

Consider Crop Residue Levels in Your 1992 Tillage Plans

Ignoring your conservation plan this spring could prove costly!

Buying chemicals, seed, parts, fixing machinery, too much rain, not enough rain, finding good help for the planting season... You've got a lot on your mind - but you better add one more item. Dig out your conservation plan and make sure you'll be in compliance at the end of the hectic planting season, or you may end up with more on your mind than you bargained for.

According to Shirley Gammon, assistant state agronomist with the Michigan Soil Conservation Service (SCS), the organization's field staff will be conducting spot checks on 5 percent of all farms with conservation plans this year. Fields will be selected by a random drawing of ASCS farm tract records for inspection.

In addition, those farms that revised their conservation plans last year, and those farms which have complaints filed against them with the SCS, will also be inspected.

SCS staff will be looking primarily at residue levels in your fields after completion of planting to see if you're meeting the requirements of your conservation plan, called for in the 1985 farm bill.

Gammon says those residue levels vary from farm to farm based on the specific conservation plan established by the farmer and the district conservationist. A number of those plans call for residue levels of 30 percent after completion of planting.

"It's not a blanket statement that farms have to have 30 percent residue levels after planting; it's what's in their specific plan that we check them on," explained Gammon. "Thirty percent is a standard measurement that seems to work well with most farms."

Gammon says that if a producer has doubts about being able to meet the required levels of field residue after tillage and planting, then a phone call should be made immediately to the district conservationist.

"Producers shouldn't just ignore the potential for a problem and hope they don't get pulled for a spot check," cautions Gammon. "If they foresee a problem, we can often come up with possible substitutes that will result in adequate erosion protection, before a farmer gets into a compliance problem."

If a producer is selected for a spot check and there is a compliance problem, the farmer and the local ASCS office will be notified and they will begin withholding farm program benefits, according to Gammon. "The producer does have an appeal process, but 30% corn 30% residue

basically he has to be actively applying his plan and be in compliance," she said.

Those farm program benefits mean all USDA farm program benefits, cautions Gammon. To protect your farm, and maintain farm program eligibility, turn to page 10 for other photo samples of various levels of field residue, as well as tips on things you can do to preserve residue levels.

"If farmers have any questions on exactly what they have to do to stay in compliance, now is the time to ask the district conservationist and clarify those questions rather than waiting," advised Gammon.

The Former USSR - Has Anything Changed Besides the Name?

"In spite of what is often said in the popular press, the CIS economy has not been privatized, prices have not been freed, and there has been no movement toward significant market reform in the Commonwealth of Independent States (CIS)," claims Richard Ebeling, professor of Economics from Hillsdale College.

Ebeling, who spent an estimated three months over the last year in the CIS, spoke to nearly 120 members of Michigan Farm Bureau's Commodity Advisory committees about the state of affairs in the former USSR. He claims that despite all the news of reform, nothing has really changed other than the name and a few faces, jeopardizing

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the future of the CIS and putting it on a crash course for failure.

"All of the ministries, all of the institutional structures, the vast majority of the personnel who ran the ministries and the bureaucracy 12 months ago are, for all intents and purposes, still the same people in control today," explained Ebeling.

According to Ebeling, the lack of reform even applies to the state owned collective farms, which were to have been privatized by March 1, according to a decree issued by Russian President Boris Yeltzin, technically abolishing collective farms.

Those collective farms were to have been incorporated to allow those who worked on the farms to become joint stockholders, or they could be divided up into family plots. But Ebeling says those grand plans have fallen miserably short of expectations. on the real market to acquire tractors, and other farm equipment and implements, nothing will happen," said Ebeling. "The economy needs to be privatized radically and prices need to be freed simultaneously so that prices can communicate information about costs and selling prices."

Ebeling was equally critical of aid extended to the CIS by the United States government, saying that despite short term gains for U.S. agriculture, such aid commits the CIS to almost certain failure.





Ebeling (left) says things aren't what they seem in the CIS.

more profitable for you," Ebeling said. "All you'll make now is some short-run profits

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"The plans have been ignored, evaded, but not implemented," exclaimed Ebeling. "If nothing does change in the agricultural sectors soon, and I mean very soon, it could be an economic disaster for Russia."

Ebeling cautioned that without privatization of land, and real reform, the situation will be critical by next fall and winter, since surplus food and money previously available was used to get through last winter.

"Unless they privatize the land, unless they give the farmers incentives by price and profit opportunities, unless they privatize the industrial sectors so that there is a way "What incentives are there to be a private farmer in Russia, if the United States is either giving food away or at a below market subsidized price that destroys all profit incentive in the foreseeable future for the Russian farmer," asked Ebeling.

Ebeling suggested that farmers would be better off to forego the short term market benefits, and that the U.S. government say no to future aid until the CIS institutes the radical reform measures needed to get "their own house in order" so that they can begin to pay for their imports.

"While that, in the short run, means a few less dollars in your pocket, I personally think that in the longer run, if the Russians do the right thing by integrating themselves into a true world market economy, it will be with no long-term improvements for either them or us."

When asked about the role that agriculture could play in easing hunger concerns in the CIS, Ebeling responded that technological education and management skills are desperately needed and would be very useful to the Russian farmer, but again argued that all the training will be worthless without true reform measures.

"The Russian farmer needs the western knowledge and expertise that American farmers possess," said Ebeling. "But all of that technological knowledge is not going to be applied or implemented or taken advantage of unless the institutional changes take place, so that people have the opportunity in a real market to take advantage of it."

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In Brief...

Flooding of a Different Kind Shuts Down the CBT

No it wasn't flooded fields across the corn belt that halted Chicago Board of Trade (CBT) action for three full days in mid-April. It was a break in the walls of a network of underground tunnels flooding the basement of the CBT with Chicago River waters, that brought trade activity to a stop, according to *Knight Ridder News*.

Commonwealth Edison spokesman Warren Vahle said water poured into the basement of the CBT at a rate of 30,000 to 40,000 gallons an hour. Massive pumps were used to remove the water at roughly the same rate to prevent the walls of the building from collapsing.

At one point, water was within three to four feet of critical telephone and electrical equipment. Divers hired by ComEd were lowered into the CBT basements by cranes through a hole cut in the sidewalk directly east of the building. The divers were able to determine that most of the water was entering through a series of conduits that bring fiber optic communication cables from the tunnels into the CBT. Trading firms with computer, clearing and phone systems at the CBT were hard hit by the flooding, unable to clear trade transactions. Many firms moved temporarily to the Chicago Mercantile Exchange which wasn't affected by the flood.

Although it's too early to estimate dollar losses, according to Les Rosenthal of Rosenthal/Collins Group, trade volume for the month of April was trailing 10 percent behind last year's pace. Cargill Investor Service's operation was brought to a virtual standstill because their entire phone and computer system were based at the CBT.

According to Bruce Sutherland of Michigan Agricultural Commodities, Inc, if such an incident had to happen, now was the time since the cash grain movement had been quite slow. "However, farmers who did want to trade grain were hesitant simply because they didn't know the direction of the market," said Sutherland. "It also affects us in the sense of lost trade opportunities for our hedging positions."

Engler's Executive Budget Order Impacts MDA

The executive order issued by Gov. Engler recently to bring the state's budget out of a projected \$800 million shortfall, is asking the Michigan Department of Agriculture to cut another half million dollars from its current fiscal year budget. The 1.8 percent cut follows a \$14.1 million budget cut last October, at the start of the current fiscal year.

According to MDA Dirtector Bill Schuette, MDA will minimize the impact of the cuts to its food safety responsibilities. "It's not easy - it means that we're lean but we're still getting the job done," he said. "There are no budget implications for Right-to-Farm, as an example of the things we're doing to make sure we meet out responsibilities to agriculture."

Schuette said the executive order means a reduction in MDA staff, by not filling positions that have been, or will be, vacant. Legislators have 10 days to approve the executive order. The Legislature hasn't agreed to restore funds vetoed by the governor in the current budget, which included \$1.1 million to Soil Conservation Districts and \$5 million in horse racing.

Madigan Outlines Changes Over Time in USDA

The size of the USDA budget and how the money is spent have changed dramatically over the past 20 years, Agriculture Secretary Ed Madigan reports. The total ag budget in 1972 was \$11 billion, with over a third of it spent on farm price and income support programs. Another 40 percent of the budget at that time went primarily for discretionary programs, largely research, conservation and marketing efforts. The remaining 24 percent was spent on food assistance programs.

By contrast, in 1992 the department will spend about \$62 billion, almost six times the expenditure 20 years ago. Only about 20 percent of today's budget is spend on price and income supports to farmers. About 54 percent (more than twice as much) of USDA expenditures today go for food assistance programs. A record-high 25 million people receive food stamps and other food assistance programs are also on the increase. Only about 27 percent of the budget now goes to discretionary programs.

CANADIAN NATIONAL BREEDERS SCHOOL MAY 27 - 31, 1992 • UNIVERSITY OF GUELPH (ONT.)

From the blackboard to barnyard...this 5th annual school feautres:
an all-star teaching line-up to include the following three anchors: Dr. Roger Hunsley, executive secretary - American Shorthorn Assoc; Dr. Harlan Ritchie, animal science professor, Michigan State University; Dr. Gary Minish, animal science professor Virginia Tech University.

presentations by contemporary beef industry speakers covering topics such as marketing,

Disaster Program Payment Allocation Announced

USDA has announced that the disaster program payment allocation factor will be 50.04 percent. Farmers who have qualified for disaster assistance on 1990 or 1991 crop losses will therefore receive approximately half of the total eligible payment. County ASCS offices will begin to make payments available immediately.

The allocation factor was higher than the level that had been predicted by many people. However, FB policy calls for seeking full funding of disaster assistance provisions of the 1990 farm bill. This would require additional appropriations to increase the funding for the payments that will be reduced by the allocation factor announced yesterday, and to cover more than one year of losses.

Government Report Critical of Farm Lender

The General Accounting Office (GAO) says the Farmers Home Administration risks losing \$14 million in loans to troubled farmers previously bailed out by the agency. The GAO report says that by almost any measure, FmHA's loan programs have become good examples of how programs should not be implemented and managed. It also said the agency's shaky loan portfolio does not reflect the operations of a prudent lender. The bad loans were a result of FmHA officials' failure to verify borrowers' debts and inspect collateral. The report also charges that some large farm loans were restructured on the basis of incomplete information.

Michigan 1991 Livestock Cash Receipts Down

Cash receipts from 1991 marketings of meat animals in Michigan totaled \$505 million, down five percent from the previous year, according to the Michigan Agricultural Statistics Service. Cash receipts from hog marketings were \$216 million, down 13 percent from 1990. Cattle and calf cash receipts, at \$285 million, were up four percent. Sheep and lamb cash receipts from marketings, at \$4 million, were down two percent from 1990.

Falling market prices for cattle, calves, hogs, and lambs were the reason for the decrease in cash receipts. Cattle prices averaged \$60.80 per hundredweight (cwt.), \$2.40 less than the previous year. Calf prices dropped from \$99.00 per cwt. in 1990 to \$98.20 per cwt. in 1991. Cattle and calf marketings, at 458 million pounds, were up seven percent from the previous year. Hog marketings were down 18.5 million pounds with hog prices averaging \$47.10 per cwt., down \$5.20 from 1990. Sheep and lamb marketings were down one percent from 1990. Lamb prices averaged \$51.80 per cwt., \$3.20 less than 1991.

80 Percent of Acreage Enrolled in Farm Programs

USDA is reporting that 79.3 percent of U.S. wheat, feed grain, cotton and rice acreage were part of acreage-reduction programs in 1991, according to *Knight Ridder Financial News*. A total of 30.6 million acres were enrolled in 1991, including 17.1 million in the Acreage Conservation Reserve, and 13 million in the 0/92 and 50/92 programs.

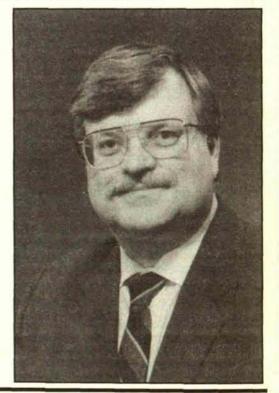
In addition, 500,000 acres were planted to minor oilseeds under the 0/92 program, USDA said. Farmers had the option last year to reserve 25 percent of their base acreage, and plant a different crop on that land. A total of 4.88 million acres was "flexed" in 1991, USDA said. Farmers planted mostly soybeans on the flexed acres, USDA said. Almost 4 million acres of the flexed land was planted in soybeans; 195,000 to minor oilseeds; and 690,000 to other non-program crops, USDA said.

Leholm Appointed CES Associate Director

Arlen G. Leholm, Extension state program leader for Community Natural Resources and Economic Development at the University of Wisconsin, has been named associate director of Michigan State University's Cooperative Extension Service, effective June 15.

Leholm's background includes both farming and business experience, as well as Extension and research. He received his doctorate from the University of Nebraska and his master's and bachelor's degrees from North Dakota State University, all in agricultural economics.

Before joining the University of Wisconsin in 1989, Leholm served as director of the North Dakota State Uni-



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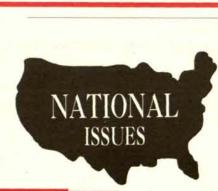
versity Center for Rural Revitalization, and as assistant director of Community Resource Development from 1987 to 1989. He held various research and Extension positions in North Dakota and Nebraska, during 1970 through 1987.

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Minor Crop Protection Assistance Act

MFB Position

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MFB supports the legislation and has asked members of the Michigan congressional delegation to cosponsor H.R. 4764. The bill is important to Michigan producers of fruits, vegetables and some other commodities. As of April 15, Congressmen Dave Camp, Bob Davis and Paul Henry had cosponsored the bill.

MFB Contact Al Almy, Ext. 2040 H.R. 4764 has been introduced to increase the research, registration and availability of safe chemicals for "minor crops." The high cost of developing the data required by EPA for registration of chemicals is leading many pesticide manufacturers to voluntarily cancel "minor uses" of their products.

The legislation would define "minor use" as the use of a pesticide on a total of fewer than 300,000 acres or a use that does not provide sufficient economic incentive to support registration if the use has not been determined to pose an unreasonable risk to health or the environment.

It would allow the EPA administrator to waive certain data requirements for a minor use, only if it is determined that the minor use does not present an unreasonable risk to human health or the environment. It provides 10 years of protection for registration data submitted after the date of enactment that relates solely to the minor use registration.

The EPA administrator would be required to complete the review of applications for registrations of certain minor uses within six months. The administrator also could provide conditional amendments to pesticide registrations to permit additional minor uses of certain pesticides, provided such uses do not significantly increase any risks associated with the pesticide.

Both USDA and EPA would be directed to establish minor use programs to identify and coordinate development and registration of minor crop protection chemicals. The legislation also establishes a minor use matching fund to help ensure the continued availability of minor use chemicals.

Duty Free Cheese Imports

MFB Position

MFB Contact

Al Almy, Ext. 2040

AFBF has sent a letter opposing GSP status for goya cheese to the U.S. trade rep. and USDA.

of a Generalized System of Preference (GSP) status for goya cheese. If granted, the imports of this cheese from Hungary would be allowed free of all U.S. tariffs. The duty free import status could result in the importation of an estimated 50,000 to 100,000 tons of goya cheese. A similar petition by Hungary was rejected less than one year ago.

A petition has been received by the International Trade

Commission (ITC) from Hungary asking for the granting

Soybean and Oilseed Loan Origination Fee

MFB Postion

Farm Bureau policy supports repeal of the loan origination fee for soybeans and other oilseeds.

MFB Contact Al Almy, Ext. 2040 S. 2367 has been introduced by Sen. Don Riegle to remove the 2 percent fee that soybean and other oilseed producers currently must pay to receive price support loans. The loan origination fee was established by Congress as part of the 1990 Omnibus Budget Reconciliation Act to reduce government expenditures.

Payment of the 2 percent fee reduces the minimum \$5.02 per bushel loan rate by 10 cents per bushel. Previous attempts to remove the fee have failed because offsetting federal spending cuts or increased taxes were not included. The expected loss of revenue from S. 2367 is offset by requiring producers to repay the loan during the same fiscal year in which the crop is put under loan. The federal government fiscal year runs Oct. 1 through Sept. 30.

Biological Diversity

MFB Position

MFB is monitoring the bill closely for its impact on agriculture. Farm Bureau has offered several amendments to clarify that the bill is non-regulatory and to ensure that economic studies and sound science are included in any future state strategy to conserve biological diversity.

MFB Contact Vicki Pontz, Ext. 2046

MUSTFA Sunset MFB Position

MFB policy on underground storage tanks recommends that the MUSTFA Act be continued and amended to allow access to the funds for clean-up of any leaking underground storage tank. MFB supported the bill and is becoming involved with a work group to consider amendments to MUSTFA.

MFB Contact Vicki Pontz, Ext. 2046

Inheritance Tax

MFB Position

MFB supports S.B. 1. Given the deterioration in the state budget however, the House may be very reluctant to move the bill because of its impact on revenue.

MFB Contact Ron Nelson, Ext. 2043

State Budget

Rep. Jerry Bartnik (D-Temperance) is sponsoring H.B. 4719 to promote the conservation of biological diversity to avoid the loss of plant and animal species. The goals of the legislation include determining whether there are any biological diversity considerations when land and water management decisions are made.

STATE

ISSUES

April 30, 1992

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

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

Rep. Tom Alley (D-West Branch) is sponsoring H.B. 5461 to amend Public Act 518 of 1988, which created the Michigan Underground Storage Tank Financial Assurance Fund (MUSTFA) and the Emergency Response Fund. These funds, financed through fees on petroleum products, are used to assist operators of underground storage tanks who are required to undertake corrective action.

Portions of the act that created the assurance fund, provided for its revenue source and distribution, and provided for a study on environmental impairment insurance, were scheduled to expire on Jan. 19, 1995. H.B. 5461 would repeal this expiration provision. The act also required that when the assurance fund expired, money in the fund would revert to the Emergency Response Fund. This provision would also be repealed under the bill.

H.B. 5461 was passed unanimously out of the House Conservation, Recreation, and Environment Committee and passed the full House 101-0.

S.B. 1, sponsored by Sen. Nick Smith, would repeal the Michigan Inheritance Tax and implement the federal Pick-Up Tax. Twenty-nine other states have repealed their estate tax and rely on the federal inheritance tax which exempts estates up to \$600,000.

A substitute for S.B. 1 was reported out of the Senate Finance Committee and phases out the inheritance tax beginning Oct. 1, 1994, by exempting the first \$100,000. On May 15, 1995, the exemption would increase to \$200,000 and finally on Jan. 1, 1996, the state inheritance tax would be eliminated and replaced by the federal pick-up tax. The gradual elimination of the estate tax would minimize the impact on state revenue which is estimated at \$120 million. The bill has passed the Senate and is awaiting action by the House Taxation Committee.

McCarran-Ferguson Act

MFB Postion

MFB opposes attempts to repeal or modify the McCarran-Ferguson Act and has written all members of the Michigan congressional delegation to urge support of continued state regulation of insurance. The current system of state regulation allows states flexibility in addressing problems.

MFB Contact Al Almy, Ext. 2040 Last November the House Judiciary Committee approved H.R. 9 which makes significant amendments to the McCarran-Ferguson Act. A strong provision of the McCarran-Ferguson Act is to reserve regulation of the insurance industry to the individual states. If enacted into law, H.R. 9 would eliminate many longstanding exemptions from the federal anti-trust laws as well as remove the individual states as the main regulators of the insurance industry. The Judiciary Committee is reportedly ready to file the committee report on H.R. 9, which will clear it for consideration by the full House.

Supporters of H.R. 9 believe the insurance industry enjoys a total exemption from anti-trust laws. To the contrary, McCarran-Ferguson clearly states that the Sherman Act, the Clayton Act, and the Federal Trade Commission Act (all hallmark anti-trust laws) "shall be applicable to the business of insurance to the extent such business is not regulated by state law." Federal anti-trust laws apply anywhere state law does not.

The insurance industry in Michigan is already heavily regulated. If the McCarran-Ferguson Act were repealed or modified, it would add another costly layer of regulation by the federal government to the insurance industry. MFB Contact Ron Nelson, Ext. 2043 The Legislature has not agreed to restoring funds vetoed by the governor in the current 1991-92 budget. The vetoes included \$1.1 million to Soil Conservation Districts and \$5 million in horse racing. Both the House and the Senate have offered bills to restore the vetoes but have not agreed as to the specific amount or other issues involved.

To compound the problem, the Legislature and the governor are attempting to deal with an estimated \$800 million in revenue shortfall for the current fiscal year which ends Sept. 30. A portion of the \$800 million could be restored through a series of increased fees for various activities, including water testing, fruit and vegetable inspection and inspection of food markets. The House has not moved the bills, stating that they are tax increases proposed by the governor and the Senate.

Revenue projections have been more optimistic than realistic in the past year. Fiscal year 1992/93 budgets are being developed, with some adjustment in current specific line items, but in total there are no increases and several department budgets are showing a decrease.

Michigan Farm Bureau (517) 323-7000

30-Day Outlook, Warmer and Drier Than Normal

Following what seemed like an eternity of colder than normal weather and reports of summer-like temperatures just to our south, spring finally arrived in Michigan during mid-April. Unfortunately, so did persistent rain and new reasons to keep spring fieldwork from begin-ning in earnest. However, "windows" of weather opportunity may develop over the next few weeks, possibly by early May.

The latest 30-day outlook for Michigan calls for a continuation of above normal temperatures, but for precipitation to average in the normal to below normal category. In early May, normal precipitation ranges from 0.8 inches per week in the western Upper Peninsula, to 0.55 inches per week in the northern Lower Peninsula, to 0.7 inches per week in the extreme south.

Temperatures over the last 30 days continued to average below normal, generally ranging from one to five degrees below the 30-year normals. Greatest departures from normal were in central sections of Lower Michigan. Interestingly, precipitation was generally below normal during the period, except for central sections of the Lower Peninsula where 2.5 - 3.0 inches of liquid equivalent fell.

3/16/92	T	emperature	P	recipitation
to 4/15/92	Observed	Dev. From	Actual	Dev. From
	Mean	Normal	(inch.)	Norm
Alpena	30.7	- 3.0	1.61	- 0.50
Bad Axe	32.8	- 4.6	2.31	+ 0.28
Detroit	38.4	- 2.1	2.23	- 0.37
Escanaba	30.5	- 1.6	1.55	- 0.57
Grand Rapid	s 36.2	- 2.3	2.96	+ 0.25
Houghton La	ke 31.9	- 2.9	2.76	+ 0.65
Lansing	35.5	- 3.2	2.50	0.00
Marquette	27.1	- 1.6	1.74	- 0.27
Muskegon	35.8	- 2.6	1.98	- 0.49
Saginaw	35.2	- 3.4	2.52	+ 0.49
Sault Ste. Ma	arie 26.4	- 3.9	0.98	- 1.14
South Bend	39.0	- 2.7	2.94	+ 0.23
Traverse City	y 33.0	- 2.5	1.50	- 0.66
Vestaburg	34.1	- 4.8	2.93	+ 0.69

Jeff Andresen, Ag Meteorologist, MSU

Current Ag Weather Updates Available Through MSU

Farmers, or anyone else interested in agricultural weather forecasts, can access current information via Michigan State University if they have a computer and a modem.

With those tools, users can access the MSU Agriculture Climatology Program Bulletin Board Service (BBS) for the price of the phone call, 24 hours a day. BBS has been operating since March 30 and is user friendly, according to MSU Extension agricultural meteorologist, Jeff Andresen.

BBS can be accessed by calling (517) 336-1075. The modem settings are 2400 baud maximum, 8 bit, no parity, and 1 stop bit. To log on initially, dial the system, make up and provide a password of your choice for future use and follow the instructions provided by the system.

If none of this makes sense, call the MSU Ag Weather Office at (517) 355-0231. Someone there will walk you through the system or provide information about the

hardware you can buy to enable you to access the system.

The system will be updated several times a day, five days a week and more frequently if weather conditions warrant changes.

BBS contains a range of information reflecting weather conditions in Michigan's 10 climatological divisions. Those divisions are: West Upper Peninsula, East Upper Peninsula, Northwest Lower Peninsula (LP), East Central LP, West Central LP, Central LP, East Central LP, Southwest LP, South Central LP, and Southeast LP.

Information available on the system includes a specific minimum temperature forecast, an estimated solar radiation table, actual and predicted growing degree days, actual and historical amounts of rainfall. The system also has a weather outlook for each of the state's climatological divisions and weather advisories.

This should give a person a real good idea of how they stand at any given point in the growing season and an idea of what conditions may be over the next 5 to 10 days," Andresen explained. "Based upon the interest shown to date, we think that eventually the majority of Michigan's growers will be able to access our service.

Andresen added that the Ag Weather office is anxious to receive comments and feedback from growers about the service, saying those changes will be made as much as possible to provide growers the weather information they need. "We're at the beginning stages of this system and we need grower input to make the system a useable tool in their business management," he said.

Andresen expects the BBS to be available year-around and carry at least some of the climatological information currently contained in the system, depending on user demand and the applicability of the information for the season.

The BBS is a joint venture between the MSU Cooperative Extension Service, the Department of Geography, Agricultural Ex-



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MICHIGAN TEST PLOTS

ACA-treated corn plots had an average increase of 6.87

Crop and Planting Update - Wheat Suffers

lowa

Corn planting was underway in all parts of the state, with 3 percent of the acreage reported planted the week beginning April 20, according to Knight Ridder News.

Corn planting is proceeding at a faster pace than in 1991 and is slightly ahead by 1 percentage point. Oats are reported well ahead of normal with 85 percent of the acreage planted, compared to 71 percent for the same time in 1991. Over 20 percent is reported to have emerged compared to the five-year average of 15 percent.

The state's winter wheat crop is rated 3 percent excellent, 25 percent good, 42 percent fair, 24 percent poor and 6 percent very poor. Early indications are that 19 percent of the winter wheat crop and 13 percent of the state's alfalfa acreage will be

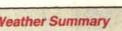
Soil moisture is rated 15 percent short, 74 percent adequate, and 11 percent surplus.

Indiana

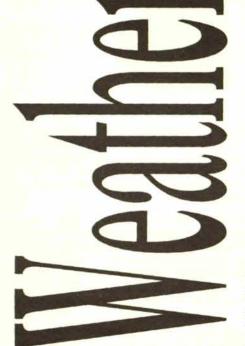
The winter wheat crop has improved in southern portions of the state, but considerable acreage is reported lost due to winterkill. Statewide, 5 percent of the wheat is rated good, 37 percent fair, 34 percent poor, and 24 percent very poor.

Three percent of the corn acreage is reported planted for the week beginning April 20, up 1 percent from average. Tillage is 76 percent complete, a week ahead of the 70 percent tilled last year at this time.

Topsoil moisture was rated 1 percent short, 58 percent adequate, 41 percent surplus. Subsoil moisture was rated 26 percent short, 63 percent adequate, and 11 percent surplus.



April 30, 1992



Michigan an	d Major Co	mmodity Are
Extended W		
P - Precip.	ТР	ТР
Michigan	A B	A N
W. Corn Belt		
E. Corn Belt		A N
Wint. Wheat Be	It A N	A/N N
Spr. Wheat Belt	A B	A B
Pac. NW Wheat		A N
	BN/A	N/BN
Southeast		N/BN
San Joaquin		A N

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



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

bushels per acre in 1991.

SEE THE BENEFITS OF ACA

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

BE A WINNER WITH ACA.

CALL 1-800-292-2701 OR YOUR NEAREST DEALER lost due to winterkill.

Topsoil moisture is rated 2 percent short, 73 percent adequate, 25 percent surplus. Subsoil moisture is rated 88 percent adequate, and 12 percent surplus.

Illinois

Farmers in the southern third of the state have made solid progress in corn planting, while cool temperatures and intermittent rain slowed activity in northern portions of the state.

Corn planted beginning the week of April 20 was 13 percent complete, up from 8 percent for the same period in 1991. Oat seeding is reported 80 percent done, up from 75 percent in 1991.

Winter wheat was rated 25 percent good, 40 percent fair, 17 percent poor, and 18 percent very poor. Wheat in major producing areas have shown recent improvement. Alfalfa is rated 38 percent good, 54 percent fair, and 8 percent poor.

Ohio

Corn planting is reported to be nearly average compared to the five-year average, with 4 percent of the acreage planted. Oat seedings are reported 59 percent complete compared to the five-year average of 62 percent. Winter wheat was rated 4 percent excellent, 30 percent good, 41 percent fair, 18 percent poor, and 7 percent very poor.

Michigan

Little, if any, corn had been planted at press time, although recent warmth has many talking about finally getting started. A "few scattered acres" of sugarbeets were planted in the Saginaw Bay area in early April, but most were waiting for warmer temperatures to begin actively planting.

Michigan's wheat crop is reported fair to poor in the southeast, good to excellent in the Saginaw Valley, serious winter kill in the southwest, with minimum winter kill in central Michigan, although considerable canola winter kill is reported in the region.



April 30, 1992

Effect of Warm Winter on Insect Outlook for 1992

Doug Landis, MSU Field Crop Entomologist

The unusually warm winter of 1991-92 has prompted a number of questions regarding how insect abundance will be affected in field crops in 1992. While long-range predictions of insect abundance are, in most cases, impossible, some logical conclusions may be drawn from a knowledge of a specific insect's biology and life styles.

1

Researchers recommend scouting for first generation corn borers when the corn plants reach about knee high. The most common symptom of early corn borer feeding is the familiar "shot hole" damage on the leaves.



For example, warm winters have the potential to allow increased survival of the over-wintering stages of some insects or perhaps in early emergence in the spring.

In the following sections, I have attempted to predict the most likely effect of recent conditions on the more common field crop pests. These predictions are meant to serve as a guide to your scouting efforts, and should not be used in place of a sound scouting program.

Corn Rootworm

Adult numbers in 1991 were low in much of the state, however, there could be higher egg survival due to warm temperatures, moderate snow cover and lack of soil drying. Soil type is the dominant influence with light soils less susceptible to corn rootworm injury.

All fields of corn in 1992 that will be corn again in 1993 should be scouted in July and August to predict the need for rootworm control in 1993.

European Corn Borer

Huge populations in 1991 were due to near perfect conditions for the first generation egg laying and survival.

Over-wintering survival is potentially higher, but disease incidence and environmental conditions will be more important in determining the risk of a heavy infestation. Look for earlier than normal emergence if warm trend continues.

Alfalfa Weevil

Eggs are typically laid in the spring although survival of eggs deposited in the fall is known as far north as northern Illinois.

Be alert for early weevil damage due either to over-wintering eggs (previously undocumented but possible in extreme southern Michigan) or early emergence of spring-laid eggs throughout the state. Parasites have been effective in suppressing populations in 1990 and 1991.

Potato Leafhopper

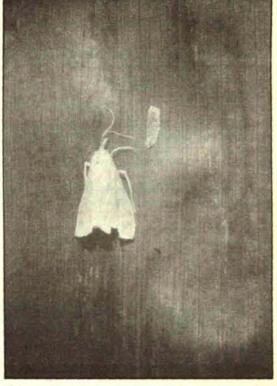
The severity of infestation is tied to the intensity and timing of spring migration events (typically May and June). A warm winter in the south may have the potential to promote earlier migrations, but conditions in Michigan will determine if populations survive.

Japanese Beetle and Bean Leaf Beetle

The northern portion of the range for both insects extend into southern Michigan and both populations have been on the increase. Look for these insects to be more numerous and to further expand their range northward in 1992 due to favorable over-wintering conditions.

Flea Beetle

Adult survival tends to be better in mild winters. Although this insect is seldom a serious pest of field corn, it does carry Stewart's wilt



Corn borer eggs are deposited in masses of 15 to 30 on the underside of leaves. Warm, humid mild June nights encourage egg laying, while extremely dry or rainy conditions can lower chances of a severe infestation.

disease to seed corn. Seed corn producers in southwest Michigan experienced increased numbers of flea beetles in 1991 and should be on the lookout for potential problems again in 1992. Canola, especially spring planted, and sugar beets are also damaged by flea beetles and plans should be made to watch these fields following seedling emergence.

Reprinted from MSU CES Field Crop Advisory Team Alert, April 1, 1992 issue.

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values available. Happy Travels!

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Alaska

July 16-27, 1992

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James L. Schmidt, Illinois Agricultural Assoc. IFB Travel Program Director

Douglas E. Fleming, Michigan Farm Bureau Field Operations Division

Canadian Rockies/ **Calgary Stampede**

July 1-12, 1992

11

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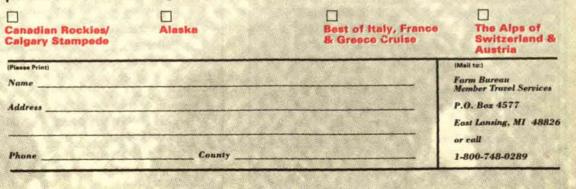
This unforgettable, 12-day tour of the Canadian Rockies will not only visit the great and growing cities of the northwest and majestic beauty of the Rockies, but also includes unique features designed to give it special appeal. Special attractions include the Calgary Stampede Celebration -- rodeo, chuckwagon races, state show spectacular, a ride on a giant snowmobile on Athabasco Glacier, a gondola ride to the top of Sulphur Mountain, and overnight stays at the beautiful Lake Louise Chateau and Banff Springs Hotel.

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Market Outlook

Dr. Jim Hilker, Dept. of Agricultural Economics, Michigan State University

Corn

The USDA incorporated the lower than expected March 1 corn stocks figure (discussed in the last issue) into their April 10 Corn Supply/Demand Report shown in Table 1. Corn usage for feed for 1991-92 was lowered 100 million bushels from the previous month's estimate.

The bottom line was not that bad as the projection for food, seed, and most importantly, industrial uses was increased 45 million bushels. The net change was reflected in the 55 million bushel increase in the projected ending stocks. The 1991-92, 14.6 percent ending stocks to use ratio is still considered fairly tight and leaves room for a significant weather market.

Weekly exports have been running near the expected rate, but are tied closely to credit allocations. This is tied directly to the weak world demand, most specifically the CIS region. While we have seen production shortfalls in some areas of the world, we have seen increases in others which have been nearly offsetting.

A combination of weather and planting progress will be the most significant factors

Table Eggs

Allan Rahn, MSU Ag Econ Dept.

The typically strong pre-Easter egg price rally has not materialized this year. Egg prices (New York, Grade A, large white, in cartons, to retailers) moved up 3-cents per dozen late in the week before Easter - after the majority of the Easter trade volume had been priced - but had traded in a flat mid 60 cent range since early March.

The recent market strength reflects the demand for in-shell eggs as the breaker-liquid egg market is relatively depressed. This situation does not bode well for post-Easter shell egg market conditions as the processed egg market frequently provides a floor price alternative at this time. Shell egg

Seasonal Commodity Price Trends				
Wheat	?			
Corn	1?			
Soybeans	1?			
Hogs	BT			
Cattle	TP			
Index: = Higher Prices;	= Lower Prices;			

TP= Topping; BT= Bottoming; ? = Unsure

in the market the next few weeks as long as the Russian political situation stays stable.

Be ready to price portions of remaining old crop corn if a rally appears. Some may want to at least put a floor under their price using options or minimum price contracts near the beginning of a rally. One, we may not have a rally; and two, it may not be very big. With good weather, prices could drop into the fall once we get past June.

prices are likely to fall 6 to 10 cents per dozen by the end of the month and to average in the upper 50 cent area during May.

The nation's table egg flock is currently around 234 million layers, 1.5 percent more than a year ago. Advanced chick hatches suggest that more pullets than a year ago will be available for flock additions until mid year.

Spent hen slaughter capacity is likely to be a short-run constraint to adjusting the size of the laying flock and may delay the timing and magnitude of the typical seasonal price advances going into summer.

N	h	e	a	t

The recent old crop market drop at first glance is not reflected in the latest USDA Wheat Supply/Demand Report shown in Table 2. The USDA increased the 1991-92 export projection by 25 million with only a month remaining in the marketing year. This was reflected in lower ending stocks and a tight ending stocks to use ratio of 14.6 percent. A poor crop this year will mean a large price rally with the U.S. holding less than 10 percent of the world stocks.

There is little to do in the pricing arena other than wait. New crop prices are as low as my 1992-93 supply/demand projection in Table 2 would suggest. In other words, I do not feel that there is a lot of downside risk. An interesting item to keep track of is the continually increas-

Soybeans

The strong demand for soybeans through the first eight months of the 1991-92 marketing year will mean that we will go into the new crop year with less than burdensome stocks. The USDA increased their projected crushings and exports for 1991-92 in their April Supply/Demand Report seen in Table 3.

This lowered projected ending stocks 20 million bushels to 305 million, with a stocks to use ratio of 15.1 percent. The lower sup-

Cattle

Cattle prices are likely to stay in their present range through mid-May before gradually dropping off through August as supplies increase and where we may test the high \$60's. Slaughter has continued to be below last year levels.

However, red ink for the slaughter plants and large numbers of competing meats will keep prices under \$80. On the positive side, we are coming into a typically strong de-

Hogs

Hog slaughter the first half of April was up a little less than expected and this was reflected in prices staying over \$40. From this point through June, we can expect a strengthening in prices. Watch for pricing opportunities for the second half of the



April 30, 1992

ing price spread between soft red and white wheat, in favor of red. This is due to both the tightness of stocks and the poor condition of the soft red crop in Indiana and Ohio.

ply also means a weather rally would have more kick. As seen in Table 3, this would put us in about the same supply/demand situation in 1992-93 as this year, with a normal yield.

Be ready to price portions into a rally, both old and new crop. New crop price bids are still slightly above what my supply/demand situation would project for 1992-93, as seen in Table 3. This means it

mand period. If this translates into higher packer margins, we may see strong prices through May.

At this point, keep as current as possible; a quick drop-off is possible. If we have a rally in the futures which allow you to forward price late summer cattle in the \$70's, consider it. For those wishing to put some feeders on grass the market is expected to drop over the next 30 days.

year on rallies. Supplies will be larger than last year and we will not have the strong cattle prices we are seeing now to help support the market. At this point, the market seems to be current with weights below a year ago.

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Balan	ice She	et For	
SC	YBE	ANS	
	1.10		Hilker's
		Proj.	
the second s	990-91	91-92	92-93
Soybean Acreage Acres Planted	57.8	Aillion A	The second second
Acres Harvested	56.5		
Bu./Harvested Acre			
Dustini rested Acie		54.5	34.1
Stocks	(M	illion Bu	shels)
Beg. Stocks	239	329	30
Production	1926	1986	1911
Imports	2	5	123
Total Supply	2167	2320	2220
Use:			
Crushings	1187	1240	1220
Exports	557	680	610
Seed, Feed and			
Residuals	94	95	90
Total Use	1838	2015	1920
Ending Stocks	329	305	300
Ending Stocks,			
Percent of Use	17.9%		
Regular Loan Rate	\$4.50	\$5.02	\$5.0
U.S. Season Avera	ae	\$5.45-	\$5.30
Farm Price, S/Bu.			\$5.8

	Table 1	1220	
	ply/Den		
Balan	ce She		
The second second	CORN		
121 1 12		Proj.	Hilker's Guess
the second s	990-91	AND IN THE OWNER	92-93
Corn Acreage		illion Ac	res)
Acres Set-Aside an Diverted	nd 6.3	4.7	3.5
Acres Planted	74.2	76.0	79.0
Acres Harvested	67.0	68.8	71.7
Bu./A. Harvested	118.5	108.6	119.5
DujA. naivesteu	110.5	100.0	115.5
Stocks	(M	illion Bu	shels)
Beg. Stocks	1345	1521	1146
Production	7934	7474	8568
Imports	3	20	6
Total Supply	9282	9016	9720
Use:			
Feed	4669	4900	5050
Food/Seed	1367	1445	1500
Total Domestic	6036	6345	6550
Exports	1725	1525	1650
Total Use	7761	7870	8200
Ending Stocks	1521	1146	1520
Ending Stocks	-		
Percent of Use	19.6%	14.6%	18.5%
Regular Loan Rate	\$1.57	\$1.62	\$1.72
U.S. Season Avera	ige	\$2.40-	\$2.10-
Farm Price, S/Bu.	\$2.28	\$2.50	\$2.50

	oly/Den ce She WHEA	et For	
and the second	990-91	Proj. 91-92	Hilker's Guess 92-93
Wheat Acreage	and the second second	illion Ac	And the second second second
Acres Set-Aside ar Diverted	nd 3.2	10.0	3.5
Acres Planted	77.3	69.9	70.0
Acres Harvested	69.4	58.1	61.0

Table 2

neat

riviou i lai routou				
Bu./A. Harvested	39.5	34.1	37.0	
Stocks	(M	lillion Bu	shels)	
Beg. Stocks	536	866	390	
Production	2736	1981	2257	
Imports	37	35	27	
Total Supply	3309	2882	2650	
Use:				
Food	796	775	800	
Seed	90	. 90	90	
Feed	489	350	165	
Total Domestic	1375	1215	1055	
Exports	1068	1300	1125	
Total Use	2444	2515	2180	
Ending Stocks	866	366	470	
Ending Stocks				
Percent of Use	35.4%	14.6%	21.6%	
Regular Loan Rate	\$1.95	\$2.04	\$2.21	

U.S. Season Average \$3.00- \$3.10-Farm Price, \$/Bu, \$2.61 \$3.10 \$3.80 Source: USDA



April 30, 1992

EPA Approves Atrazine Use Requirements

The Enivornmental Protection Agency has approved label changes for the use of atrazine, a widely used herbicide in corn, for the 1993 crop year and will apply to all products containing atrazine.

According to Steve Spain, CIBA-GEIGY's product manager for atrazine, the changes will reduce the total amount of atarzine used and surface water runoff from treated fields.

The revised label will eliminate non-crop total vegetation control uses of atrazine. For agricultural uses, the maximum rate for a single application will be reduced to 1.6 or 2 pounds of atrazine per acre, depending on the amount of soil-holding crop residue in the field. Presently atrazine can be applied in amounts of up to three pounds per acre.

The new label also creates buffer areas between atrazine application sites and surface water. Atrazine applications will not be permitted within 66 feet of the points where field surface water runoff can enter streams and rivers, or within 200 feet of lakes or reservoirs.

First Annual Meeting of FCS of Michigan's Heartland Successful

Nearly 900 stockholders and guests attended the first annual stockholder's meeting series for Farm Credit Services (FCS) of Michigan's Heartland held in early April in Midland, Alpena, Traverse City, and Lansing. According to CEO James Bremer of FCS of Michigan's Heartland, four meetings were held to bring the information as close to members as possible.

Members approved the downsizing of the organization's board due to the recent merger, according to Bremer. "The individuals who were serving on the board were good people, and it was a difficult task for the membership to select new board members," he said.

New directors for Production Credit Association (PCA) include: Robert Weaver, Leelanau County Tom Murphy, Isabella County Brent Wilson, Gratiot County Glen Williams, Shiawassee County Charles Wilcox, Ingham County.

Newly elected to the Federal Land Credit Association (FCLA) were: Gerald Lehman, Ogemaw County Don Hatfield, Mecosta County Cathy Webster, Clinton County Gerald Cole, Shiawassee County Joann Kinne, Ingham County.

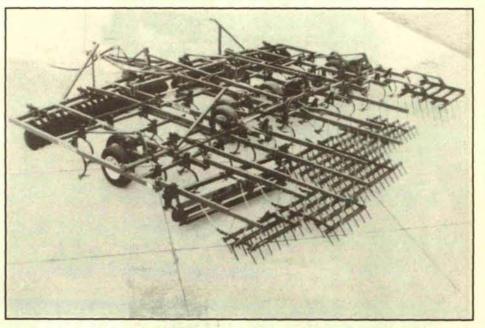
At the first board meeting of the new directors, Gerald Cole (below) was elected executive board chairperson,

New Glencoe SF4500 Soil Finisher From Farmhand To Meet Compliance Requirements

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Improved down-pressure on the springloaded disc gangs and the addition of 16" cut out feathering blades provides excellent field leveling. The hitch is designed to improve the draft angle and reduce machine stress. Four optional leveling attachments, including a new 8-bar spike tooth flex harrow and a 5-bar coil-tine harrow, allow machine setup for specific soil and residue conditions and incorporation needs.

Nine models of the SF4500 are available,



New Product Profile

The SF4500 has four rows of shanks from a 12' rigid frame model to a 38'3" folding wing model. All models carry spaced 30" between rows for ideal soil-stir-ring action. Underframe clearance is 21". contact Farmhand, Inc., P. O. Box 1500, Excelsior, Minnesota 55331 or call the Sales Center at 515-236-6571.



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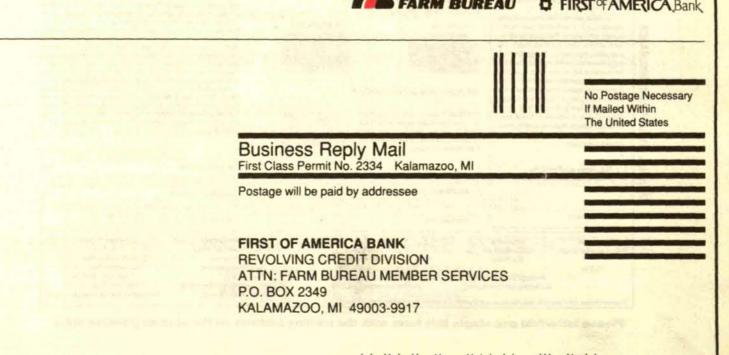
Compare the premiums. Both the MemberLine VISA and the Gold MasterCard offer a wide array of complimentary features and options for your protection and peace of mind. And when you carry a Gold MasterCard, you'll enjoy the added advantages of a higher credit line, executive travel privileges, emergency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

Easy to apply for. Simply remove this page from the magazine and fill out the application on the reverse side. Letterfold and staple the form with the mailing address on the outside. No postage necessary!



Gerald Lehman was elected FCLA board chairperson, and Robert Weaver was elected PCA board chairperson.





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Educate Tractor Operators In Safety Techniques



8

n Michigan, about half of agriculture-related deaths each year are the result of tractor upsets. It is estimated that the use of rollover protective structures (ROPS) on all tractors would reduce the number of those deaths by a third--but safety experts also say that the equipping of all tractors in Michigan with ROPS is not a practical expectation.

One thing farmers can do is to educate every user of tractors whether those tractors are ROPSequipped or not - about techniques that reduce the potential for accidents.

You should make sure all the operators know how your tractor works. Teach them how to drive it and operate its equipment. Have them read the operator's manual. Show them the hazards on your place and what to do to avoid trouble. Supervise them until you're



From Farm Bureau Insurance

sure they are competent and safety conscious.

Here are safety instructions for you to pass along to anyone who operates your tractor:

- Securely fasten your safety belt if the tractor has ROPS.
- If possible, avoid operating the tractor near ditches, embankments, and holes.
- Reduce speed when turning, crossing slopes and on rough, slick, or muddy surfaces.
- □ Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- Do not permit others to ride.
- Operate the tractor smoothly. No jerky turns, starts, or stops.
- Hitch only to the drawbar and hitch points recommended by tractor manufacturers.
- When the tractor is stopped, set the brakes securely and use park lock if available.

Remember, too, that youthful hired laborers under age 16 are not allowed to operate a tractor of 20 PTO horsepower or more. Exceptions can be made for youths ages 14 and 15, however, if they have completed either the 4-H or the Agricultural Science tractor operation program, have been instructed by their employer in the safe and proper operation of the equipment, and are properly supervised.

Pesticide Application – Last Minute Reminders –

Well Locations

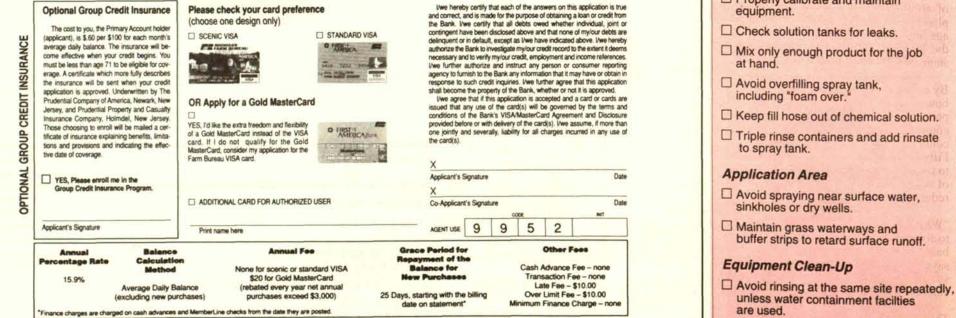
- Never clean spray equipment near wells.
- Never calibrate sprayers near wells.

Equipment Preparation

Properly calibrate and maintain

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First Name	Middle Initial	Last Na	me			Social Security Nu	Imper		
Present Street Address			2	Time	at Preser Yrs.	t Address Mos.	Date of Bi	in the second	
City, State		Z	p Code		e Telepho ude Area (ne Number Code) ()		
Previous Address (if less than two years a	at present address)		City				Sta	ate Zip	
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Employer's Telephone Number	Position	2.000	Time at Present Employm Yrs. Mc		s Income I	rom Employment	Monthly Yearly		
City, State, Zip Code	_						Monthly		
					Other	Income	□ Yearly	Source of Other Income	
Previous Employer (if less than two years	at present employer)							Time at Previous Employer Yrs. Mot	
Nearest Relative (not living with you)		Address	1.1.1					Telephone ()	
First Name	Middle Initial	Last Na	me			Social Security Nu	umber	*****	
Present Street Address				Time	at Preser Yrs	nt Address Mos.	Date of Bi	inth	
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Employer's Telephone Number	Position		Time at Present Employm Yrs. Mr		s income t	from Employment	Monthly Yearly		
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Previous Employer (if less than two years	at present employer)			_				Time at Previous Employer Yrs. Mor	
Nearest Relative (not living with you)		Address						Telephone ()	
Credit References	Monthly Pa	ayments	Balance Due	Own/	Buying Ho	me 🗆 Other	Rent	Monthly Payment	
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	\$		\$		-			Declared N Bankruptcy?	



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Use dedicated equipment where possible to reduce the number of rinsings.



April 30, 1992

Row Crop Cultivation Focus of 1992 Ag Expo's Field Demonstrations



The focus of the field demonstrations at Ag Expo '92 (July 14-16) will be on the equipment and management considerations necessary for successful row crop cultivation in conventional, conservation, ridge and notilled fields.

Interest in row crop cultivation has continued to grow in recent years, with renewed emphasis on controlling crop input costs. Cultivation in a conventional seedbed, on a per acre basis, can cost \$3 to \$4 per pass over the field.

If herbicide costs can be reduced or yields increased, cultivation becomes a wise

Counting Stems is Best Way to Predict Alfalfa Yields

Counting stems is the best way to determine potential yields in your alfalfa stands, say two University of Wisconsin agronomists. If you don't count at least 40 per square foot, you probably should plow it down.

Each spring, many farmers go through the routine of checking their greening alfalfa stands to decide whether or not to plow them down.

In the past, it has been difficult to figure out when to plow down stands because of potentially poor yields. Now agronomists Dan Undersander, UW-Madison, and Dennis Cosgrove, UW-River Falls, have discovered that counting the stems rather than plants can better estimate how well alfalfa stands will produce.

Previously, researchers believed that stand density (number of plants per square foot) was the best indicator of yield. Farmers were encouraged to replant if the stands had less than a recommended stand density, which varied with age of the stand. But many farmers were getting good yields even with thin stands, says Undersander.

"We found that we could get good yields with much fewer plants than we figured, without regard to age of stand," he says.

In their study, Undersander and Cosgrove discovered that farmers could get six tons of alfalfa per acre with as few as seven choice. Reduced herbicide use also helps reduce potential for groundwater contamination. But row cultivation takes time and residue management can be a problem in conservation tilled fields.

Demonstration plots for six weed control systems in corn and soybeans will be established in early May and include:

- 1. No herbicide, no cultivation.
- Broadcast herbicide, no cultivation.
 Broadcast herbicide, one cultivation.
- 4. Band herbicide, one cultivation.
- 5. Band herbicide, two cultivations.
- 6. No herbicide, two cultivations.

No-till and ridge till cultivation equipment will be demonstrated on ridges in corn residue; moderate residue cultivators will run in chisel plowed corn ground; and low residue equipment will be operating in conventionally tilled soil.

Automatic guidance systems will also be demonstrated with emphasis on equipment design, sweep, shovel and point selection for a wide range of cultivation requirements.



Those attending Ag Expo will once again be able to view various pieces of machinery in operation at the 40-acre field demonstrations, as they did last year, for side by side comparisons.

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plants per square foot, regardless of stand age after the sodding year. The key is not the number of plants but the number of stems, says Undersander.

By counting stems, farmers can determine how many tons they can potentially harvest per acre. Undersander says farmers who count 40 stems per square foot potentially could harvest four tons of alfalfa per acre. Fifty-five stems per square foot can yield up to six tons to the acre. Low soil fertility, lack of water, or insect or disease attacks can reduce yields, Undersander notes.

"What this will do that we haven't been able to do before is to make plow down decisions based on yield expectations," Undersander says. "If they're not counting at least 40 stems, it might be a field they should consider plowing down."

This method can be used on any alfalfa stand after the seeding year, Undersander notes. The best time to count stems is when stems are three to eight inches high. • For younger students, we sponsor the America & Me Essay Contest for Michigan eighth graders. Now in its 24th year, the contest encourages Michigan young people to explore their roles in America's future. Thousands of students enter each year.

• We also sponsor Junior Achievement, statewide Future Farmers of America programs, and numerous athletic events through the Michigan High School Athletic Association.

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April 30, 1992

10

Estimates of Residue Cover After Machinery Operations

Tillage operations bury some crop residues to various degrees. Just how much residue is buried depends primarily on the type of machine used, how it's used, and the type of residue it's used on.

The chart at right has been developed from research data. For each machine listed, the numbers to the right are the ranges of crop residue that you could expect to leave after one pass with that piece of equipment. The actual residue level can vary, however.

Pieces of machinery listed are those commonly used in corn and soybean tillage operations. It's best to set equipment to work shallower, drive slower, and use tillage points that fracture the soil rather than turn or throw it.

Use the chart to compare tillage implements for their ability to leave residue on the soil

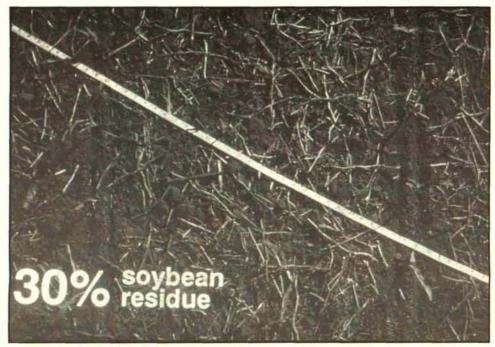
surface and to get a rough estimate of the percent of residue you can expect to leave after planting from a specific tillage system. Multiply each of the machinery operations' numbers together, and choose from within the range listed.

Begin calculations with the residue remaining after harvest and use the overwintering weather factor. As a general rule of thumb use the higher number listed for the weather factor.

Example Calculation

Here's an example of how to calculate ground cover after planting:

.95 (% cover after harvest) x .90 (overwinter) x .60 (spring chisel - straight points) x .80 (field cultivator with sweeps) x .90 (planting) = .37 (times 100 equals 37%ground cover after planting).



How to Measure Crop Residue

Use any line that is equally divided into 100 parts. Fifty foot cable transect lines are available for this purpose. A 50-foot nylon rope with 100 knots or marks six inches apart or a 50-foot tape measure using the 6-inch and foot marks also works well.

Stretch the line diagonally across the crop rows. Walk back along the line looking for residue underneath the marks. Count the number of marks (tabs or knots) that have residue under the leading edge when sighting from directly above the mark. It is important to use the same point on each mark for accuracy. Don't count residue smaller than 1/8 inch in diameter.

Walk the entire length of the rope or wire. The total number of marks with residue under them is the percent cover for the field. If your rope or tape has only 50 marks, multiply by 2; for 25 marks, multiply by 4. Repeat the procedure at least three times in different areas of the field and average the findings. Avoid measuring areas such as end rows, or point rows.

Measure residue before and after any field operation to find out how much residue is buried with a single pass of that piece of equipment.

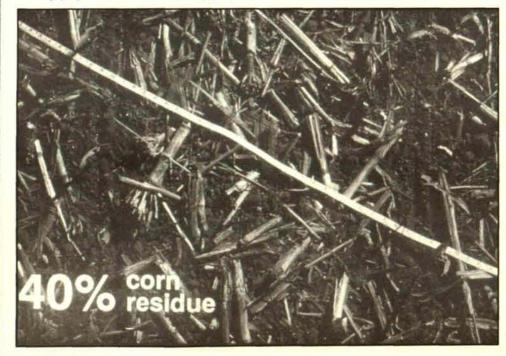
For purposes of crop residue values for soil conservation systems, the residue cover is measured after planting.

Look down, not out across the field, for an accurate estimate of ground cover.

Percent ground cover is dependent on both the amount of crop residues and its distribution. Residues spread evenly across the rows produce the highest percentages of ground cover.

	Democrat De	aidus Loft
Machine or operation	Percent Re Corn/Small Grain	
Over winter weathering	80-95	70-80
Moldboard plow	0-10	0-5
Paraplow/Paratill	80-90	65-75
V ripper/subsoiler	70-90	60-70
Chisel plows with:		
Sweeps	65-85	35-55
Straight chisel points	55-80	30-50
Twisted points	40-60	15-35
Coulter chisel plows with:		
Sweeps	60-80	30-60
Straight chisel points	50-70	25-45
Twisted points	35-55	10-30
Disk chisel plows:		
Sweeps	55-75	25-45
Straight chisel points	45-65	20-40
Twisted points	30-50	10-25
Disks:		
Offset light duty	45-55	30-40
Offset heavy duty	35-45	25-35
Tandem disk (as a secondary operation	on) 40-60	35-45
Tandem disk after harvest,		
before other tillage	80-90	50-60
Field cultivators as primary tillage operation	on:	00 55
Duckfoot points		30-55
Sweeps or shovels 6-12"		50-70
Sweeps 12-20"	v	55-75
Field cultivators as secondary operation:	60-80	50-70
Duckfoot points Sweeps or shovels 6-12"	75-85	60-75
Sweeps 12-20"	80-90	65-80
Finishing tools:	00-90	03-00
Soil finisher	45-65	30-50
Seedbed conditioner	75-95	50-70
Culti-mulcher	70-90	60-70
Harrows	70-90	65-85
Drills:	10 50	00 00
Hoe openers	50-80	40-60
Disk openers	80-90	60-80
No-till coulters	75-85	70-80
Cross slot openers	90-95	90-95
Planters:		A ST LEAD
Runner planters	85-95	80-90
Double disk opener planters	80-90	70-80
Sweeps or double row cleaning disks	60-80	40-60
Ridge-till planter	60-70	30-50
No-till planters with:		100 Carl 100
Offset double disk openers	90-95	85-95
Smooth coulter	90-95	85-95
Ripple coulter	85-90	80-90
Fluted coulter	80-85	70-80
2 or 3 fluted coulters	75-85	65-75
Anhydrous applicator	75-85	45-70
Knife-type fertilizer applicator	60-80	40-60
After Harvest*	75-95	65-90
 Begin calculations with residue remaining after harv 	est.	

Chart and Photos Courtesy of Michigan SCS Office







April 30, 1992

May Discussion Topic -- Responding to Animal Rightists

he vandalism and arson at the Michigan State University mink research facility highlighted the ruthless tactics of the animal rights movement. But that very ruthlessness makes these extremists and their message vulnerable to a well-reasoned counterattack -- a counterattack led by Farm Bureau members armed with up-todate consumer communication research.

Whether you are talking to your neighbors in the grocery store, visitors to a fair display, sightseers at a farm tour or children in a classroom, it is important to communicate a consistent message about the value and benefits of animal agriculture. To assist you, the American Farm Bureau Federation has identified a series of "winning" messages that tap into persuasive themes about animals and family farming. These key messages are:

 "Farmers are in this business because they care about animals. They wouldn't be able to make a living if they didn't keep their animals healthy and productive." While the public generally believes that farmers treat their animals well, it is critical to reinforce this simple truth. Today's farm animals are protected from predators, disease and severe weather conditions and have food and water readily available. It's in a farmer's best interest to make sure his/her animals are healthy and well cared for.

- "Meat, milk, eggs and dairy products supply important nutrients and Americans have the right to include these products in their diets." Americans don't like animal rights extremists telling them what to eat or not eat. But it is important to address perceived concerns about diet and health by

pointing out that all reputable dietary experts agree that animal products play a role in a healthy, well-balanced diet.

"Farmers are expert at what they do, and they are trained in modern agricultural methods that incorporate the highest standards of environmental management and food safety." Land grant universities, like Michigan State University, provide farmers with the latest scientific and practical knowledge about agricultural production and marketing. Farmers are "Professionals From the Ground Up" who feel a strong responsibility to produce wholesome food and take care of the land and animals under their stewardship.

- "Farming and ranching in America is a family business, with 97 percent of farm and ranches family owned and operated." It's important to remind people that family farming is alive and well. This means that farmers remain deeply involved in the care, feeding and welfare of their animals. Americans support this concept and oppose efforts that would jeopardize family farming.

"America's farmers and ranchers are stewards of the land, preserving vast amounts of open space and natural resources, as well as an irreplaceable part of our heritage." Consumers want to preserve and protect this heritage, as well as the traditional freedom they associate with it. Attacks on animal agriculture by animal rights extremists jeopardize the survival of farming in America. In turn, loss of farms would mean shopping malls and office parks replacing precious open land - which research shows is strongly opposed by the public as a whole.

- "Only in America can less than three percent feed 100 percent of the population with the world's most wholesome, affordable food." This message is a powerful tool for responding to attacks on animal "factory farming." Studies show that 80 percent of Americans become more supportive of farmers when reminded that less than three percent of our population feeds our country and much of the world. Thanks to our productive agricultural system, American consumers enjoy the highest quality food at the lowest prices in the world.

These "winning" messages about animal agriculture can be valuable tools in your effort to convince and persuade consumers about the benefits of modern animal agriculture. Watch for opportunities to proactively utilize your communications skills to counteract animal rightists' propaganda.

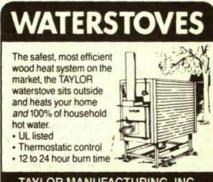
Discussion Questions:

1) Have concerns surfaced in your community about animal care, research animals or the raising of livestock? If so, in what form?

What kinds of techniques and motivations have you observed animals rights groups using to draw attention to themselves?

Why is it important for all facets of agriculture to become involved in communicating positive messages about the animal industry?

4) What kinds of opportunities are there for your CAG or county Farm Bureau to counteract the extreme messages of animal rights activists?



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A Dozen Ways to Leave More Residue

1. Follow a crop rotation sequence with high residue producing crops. Soybeans don't provide the same kind of protection as corn, for example. Also, high yields give more residues.

2. Wait until spring for tillage operations. This is most important on low residue producing crops such as soybeans. Fall tilled soybean ground is very vulnerable to wind erosion in late winter and early spring.

3. Reduce the number of tillage passes. In most cases, this is as important as the type of tillage performed.

4. Plant rye or wheat as winter cover crops. This is a good option when you are growing low-residue crops such as soybeans or corn silage.

5. Set chisels and disks to work shallower. Tilling deeper buries more residue.

6. STOP using the moldboard plow.

Conservation Reserve Program (CRP) Can Improve Your Profits

"Why waste energy trying to make a profit on unproductive cropland?" questioned Homer R. Hilner, state conservationist for the Soil Conservation Service in Michigan, as he reviewed the benefits of USDA's Conservation Reserve Program recently.

USDA's Conservation Reserve Program (CRP) gives farmers the option of concentrating on the most productive farmland. The June 15-26, 1992 sign-up period is the next opportunity farmers will have to apply for enrollment in the program.

Although any land used to grow crops two or more years during the 1986-1990 period is eligible for enrollment, farmers can offer only their least productive fields and unproductive cropland adjacent to drainage ditches and streams for enrollment in the program. Soil compaction and fertility are usually problems on severely eroded land and land that was covered with subsoil when drainage ditches were dug.

Vegetative cover on cropland adjacent to drainage ditches helps protect water quality and is one of the most visible things farmers can do to protect water quality. These filter strips need to be at least four rods (66 feet), but not more than six rods (99 feet) wide to meet programs requirements.

Renters also benefit when landowners enroll unproductive land along ditches in the program because they no longer have to rent the unproductive land.

Everyone benefits because of reduced water pollution and all forms of wildlife have better habitat for food and cover when land is enrolled in the program and is protected with permanent sod or tree cover.

Farm operators and owners should visit county Agricultural Stabilization and Conservation Service (ASCS) offices now and during the June 15-26 period to learn more about the options available to them and to apply for program enrollment. .

7. Drive slower on tillage operations. Driving faster throws more soil and covers more residue.

8. Use straight points and sweeps on chisel plows, instead of twisted points. Twisted points may bury 20 percent more residue.

9. No-till drill soybeans instead of planting them in a prepared seedbed. No-till drilling keeps more residue on the soil surface, and generally produces a quicker canopy.

10. Convert to a no-till system. No-till disturbs residue only in the row.

11. A straighter alignment of disk blades buries less residue.

12. Strive for even distribution of residue from the combine at harvest. Also, leave residue size as large as possible. Smaller particles such as chopped soybean residue will decompose more quickly than larger particles and will be buried more easily.

Focusing on land that does not require extra fuel, extra fertilizer and extra work for yields that are usually lower than in the rest of the field is more efficient and profitable.

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April 30, 1992

Calibrating Granular Insecticide Application Units

When was the last time you calibrated your soil insecticide application units and what product did you use? If the answer is anything other than, "I did it this year using the product I intend to apply in 1992," you had better plan on spending a little time with your planter in the near future.

Proper calibration of granular applicators is critical for effective and economical use of soil insecticides. A spot check of several producers and applicators over the last several years has shown that while some are right on, others have been under or over applying by as much as 50 percent. Commonly asked questions regarding calibration are as follows: Q. "Can't I just use the settings recommended on the insecticide bag?"

A. Most manufacturers who provide such guidelines caution growers that while they are a good starting point, they should not be used as the sole calibration method. Varying age or state of repair of equipment as well as moisture conditions may affect these settings significantly.

Q. "I usually just calibrate one unit, then set all the others to the same adjustment. Any problems with this?"

A. If all your units were perfectly identical, this should work. However, in the real

Presque Isle County Farm Bureau sponsored a "Small Animals Day" recently in cooperation with the CES and local commodity organizations. Over 4,000 enjoyed the farm animals, commodity samples, equipment and logging displays, 4-H, membership, farm safety promotions, and local radio station WHAK broadcast live from the event. Below, county president Mike Tulgestke and son Andy share a brief moment examining one of the exhibits.



world, this is seldom the case. As an example, MSU field crops entomology researchers recently purchased about two dozen new units for use in their screening trails. In calibrating them they found that to deliver the same amount of product, the setting varied by as much as four adjustment units on the applicators scale. If they had chosen a single setting for all units, some would have been off by up to 20 percent.

Q. "I've switched products from last year, but it is still a 15 percent G. Will the same settings work again?"

A. Unfortunately no! Most applicators on the market use a varying opening (orifice) size to regulate the amount of product delivered. The density, relative size and shape, moisture content and makeup of the carrier (usually sand or clay) determine how fast the product will flow through a given opening. Since carriers vary from product to product, you cannot be sure of your calibration in this situation. In addition, since a company may change its carrier from year to year, one should re-calibrate every year even if using the same product.

Suggestions For Calibrating

Check the overall condition of your equipment and replace worn or damaged parts. When working with the insecticide units, remember that they probably contain residue from last year. Wear protective equipment including gloves and eye protection.

Products can be calibrated by either a weight or volume method. The volume method is somewhat easier but requires that pre-calibrated tubes be available for each product to be calibrated. These may often be obtained from your agri-chemical supply dealer. If using the tubes, be sure to follow the manufacturer's recommendations exactly. In general, you attach the collection tubes to the dispensing units and drive the planter at normal planting speed over a fixed distance (usually between 250 and 1,000 feet). At the end of the course, you compare the volume of output to the scale on the side of the tube. The tubes have been pre-calibrated so that each mark corresponds to a given number of ounces. Adjust the units up or down until all give the desired output.

If tubes are not available, then the output from each unit must be weighed on a postal scale or other instrument capable of weighing in ounces or grams. Procedure to follow:

1. Measure and mark off a course 250 feet long. It is best to make calibration runs in a worked field, versus on a road, to account for normal wheel slippage.

2. Disconnect all the drop tubes and collect granules in plastic bags attached to each applicator unit. It helps to number the bags and units to keep them correctly identified.

3. Drive over the course at planting speed. Rather than starting from a dead stop, bring the tractor to planting speed and lower the planter at the mark.

4. Weigh the material collected. Record and compare with the following table.

5. Adjust units to deliver more or less material. Continue to test until all units consistently provide the desired output.

Reprinted from MSU CES Field Crop Advisory Team Alert, April 15 issue.

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