Weather Hampers Spring Planting and Crop Development Across Michigan and Corn Belt States

Michigan’s wet and cool April weather pattern kept many tractors and planters in the shed, while farmers anxiously awaited the arrival of warmer and drier days. Average statewide growing degree day accumulations are behind 56 units, while rainfall has boosted moisture levels to surplus conditions in 80 percent of Michigan’s fields.

According to the Michigan Agricultural Statistics Service, corn planting was 1 percent complete as of May 3, compared to 10 percent on average. Sugar beet planting was significantly behind average with just 1 percent planted as compared to 50 percent on average. Oats, potatoes, and acres tilled were also well behind the five-year average as of press time. Fruit development was behind average due to the cool, wet weather, as well. Sweet cherries and tart cherries were primarily in the dormant to green tip stages of development, as were apples and peaches. Vegetables were also lagging, with asparagus production yet to begin, and strawberries just breaking dormancy.

According to MSU entomologist Doug Landis, continued weed growth in unplanted fields could mean increased pest pressures such as seed corn maggot due to cool soil conditions. Slugs and cutworms could also be more prevalent once the corn plant has emerged due to slow growth.

"With the increased opportunity for weed growth on fields, which we know to be attractive for the egg laying of black cutworm, we might expect some higher risk of cutworm injury if there’s a lot of green material in a field," explained Landis. "Having said that, however, we have not had cutworm activity in the area yet, and activity in the past on the farm on the edge of Cleveland where the Indiana has been very slow as well."

Landis said that the lack of heat units has helped to keep insect pressure to a minimum thus far in Michigan and corn belt states. Iowa, Illinois, Indiana, and Ohio are all reporting planting delays. Illinois has been particularly hard hit with planting reported at only 1 percent complete compared to 46 percent on average.

MSU weed specialist Jim Kells said he expects weed management practices will need little modification at this point, especially in conventional tilled fields. "If our planting is delayed much longer, the weeds could be bigger and that may require farmers to rethink their burndown approach in no-till situations," he said. "It may require switching to a different program altogether."

Kells said the bigger issue is going to focus on hybrid selection and when a farmer should switch to a shorter season hybrid for corn to avoid problems experienced last fall. According to Cargill territory representative Ann Briggs, farmers should carefully analyze their own situations before making drastic hybrid changes. Farmers need to keep in touch with their seed dealers and let them know as soon as possible if they plan on making a hybrid change, she said. "Typically, we’ll exchange 10 percent of our longer day hybrids for a shorter season in a normal year, and we can usually accommodate that change given enough advance notice."

Proposal A - School Finance Reform Faces June 2 Vote

The bills and the details to implement Proposal A are still being discussed and negotiated as of press time. On June 2, it will be up to Michigan voters to decide the future of school finance. Proposal A would constitutionally change the way Michigan finances its schools and would keep future legislative involvement to a minimum, according to MBF Legislative Counsel Ron Nelson.

"Proposal A constitutionally provides a $4,800 student foundation grant for those school districts which levy the 18 mills for operating. In addition, voters may approve an additional nine mills for enrichment. For a lack of quality and a reward for curriculum that meets the standard will continue."

Nelson said that local school boards will have substantial responsibility in developing a budget based on the dollars available. With the $4,800 guarantee at 18 mills, any school district below $4,800 will be increased by a maximum of 10 percent per year up to $4,800. "Virtually all rural school districts will see increased funding, many at the 10 percent maximum allowed," said Nelson. "For example, if a school district is generating $3,500 and levying 18 mills, that school district would see a 10 percent increase, or approximately $350 increase funding for a total of $3,850 per pupil. This increase would continue until the school district reaches the maximum $4,800, which will be indexed upward annually based on the revenue received by the state."

Most rural school districts will have more dollars available for each student under Proposal A. The $4,800 foundation grant will cover many of the costs currently associated with education. The percentage and details of teacher retirement, adult education and special education are currently being negotiated.

Michigan Contributions To 50 Billionth Export Bushel

The Michigan Corn Growers Association (MCGA) held a brief ceremony at the Farm Bureau Center in Lansing recently to send off Michigan’s contribution to the commemorative 50 billionth bushel of grain exported from the United States.

MCGA leaders mixed corn contributed from the four corners of the state. The corn was then mailed in a special container to New Orleans, where it was combined with corn from the rest of the U.S. and shipped to Japan in a national ceremony May 6.

"The export of 50 billion bushels of U.S. corn is a tribute to the entire corn industry," said Larry Nobis, President of the MCGA. "Without the exports of the past 15-20 years, where would U.S. agriculture have been? Exports have definitely been a boost to our industry.

Nobis said corn is a major Michigan farm commodity, with corn exports contributing over $200 million each year to the state’s economy and providing thousands of jobs. "Of the purposes of the MCGA and the National Corn Growers Association (NCGA), it is to develop markets that have overseas and increase those markets in years to come. The corn industry will also continue to look for new industrial uses for our product."

The MCGA is an association of 500 Michigan corn growers and is affiliated with the NCGA. Members are interested in furthering the economic well being of corn producers in the state.
Of the $66.5 million designated for butter, a readily available surplus commodity, $55.4 million is being distributed through the Food Security Act, credits issued under the Bush administration. At last count, those credit defaults have already begun and will have to be purchased. The funds will be transferred by May 18, with shipments to begin 30 days later. This step will allow the import of butter to the United States, providing a market for farmers who have not been able to sell their products elsewhere.

The package includes $227.5 million for corn, $105 million for soybean meal, $66.5 million for sugar, $56 million for wheat, and $40 million for high value horticultural crops. The funds are intended to help farmers who have been affected by the US tariffs imposed on EU exports. The USDA is also seeking public comments on a proposal to establish a national fluid milk promotion program. The program's mandatory national checkoff funds the National Dairy Board and Empower America.

Ag Secretary Mike Espy has announced an August referendum of U.S. dairy farmers to determine whether they favor continuing their national dairy promotion and research activities. The referendums, according to USDA, will be held in May and June.

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The effort, "Operation Farm Ukraine '93," is being coordinated by three U.S. agricultural cooperatives: Morton Buildings, Kalkaska, MI; Adirondack Rust, Morton Buildings, New York; and Downruss, Morton Buildings, Wisconsin. The project is aimed at providing funding for the purchase of machinery and equipment to support the Ukrainian farmers' efforts to increase their crop yields.

Investment Tax Credit In Doubt

The Investment Tax Credit (ITC) has been a controversial issue in the U.S. government. Some favor increased business expensing, while others favor changing the corporate income tax system to reduce taxes. The ITC is a tax credit that reduces the amount of taxes that a business must pay. However, some are calling for its elimination because they believe it is not providing the intended benefits.

European Brits Can't Agree On Subsidies

With France leading the call for greater farm subsidies and other nations seeking a tight European Community budget, the issue of farm subsidies is likely to be a major topic at the upcoming meetings of the European Union. The debate could lead to tougher environmental regulations. Among other things, the bill would abdicate the U.S. role in Environmental Quality and the farm bill's responsibilities for compiling environmental statistics to a bureau within the new department. Sen. Dominick (R-Okl.) offered an amendment to require economic and employment impact statements to accompany every reported bill and every proposed legislation. The amendment would make Congress and the agencies better informed of the consequences of proposed regulations and legislation prior to implementation.

U.S. Farms Reach Out to Ukraine

One hundred U.S. farmers left Chicago recently for a three-week stint to help with spring planting on 1,000 private and collective farms in Ukraine, according to the Chicago Tribune. The effort, "Operation Farm Ukraine '93," is being coordinated by three U.S. agribusiness firms – J.I. Case, ICIC Seeds and Trans-Chemical – in hopes of ultimately expanding the Ukrainian market for U.S. goods, services and technology.
National Legislative Priorities

During the 1993 MFB Washington Legislative Seminar, the 110 farmers from throughout Michigan who traveled to Washington, D.C. talked to their Congressmen about key agricultural issues. Those key issues included private property rights, a Constitutional amendment to require a balanced federal budget, proposed lowering of the federal estate tax exemption, deduction of health insurance premiums paid by self-employed persons and registration of minor use pesticides.

Following is a summary of the issues discussed with the congressmen and their decision, as of April 22 to oppose the legislation.

Private Property Rights – H.R. 561

This bill would require federal agencies to establish appropriate procedures for determining whether a proposed project might result in the taking of private property. Farm Bureau strongly supports this requirement for federal agencies to “look before they leap” on the private property, rights of landowners.

Michigan congressmen who have cosponsored H.R. 561 are Jim Barcia (D-Bay City) and Dave Camp (R-Midland).

Balanced Budget – H.J.R. 103

This resolution would provide for a Constitutional amendment to require a balanced federal Budget. Farm Bureau strongly supports H.J.R. Res. 103.

Michigan congressmen who have cosponsored H.J.R. Res. 103 are Jim Barcia (D-Bay City); Dave Camp (R-Midland); Paul Henry (R-Grand Rapids); Peter Hoekstra (R-Holland); Joe Knollenberg (R-Bloomfield Hills); Paul Kelly (D-Grand Haven); Nick Smith (R-Addison); and Fred Upton (R-St. Joseph).

Federal Estate Tax Exemption

H.C.R. 6

This resolution expresses to Congress that a decrease in the federal estate tax exemption and supports H. Con. Res. 6. $600,000 to $200,000 would devastate increasing the federal estate tax by lowering land), Joe Knollenberg (R-Bloomfield Hills), and Fred Upton (R-St. Joseph).

Members of the Michigan congressional delegation who have cosponsored H. Con. Res. 6 are Jim Barcia (D-Bay City); Dave Camp (R-Midland); Barbara Roe Collins (D-Detroit); Peter Hoekstra (R-Holland); Joe Knollenberg (R-Bloomfield Hills); Bart Stupak (D-Menominee); and Fred Upton (R-St. Joseph).

Health Insurance Deduction

H.R. 162

H.R. 162 would extend the 25 percent federal income tax deduction self-employed persons can claim for the cost of their health insurance premiums. The bill would also increase the deduction to 100 percent of the cost of the health insurance premiums paid by self-employed persons. Farm Bureau strongly supports H.R. 162.

Members of the Michigan congressional delegation who have cosponsored H.R. 162 are Jim Barcia (D-Bay City), Dave Camp (R-Midland); Barbara Roe Collins (D-Detroit); Peter Hoekstra (R-Holland); Joe Knollenberg (R-Bloomfield Hills), Bart Stupak (D-Menominee), and Fred Upton (R-St. Joseph).

Minor Use Pesticides - H.R. 967

H.R. 967 would amend the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to encourage the registration of products that are used on crops such as blueberries, cucumbers, etc.

Michigan congressmen who have cosponsored H.R. 967 are Jim Barcia (D-Bay City); Dave Camp (R-Midland); Paul Henry (R-Grand Rapids); Peter Hoekstra (R-Holland); Joe Knollenberg (R-Bloomfield Hills); Paul Kelly (D-Grand Haven); Nick Smith (R-Addison); and Fred Upton (R-St. Joseph).

Action Needed:
If your congressman has cosponsored these priority bills, please thank them for their support and encourage a special thank you would be given to Congressman Jim Barcia (D-Bay City) and Congressman Dave Camp (R-Midland), who have cosponsored all of these priority agricultural bills.

MFB Contact: Al Almy, Ext. 2040

Inheritance Tax Repeal

MFB Position:
Michigan Farm Bureau strongly supports the repeal of the Michigan Inheritance Tax and adoption of the federal Pick-up Tax.

Action Needed:
Contact your state senator urging support for H.B. 4597

MFB Contact: Ron Nelson, Ext. 2043

Unemployment Compensation Insurance Reform

MFB Position:
MFB supports S.B. 2 as passed by the Senate. Michigan Farm Bureau would support amendments that reinstated the more traditional resembling Farm Bureau policy.

MFB Contact: Howard Kelly, Ext. 2044

Proposal A – School Finance Reform

School districts will ultimately have more responsibility in developing their budget support for a majority of Michigan’s rural school districts, taxpayers will see a significant millage reduction for school operating with a 22 mill reduction from the current level. Even if the school district decides to vote additional mills (maximum of nine), they may still see a substantial reduction in operating mills.

Under the proposal, all school districts are guaranteed an increase in funds and a combination of additional mills (maximum of nine), they may still see a substantial reduction in operating mills.

In addition, the proposal would reduce the amount each millage vote by 10 percent, reducing the state share, which would bring about a grant to the state level of $4,850. The bill would effectively repeal the Michigan Inheritance Tax starting Oct. 1, 1993. Michigan would adopt the Federal Estate Tax as 28 other states have done. The federal Estate Tax exempts estates up to $600,000 and provides a lower tax rate than the Michigan Inheritance Tax for those estates larger than $600,000.

The federal Estate Tax is often referred to as the federal Pick-up Tax because the states allow the maximum credit, the same as on the federal Estate Tax return. In addition, the bill will extend the filing deadline, currently 105 days after death, to 180 days, which is the same as the federal Estate Tax deadline.

The House Labor Committee held and hoped to break the deadlock to tie vote in the committee and report a House substitute for S.B. 2, sponsored by Sen. Janine Emmans, R-Detroit. The original bill followed Farm Bureau policy, but the bill that passed the Senate was a watered-down version.

Action Needed:
When Committee reports are introduced on the House floor that more closely resemble Farm Bureau policy, then calls to your representative, asking for support of S.B. 2 will be appropriate. The original bill followed Farm Bureau policy, but the bill that passed the Senate was a watered-down version.

Seatbelt Law Violation

MFB Position:
Members of the Michigan Farm Bureau were notified that MFB is opposed to law enforcement, safety rules and the wearing of seat belts, but opposes the expansion of current police powers and, therefore, MFB opposed the bill.

MFB Contact: Howard Kelly, Ext. 2044
Cool and wet weather was the rule for much of April across Michigan. The combination of below normal temperatures (generally 1 to 3°F below normal) and above normal precipitation (.5 to 1.5 inches) above normal had varied impact on spring field work.

Some areas of the state are experiencing substantial delays in spring field work and early planting to delayed initial development of overwintering crops, resulting in reduced chances for subsequent late spring frost damage. Fieldwork delays due to the wet weather are also widespread across the majority of the corn belt.

While the latest National Weather Service 30-day outlook for May calls for a change toward warmer than normal temperatures and normal to slightly above normal precipitation, the 90-day outlook is forecasting average temperatures through the end of July to be below normal, with precipitation expected to continue near, to slightly above, normal levels.

### Corn Belt Planting Progress Reports

**Ohio**

Limited field work had been completed prior to additional rainfall which put a halt to work, according to the Ohio Agricultural Statistics Service. Corn was 4 percent planted as of May 3, compared to the five-year average of 28 percent. Soybeans were less than 1 percent planted down from the 5 percent average figure.

Oats were reported as 25 percent planted, down from the 80 percent average. Only 10 percent of the crop had emerged compared to the 40 percent average. Growers are reportedly talking of switching out acreage to soybeans, due to delayed planting.

Winter wheat was in generally good condition, although development remained slow. The crop was rated 13 percent excellent, 44 percent good, 33 percent fair, 8 percent poor, and 2 percent very poor.

**Indiana**

Unseasonably wet weather continued to stall corn planting, according to the Indiana Agricultural Statistics Service. Corn planting was 1 percent complete, compared with 32 percent on average.

Oat seeding was at 32 percent complete compared to the 82 percent average. Winter wheat was 11 percent excellent, 72 percent good, 14 percent fair and 3 percent poor.

Topsoil moisture levels were rated 71 percent surplus, 29 percent adequate, while subsoil moisture levels were rated 65 percent surplus, and 35 percent adequate.

**Illinois**

Corn planting in Illinois was nearly three weeks behind as of May 3, according to the Illinois Agricultural Statistics Service. Corn planting stood at 1 percent complete compared to the five-year average of 46 percent.

Oat seedings were 30 percent complete compared to the 93 percent average. Winter wheat was rated 4 percent excellent, 76 percent good, and 26 percent poor. Soil moisture levels were reported 11 percent adequate, and 89 percent surplus.

**Iowa**

Most planting activity had taken place in western portions of the state with farmers skirting around wet spots, according to the Iowa Agricultural Statistics Service. Serious out planting delays were prompting many farmers to consider switching to other crops such as soybeans.

Corn acreage planted stood at 3 percent, down from the 27 percent average as of May 3. Primary seeded preparation reached 30 percent, as compared to the 83 percent average level. Soil moisture levels were rated 31 percent adequate and 69 percent surplus.
Wet Spring Means Planting Adjustments

Farmers will have to adjust their planting and herbicide applications around the wet spring weather, according to Tom Thomson, corn specialist at Ohio State University. He says when things dry out sufficiently for field work, farmers should get there early to establish light tillage or no-till are the best alternatives this year.

1990 was a good example of how things can get fouled up by the weather. The last week in April that year was great for planting and most farmers completed their preliminary tillage. Then it rained throughout May.

"Only half of the corn crop was planted by June, because farmers couldn't get back in the field," Thomson says.

There is usually a significant yield reduction if corn is planted after May 10-15, Thomson says. Farmers can expect to lose

Wet Fields and Tillage Considerations

Dan Coffin, Regional Agronomist, Northrup King

What are some key ingredients to top yields and profitable corn production? Some key ingredients would include top genetics, uniform stands, nutrients, water and sunshine.

This isn't an exhaustive list, but it's enough to make a point about the damaging effects of till soil. Fields throughout Michigan have been extremely wet and April is flying by. All of us are anxious to get started and are tempted to till fields that are simply too wet.

What happens when fields are tilled too wet? Soil is compacted and structure is damaged. Compacted seedbeds result, which enhance the probability of poor seed-to-soil contact.

Compacted seedbeds can contribute to denitrification of nitrogen, poor root growth, seedling diseases, stalk rot complex, stunted growth and reduced water availability. All of these can ultimately reduce the yields of your chosen hybrid.

Uneven emergence is likely to occur if dry conditions persist after planting. Slowly emerging corn is like runt hogs. They are always behind and rarely add much to the profitability. Plus, irregular stands resulting from poor seedbeds will hurt yields.

Cloddy seedbeds can also contribute to poor weed and insect control. Compacted seedbeds can contribute to denitrification of nitrogen, poor root growth, seedling diseases, stalk rot complex, stunted growth and reduced water availability. All of these can ultimately reduce the yields of your chosen hybrid.

Many producers in 1992 were fortunate to avoid severe reductions in yields resulting from soil compaction due to ample rainfall throughout the summer.

In years with a dry summer, producers would have been hurt much worse. The poorly developed root systems were able to get all the water and nutrients needed last year. Many fields had good yields, but did not have top yields because of drowned-out spots and lack of nitrogen.

I still wonder how high the yields could have gone in Michigan if there had been some bright sunshine between the rains. We agronomists are never satisfied.

When planting soybeans early in cold soil, the planting depth should be 1 inch to 1-1/2 inches. No-till soybean plants are usually smaller, so the crop should be planted in 13 inch rows or drilled. Beuerlein says to make sure the seed is covered for good seed-soil contact.

Nitrogen application on wheat should also be adjusted for wet weather, Beuerlein said. In most years, nitrogen should be applied between March 15 and April 15. But since wheat growth is behind this year, there should not be a yield loss if nitrogen was applied by May 10, Beuerlein says. He suggests applying one pound of nitrogen for every bushel of anticipated yield.

Weed specialist Mark Loux says herbicide programs should be adjusted for the wet spring and any consequential changes in tillage.

Farmers planting no-till corn and soybeans should use a knock-down chemical such as Roundup to control the weeds that emerged before planting. Weeds are behind schedule because of the cold and this should keep knock-down costs low.

Most farmers will be anxious to get crops planted when the soil dries and the application of pre-plant and pre-emergence herbicides may be delayed, Loux says.

As planting is delayed, farmers should consider switching from a pre-emergence to a post-emergence herbicide program. Late planting also reduces the need for a long-residual herbicide program, because many of the early weeds are removed by tillage or a knock-down herbicide.

Late planting results in a more rapid canopy closure and a shorter period of weed emergence. This will make a post-emergence program easier to implement, Loux says.

In no-till soybeans, farmers should consider using a knock-down herbicide at planting followed by post-emergence herbicides, because of the reduced population of broadleaf weeds in no-till fields.

Loux says herbicide runoff this year has been lower than might be expected. There's been minimal application so far because of the rain.

Over 55 stores of Michigan to serve you. Be sure to stop in at your local Sherwin-Williams store today!
Dr. Jim Hilker, Dept. of Agricultural Economics, MSU

**Corn**
With the late planting dates for corn, weather remains the big market mover. However, economics and other factors are also adding to the mix. Last year's carryover to stick with, the USDA projects 1.3 billion bushels of carryover. That is another potential that we will see USDA expectations of a 4 percent increase in soybean production as of April, there are a few potential roadblocks. We are exporting more each week than we are making in new sales. This means summer sales will have to pick up in order to continue to top the large shipments. An impediment to new sales are the problems with the meat trade, though, the Russians are not real keen on racking due to higher shipping costs. And holding up pretty well as of the end of April. Soybeans will come to the market eventually and buyers seem to be willing to wait. With lower inflation and interest rates, seem to be holding on to more of their crop. The odds are we will have high yields. Spring hogs into a tailspin. In other words, the shipping? At this point, 75 percent of the old crop soybean basis continues to narrow and is now on the wide side of an expected range. This means that while there may be more gains to basis narrowing, it could quickly be eliminated by quality deterioration as we move into warm weather. There is anything changing in your stored corn problems, and the experts say there is, then move it. If you want to stay in the market for a possible scare, consider using a basis contract. We have had a fairly sharp drop-off in new crop prices. At this point, consider holding further new crop sales. While there is downside risk, the odds are a little higher for a small rally this spring or summer. Be ready to forward price on rallies.

Dr. Larry Hamm, Dept. of Agricultural Economics, MSU

**Wheat**
The winter wheat crop is close to 80 percent good-to-excellent and only 2 percent poor indication that we will meet USDA expectations of a 4 percent increase in soybean production. However, the 1992-93 winter wheat plantings are running behind normal, but the moisture level is good and expectations for a good crop are high. If production does increase from last year, we will probably need to find a home for it domestically. This means increases in feed use and exports. While there are some new crop sales, it would mean significant feed use competition with corn this summer.

**Soybeans**
Brazil's crop looks great with their harvest well over 50 percent complete. Late corn plantings could well mean more soybean acres than indicated by the Prospective Plantings Report. But, given these two negative factors, the soybean market was holding up pretty well as of the end of April. One factor that is helping, (but we don't know if it will last) is Brazilian producers seem to be holding on to more of their crop. They are better capitalized this year and, with lower inflation and interest rates, storage costs are lower. However, the soybeans will come to the market eventually and buyers seem to be willing to wait. U.S. exports, both shipments and sales, continue to run at a rate which will meet the needs of year-to-date levels. Year-to-date corn exports are 17 percent above a year ago and only 2 percent below a year ago. While lots of things can still happen, the odds are the corn market will hold up ahead of shipping costs. And bullish commodity will be purchased due to higher shipping costs. And two, the Russians are not real keen on racking due to higher shipping costs. And holding up pretty well as of the end of April. Soybeans will come to the market eventually and buyers seem to be willing to wait.

**Hogs**
Hog slaughter in the last three weeks of April were above year ago levels. Perhaps the hog market could be moving closer to the correct price level, but the USDA market year projections (the marketing year runs through Aug. 31). Shipments are expected to be up 11 percent and exports-year-to-date are up 15 percent.

**Strategy:** The old crop soybean basis continues to narrow and is now on the wide side of an expected range. This means that while there may be more gains to basis narrowing, it could quickly be eliminated by quality deterioration as we move into warm weather. There is anything changing in your stored corn problems, and the experts say there is, then move it. If you want to stay in the market for a possible scare, consider using a basis contract.

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USDA marketing year (projections: the marketing year runs through Aug. 31). Shipments are expected to be up 11 percent and exports-year-to-date are up 15 percent.
Dairy Profits in 1992 Down Compared to 1991

Sherill B. Nott, Dept. of Agricultural Economics, MSU

Michigan dairy farmers faced unusual weather in 1992. The impact on profits is only recently becoming known as income taxes are filed and profit measures calculated. Preliminary results show dairy operations keeping their books with MSU’s Telfarm system made less money in 1992 than in 1991. Milk price was up. But, many crop results were unfavorable. The details follow.

Data Source
The 1992 results are the averages of 75 specialized dairy farms. They are preliminary, and may change as individual farm data are corrected and expanded in the future. The 1991 results are the final averages of 203 farms. The average farm in 1991 harvested 485 acres and had 107 cows. The 1992 averages were 478 acres and 111 cows.

Profits Compared
Three profit measures are shown in Table 1. All show 1992 was less profitable than was 1991. Milk price was up. But, many crop results were unfavorable. The lower yields accompanied inventory losses during 1992 for corn grain and hay crops, as shown in Table 3. The net impact for all crops was a loss of $3,366. Dairy livestock increased by enough to have an average gain of inventory of $1,659 for crops and cattle during the year.

Feed Costs
The milk sold per cow in 1992 was over a thousand pounds less. The feed cost per cow was only $38 less. This calculation "sells" farm-grown feed to the dairy enterprise at the year end price used to value feed inventory. The "Other foods" in Table 4 were all purchased. They mainly protein supplements and high energy feeds.

Crop Results
The major crops grown on dairy farms and their yields are given in Table 2. Corn for grain, corn silage and hay crops had noticeably lower average yields in 1992 than in 1991. The small grains of oats, barley and wheat had higher yields. The farms in 1992 managed fewer owned acres, rented two less acres and had five fewer acres set aside or left idle. The 75 farms in 1992 harvested an average of 478 acres.

Management Income Calculation
Management Income Calculation

<table>
<thead>
<tr>
<th>Management Income Calculation</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Income per Cow</td>
<td>$2,633</td>
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<tr>
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<td>Management Income</td>
<td>$302</td>
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</table>

Discussion of Data Source
The Telfarm system is not a random data source. It may be representative of the bigger, and better managed farms in Michigan. The 1991 averages were from the final report of 203 farms after all farmer corrections were completed. The 1992 averages were preliminary results of only 75 farms.

The 75 farms in 1992 may or may not have been among the 203 farms selected in 1991. The 1992 farms were computer checked to ensure several factors were within set ranges. Some of the farms may have had incomplete records.

The final report on 1992 farms will be out in late summer; the individual items are expected to differ a bit from these preliminary results. More details on the preliminary results can be obtained from the author by asking for Staff Paper No. 93-19.
Use Common Sense to Prevent Falls From Ladders

Falls from ladders may not happen on the farm every day—but when they do, the likelihood of serious injury is very high. Such falls usually involve either an equipment failure or poor judgment. Sometimes a rung, step, or side rail fails. Or a ladder may be set at the wrong angle. Or it may be set on a soft, uneven, or slick surface.

Problems also result when users try to climb with heavy or awkward loads. Overreaching, working in strong winds, and climbing all the way to the ladder top are other unsafe practices. And it's possible that someone climbing a ladder might simply slip, get dizzy, or become disoriented.

Here are tips for preventing ladder falls:

- Choose a ladder long enough and strong enough for the job. Don't climb beyond the third rung from the top of a straight or extension ladder, or the second step from the top of a tripod ladder. When planning to exit a ladder to a roof, extend the ladder at least three feet beyond the roof line.
- Be sure your ladder is in good condition before you start climbing. Make needed repairs, or replace it.
- Don’t lean a ladder against a weak surface.
- Set the base of a straight or extension ladder out one foot from the building or tree for every four feet up. Doing so ensures the proper angle for best stability.
- Stay off high ladders in high winds or threatening weather.
- Set the ladder on firm, level footing. Use planks if the ground is soft. On uneven surfaces, block the low-side leg. Before climbing past the lower rungs or steps, make certain the ladder is stable and won’t slide out or tip sideways. Long ladders can be lashed at the top for added safety.
- Watch for overhead power lines when erecting or repositioning ladders. Use only wooden or nonconductive ladders near electrical wires or installations.
- Face the ladder when going up or coming down, and grasp the rungs or tree with both hands. Carry tools and supplies in a tool holster or shoulder sack—or transport them by rope and bucket.
- Wear comfortable shoes or boots with slip-resistant soles. Clean them before use, and choose a pair that will give a good grip. Plant each foot securely on the rung or step before putting your weight on it. Don't hurry. Take time to be safe.
- Keep a hand on a rung or rail while working, or lock an arm around the rail. If you need to work with both hands, lock a leg around a rung.
- Keep your belt buckle between the rails. Don't overreach or lunge for that last inch. It’s much safer to come down and move the ladder.

Handling Corn May Add to the Risk of Potential Respiratory Problems

Handling this year's corn as it comes out of storage may pose potentially serious respiratory risks for workers associated with the task.

Mold, broken, and fine material commonly found in the corn may create working conditions that could lead to farmer's lung disease, says Howard Doss, MSU Extension agricultural safety specialist.

Doss says that Farmer's Lung is one of the more serious respiratory ailments associated with Michigan agriculture. A current report by MSU's Center for Agricultural Safety and Health estimates that at least 15 Michigan farm workers will be afflicted each year by workplace-related lung diseases, including Farmer's Lung, Doss says.

"It is an illness that may develop as the result of inhaling dust containing bacterial or fungal proteins," Doss says. "The disease typically occurs among farm workers who handle silage, grain or animal bedding that is dusty or contaminated.

Farmer's Lung symptoms include tightness in the chest, muscle aches, chills, shortness of breath and sometimes, a dry cough. These symptoms often develop several hours after exposure. If the symptoms persist, seek medical attention, he advises. "Sometimes the symptoms disappear if the exposure was brief, but continued exposure to dust-laden conditions can reduce normal respiratory capacity and cause permanent damage," Doss says.

Doss recommends that all farm workers wear disposable dust masks (not painter's masks) or respirators whenever they are working around dusty conditions in the barn or in other confined working spaces and especially when they are handling this year's corn and corn silage.

At minimum, the dust mask or respirator should be capable of filtering mold spores. An example would be the NIOSH R9710 or equivalent (this is not a product endorsement).

Select a respirator appropriate to the severity of working conditions, he advises, and make sure it is properly fitted and used in accordance with manufacturer's instructions and state limitations. Respirator misuse may result in sickness or death, Doss says.

"Anyone wearing a dust mask or respirator must remember that they are designed to filter only dust and mold spores—they do not supply oxygen," he adds.

Masks should be disposed of or the filters replaced when normal breathing becomes noticeably difficult.

"It is important to know under what circumstances these masks or respirators can be used safely," Doss says. "When they’re matched to the working conditions, this type of personal protection can significantly reduce respiratory health risk associated with contaminated working conditions.

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"It is important to know under what circumstances these masks or respirators can be used safely," Doss says. "When they're matched to the working conditions, this type of personal protection can significantly reduce respiratory health risk associated with contaminated working conditions.
How Can an MDA Inspection Benefit You?

Did you know that MDA conducts inspections that are aimed at keeping farmers out of trouble with state and federal regulatory agencies? The Pesticide and Plant Pest Management Division (PPPMD) of the Michigan Department of Agriculture (MDA) operates under a cooperative agreement with the U.S. Environmental Protection Agency that gives MDA primary authority over pesticide use issues.

One of the requirements of the cooperative agreement is to conduct proactive inspections, called planned use inspections, in order to identify and resolve problems at an early stage. The inspections are also intended to derive information about general industry trends and issues in order to focus resources on these areas before they become problems.

In an effort to become more familiar with the farming community, the form contains questions on required and anticipated issues. In addition to suggested management techniques, the latter two pieces of information, however, are intended as information dissemination only, with no enforcement action intended.

PPPMD conducts 170 planned use inspections each year, with 85 inspections focused on commercial pesticide applicators and 85 on private pesticide applicators (farmers). PPPMD has been conducting planned use inspections since 1982.

The inspections are not intended to be a basis for enforcement actions, but rather to provide assistance to applicators in understanding and adhering to laws and regulations related to pesticide use. Even when violations are found, applicators will be given sufficient time to resolve the problems unless they pose an immediate threat to human health or the environment.

What can you expect when an inspector calls on you for a planned use inspection? Inspectors will attempt to inconvenience you as little as possible by scheduling an appointment with you. Approximately one to two hours will normally be required, however, that time may vary depending upon a number of factors. Inspectors will utilize a checklist-type form to review on-farm procedures in a number of pesticide areas including: pesticide storage, recordkeeping, application training, transportation, protective clothing and equipment, pesticide disposal, mixing and loading practices, and application equipment. Inspectors may also ask to observe a scheduled application.

EPA Rule Focuses On Farmworker Safety

The Environmental Protection Agency recently published a rule on Worker Protection Standards for farms, nurseries, greenhouses, and forestry operations that use pesticides, including insecticides, herbicides, fungicides and fumigants.

The rule will be phased in over the next year, with full implementation to be in effect by April 1994, says Mark Landmark, rural health and safety director for the American Farm Bureau Federation.

Not all provisions of the rule apply to family farm operations, Landmark said, but if anyone outside the immediate family is employed on a particular operation, it is classified as an employer and must comply with all the rules.

Strictly family farms must provide personal protection equipment, including safety gear which must be worn by workers according to label instructions. They also must observe restricted-entry intervals when pesticides are applied to a field, when required on the label of the material applied.

Other rules that apply to employers include: notification of employees when pesticides are to be applied and field-posting with signs; decontamination facilities available to field workers; transportation provided in medical emergencies; worker training programs; and certain information posted and available to workers, according to Landmark.

The Farm Bureau MemberLine™ VISA® and Gold MasterCard. Two good reasons why it pays to compare before you apply for a credit card...

Inspectors will utilize a checklist-type form to review on-farm procedures in a number of pesticide areas including: application training, transportation, protective clothing and equipment, pesticide disposal, mixing and loading practices, and application equipment.
AFBF Recommends Zero Acreage Reduction For 1994 Wheat

Citing decreased year-end wheat supplies and negative impacts on farm income that would result from a large wheat acreage reduction program (ARP), the American Farm Bureau Federation has recommended that the 1994 wheat ARP be set at zero percent.

In a letter to the Grains Analysis Division of the U.S. Department of Agriculture, the nation's largest farm organization also requested that loan rates for the 1994 wheat price support program be set at the basic formula rate as outlined by the Food, Agricultural, Conservation and Trade Act of 1990.

An ARP higher than zero percent also would have serious impact on net farm income, Farm Bureau stated. AFBF analysis indicates that for each 1 percent increase in the ARP, net farm income for the average farm in 1990 would have serious impact on net farm income for the average farm, according to Farm Bureau's letter.

Accounting for the cost of wheat production, USDA analysis indicates that for each 1 percent increase in the ARP, ending stocks from the 1994 wheat program will likely be extended by over 60 million bushels. "An ARP above zero percent would reduce the competitiveness of U.S. wheat in world export markets."

According to Farm Bureau, each 5 percent increase in the ARP percentage would further reduce U.S. wheat exports by approximately 2 percent.

"The United States has fought hard to stop the slide of U.S. market share of world wheat markets," Farm Bureau's letter stated. "Forgetting nearly 23 percent of our production through CRP, 092, and flex, acres would be counterproductive to further reducing the presence of U.S. wheat in international markets by imposing additional set aside requirements with an ARP."

Furthermore, Farm Bureau believes that Congress during the coming season, has failed to share of the costs resulting from unsuccessful world trade negotiations. As long as marketing loan provisions are in effect for a stalemate in trade talks, the organization said it would support the use of basic loan rates for wheat and feed grains price support programs.

Wheat Residue Effective Against Costly Soybean Pest

University of Kentucky research shows planting no-till soybeans into standing wheat stubble significantly suppresses development of soybean cyst nematode (SCN), a pest that causes growers millions of dollars in losses each year.

"We proved wheat residue reduces SCN development 60 to 75 percent by the end of a soybean growing season," says Don Hershman, Extension Entomologist at the University of Kentucky and Education Center in Princeton.

Hershman says the research results mean that producers who double-crop soybeans behind wheat might be able to use a shorter rotation cycle, and perhaps reduce dependence on resistant soybean varieties, to manage SCN effectively.

During the three-year project, soybeans were planted in residue and no-residue plots and the impact of tillage on these plots was studied.

"The presence of wheat residue, not tillage per se, appears to be the primary influence on season-end cyst levels," says Hershman, who notes tillage appears to be important relative to disturbing wheat residue. Disturbed residue apparently is less effective in keeping SCN at low levels.

The project found:

- Wheat-residue plots had significantly fewer cysts at season's end than no-residue plots—regardless of tillage practice.
- In residue plots, no tillage resulted in lower cyst levels than minimum tillage two out of three years.
- Wheat residue had no impact on yields.
- A 1992 study indicated that both wheat roots/crowns and straw must be present to control SCN populations during the growing season, it's ruled out possible explanations, but plans to expand research into other areas.
Most of the practices we can adopt to help safeguard water quality from contamination by crop protection chemicals are common sense: protecting wellheads from spills, rinsing containers, use of soil conservation farming methods, etc.

Common sense, however, takes a backseat to mathematics and engineering when it's spills, rinsing containers, use of soil conservation farming methods, etc.

Recent studies in several states have found that as many as one out of every three percent. Wrong pressure, wrong ground speed and worn or damaged spray tips are common.

Calibration errors add excess chemical costs, reduced yield due to pests if the chemical is under applied, crop damage if the chemical is over applied and increased potential for water contamination. What farmers need is a simple, accurate method to calibrate their sprayers as often as needed, or at least once a year.

### Calibration Made Simple

Below are simplified calibration and maintenance procedures for the ag chemical sprayers generally used in farming. Just follow these ten easy steps:

1. Fill your sprayer tank with water. Only use clean water to calibrate.
2. Measure the distance between the nozzles on your spray boom.
3. Choose the Test Course Length (in feet) from the chart below which corresponds to your nozzle spacing. For directed and band rigs, use the row spacing of the field you plan to spray. Carefully measure the appropriate course distance in the field and mark for easy visibility.

<table>
<thead>
<tr>
<th>Nozzle Spacing (inches)</th>
<th>Test Course Length (feet)</th>
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</thead>
<tbody>
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<tr>
<td>16</td>
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<td>38</td>
<td>340</td>
</tr>
<tr>
<td>40</td>
<td>350</td>
</tr>
</tbody>
</table>

4. Drive the test course at your normal spraying speed. Be sure to operate all equipment. Record the seconds required to drive the measured distance. For greatest accuracy, do the speed check with the sprayer tank half full. Be sure to take a "running start" at the starting flag so that your tractor/sprayer reaches the desired spraying speed before you begin timing.

5. Park your tractor/sprayer, but keep the engine running at the same setting used to drive the test course.

6. Set the desired pressure on your sprayer (this will vary with the type of spray tips you use and the gallons per minute you wish to spray through them. Consult the spray chart for the tips you have chosen).

7. Using a plastic container marked in ounces (a baby bottle or measuring cup works fine), collect the water sprayed from one nozzle during the same amount of time that it took you to drive between the flags on your test course.

8. Measure the flow of each nozzle on the boom to assure uniform distribution. If the flow rate of any tip is 10 percent greater or less than that of the others, replace it. If two or more are faulty, replace all tips on the entire boom. At about $3 each, the total cost is small compared to the avoided problems and dollars you will be saving by replacing defective tips. Whatever type of spray tip you choose, be sure to use all the same type of your boom.

9. The amount of water collected in ounces per nozzle equals gallons per acre applied. Vary the sprayer pressure slightly to fine tune your overall sprayer output.

10. Be sure to read the product label for appropriate application information.

### Maintenance Tips

Getting your sprayer ready for spring spraying generally involves three steps: cleaning strainers, examining the pump and valves, and checking for leaks.

1. Clean the line strainer and all tip strainers, and examine the tips for obvious signs of clogging or damage. Use only a soft bristled tooth brush to clean the tips, a wooden tooth pick or paper clip can severely damage the finely machined thin edges around the tip orifice. It's a good idea to replace all spray tips about every two years, or more frequently if you grow crops requiring frequent sprays.

2. Check the casing of the centrifugal pump for cracks caused by freezing of water left in the pump over winter. While the pump is running, check the throttling valves. The pressure gauge should move as you turn the throttling valve if it is working properly.

3. Check the hoses and hose clamps for splits and leaks by running the pump with various combinations of valves closed or partially closed to increase the line pressure.

### Proper Cleanup of Pesticide Spills Protects Water Supplies

When handling, transporting or using pesticides are a concern for every producer. But by knowing what to do if a spill occurs, whether it's on your property or on the road, you can help minimize the risk and prevent ground water and surface water contamination.

**Control the spill** as quickly as possible by restoring the container to its upright position, cluing a leaking valve or hose or putting a secondary container in place to catch the leaking solution. Of course, this will depend on what and how much was spilled and the state or local officials or your retailer will give advice on cleanup of spilled liquid. It may be most important to first divert a spill away from a nearby pond or stream and then attempt to stop the leak or spill. This is a judgement call that only you can make.

**Contain the spread** of the spill when the spill has been stopped by creating soil dams in the path of the spilled liquid. It may be most important to first divert a spill away from a nearby pond or stream and then attempt to stop the leak or spill. This is a judgement call that only you can make.

**Begin cleanup** as soon as the situation has stabilized. Quick action on your part to clean up a spill is not only required in many states, but will prevent the chemical from leaching or washing away in a rainstorm.

**Use absorbent materials** on pavement or concrete to capture the spilled liquids. They can then be shoveled or swept. Non-chlorinated pet litter is an excellent, inexpensive absorbent material to keep on hand for such purposes.

**Properly dispose of** the drenched soil or absorbent material. This will depend on what and how much was spilled and the rules for disposal in your state. Contact state or local officials or your retailer for legally acceptable disposal options.

**Report the spill,** if required, before it threatens public health or the environment. If the spill is large or enters a waterway, you'll need to call the local EPA office, the local emergency planning office or the state health department. The reporting criteria will vary with the chemical spilled, however, so ask your dealer to check the Material Safety Data Sheet or call the manufacturer for further details.

**Who To Call:**

<table>
<thead>
<tr>
<th>EPA Hazardous Waste Hotline</th>
<th>Atlanta</th>
<th>404-347-3004</th>
</tr>
</thead>
<tbody>
<tr>
<td>800-424-9346</td>
<td>Boston</td>
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<tr>
<td>EPA Safe Drinking Water Hotline</td>
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<tr>
<td>800-426-4791</td>
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<tr>
<td>National Pesticides Telecommunications Network</td>
<td>Denver</td>
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<tr>
<td>800-888-7378</td>
<td>Kansas City</td>
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<td>National Approved Chemicals Association</td>
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<td>212-254-2657</td>
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<td>202-396-1580</td>
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<td>Chemicals Referral Center</td>
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<td>800-262-8200</td>
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<td>Chemtrec Emergency Hotline</td>
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When to Switch Corn Hybrids Because of Planting Delays

Oran B. Hesterman, Crop and Soil Sciences
Michigan State University

It's a well-known fact that if planted early, a full season hybrid can take advantage of a longer growing season, resulting in higher yields. However, late planting of a full season hybrid can become risky at harvest, since a killing frost could hit the crop prior to full maturity, resulting in higher grain moisture and lower test weights.

What is a Full Season Hybrid?
No hybrid can be considered full-season irrespective of where it's grown. In general, a full season hybrid is one that uses or requires the entire growing season available at a particular location to reach full maturity prior to the first killing frost.

A full season hybrid for a particular location will depend obviously on air temperature patterns throughout the growing season.

It's important to understand that the days designation used to identify a maturity group of hybrids may not be reflective of the actual number of days that it takes for a specific hybrid to reach maturity. This classification is used to classify hybrids according to when they mature in relation to other hybrids of known maturity.

Mid, short and ultra-short season hybrids could be considered as those which are approximately 5, 15, and 20 days relative maturity (RM) respectively, earlier than a full season hybrid for a given location.

For example, a 95-day RM hybrid does not necessarily mature in 95 days. However, under similar climatic conditions and cultural practices, a 95-day RM hybrid should mature approximately 10 days earlier than a 105 day RM hybrid.

Table 1 gives approximate RM for full to ultra short season hybrids for four different regions in Michigan.

Adaptations would need to be made due to local climatic conditions and cultural practices. These estimates are based on a planting date of early May.

What are Growing Degree Days?
A growing degree day unit (GDD) is a representative index of accumulated heat, normally derived from air temperatures at a given location. GDDs are calculated on a daily basis and summed for all or a portion of the growing season.

The most common way of calculating GDDs for corn is known as the "86-50" cutoff method. If the day's minimum temperature is less than 50 F, it's raised to 86 F. If the day's temperature is higher than 86 F, it's lowered to 86 F. This is because corn growth doesn't begin until temperatures are at least 50 F, and growth actually begins to slow at temperatures in excess of 86 F.

Next, calculate the average for the day by dividing the sum of the maximum and minimum by two. Finally, subtract the base temperature of 50 F from this average to get your GDDs for the day.

GDD = (Maximum Temperature + Minimum Temperature to be divided by 2) - 50

Seasonal GDD Accumulations in Michigan

The growing season in a climate such as Michigan is normally defined as the number of days between the last occurrence of 32 F in the spring and the first occurrence of 32 F in the fall. For purposes of this report, GDD day accumulations for various spring planting dates and the first occurrence of a killing frost of 30 F in the fall were used.

Twenty representative stations were chosen from corn producing areas of Michigan for calculation of GDD statistics for the period of 1961 to 1990. Percentile statistics of seasonal GDD accumulations are given in tables 2 and 3 for different hypothetical planting dates of May 20 and June 1.

In reading the data from these tables, seven numbers representing different percentages of seasonal GDD accumulation statistics are given for each station. In short, the numbers in the tables represent the minimum number of GDDs accumulated for the given percentile of days in the study.

For example, the 30th percentile GDD accumulation for a May 20 planting date in Allegan (Table 2) is 2488. This means that for the period 1961 - 1990, Allegan accumulated 2488 GDDs or more in 30 percent of the seasons (given a May 20 planting date).

Timewise, seasonal totals decrease only slightly, from April 20 to May 10, but fall rapidly thereafter, following the rapid seasonal rise in temperatures during May. This underscores the importance of early planting in Michigan, as potential accumulated GDDs lost by planting after early May become increasingly difficult to make up later in the season.

Using GDD information to Select Corn Hybrids

Some seed companies collect information on the required number of GDDs for a specific hybrid to reach specific stages of development such as silking and black layer. If this information is available, you
When to Switch Corn Hybrids Because of Planting Delays... (continued from page 12)

<table>
<thead>
<tr>
<th>Station</th>
<th>95</th>
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Remember, the tables and figures are long-term averages and likely will not correspond precisely to any individual year. However, they can be of great value if you are willing to manage your corn hybrid selection according to the long-term average climate for your location rather than according to your own guess of what the next growing season is likely to offer.

When to Switch Hybrids in Relation to Planting Date

The information on GDD accumulations at progressive planting dates (Tables 2 and 3) can be used as a guide when facing the decision of when to switch to a shorter season hybrid as planting dates are delayed.

If, for example, you farmed in the Caro area and you originally intended to plant a hybrid with a RM of 105 days, you would need 2500 to 2700 GDDs (Table 4) for the crop to mature prior to the first killing frost.

If planting was delayed until May 20 (Table 2), the normal GDDs (50th percentile) available would be 2283. In this case, the 105 RM hybrid would likely not mature prior to frost, and you may want to consider switching to a 95 day RM hybrid (Table 4).

The decision of when to switch to shorter season corn hybrids as planting is delayed will depend on:

- the extent of the delay
- your anticipated harvest date
- your individual assessment of the "odds" you desired or anticipated harvest schedule.

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### May 1993 Discussion Topic: Battling the "BTU Tax"

Because agriculture is such an energy-intensive industry, farmers are deeply concerned about the impact of President Clinton’s proposed BTU energy tax.

Reflecting that concern, Michigan Farm Bureau President Jack Laurie testified in Washington, D.C., on March 23 before a House Agriculture Subcommittee on the impact of the tax on the agricultural industry. “This tax would impose added costs on individual producers who cannot pass those costs on,” he told the congressmen. “Increases in transportation and processing costs will simply make our products less competitive in world markets.”

According to Farm Bureau estimates, the energy tax will mean farmers will incur $1 billion in additional production costs, about two percent of U.S. net farm income. Half the $1 billion hit would come from direct fuel costs; the other half would come from indirect costs resulting from price hikes for inputs like fertilizer and pesticides.

Laurie also told the congressmen that the tax will cause farm prices to decline, since many farmers receive the market price established in commodity markets minus the transportation and handling costs, which would be higher because of an energy tax.

According to an AFBF analysis, the proposed BTU tax on the heat content of various fuels would result in tax increases of 7.5 cents per gallon for gasoline, 8.3 cents for diesel and 2.3 cents for propane.

The new levies would affect all aspects of agricultural production, from running combine harvesting equipment to operating irrigation systems.

### Michigan Medical Malpractice Reform Nears Reality

The House of Representatives passed Senate Bill 270 (H-2), sponsored by Sen. Dan DeGroef (R-Port Huron), by a vote of 72-29. This bill was passed with only two substantive changes from the originally drafted Griffin-Bandstra substitute.

Language stating the intent of the Legislature in passing this bill, was removed. While it had no effect on tort reform, Farm Bureau supported it, feeling it could help in thwarting anticipated lawsuits challenging the enactment of this law, by leaving little doubt as to the intent of the Legislature.

The lower tier of the cap on non-economic damages was also raised to $250,000, to $250,000, to take inflation into account since the enactment of the current cap.

This bill has been of significant importance to members of the House of Representatives. In past years, a Medical Malpractice Liability bill could not even make it out of the House Judiciary Committee.

This time, through the efforts of the two co-chairs of the House Judiciary Committee, Reps. Tom Mathieu (D-Grand Rapids) and Mike Nye (R-Litchfield), a substitute bill S.B. 270 (H-1) was reported out by a unanimous vote. While their substitute was not perfect, it did break the logjam in that committee.

The bill has now been returned to the Senate, where they will vote on accepting or rejecting the changes to the bill that originally passed the Senate. If the Senate concurs with the language as passed by the House, it would be sent to the Governor for his anticipated signature.

A coalition, which MBF is a member of, will work with the original sponsor of the bill, Sen. Dan DeGroef, as the Senate makes its final decision. The bill could possibly be finalized by the date of this publication.

**MFB POSITION:**

Supports the Griffin - Bandstra substitute S.B.-270 (H-2).

**Farm Bureau Health policy excerpt:**

Farm Bureau members have a real concern for their family’s good health. Adequate health care is becoming unaffordable for many Americans and is virtually nonexistent in many rural areas. The American public perceives the health care/health insurance system to be in a crisis.

We support:

- A cap on malpractice settlements.
- Elimination of pain and suffering settlements.
- Tort reform.

**ACTION NEEDED:**

Continue to keep this issue on your legislator’s mind. Thank the 72 members of the House of Representatives that passed this Medical Malpractice bill and the senators who voted for the original Senate Bill 270. Encourage them to keep the momentum going and put a bill on the governor’s desk soon.

**MFB CONTACT:**

Howard Kelly, Ext. 2044

### Aquaculture - Expect a Brighter Future!

Per-capita seafood consumption may have slipped by about 1.5 pounds in the late 1980s, but there’s good news for the growing aquaculture business. Consumption of farm-raised fish is up. That’s good news for the Midwest, where fish farming is starting to pick up steam.

Researchers at Ohio State and elsewhere are developing production systems that capitalize on coho salmon fish. That means growth away from the outfall business that has dominated American aquaculture. Bass, trout and a few other varieties look promising. The new production couldn’t come at a more opportune time. Experts indicate the wild catch is declining in most areas and farm-raised fish will be needed to meet both U.S. domestic and export demand.

Farm-raised fish and other aquatic species are a growing portion of total U.S. seafood consumption, according to USDA. Since consumers still want the health benefits expected from eating fish, producers should have little problem on the demand side. The major remaining problems for the industry are in the policy area. Some troublesome questions about food safety and inspection remain for fish and other food catches.

Another major concern of farmers is that ethanol would be subject to the new tax. In March, Treasury Secretary Lloyd Bentsen announced that the Clinton Administration would exempt ethanol, methanol and gasoline additives from the energy tax. But during debate over the fiscal 1994 budget resolution, the U.S. Senate rejected that exemption.

The Senate also defeated a Farm Bureau-backed non-binding amendment to exempt off-road use of motor fuel from the tax. The amendment was defeated even though senators had earlier passed a non-binding resolution stating that the BTU tax is unfair to agriculture.

The energy tax is highly regressive—it hits everyone regardless of their ability to pay. Unless the tax plan is altered, agricultural producers will find themselves getting a double-barreled blast of one of the biggest tax hikes in history—a tax increase that could have a profound impact on farm prices and profitability.

### Discussion Questions:

1. What alternatives will farmers use to adjust for the extra cost of a BTU tax?
2. What other industries will be adversely affected by the proposed BTU tax?
3. Which industries will affect the bottom line of agriculture the most?
4. What can Farm Bureau do to convey a message about the effects of the proposed BTU tax on agriculture?
Drug Residues - Risking the Dairy Beef Investment

Suzanne N. Gibbons, DVM, Michigan State University

The Milk and Dairy Beef Quality Assurance program has increased producers' and veterinarians' awareness of the importance in maintaining a quality product. Of the many topics discussed during local quality assurance programs, the issue of drug residues has been foremost.

The importance in marketing "clean" milk and the financial consequences when violations occur are well-recognized, but the substantial contribution beef sales ofulls and calves can play in a dairy farm's economic picture isn't always as apparent. Beef prices have remained steady over the recent months and more producers are finding themselves depending on the beef market to supplement fluctuating milk prices.

It's important to guard dairy beef revenue by being aware of the potential loss and regulatory action taken due to drug residue in those animals. In 1991 nearly 2.5 million dairy cows and 515,465 calves less than three weeks of age were slaughtered in the U.S., representing 9.1 percent and 1.6 percent respectively of the total number of cattle marketed. Even though they constitute only 10.7 percent of the marketed cattle, dairy cows and calves were responsible for the vast majority of the residues found by the National Residue Program. There are two groups of testing: monitor testing is the random selection of healthy looking animals, and surveillance testing which focuses on the suspect or unhealthy animals that are more likely to have received recent antibiotic treatments.

The monitor testing program indicated that the predominant tissue residue violations in cull cows were from gentamicin and streptomycin. However, the surveillance program indicated penicillin, streptomycin, and oxytetracycline to be the most predominant tissue residues.

The monitor program for calves indicated streptomycin and neomycin to be most prevalent. The surveillance test, used to identify most of the calf residue violations, detects antibiotics and sulfa without providing a breakdown of specific drugs.

Ivermectin residues in cull cows highlight the occurrence of residues from drugs used in a preventive capacity. A majority of drugs found were the antibiotics and sulfa most commonly used in dairy cattle.

To many, it isn't surprising that cull cows would have a higher incidence of residues than the other classes of cattle. After all why are cows culled? Many are culled because of health problems such as mastitis, or pneumonia that required drug use, while others are called because of infertility, genetics, or low production.

Despite cautions to provide drug-residue free milk, statistics show that a disproportionate amount of dairy calf cows and calves were responsible for the vast majority of the residues found by the National Residue Program. Photo: Michigan Milk Producers Association

It's common for dairy farms to sell their beef calves at two weeks of age. While producers don't realize it that calves don't all go to a commercial feedlot. Most will be bought as bull or veal and slaughtered shortly after purchase.

This abbreviated time doesn't allow for an adequate withdrawal period after the use of most drugs. The most common way a calf can acquire residue, beside direct treatment, is through consumption of colostrum milk from recently treated dry cows, or milk from treated cows.

Some cows treated during their dry period before the proper withdrawal time has passed. Colostrum from those cows should be fed only to calves that will be kept on the farm for an extended period of time.

The immune system of a calf is often unable to metabolize drugs as rapidly as an adult. In young calves, all drugs should be used with caution and preferably under the direction of a veterinarian.

Once the potential for drug residues is recognized on a farm, it becomes imperative to implement preventative measures. The best way to avoid future residue problems is to have a good working relationship with your veterinarian.

This relationship should include preventative herd health management, as well as prompt treatment of sick animals. The goal of a herd health program should be to increase the probability of a healthy, adult female. In young calves, all drugs should be used with caution and preferably under the direction of a veterinarian, however, an informed decision is more likely.

Though a perfect, high producing, disease free cow is the ultimate goal, there are few farms that can boast such a feat. Therefore, knowing that medical treatment of animals is a necessity, management improvements can allow a farm to avoid drug residue violations.

It's essential that each animal have its own unique identification and that accurate records are kept pertaining to drug use. The most common and avoidable cause of drug residue violations is failure to observe adequate withdrawal times. It should be remembered that meat withdrawals are often ten times longer than those for milk.

Also label withdrawal times for both milk and meat are established on healthy, adult animals. These may or may not be adequate for sick or immature cattle.

With calves, a farm may not have the luxury of time for withdrawal periods, so precautions should be taken to ensure that calves don't receive contaminated milk. Some drugs that are safe for milk animals may not be available to test for residues and as technology is improved, their use will become more widely accepted.

As awareness of potential drug residues in dairy beef increases, more producers will find it advantageous to exhibit the same diligence for meat residue avoidance.

Implementing a preventative herd health program with a veterinarian will improve a producer's ability to assess and reduce the potential for drug residue violations. This will help to safeguard an area of economic potential for your dairy farm.