supplies were 3 percent surplus, 51 percent adequate, and 46 percent short. Subsoil moisture was 9 percent short, 88 percent adequate and 3 percent surplus.

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MSU Survey Shows Michigan Farmland Values Stabilizing

If you're wanting a speculative purchase that promises a quick buck, then don't place your bet on Michigan farmland, at least for the next 12 months, according to the second annual Michigan State University Agricultural Economics Department survey of farm lenders, appraisers and county assessors.

If, on the other hand, you're looking for a land investment opportunity that will cashflow, then a land purchase might be the right move, according to Steve Hanson of MSU's Ag Econ Department, who administered the survey in a joint effort with Dr. Mike Kelsey and Alan Jensen, also of the Ag Econ Department. "We're looking at land out there now that is priced at its production capabilities," explained Hanson.

The exceptions, according to the survey, were farm land purchases/sales made for non-agricultural uses such as development, which apparently dominated a considerable amount of farmland sales activity in the past 12 months.

The survey measured land values and rental rates for sugar beet ground, high and low quality corn-soybean-hay (C-SB-H) land, and irrigated land. High and low quality C-SB-H land values increased an average of 2.5 percent and 1.6 percent, respectively, during the last year. Sugar beet land values rose by 3 percent and irrigated land values increased 3.4 percent in the last 12 months.

Land values are expected to remain fairly constant over the next 12 months. High quality C-SB-H land is expected to increase an average of 1.4 percent over the next 12 months, while low quality C-SB-H land is expected to see only a 1 percent increase. Sugar beet land values are expected to gain 1.4 percent over the next year, while irrigated land will see the biggest jump with an average increase of 3.4 percent anticipated.

Supplies of high quality and low quality C-SB-H on the market increased an average of 1 percent and 2.4 percent, respectively. Sugar beet land availability on the market increased by 3.3 percent. The supply of irrigated land on the market remained stable, perhaps explaining the relatively strong outlook for irrigated land prices during the next 12 months. High quality C-SB-H land showed the most variability in change in supply of land, exhibiting as much as a 30 percent decrease in the supply of land on the market in some areas and up to a 30 percent increase in other areas.

Turning to rental values, high quality C-SB-H land received an average cash rent of \$64 per acre compared to \$41 per acre for lower quality C-SB-H ground. Sugar beet land rentals took high honors with an average \$108 per acre, while irrigated land rented for an average \$92 per acre.

A useful tool called "value-to-rent ratio," which is determined by dividing land value by the cash rent, showed that high and low quality C-SB-H ground carried a 16.1 and beet ground and irrigated land carried a 13.5 and 12.6 percent average ratio, respectively.

According to Hanson, value-to-rent ratios are a direct function of the future cash flows the land is expected to generate. Higher expected cash flows are "capitalized" into the value of the land today, increasing its value relative to the current year's cash flow. In other words, higher expected future cash flows translate into higher value rent ratios, prompting Hanson to suggest a number of explanations.

"The relatively high value-to-rent ratios for C-SB-H land suggests three possible situations," explained Hanson. One is the market actually anticipates that cash flows for C-SB-H production will grow at a faster rate than sugar beets and irrigated land.

"Secondly, the C-SB-H land may be switched to alternative production, such as sugar beets in the near future, or finally, there may be non-farm uses of the land in the future that may provide higher cash flows than those expected from C-SB-H production."

1992 Michigan Land Survey Results

	Average Price Per Acre	Change in Value last 12 mo.	Expected Change next 12 mo	Change in Land Supply	Avg. Cash Rent
Corn Soybean Hay (above avg)	\$984	+2.54%	+1.41%	+1.07%	\$64.40
Corn Soybean Hay (below avg.)	\$662	+1.61%	+1.03%	+2.42%	\$41.20
Sugar Beet	\$1,441	+3.00%	+1.4%	+3.33%	\$107.90
Irrigated	\$1,070	+3.38%	+3.35	+0.00	\$91.90

The major determinants of land values, according to survey respondents, were believed to be non-farm development potential, alternative production practices, and the P.A. 116 program, which according to Hanson, have struck some nerves of wouldbe property sellers for development purposes across the state.

"Several farmers would tell you that P.A. 116 is holding down their land values, because the program eliminates any non-agricultural uses of the land, but that was the original intent of the law," explained Hanson. "The law is actually working the way it was supposed to."

A NEW MONEY SAVING HEALTH PLAN





June 15, 1992

17.4 average ratio, respectively, while sugar

MFB Board to MSU: Fill Elton R. Smith Chair Now!

The Michigan Farm Bureau (MFB) Board of Directors has expressed "deep concern" to MSU about the length of time it is taking to fill the Elton R. Smith Endowed Chair for Food and Agricultural Policy. In a letter to Dr. Fred Poston, dean of the College of Agriculture and Natural Resources, the directors said county Farm Bureaus will soon begin the process of developing this year's policy recommendations to MFB, and will include issues surrounding the development of the 1995 Farm Bill.

"Now is the ideal time to fill the Chair. Farmers need policy research and information in order to effectively shape the 1995 Farm Bill debate," they said. The board urged Poston to make the selection of an outstanding candidate for the Chair an "immediate and top priority." In these tough economic times all business owners are looking for ways to improve their bottom line. Now Farm Bureau can help with a new money saving group Health Plan from Blue Cross Blue Shield of Michigan.

These new plans are guaranteed issue no matter what your health history, locally serviced by our 69 county offices and 400 agents statewide, and competitively priced to save farm owners and operators hundreds or even thousands of dollars off their health insurance bill. So, if you're a sole proprietor or if you have one or more employees, you should call Farm Bureau today for benefit and rate information.

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Market Outlook



June 15, 1992

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

CORN

Not much is happening on the use side of the corn market, but as all of you have been watching, the weather has been whipping around the projected supply side of the corn market pretty regularly.

And if early June moisture conditions across the Corn Belt have not improved by now, the roller coaster action in the corn pits is likely to continue more up than down. If the Corn Belt has received good rains by now, the market will likely still roll, but more down than up. At this point, early corn crop ratings are running lower than year ago levels.

Actual corn exports are hardly running high enough to make the USDA projections. However, corn sales have picked up and should cause actual shipments to pick up. At this time, it appears that total U.S. corn exports for the 1991-92 marketing year will reach the USDA projection of 1.55 billion bushels, down 175 million from a week ago.

Farmers enrolled 61.9 million acres into the USDA corn program for 1992. Of this, 5.2 million acres will be idle due to set-aside requirements and 0/92. Another 9.3 million acres, 15 percent, will not receive deficiency payments due to the flex provisions.

To put this in perspective, farmers intended to plant 79 million acres of corn. This means there are a lot of acres not receiving deficiency payments. This obviously increases the significance of your pricing decisions.

WHEAT

The USDA announced a 0 percent wheat set-aside for 1993. This was in the range of expectations and therefore, was not an immediate market mover. It shows the USDA feels we are not only in a fairly tight supply situation now, but that we could be in that situation through the 1993-94 crop marketing year, i.e., two years out.

The crop conditions for wheat in early June were below year ago levels for both spring and winter wheat. As yield reports come in from Texas and Oklahoma, and soon Kansas, we will begin to get a better handle on the supply situation.

If the lower crop ratings turn into actual lower yields than last year, there will be room for considerable upward price movement. But we have to be somewhat cautious. There is room for adjustment on the

SOYBEANS

Soybean futures, as of early June, were offering a weather premium that would 1992 yield 1-2 bushels below trend.

Seasonal Commodity **Price Trends**

Wheat	†?
Corn	?
Soybeans	?
Hogs	TP
Cattle	1?
Index: [†] = Higher Prices; [‡] TP= Topping; BT= Bottor	= Lower Prices; ming; ? = Unsure

In most parts of the state, we have seen opportunities to lock in new crop corn prices over \$2.45 per bushel. This is saying the market is paying for a crop with a yield 6-10 bushels below trend. Consider pricing portions of your new corn crop at this level and above.

Remember, if you use a put to protect your downside price risk, you don't have to worry about delivery if you have a short crop. However, premiums are high due to the volatility, so I'd use futures or forward contracts to price up to the amount where production risks become a realistic problem. If you have old crop corn left, consider pricing heavily into rallies. If you have a relatively small amount left, it's hard to argue against speculating with it, given the potential weather markets yet in front of us.

demand side. Remember, the USDA will play a large role in the export picture, and stocks in Canada and Europe could temper upside price movement.

At this point, U.S. export sales for the 1992-93 crop year have been quite disappointing, but the USDA only projected them down 4 percent in the May wheat Supply/Demand Report.

It appears, given the above information, that there is more upside potential in the wheat market than downside risk. Consider holding new crop wheat sales for price rallies; however, be ready to reconsider as September Chicago wheat futures move into the \$3.70 range and/or cash forward contracts move over \$3.50, depending where you are located.



The Michigan milk price outlook has the proverbial good news-bad news aspect to it. The fundamental national market conditions are leading to rising milk prices. On the other hand, the suspension of over-order pricing in Michigan will dampen the revenue increases to Michigan producers.

Commercial demand for dairy products is increasing after the disappointing results from 1991. Per capita consumption of dairy products declined 6 pounds to 565 pounds per person in 1991.

Fluid milk and American cheese consumption was virtually unchanged from 1990, while other cheeses and ice cream increased 1991 consumption. Butter consumption continued to decline even in the face of substantial declines in the wholesale price of butter. Frozen yogurt sales also slowed significantly.

However, for the first three months of the year, commercial disappearance was up 1.8 percent, or 1 billion pounds, over the January through March period of 1991. All main dairy products, with the exception of cottage cheese, are showing year-to-year consumption gains.

The renewed growth in dairy demand is running head-long into a stagnant milk supply. For the first one-third of 1992, U.S. milk production is stable. Increased demand drawing on a stagnant supply means price increases.

TABLE EGG MARKET

Allan Rahn and Henry Larzelere, MSU

In May, table egg prices (New York, Grade A, large white, in cartons, to retailers) averaged 59 cents per dozen, 8 cents a dozen below year earlier levels. This price level is almost 10 cents below full production costs for most producers. Corn prices were comparable, but higher soybean meal prices during the same period pushed up table egg production costs nearly 1 cent per dozen.



Wholesale cheese and nonfat dry milk powder prices continue to increase. These increases, along with recent past product price increases, will lift the M-W above \$12.00 for May with even higher M-W's coming in June and July. Because federal order prices are linked to the M-W, federal order minimum blend prices will continue to increase.

Rapidly rising federal order prices in the summer are highly unusual and good news for dairy producers. Unfortunately, Michigan dairymen could have higher prices if the Michigan over-order pricing and superpool distribution system could be reestablished. Since 1985, the joint work of three Michigan dairy cooperatives has been putting extra money into all Michigan milk checks. In recent months, that extra has been around \$.40 per cwt.

With the elimination of the superpool distribution organization and the over-order price structure, Michigan's cooperatives have gone from a cooperative mode into a competitive posture.

In the short-run (a month or two), mailbox prices will be highly variable across organizations as various cooperative-handler pricing arrangements and strategies are implemented.

However, cooperative and processor competition will eventually force pay prices down close to the federal order minimum blend or uniform prices. The loss of the \$.40 per cwt. Michigan premium is the "bad" news. This cost of competition could be eliminated by renewed cooperation.

flock is lower and fewer were being molted. There are indications that egg producers are starting to try to downsize the flock.

The April egg-type chick hatch was down 10 percent from last year and eggs in incubators for hatching on May 1 were down 4 percent. Spent hen slaughter, however, during the first three weeks ending in May, were 8 percent under last year.

In June, table egg prices typically start advancing from their May seasonal lows. Expect egg prices to start strengthening in June, but the average for the month will be near the May average of 59 cents per dozen. Table egg prices should continue to move higher during the July through September quarter with an average in the mid-60 cent range.

While that is not a large deviation and there is probably slightly more upside price potential than downside price risk in the very short-run, I would still suggest that producers take advantage of pricing opportunities over \$6.00 per bushel for some of their expected production, especially if they have not already done so. Also consider moving old crop, especially if you

production.

still own a large percentage of your 1991

Export shipments have slowed down as we run into more competition from South America. But sales, plus shipments, indicate that we'll reach USDA's expectation of 690 million bushels for the 1991-92 crop marketing year. This would be an increase of 133 million bushels, 24 percent, compared to 1990-91. Some of the downside price risk comes from the large export projection the USDA has for 1992-93, given the large increase in South American production.

HOGS

We are probably at or past the seasonal peak for hog prices this year. While there are some indications that the increase in the breeding herd has peaked, we will still be seeing a lot of hogs for the rest of the year.

The USDA Quarterly Hogs and Pigs Report will be released on June 30 and should give us a clearer picture. On the one hand, sow slaughter is up, indicating producers are not increasing herd size; but on the other hand,

prices recently have been better than expected, raising optimism in some areas of the hog sector.

Keep very current on ready hogs as we proceed into a declining price period. At the same time, watch for price rallies in the fall futures to lock in some of your future production. I expect prices will drop under \$40 per cwt. sometime late summer and/or fall.

The number of layers in the nation's laying flock and table egg production remain well above a year ago. On May 1, the flock size was up 1.5 percent and table egg production was 3.6 percent greater.

Production was up more than the number of layers because the average age of the

CATTLE

The May 1 USDA Monthly 7-State Cattle-On-Feed Report released May 22 showed higher April placements and lower April marketings than expected. There is also some indication that placements in May are up from a year ago, we may finally be finding some of those feeders we have been looking for since February.

At this point, feeder prices will probably weaken on into the summer in a typical seasonal decline. Given a normal corn crop, this fall's feeder cattle futures contracts are probably a little on the low side. However, there is considerable short-term downside risk due to the moisture conditions across the Corn Belt.

The fed market has more than begun the seasonal decline into the summer. In fact, I expect it to stabilize in the \$72-\$74 per cwt. in the short-run before declining towards \$70 in mid-summer. This indicates one should keep current, but has a little time to finish light cattle. Fall live cattle futures are not offering any good pricing opportunities at this time as futures remain under \$70 and fundamentals would suggest prices in the \$70-\$75 range in the October-December period.



July Discussion Topic - Food Labeling Requirements

Nutrition-conscious consumers who wanted to count the calories or grams of fat in a food product used to have to peer through obscure charts and guides to find the information they were looking for. But no more.

Modern grocery store products are labeled with a sometimes bewildering array of nutritional data. A sure sign that nutrition labeling is here to stay comes from the advertising world. Food processors boldly highlight nutrition content in an effort to lure consumers toward new low or reduced calorie products. Widespread promotion of better eating habits, an obsession with weight loss and concerns about the link between diet and disease, are helping to drive a demand for even more detailed food labels.

"There is a perception on the part of the Food and Drug Administration (FDA) and the USDA that consumers desire more information about nutrition on their food labels," according to John Keeling, assistant director of national affairs for the AFBF.

The FDA is moving forward with an aggressive proposal to completely rework food labels and increase the amount of nutritional information on them. The USDA is voluntarily moving along in tandem with FDA. "The thinking at USDA is that, if we don't make these changes in a voluntary way we'll get mandated to make them. As the FDA goes along on most foods, the USDA is following suit on meat and poultry. The only difference is that USDA is taking a longer time frame," said Keeling.

This is an important economic issue for the food processing industry because of the cost involved in making new labels. "One arguments for extending the time period of the new labeling requirements was that, with all of the reworking of the labels that had to be done, there physically were not enough label printers in the U.S. and enough time left to have all the labels reprinted by the deadline," said Keeling. "It's important that the FDA move cautiously because the increased cost to consumers from new labels can be significant."

Farm Bureau policy is basically in favor of accurate labeling that allows consumers to make informed choices about food products. For example, what exactly should be designated low or reduced fat?

"Under some of the definitions that are being looked at, there would be no way that dairy products could ever be labeled low fat. A reduced fat or a low fat dairy product may have more fat in it than some other products, but the label may convey to the consumer that this particular product has had the fat reduced significantly," Keeling said. "Farmers are interested in making sure the new nutrition labels emphasize clear nutritional issues and not that they get into a 'good food, bad food' situation." Labeling concerns can go beyond questions of nutritional content. Michigan Farm Bureau led the way in changing federal labeling rules to ensure country of origin labeling for apple juices. "Labels can be important to consumers so they can make some inferences about the quality of the product," Keeling said.

Farmers believe it's important to continue to let the American people know that there are dietary choices to make. But choices of traditional meat, dairy, vegetables, fruits and nuts and cereals all have an important role to play within those choices. Accurate food labeling should enhance the ability of



June 15, 1992

Discussion questions:

- 1) Do your group members feel as consumers that they are more aware of food labels?
- 2) What kinds of nutrition information do group members look for on food labels?
- 3) Does current labeling provide consumers with enough information about products?
- 4) How will farmers be affected by requirements for more-detailed food labeling?

VanDamme June Volunteer of the Month

Roger VanDamme of Hiawathaland County Farm Bureau in Michigan's Upper Peninsula, has been selected as the first recipient of Michigan Farm Bureau's new "Volunteer of the Month" award program, in recognition for his involvement in a Delta County road issue.

VanDamme, who operates a 400-acre potato and small grain farm, and serves as Hiawathaland County Farm Bureau President, was considered instrumental in getting a number of different commodity interests working to-

gether to achieve a "common ground" resolution to the county's road weight restriction limits. VanDamme volunteered to serve as a representative for agriculture on a county road commission committee consisting of 12 different members.

VanDamme is the first recipient of the "Volunteer of the Month," which will continue to be selected from nominations made based on what the individual has done locally for the agricultural industry.



You can order tickets by contacting your county Farm Bureau office or by filling out the form below and sending it to Michigan Farm Bureau.

If you are a member in one of the following counties, be sure to call your county first since they have already reserved tickets: Allegan, Antrim, Barry, Bay, Calhoun, Charlevoix, Cheboygan, Chippewa, Copper Country, Emmet, Gladwin, Hiawathaland, Ingham, Ionia, Iron Range, Isabella, Kent, Livingston, Mac-Luce, Menominee, Midland, Montcalm, Montmorency, Ottawa, Otsego, Presque Isle, Saginaw, Shiawassee, and Tuscola.

Michigan Cattlemen's Summer Roundup Headed North!

The 1992 Michigan Cattlemen's Summer Roundup will take place July 10 and 11 in the Upper Peninsula's Chippewa County with headquarters located at Sault Ste. Marie's Ramada Inn. According to Mark Ash, Chippewa CES Director, the event gets underway Friday afternoon with a slate of speakers including:

Dr. Darrell Wilkes, vice president of Research and Industry from the National Cattelmen's Association, speaking on "Beef Quality Audit and Value Based Marketing - Will it Happen This Decade?"

Bob Rosenaw, Mackinaw Land and Cattle, speaking on "Marketing Michigan's Grasslands - Integrating Michigan's Cattle Industry."

Dr. Jim Hilker, Agricultural Economics Department, Michigan State University, speaking on "Custom Grazing Versus Ownerships - Pros and Cons." **Tom Reed**, general manager, Michigan Live Stock Exchange, speaking on the "Role of the Marketing Company."

Saturday's agenda includes a tour with three stops scheduled, including one at a cow-calf operation, another at a backgrounding operation where 600-pounders are brought in and put on grass until they're sent to feedlots in the fall, and finally a stop at a Chippewa County buffalo operation.

Saturday's events will conclude with a luncheon sponsored by the Chippewa and Mac-Luce County Farm Bureaus.

For more program and registration information, contact the Michigan Cattlemen's Association office at (517) 669-8589. Hotel registrations are due July 1, with program pre-registration due by July 6.



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Be sure to stop by and see FPC representatives at the Michigan Farm Bureau Family of Companies Tent at Ag Expo

July 14 - 16

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Please note: If the original block of Tiger tickets is sold out, we may not be seat everyone with the Farm Bureau group.

To order Farm Bureau Day at Tiger Stadium tickets, just complete this order form and mail to: Michigan Farm Bureau, Attn: Mike Kovacic, P.O. Box 30960, Lansing, MI 48909. Order DEADLINE is August 1, 1992. Enclose your check or money order made payable to **Michigan Farm Bureau**. Tickets are \$8.50 each.

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June 15, 1992

MFB's Summerfest and Ag Expo - A Great Combination!

It's going to be a celebration at Farm Bureau Center in Lansing on July 15, starting at 3 pm. The festive Summerfest event includes a grilled steak dinner with all the trimmings, cold drinks, apple pie and other sweet treats, games, vintage tractors and country music. To get an added extra during your trip to Ag Expo, send in your ticket order form today along with a check or money order before the June 30 deadline. There's just 2,500 tickets available, sold on a first come first serve basis. See the order form on page 2 of the regular Michigan Farm News Summerfest ad!



Ag Expo '92 will provide the MFB Family of Companies an opportunity to showcase their many products and services to an expected 50,000 farmers who will attend the three-day trade show. The theme for this year's MFB big tent display will be, "Farmers -- Professionals From the Ground Up!" The 60' x 90' red and white striped tent will be located on our traditional lots in the heart of the Expo grounds at the corner of Second Street and Avenue D on lots 248, 249, 348 and 349 (see map on page 6).

Under the big top, members will find Farm Bureau staff ready to answer questions on everything from health care to custom diesel fuel. In addition to the many products and service, booths featuring member involvement programs, and special informational boothes staffed by Public Affairs Division and state agency resource people, will be included in this year's display.

Don't miss the most exciting spot on the Expo grounds -- the Farm Bureau Family of Companies display!



Keep Farm Life Safe for Kids

A farm is a great place to bring up children -- but it can also be a hazardous place. One child in four in the U.S. is involved in an accident of consequence each year, and accidents are the leading cause of death among children.

On the farm, the danger is magnified--because children there are exposed to more workplace hazards and often begin lending a hand with work at an early age.

A primary danger is the close proximity of farm hazards to the farm home environment. Unlike other children, farm children face virtually the same occupational dangers their parents face. They need only take a few steps from their homes to find heavy machinery, toxic chemicals, and potentially dangerous storage areas.

What's more, many children do the work of adults, facing the same dangers--but often without the same knowledge, experience, and physical strength.

Parents and caregivers must take responsibility for reducing risks to children by teaching them about safety hazards, supervising the work young people do, and making sure they get the best possible care if injury occurs.

Here are some recommendations for keeping children safe on the farm:

- Educate youngsters about the dangers of farm equipment.
- Keep firearms, chemicals, medications, matches, and tools inaccessible to children.
- Keep play areas free of hazards--and enclose play areas for preschoolers.
- Teach children to swim, but don't let them swim without the presence of a responsible adult.

Before allowing children to bike on

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public roads, make sure they know the rules of the road and can handle a bike capably. Be sure the bike is in good condition and has the required lighting and safety devices.

Make grain bins, the shop, animal quarters, silos, and chemical storage units off limits to children. Lock and bar entry. Remove the keys from motorized equipment to prevent children from starting it.

Train and supervise young people until you are sure they can do a chore or job safely.

Encourage young people to take part in safety activities sponsored by local youth organizations and schools. Involve them in hazard hunts around the house.

Don't allow children to be near animals and pastures unless supervised by adults.

Michigan's Farm Show

MICHIGAN STATE UNIVERSITY

June 15, 1992

Ag Expo 1992 to Focus On Row Crop Cultivation Methods

The field demonstrations during Ag Expo, July 14-16 at Michigan State University, will feature a variety of methods to control weeds in row crops.

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Ag Expo's 35-acre main exhibition site will be open at 9 a.m. each day. It will feature more than 300 farm equipment and supply exhibitors from more than 20 states and Canada. The 30-acre field demonstrations will focus primarily on weed control in residue-laden cropland.

"We will show farmers how new equipment designs and management practices can help reduce crop protection costs," says Tim Harrigan, Ag Expo field demonstrations manager.

About a dozen manufacturers will be involved in the field demonstrations. They will operate equipment in conservation tillage and no-till fields in which crops have been planted. About 30 acres will be used for the field demonstrations.

No-till cultivation equipment will be demonstrated in chisel-plowed corn residue. Automatic guidance systems will also be demonstrated under a variety of field situations.

The demonstrations will let farmers compare the effects of equipment design, sweep, shovel and point selection for a variety of cultivation practices and requirements.

Demonstration plots will show the effect of seven weed control methods in corn and soybeans:

- · No herbicide, no cultivation
- Broadcast herbicide, no cultivation
- Broadcast herbicide, one cultivation
- · Broadcast herbicide, two cultivations
- · Banded herbicide, one cultivation
- · Banded herbicide, two cultivations
- · No herbicide, two cultivations

Harrigan says the field demonstrations are intended to help farmers decide which practice will be the most economical for them.

"One of the main reasons for renewed interest in mechanical weed control is to reduce crop production costs," he says. "If herbicide costs can be reduced or yields increased, cultivation may be a wise economic decision. Reduced herbicide use may also help curtail potential for groundwater contamination. However, row crop cultivation takes time and costs \$3 to \$4 per pass over a conventional seedbed, and residue management can be a problem in conservation-tilled fields.

"During the field demonstrations, we want to look at the economics of all of these practices and help farmers decide which practice to follow," Harrigan says.

Before coming to Ag Expo, Harrigan encourages farmers to consider the following when reviewing the field demonstrations:

Cultivation controls weeds, breaks up and aerates crusted soils and improves water infiltration. This can increase



Expo participants will once again be able to make in-field side-by-side comparisons during the field demonstrations, and talk with over 300 exhibitors at the main MSU exhibition site.

yields about five percent on fine textured soils.

- Herbicide use can be cut by two-thirds when placed in 10 inch bands over the row. Weeds between the row can then be controlled by cultivation.
- Today's cultivators can be used to side-dress fertilizers and band, spot or broadcast pesticides.
- Equipment improvements make it possible to cultivate in conservation and no-tilled residue.
- Guidance systems make it possible to cultivate at higher speeds, with greater precision and less operator fatigue.

Harigan estimates that the field demonstrations, round trip, will take approximately an hour and a half, with buses departing for the first of five stops every 15 minutes. The demonstrations will run from 10 a.m. to 5 p.m. on July 14 and 15 (Tuesday and Wednesday) and 10 a.m. to 4 p.m. July 16.

All of Ag Expo's activities, parking and transportation services are free.

What We've Learned From You About Us

by Bill Bickert, Ag Expo Chairperson

mostly from southern Michigan but also from Ohio, Indiana, and Ontario, Canada.

In addition, there will be a variety of demonstrations, displays and information availThe Expo officially opens at 9 a.m. on Tuesday, July 14. Hours are from 9 a.m. to 5 p.m.,Tuesday and Wednesday, and from 9 a.m. to 4 p.m. Thursday.

Just being a part of a major farm show is pretty important to the folks we talked to during Ag Expo last year in a poll that asked farm families why they attend. There are a variety of reasons why they attend Ag Expo, Michigan's largest agricultural equipment exposition. We gathered comments from about 270 farm families to find out how important Ag Expo is to them, our third such poll.

Farmers' primary reason for attending Ag Expo is to obtain information that they can use back home. About a third of those attending were looking for information about a specific product. Nearly 70 percent of the farmers polled said that Ag Expo is becoming more important to them as a source of information for their buying decisions and planning for the farm business.

We learned that farm families travelled an average of 79.5 miles to attend Ag Expo and that the distance travelled ranged from 3 miles to 500 miles. Farm families came Everyone said Ag Expo should continue as a show for farmers and that is our purpose. Ag Expo is intended as a place for farm families to be among their counterparts in agriculture who have at heart the well-being and continuation of the farm business.

Ag Expo has become something of a tradition among farm families. On average, visitors have attended Ag Expo four or more times since it began in 1980. Of the group polled, 56 percent do not attend other major farm shows and of those who have, 88 percent rated Ag Expo equal to, or better than other farm shows.

The 35 acres that constitutes our main exhibition site will be brimming with millions of dollars of farm equipment, supplies, and services; the only place in Michigan where such an array can be seen. We intend to enable visitors, in an enjoyable setting, to make evaluations, develop ideas, and talk with industry and university experts about opportunities to improve the farm business. able in "education" row. This is a series of exhibits representing MSU's departments of agricultural engineering, animal science, crop and soil sciences, fisheries and wildlife, water research, public safety, veterinary medicine, etc. Representatives will be available to answer questions about farm security, crop production, education programs, human and animal health care, water quality, and other aspects about the farm business.

Admission is free, and visitors are required to use the parking facilities at Farm Lane and Mt. Hope Road. The show hours are Tuesday and Wednesday from 9 a.m. - 5 p.m. and Thursday, from 9 a.m. - 4 p.m. Free wagon shuttles will be available to take you from the parking area into the main exhibition site. The boarding station is located on the north side of the main parking lot.

We are confident you will enjoy a trip to Ag Expo because of its variety in a safe, clean, and friendly environment.

Ag Expo Food Services

There will be a variety of food and plenty of it at the main exhibit site, including grilled chicken sandwiches, submarine sandwiches, roasted sausage, hot dogs, pizza, cold/hot beverages and ice cream from vendors that will be on the grounds daily. All of the food services will be in a food court near Tent C, at the north edge of the grounds.

Make plans to stop at the MFB center on Wednesday afternoon, July 15, for the best meal deal in town at the annual Summerfest event for just \$4. Be sure to get your Summerfest tickets now, since sales are limited to the first 2,500 purchased.



The Role of Cultivation in the 1990's Expected to Grow

Francis J. Pierce, Associate Professor, Crop and Soil Sciences Department, Michigan State University

Historically, one of the greatest time- and labor-consuming operations in the production of crops is the control of weeds. Mechanical cultivation or tillage has traditionally been an important method of controlling weeds. Chemical weed control replaced mechanical methods as the primary control strategy, although cultivation remained as an important supplement to herbicides. It is not uncommon for farmers to cultivate after application of broadcast herbicides.

The widespread use of herbicides is currently a major environmental concern. There is a great deal of interest nationally in reducing chemical use in crop production. Mechanical control is the primary alternative weed management strategy to herbicides in row crop production.

There's a renewed interest in the use of mechanical weed control, particularly cultivation. Emerging weed control strategies are combining mechanical methods with chemical and cultural (crop rotations, cover crops) practices to develop more efficient, economical, and environmentally (the three E's) safe crop production systems.

The major problem in successful cultivation is controlling weeds in the crop row. A combination of band application of herbicide in the row and cultivation can be very effective and economical and is gaining in popularity. Rotary hoeing can be very effective for early post-emergence cultivation of any row crops. They run directly over the row, uprooting small, tender weeds and



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equipment adjustment and operation for the variable weed spectrums and soil conditions on their farms.

The year 1995 brings Conservation Compliance to the implementation phase. The farm plans developed during the early 1990's must be in place by 1995. The Conservation Tillage Information Center estimates that the acreage in conservation tillage must double nationally by 1995 to meet conservation compliance.

Effective conservation includes rotation and management of crop residues on or near the soil surface to control soil erosion to acceptable levels. This means that mechanical control may be inappropriate for certain soil and crop conditions.

For others, cultivation must be able to handle high crop residue conditions and different levels of soil workability determined by the degree of tillage prior to planting. For example, band applications of herbicides may be possible in no-tillage but the cultivator must be able to operate in high residue conditions in a firm soil. In addition, in order to meet the timeliness issues raised above, cultivators and rotary hoes may need to operate at much higher speeds than presently recommended for current equipment designs.

Summary

The role of cultivation in the 1990's is changing and the following statements characterize the role:

· Environmental concerns over the use of herbicides will increase the interest in mechanical weed control, particularly cultivation.

· Increased use of cultivation will result from the potential for increased profitability by adjusting weed control strategies in general, including the use of crop rotation, post-emergence chemicals and the use of cultivation. For example, the costs of herbicides in sugar beets has made band application plus cultivation the preferred weed control strategy.



Early weed control in the crop row can be accomplished with a rotary hoe.

breaking any soil crust that might be present.

There are, however, considerable uncertainties associated with sole reliance on mechanical strategies for weed control. There are also constraints to the use of mechanical weed control that must be addressed by farmers. Specifically, these include soil and water conservation and timeliness.

Timeliness is the critical factor in effective weed control. Cultivation controls weeds by uprooting, covering, or cutting off weeds. The timing of mechanical control must match the most vulnerable stage of weed development while avoiding injury to the crop.

Farmers may be reluctant to rely on mechanical control strategies due to the narrow window for cultivation created by wet conditions. They are also concerned with effectiveness of mechanical control, labor availability and lack of information on

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· Mechanical weed control will be tempered by the need for the management of crop residues for erosion control and the need to meet conservation compliance by 1995.

· To meet the timeliness and conservation requirements, successful cultivation will require increased information on the adjustment and operation of cultivators and new designs to handle crop residues and variable soil conditions as well as higher operating speeds.

· Total reliance on mechanical weed control strategies is currently limited in use. However, considerable attention should be directed as the extent to which this may be possible in current and future cropping systems.

Costs of Owning and Operating Cultivation Equipment

	Width	Tractor Hp	Acre/ Yr	Acre/ Hr	Implement Price \$	Implement Ownership \$/Yr	Tractor ownership \$/Yr	Operating \$/Acre	Total* <u>\$/Acre</u>
Broadcast Sprayer	30 '	60	300	15	5,400	665 970	104 131	0.63	3.20 2.90
	45 '	75 90	450	23 30	7,900	1,475	157	0.37	3.10
Band Sprayer**	4-row		300	4.2	2,350	290		0.25	1.20
(Planter Mounted)	6-row		450	6.4	2,400	295		0.25	.90
	8-row		600	8.5	2,600	320		0.25	.80
	12-row		900	12.7	2,850	350		0.25	.65
Rotary Hoe	15 '	60	300	10.2	3,500	430	157	1.21	3.15
	20'	90	400	13.6	4,800	590	236	1.05	3.10
	30 '	120	600	20.4	10,000	1,230	314	0.82	3.40
Row Cultivator	4-row	50	300	4.6	3,000	370	287	2.50	4.70
(Conventional)	6-row	75	450	7.0	3,400	420	431	1.88	3.75
	8-row	95	600	9.2	4,800	590	546	1.56	3.45
	12-row	150	900	13.9	7,100	875	862	1.29	3.20
Row Cultivator	4-row	50	300	4.6	3,800	468	287	2.52	5.05
(Conservation)	6-row	75	450	7.0	4,600	565	431	1.91	4.10
(8-row	95	600	9.2	6,100	750	546	1.58	3.75
	12-row	150	900	13.9	14,200	1,745	862	1.36	4.25
Row Cultivator	4-row	60	300	4.6	6,200	760	345	2.72	6.40
(No-till, Ridge-till)	6-row	90	450	7.0	8,200	1,010	518	2.10	5.50
	8-row	120	600	9.2	10,500	1,290	690	1.80	5.10
	12-row	180	900	13.9	21,800	2,680	1,035	1.43	5.55

Source: MSU

There has been renewed interest in row crop cultivation on Michigan farms during the last few years. Row crop cultivation controls weeds, breaks up and aerates crusted soil and improves water infiltration. Banding herbicides over the row and cultivating between the rows can often reduce herbicide use and cost by 50 percent.

Yield increases in the range of 5 percent not related to weed control in cultivated versus uncultivated corn and soybeans are not uncommon. A well designed tillage and weed control program that includes row crop cultivation will make an important contribution to the profitability and sustainability of Michigan farms. In a 1990 survey of Michigan cash crop and sugar beet farmers, (see below) more than 50 percent of the cash crop farmers and 20 percent of the sugar beet farmers reported leaving more than 30 percent residue from the previous crop on the soil surface after planting.

They also reported that weed control was their most difficult problem when managing residue in a conservation tillage system. Row crop cultivation equipment designed for moderate and high residue conditions can be used successfully in conservation tillage fields. The table above indicates the annual costs of owning and operating selected herbicide application and mechanical weed control equipment.

Selected Weed Control Practices on Michigan Farms

Weed Control Control Method	Corn % of Acres	Sugar Beets % of Acres
Pre-Emerge Broadcast		
Pre-Emerge Banded		
Post-Emerge, Broadcast		
Row Cultivate One Time		
Row Cultivate Two Times Source: MSU-AES Research I	12. Reports 506 and 5	





June 15, 1992

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June 15, 1992

The Single-Step Planting, Incorporating and Finishing Tool from McFarlane

America



The Ex-Seeder exceeds your expectation by combining our 16-Bar Flexible Harrow and the Gandy Orbit-Air™ Applicator for:

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- Ideal for soybeans and grain crops.
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- Sturdy frame Cradles the cutterbar for extra protection and durability.
- . 540 or 1,000 rpm driveline with equal-angle hitch for smooth power transfer.

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· Standard hydraulic tongue-Makes it easy to position the unit without leaving the tractor seat.



June 15, 1992

Tailor Crop Cultivation to Match Your Tillage Operation

Timothy M. Harrigan, Power and Machinery Specialist, Agricultural Engineering Department, MSU

Row crop cultivation can give your crops many benefits by controling weeds, breaking up and aerating crusted soils and improving water infiltration.

Herbicide use can be cut by as much as two-thirds when placed in 10 inch bands over the row with weeds in the inter-row area controlled by cultivation. Cultivators can be used to side-dress fertilizer and band, spot or broadcast pesticides. Equipment improvements have made it possible to include row crop cultivation in a residue management program in conservation and no-till fields. Tractor or implement guidance systems have made it possible to cultivate at higher speed with greater precision and less operator fatigue than ever before.

Row Crop Cultivators

Row crop cultivators designed for a prepared seedbed and little crop residue may be suitable for reduced tillage conditions in some cases. A rolling cultivator or S-tine cultivator may work well if the residue cover is not too heavy, if the ground is not too rough and if the soil is not too hard. An example of a situation where a conventional row crop cultivator might work well in a reduced tillage system would be lightly tilled soybean residue in a loam or sandyloam soil.

In heavier residue where soil penetration may be a problem, conventional row crop cultivators will not work well. Heavy duty S-tine cultivators with higher ground clearance, a heavier shank and frame and a longer gang assembly with a tine configuration designed to improve residue flow have been designed for moderate residue conditions. S-tines work well at 5 to 7 miles per hour. The S-tines vibrate in a tight circular pattern improving the soil mixing action.

C-shank cultivators with sweeps offer good soil penetrating ability in fine textured, hard soils where the surface may be rough. The sweeps cut and lift the soil but don't provide the same degree of soil shatter and mixing that S-tines provide.

No-till and ridge-till cultivators are designed to cut and lift the soil in untilled fields covered with heavy residue. These cultivators have high ground clearance for improved residue flow and heavy frames for soil penetration. Most have one heavy duty shank per row with a wide sweep to cut and lift the soil. Larger coulters are mounted in front of the shank to cut the crop residue and improve residue flow.



Crop shields protect small plants in the row. If the plants are small and fragile, a full covered shield will prevent any soil from moving into the row and damaging the plants. Open top sidewalls allow cultivation of taller crops while preventing soil flow into the row. When the plants are larger, weed control can be improved by allowing some soil flow into the row to bury small weed seedlings. A rolling spiked wheel will shield the plants from large debris but allow some soil to flow into the row area. Rotary hoe wheels also shield the crop from heavy debris, remove small weeds into the row area and permit some soil to flow into the row. A single pass of a row crop cultivator will bury 20-40 percent of the initial crop residue. Increasing the depth or speed of cultivation increases the amount of soil moved and the amount of residue buried.

Machinery Economics

Cultivation benefits must be balanced against the additional equipment costs, labor requirements and the risk of unexpected weed control problems if the cultivation is not done on a timely basis.

Example: A six-row, conservation tillage, row crop cultivator will cost about \$4,600. Annual ownership costs which include depreciation, interest (real interest at 6 percent), insurance and shelter, will be \$565 per year over the 10 year expected life of the implement. Tractor ownership costs based on the hours spent cultivating 450 acres will be \$431 per year. Operating costs, which include labor, fuel, repair and maintenance will be \$1.91 per acre. The total ownership and operating costs for the six row cultivator will be \$4.10 per acre for the first pass over the field. If adequate labor is available and the savings from decreased herbicide use and potential increased yields is greater than \$4.10 per acre, row crop cultivation may be a wise economic decision. See AEIS 597, The Costs of Owning and Operating Weed Control and Row **Crop Cultivation Equipment**, for more information.

Equipment Tips

- Improve residue flow with higher ground clearance, coulters to cut heavy residue and longer gang assemblies with wider spacing between tines in moderate residue.

 Improve soil penetration with C-shanks and larger, heavier frames.

REX is One of the Best...

21H738 Rex is one of the elite bulls in the Holstein breed, siring high components, high milk and outstanding type. That's why dairy producers nationwide continue to show their confidence in him.

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...and so is his daughter, Sherry!

Sherry is probably the best known of Rex's more than 6,000 daughters, since she topped the prestigious "Top 10" sale last fall. She was purchased for \$90,000, making her the highest selling cow in the U.S. during 1991.

Hoffland Rex Chairman Sherry VG-88 2-4 365d 32,870M 3.9 1274F 3.2 1055P

If you want a bull that "does it all," talk to your 21st Century Genetics representative about Rex. He's still among the best, at 99% reliability. Ask for your 21st Century Genetics sire directory too. It's hot off the press and features the best lineup of bulls in the industry.



 Vibrating tines improve weeding and residue flow at higher speeds.

- Guidance systems and stabilizing disks improve precision around curves and on hillsides.

- Fully covered and open sidewall crop shields protect small plants and prevent loose soil from moving into the row. Rolling, spiked wheels and rotary hoe wheels protect the crop from heavy residue but allow some soil to flow into the row.

- Increasing the depth or speed of cultivation increases the amount of soil moved and the amount of residue buried.



June 15, 1992

Guidance Systems Make Cultivating Quicker and Easier

A new cultivator "quick hitch" guidance system from Sukup Manufacturing features a unique, hydraulically-adjusted top link design combined with wand row-sensing and electronically controlled hydraulics.

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The Sukup AUTO GUIDE system offers improved user controlled sensitivity as well as faster hydraulic adjustment of the top link. The new system allows electronic signals from the wand to operate hydraulic valves which move the steering cylinders in the hitch.

The AUTO GUIDE system can be used with most of today's rear mounted conventional or high residue type cultivators. There are three main components in the AUTO GUIDE system:

Two Way Wand Sensor - Steel fingers sense off just one row for small crops, or between two rows for larger crops. The wand unit mounts separately on the cultivator tool bar.

Power Top-Link, 3-pt. Quick Hitch - Includes two cylinders that pivot the tool bar, allowing the stabilizing coulters to steer the cultivator. A third cylinder moves the top link of the hitch ahead or back to control cultivator lift and penetration.

Electronic Controls - A sophisticated, but. easy to use, control box in the cab incorporates today's most advanced electronic technology. In "manual" position, the hitch will center itself. The "automatic" position can be sued to control right or left side draft of the implement. A needle monitor showing hitch position, and a sensitivity control are just two of many other features of the control.

Sukup's new SLIDE GUIDE guidance system features a full 20 inches of side-to-side movement, with field proven electronics and a rugged yet lightweight design. The SLIDE GUIDE is ideal for use on pull-type implements and equipment with pivoting coulters. It may also be used on tractors with either open-ended or closed center hydraulics.

Four sensing options are available with the SLIDE GUIDE including either a one-row wand, a tworow wand, chain style for planters (optional) and wheel style for ridges (optional). All Sukup SLIDE GUIDE units are tested, pre-calibrated and come equipped with Pioneer couplings so they're ready for immediate use.

For more information on either of the Sukup guidance systems, contact Sukup Manufacturing Co., Sheffield, Iowa 50475, or phone them at (515) 892-4222.



The new Sukup Slide Guide Guidance sytem offers a full 20 inches of side-to-side movement to guide pull type implements and equipment with pivoting coulters. Another model is also available to be used with conventional rear-mounted and high-residue cultivators.



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Move grain and seed quickly and easily with a Walinga Agri-Vac system. Super chromed blower outlasts unchromed blowers. Fully reversible drop thru/blow thru airlock with stainless steel adjustable tips keeps you on top of the biggest grain moving jobs.

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June 15, 1992

10

These Farmers are Committed to the Ridge Till System

The Lauwers, who farm 2,500 acres in St. Clair County, have had success with ridge till in corn and soybeans for eight years. Now they have their sights set on making it work in sugar beets as well!

The soil conservation movement has caused many farmers to abandon conventional tillage for more ecological/economical methods. Although the trend has been toward no-till, some farmers believe that ridge till is a better way to go.

Rich Lauwers, his wife, Carol and sons, Mark and Mike, who farm 2,500 acres in St. Clair County, have used ridge till on corn and soybeans for the eight years. Last year, working with the Michigan Agricultural Stewardship Association (MASA), he compared conventionally tilled sugar beets and ridge tilled sugar beets.

"Most of the time, it's hard to improve on soil that hasn't been touched in the spring, especially in a ridge," Lauwers said. "We knew what good condition the soil was in when we planted corn and soybeans on a ridge, so we thought we'd try it with sugar beets."

It was a logical step for Lauwers, since he owned the cultivator necessary to build the ridges for his corn and soybeans. He had also made the modifications needed on his planting and harvesting equipment. He was ready to tackle two of the problems faced by sugar beet farmers, lack of moisture and wind.

Lauwers points out that conventional tilled soil dries out much faster and usually the sugar beet seed won't germinate until after it rains. The ridge tilled soil holds the moisture better and as for the wind problem, "The wind doesn't bother that old row as much as it does the tilled area," he explained. "Sugar beets are really vulnerable to dirt sifting across and cutting them off." The ridge tilled sugar beets worked out well for Lauwers. The difference showed in the yield, with the ridge tilled area yielding an extra 1.8 tons an acre. "We were satisfied. We ridge tilled beets on some pretty heavy soil," he said. "They grew as good or better than where we tilled right next to it. I was really surprised that there was that much of a difference."

All said and done Lauwers figured the ridge tilled sugar beets netted him an extra \$57 an acre. The cost was a little higher on the ridge till because of the extra herbicide needed, but Lauwers doesn't see this as a problem. "I feel better using Roundup than I do dragging something across the field with a four wheel drive tractor and see the dirt blow away," he said.

One problem with sugar beets is the ridge is destroyed during harvest. Lauwers son, Mike, explained how they worked around it. "We plant no-till in the spring where the beets were and start building the ridges again during cultivation." Then they have ridges throughout the rest of the rotation.

One major concern with ridge till is what to do with the headlands. Instead of worrying about driving over the ridges, some farmers no-till; others leave the headlands fallow. The Lauwers take it all in stride and ridge till the headlands too. Mike explained, "We don't build the ridges as high and we go real slow."

The movement toward no-till has led Lauwers to do a field project comparing ridge till to no-till in corn and soybeans. Working again with MASA, he will do side by side testing of the two methods over a



Ridges are built during cultivation after the crop is well established, in preparation for the next spring's planting operation. Above, a ridging operation is taking place in this field of soybeans at an MSU research farm. The raised disks can be also be lowered for cultivating the edge of the ridge as well.

number of years. "There's not a lot of people doing ridge till," he said. "Maybe we're wrong, so we want to compare numbers over several years."

According to Jerry Grigar, from the Soil Conservation Service, there were only 12,000 acres ridge tilled in 1990, dropping to 10,220 in 1991. He sees the biggest factor affecting farmers using ridge till is the commitment. The high residue cultivator needed for ridge till is specialized, expensive and only good for ridge till. On the other hand, farmers can buy no-till planters quite cheaply and if they don't work out the way they had planned, the planters are easily converted for conventional tillage, says Grigar. "Ridge till is not something you can just jump in and out of," he said. "It requires a commitment."

Although Lauwers has made the commitment to ridge till, he plans to continue working with MASA to make sure he's doing what's best for the soil. His deep interest in soil conservation and sustainable agriculture is the key. "We were primarily motivated to begin looking at sustainable agriculture out of a desire to leave the land in better shape than we found it."

Tractor and Combine Sales Trend Lower

Unit retail sales of farm tractors lost ground in 1991 after four consecutive years of gains. Combine sales also declined, according to the Federal Reserve Bank of Chicago. Despite lower interest rates and a slight increase in crop plantings, the expected trend in net cash farm income points to further slippage in sales in 1992.

Unit tractor sales were characterized by weakness throughout most of 1991, with sales posting a year-over-year decline in nine months out of 15 1984 twelve. According to reports from the Equipment Manufacturers Institute (EMI), the tone was set early in the year as the first quarter sale of tractors with over 40 horsepower registered a decline of about 12 percent. The rate of decline narrowed during the spring and summer, but then ballooned to about 24 percent in the fourth quarter. Among two-wheel drive tractors, unit sales of those with 40 to 99 horsepower and those with over 99 horsepower each recorded a decline of about 12 percent for all of last year. Sales of large, four-wheel drive tractors (at 4,070 units) fell 20 percent. At 58,090 units, total sales of farm tractors were down 12 percent from the previous year and the lowest since 1988.



RP FACT SHEE CONSERVATION RESERVE PROGRAM

Apply for enrollment at your local ASCS office JUNE 15 - 26, 1992

The Conservation Reserve is a program established by the '85 farm bill (Food Security Act of 1985) & expanded by the '90 farm bill (Food, Agriculture, Conservation, & Trade Act of 1990) to...

Reduce Soil Erosion on Farm Land

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Annual payments are the accepted bid price and are guaranteed for 10 or more years.

Any cropland in Michigan used to produce an agricultural commodity in 2 or more years during the 1986-1990 period is eligible for enrollment because of water quality benefits.

Enrollment limit in legislation creating the program is 45-million acres. Enrollment after 11 completed sign-up periods is 35,517,740 acres. Michigan enrollment is now over 247,000 acres.

Land owners and producers may find the program attractive because of secure 10-year contracts for prevailing rental payments, wildlife benefits and environmental benefits.

A voluntary program, producers may apply for enrollment at Agricultural Stabilization and Conservation Service Offices during the next enrollment period, June 15 - 26, 1992. Combine sales registered a decline of seven percent in 1991. A strong first half performance was more than offset by weak sales during the summer and fall. Unit sales posted a slight gain over the strong yearearlier level in the first quarter and then jumped to a 24 percent gain during the

*USDA forecast. SOURCE: Equipment Manufacturers Institute and USDA.

> second quarter. The pattern reversed abruptly during the summer months when drought concerns pulled combine sales nearly a third below the previous year. Despite the decline, the 9,720 units sold in 1991 were the second highest for any year since 1984.

> Selling prices for tractors and self-propelled machinery averaged between four and five percent higher during 1991 than in the previous year, according to USDA reports.

> Unit sales of farm tractors in January 1992 were up sharply compared to a year ago. However, sales slipped again in February. Combine sales were down both months. The USDA has projected that unit sales for each will decline seven percent, with overall dollar purchases of tractors and other machinery expected to fall about two percent.



Understanding the Ridge Till Management System

Ridge till systems are similar to no-till systems since they both reduce field work to planting, chemical application, and harvesting. The Conservation Technology Information Center (CTIC) maintains that ridge till systems have all the cost reduction and erosion benefits of the no-till systems while avoiding a lot of crop residue, temperature and moisture problems associated with no-till.

In ridge till systems, crops are planted on permanent ridges, 4 to 6 inches high, that are formed and maintained during summer weed cultivation. CTIC warns that proper spacing of wheels and narrow tires are necessary to ensure that all equipment will ride in the valleys between the ridges and not damage them. Stabilizing attachments are available to keep the equipment on track, but the CTIC does not believe they are generally needed except on contours and slopes. If proper care has been taken from planting through to harvest, the ridges will keep through the winter and be ready for spring planting.

While planting, the soil is prepared by one of a number of different tillage attachments which clean the tops of the ridges of any crop residue. Some of the more popular attachments are the sweep, the horizontal disk, the staggered and notched disk furrowers or just a plain disk furrower. The residue is swept into the valleys between the ridges where it is broken up by cultivation and cannot hinder the growth of the new crop as it can in no-till.

A ridge till cultivator is designed to build and maintain the ridge for the next year's crops as well as breaking up the previous year's crop residue and displacing weeds. CTIC points out that most of the seeds from weeds and previous crops are swept into the valley during planting and aren't a problem

Conservation Reserve Program and Water Quality Go Hand in Hand

Runoff from cropland enrolled in the Conservation Research Program (CRP) can be reduced significantly, according to Vicki Siems, resource conservationist for the Soil Conservation Service. The CRP, administered by the USDA, was established by the Food Security Act of 1985 and extended by the Food, Agriculture, Conservation and Trade Act of 1990 to protect the nation's food-producing resource and reduce water pollution.

Permanent vegetative cover (trees or grass/legume sod) is established on cropland enrolled in the program and taken out of production. In Michigan, producers may enroll land used to grow crops two or more years during the 1989-90 period in the program and get ten-year contracts with payments comparable to local rental rates. in the row. However, a preemergent herbicide is typically banded over the row at planting for grass control and sometimes a "burn down" herbicide is needed before soybeans because of the later planting date.

Application of fertilizers depends heavily on the soil texture. According to the CTIC, nitrogen applied two to three weeks after planting has been the most successful in fine textured soils, while in coarse textured soils, the applications are usually split between planting or early cultivation and late cultivation.

Corn reportedly responds best when phosphorus and potassium are banded 3 to 6 inches deep near the row. CTIC suggests application on the ridges be made during planting or in the fall with tool bars equipped with coulters and fertilizer openers. Fall application has been reported the most successful for fine textured soils or soils with poor internal drainage. The results have not been consistent on banded application of Phosphorus and Potassium on ridge tilled soybeans. The CTIC points out that ridges serve several purposes other than separating crop and crop residue. Ridges tend to maintain a higher temperature in the spring and water saturation is not as big a problem. Jerry Grigar, from the Michigan Soil Conservation Service, lists many other benefits to ridge till including controlled field traffic, reduced pesticide use, reduced equipment cost, reduced wind and water erosion and a safer environment for the plant.





Sediment runoff can accumulate in streams, drains and rivers and reduce the capacity of channels resulting in flooding more frequently and causing drainage problems aswell, explained the Siems.

Sediment also covers fish spawning areas and can reduce the recreational uses of the lake or stream, Siems said as she explained how everyone benefits from programs like the CRP.

Except for a small amount of fertilizer that may be needed when the permanent vegetative cover is established, no fertilizer is applied to land in the CRP.

The next enrollment period for the Conservation Reserve is June 15-26, 1992. Land owners and operators interested in program enrollment should visit the Soil Conservation Service, and Agricultural Stabilization and Conservation Service offices to learn more about the program and to enroll. NUELLER

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June 15, 1992

12 Canola Production in Michigan - Is the Honeymoon Over?

Michigan's latest field crop, canola, has been pushed by scientists, seed companies and food manufacturers who cite valuable health benefits associated with canola oil, calling it the oil crop of the future. On the production side, however, canola is walking the fine line between fact and fiction. Conflicting stories are told by canola advocates and farmers who have had bad experiences with canola. Several bad years of production and marketing experiences have prompted many to question canola and its future in Michigan.

Dr Larry Copeland, canola researcher at MSU, has seen canola grow from just under 100 acres in 1988 to almost 9,000 in 1991. He believes there's considerable interest in developing canola as a crop, but he doesn't see it as the wonder crop of the future. "I'm not going to tell you that it's the best crop to grow," he said. "I think that it is a good crop to grow in rotation with other crops. Canola can and will fit in."

Copeland sees two major disadvantages for canola in Michigan right now, most importantly, the myths and biases regarding canola and handling problems. "Some people call canola a weed," he said. "They say they have all the weeds they want on their farm already." Copeland says he has heard all the stories, and he laughs at them because he considers them issues of light conversation and not factual problems.

Copeland says the stories that canola is impossible to plant, harvest, handle or transport because the seed is so small are unfounded. "That is not a problem," Copeland maintains. "Yes, the seed is small and does flow freely. Yes, if you have large gaps in your truck, it'll blow out. But it's not impossible to handle canola."



Dale Jury, a broker with Michigan Agricultural Commodities which merchandises a considerable amount of Michigan grown canola, agrees with Copeland's assessment. He believes one reason elevators are unwilling to handle canola is because they are worried about the seed size and are afraid of product loss. "The seed size has not been a problem for MAC," he contends. "It's really not a disadvantage."

Copeland admits that shattering is seen as a big problem in canola production. "Canola tends to shatter quite easily," he said. "But even under normal shattering conditions, it looks a lot worse than it actually is. The fact is, some will shatter on the ground and germinate but they can be controlled by cultivation or herbicides."

Barry County farmer Tom Guthrie had problems with shattering in his canola but attributes the severity to lack of experience on his part. "The second year our yields were down because of wind damage; it shattered, shook to the ground," Guthrie explained. "I think part of it was that we didn't know enough about it or have the experience. If we had the chance to do it over again, I think that we would be in the field a week before we were and not had as big a problem."

The lack of knowledge or experience is considered to be another disadvantage by Copeland, as it is in any new crop. "I've learned a lot about canola," Copeland stated. "But any grower, regardless of how much I know or don't know, is going to have to go through the learning process for him or herself."

Copeland realizes what kind of experience canola growers have during this learning process will determine what happens to canola in Michigan. "What the future holds for canola depends on how much enthusiasm farmers continue to have for the crop." He's concerned that producers will make decisions based on unusual weather, which has been resulted in a number of bad experiences with canola in the last year and a half.

Copeland attributes unusually high temperatures early last spring for a bad canola yield in 1991. Cold temperatures this spring, says Copeland, have ruined about 3,000 acres this year. "We had some early growth apparently, coming out of dormancy, then some more cold weather," he explained. "The bottom line was that we got quite a lot of winter injury or late spring injury due to freezing."

Even though there have been a lot of problems recently, Copeland tries to remain optimistic about canola in Michigan. He sees both environmental and economical opportunities for canola production in Michigan. "Our climate is pretty much dominated by the Great Lakes, and having water all around us moderates both our winter and summer temperatures," he explained. "Compared to areas around us, we are characterized by cool seasons We have less fluctuations, which makes Michigan's weather conditions perfect for growing canola."

Economically, Copeland says Michigan is in a good position too, because of the two processing plants located in Canada. ADM is in Windsor, while Can-Ameri is located 100 miles further east at Hamilton. "We're relatively close to the processing plants, and of all the states, we have the most favorable position for marketing canola," he concluded.

Copeland has high hopes for canola, and believes the crop has the potential to develop into a very important Michigan commodity. "Canola went from almost nothing to as high as 8 million acres in the provinces of Canada," he stated. "A lot of seed people see that same scenario developing in the United States. Whether or not that happens is yet to be determined. I certainly think there is a niche for it in Michigan."



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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 Harbo	r 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

Canola Production a Learning Process

Clinton County farmer Bob Kissane has had a bit of bad luck with his canola, but he isn't ready to totally give up on the crop. While several farmers in his area gave up in the first year or two, Kissane is still working with canola to see if it will fit into his cropping operation.

"I said I'd give it three years," he explained. "It did good the first year, so-so the second year, but this year it's looking pretty bad." Kissane ended up plowing under 25 of the 65 acres of canola this spring because it was such a poor stand. "I don't think it had a chance to harden last fall before winter hit."



 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. Like many other canola growers, Kissane is concerned about marketing the canola he has left. "The elevator where I took my canola last year isn't accepting it this year," he said. "I don't know that I'll have enough to make it worth the trip to Windsor."

Kissane originally became interested in canola as a way to spread his work load out. "I had hoped to plant 100 acres of canola and 100 acres of wheat each year," he explained. "I farm alone and it would be easier if I didn't have to do everything all at once."

Even after the run of bad luck with canola, Kissane still thinks he'll plant around 20 acres this fall, a very small portion of the 1,000 acres that he farms. "I've learned a lot about canola," he said. "I think I could grow it and have a good stand - if the weather cooperates."

He doesn't think this sentiment is shared with many farmers in his area. "A lot of people tried it once, had a bad stand and Kissane believes the way canola was portrayed to the farmers in the first place was another problem. "I think if was played up a lot the first year; people pushed it and painted a really rosy picture," he said. "They made it seem so great, but it wasn't the real picture. Canola isn't a bad crop, but it's not as good as they said it was."

won't try it again," he explained. "Then other people see their neighbors plant it and have problems and don't want to even try it. I think it will die out, at least around here, unless they develop some kind of program to encourage people to try it again."



June 15, 1992

Canola Finds a Niche in Guthrie's Operation

Flexibility and Diversity Spreads His Harvest Season Workload

Barry county farmer Tom Guthrie is getting ready to harvest his third canola crop. He's a farmer who likes canola and believes it works well in his crop rotations.

In 1986, he participated in the dairy buy-out program and began to look for ways that he could diversify his farm. "It was about the time that canola was just getting talked about in the state," he explained. "I watched it for a few years and read about it, and then talked to a farmer in northern Barry County who had grown canola for a couple of years." After that discussion, Guthrie made the decision to give canola a try.

Guthrie doesn't regret his decision. "I've had very good results with it," he said. "Compared to wheat, it was definitely a much better income crop that year and it was very comparable to soybeans." The first crop did so well for Guthrie that he planted nearly twice as much the next year.

Guthrie doesn't think this year's crop will do as well as the first year. "I've noticed some winter kill because the stands this spring just don't look as good as they have in the past," he explained. "So I'm anticipating some possible yield reductions because of that, but to what extent, I'm not sure.'

Guthrie's canola experiences haven't all been good. The winter kill this year, and a problem with shattering last year have been a learning experience. "It still wasn't an experience that was discouraging or defeating," he said. "All things being equal and yields being normal, I think canola competes right along side of soybeans. It can be a crop of equal value, plus it provides op-portunities for flexibility."

The flexibility is what appeals to Guthrie the most about canola, which allows him to diversify and spread his workload out. "Part of my operation is custom work," he ex-

plained. "When we get into soybeans in the fall, it's quite demanding. If I can get some of my own fields done in July, by harvesting canola instead of soybeans, then it frees up time in the fall."

Guthrie hasn't had problems with marketing either. "I market my canola directly to Michigan Agricultural Commodities," he said. "They buy it from me at a farm pickup price. They provide the truck, they pay for hauling and they do the export paperwork and all the other paperwork. I just haven't had any problems."

Although a lot of people have sat back to watch and wait, Guthrie decided to take the advice of just getting into it and doing it. "We'll continue to improve canola," he said. "But I can't see from my experience why an individual should wait for that to happen before he starts getting some experience under his belt."



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Scouting for First Generation European Corn Borers

Doug Landis and Mike Haas, Entomology, MSU

Last year's severe infestation of European corn borer (ECB) has convinced most growers that this is a pest that needs to be watched for in 1992. Scouting individual fields is the only way that producers can make good decisions regarding ECB management.

Corn borer populations vary greatly from year to year and from field to field. Growers need to pay special attention to earlier planted (taller) fields because they are frequently more attractive during first generation egg laying. In most of Michigan, the European corn borer has two generations per year. This article focuses only on scouting for first generation borers.

Description of Life Stages

Scale-like, rounded eggs are laid in masses, up to 1/4-inch long, on the underside of corn leaves near the mid-vein. Each egg is about the size of a pinhead; they overlap much like fish scales. Although whitish when first laid, they darken and form a definite dark spot (the head of the larvae) just before hatching. Newly hatched larvae (or borers) are about 1/16-inch long. They have smooth whitish bodies, black heads, six small legs



near the head, and five pairs of fleshy legs (prolegs) near the tail. Full-grown larvae range from 3/4- to 1-inch long, vary in color from gray to creamy white and have numerous prominent dark brown or black spots. Adults are pale yellow to light brown with wavy lines on the wings and have a wingspread of about one-inch.

Damage

Whorl feeding produces the "shothole" type of damage typical of early first-generation borer damage. As they mature, larvae leave the whorl to tunnel into the stalk of the corn plant. This weakens the plant and can result in reduced yields and lodging. While whorl feeding has no significant effect on corn yield, an average of one borer per stalk reduces yield by approximately 5 percent.

Scouting and Economic Thresholds

Moth numbers and flight periods can be monitored using blacklight or pheromone traps. Growers can obtain information on when to time scouting activities from alerts issued by county agents.

First generation - Begin sampling when the first larvae are sighted in your area or when corn is 16-22 inches in extended leaf height. Choose five random locations of the field and check the whorl leaves of 20 consecutive plants in each area (100 plants/field) for feeding damage. Keep a count of damaged plants in each area and record this number. Damage is evident as either white spots, "shot-holes", or broken leaf midribs.

Then choose two damaged plants in each of the five areas (10 plants/field) and examine them for larvae. Grasp the top of the whorl and pull it out of the plant, unroll the leaves and look for whitish larvae with four spots per segment and black heads.

Count the number of live borers found and record this number. For any plant in which three or more live borers are found, additional borers in a plant do not significantly increase damage. If you find no borers in damaged plants, they may have already tunneled into the stalk, and it is too late to control them with insecticides. Alternatively, natural enemies may have killed the larvae leaving only damaged plants but not borers.

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Time Treatments For Corn Rootworm

If you plan on applying a cultivation-time treatment for corn rootworm larvae, it should be completed before June 15 to maximum effectiveness. It's critical that these treatments be adequately incorporated into the soil since there is less opportunity for rainfall to do the job. This is typically done by directing the treatment (granules or liquid) at the base of the plant (ahead of the cultivator shoes) and adjusting the cultivator to throw soil onto the base of the plant. We have found these treatments effective if properly applied.



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June 15, 1992

Financial Help for Beginning Farmers Possible Through FmHA

Beginning farmers may get a break if a young farmers' farm credit bill continues to move through the legislative process. It recently passed by a vote of 19-0 in a House Agriculture subcommittee, and is expected to go before the full committee before the July recess.

"This important legislation is designed to help the next generation of farmers and ranchers carry on the outstanding tradition of production and stewardship that the current and past generations have provided," Farm Bureau said in a submitted statement. Rep. Glenn English (D-Okla.), chairman of the committee's credit panel, introduced legislation (H.R. 4906) that would improve the operation of the Farm Credit System and make it easier for new farmers to get loans.

Hyde Murray, an assistant director of national affairs for the American Farm Bureau Federation, said the main provisions of H.R. 4906 would establish an emphasis within the Farmers Home Administration on beginning farmer programs and a new procedural framework for FmHA lending. Other provisions would make limited changes in the Farm Credit System and would impose a 15-year limit on the length of time an individual can participate in any combination of FmHA direct and/or guaranteed farm operating loan programs.

"As a general policy, Farm Bureau does not support the extension of subsidized agricultural credit," Murray said. "However, in the case of young farmers and ranchers who face enormous obstacles in getting started in the current high capital type of modern agriculture, we do have a policy that supports



'special programs maintained to deal with the problems of young farmers trying to get established in farming.'"

Recent studies have shown that there are twice as many farmers over age 60 as under age 30, and many of these older people plan to retire during the next decade. "What we are attempting to devise is a blueprint for the future of rural America and a reasonable hope that those who choose farming and ranching as a way of life have the means to do so," English said.

USDA Announces 1993 Wheat Acreage Set-Aside of Zero Percent

USDA has announced a zero-percent acreage reduction program for 1993 crop wheat, along with a commitment to use its export promotion programs to sell the expected large supply, according to *Knight Ridder News*. USDA also announced the 1993 price support loan rate for 1993 crop wheat would be \$2.45 per bushel, up from \$2.21 for 1992 production.

USDA chose a zero-percent ARP, which it previously estimated could lead to a 2.415billion-bushel crop, "to ensure sufficient supplies of U.S. wheat for domestic and export needs," USDA Secretary Edward Madigan said in a statement.

By law, USDA could have set an ARP of up to 15 percent, and even considered a "no set-aside" option that would have allowed more acres into production than a zero-percent program. However, the no-set-aside plan was universally rejected by producers because they would lose certain guaranteed crop disaster subsidy payments.

The National Association of Wheat Growers officially recommended a 2.5 percent ARP, but said they could support a zeropercent program if USDA pledged to aggressively use its subsidy and credit programs to export wheat. Madigan seems to have taken the hint.

"We want our farmers to recognize the commitment to exports behind this decision," he said in the statement. "We will continue to be a reliable supplier of wheat and we will sell that wheat into world markets.



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