

MICHIGAN FARM NEWS



March 30, 1993

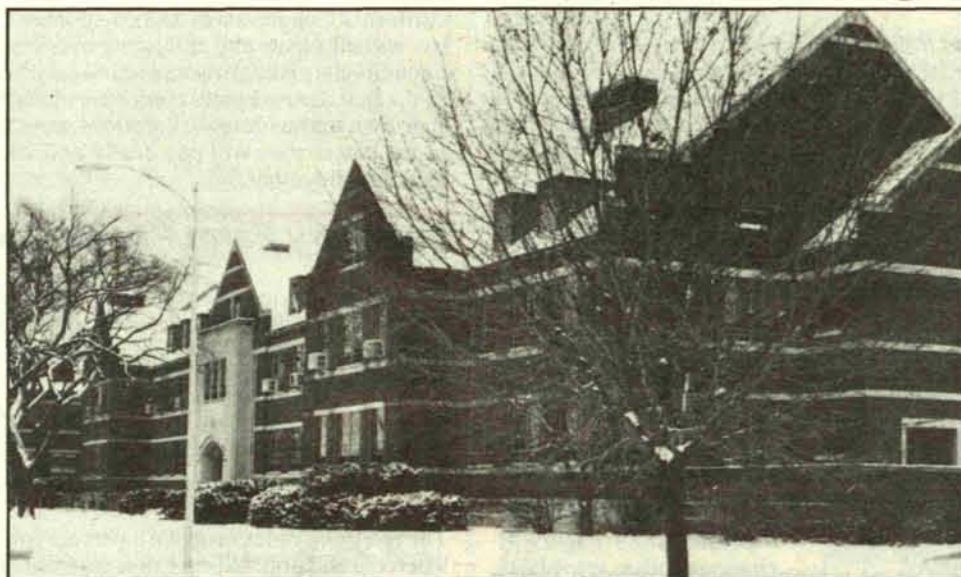
Vol. 70, No. 6

Engler Makes Animal Livestock Initiative Budget Commitment

In a surprise move, Michigan Gov. John Engler included the entire \$70 million capital outlay required for the Michigan Animal Livestock Initiative in his 1994 fiscal year budget recommendation. If approved by the Legislature, it means that actual construction of new animal science and research facilities at Michigan State University could begin as soon as 1994. It also means Michigan's livestock industry will benefit from improved research and facilities much sooner, according to Ag and Natural Resources Dean Fred Poston.

The capital outlay proposal follows on the heels of a \$1 million appropriation last year for design and architectural work of the new facilities. The university has four architectural firms working on designs for new facilities, most notably a new educational/livestock pavilion and total renovation of Anthony Hall, as well as new facilities for the dairy processing and meat labs.

"We were having difficulty in terms of federal inspection because our meat lab simply wasn't up to code," Poston explained. "Anthony Hall currently isn't capable of handling the demands put upon the electrical system by all the computers



If funding is approved, MSU's Anthony Hall would undergo a total renovation.

and research equipment. Upon completion of the renovation of Anthony Hall, it will be essentially new and capable of lasting for another 50 to 100 years."

Despite the current state budget crunch, Poston is confident that the Legislature will

support Gov. Engler's proposal, based on the potential return of the livestock initiative, referring to excess processing capacity in swine, dairy and poultry sectors of Michigan. Currently, several meat packing facilities import as much as 40 percent of their production, simply because

Michigan doesn't meet needed production levels for full operation, says Poston.

"There are some things that have happened recently in the private sector that could mean we'll see as much as a 50 percent increase in hogs over the next 18 to 24 months - that's about 5,000 jobs by itself," said Poston, referring to on-going discussion between the Michigan Livestock Exchange and Farmland Industries. "In these hard economic times, that's awfully significant for the state of Michigan."

The animal livestock initiative will not be complete, however, without follow-through on budget requests for staffing and research, cautioned Poston. As part of the original proposal, an annual allocation of \$6 million was requested to meet those needs once the renovation and new buildings were completed.

"We were beginning to lose people, not because of salary, but because of inadequate facilities," Poston said. "Now, hopefully, we'll have the facilities which the governor has indicated would not make good monuments. Someplace along the line, we hope the state will consider that."

Court of Appeals Decision Questions P.A. 116 Procedures

A recent Court of Appeals ruling regarding P.A. 116 administrative rules called Rule-43 for contract termination has created additional questions about the procedures and validity of P.A. 116 contracts, and exactly the Department of Natural Resources' (DNR) role in the program.

According to Kevin Smith, Michigan assistant attorney general, the Court of Appeals overturned three Circuit Court decisions, but also added that the DNR has no authority in reviewing a local governing unit's decision in P.A. 116 terminations.

The ruling was the result of a DNR appeal on a previous Circuit Court of Appeals decision that said DNR rules for P.A. 116 termination were unconstitutional because they exceed the authority granted by the original act, that the rules did not comply with the underlying legislative intent, and

that the rules were arbitrary and capricious. In other words, the termination rules weren't rational, explained Smith.

"The Court of Appeals held that Rule-43 was valid and that DNR could adapt standards to define when somebody can get out of a P.A. 116 contract agreement," explained Smith. "The ruling also says that local units of government are bound by the DNR rules and they cannot allow somebody out of a contract, unless they comply with DNR rules. The DNR, however, cannot review the local determination to make sure it's an accurate application of the rules."

Smith says the attorney general's office filed a request for a re-hearing on March 22, on that portion of the decision that says the DNR cannot review a local decision. "I'm fairly confident that it will be appealed, but I can't say for sure," he said. "It's difficult to predict when the Court of Appeals will respond, but I wouldn't expect it to take more than a couple of months."

The case involves Daniel D. and Barbara Dykstra, Barry County farmers who wanted to terminate their P.A. 116 contract to allow for the sale of enrolled farmland, after health problems and a death in the family forced them to quit farming, according to their attorney, Laurie Strong.

Just how the case ended up in the courts is not clear. Strong claims that the Dykstras, pursued normal DNR termination procedures and had received township and county approval to do so, but received no opinion from the DNR, before seeking legal remedies and the subsequent lawsuit.

Smith, on the other hand, says that the DNR can find no records that would support that claim. In addition, Smith said the lawsuit doesn't state why the contract should be

terminated. "It just says they wanted to terminate the contract and they didn't like the rules under which they had to terminate and, therefore, they wanted the rules declared invalid," he said.

Strong maintains the court case is the result of inaction by the DNR on two separate occasions - their inaction on the original termination requests, and their inaction on the declaratory ruling. Under the Michigan Administrative Procedures Act, the Dykstras asked the DNR to issue their own

opinion, or declaratory ruling, on specific rules regarding the validity of Rule-43.

"To the best of my knowledge, the DNR never acted on the original requests to terminate the P.A. 116 contract," Strong said. "The DNR also refused to issue a declaratory ruling on Rule-43. If they had done so, we would have been required to stay within an administrative branch of government to resolve this matter."

Continued on page 5, see "P.A. 116"

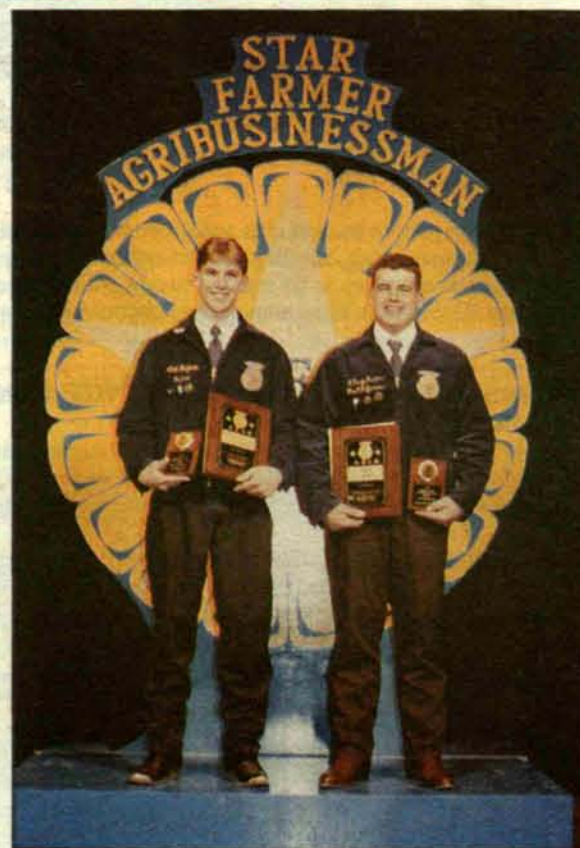
Stars of Michigan

The naming of the Star Farmer and Star Agribusiness Person of Michigan highlighted the 65th Annual FFA State Convention held at MSU March 3-5.

Stephen Rothstuss (right) of Saline and Chad Benjamin (left) of Webberville were recognized as outstanding FFA members for their exceptional Supervised Occupational Experience Programs.

Rothstuss was named Star State Farmer for participation in production agriculture with his hog and crop operations. Benjamin was selected Star Agribusiness Person for involvement in his meat processing business and a hog operation. The State FFA Degree is the highest degree the Michigan Association of FFA can bestow on its members. Just two of the 200 State FFA Degree recipients are selected as Star Farmer and Star Agribusiness Person.

See page 8 For More FFA Award Winners!



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"Clinton Economic Package Hits You Where It Hurts"

A major goal of our 33rd annual Washington Legislative Seminar, held March 23-26, was to try to help Michigan's congressional delegation understand just how hard our state's farmers will be slapped by President Clinton's proposed energy tax.

So we hit lawmakers with the facts. We told them that Farm Bureau estimates that the tax, when phased in by 1996, will boost the cost of gasoline by 7.5 cents a gallon, diesel by 8.3 cents and propane by 2.3 cents. That will add \$800 to the direct fuel costs of a typical grain farmer. That figure could skyrocket if Michigan farmers again face the atypical drying costs that went along with the cold and wet fall.

These higher costs will burn up about two percent of total net farm income. And it doesn't even begin to figure in the added transportation costs that will be borne by farmers and all rural drivers, who don't enjoy access to subsidized mass transit like their city cousins.

We told the congressmen that boosting our transportation and handling costs can't help but trim farm prices, too. Markets respond to national and international demand. Farm prices, we explained, reflect international prices minus the transportation and handling costs of moving farm goods to centralized markets. With increased marketing and transportation costs, farm prices will tend to decline to offset these margins. The slender profits of the agricultural economy are about to get pared even further.

That adds up to lower farm income, hitting us at a time when we're also facing reduced farm price supports, a highly competitive world economy and increasingly shaky world trade talks.

By and large, the Michigan congressional delegation was receptive to our information. I think that our credibility was boosted by the fact that Farm Bureau offered a logical and sound alternative to the president's tax plan. Rather than boosting revenues as a way to cut the deficit, we suggested controlling expenditures.

Farm Bureau's plan to do that involves the goal of a freeze in total federal spending, including entitlement programs, at the previous fiscal year's level. We call for the president to be given line-item veto power and write-down authority in appropriations bills. We support fundamental reform in federal entitlement programs and cost-of-living adjustments and we support a constitutional amendment to restrict the spending authority of the federal government.

To my point of view, the refreshing thing about our annual lobbying trip to the nation's capital is that Farm Bureau is recognized as not just another pleading special interest group. We back our proposals with facts and figures and offer sound alternatives. As our Michigan lawmakers debate the president's economic plan in the weeks ahead, I hope they'll remember the logic of our suggestions.

Jack Laurie
Jack Laurie, President
Michigan Farm Bureau

Higher Farm Program Loan Rates Considered

Members of the House say they are considering some combination of higher farm program loan rates and a reduction in acres eligible for subsidies as a means of cutting farm spending over the next five years.

Members say more budget cuts would be hard to swallow on top of cuts already affecting agriculture programs, but they agree further cuts may be inevitable, according to a report by *Knight-Ridder News*. "It's going to come down to choosing our poison," said Rep. Tim Johnson (D-S.Dak.), chairman of the subcommittee on general farm commodities.

Russian Power Struggle Hits Food Supply

Russia's food supply could be in for double barreled difficulty because of the political strife going on over its democratic reforms, according to a University of Iowa economist in Moscow to help the former Soviet republic with its agricultural reforms.

The economist, John Helmuth, said recently in a telephone interview from Moscow, the Kremlin power struggle between President Boris Yeltsin and the Congress of People's Deputies is disrupting planning for spring planting in Russia and threatening the food supply.

At the same time, the political uncertainty is deepening the credit problems, which has worsened Russia's position in the world food market. Helmuth said Moscow is expending its time and resources on confrontation rather than keeping things moving in the agricultural sector. "I'm not optimistic that there is going to be an efficient and orderly flow of agricultural input," Helmuth said.

He said Russian people outside government are not paying much attention to the political struggle; they only laugh at it, but it is affecting their lives. He thinks the majority of Russians entering private enterprise will opt for cooperative rather than private ventures. "They feel strength and support working with groups," he said.

In Brief...

Labor Reform Act Proposal Bad News for Agriculture

Howard Kelly, legislative counsel and farm labor specialist, is calling the proposed Agricultural Worker Protection Reform Act of 1993 a broad union contract, developed by members of Congress, to be forced on all farmer employers and farm workers, whether they like it or not (see Capitol Corner, page 3).

Michigan Congressman William Ford (D-Ypsilanti), a co-sponsor of the legislation, has also introduced an OSHA reform bill, which in combination with the Agricultural Worker Protection Reform Act, should go a long way in reducing the number of jobs in the agricultural industry. This one-two combination could be the last straw in the continuing growth of burdensome rules and regulations effecting farm labor operations, says Kelly.

California Congressman and co-sponsor George Miller says the amendments to his 1983 law will eliminate any ambiguity over responsibility and thus will reduce violations. "The amendments make growers responsible for ensuring that the farm labor contractor is abiding by the law. Growers and contractors have had the chance to end their abusive practices on their own and with few exceptions, they have failed," said Miller. "Now they will abide by the law or they will pay dearly and, in some instances, lose their right to conduct their business altogether."

February Farm Prices Lower

The index of Prices Received by Farmers in Michigan for all products as of Feb. 15 was 126 percent of its 1977 base, according to the Michigan Agricultural Statistics Service. The February index is down 3 percent from January's index of 130 but 2 percent higher than last February's index of 124.

The price index for all crops in Michigan fell 4 percent from a month ago. Hay led the decline by falling 12 percent, while dry beans and winter wheat fell 8 percent and 4 percent respectively. Potato prices rose slightly from last month, gaining 2 percent.

The livestock index dropped 1 percent from last month. The decline was due to eggs falling 9 percent and milk falling 4 percent from January. However, the meat animal index partially offset the decline with hogs up 9 percent and calves up 4 percent for the month.

Nationally, the All Farms Products Index of Prices Received in February was 139 percent of its 1977 base, unchanged from January. Price gains from January for hogs, cattle, sweet corn, and celery offset price declines for tomatoes, milk, carrots and eggs.

The Index of Prices Paid by Farmers for Commodities and Services, Interest, Taxes and Farm Wage Rates for January was 193 percent of its 1977 average. The index was up 0.5 percent from October 1992 and up 1.6 percent above January 1992. Since last surveyed in October, prices were significantly higher for feeder livestock with lower fuel prices moderating increases for other items in the current survey.

Don't Count Bacon and Eggs Out Yet

People seem to be regaining their appetite for the traditional breakfast of bacon and eggs, according to a recent *Wall Street Journal* report. Market researchers are finding that consumer attitudes are shifting back to the traditional favorites, as bacon sales in supermarkets grew 4 percent in the 12 months ended Jan. 31, 1993, and its popularity in restaurant breakfasts was even stronger.

Sales of both bacon and breakfast sausage increased by volume, but dollar amounts were down because of the volume of pork being produced, making it a better buy for processors. Egg consumption, which declined from 1980 to 1989, has now leveled off and started to inch back up as well. Researchers say it is too early to call this a long-term trend, but it definitely represents a change of attitude. One theory is that there are now enough light and low fat choices available to consumers they don't mind squeezing some of their old favorites back into their diets with more frequency.

Think Tank Doesn't See What It Thinks It Sees

The Center for Resource Economics, a Washington-based environmental think tank, says its analysis of Soil Conservation Service records indicates that \$23 million in government subsidies has been denied farmers due to non-compliance with conservation laws, but nearly half of it has been restored on appeal.

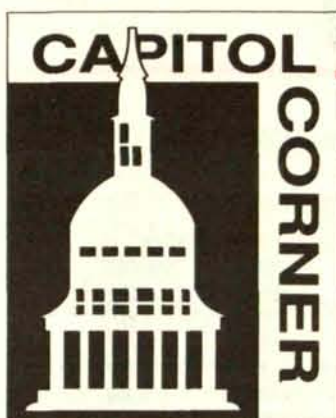
The group uses this as evidence that SCS is too lax in enforcing soil conservation requirements on farmers. What it doesn't emphasize is that SCS investigated conservation compliance on 97,000 farms last year and found violations on only 2,499 of them. That figures out to about 2.5 percent, with appeals resulting in eventual payment of about \$10.4 million of the \$23 million originally withheld.

It should be noted that some of the studies were carried out at a time of year when the crop residues were minimal. It is unknown whether the alleged violations represent anything more than a failure to meet residue levels or simply problems caused by inability to obtain technical assistance from the local SCS office on a timely basis.

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Agricultural Worker Protection Reform Act of 1993

MFB Position:

The American Farm Bureau has said that the bill is in direct opposition to Farm Bureau policy in every respect and will be vigorously opposed.

Action Needed:

Advise your Representative in Congress about your thoughts on this bill.

MFB Contact:

Howard Kelly, Ext. 2044

H.R. 1173, co-sponsored by U.S. Reps. William Ford (D-MI), George Miller (D-CA), and Howard Berman (D-CA) amends the **Migrant and Seasonal Agricultural Worker Protection Act** to make the act applicable to all agricultural workers.

H.R. 1173 makes radical changes in the present federal migrant and seasonal agricultural labor law by removing all references to migrant and seasonal in the law, and replacing them with the word agricultural worker.

Some of the key provisions are as follows:

- Bill would cover all farm employment, whether temporary or full-time, migrant or local, regardless of size of farm or commodity produced.
- Eliminates current exemptions, including family farms, small businesses, small employers, livestock, poultry, hay harvesting, sheep shearing, food processing, cannery, gin, packing shed, or nursery.
- Requires all farm employment be by written contract, specifying the precise term of employment and pay rates.
- Farmers would be obliged to pay workers for the entire term of employment, regardless of conditions such as weather or market conditions that prevented workers from working during that period.
- The bill effectively outlaws the farm labor contractor system by holding farm employers strictly liable for all acts of farm labor contractors. Fines of up to \$250,000 per plaintiff are authorized for use of unlicensed crewleaders.
- Farmers would be legally liable for compliance with field sanitation, hazard communication, heat stress and EPA farm worker pesticide protection regulations. The small farm exemptions are eliminated.
- Workers are given a private right of action to sue employers for violations of these, as well as local and state safety and health regulations.
- Employers of 25 or more farm workers would be required to provide free child care and free transportation to and from the farm workplace.
- Forbid the transportation of farm workers by drivers impaired by drugs or alcohol or in unsafe vehicles.
- Increases in labor costs and farm liability would be significant if the bill is enacted. The bill provides for damages up to \$25,000 for violations, as well as attorney fees and costs.
- The bill repeals the 9-month **Adams Fruit** reversal. Language is incorporated which permits a court to consider workers' compensation benefits in awarding actual damages. This means that "agricultural workers" would be the only workers that could sue the employer and also collect workers' compensation benefits.

Michigan Farm Bureau (517) 323-7000

No-Fault Automobile Insurance Reform

MFB Position:

MFB policy on No-Fault Automobile Insurance supports the cost saving reforms included in H.B.4156 (H-2).

MFB Contact:

Darcy Cypher, Ext. 2048

The Michigan House of Representatives agreed to reform Michigan's automobile insurance laws by passing H.B. 4156 (H-2) with a 65 to 43 vote. The bi-partisan proposal is expected to reduce auto insurance rates an average 16 percent by enacting reforms which:

- Allow consumers to select PIP medical coverage limits from \$1 million up to \$5 million. Present law requires that consumers purchase unlimited PIP medical coverage.
- Prohibit lawsuits by motorists 50 percent or more at fault and limit non-economic lawsuits.
- Control medical and rehabilitation costs.
- Reduce subsidies to high-risk parts of the state by lower risk communities.
- Allow discounts for airbags, seatbelts, anti-theft devices and long-time customers.

Perishable Commodity Frost Weight Exemption

MFB Position:

Michigan Farm Bureau's Highways policy supports "a frost weight exemption for highly perishable commodities and supports granting county road commissions the authority to suspend frost weight exemptions." MFB opposes H.B. 4121 (H-2) as amended in committee.

MFB Contact:

Darcy Cypher, Ext. 2048

A substitute to House Bill 4121 was considered in the House Transportation Committee on March 10. This substitute required that county road commissions and the state Department of Transportation establish permitting mechanisms for exempting milk and other highly perishable commodities, as designated by the Commission of Agriculture, from seasonal weight restrictions.

The substitute granted MDOT and local road commissions the ability to deny permits, but required that written notice stating the reason for denial be made within 30 days and include alternative routes. The Michigan Milk Haulers, the County Road Association and Michigan Farm Bureau were not opposed to the substitute.

The substitute was amended by the Transportation Committee to delete the requirement for a permitting mechanism and limited the exemption consideration to only milk.

Local Pesticide Ordinances

MFB Position:

Farm Bureau policy opposes local regulation of pesticides and, therefore, strongly supports H.B. 4344 as introduced.

MFB Contact:

Vicki Pontz, Ext. 2046

House Bill 4344, as introduced by Rep. Tom Alley (D-West Branch), would preempt a local unit of government from enacting or enforcing an ordinance that contradicts or conflicts with the Michigan Pesticide Control Act.

The bill would allow a local unit of government to pass a pesticide ordinance if unreasonable adverse effects on the public health or environment will exist within the local unit of government. The ordinance must be approved by the Agriculture Commission. The bill also allows the Department of Agriculture to contract with a local unit of government to act as its agent for the purpose of enforcing the Michigan Pesticide Control Act.

Michigan Property Tax Reform Proposals Plentiful

There is an apparent consensus among legislators that Michigan's property tax needs reform to reduce reliance for schools operating on the tax. Unfortunately, they haven't reached a consensus on a variety of proposals for property tax reform, according to MFB Legislative Counsel Ron Nelson.

A package of ten bills that deal with property tax reform is moving through the House and a Senate bill has also moved through the Senate. Nelson says that all of the proposals would accomplish, in varying degrees, property tax reform.

"The debate on property tax reform is driven by several factors; the removal of the freeze on assessments, the fact that we are at the beginning of a two-year session, and the fact that 27 new members of the House were recently elected, many on promises of property tax relief," Nelson explained. "The complicating factor is that any significant reduction on property tax reform requires a substantial amount of dollars to replace at least a portion of the property tax cut."

The three options most often talked about for replacement of lost property tax dollars include:

1. Simply replace the needed revenue from the existing General Fund.
2. Increase in sales tax (which requires a vote of the people to raise the current 4 cent limit).
3. Increase in the income tax rate to generate the additional revenue.

"All of the proposals have advantages and disadvantages," Nelson said. "The downside of taking money from existing general funds raises the question of which existing programs will be reduced or eliminated. The concern on raising the sales tax is that the voters will not approve the sales tax and, therefore, other sources of revenue, or further budget cuts, will have to be implemented. Finally, increasing the income tax is politically risky for a legislator to go back home and tell constituents they have just raised their taxes."

Even with substantial property tax cuts, the governor has indicated a concern for raising taxes on the basis that Michigan needs to further down-size, or right-size, government. Additional revenue, unless very carefully structured, may not find its way to offset the property tax reductions, according to Nelson.

In addition to legislative discussion, a number of groups and organizations either are developing or have proposed solutions to the property tax dilemma. All of these proposals have the possibility of lending confusion to the issue or the opportunity to surface a variety of options and creative approaches to resolve the property tax dilemma.

Proposed Ethanol Rules Published

The proposed rule concerning ethanol's inclusion in the Clean Air Act's reformulated gasoline program has been published in the *Federal Register*. A plan to include ethanol in the program was proposed last fall by then-President Bush, but publication of the rule to implement it was delayed. The Clinton administration, shortly after taking office, put a temporary hold on the ethanol matter and several other not-yet-finalized regulations.

The proposed rule would allow ethanol to effectively compete in the reformulated gasoline program. It would require clean air programs in 39 metropolitan areas that experience wintertime carbon monoxide problems to use fuels with a 2.7 percent oxygen level, a standard easily met by ethanol.

Farm Bureau strongly supports efforts to include ethanol in the reformulated gasoline program and will be commenting on the proposal. American Farm Bureau Federation President Dean Kleckner said the inclusion of ethanol would benefit the nation's air quality and its energy security, and also would benefit the agricultural economy. The comment period will close April 27. A public hearing on the ethanol rule also is planned.

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Weather

30-Day and 90-Day Forecast – Warmer and Drier Than Normal

Several periods of sub-zero temperatures brought mean temperatures to below normal levels (generally 1-4 degrees F below normal in the north and 4-7 degrees below in the south) for the mid-February through mid-March period.

Given the persistent nature of the cold weather and increase in snowcover since early February, it is likely that overwintering fruit and field crops were still dormant and relatively unaffected. Precipitation during the last 30 days generally continued below normal, with the exception of a few western sections which experienced very heavy lake-effect snow, and in the far south, where a series of major snow storms brought above normal snowfall.

Latest National Weather Service outlooks for the Great Lakes area remain little changed, calling for a continuation of normal to below normal precipitation and an increase in mean temperature to normal to above normal levels for the next 1-2 months.

For much of the state, this would be a favorable outlook for spring fieldwork, especially in eastern sections of the Lower Peninsula where heavy, wet soils can cause lengthy delays. Even though precipitation has dropped off during the last month or two, soil moisture should still remain at adequate levels for the early season due to the heavy rains and snows of last fall and early winter, which brought many soils to field capacity or even saturation.

2/16/93 to 3/15/93	Temperature		Precipitation	
	Observed Mean	Dev. From Normal	Actual (inch.)	Normal (inch.)
Alpena	17.4	-5.1	0.83	1.67
Bad Axe	19.4	-7.1	1.16	1.81
Detroit	24.9	-5.2	1.97	1.99
Escanaba	19.3	-2.8	0.19	1.66
Flint	21.9	-6.1	0.74	1.99
Grand Rapids	23.2	-5.3	1.34	2.02
Houghton	17.9	-0.4	1.21	1.63
Houghton Lake	19.0	-4.5	1.24	1.67
Jackson	22.4	-7.0	1.03	1.91
Lansing	22.2	-5.6	1.45	1.91
Marquette	16.2	-1.2	0.92	1.63
Muskegon	24.7	-3.8	1.10	1.96
Pellston	18.2	-1.5	0.49	1.60
Saginaw	21.5	-5.3	0.95	1.81
Sault Ste. Marie	16.6	-2.0	0.15	1.66
South Bend	25.3	-6.2	1.64	2.02
Traverse City	21.1	-3.0	1.86	1.60
Vestaburg	21.4	-5.3	1.38	1.87

Normals are based on district averages.
Jeff Andresen, Ag Meteorologist, MSU

Spring Canola Could Be a Worthwhile Crop

An oil crop that could provide northern Michigan growers upward of \$200 gross return per acre may be worth looking into. The crop is spring canola and there are several reasons why it could be fitted into northern Michigan crop rotations, according to Larry Copeland, Michigan State University Cooperative Extension Service agronomist.

"Spring canola does best in a cool climate, which is characteristic of northern lower Michigan and the Upper Peninsula," Copeland says. "Farmers in northern Michigan can produce canola crops as abundant as those in Canada, where canola is a major oilseed commodity."

"We have a milder, more stable climate than is found on the Canadian prairie provinces,"

Copeland observes. "If the crop is planted in late April or early May, it will be ready for harvest in 90 to 100 days."

Field trials in 1990 at MSU's Lake City Experiment Station on 17 varieties of spring canola showed yields ranging from 2,260 pounds to 3,474 pounds per acre.

"With good market planning and proper crop management, canola should provide a return of 40 bushels an acre," Copeland says. "With current prices at about \$5.67 per bushel delivered to Windsor, Ontario, that's a fairly good return on investment."

Canola has become a sought-after crop because of its oil and protein content. Canola typically has 40 to 44 percent oil and 23 percent protein. The soybean typically has 18 percent oil and 37 percent protein.

Because of that similarity, canola market prices rise and fall in sympathy with the volatility of the soybean market. Nevertheless, the canola market tends to be quite dependable throughout the year, Copeland says.

Canola debuted in southern Michigan in 1988 on about 100 acres. The estimate for the 1993 crop is about 10,000 acres, down about 3,000 acres since 1991.

Copeland isn't too concerned about the acreage fluctuation, but he hopes farmers won't give up on canola because of one or two years' bad experience.

"Canola has not found stability in Michigan agriculture, but it needs to be given a chance," Copeland says. "While I encourage farmers to try the crop, I also urge them to remain with it for at least three years because we are still on the upside of the learning curve for this crop."

That probably was the case with farmers who began growing soybeans in Michigan in the early 1900s. By 1930, there were only about 1,000 acres planted to soybeans, with yields running about 10 bushels per acre.

Michigan's 1991 soybean crop of 1.39 million acres averaged 38 bushels per acre and produced 52.8 million bushels worth more than \$298 million.

Michigan and Major Commodity Area Extended Weather Outlook

T - Temp.	3/31	4/15	3/31	5/31
P - Precip.	T	P	T	P
Michigan	N	B	N	B
W. Corn Belt	N	N	N	B
E. Corn Belt	N	N	N	B
Wint. Wheat Belt	N	A	N	N
Spr. Wheat Belt	A	B	A	B
Pac. NW Wheat	A	B	A	N
Delta	B/N	A	N/B	N
Southeast	B	A	B	A
San Joaquin	A	A	A	N

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



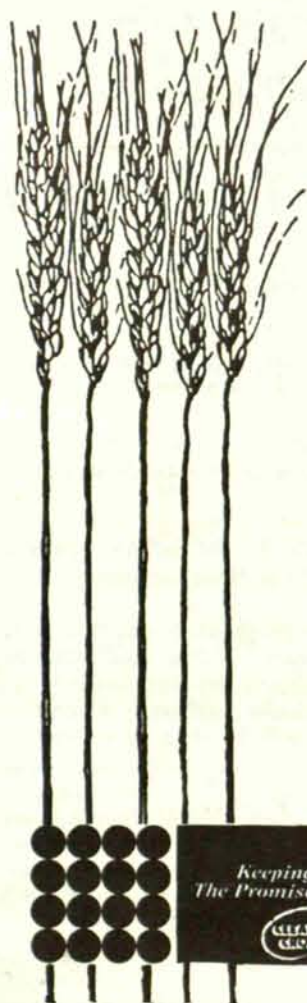
Serving Michigan Farm Families is Our Only Business

Since its beginning in 1971, Michigan Farm Radio Network's only objective has been to serve Michigan's farm families. This dedication to serve agriculture is shared by 29 local radio stations in Michigan. Through these stations, Michigan Farm Radio Network provides the latest in market analysis, weather and news to Farm Bureau members daily on the following stations:

Station	City	Frequency	Morning Farm	Noon Farm
WABJ	Adrian	1490	5:45 am	12:15 pm
WATZ	Alpena	1450	5:30 am	12:15 pm
WPZA	Ann Arbor	1050	6:15 am	12:05 pm
WLEW	Bad Axe	1340	6:30 am	12:50 pm
WHFB	Benton Harbor	1060	*	12:30 pm
WKYO	Caro	1360	6:15 am	12:45 pm
WTVB	Coldwater	1590	5:45 am	***
WDOW	Dowagiac	1440	6:15 am	12:15 pm
WACY	Fenton	1160	6:15 am	12:15 pm
WGHN	Grand Haven	1370/92.1	5:45 am	12:15 pm
WPLB	Greenville	1380	6:15 am	12:45 pm
WBCH	Hastings	1220	6:15 am	12:30 pm
WCSR	Hillsdale	1340	6:45 am	12:45 pm
WHTC	Holland	1450		12:15 pm
WKZO	Kalamazoo	590	**	12:15 pm
WJIM	Lansing	1250	5:05 am	12:15 pm
WWGZ	Lapeer	1530	*	12:15 pm
WNBY	Newberry	92.5		12:15 pm
WOAP	Owosso	1080	6:15 am	12:30 pm
WHAK	Rogers City	960	7:10 am	12:15 pm
WSJ	St. Johns	1580	6:15 am	12:15 pm
WMLM	St. Louis	1540	6:06 am	12:20 pm
WSGW	Saginaw	790	5:55 am	12:15 pm
WMIC	Sandusky	660	6:15 am	12:45 pm
WKZC	Scottville	95.9	5:45 am	12:30 pm
WCSY	South Haven	940		12:15 pm
WKJC	Tawas City	104.7		12:45 pm
WLKM	Three Rivers	1510/95.9	6:15 am	12:15 pm
WTCM	Traverse City	580	5:55 am	12:40 pm

* Station signs on at different times during the year. Morning farm times change with sign-on times.
** Station airs various farm reports between 5:50 and 6:20 pm.
*** Station airs various farm reports between 12:00 and 1:00 pm.
Some stations carry additional market reports throughout the market day.

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Increase Wheat Yields

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

1992 Yields

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

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Michigan Corn Marketing Committee Appointed and Operating

5

Gov. John Engler announced his initial appointments to the Michigan Corn Marketing Committee (MCMC) March 8, 1993, according to Michigan Farm Bureau Commodity Specialist Bob Boehm.

The MCMC, created by the December passage of the Corn Marketing Program of Michigan (CMPM), will be made up of nine corn farmers, one from each of the nine districts created by the program. In addition, four non-voting members will serve on the committee as well. The four non-voting members will represent the Michigan Department of Agriculture, the Michigan State University College of Agriculture and Natural Resources, the Michigan Agri-Business Association, and the Michigan Corn Growers Association.

The MCMC will be responsible for the investment of all assessments collected by the program. These investments will be aimed at improving the profitability of Michigan's corn farmers. According to the program approved by Michigan's corn farmers, committee appointments are to be three years in length. These initial appointments, however, will be of varying lengths in order to stagger the expirations of member's terms.

The appointments, the districts they represent, the counties in their district, and the length of their terms are:

- 1/Tom Bodtke/Allegan, Van Buren, Barry, Cass, Berrien/1 year
- 2/Steve Gazdag/Kalamazoo, St. Joseph, Branch/3 years
- 3/Vacant/Calhoun, Hillsdale, Jackson
- 4/Elgin Darling/Lenawee, Monroe, Washtenaw/1 year
- 5/Dan Putman/Ionia, Clinton, Eaton, Ingham/2 years
- 6/John Knoerr/Sanilac, Lapeer, St. Clair, Macomb, Oakland, Wayne, Livingston/2 years
- 7/Ray Schaub/Genesee, Shiawassee, Saginaw, Gratiot/2 years
- 8/Gary Krug/Huron, Tuscola/3 years
- 9/Bob Rosenow/balance of state/1 year

P.A. 116 continued from page 1

Strong said that since the DNR refused to issue a declaratory ruling either affirmatively or negatively, the Dykstras then had the right and option to take the issue to Circuit Court to ask for P.A. 116 contract termination declaratory ruling.

Strong declined to have her clients comment on the issue, since they are still involved in a possible appeal. She said she did not know how many acres are involved in the case, nor who the purchaser of the Dykstra property would be if the P.A. 116 contract is successfully terminated.

According to MFB Legislative Counsel Ron Nelson, farmers in general could stand to lose the most if a DNR appeal on the local government decision-making ability is unsuccessful, since the ruling puts the future of the P.A. 116 program in doubt.

"The practice since 1974 has been that the P.A. 116 contract is between the individual landowner and the DNR as the agent for the state of Michigan," Nelson said. "The total impact of the Court of Appeals decision is unknown at this point. Early indications are that it may have substantially weakened the law and raises serious questions of contract law if a township, which isn't a part of the contract, has the authority to dissolve an agreement."

So what's the answer to the seemingly endless confusion and discussion of P.A. 116 contract terminations? Smith suggests that the holes in P.A. 116 contract rules be filled and dealt with legislatively. "The statutory scheme is particularly unclear. There's no question that it's a very poorly drafted statute with respect to the termination process. Clearly the Legislature could amend and clarify this issue," Smith concluded.

The first meeting of the MCMC was held March 9, 1993, in Lansing at the Michigan Farm Bureau Center. At that time, the committee elected Dan Putman chairman, Ray Schaub vice chair, John Knoerr treasurer, and Tom Bodtke as secretary.

The MCMC has decided to enter into a temporary contract with the Michigan Agricultural Cooperative Marketing Association to manage the MCMC and to facilitate the printing and distribution of a manual containing MCMC operation guidelines.

The new guidelines will include procedures and remittance forms for licensed grain dealers to use in the collection of checkoff funds. It's expected the temporary contract will last 90 to 120 days to allow the committee time to select an administrator for the program.

Under the program, the 1 cent per bushel assessment began March 1, 1993. Elevators and other first purchasers are required to withhold assessments on all corn sales since March 1, and remit these funds monthly. The first remittance will be due by April 15.



Members of the recently appointed Michigan Corn Marketing Committee include (l-r): Tom Bodtke, Elgin Darling, John Knoerr, Ray Schaub, Bob Rosenow, Gary Krug, and Dan Putman. The committee met for the first time at the Michigan Farm Bureau Center in Lansing to elect officers. (Not pictured, Steve Gazdag)

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In his autobiography, Groucho Marx tells how an annuity helped him at a crucial point in his career. The annuity, he said, gave him such a feeling of security that he was able to pursue his career with a lighter heart and more confidence.

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Market Outlook...

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

Corn

The USDA did not make any changes in their March release of the Corn Supply/Demand Balance Sheet shown in Table 1. I have made some minor changes in my estimates for the 1993-94 corn marketing year since February. However, two major USDA reports are to be released on March 31, about the time you receive this issue, which could substantially change both the USDA's 1992-93 and my 1993-94 estimates in Table 1. They are the quarterly Grains Stocks Report and the annual Prospective Plantings Report.

The Corn Grain Stocks Report will help determine the amount of corn that has been fed through the first six months of the 1992-93 crop year. Check to see how much the USDA corn stocks figure differs from the trade estimates.

If the USDA figure is larger than the trade estimates, that probably means 1992-93 ending stocks will be increased. This would be negative on both this year's and next year's prices. If the stocks figure turns out to be lower than expectations, ending stocks will likely be lowered, which would be positive for corn prices.

The USDA will not update their Supply/Demand Report until April 12, but you could approximate that update by changing 1992-93 feed use and ending stock in Table 1 by the amount the numbers differ from expectations.

Wheat

The latest Wheat Supply/Demand Balance Sheet is shown in Table 2. The same two reports will be released for wheat as we discussed for corn. When the reports are released, make the necessary changes on Table 2 for wheat in the same manner that was described for corn.

The USDA made some changes in their March estimates shown in Table 2 versus their February estimates. Projected 1992-

Wheat	↔ ↓
Corn	BT
Soybeans	↔
Hogs	↔
Cattle	↓

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

The USDA will also release the Prospective Planting Report which will show how many corn acres U.S. farmers intend to plant this spring. When you hear the estimate late afternoon on the 31st, you can easily adjust my 1993-94 figure for acres planted in Table 1. From that, subtract 7.1 million acres not harvested for grain and you will have the estimate for acres harvested. Multiply by 121 bushel per acre and you will have the production estimate for 1993-94.

Adjust the beginning stocks numbers for any changes you made in the 1992-93 ending stocks number and you have total supply for 1993-94. If it is higher than mine, ending stocks will likely increase and vice-versa. At this point, I feel the futures markets expects a planting figure lower than mine.

93 exports were lowered 25 million bushels and projected food use was lowered 10 million bushels. This lowered total use and increased expected ending stocks by 35 million bushels.

Because it appears that we will produce more than our projected use next year, that implies a stocks build-up over the next couple of years with normal yields and low set-asides.

Soybeans

The USDA only made a minor change in their March version of the 1992-93 Soybean Supply/Demand Report shown in Table 3. They increased projected imports 15 million bushels to 760 million.

This lowered projected ending stocks by the same amount to 340 million bushels. While this stocks level is by no means tight, it is low enough that the market could get excited by poor planting conditions or a drought scare.

As with corn and wheat, the USDA will report March 1 soybean stocks and 1993

Hogs

The question of "were the hogs ever there?" should have been answered in the USDA March 1 Quarterly Hogs and Pigs Report released March 26. While the December report showed we would be slaughtering 3-5 percent more hogs this winter, we have slaughtered 3 percent less hogs year-to-date.

If the report was positive and the markets rallied further, consider forward pricing some of your future production. We will discuss the March report in the next issue.

Milk Production Down Slightly

Dairy herds in Michigan produced 425 million pounds of milk during February, down 4 million pounds from a year ago, according to the Federal/State Michigan Agricultural Statistics Service. Milk per cow averaged 1,250 pounds, decreasing 20 pounds from a year ago. The Michigan dairy herd was estimated at 340,000 head, 2,000 more than February 1992.

The preliminary value of milk sold averaged \$12.30 per hundredweight (cwt.) in February, \$1.00 less than last year. Mid-month February slaughter cow prices averaged \$50.00 per cwt., \$3.10 more than the previous year.

Milk in the 21 major states totalled 10.0 billion pounds, down 2 percent from production in these same states in February 1992. The number of cows on farms was 8.20 million head, 74,000 head below February 1992 and 11,000 less than January 1992.

Dairy manufacturing plants in Michigan produced 2.1 million pounds of butter in January, 24 percent more than a year ago. Ice cream output totalled 1.7 million gallons, 4 percent less than January 1992.

FARM BUSINESS OUTLOOK

soybean planting intentions at 3 p.m. on March 31. The number will affect Table 3 for soybeans just as described for corn. Again, the USDA will update the Supply/Demand Reports given the new information on April 12, but you can approximate the changes by making the appropriate changes in Table 3 yourself.

Cattle

I suspect that the Cattle-On-Feed Report released March 19 showed we still have a lot of cattle coming and the question is, "when is it going to get here?"

At this point, weather has continued to hold up the flow, but the reports have consistently showed they are coming.

At this point, the most important strategy is to keep current and try to get your cattle market ready as soon as possible in order to take advantage of these very strong prices.

Table 1
Supply/Demand
Balance Sheet For
CORN

	USDA Proj.	Hilker Proj.	
	1991-92	92-93	93-94
Corn Acreage (Million Acres)			
Acres Set-Aside and Diverted	4.7	3.5	7.0
Acres Planted	76.0	79.3	76.3
Acres Harvested	68.8	72.2	69.2
Bu./A. Harvested	108.6	131.4	121.0
Stocks (Million Bushels)			
Beg. Stocks	1521	1100	2237
Production	7474	9479	8373
Imports	20	3	5
Total Supply	9016	10,582	10,615
Use:			
Feed	4897	5200	5200
Food/Seed	1434	1495	1535
Total Domestic	6331	6695	6735
Exports	1584	1650	1700
Total Use	7915	8345	8435
Ending Stocks	1100	2237	2180
Ending Stocks Percent of Use	13.9%	26.8%	25.8%
Regular Loan Rate	\$1.62	\$1.72	\$1.72

U.S. Season Average
Farm Price, \$/Bu. **\$2.37 \$2.05 \$2.10**
Source: USDA & Hilker

Table 2
Supply/Demand
Balance Sheet For
WHEAT

	USDA Proj.	Hilker Proj.	
	1991-92	92-93	93-94
Wheat Acreage (Million Acres)			
Acres Set-Aside and Diverted	10.0	3.5	0.5
Acres Planted	69.9	72.3	73.8
Acres Harvested	58.1	63.1	64.0
Bu./A. Harvested	34.1	39.0	39.0
Stocks (Million Bushels)			
Beg. Stocks	866	472	541
Production	1981	2459	2496
Imports	38	65	43
Total Supply	2885	2996	3080
Use:			
Food	785	810	850
Seed	94	95	100
Feed	259	225	175
Total Domestic	1137	1130	1125
Exports	1275	1325	1350
Total Use	2413	2455	2475
Ending Stocks	472	541	605
Ending Stocks Percent of Use	19.6%	22.0%	24.4%
Regular Loan Rate	\$2.04	\$2.21	\$2.45

U.S. Season Average
Farm Price, \$/Bu. **\$3.00 \$3.30 \$3.00**
Source: USDA & Hilker

Table 3
Supply/Demand
Balance Sheet For
SOYBEANS

	USDA Proj.	Hilker Proj.	
	1991-92	92-93	93-94
Soybean Acreage (Million Acres)			
Acres Planted	59.1	59.1	59.5
Acres Harvested	58.0	58.1	58.5
Bu./Harvested Acre	34.3	37.6	35.0
Stocks (Million Bushels)			
Beg. Stocks	329	278	340
Production	1987	2197	2048
Imports	3	2	2
Total Supply	2319	2477	2390
Use:			
Crushings	1254	1265	1250
Exports	685	760	720
Seed, Feed and Residuals	102	112	100
Total Use	2040	2137	2070
Ending Stocks	278	340	320
Ending Stocks, Percent of Use	13.6%	15.9%	15.5%
Regular Loan Rate	\$5.02	\$5.02	5.02

U.S. Season Average
Farm Price, \$/Bu. **\$5.60 \$5.45 \$5.50**
Source: USDA & Hilker

7 The Competitive Position of Michigan Ag

Jake Ferris
Department of Agricultural Economics
Michigan State University

Michigan's agricultural future is directly tied to national and global scenarios. The pace of population and income growth at home and abroad, how consumers modify their tastes and preferences, what policy makers decide to do in forging domestic and international agricultural programs are all crucial to the outlook for Michigan farmers.

Another set of questions relate to how well Michigan agriculture will compete with other states and nations in the years ahead in supplying the projected food demands. Does Michigan have any comparative advantage?

Most of Michigan's agriculture and food industry is near large metropolitan areas and non-farm employment opportunities. Not only are markets close at hand within the state and just outside its borders, but Michigan is favorably located in the North American market. Just under half of the total population of the U.S. and Canada is within 500 miles -- a reasonable one-day drive. The state's advantage, then, is being closer to markets than many other major producing areas, with consequently lower transportation costs.

The urban interface provides certain unique opportunities for extensive direct marketing through roadside stands, "pick-your-own" operations, and farmer's markets. Also, with industry close at hand, farm families have the flexibility of earning off-farm income. Farm families in places like western Iowa have few of these alternatives. For this reason, the percentage of part-time and hobby farming is higher in Michigan than elsewhere.

In addition to the urban-rural connection, the diversity of Michigan agriculture also contributes to stability. With more eggs in one basket, the cyclical stress, which is a trademark of many agricultural enterprises, is counterbalanced by the wide scope of agriculture in the state. Diversity does have drawbacks in that it challenges the infrastructure (Extension, research, teaching, finance, agribusiness, government agencies, etc.) to serve a vastly different clientele adequately.

Of course, the close interface of agriculture and the non-farm population also presents some handicaps -- some comparative disadvantages. Animal waste issues are more sensitive in Michigan than in many other agricultural states. Wage rates to hired labor tend to be higher. Property taxes are also above other states, although many individual farmers receive relief through P.A. 116. In spite of urbanization, Michigan farmland prices are below other eastern Corn Belt states.

Michigan's favorable location relative to the North American market would normal-

ly mean farm prices should be higher than in many other states. This is true in some cases, but there are a number of exceptions. Export markets have grown to become very significant for corn, soybeans, and wheat. The bulk of these products move into export markets through the Gulf of Mexico or Atlantic Coast. Therefore, states along the Ohio and Mississippi rivers and in the Eastern U.S. benefit.

Secondly, location of processors is key to geographic price surfaces. Because nearly all of Michigan's soybeans, dry beans and fed cattle are shipped out of the state for processing, this tends to depress prices relative to states to the south. On the positive side, processing of hogs, turkeys, sheep, and lambs well exceeds Michigan's output. The state also has slack in cheese processing.

About 60 percent of Michigan's corn crop and as much as 20 percent of Michigan's hay crop is shipped out of the state. The quantities involved and the lower price structure resulting can be considered a plus for expanding the livestock industry.

To assess Michigan agriculture's competitive position, the efficiency of the farm production plant must be evaluated. Are economies of scale for operation being realized? What is the level of management skills? Related to this is the progressiveness of farm organizations, agribusiness, marketing agencies, processors, and the entire infrastructure involved.

The competitive position of an industry in a state is not static, but is ever changing as new markets evolve, as costs of production, processing, and transportation change, and as leadership emerges to effect change.

The dynamics are illustrated in a "shift-share" analysis of major Michigan farm commodities in 1960-90. Looking at the last half of this period, 1976-90, the results can be seen in Table 1.

Sugarbeets topped the list as Michigan's share of U.S. production increased by .37 percent per year in 1976-90, i.e., from about 6 percent of U.S. output in the mid 1970's to nearly 12 percent by 1990. Egg production barely outpaced U.S. output. A number of commodities lost out.

Of special interest is the number of commodities gaining share in 1976-90, which had been losing share in 1960-76. This list includes oats, turkeys, hay, peaches, hogs, cattle on feed, wheat, fall potatoes, and eggs. In other words, 10 out of the 14 commodities exhibiting comparative strength in 1976-90 had been losing out in the previous 15 years. Of the commodities losing ground in 1976-90, only beef cows and blueberries had gained in 1960-76.

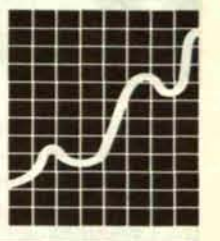
Understanding why shares have shifted can provide insight into future prospects. For example, Michigan has been a relatively

low cost sugarbeet producing state. Processing capacity and low corn prices have contributed to the growth in turkey and hog production. Cash field crop production fits well into part-time farming.

Michigan's important dairy industry lost ground to California and the South due to economies of scale in those regions and also due to an effective "whole-herd buyout" program in Michigan, among other reasons. Further expansion in California may be limited due to resource constraints, particularly water. The existence of new cheese processing in Michigan should help stabilize the industry in the future.

The accelerated decline in dairy cow numbers in the 1980s contributed to a turnaround in cattle feeding. More important, however, was an innovative financing program of the Michigan Live Stock Exchange.

Other reasons might be cited for the patterns observed in the shifts in Michigan's share of U.S. output. One caution for interpreting trends in shares is that trends in absolute production may present a different picture. For example, while Michigan's share of



FARM BUSINESS OUTLOOK

blueberries, nursery, and floricultural products declined in 1976-90, these were among the more rapidly expanding products in absolute terms in this period. Michigan responded to growing demands, but other states made a bit more headway.

Evaluation of the competitive position of an industry in a state often focuses on the endowment resources -- soils, topography, climate, water, etc. These are basic, but much under-rated is the contribution leadership and infrastructure can make in shaping the future. Michigan has the combination of resources to maintain and strengthen its position in agriculture in the years ahead.



Neal, Kelly, Pat, Harold and Marty Travis operate North Valley Farms, a 300-cow dairy operation at Shepherd, MI. The four brothers farm with their parents, Pat and Evelyn Travis. The farm has a 20,500-lb. milk RHA and produces 1,000 acres of hay and corn.

HOW A DROUGHT SET SEEDS OF EXPANSION FOR THE TRAVIS FAMILY.

"We've just completed the second phase of a dairy expansion that includes a free-stall, center-feed barn and double-8 milking parlour. The expansion began in 1988 after a severe drought forced us to make some serious decisions. As brothers, we knew we wanted to farm together with our folks but a cash-crop business was too risky for all of us to depend on.

"Looking back, 1988 wasn't a pretty year to begin an expansion, but Farm Credit had confidence in us and stood behind our decision. Our loan officer has been a tremendous planning resource and helped us work through countless 'what if' situations on the computer.

"A lot of lenders wouldn't have been able to grasp our vision for this family dairy business but Farm Credit not only grasped it, they helped us figure out a better way to make it happen. If it hadn't been for the facilities expansion loan and other help from Farm Credit, there's no question that several of us couldn't be in this operation today."



FARM CREDIT SERVICES
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TABLE 1

CHANGE IN SHARE OF U.S. PRODUCTION, 1976-90

Gained

Ranked from gained the most to gained the least

Sugarbeets
Cherries, tart*
Potatoes, summer
Oats
Turkeys
Hay
Peaches*
Hogs
Soybeans
Cattle on feed**
Wheat*
Corn for grain*
Potatoes, fall*
Eggs*

Lost

Ranked from lost the least to lost the most

Beef cows
Sheep and lambs
Grapes*
Milk
Apples*
Vegetables
Nursery/Floriculture
Strawberries
Blueberries*
Cherries, sweet*
Dry beans

*Not statistically significant. **Based on trends from 1982 to 1991.

8 Farm Trucks: Make Each Trip a Safe One

Your farm trucks get as much use -- and sometimes abuse -- as any vehicles you'll ever own. But proper operation and maintenance will help prolong the life of your trucks and protect everyone who drives them. Here's how to make each trip a safe one:

- Comply with all federal and state regulations that apply to your trucks: licensing regulations, transportation of hazardous materials, wide loads, placarding, and the like. Contact your local state motor vehicle branch or the Michigan Department of Transportation for the information you need.
- Keep your trucks in good operating condition. Make sure all lighting works, brakes and tires are sound, and other safety components -- wipers, defrosters, mirrors, etc. -- are functioning properly. Check hoses, belts, and fluids regularly.
- Have tools, flares, a fire extinguisher, load securing devices, a jack, spare tire, and first aid kit available. And be sure to have your driver's license,

vehicle registration, and proof of insurance on hand.

- Train new drivers in safe truck operation. Make sure they realize that a heavily loaded truck can't accelerate, stop, or turn as quickly as an unloaded truck.
- Keep loads within rated capacity. Overloading adversely affects handling, braking, and engine performance -- and adds stress to components.
- Secure the load if necessary, so it can't shift or fall off. When hauling machinery, load it for minimum overhang.
- Wear your safety belt. Avoid alcohol -- and if you take medications, ask your doctor if they might affect your ability to handle a truck safely.
- Obey speed laws, and drive slowly over rutted rural roads. Watch for soft shoulders and abrupt drop-offs. Slow to a safe speed before entering a curve, then maintain accelerator pressure.

- Keep an adequate following distance, especially if you're hauling a heavy load or the road is slick. You'll be better able to avoid rear-ending someone who suddenly slows or stops.
- Don't allow riders in a pickup or other truck bed.
- When driving a semi or a long-wheel-base straight truck, or towing a trailer or wagon, be sure to clear all obstacles -- posts, mailboxes, culverts, ditches, and the like. On farm lanes, and in lots and fields, watch for objects such as rocks, mud, posts, farm equipment, fences, animals -- and, of course, people. Make certain everyone is clear before backing up or moving ahead.
- If your truck has a hydraulically lifted bed, don't rely on hydraulics to hold it up. If you must attend to trouble with the bed up, block it securely. Stay clear when lowering the bed and keep bystanders back.



From Farm Bureau Insurance

FFA State Winners Continued...

Other State FFA Degree recipients were recognized for excellence in production agriculture and agribusiness. Gold winners in production agriculture were: Dawn Green, Branch Area Career Center; Ryan Kuhl, Unionville-Sebwaing; Amanda Lea Nash, Ovid-Elsie; Mary Beth Siemen, Harbor Beach. Silver recipients in the area of production agriculture were: Amanda Barry, Laker; Jim Miller Jr., Chesaning; Bill Ostrander, Leslie; James Smith, Capac; Tanya Thuemmel, North Huron; Mark Walkington, Lakewood.

The agribusiness gold award winners were: Kurtis Griffes, Webberville; Lynn Renee Houpt, Dundee; Justin Johnson, Branch Area Career Center; Chad Nicholas, Caledonia; Doug Sheridan, Mason. Silver agribusiness award recipients were: Chad Bischoff, Marshall; Robert Braman Jr., Milan; Benjamin Butcher, Corunna; Cheryl Salenbien, Dundee; Chad Sweeney, Laker; Greg Talaski, North Huron.

1993 State Proficiency Awards

Ag Mechanics
David Woods, Marshall, State Winner

Ag Sales and/or Service
Kurtis Griffes, Webberville, Gold

Beef Production
Wendy Pline, Ovid-Elsie, State Winner
Michael Allen, St. Louis, Gold
Ryan Kuhl, USA, Gold

Dairy Production
Adam Atherton, Byron, State Winner
Amanda Nash, Ovid-Elsie, Gold
Dave Mikek, St. Louis, Gold

Diversified Crop
Adam Good, Marshall, State Winner

Diversified Livestock
Ryan Kuhl, USA, Gold

Floriculture
Brandie Smego, Cassopolis, Gold

Home and Farmstead
Anthony Boughton, Marshall, State Winner
Joshua Gremel, USA, Gold

Horse Production
Charla Smith, Alma, Gold
John Schut, Hopkins, State Winner
Melinda Beck, Ogemaw Hgts., Gold

Placement in Agriculture
Michael Allen, St. Louis, Gold
Daniel Schulz, USA, Gold
Chad Benjamin, Webberville, State Winner

Sheep
John Tomasek Jr., Byron, State Winner

Soil & Water Management
David Kemp, USA, State Winner

Specialty Animal
Jennifer Blakely, Lakewood, Gold

Specialty Crop
Robert Weburg, St. Louis, State Winner

Swine
Chad Vincent, JACC, Gold
Chad Benjamin, Webberville, Gold

Wildlife Management
Danette Taschner, USA, Gold

A NEW MONEY SAVING HEALTH PLAN

FOR FARM OWNERS & OPERATORS

FAMILY HEALTH INSURANCE PROPOSAL
FARM OWNERS/OPERATORS

COVERAGE:
 CMM 250
 CMM 500
 CMM 1000

GROUP SIZE:
 Sole Proprietor
 Group Size (2-99)

Annual Premiums

Current Health Insurance	\$4,444
New Farm Bureau Group Program	3,492
Member Savings	\$ 952

Note: the savings with the new Farm Bureau Plan

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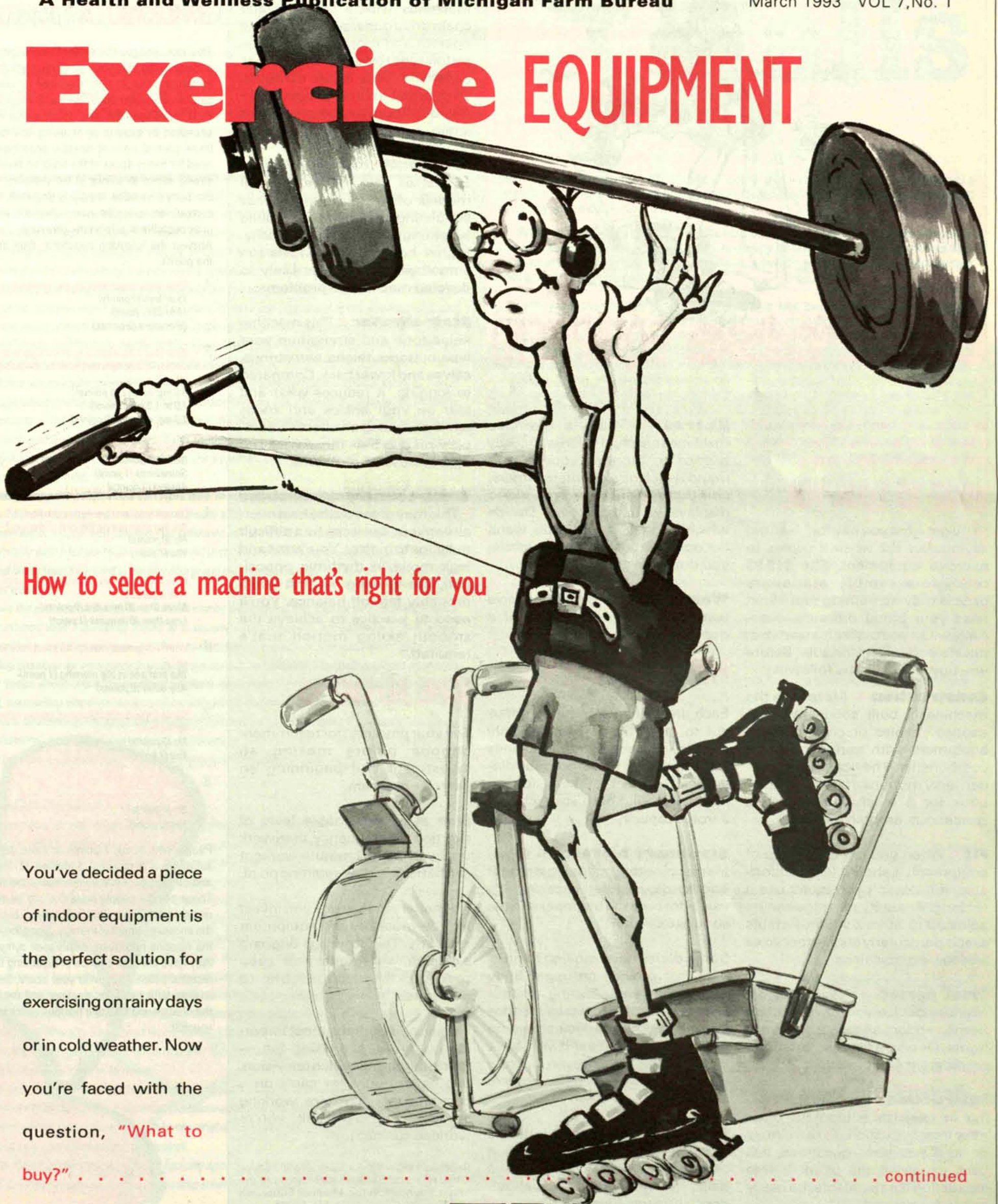
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HEALTH HARVEST

A Health and Wellness Publication of Michigan Farm Bureau

March 1993 VOL 7, No. 1

Exercise EQUIPMENT

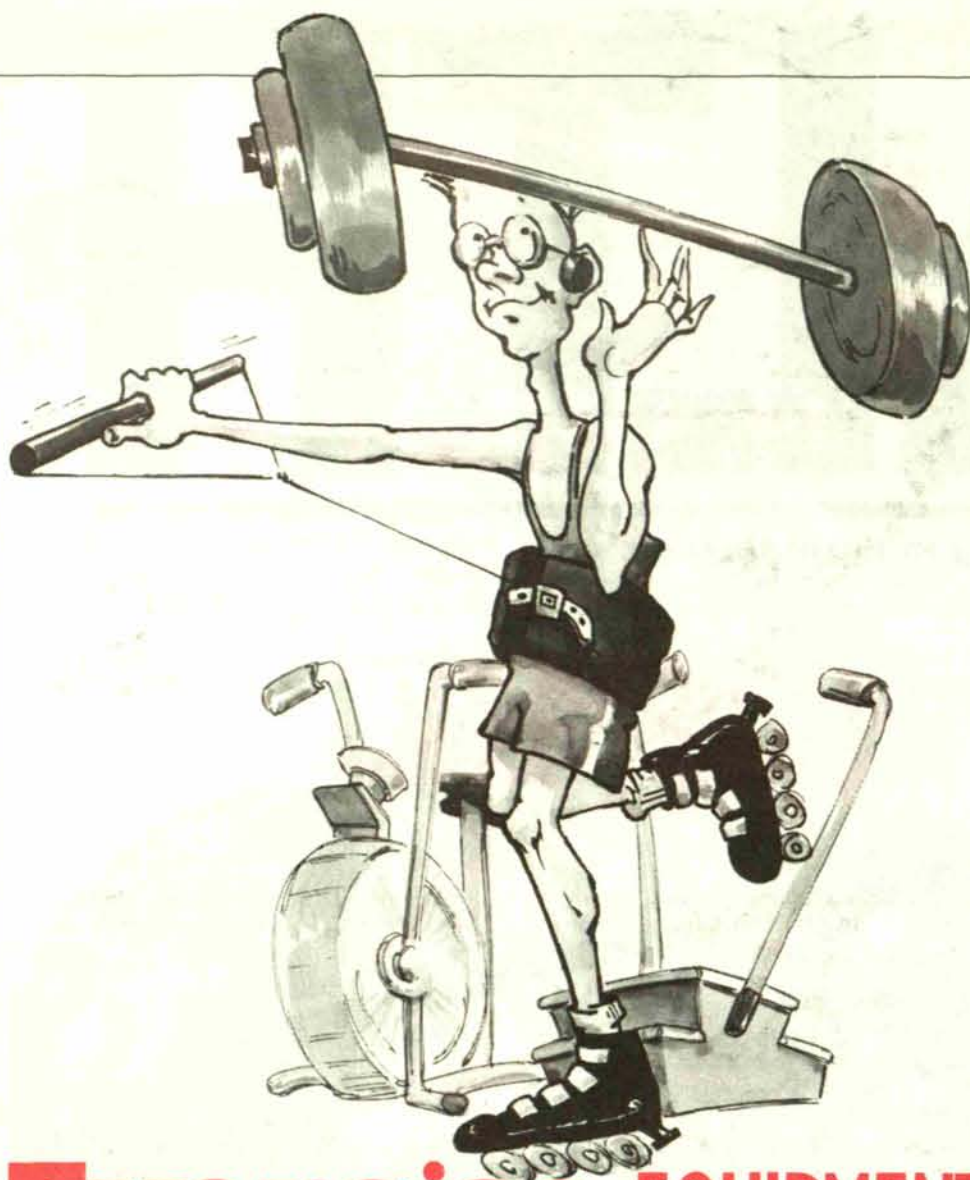


How to select a machine that's right for you

You've decided a piece of indoor equipment is the perfect solution for exercising on rainy days or in cold weather. Now you're faced with the question, "What to

buy?" continued





Exercise EQUIPMENT

The choices can be overwhelming. But if a machine at home will help you maintain a fitness routine, it's worth the money and effort of shopping.

WHAT TO LOOK FOR

"You get what you pay for" is an old saying, but apt when it comes to exercise equipment. The \$19.95 ready-to-assemble stationary bicycle may do nothing more than raise your blood pressure, especially when you realize it's unstable, unsafe and uncomfortable. Before you buy, consider the following:

Construction • Make sure the machine is built solidly with no exposed cables or chains. Avoid equipment with spring operated components. They can make sudden jerky motions that cause injury. Look for a machine that offers continuous, smooth motion.

Fit • When you get on a piece of equipment, it should feel comfortable; if it doesn't you won't use it for long. A quality machine can be adjusted to fit you. A comfortable seat is particularly critical for cycles and rowing machines.

Trial period • Never buy an exercise device you haven't tried. Some vendors allow a trial in your home. Or visit a fitness center and try different equipment.

Instruction • Vendors specializing in exercise equipment often offer free instruction. Take them up on it. If you have questions, call back or revisit the store. If free instruction isn't available, be ready to pay for training.

Extras • Today's exercise machines are often laden with costly gizmos to monitor your performance — calorie counters, timers, computer printouts and video displays to name a few. Decide which gadget, if any, you want, but don't get talked into something you don't need and won't use.

Warranty • A comprehensive warranty is usually a sign of a quality machine.

FIVE BASIC MACHINES

Each device has something different to offer. Some exercise only your lower body. Other machines build strength, or aerobic (cardiovascular) capacity. The following machines build both strength and aerobic capacity.

Stationary bicycle • A versatile machine that builds leg strength and cardiovascular capacity. It's useful for both the beginner and the serious exerciser.

Some cycles have moving handlebars that provide an upper body workout as well. Putting all four limbs in action increases calories burned and can reduce stress on your hips and knees. If you have knee problems, however, be sure the resistance can be adjusted to a low setting.

Rowing machine • This device puts your whole body in action. It offers a good aerobic workout and helps strengthen your back, shoulders, stomach, legs and arms.

Machines with a flywheel and chain drive generally are easier to operate and more effective than piston-type rowers, which are less expensive and more compact. With either rower, proper technique is important to avoid back strain.

Treadmill • You can walk or jog as fast as you choose. Several models offer adjustable inclines simulating hills. All models build leg strength and aerobic capacity. Higher horsepower models run smoother and are less likely to develop mechanical problems.

Stair-climber • This machine helps tone and strengthen your hips, buttocks, thighs, hamstrings, calves and lower back. Compared to jogging, it reduces wear and tear on your ankles and knees while providing an effective aerobic workout. Still, the device can aggravate knee problems.

Cross-country ski machine • This may give you the best overall workout, but it can be a difficult machine to master. Your arms and legs move in rhythmic opposition, like walking. At first you'll probably feel off balance. You'll need to practice to achieve the smooth skiing motion that's required.

SOME REMINDERS

See your physician for recommendations before making an investment and beginning an exercise program.

Start at a comfortable level of exertion and frequency, then work up. Even a 1 or 2 minute workout can be beneficial as a starting point.

No matter what device you invest in, you must use the equipment regularly. To encourage ongoing exercise, set goals and keep records. Be accountable to someone.

Finally, and perhaps most importantly, make exercising fun — read a magazine, watch television, use headphones, or carry on a conversation. If you're working so hard you can't talk, you're working too hard.

Reprinted from the September 1992 Mayo Clinic Health Letter with permission of the Mayo Foundation for Medical Education and Research, Rochester, MN 55905.

Lifes

SMOKING...is it physical?

This quiz gauges the strength of a smoker's addiction, the likelihood of severe withdrawal symptoms, and, in turn, the need for nicotine patches. Swedish researcher Karl O. Fagerstrom, Ph.D., developed the quiz, which is now widely accepted by experts on smoking. It uncovers three general signs of nicotine dependency: a need for heavy doses of the drug; an especially strong desire to smoke in the morning, when the body's nicotine supply is depleted; and a compulsion to smoke even when it's socially unacceptable or offers little pleasure. Answer the following questions, then add up the points.

1. How many cigarettes do you smoke in a day?
15 or less (0 points)
16 to 25 (1 point)
26 or more (2 points)
2. How much nicotine is in each cigarette you smoke? (That information is on the package label.)
0.9 mg. or less (0 points)
1.0 to 1.2 mg. (1 point)
1.3 mg. or more (2 points)
3. How often do you inhale?
Never (0 points)
Sometimes (1 point)
Always (2 points)
4. Do you smoke more during the first 2 hours of the day than during the rest of the day?
No (0 points)
Yes (1 point)
5. How soon after you wake up do you smoke your first cigarette?
More than 30 minutes (0 points)
Less than 30 minutes (1 point)
6. Which cigarette would you most hate to give up?
The first one in the morning (1 point)
Any other (0 points)
7. Do you find it difficult not to smoke where it's forbidden?
No (0 points)
Yes (1 point)
8. Do you smoke even if you're so ill that you're in bed most of the day?
No (0 points)
Yes (1 point)

People who score 7 points or more probably suffer from a physical addiction to nicotine and can expect severe withdrawal symptoms. Those are the people least likely to be able to quit simply by exercising "will power" or getting the encouragement of therapy. Since they need the nicotine to prevent withdrawal symptoms, they have the best chance of benefiting from a nicotine patch. The lower your score, the less intense your need for nicotine, and the lower the chance you'll need a nicotine patch to help you quit.

Style

NICOTINE PATCHES: A better way to quit?

Patches fight nicotine with nicotine. They can help. But you still need plenty of will power. While the patch may be working wonders for drug makers profits, its not a magical solution for smokers. Some patch users may "Step into a life free from cigarettes," as one ad promises. But most won't. And, last summer, reports of heart attacks among users of the patch raised questions about its safety. Here's a realistic look at what nicotine patches can and can't do.

A NEED FOR NICOTINE

When a cigarette smoker tries to quit, the odds are less than 1 in 10 that he or she will succeed for more than a few months. That's because smoking is not just psychologically addicting, but physically addicting as well. Most smokers develop symptoms of nicotine withdrawal within a few hours after their last puff. Those withdrawal symptoms can include hunger, insomnia, and difficulty concentrating, as well as feelings of anxiety, irritation and anger.

Before patches came along, the best way to fight nicotine withdrawal was by chewing nicotine gum (Nicorette). But using nicotine gum properly isn't as easy as it sounds. Chew it for less than 20 minutes or so, and you won't get enough nicotine; chew it too vigorously or too continuously, and you get too much, which can cause burning in the mouth and throat, nausea, or vomiting. Many foods and drinks, particularly highly acidic ones like coffee and soda, can interfere with the absorption of nicotine if you ingest them before using the gum.

Patches are a simpler, more reliable way to ease withdrawal symptoms. You stick the 2 to 3-inch adhesive patch on your upper arm or torso and replace it once a day. The patch continuously releases small amounts of the drug, which then seeps into the skin, supplying the daily equivalent of up to three-quarters of a pack of cigarettes. Each brand comes in two or three dosages, so you can gradually wean yourself from nicotine during the treatment period which lasts anywhere from six weeks to several months.

Initially, using the patch alone can work well. In one study at the Mayo Clinic, for example, 77 percent of people had stopped smoking immediately after a six-week course of treatment, compared with 39 percent using placebo patches that delivered no active drug. But such success doesn't last: A similar study with a longer follow-up has found that only around 15 percent of people in the patch group and fewer than 5 percent in the placebo group managed to stay away from cigarettes for a full year after treatment.

While the patches ultimately aren't much use by themselves, they can be moderately effective when combined with counseling aimed at a smoker's psychological dependency. In the typical study, smokers wearing nicotine patches participate in weekly or biweekly hour-long group counseling sessions for anywhere from three weeks to three months. That two-pronged approach typically keeps about one of every three smokers away from cigarettes for at least one year. By contrast, counseling alone works as well for only about one of every five smokers.

Experts on smoking and patch manufacturers themselves agree that patch users should indeed have behavioral counseling and support. Consumers Union's medical consultants recommend group programs such as those run by the American Lung Association or the American Cancer Society.

WHAT ABOUT THE RISK?

The only serious side effect associated with the patch was reported recently by a Massachusetts hospital, which had five heart attack cases in patch users who continued to smoke. But at least a dozen clinical trials, involving a total of several thousand smokers, have found no more heart attacks among people who wear the patches than among those who wear placebo patches—even though many patch-wearers continued to sneak at least an occasional cigarette.

Smokers who are at highly increased risk for heart attack would be better off kicking the habit without the help of patches. (Factors that strongly increase the risk include a recent heart attack; uncontrolled angina, or heart related chest pain; and abnormal heart rhythms.) However, any smoker who can't quit without the patches is probably safer trying them than continuing to smoke.

Other side effects are better established. Up to half of patch users experience itching, burning, or reddened skin around the patch, but those symptoms are generally minor and transient.

Some patch wearers also report insomnia or nightmares—both caused by wearing the patch round the clock. The newest patch on the market, Nicotrol, is designed to be taken off at night, since it provides a full daily dose in 16 hours.

Consumers Union's medical consultant suggests starting with a 24-hour patch (Habitrol, Nicoderm, or PROSTEP). Then, if nighttime problems arise, you could simply remove the patch before going to bed. While that reduces the total amount of nicotine you get, you might do fine on the lower dose. If not, you could just switch to Nicotrol.

Other than that difference, no patch has any apparent advantage over the others. They all cost about \$25 to \$30 per week. Some insurance companies and even some employers will cover that cost.



The following questions and answers come from Lansing's Sparrow Hospital's physician referral and information service called "NurseLine". They are timely and commonly asked questions.

Q. With so much coverage in the media today about the high cost of health care and treatment in a hospital emergency room, recognized as one of the most expensive places to receive care, how do you know if a visit to the emergency room is appropriate?

A. Each year, over 50,000 people are evaluated and treated in Sparrow Hospital's Emergency Department. Dr. Bruce Reineohl, has treated thousands of patients during thirteen years as a Sparrow Hospital Emergency Medicine physician, yet he stresses that there are not strict guidelines for when to come to a hospital emergency room. "If you are worried about a problem, then we are worried about it too," said Dr. Reineohl.

Unfortunately, many patients do not come in for treatment until they are seriously ill, Dr. Reineohl says, while other patients tend to come in with simple problems that could easily be treated at home or could wait until the patient sees his or her physician.

Remember, Dr. Reineohl says, many health problems are easier and more cost-effective to treat if caught earlier. If you are not sure if your condition warrants a visit to the emergency room, Dr. Reineohl suggests you contact your private physician or call Sparrow Hospital's NurseLine, 1-800-968-3838.

Dr. Reineohl offers the following list of potentially serious situations which suggest immediate medical attention:

- Shortness of breath
- Serious cuts
- Orthopedic injuries (breaks, sprains, swelling)
- Pregnancy problems (bleeding or abdominal pain)
- Suicide attempts or psychotic episodes
- Change in status of a chronic health problems (asthma, heart disease)
- Chest pain
- Head injuries

If possible, you should contact your private physician before you leave for the Emergency Room. Your physician may be able to provide important medical information to the emergency room staff. Dr. Reineohl cautions that one should not hesitate if he/she think they need immediate attention.

"I would rather see a hundred people that did not need immediate treatment, than to miss one that did."

Q. What is Lyme disease and what are the symptoms?

A. According to Dr. Michael Fairfax, Rheumatologist at Sparrow Hospital, Lyme Disease is transmitted by a deer tick the size of a pinhead, and is contracted most often in the spring and summer months. It is caused by a spirochete, usually *Borrelia Burgdorferi* which is a microorganism. Lyme Disease discriminates against no one—people of all ages may be affected.

According to Dr. Fairfax, the symptoms and signs of Lyme Disease range from headaches and rashes, to more serious neuromuscular and cardiac manifestations. Within 30 days, an infected person may feel the onset of early symptoms of this disease, characteristically starting as a rash. Without treatment, a person may experience cardiac, neurologic or musculo-skeletal symptoms within two months to several years after being infected with the spirochete. If you have reason to believe you may have been infected with Lyme Disease, see your physician.

Q. I spend a lot of time on my feet. Often after working or exercising in a gym, I experience itching, cracking and burning between my toes. How can I prevent athlete's foot?

A. According to Dr. Mitchell Rinek, Dermatologist on staff at Sparrow Hospital, you can prevent athlete's foot by following these guidelines:

- Wear cotton socks when you exercise.
- Change your socks every day.
- Wear shoes with ventilation holes or porous upper material (not man-made), or sandals.
- Air out your shoes when you are not wearing them
- Wear sandals or flip-flops when you take a shower in a locker room.
- Apply Micatin or Lotrimin, an over the counter compound once or twice a week between your toes and predisposed areas.
- Disinfect shower and locker room floors.

If you have health concerns, questions, or need a physician referral, call Sparrow Hospital's NurseLine, an information and Physician Referral Service at 1-800-968-3838.

The above questions and answers are for general information purposes only. If you have symptoms or health related questions, consult our physician.

Your OPERATION, Your BLOOD

When you discuss surgery with your physician, in addition to scheduling the date, you may want to ask about donating your own blood in advance. Technically known as autologous blood, your own blood can be collected, tested and stored before surgery to be available for blood transfusions.

"We're seeing more autologous collection because using your own blood is really the safest, surest way to reduce the risk of potential exposures," said Fran Sklapsky, administrative director of the Sparrow Hospital Laboratory in Lansing, MI. "It's becoming more common and more people are electing it as a personal preference."

For a few people, autologous collection may be medically indicated. "When there is the presence of unusual antibodies or multiple antibodies in an individual's blood, it could make the possibility of finding compatible blood difficult or next to impossible," said Sklapsky. Antibodies are identified by routine blood group and type testing.

According to Fred Wilson, administrator of the Great Lakes Regional Blood Service for the American Red Cross, the key difference between the general blood supply and autologous or directed donations (for specific donors) is that autologous and directed donations are planned donations.

Directed donations are taken from persons selected by the patient from among family or close friends who have the same or compatible blood type. "The major medical objection to directed donations is that, under pressure to donate, a family member or friend might not be completely truthful about their medical history. This is especially true since donor anonymity has been sacrificed," said Wilson.

"Our autologous and directed donations are special services that the Red Cross Blood Services provides to patients," said Wilson. "All of these donations require special paperwork and authorizations."

Whether you choose to use your own blood for surgery as a personal preference or for medical reasons, your doctor must order autologous collection. Any blood donor — autologous, directed donor, or general donor — must be at least 14 years old and weigh 100 pounds or more.

Prior to the final approval for autologous collection, the physician and technicians evaluate the patient's overall health, medical history, and any medications the patient is taking. For example a history of blood disorders or cardiovascular disease, and certain "blood thinning" medications would preclude autologous donation. Pregnant women or patients who have an active infection will not be allowed to donate.

Currently about 4 million people require transfusions of 14 million units of blood and blood components each year. The Red Cross Blood Service, the nation's largest supplier of blood (most of it donated) says that the current tests, including tests for HIV antibodies, virtually eliminate the chances of receiving contaminated blood.

"We remind our regular, volunteer blood donors that they cannot direct to a patient unless the patient has requested them to do so," said Wilson.

ADDITIONAL QUESTIONS:

Q. How many units of blood (pints?) are typically needed for surgery, i.e., is there a recommended available supply?

A. We usually leave that decision to discretion of physician who makes the determination depending on the type of surgery, for example, a Caesarean may require only 2 units of blood where joint surgery may indicate an available supply of up to 6 units of blood.

Q. How frequently would the patient donate before elective surgery?

A. With the physician's approval and assuming patient can recover adequately, we would draw 1 unit a week and ideally draw the last unit 1 to 2 weeks prior to surgery. If the physician orders, say 6 units, that sounds like a lot of units of blood in a short period of time. There is the possible problem of outdated blood.

Q. How far in advance would autologous collection take place?

A. A unit of blood is good for 42 days — Maximum ideal period. If we need to start drawing before that time and could encounter the problem of outdated we do what we call "leap frog collection," i.e., we take 1 unit this week; then at the next collection date we give that unit back and then draw 2 units.

Q. What factors might determine the frequency of autologous collection?

A. Hemacrit level (ratio of red cells to plasma) recovers adequately; overall health; minimum level of hemacrit (red cells vs. plasma) This is all monitored by the physician.

Q. Are there times when autologous collection would be indicated?

A. Autologous collection is indicated when there is the presence of unusual antibodies or multiple antibodies in an individual's blood that could make the possibility of finding compatible blood difficult or next to impossible. Antibodies in the blood are identified by routine blood group and type testing done by the hospital — a lot of people walking around with antibodies, but generally can find a compatible blood supply.

Q. How long does blood testing take?

A. A minimum of three days before surgery — if donor directed.

Q. What other tests are performed on donated blood (other than for HIV antibodies)?

A. Blood group and type, antibody screening; ALT, non specific liver function test; hepatitis C; hepatitis B surface antigens; hepatitis core; HIV; HTLV-1 virus; VDRL (syphilis).

Fran Sklapsky, administrative director of the laboratory, Sparrow Hospital, Lansing.

MEDICAL FOCUS

STUDY SAYS DRUGS WORK AS WELL AS BALLOON ANGIOPLASTY TO OPEN CLOSED VESSELS AFTER HEART ATTACK

Clot-dissolving drugs restore blood flow during a heart attack just as well as the more complex balloon angioplasty procedure, according to an article in the New England Journal of Medicine.

"This finding should be of great benefit to patients," says Dr. Raymond Gibbons, Mayo Clinic cardiologist and principal author of this study. "Drug therapy is available in virtually every hospital across the United States. The balloon procedure is available only at larger medical centers."

The study assigned 108 patients who had suffered acute heart attacks to one of two therapies. Half received the clot-dissolving drug called tissue plasminogen activator over four hours. They were then observed carefully for the next week. If their chest pain returned, they were treated promptly with medicines or balloon angioplasty.

The other half received balloon angioplasty. This therapy involved threading a balloon-tipped catheter through an artery in the leg and up into the blocked heart vessel. The balloon was then inflated to widen the blocked vessel and restore normal blood flow. This procedure is almost always successful initially, although the vessel may again become blocked over the next six months.

By using a radioactive material and imaging technique, the researchers were able to measure the potential size of the heart attack before treatment and the actual size of the heart attack after treatment. Gibbons and colleagues determined the amount of heart-muscle saved by comparing these two numbers. These measurements showed that both treatments reduced the size of the heart attack by 50 percent. Unfortunately, many patients did not come to the emergency room until they had chest pain for more than two hours. The benefit of either therapy would almost certainly have been greater if the patients had come to the hospital sooner.

"Many cardiologists believe that the balloon procedure would be more effective," Gibbons notes. "We were a bit surprised to find that the drug therapy helped save as much heart muscle as balloon therapy."

The study also showed that the cost of the therapies was about the same. In analyzing costs, researchers measured expenses for hospitalization as well as costs for days taken off of work and change in personal income. When they compared the amount of heart muscle saved with the cost of therapy, they found no substantial difference.

This is one of many Mayo studies examining both the benefits and costs of various treatment options.



9 SCS to Begin New Method for Measuring Soil Erosion

Farm Bureau has long believed that sound science is the basis for good policy. To that end, the USDA Soil Conservation Service (SCS) is about to implement an improved equation for estimating soil erosion caused by rainfall and runoff. The old method, known as the Universal Soil Loss Equation, will now be called the Revised Universal Soil Loss Equation (RUSLE).

Many farmers using crop residue management, particularly certain types of mulch tillage and no-till, have felt that the old equation did not give them proper credit for the soil erosion control they were attaining.

While the revised equation doesn't address all the concerns, it represents a major improvement. The revised equation may cause some erosion estimates to go up, while others will go down. For those that go down, the good news is that farmers are accomplishing more erosion control than they were previously credited with.

The equation itself will remain the same (A=RKLSLCP). What has changed is that more research has become available to allow some of the factors to be updated to more accurately reflect different conditions across the country. Particularly noteworthy are improvements in:

R=rainfall factor - This factor has been dramatically updated in the western U.S. from data obtained at 1,200 weather stations. The factor also has been revised in the eastern U.S. for flatter areas with high R-factors.

K=soil erodibility factor - A seasonally variable erodibility factor has been developed.

L=slope-length factor and S=slope-gradient factor - New slope length and steepness factors have been developed to account for rill and inter-rill erosion and slopes of varying shape.

C=cropping management factor - New sub-factors for prior land use, crop canopy, surface cover and surface roughness are available.

P=erosion control practice factor - New values have been generated for rangelands, strip-crop rotations, contouring and subsurface drainage.

SCS indicates that the changes should not affect the Midwest very much since that is where the information came from to develop the original method. However, RUSLE may change erosion estimates in other parts of the country. The change could be either way; in some cases erosion estimates will increase, in other cases they may decrease.

The Agriculture Research Service, which did the research and developed the revised equation, turned RUSLE over to the SCS in mid-December. SCS will train state offices. State SCS offices will then develop tables using the new factors and have those tables in the local SCS offices by August 1993.

However, SCS does not anticipate that use of the new equation will require a wholesale rewrite of conservation compliance plans.

Technical questions about RUSLE should be directed to: Kenneth Renard, ARS, USDA, Tucson, AZ 85701; George R. Foster, University of Minnesota, St. Paul, MN 55108; or Glenn Weesies, National Soil Erosion Research Laboratory, West Lafayette, IN 47907.



When available, the SCS field offices will use the new method in making calculations for any "new" conservation compliance, CRP and sodbuster plans. They also will use it when revising any plans that farmers want to change.

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Farm Bureau Communicates Health Initiatives to First Lady

In a letter to Hillary Clinton and the Health Care Task Force she is chairing, the American Farm Bureau Federation pointed out a number of changes in U.S. health care policies that would bolster the quality and availability of health care in under-served rural America.

AFBF suggested that health care policy include the following:

- * A 100-percent health insurance tax deduction for the self-employed.

- * The elimination of or drastic reductions in cost shifting from Medicaid and Medicare to individuals and third-party payers.

- * Assistance for medical communications systems and emergency patient transfer systems.

- * Regulatory flexibility for health care providers in rural areas.

- * Greater efforts by the nation's medical schools to train family physicians to practice in rural areas.

- * Allowing a greater use of non-physician health care providers, such as nurse practitioners and physician's assistants.

TO RECEIVE ADDITIONAL INFORMATION AND AN AMEX BROCHURE/APPLICATION - FILL OUT THE COUPON BELOW OR CALL DIRECT 1-800-292-2680, EXT. - 2724.



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10

Reducing the Risk of Groundwater Contamination by Improving Fertilizer Storage

If stored safely in a secure location, fertilizers pose little danger to groundwater. Common sense suggests keeping fertilizer dry and out of the way of activities that might rip open a bag or allow rain to enter a bulk container.

In the event of such an accident, an impermeable (waterproof) floor, such as concrete, helps to prevent fertilizer seeping into the ground and leaching to groundwater. A curb built around liquid fertilizer storage areas will prevent contaminants from spreading to other areas.

Secondary containment provides an impermeable floor and walls around the storage area, which will prevent the fertilizer from seeping into the ground if a bulk liquid fertilizer storage tank should leak.

Building a New Storage Facility

While a new facility just for fertilizer storage may be expensive, it may be safer than trying to adapt areas meant for other purposes. Keep these simple principles in mind:

1. Locate the dry storage building or liquid secondary containment downslope at least 150 feet away from the well and 200 feet from surface water. Separation from the

well should be greater in areas of sand or fractured bedrock.

2. In the event of a fire, contaminated fire fighting runoff water should drain to a confined area.

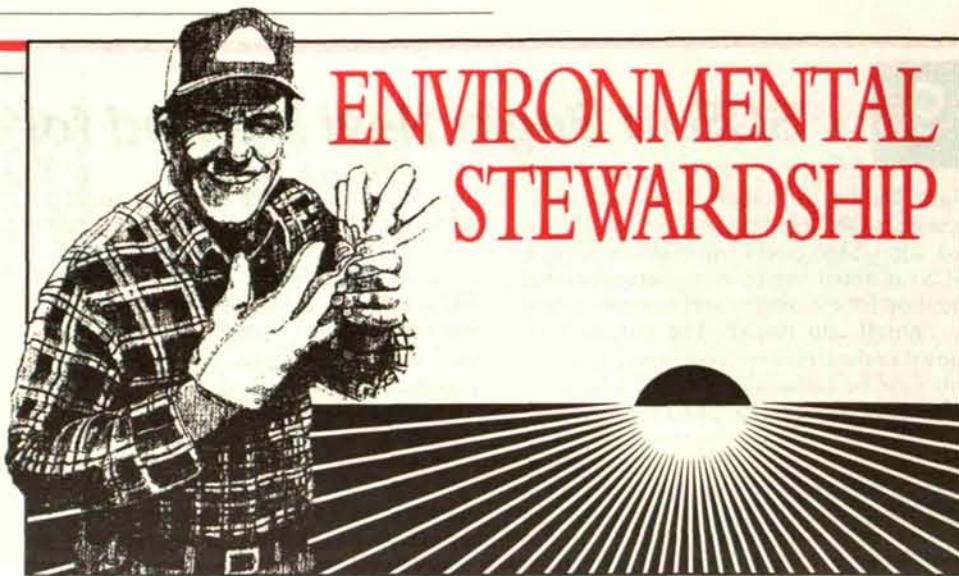
3. The mixing and loading area should be close to your storage facility, to minimize the distance that chemicals are carried.

4. The building foundation or secondary containment floor should be well drained and located a minimum of two feet above the water table. The finished outside grade should be 3 inches below the floor of the storage area and sloped away from the building to provide surface drainage. The subsoil should have a low permeability.

5. Provide pallets to keep bags off the floor. Store dry products separate from liquids to prevent wetting from spills.

6. If you plan to store large bulk tanks, provide a large enough containment area to confine 125 percent of the contents of the largest bulk container, plus the displaced volume of any other storage tanks.

7. A locked storage area or building provides security. Preventing unauthorized use of fertilizer reduces the chance of ac-



cidental spills or theft. Provide signs or labels indicating that the cabinet or building is a fertilizer storage area. Labels on the outside of the building give firefighters important information about fertilizers during an emergency response for a fire or spill.

8. Provide adequate road access for deliveries and emergency equipment.

9. For information on factors to consider in the design of a storage facility, such as ventilation, water access, temperature control and worker safety, contact your county Extension office or the Michigan State University Department of Agricultural Engineering at (517) 355-4720 for plans and recommendations.

An effective way to reduce your storage cost is to cut back on the amounts of fertilizer stored. If that option is not practical, consider how you can protect the fertilizers you keep on hand.

Ideally, your fertilizer storage area should be separate from other activities. If the building must also serve as a machine shed or a housing for livestock, you may find it difficult to meet all the requirements for safe storage.

Mixing/Loading Practices

Groundwater contamination can result from small quantities spilled regularly in the same place. Spills of dry fertilizer should be promptly and completely cleaned up and placed immediately into the application equipment.

A mixing/loading pad provides for operational containment during the transfer of liquid fertilizer to application equipment on nurse tanks. Store piles of dry bulk fertilizer on an impermeable surface under cover or in a building. Treat dry fertilizer impregnated with a pesticide as a pesticide.

Liquid Fertilizer Mixing/Loading Pad

Containing liquid fertilizer spills and leaks requires an impermeable surface (such as concrete) for mixing and loading. A concrete pad should be large enough to accommodate your equipment and to contain leaks from bulk tanks, wash water and spills from transferring fertilizers to the sprayer.

Locate the pad adjacent to the storage area. Make sure that water from the pad moves away from the well. At sites where runoff could reach the well, construct a diversion to direct runoff to another area. Pads should be located at least 150 feet from private wells unless special well head protection is provided.

The size of the pad depends on the equipment you use. It should provide space around the parked equipment for washing and rinsing. The fertilizers and rinse water should have a confined area, such as a sump, for settling before transfer to rinsate storage tanks.

Having several separate rinsate storage tanks allows you to keep rinse water and different fertilizer chemical mixes separate. That way, it can be used for mixing water on subsequent loads.

If you are considering constructing a mixing/loading pad, more detailed information is available from county Extension offices or the Department of Agricultural

Engineering at Michigan State University. Call (517) 355-4720.

Even if you don't have an impermeable mixing and loading pad, you can minimize contamination by following some basic guidelines:

- Avoid mixing and loading fertilizers within 100 feet of a well or water supply. One way to do this is to use a nurse tank to transport water to the mixing and loading site.

Ideally, the mixing site should be moved from year to year within the field of application.

- Avoid mixing and loading on gravel driveways or other surfaces that allow spills to sink quickly through the soil. A clay surface is better than sand.

- Install an anti-backsiphon device on the well or hydrants. Never put the hose in the sprayer tank. Provide an air gap of 6 inches between the hose and the top of the sprayer tank.

- Always supervise sprayer filling.

- Consider using a closed handling system, in which the fertilizer is directly transferred from the storage container to the applicator equipment, typically through a hose. This minimizes human and environment exposure to the chemical.

- Use rinsate for mixing subsequent loads.

- Once the pad is contaminated with chemicals, runoff must be contained and stored with the rinsate for mixing subsequent loads, or disposed of in an approved manner.

- Only when the pad has been adequately cleaned can runoff be considered uncontaminated and allowed to discharge freely.

Spill Cleanup

For dry spills, promptly sweep up and reuse the fertilizer as it was intended. Dry spills are usually very easy to clean up. Dry impregnated fertilizer is considered a pesticide and, if spilled, should be recovered and applied to the target crop as it was intended.

For liquid spills, recover as much of the spill as possible and reuse as it was intended. Some contaminated soil may be required to be removed and field applied if possible.

Report uncontained fertilizer spills of more than 55 gallons or 200 pounds of fertilizer. Smaller quantities of liquid or dry products should be reported if they could cause damage because of the nature of the specific compound or spill location.

To report, call the 24-hour Pollution Emergency Alerting System (PEAS) of the Michigan Department of Natural Resources: 1-800-292-4706.

Remove the spilled material and contaminated soil no matter what the quantity, and dispose according to DNR recommendations. Know how to handle your particular fertilizers, and whom to call for help.

Contacts and References

Who to call about...

Plans and recommendations for fertilizer mixing and loading pads:

*Your Extension office or Michigan State University, Department of Agricultural Engineering, at (517) 355-4720.

Fertilizer spills:

* The 24-hour Pollution Emergency Alerting System (PEAS) - Michigan Department of Natural Resources at 1-800-292-4706.

Proper disposal of soil contaminated by a fertilizer spill:

* Department of Natural Resources, Environmental Response Division:
Region I - Marquette (906) 228-6561
Region II - Roscommon (517) 275-5151
Region III - Lansing (517) 322-1300

What to read about...

Groundwater and nitrates in groundwater:

* Well Water Sampling Results. 1988-1989. Michigan Department of Agriculture. (517) 373-1087.

Health effects:

* *The product label.* Read your product labels carefully for specific information on fertilizer health effects.
* *Nitrate, Groundwater and Livestock Health.* Univ. of Wisconsin-Extension. G3217.
* *Nitrates and Groundwater.* Freshwater Foundation.

Fertilizer handling and management:

* *Fertilizer Practices, Right To Farm.* Michigan Agricultural Commission, Lansing, MI.
* *Chemicals in Your Community: A Guide to the Emergency Planning and Right to Know Act.* 1988. U.S. Environmental Protection Agency. Pages 26-27 contain information on implications of this law for farmers.

Fertilizer storage:

* *Fertilizer and Pesticide Containment Facilities Handbook.* Midwest Plan Service, Ames, Iowa. MWPS-37.
* Michigan Department of Agriculture, Pesticide and Plant Pest Management Division. REG 641 (pending) Commercial Fertilizer Bulk Storage.

Publications available from...

1. Your county Extension office, or directly from the Bulletin Office, Room 10B Agriculture Hall, Michigan State University, East Lansing, MI 48824. There may be charges for the publications.

2. Your county Extension office or the Plan Service Secretary, Agricultural Engineering Department, Room 217 A.W. Farrall Hall, Michigan State University, East Lansing, MI, (517) 353-3297.

3. University of Wisconsin-Extension, Environmental Resources Unit, 216 Agriculture Hall, 1450 Linden Drive, Madison, Wisconsin 53706, (608) 262-0020.

4. U.S. Environmental Protection Agency (EPA), Office of Pesticide Programs (TS-766C), 401 M Street S.W., Washington, D.C. 20460.

5. Freshwater Foundation at Spring Hill Center, 725 County Road 6, Wayzata, Minnesota, (612) 449-0092.

6. Midwest Plan Service, Agricultural and Bio Engineers Department, 122 Davidson Hall, Iowa State University, Ames, IA 50011.



11 Assessing the Risk of Groundwater Contamination from Fertilizer Storage and Handling

Worksheet

Fertilizer Storage and Handling: Assessing Drinking Water Contamination Risk

- Use a pencil. You may want to make changes.
- For each category listed on the left that is appropriate to your farmstead, read across to the right and circle the statement that best describes conditions on your farmstead. (Skip and leave blank any categories that don't apply to your farmstead.)
- Then look above the description you circled to find your "rank number" (4, 3, 2 or 1) and enter that number in the blank under "your rank."
- Directions on overall scoring appear at the end of the worksheet.
- Allow about 15-30 minutes to complete the worksheet and figure out your risk ranking for fertilizer storage and handling practices.

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
FERTILIZER STORAGE					
Dry formulation					
Amount stored	None stored at any time.	Less than 1 ton.	Between 1 and 20 tons.	More than 20 tons.	___
Type of storage	Covered on impermeable surface (such as concrete or asphalt). Spills are collected.	Covered on clay soil. Spills are collected.	Partial cover on loamy soils. Spills not collected.	No cover on sandy soils. Spills not collected.	___
Liquid formulation					
Amount stored	None stored at any time.	Less than 55 gallons.	Between 55 and 1500 gallons.	More than 1500 gallons.	___
Type of storage	Concrete or other impermeable secondary containment does not allow spill to contaminate soil.	Clay-lined secondary containment. Most of spill can be recovered.	Somewhat permeable soils (loam). No secondary containment. Most of spill cannot be recovered.	Permeable soil (sand). No secondary containment. Spills contaminate soil.	___
Containers	Original containers clearly labeled. No holes, tears or weak seams. Lids tight.	Original containers old. Labels partially missing or hard to read.	Containers old but patched. Metal containers showing signs of rusting.	Containers have holes or tears that allow fertilizers to leak. No labels.	___

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
FERTILIZER STORAGE (continued)					
Security	Fenced or locked area separate from all other activities, or locks on valves.	Fenced area separate from most other activities.	Open to activities that could damage containers or spill fertilizer.	Open access to theft, vandalism and children.	___

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
MIXING AND LOADING PRACTICES					
Location of well in relation to mixing/loading area with no curbed and impermeable containment area	100 or more feet downslope from well.	50 to 100 feet downslope.*	10 to 50 feet downslope,* or 100 to 500 feet upslope.	Within 10 feet downslope* or 100 feet upslope.	___

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
ADDITIONAL MIXING AND LOADING PRACTICES FOR LIQUID FERTILIZER					
Mixing and loading pad (spill containment)	Concrete mixing/loading pad with curb keeps spills contained. Sump allows collection and transfer to storage.	Concrete pad with curb keeps spills contained. No sump.	Concrete pad with some cracks keeps some spills contained. No curb or sump.	No mixing/loading pad. Permeable soil (sand). Spills soak into ground.	___
Water source	Separate water tank.	Hydrant away from well.	Hydrant near well.	Directly obtained from well.	___
Backflow prevention on water supply	Anti-backflow device installed or 6-inch air gap maintained above sprayer tank.	Anti-backflow device installed. Hose in tank above waterline.	No anti-backflow device. Hose in tank above waterline.	No anti-backflow device. Hose in tank below water line.	___
Filling supervision	Constant	___	Frequent	Seldom or never	___

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
ADDITIONAL MIXING AND LOADING PRACTICES FOR LIQUID FERTILIZER (continued)					
Handling system	Closed system for all liquid product transfers.	Closed system for most liquids. Some liquids hand poured. Sprayer fill port easy to reach.	All liquids hand poured. Sprayer fill port easy to reach.	All liquids hand poured. Sprayer fill port hard to reach.	___

	LOW RISK (rank 4)	LOW-MOD RISK (rank 3)	MOD-HIGH RISK (rank 2)	HIGH RISK (rank 1)	YOUR RANK
CLEANUP AND DISPOSAL PRACTICES					
Sprayer cleaning and rinsate (rinse water) disposal	Sprayer washed out in field. Rinsate used in next load and applied to labeled crop.	Sprayer washed out on pad at farmstead. Rinsate used in next load and applied to labeled crop.	Sprayer washed out at farmstead. Rinsate sprayed less than 100 feet from well.	Sprayer washed out at farmstead. Rinsate dumped at farmstead or in nearby field.	___

Boldface type: Although these practices are legal for fertilizers in Michigan, they are illegal for pesticides. Therefore, if the same area is used for both pesticide and fertilizer handling, these conditions are illegal.

TOTAL

Why should I be concerned?

Fertilizers play a vital role in agriculture. Over the years, they have increased farm production dramatically. Commercial fertilizer is, however, a major source of nitrate.

Nitrate-nitrogen levels exceeding the public health standard of 10 milligrams per liter (mg/l; equivalent to parts per million for water measure) have been found in many drinking water wells. The other major components of commercial fertilizer, phosphorus and potassium, are not generally a groundwater contamination concern.

Nitrate levels in drinking water above federal and state drinking water standards of 10 mg/l nitrate-nitrogen can pose a risk to some infants. Infants under 6 months of age are particularly susceptible to health problems from high nitrate-nitrogen levels, including the condition known as methemoglobinemia (blue baby syndrome). Nitrate can also affect adults, but the evidence is much less certain.

Young livestock are also particularly susceptible to health problems from high nitrate-nitrogen levels. While livestock may be able to tolerate several times the 10 mg/l nitrate-nitrogen level, levels of 20-40 mg/l may prove harmful, especially in combination with high levels (1,000 ppm) of nitrate-nitrogen from feed sources.

Farmstead handling of fertilizers can affect groundwater by allowing materials containing nitrogen to seep through the ground after a leak or spill. Other potential farmstead sources of nitrate are septic systems, livestock yards, livestock waste storage facilities and silage storage.

Your drinking water is least likely to be contaminated if you follow appropriate management procedures or dispose of wastes off the farm site. However, proper off-site disposal practices are essential to avoid risking contamination that could affect the water supplies and health of others.

How will this worksheet help me protect my drinking water?

- It will take you step by step through your fertilizer handling, storage and disposal practices.
- It will rank your activities according to how they might affect the groundwater that provides your drinking water supplies.
- It will provide you with easy-to-understand rankings that will help you analyze

the "risk level" of your fertilizer handling, storage and disposal practices.

- It will help you determine which of your practices are reasonably safe and effective, and which practices might require some modification to better protect your drinking water.

How do I complete the worksheet?

Follow the direction at the top of the charge on the next page. It should take you about 15-30 minutes to complete this worksheet and figure out your ranking.

What do I do with these rankings?

Step 1: Begin by determining your overall fertilizer management risk ranking. Total the rankings for the categories you completed and divide by the number of categories you ranked.

This ranking gives you an idea of how your fertilizer management practices as a whole might be affecting your drinking water. It should serve only as a very general guide, not a precise diagnosis. Because it represents an averaging of many individual rankings, it can mask any individual rankings such as 1s or 2s that should be of concern.

Step 2: Look over your rankings for individual activities:

- Low-risk practices (4s):** ideal; should be your goal despite cost and effort.
- Low-to-moderate risk practices (3s):** Provides reasonable groundwater protection.
- Moderate-to-high risk practices (2s):** Inadequate protection in many cases.
- High-risk practices (1s):** Inadequate protection; poses a high risk of polluting groundwater.

Regardless of your overall risk ranking, any individual rankings of 1 require immediate attention. Some concerns you can take care of right away; others could be major or costly projects requiring planning and prioritizing before you take action.

FARM-A-SYST

The Farmstead Assessment System in Michigan is a multiagency cooperative effort to increase awareness and encourage correction of potential water quality problems around the farmstead. The materials are based on similar materials developed in Wisconsin and Minnesota with assistance from the United States Environmental Protection Agency, Region V.

Conservation Farming Practices Can Influence Insect Populations

Farmers who are reducing tillage or changing crop rotations to meet conservation compliance requirements could be in store for changes in their insect problems in corn, according to insect specialists in the Corn Belt.

"Conservation systems don't necessarily have more or less insect problems, just different ones," says Larry Bledsoe, Purdue University insect specialist.

The 1990 Farm Bill linked farm program benefits with conservation provisions. The deadline for total compliance is Jan. 1, 1995. An option to achieve compliance on highly erodible land is to plant continuous corn, since corn leaves more durable residue than soybeans.

But, more continuous corn could mean increased problems with corn rootworm, the single most damaging insect in corn.

More residue = More insects?

More surface residue from corn, small grains and hay could mean new problems with insects that were once considered minor pests. The University of Nebraska's

insecticide recommendations warn that conservation tillage keeps the soil cooler, making corn seeds sprout slowly. This increases their vulnerability to early-season soil insects.

Bledsoe points out that high-residue or weedy fields can also make a good breeding ground for insects like cutworms, wireworms, white grubs, billbugs and stalk borers.

Surface Residue Attracts Cutworm Moths in Spring

Dr. Jon Tollefson of Iowa State University says cutworm moths fly north early each spring from the Gulf of Mexico to breed in U.S. cornfields. Untilled corn stalks or piles of crop residue provide a shelter for them to lay their eggs, and growing weeds provide a food source for the hatched larvae until corn plants emerge from the ground.

In high-residue or no-till fields that develop a cutworm infestation, a soil insecticide can make a big difference in stand and yield. A single cutworm can cut four corn plants in the two-leaf stage. That adds up quickly in the weigh wagon.

Rotation Changes Could Benefit Wireworms

As for wireworms, problems can arise when compliance plans include the possibility of changing crop rotations or when acreage is set aside.

"If you're in sod for more than two years, your chances of wireworm and seedcorn maggot problems increase substantially," warns Dr. Rich Edwards, Purdue University insect specialist. "The same is true for seedcorn maggots following alfalfa."

Farmers facing wireworm infestations have to be extra careful, even years after coming out of setaside or hay, according to Tollefson.

"Even if you plow to get out of hay, wheat or setaside, you probably won't disturb the wireworms," he notes. "Wireworms stay fairly deep in the soil and have a life cycle that can last two to four years. They may live on roots and buried organic matter for an entire growing season, then reemerge the next year."

If a field has a high potential for wireworm infestation, you should expect trouble for the next couple of years and plan your soil insecticide program accordingly, Tollefson recommends.

Some Good News -- Earthworms Thrive

No-till fields tend to increase earthworms because of the field's moisture and increased residue, which serves as a good food source. No-till farmers benefit from earthworms because the worms help mix in fertilizers, herbicides and insecticides.

"Earthworms are a natural form of tillage," says Dr. Ed Berry, USDA entomologist in Ames, Iowa.

Earthworms loosen and aerate the soil, Berry explains, and water soaks into the ground via their channels four times faster than fields that don't have earthworms. Also, plants' roots are less inhibited and often take advantage of the abundance of channels throughout the soil.

Young Farmers Optimistic, Better Off, But Not Worry-Free Survey Says

Young farmers and ranchers are more optimistic about farming, and are better off financially than they were five years ago. But their lives are far from worry-free.

Concerns about the availability of financing, profitability, regulations, and taxes weigh heavily on their minds today, according to a survey conducted by the American Farm Bureau Federation.

The survey of 226 young farm and ranch leaders from 35 states was conducted Feb. 13, during AFBF's 1993 Young Farmers and Ranchers Leadership Conference in Dearborn, Mich.

The survey tracked the attitudes and choices of young farmers and ranchers on issues ranging from the environment to off-farm employment.

When asked about their present attitude toward the future of farming, 67 percent said they were more optimistic, while 33 percent said they were less optimistic than they were five years ago. A total of 77 percent said they are financially better off than they were in 1988.

When asked about their three greatest concerns, the young farmers and ranchers said overall profitability was the top concern, receiving 26 percent of the combined ranking. Availability of financing was also a primary concern, with 23 percent of the vote.

Other top issues of concern include: the freedom to farm, in light of government regulations, red tape and urban encroachment (18 percent); the burden of taxes (13 percent); the availability of land and facilities (10 percent); competition from larger farms (5 percent); the willingness of parents to turn over the operation's reins (4 percent); and the availability of adequate support services such as schools, services, and social/cultural activities (1 percent).

Given those concerns, when asked to rank the top three steps they'd like to see government take on behalf of agriculture, young farmers and ranchers said opening international markets was the most important, with 17 percent of the combined ranking. Government reform of health-care was second at 16 percent. On a related topic, 87 percent of the young farmers and ranchers said they were covered by health insurance.

Two additional top recommendations for government action included the strengthening of private property laws and sounder fiscal policies, which each gained 15 percent of the vote.

Other government actions young farmers would like to see include: reducing the burden of Social Security taxes on the self-employed (11 percent); more consideration of economic factors by regulators (9 percent); developing cost-share programs for environmental compliance (7 percent); and more emphasis on rural development programs, and increasing farm program payments, (5 percent each).

Government officials are advised to pay attention to the wishes of young farm and ranch leaders, especially in light of survey results that indicate 91 percent of the respondents voted in the last presidential election, and 43 percent communicated at least once with their elected officials during the previous year.

When asked how they felt about the profession of agriculture, 66 percent of those responding said they chose farming because of its lifestyle values, while 25 percent said their decision to farm was based on lifestyle and business aspects, while just 9 percent said that to them farming was "just a business."

While most choose to farm for lifestyle reasons, even more young farm and ranch couples supplement farm income through off-farm work. Ninety-eight percent of the respondents said they, their spouse or both

MFB's 1992 Outstanding Young Farmer James Wagner, daughter Alysia and wife Michelle.



work off the farm. In 24 percent of the total operations, both spouses work off the farm. Only the wife pursues off-farm employment in 54 percent of the operations, while only the husband brought in off-farm income in 19 percent of the operations.

Despite the need to supplement their farm income, 95 percent of the total respondents said they see themselves as "life-long farmers."

On a similar note, 81 percent of those responding said "yes" they wanted their

children to follow in their footsteps as farmers. Only 12 percent said "no," while 7 percent said that decision should be left totally up to their children.

While recognizing the importance of economics and the environment in agriculture, 62 percent of the respondents said they base their voluntary farming practices on both, with an emphasis on economics, and 33 percent said both, with an emphasis on the environment. Four percent said they equally balance economics with environmental considerations, while only 1 percent said they considered only economics or the environment.

The stewardship ethic of young farmers and ranchers is on the increase. Results of the survey indicate that these young farmers have doubled their overall use of stewardship practices in the last five years. The most widely used practices today, in order, include: reduced tillage, regular soil and tissue analysis, field scouting, other types of integrated pest management, and buffer strips for wildlife.

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Challenge and Change Focus of MMPA Annual Meeting

13

Approximately 274 delegates and additional members of the Michigan Milk Producers Association (MMPA) were in Lansing recently for the cooperative's 77th annual meeting. In addition to policy discussion and award programs, delegates heard from General Manager Walt Wosje and MMPA President Elwood Kirkpatrick.

Kirkpatrick told the group that the emphasis on cutting government spending to fund dairy support prices combined with new trading opportunities via North American Free Trade Agreement and GATT could be mixed news for the dairy industry.

"It's becoming apparent the government will not play as important a role as it once did in price supports," Kirkpatrick said. "That means we have both a challenge and an opportunity for developing export market opportunities. It gives the dairy industry the potential to design a program that can assist us in developing export markets and, at the same time, maintain market balance in this country."

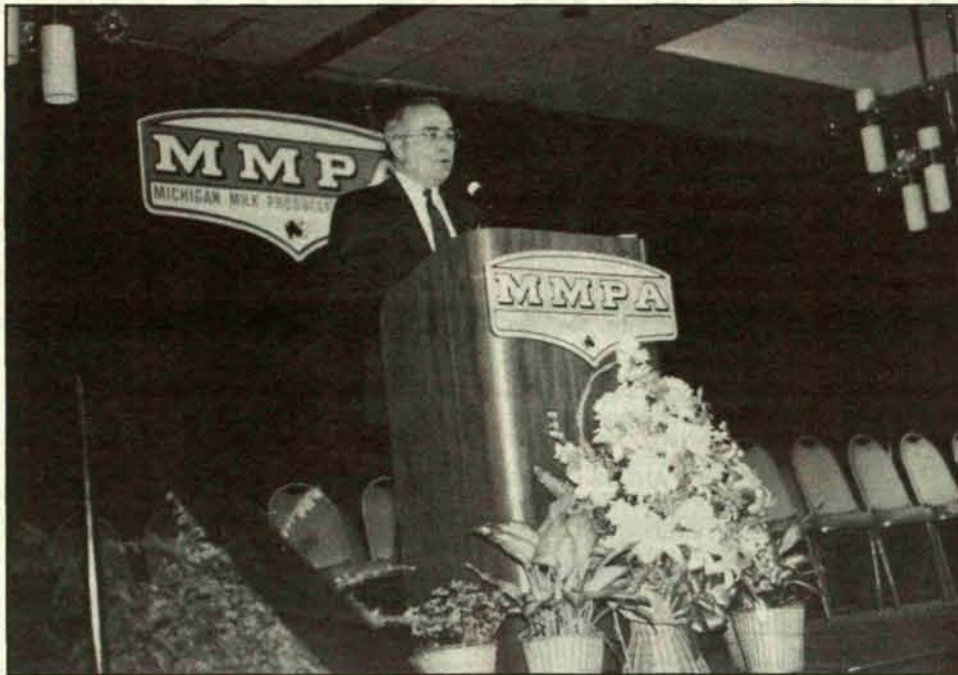
Kirkpatrick said the recent Engler proposal to fully fund the Livestock Initiative also represents an opportunity for the dairy industry and Michigan State University to establish a new partnership.

"We need to address the competitive situation from a production per cow standpoint," Kirkpatrick said. "But more importantly, we need to identify the cost of producing milk here in the state of Michigan and how we can reduce that cost so that we can compete with any producing group in the U.S."

According to Kirkpatrick, the shift in production trends to the south and west has continued, adding that California will likely displace Wisconsin in dairy production. Additionally, Michigan's number one ranking in production honors has gone to New Mexico which now claims a rolling statewide average of 19,500 pounds.

General Manager Walt Wosje told the group that the number of cows also continues to decline, while average production per cow continues to grow. "In 1950, there was about 22 million dairy cows in the U.S. producing 115 billion pounds of milk," explained Wosje. "In 1992, there was less than 10 million cows producing 152 billion pounds."

Wosje attributed the production gains to better genetics and improved management.



Above MMPA President Elwood Kirkpatrick addresses delegates and members attending the cooperative's 77th annual meeting, to hear annual operating reports, and discuss policy issues in addition to numerous award ceremonies.

He predicted the trend of fewer cows and larger production per farm will continue, meaning more changes for the cooperative in terms of services provided.

Wosje also discussed a Class III-A pricing category for butter and powder utilization that a number of dairy cooperatives around the country have called for in national hearings.

Under the program, milk sold for butter and powder processing would be priced at the market value of butter and powder as opposed to milk utilized for cheese production. Although the USDA has implemented the Class III-A pricing structure in three of 28 federal orders, it still hasn't been implemented in Michigan.

"What we saw last year, was that the return on butter and powder was significantly below the M-W, and yet all the plants that made butter and powder had to settle up with the federal order at the M-W price," said Wosje. "In effect, we were paying 75 cents into the federal order pool even though the market return for butter and powder wasn't there."

Wosje also expressed concern over the proposed dairy futures market, saying that despite future market proponent's claims of dairy market stabilization, dairy producers

would not benefit as much as the processors and, in fact, could lose peak price opportunities.

In other pricing matters, Wosje outlined a new multiple component pricing system, based on volume, butterfat, and protein, to replace the current single component pricing structure based on butterfat only. According to Wosje, the protein component of pricing will account for nearly 66 percent of the total value of milk, once implemented, and reflect changing consumer tastes and dairy product demands.

The co-op marketed 2.9 billion pounds of milk in 1992, with an average producer pay price of \$13.34 cwt. Loss of the state superpool cost the cooperative nearly \$1 million a month in additional premiums paid to producers, from June to December when the new superpool was implemented.

Wosje expects that with the new super-pool in place, 1993 will be a better year for MMPA, compared to 1992. Although producer pay prices will not be as high in 1993 as in 1992, Wosje predicted prices would not reach the record lows of 1991.

Trend Toward Larger Hog Farms To Continue

There will be more extremely large hog producing units among the nation's hog farms and the total number of hog producing farms will be much smaller by the year 2000, according to an industry survey conducted recently.

To cope in the next century, hog producers will need expertise and advice of expert consultants in such areas as veterinary medicine, financial planning, nutrition, marketing, and environmental and agricultural engineering.

The survey conducted among hog producers, veterinarians, meat packers, academics and ag-industry executives serving the pork industry found that consolidation of smaller hog farms will continue and result in far fewer units producing less than 3,000 head-per-year by the year 2000.

The survey, conducted during the recent National Pork Industry Forum in Dallas, was taken by Brock Associates of Milwaukee and underwritten by Elanco Animal Health, a division of Eli Lilly and Company.

There could be as many as a dozen farms producing a million or more hogs a year by 2000, compared to five of that size now. Farms producing more than 100,000 hogs a year could jump by 52 percent by the turn of the century, to 129 farms.

Environmental issues such as waste management and odor control are seen as major factors which will impact production growth between now and 2000.

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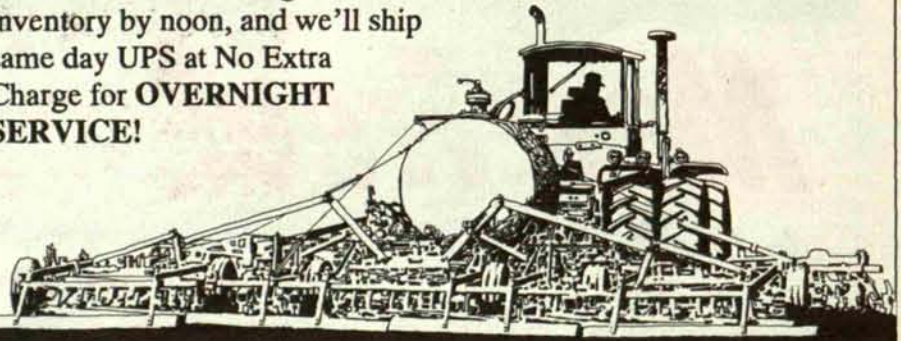
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Farmers and Lenders Discover Value of Crop Insurance

Contact One of These Farm Bureau Insurance Agents for Your Crop Insurance Needs

Written by: Rain and Hail Insurance Service, Inc. and Jim Gallagher, Manager, CSAC Agency

Up until last year, Kansas State University's crop marketing specialist Dr. Bill Tierney never paid much attention to crop insurance. "I always thought producers exaggerated the risk that they would lose a crop," Tierney said. "I recognized that there was some risk that a farmer might price more bushels than he produced. I usually recommended that farmers purchase 'put' options - a form of price insurance, if they pushed pre-harvest sales beyond 50 percent of their expected crop." However, recent developments have changed Tierney's thinking about the tie between pre-harvest pricing decisions and Multiple Peril Crop Insurance (MPCI).

"The 1992 crop year offered wheat and feed grains producers some exceptional pricing opportunities," Tierney said. In February, 1992, futures prices for wheat reached an 11 year high. The corn market, while not as strong as wheat, nevertheless gave producers two chances (in March and again in June) to sell new crop corn at \$2.50/bu. or better, he says.

"In nearly all the conversations I had with producers last year, they kept telling me that they just didn't feel comfortable pricing a crop that they didn't have - no matter how good the price looked," Tierney said. "I just couldn't get them to do any pricing until an associate of mine (Dr. Art Barnaby, an Extension farm management specialist) pointed out that a producer might be willing to make some pre-harvest sales on that part of the crop that was insured under MPCI (up to 75 percent of their proven yield)," Tierney said.

The idea of "linking" crop insurance and marketing into an Integrated Risk Management strategy made a lot of sense. Tierney and Barnaby decided to launch a series of over 25 day-long workshops in Kansas to demonstrate this strategy to crop producers. "To date, we've had over 1,000 producers attend our workshops and I've been amazed at the reception," Tierney said. "At the beginning of each workshop, we discuss traditional producer attitudes toward multiple peril crop insurance. It never fails that there's always a few farmers in the audience that say they don't buy crop insurance because "it never pays."

Those same farmers don't seem bothered by the inconsistency of that statement. "Farmers don't expect property, health, and auto insurance to 'pay', but that doesn't stop them from buying it," Tierney says. "For some reason, many farmers want a real return - 'to collect' on their crop insurance. However, as long as the insurance rates are actuarially sound, it's highly improbable that they will earn a big return from their crop insurance over a 10 to 15 year period."

However, Tierney and Barnaby believe that farmers could use crop insurance to increase farm income in good years, if they were willing to use it in combination with some low risk, pre-harvest marketing strategies. "In most years, crop producers are able to sell their crops early at prices much higher than those that prevail at harvest," Tierney says. "Iowa State University's Dr. Robert Wisner recently published some startling research which clearly documented this phenomena for corn."

"Most of the farmers that attended our workshops recognized that crop insurance could serve as a 'financial safety net' which provided added protection if they choose to do some pre-harvest sales," Tierney says. "If they limited their pre-harvest sales to just that portion of their expected crop that was covered under MPCI (50, 65 or 75 percent of their proven yield) and they price those bushels using 'put' options (price insurance), then the combined effect of these two actions would be a de facto revenue insurance."

According to Tierney, the combination of crop and price insurance could guarantee farmers a known minimum revenue equivalent to the number of bushels insured (and sold) multiplied by the expected minimum price associated with the 'put' option strike price.

For example, if a Kansas producer: (1) has a proven insurance yield of 110 bu./acre (and purchases MPCI at a \$2.30 price election), and (2) expects to harvest 500 acres of corn, then their minimum expected revenue from purchasing \$2.50 December corn "put" options would be as follows: (MPCI Coverage; Bushels of Corn Insured and Sold x December Corn option Strike Price - Expected Local Basis = Minimum Expected Revenue

75% 41,250 x \$2.50 - \$.20 = \$94,875

65% 35,750 x \$2.50 - \$.20 = \$82,258

50% 27,500 x \$2.50 - \$.20 = \$63,250

If futures prices at harvest are higher than \$2.50 (and the producer has bushels to sell), then the farmer's revenue will be higher. If the

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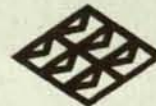
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Remember Michigan's Pseudorabies Deadlines

Effective March 31, all Michigan swine herds must be tested, at owner expense, by July 1 to establish a herd status in regard to pseudorabies (PRV) disease. According to MFB livestock specialist Kevin Kirk, herds that don't complete this testing will be quarantined and tested by the Michigan Department of Agriculture, at the owner's expense.

"Michigan is currently involved in a 10-year cooperative state, federal and swine industry effort to eradicate pseudorabies from its swine populations," said Kirk. "The success of this program is important to ensure the health of our swine herds and to maintain our competitiveness in interstate and international markets. For example, Ohio and Wisconsin will not currently accept feeder pigs from Michigan without special provisions, since their state PRV status is ahead of Michigan."

PRV, a viral disease of swine, causes reproductive problems in breeding swine, fever and flu like symptoms in growing swine, death in very young pigs from encephalitis, and poor performance in all ages due to reduced immune systems.

Herds that test positive are required to enter into an agreement with MDA to eradicate the disease. A herd cleanup plan will be developed defining the steps, procedures and timetable for this cleanup.

In addition, when a herd tests positive for PRV, the testing lab informs the state veterinarian's office and a quarantine is placed on the herd. Previously, the herd was then restricted to moving pigs only to slaughter or to another quarantined facility.

Under the new law, however, the herd may move animals only to slaughter or, under special permit, to licensed, inspected, quarantined facilities.

Quarantines may be released based on negative tests of the entire herd at least 30 days following removal of all infected stock. Alternatively, the herd may be tested by statistical sampling. Two negative samples of a percentage of the breeding and finishing herds collected at least 90 days apart will qualify for quarantine release and reassignment of herd status.

A herd may also be released from quarantine by undergoing depopulation, cleaning, and disinfecting of premises, and repopulating with known PRV-free stock.

According to Kirk, a percentage of swine in a herd must be tested annually according to the following schedule:

- In a herd of 10 or less, all 10 are tested.
- In a herd of 11 to 35, 10 swine are tested.
- In a herd of 36 or more, 30 or 30 percent are tested, whichever is less.
- Breeding/farrowing operations are tested according to the number of breeding animals six months of age and older of both sexes. Feedlots are tested according to the number of animals present on the premises for 30 days or more.
- Sampling should be random and representative of all groups. Testing the oldest animals in each group will generally yield the best information.
- All herds are subject regardless of size or type of operation.
- Purchased additions are not part of the herd until 60 days after their introduction into the herd for monitoring purposes.
- Qualified negative pseudorabies free herds and all herds located in Michigan's Upper Peninsula are already in compliance and do not need to change their testing schedule.

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