



Election 1990– An Agricultural Perspective

At a time when political action committees (pacs) are being portrayed as mouthpieces for fat-cat corporate donors, I'm proud to point to the Michigan Farm Bureau AgriPac as a truly grass roots political entity that represents the views of working men and women who make their living in Michigan agriculture.

From the first candidate interviews by local Farm Bureau committees in June of this year to the Sept. 6 meeting with gubernatorial candidates John Engler and Jim Blanchard, grass roots input has been the chief factor considered in making AgriPac endorsements for "Friends of Agriculture" in both the primary and general elections. The results of this extensive discussion and evaluation are over 110 endorsements for state and federal candidates in the Nov. 6 General Election. (See page 4 for AgriPac's 1990 endorsements.)

In this election year, the agricultural issues under scrutiny ranged from cargo preference regulations for U.S. farm exports to protecting Michigan's Right to Farm law and flood disaster loans. Equally important were the fiscal, environmental and labor issues which affect small businesses and families in rural Michigan such as inheritance tax reform, availability of rural health care, auto insurance reform and the commercial driver's license law.

AgriPac also kept score on some long term issues such as the development of renewable alternative fuels (ethanol), federal deficit reduction, state and federal tax policy, education finance reform, minimum wage and more. In each chamber of the U.S. Congress and the Michigan Legislature, ten key votes were identified and the votes tallied to reveal where political action backed political rhetoric -- and where it did not.

AgriPac's "Friends" value the endorsement highly for the status and voter commitment conferred by the endorsement. Because members are a part of the process, they follow through with the most important candidate endorsement of all -- their ballot. A recent study shows that nearly all Farm Bureau members are registered voters who exercise this right regularly.

If, like many others, you find the media "analyses" and emotional campaign appeals of the past several weeks more confusing than informative, I encourage you to study the list of AgriPac endorsements in making your ballot decisions. You can vote confidently for "Friends" whose philosophies and voting records have been measured against grass roots issues identified by your fellow members, influenced neither by party affiliation nor paid political advertising. Make your voice heard in the most effective way possible -- by casting your ballot on election day.

Jack Laurie

Jack Laurie, President Michigan Farm Bureau

A New Look, A New Approach

Welcome to the first edition of a new publication designed especially for associate Farm Bureau members. You've undoubtedly noticed that something's different about your Rural Living magazine.

In addition to a new look you will also find editorial changes in terms of news for the non-farm member. Topics will include updated member services information as well as news you can use to assist you as consumers.

The changes are the result of a communications audit where we asked our members what's right and what's wrong. Associate Farm Bureau members told us they wanted more member service information and articles that will make them better consumers of agricultural produce. Unlike our farm members, nonfarm members told us they wanted less hard farm news and management information.

Our publications will be separated and targeted to meet the needs of both our farm and non-farm audiences. You will continue to receive the Rural Living four times a year; October, January, April, and July.

Keep in touch. We'd like to know your thoughts as we strive to provide you an improved publication.

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MICHIGAN'S Farm Best



Photo: Michigan Travel Bureau

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A Publication of Michigan Farm Bureau

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MICHIGAN'S FALL FARM MARKET GUIDE

Rural Living is Published Quarterly: By the Michigan Farm Bureau Information and Public Relations Division.
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Officers: Michigan Farm Bureau President, Jack Laurie, Cass City; Vice President Wayne Wood, Marlette; Administrative Director, Charles Burkett; Treasurer and Chief Financial Officer, Tom Parker; Secretary, William S. Wilkinson.

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Engler/Schuette Lead List of Endorsements

Republican gubernatorial candidate John Engler earned the Farm Bureau endorsement as Friend of Agriculture after an over-whelming 81 percent endorsement from county Farm Bureau candidate evaluation committees, reported AgriPac-Chairman, David Conklin.

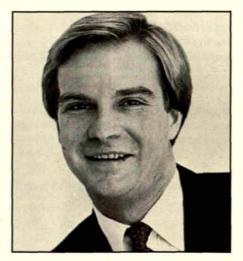
"John Engler was clearly their choice for governor," said Shiawassee County farmer David Conklin. "Of 47 county Farm Bureaus that made recommendations, 39 cast their votes for Engler. That overwhelming margin left no question of who would receive the endorsement."

"Of 47 county Farm Bureaus making recommendations, 39 cast their votes for Engler."

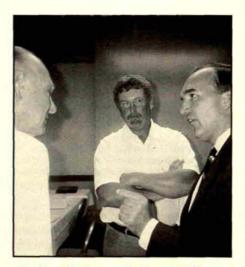
Engler's positions on issues related to agriculture closely parallel Farm Bureau policy, Conklin said. "His strong support for Michigan's

animal agriculture initiative, his recognition that agriculture has a crucial need for
inheritance tax reform and property tax
relief, his commitment to agricultural research and education, and his opposition
of mandatory insurance rollbacks without
reforms were some of the key issues that
tipped the scales so strongly in favor of
John Engler."

Conklin praised the work of the county Candidate Evaluation Committees saying that the Engler endorsement is an example of grass roots county input based on the best available information. County Farm Bureaus met in Lansing Sept. 6 to hear from John Engler and James



Schuette, who received the primary endorsement by AgriPac in August, continues to rely on the support of the political action committee in a tough race for the U.S. Senate against incumbent Carl Levin.



Engler, like Senate challenger Bill Schuette, has received the Friend of Agriculture endorsement from Farm Bureau throughout his career.

Blanchard about their views on important issues.

In a media statement following the Agri-Pac announcement, Engler said, "I am extremely pleased to learn that the farmers of Michigan are supporting me for governor....I won't let them down."

In addition to Engler, the following new endorsements for "Friends of Agriculture" were made by the AgriPac Committee:

U.S. Representative

Bob Davis (R-Gaylord) 11th District John Dingell (D-Dearborn) 16th District Bob Traxler (D-Bay City) 8th District

Mich. State Senate

John Pridnia (R-Harrisville) 36th District

Mich. State House of Representatives
James Docherty (D-Port Huron)76th Dist.
David Robertson (R-Gr. Blanc)83rd Dist.
Dale Shugars (R-Portage) 47th District

Attorney General -- Cliff Taylor State Supreme Court -- Patricia Boyle and Judy Hughes

Secretary of State -- Richard Austin MSU Board of Trustees -- Dee Cook and Jack Shingleton

U of M Board of Trustees -- Marvin

State Board of Education -- Richard DeVos and Lowell Perry

The following Friends of Agriculture, endorsed by MFB AgriPac in July1990, were successful in the primary. The endorsements continue for the Nov. 6 General Election.

U.S. HOUSE of REPRESENTATIVE

MICHIGAN HOUSE OF REPRESENTATIVES

District 2	Carl Pursell	(R-Plymouth)
District 3	Brad Haskins	(R-Ceresco)
District 4	Fred Upton	(R-St. Joseph)
District 5	Paul Henry	(R-Grand Rapids)
District 6	Bob Carr	(D-East Lansing)
District 9	Guy Vander Jagt	(R-Luther)
District 10	Dave Camp	(R-Midland)
District 18	William Broomfield	(R-Birmingham)

MICHIGAN SENATE

Dist.		Party
1	John Kelly	(D-Detroit)
4	David Holmes	(D-Detroit)
5	Michael O'Brien	(D-Detroit)
6	Robert Geake	(R-Northville)
7	Christopher Dingell	(D-Trenton)
8	Matt Dunaskiss	(R-Lake Orion)
9	Doug Carl	(R-Mt. Clemens)
10	George Hart	(D-Dearborn)
11	Norman Shinkle	(R-Lambertville)
12	William Faust	(D-Westland)
13	Jack Welborn	(R-Kalamazoo)
14	Jon Cisky	(R-Saginaw)
15	Denise Alexander	(R-Southfield)
16	Doug Cruce	(R-Troy)
19	Nick Smith	(R-Addison)
20	John Schwarz	(R-Battle Creek)
21	Paul Wartner	(R-Portage)
22	Harry Gast	(R-St. Joseph)
23	William VanRegenmorter	(R-Jenison)
24	Debbie Stabenow	(D-Lansing)
25	Joe Conroy	(D-Flint)
26	Gilbert DiNello	(D-East Detroit)
27	Art Miller	(D-Warren)
28	Dan DeGrow	(R-Port Huron)
30	Fred Dillingham	(R-Fowlerville)
31	Dick Posthumus	(R-Lowell)
32	Vern Ehlers	(R-Grand Rapids)
33	Phil Arthurhultz	(R-Whitehall)
34	Jim Barcia	(D-Bay City)
35	Joanne Emmons	(R-Big Rapids)
37	George McManus	(R-Traverse City)
38	Don Koivisto	(D-Ironwood)

MICHIGAN HOUSE OF REPRESENTATIVES

6	Morris Hood, Jr.	(D-Detroit)
8	Carolyn Kilpatrick	(D-Detroit)
10	Ted Wallace	(D-Detroit)
12	Curtis Hertel	(D-Detroit)

Dist.		Party
13	William Bryant, Jr.	(R-Grosse Pointe Farms)
18	Sid Ouwinga	(R-Marion)
19	Don Van Singel	(R-Grant)
20	Claude Trim	(R-Waterford)
23	Phil Hoffman	(R-Horton)
25	Roman Kulchitsky	(R-Warren)
26	David Jaye	(R-Utica)
28	Robert DeMars	(D-Lincoln Park)
29	Gregory Pitoniak	(D-Taylor)
33	William Keith	(D-Garden City)
35	Lyn Bankes	(R-Livonia)
39	Jerry Bartnik	(D-Temperance)
40	Tim Walberg	(R-Tipton)
41	Michael Nye	(R-Litchfield)
42	Glenn Oxender	(R-Sturgis)
43	Carl Gnodtke	(R-Sawyer)
45	James Middaugh	(R-Paw Paw)
48	Don Gilmer	(R-Augusta)
49	Bill Martin	(R-Battle Creek)
51	Susan Munsell	(R-Howell)
54	Paul Hillegonds	(R-Holland)
56	Frank Fitzgerald	(R-Grand Ledge)
58	Dianne Byrum	(D-Onondaga)
59	Lynn Jondahl	(D-Okemos)
60	Willis Bullard	(R-Highland)
61	Tom Middleton	(R-Ortonville)
63	Gordon Sparks	(R-Troy)
64	Maxine Berman	(D-Southfield)
68	Shirley Johnson	(R-Royal Oak)
71	Sal Rocca	(D-Sterling Heights)
75	Ken DeBeaussaert	(D-New Baltimore)
77	Dick Allen	(R-Caro)
78	Keith Muxlow	(R-Brown City)
82	Thomas Scott	(D-Burton)
84	John Strand	(R-Lapeer)
85	James O'Neill	(D-Saginaw)
86	Lewis Dodak	(D-Montrose)
88	Robert Bender	(R-Middleville)
89	Gary Randall	(R-Elwell)
91	Walter DeLange	(R-Kentwood)
93	Richard Bandstra	(R-Grand Rapids)
94	Ken Sikkema	(R-Grandville)
95	Alvin Hoekman	(R-Holland)
97	Nancy Crandall	(R-Muskegon)
98	Bill Bobier	(R-Hesperia)
100	Roland Niederstadt	(D-Saginaw)
101	Tom Hickner	(D-Bay City)
103	Ralph Ostling	(R-Roscommon)
104	Thomas Power	(R-Traverse City)

(D-Drummond Island)

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Pat Gagliardi

HIGHER FARM EXPENSES WILL NOT CAUSE HIGHER FOOD PRICES

U.S. FARM EXPORTS TO IRAQ CALENDAR YEAR 1989

	% of Total	
	U.S. Exports	\$ million
Commodity		
Wheat	2.9%	\$170
Rice	13.7%	\$133
Feedgrains	1.1%	\$85
Dairy Products	6.2%	\$16
Eggs	17.1%	\$15

Michigan farmers are facing higher energy costs and lower commodity prices due to the Iraqi invasion of Kuwait. However, it is anticipated that higher farm expenses will not trigger higher food prices, according to Michigan Farm Bureau Economist Bob Craig.

The price farmers paid for diesel fuel jumped by as much as 17 cents a gallon in some areas of the nation. According to Craig, each \$5-a-barrel increase in the price of crude oil means an additional \$1-billion boost in farm operating costs or a 20% increase in energy costs for U.S. farmers.

This \$1-billion projection covers fuel costs for cultivation and harvesting of 350 million acres. Also included are costs for other farm tasks, such as trucking, irrigation, and crop drying. According to Craig, farmers typically will spend about \$4.5 million to \$5 billion each year on fuels and oils.

An economic recession caused by higher energy prices could spell more bad news for farmers, by send"If agriculture was the only component, consumers would actually see a decline in food prices due to the loss of the Iraqi market for farm products."

ing bearish waves through commodity markets and tumbling livestock prices. Consumer demand for beef and pork are tied to consumer income, which generally falls with employment figures.

Since the farmer receives only 24 cents of the average U.S. food dollar, consumers could expect to pay for increases in other energy related expenses added between the farm and the grocer's shelf. This includes higher costs for refrigeration, manufacturing, transportation and even lighting the supermarkets themselves.

"American consumers should not see much of an increase in food prices from the farmer's end, " said Craig. "If agriculture was the only component, consumers would actually see a decline in food prices due to the loss of the Iraqi market for farm products."

Nevertheless, Frank Panyko of the Food Institute, a food industry organization specializing in all aspects of food distribution, said consumers can expect to see an overall one percent increase in consumer food costs.



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Compare the fees. The MemberLine VISA has no annual fees, no membership fees and no application fee. The annual fee for the Gold MasterCard is \$20 — far lower than the fee charged for most gold cards. For added savings, the \$20 fee is rebated every year that you make \$3,000 or more in net purchases.

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Fall Lawn Care Tips

Editor's note: The following information was contributed by Tim Doppel, owner of Atwood Lawn Care, Inc., of Sterling Heights, Michigan, and a director of the Michigan Turfgrass Foundation, a non-profit organization serving members of Michigan's turfgrass industry.

In addition to all the other enjoyable aspects of fall, such as football, harvest and color tours, fall also happens to be an ideal time to work on the landscaping around your home. Not only do the cooler temperatures allow for an enjoyable time for work, but it also happens to be one of the most important times for your lawn and landscape.

While many people look to fall as the end of their lawn's growing season, it is in reality just the beginning. Anything that you do or don't do to your lawn in the fall will have a direct impact on the condition and appearance of your lawn next spring and summer.



Some things you can do this fall to improve your lawn next year include:

Watering

Nothing that a lawn care company or a doit-yourselfer can do will overcome improper watering. Lesson number one in lawn care is to water on a consistent basis. Research conducted at Michigan State University by Dr. Joe Vargas shows a daily watering in the late morning for about 30 minutes (.1 inch) will give you superior results.

Fertilizer

During the fall of the year, your lawn's root system will become the most active of the entire growing season. Potash and phosphorus, in addition to nitrogen, will help to strengthen your lawn's root system, and consequently, appearance.

Try to find a fertilizer that has a nutrient ratio of 4-1-2, or as close as possible. One fertilizer blend often recommended is a 32-5-15. Apply the fertilizer so that you are putting down one pound of nitrogen for every 1000 square feet of lawn area.

What you may not realize is that by thickening your lawn now, you are helping it to become greener and healthier much sooner next spring. Winters are tough on lawns, and reserves need to be built up before winter sets in.

Weed Control

No lawn is immune from weeds. While the best defense against weeds is a healthy dense turf, a control plan may be needed for those weeds that will make their appearance. Fall is an excellent time to control weeds when many are just germinating.

Most of the weed control products available today will be very effective in controlling the weeds in your lawn. Perhaps you have noticed the flurry of bad press in recent years concerning the safety of these lawn care chemicals. However, when used according to label instructions and wearing appropriate clothing when making application, these materials are not unduly risky.

Read the label directions on every container of herbicide, and do what it says! If you don't understand the intructions, get help. Call your Cooperative Extension agent, ask the salesperson for assistance, or contact a number of lawn care services that may be available in your community for more information. You can make effective and safe application of herbicides to rid your lawn of unsightly weeds with the materials available today.

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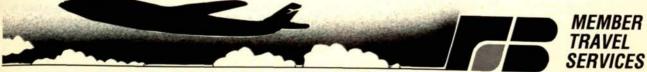
Member Travel Services

BUS TRIPS

A NIGHT OUT AT 'THE PHANTOM OF THE OPERA"

The Phantom of The Opera by Ken Hill opened at the Theatre Royal, Stratford, East London in 1984. This is the original London Stage Musical whose story is based on the Gaston Leroux classic novel of 1911. Mr. Hill's adaption of this turn of the century thriller distinguishes itself from the Andrew Lloyd Webber version by skillfully combining comedy, drama and mystery with the music of the world's greatest operatic composer. The \$49 per person cost includes tour bus transportation to and from Lansing to Detroit and time after the show to shop/browse in Trappers Alley and Greektown. Make plans now to attend the Saturday, Nov. 3, 2:00 pm show and then enjoy a "NIGHT OUT".

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FARM MARKETS OF MICHIGAN & FALL COLORS

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runchy apples, bonfires, hayrides and sing-alongs...just a sampling from the Michigan fall farm market cornucopia yielding a harvest of food and fun for your family. Whether you choose a leisurely drive in the country with stops at orchard cider mills for the tangy beverage and warm fried doughnuts or sign up for orchard U-Pick by the bushel, today's farm markets offer more than farm fresh fruits and vegetable produce.

Farm markets help to carry on traditions of bygone days when buying direct from city farmers' markets or roadside stands was commonplace. For example, 65 years ago when Montrose Orchards was established on the state's east side, the business was agriculture -- apples and blueberries in season.

The modern day Montrose Orchards farm market is year around with fruits, bakery, cider mill, tours and special events.

Owners Don, Dan and Sandy Hill and Craig Hepker work hard to keep everything "fresh" including the recreational and tourism aspects of their business.

For these farm marketers, months of work and tremendous investment went into this year's expansion efforts. Dan and Craig are partners in the addition of ten acres of strawberries, eight acres of pumpkins and Indian corn, and a stand of Christmas trees.

And you can see just about all of it from the comfort of one of the two new haywagons that carry tours through the orchards and fields. Throughout the year, hayrides through the Pumpkin Trail and bonfires in the Blueberry Patch are available. "Hayrides are very popular fall events and this year we're offering evening rides with a bonfire," says Hepker.

Local advertising, flyers and word of mouth have already boosted the market's fall business. "We always have a lot of church groups, school children and bus tours in the fall, but this year we're hosting several family reunions. They're going to have a picinic, tour the orchards and cider mill, pick pumpkins, then end the day with a big bonfire. What a great idea!", says Hepker.

Schedule group tours on weekends or evenings by calling Montrose Orchards, 313-639-6971. Other group tours available this fall are the cider mill walking tour or a cider mill wagon ride tour. Or visit the orchard and farm market anytime for a glass of cider, a warm doughnut, and bring home delicious Michigan seasonal fruit. The address is 12473 North Seymour Road, Montrose, Michigan.

On the next two pages you will find a directory to other Michigan fall farm markets. The directory represents members of the Farm Markets Of Michigan.



FARM MARKETS OF MICHIGAN

& FALL COLORS

1. AMON ORCHARDS-"GRANDMA'S COUNTRY MARKET",

7404 US-31 N., P.O. Box 1551, Traverse City, MI 49685. Located near the Grand Traverse Resort. Gift boxes and mailbox orders shipped via UPS daily. Fall: Fruit, U-pick pumpkins, cider and donuts; press your own cider. Market phone (616) 938-1644.

2. ASHTON'S ORCHARDS AND CIDER MILLS, 3925 Seymour Lake Road, Ortonville, MI 48462. Apples, cider, plums, pears, and a host of other items. Phone (313) 627-6671.

3. BROWN'S RIDGE VIEW FRUIT FARM, 1475 M-22, Martin, MI 49070. Fruits, vegetables, preserves, fudge, candies, juice and U-pick. Phone (616) 672-5245.

4. BIN AN OAN ORCHARDS, 8381 S. Division, Byron Center, MI 49315. Apples (U-pick or picked), cider mill, donuts, pears, jams and jellies, pumpkins, squash. Phone (616) 455-4278.

BLAKE'S ORCHARD AND CIDER MILL, 17985 Center Rd.,
 Armada, MI 48005. U-pick apples, pears, cider mill and donuts,
 baked goods, animal petting zoo. Phone (313) 784-5343.

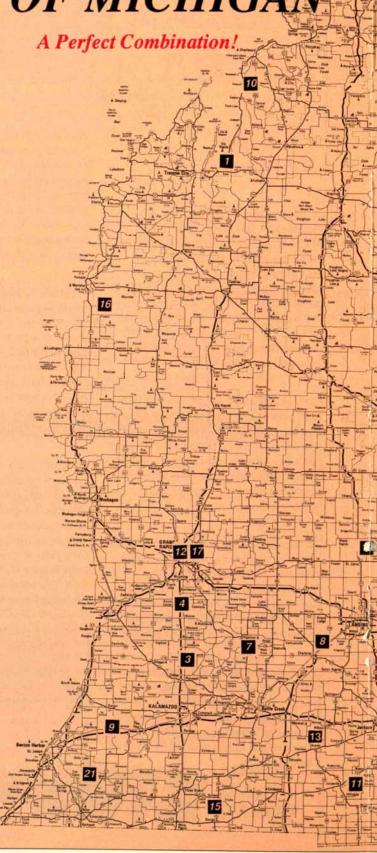
 BOYKA'S FARM PRODUCE, 20555 23 Mile Road, Mt.. Clemens, MI 48044. Corn, melons, cabbage, zucchini, pumpkins, squash. Phone (313) 286-1886.

COTANT'S FARM MARKET & GREENHOUSE, 2500 S.
 Bedford Road, Hastings, MI 49058. Apples, cider, in-store bakery, and other seasonal produce. Phone (616) 945-4180.

8. COUNTRY MILL (THE), 4648 Otto Road, Charlotte, MI 48813.
Apples and pumpkins (U-pick or we pick), winter squash, cider mill and bar, farm bakery, fall wagon rides. Phone (517) 543-1019.

 DOWD'S FRESH FRUIT HUT, I-94 at Hartford, Hartford MI 49057. Pears, plums, apples, melons, preserves, apple cider. Phone (616) 621-3644.

10. ELZINGA FARM MARKET, on U.S. 31, 1/2 mile north of Atwood, Ellsworth, MI 49729. Apples, pears, baked goods, preserves, delicatessen. Phone (616) 599-2504.





11. GLEIS INCORPORATED, 3500 Milnes, Hillsdale, MI 49242. Greenhouse crops, apples, vegetables, produce. Phone (517) 437-4495.

12. HAPPY APPLE, 2390 4-Mile Road, N.W. Grand Rapids, MI 49504. Apples, pears and assorted vegetables. Phone (616) 784-0864.

13. HARRISON ORCHARD, 10250 Condit Road, Albion, MI 49224. Sales room with apples, sweet cider, jelly, jam, popcorn, honey. Phone (517) 629-6647.

14. KAPNICK ORCHARDS, 4245 Rogers Highway, Britton, MI 49229. Fruits, vegetables, cider, donuts, bakery, nuts, fruit baskets, cheese and sausage. Phone (517) 423-7419.

15. NOTTAWA FRUIT FARM, 25014 M-86, Sturgis, MI 49091. Vegetables, jams, bakery goods, orchard fruits. Phone (616) 467-7719.

16. ORCHARD MARKET, INC., 8400 N. U.S. 31, Freesoil, MI 49411. Farm fruits, vegetables, jams, jellies, fruit/nut/seed mixes, candies, frozen fruit, and vegetables. Phone (616) 464-5534.

17. ROBINETTE'S APPLE HAUS, 3142 4 Mile Road N.E., Grand Rapids, MI 49505. Fruits, cider mill, bakery, gifts, dried and silk flower arrangements. Phone (616) 361-5567.

18. UNCLE JOHN'S CIDER MILL, 8614 N. U.S.-27, St Johns, MI 48897. U-pick or picked apples, cider making, large country gift shop, wagon rides, bakery, jams, honey, donuts, caramel apples. Apples and cider shipped in season. Phone (517) 224-3686.

19. WARNER'S ORCHARD & CIDER MILL, 5970 Old U.S. 23, Brighton, MI 48116. Fresh fruits in season, cider mill, jams, jellies, maples syrup, honey, popcorn. Phone (313) 229-6504.

20. WINDY RIDGE ORCHARDS, 9375 Saline Milan Rd., Saline, MI 48176. Cider, apples, donuts, jams, honey, pumpkins. Phone (313) 429-7111.

21.WICK'S APPLE HOUSE, 52281 Indian Lake Road, Dowagiac, MI 49047. Wide variety of produce, cheese, preserves, honey, popcorn, cider mill (operates weekends), homemade pies and donuts. Tours by appointment. Phone (616) 782-7306.

22. WOLCOTT ORCHARDS, 3284 W. Coldwater, Mt Morris, MI 48433. Cider mill, bakery, apples, dried fruits, honey, apple festival, gifts. Phone (313) 789-9561.

RESURRECTING A WETLAND



Last May, when motorists along highly traveled U.S. 27 in Clinton and Gratiot counties saw the diminishing water level in the Maple River wetland. many were concerned. They thought the familiar and highly visible wildlife area was in danger of disappearing. But when they contacted the Michigan Department of Natural Resources, they learned that the drawdown to mud flats was in preparation for a major rejuvenation of a 200 acre wetland area.

According to Al Stewart, DNR wildlife habitat biologist, whose chief responsibility is the management of the wetland for waterfowl and wildlife, the mid-Michigan wetland was due for a "makeover."

"In the wetland ecosystem, the changes in plant and wildlife occur more quickly than in, perhaps, an open field. Where revegetation and regrowth from plowed field to forest may occur over a human lifetime, the composition of a wetland can go through a complete cycle in as little as ten years," says Stewart.

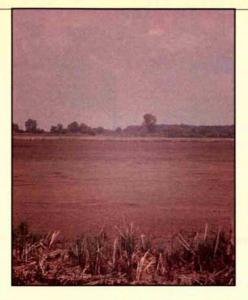
"In the proper wetland balance," he explains, "you will find about 50% open water and 50% emergent vegetation, such as cattails." Since the last major drawdown of the Maple River wetland in 1982, the balance of the wetland reached optimum in 1984 or 85, however, by 1990, in the last phase of the cycle, the wetland was 75% open water and fostering the development of a number of aquatic plants. Of particular concern was the loss of cattails and cattail mats. Cattails are important sources of food and housing for wildlife, particularly the muskrat.

"Muskrats and marshes go hand in hand," says Stewart. The muskrat uses the stalks and leaves of cattails for housing and the roots provide winter food. In return, the muskrat keeps the marsh waterways clear of vegetation.

In early May, waters of the marshland were drained and seeded with Japanese millet and over the summer, the rich mud flats produced lush native plants including smartweed, burrweed, bullrushes, cattails.

"Japanese millet was the only vegetation introduced to the wetland. All the other vegetation is natural, native plants," explains Stewart. Aerial seeding of the millet he says, was an effort to avoid establishing purple loosestrife, a non-food, herbaceous plant which competes with cattails in the wetland.

Finally, in September, reflooding completed the project in time for the fall migration of ducks and geese. Since the reflooding, Stewart says that wildlife is returning to the wetland. Shore birds, such





The 200 acre marsh is part of the 6,000 acre Maple River State Game area just north of St. Johns. The Maple River area represents the largest contiguous wetland area in Michigan.



the earliest to repopulate the marsh, then

wildlife. They provide a natural filter for run-off water, trapping silt and organic pollutants, and help to recharge ground waters and springs. The Maple River drawdown was part of the effort to preserve Michigan's three million acres of wetlands.

The Michigan Department of Natural Resources currently manages 23 wetlands game areas and nature centers in the Upper and Lower Peninsulas. Many of these managed wetlands have boardwalks traversing the wetlands or observation towers for visitors. For more information, contact the Michigan Department of Natural Resources, Land and Water Management Division, P. O. Box 30028, Lansing, MI 48909.



WHAT CONSUMERS SHOULD KNOW ABOUT GENERIC DRUGS



Generic drugs enjoy widespread use, yet confusion and misconceptions about generic drugs are just as prevalent.

"Generic drugs are effective. They are chemically the same as brand-name drugs but usually cost less -- in some cases, dramatically less," says Dr. Fred Severyn, associate medical director for Blue Cross and Blue Shield of Michigan. "Generics have played an important role in health care over the last three decades."

Nationwide, sales of generic drugs reached \$3.4 billion in 1988, accounting for one-third of all prescriptions filled.

To get Federal Drug Administration (FDA) approval, a generic drug must be the same as its brand-name counterpart. It must contain the same amount of active ingredients, call for the same dosage, and be administered in the same manner.

Manufacturers are also required to prove that the generic drug is bioequivalent to the original, meaning the generic drug must be absorbed at the same rate and to the same degree as the brand-name drug.

Generic drugs were the subject of a recent FDA investigation into allegations that a few manufacturers tried to speed up the drug approval process.

"What has come out of these incidents is an even more stringent application process for new generic drugs," Severyn says. "FDA is taking additional steps to make sure generic drugs maintain the excellent track record they've had."

The cost savings of generic drugs can be dramatic. A two-week supply of the brand-name antibiotic "doxycyline" can cost a pharmacy \$55, while its generic equivalent costs \$5. A similar supply of the brand-name "cephalexin," also an antibiotic, can cost a pharmacy nearly \$80, compared to \$28 for its generic form.

Drug manufacturers apply to the FDA for approval to produce a generic drug after the patent on a brand-name drug expires. Because

the generic manufacturer doesn't have advertising and development costs of the original producer of the brand-name drug, generics can usually be sold for much less than brand name drugs.

On occasion, a physician may prefer a brand-name drug for a certain patient. The physician indicates this by writing "D.A.W." (dispense as written) on the prescription.

FACT SHEET-GENERIC DRUGS

WHAT ARE THEY?

Generic drugs are chemically equivalent to their brand-name counterparts. They must also contain the same amount of active ingredient, call for the same dosage, and be administered in the same manner. They must also be bioeqivalent.

WHAT IS BIOEQIVALENCY?

Bioequivalency means the drug is absorbed into the bloodstream at the same rate and to the same degree as the brand-name product.

WHY ARE THEY CHEAPER?

Drug manufacturers apply to the FDA to produce a generic drug after the brand- name's patent has expired. Savings are realized through savings in advertising and development costs of the drug.

HAS THERE BEEN A RECENT STUDY?

Yes. A study by the FDA of the top 30 generic drugs found only 1.1 percent lacked potency or didn't dissolve properly, approximately the same percentage for their brand-name counterparts. The 30 drugs tested represent approximately 75 percent of all new generic prescriptions.



Health care coverage isn't simple anymore. The bottom line, however, remains the same: everybody wants the best possible coverage at the lowest possible rates. This is where Farm Bureau has good news for small business owners.

With over 40 years of experience in providing individual health care plans, Farm Bureau is now offering six Blue Cross Blue Shield plans and two Blue Cross Blue Shield PPO plans specially designed for groups with 2 to 99 employees. All plans have no

Protecting the interests of small business by understanding the interests of small business...

WHERE BELONGING MAKES A DIFFERENCE. medical underwriting and carry no pre-existing condition clauses. Prescription, dental and vision coverage options are also available to qualified groups.

If you're a small business owner who is dissatisfied with your present employee health care plan — or a small business owner who is ready to initiate your first employee health care plan — contact your local Farm Bureau office. We'll listen to your health care coverage needs, tailor a package to suit your preferences, and then cut to the bottom line.

Farm Bureau, specialists in all business insurance needs, can be depended on to protect the interests of small business because we understand the interests of small business.

What matters to you matters to us.

For further information, call 1-800-292-2680 or contact your local Farm Bureau office.



SHOPPERS AND NUTRITION

Here are the top three concerns listed by consumers in an ongoing Food Marketing Institute study titled "Nature of Shoppers' Concerns about the Nutritional Content of Foods: 1983-89."

Study Base: Those who are very, somewhat, or not very concerned about the nutritional content of what they eat.

Q.: What is it about the nutritional content of what you eat that concerns you and your family most?

	1983 Tot.	1984 Tot. %	1985 Tot. %	1986 Tot. %	1987 Tot. %	1988 Tot. %	1989 Tot.	88-89 Chg.
Cholesterol	5	8	10	13	14	22	8	+16
Fat Content Low Fat	9	8	13	17	16	27	29	+2
Salt Content Less Salt	18	17	19	20	22	26	25	-1

Nutrition ranked second only to taste as the most important factor in selecting food products. Americans are altering their consumption patterns to include foods perceived as "healthier." When asked to indicate which food products they were eating more or less of, consumers responded as follows:

More fruits/vegetables	57%
More chicken	19%
More fish	18%
Less meat/red meat	34%
Less fats/oil	27%
Less sugar	19%

PUBLIC OPINION NOTEWORTHY

A majority of American consumers are concerned, but "reasonable," about the agricultural chemicals farmers use to grow their food, according to the results of a public opinion survey commissioned by the American Farm Bureau Federation on food safety, farmers and modern farm ing practices.

The survey showed that one-fifth of U.S. consumers believe that chemicals should be totally eliminated in the growing of crops and raising of livestock; two-thirds believe farmers should further limit the amount of chemicals they use.

"It's clear we (farmers) have a real job ahead of us to educate consumers about the realities of modern farming, namely that many farmers, rather than increasing chemical use, are instead looking to cut back on the use of expensive chemicals whenever possible," says Laurie.

Roughly 73% of the respondents believe that farmers are using more chemicals than necessary in order to achieve higher profits. That concerns MFB President Jack Laurie, who met recently with reporters at a news conference to announce the results of the survey.

"It's clear we (farmers) have a real job ahead of us to educate consumers about the realities of modern farming, name ly that many farmers, rather than increasing chemical use, are instead looking to cut back on the use of expensive chemicals whenever possible," says Laurie.

"The survey also indicates that 56% of the public believes that few farmers receive extensive training and education on how to use chemicals. Three-quarters of the people surveyed said farmers should educate consumers about farming and speak out forcefully on food safety issues. We intend to do just that."

FAST FOOD SWITCHING TO VEGETABLE OIL

Three of the nation's largest fast food chains, McDonald's, Burger King and Wendy's are forsaking beef tallow for low cholesterol blends believed more acceptable to consumers.

Burger King, the first to announce the switch, is moving to a blend of soy and cottonseed oil while Wendy's will be using straight corn oil. McDonald's is believed to be considering a mixture of cottonseed and corn oil.

Analysts are still attempting to determine market and price impacts for the commodities, saying it will strenghten demand in the long run while reducing volatility in the market. Analysts expect that prices for corn and cotton-seed will see the biggest swing, based on availability of edible corn and cottonseed oil, compared to soyoil.

SIRLOIN STEAKS AT \$200 A POUND?

Food costs in Tokyo are the highest of any of the world's capital cities, according to a recent survey by the United States Department of Agriculture (USDA). Sirloin steaks costs more than \$200 a pound in Tokyo retail stores.

The cost for the same market basket of groceries was more than \$100 in Stockholm. The 15 items added up to less than \$50 in Canberra, Buenos Aires, Brasilia, Pretoria and Mexico City among various capitals.

Shoppers in Stockholm were paying \$3.82 a pound for broiler chicken while the same item costs \$1.03 in Washington, D.C., and a low of 70 cents a pound in Buenos Aires.

The costs of a 15-item grocery list used for the survey totaled \$117.33 in Tokyo, compared to \$52.69 in Washington, D.C., which was 13th on the list.

ETHANOL ON A ROLL

F ifteen years ago 25 million bushels of corn were converted to ethanol. In 1989, that figure had grown to 380 million bushels as the cleaner-burning liquid became a popular fuel additive.

Ethanol is not competitive with petroleum fuels at current oil and corn price ratios, but as fuel prices shot up following the Iraqi invasion of Kuwait, people are beginning to talk more about the benefits of ethanol fuel.

The current tax break which makes it possible for fuel companies to blend ethanol with gasoline is now only in place until 1992, unless it is extended by Congress.

The Clean Air Act, now making its way through Congress, could provide a boost to ethanol as a cleaner alternative fuel.



Ethanol production has currently leveled off at about 850 million gallons a year.

■ WOOD-BURNING STOVE SAFETY TIPS

That friendly wood-burning stove can become your worst enemy if not properly installed and maintained, warns Farm Bureau Insurance.

"A large percentage of the home fires we see during the cold months are caused by wood-burning appliances," said William Monville, director of property claims for Farm Bureau Insurance. "If used properly, wood heat can be a safe and economical way to heat your home. But used improperly, it becomes a danger to property and life."

Ron Converse, who makes farm and home safety surveys for Farm Bureau Insurance, reports that thousands of Michigan residents use wood heat appliances in their homes or farm buildings.

"We urge the utmost care where wood heat is concerned," said Converse, who also serves as president of the Michigan Rural Safety Council. "On the positive side, we are noticing that people are becoming more knowledgeable about how to work with wood heat.

Converse said he has special concerns about this heating season because many wood stoves may be fired up again after having been idle for two to three years.

"For the past few years, energy costs have been relatively low, so many people have not depended on wood as a fuel," he said. "With the increasing cost of fuel oil, more and

"With the rising cost of oil and other heating fuels, people are relying on wood stoves again. Those stoves and chimneys should have thorough inspections before being returned to use."

more Michigan residents will be depending on wood heat," Converse said. Heating with wood requires extra care and definite safety measures. Anything less is just too dangerous."

Send for Farm Bureau Insurance's free wood heat safety guide. Called "Wood Heat—The Safe Way," the brochure is a practical guide to the safe installation and use of wood stoves. Write to: Wood Heat Guide, Communications Dept., Farm Bureau Insurance, P.O. Box 30400, Lansing, Mich. 48909.

Incidentally, the Farm Bureau Insurance guide is widely acclaimed by fire departments, police agencies, and safety groups in Michigan and other states. Farm Bureau Insurance prepared the brochure in cooperation with several wood heat safety experts, establishing Farm Bureau as a front-runner in the promotion of wood heat safety. Nearly 250,000 of the guides have already been distributed.

Is Your Stove Ready?

Have an expert inspect your wood heat installation.

Use dry, well-seasoned hardwoods in your wood stove. They don't cause as much creosote build-up, a sticky, tarlike substance that accumulates in your chimney. Green wood, or certain woods like pine, are not recommended, since they are great contributers to creosote build-up.

Inspect and clean the chimney regularly. One spark can set a creosote-filled chimney on fire. Always keep fire extinguishing gear nearby and in working order.

LAWN & GARDEN MACHINE

Why buy several machines when ours tills, beds and over-the-row cultivates? It also thatches, aerates and mows. Easy-to-change tines adapt to any gardening need.

Call 1-800-545-2293 for free brochure

WATERSTOVES

The safest, most efficient wood heat system on the market, the TAYLOR waterstove sits outside and heats your home and 100% of household hot water.



Thermostatic control

• 12 to 24 hour burn time Call 1-800-545-2293 for more details

TAYLOR MANUFACTURING, INC. PO Box 518, Elizabethtown, NC 28337

■PELLET FIRED APPLIANCES MAKE DEBUT

Even before the Middle East crisis sent fuel oil prices skyrocketing, consumers were searching for cost-effective, environmentally sound alternatives for home heating. One energy saving option, known as a pellet fired appliance, or PFA within the appliance industry, is designed to burn pellets of compressed waste material such as sawdust.

To operate a PFA, a user fills a bin in the appliance with pellets from a 25 to 50 pound bag. Pellets are steadily delivered to the fire. A built-in electric fan feeds combustion air to the fire while another circulates heat into the room.

Other product attributes include: variable operating times of 13 to 90 hours on a single filling; emissions of less than 1.5 grams of particulate per hour compared to older stoves emitting 22 to 60 grams per hour; operating costs of 5 to 30 cents per hour depending on use; and a 75 to 80 percent efficiency factor compared to 60 to 80 for older stoves.

PFAs retail for up to \$2,000 and are sold in fireplace and woodstove specialty stores and home centers. For a free brochure, readers can contact Heatilator at (800) 247-6798.



Pellet fired appliances are an exciting new step in solving today's energy and environmental issues.

AN A-MAIZE-ING ALTERNATIVE

helled corn could become the newest alternative fuel, thanks to the A-MAIZE-ING HEAT furnace manufactured by Ithaca Manufacturing. The 100,000 BTU forced air furnace utilizes shelled corn and was designed as a primary or secondary source of heat for homes in the 2,000 square foot range, according to marketing representative Kevin Rogers.

According to Rogers, the 14 bushel hopper will last approximately two weeks, on average, although insulation values and heat loss can change that time.

"Corn costs less per BTU, resulting in savings to the consumer while providing an economical and ecologically safe home heating system," says Rogers. "We currently have 12 dealers located throughout the state to provide sales and service."

Suggested retail price for the furnace is \$2,495. For more information contact Ithaca Manufacturing at (517) 875-4949.



■ ORGANIC CONSEQUENCES

The costs society would have to pay for eliminating the farm use of agricultural chemicals would include higher food prices, reduced farm product exports, reduced food security and increased soil erosion, according to a study conducted recently at Texas A & M University.

The tradeoffs associated with reduced chemical use are the missing link in policymakers' ability to make informed decisions, according to Dr. Ron Knutson, a Texas A & M economist who coordinated the study. "These tradeoffs have profound implications in terms of consumer food costs, food availability in the event of adverse weather, progress toward freer trade, a competitive position internationally, and a greater potential for soil erosion."

For example, said Knutson, "In terms of 1989 dollars, consumers would spend \$228 more per household annually if pesticide use were eliminated. If the chemical ban extended to inorganic nitrogen fertilizer, each household would be penalized \$428 each year."

For the middle income consumer, this amounts to a 12 percent increase in the weekly food bill. Lower income families would be hit the hardest, spending 44 percent of their income on food.

Products from cotton, rice and peanuts -crops which account for over 75 percent
of the agricultural pesticides used and
more than 70 percent of the commercial
nitrogen fertilizer used annually in the
United States -- would see the largest increases.

More than 140 university crop specialists and economists across the nation participated in the study, by providing data on the effects of eliminating pesticides and inorganic fertilizers.

Other research findings:

Crop production would drop more in southern states than in northern states because southern climates are more favorable to yield-robbing pests and southern soils are lower in nitrogen and nutrients.

Without chemicals, consumers could expect double-digit inflation in the annual increase in food prices from 1995 to 1998. Such increases have not been experienced since the early 1970s when price controls and export embargoes were imposed in an attempt to curtail inflation.

Removing pesticides and inorganic fertilizer would cut grain and cotton exports by nearly 50 percent.

Banning chemicals would lead to a 10 percent increase in cultivated acres with an associated rise in soil erosion.

Crop producers could experience a temporary gain in income through higher prices resulting from decreased yields, but the effects of higher feed costs would be devastating to livestock producers.

In general, the findings indicate that the benefits of current production practices outweigh the costs of restricting their use.

Corn yields, for example, were estimated to decline by 53 percent while prices would increase 61 percent if chemicals were not used. Cotton yields would suffer a 62 percent decline while prices would be up 118 percent if chemicals were eliminated.

Reduced export activity could be expected to cost \$14 billion in lost economic activity and the loss of over 217,000 jobs, Knutson said. Such losses would fall more heavily on export dependent rural and urban areas.

"POLLUTERS PAY"

Michigan's New Law Has Implications For Property Owners, Not Just Industry.

WHAT IS IT

The newly passed legislation amends the Environmental Response act and prescribes the powers and duties of the Department of Natural Resources in response to environmental contamination at certain sites in Michigan.

The law also permits the DNR access to property and information and permits public access to information. Under terms of the new law, the DNR is also allowed to issue administrative orders to require response activities in addition to taking or approving response activities.

The objective of the law is to develop procedures for allocating the costs of clean-up associated with the release of hazardous substances defined as a chemical or other material which is, or may become, injurious to the public health, safety, or welfare or to the environment.

WHAT DOES IT MEAN TO ME?

You could be held responsible for paying for pollution clean-up even when you were not responsible for the pollution.

The legislation's definition of "contractual relationship" includes land contracts, deeds, or other instruments transferring title or possession. For example, if property is acquired after the disposal of hazardous substance, the purchaser must present evidence that they had no knowledge of the disposal and that they undertook all appropriate inquiry

into the previous ownership and uses of the property. In addition, the defense of not knowing that a hazardous substance was subject to release would not be an excuse.

You are not liable under the act when applying pesticides and fertilizers according to generally accepted ag and management practices or according to label directions. However, you are liable if the DNR can prove your application was not according to label directions or in the case of an accidental spill.

You are not liable for releases that occur as a result of a "permitted" release, but you can be held liable for any other release that occurs on your property, such as discharges to groundwater or surface water.

If your property has been identified as a property where a hazardous substance has been released, you shall not transfer an in-

terest in that real property unless you provide written notice to the purchaser that the property is a "site" and disclose the

general nature and extent of the release. The written notice must be recorded with the register of deeds. Additional certification that all response activity required in an approved remedial action plan has been completed must also be filed with the register of deeds before transferring the property.

If there is a reasonable basis to believe that there may be a release or threat of a release on your property, the DNR has the right to enter any public or private property at all reasonable times to obtain samples, investigate, inspect, etc. Failure to allow entry or information could mean a \$25,000 fine per day for each day of non-compliance.

LIABILITY

If there is a release or threat of a release of a hazardous substance on your property that causes the incurrence of response activity costs, the following persons are liable: the owner or operator of the facility the owner or operator of the facility at the time of disposal of the hazardous substance, the owner or operator of the facility since the time of disposal of the hazardous substance.

You are liable for all costs of response activity, any other necessary costs of response activity, damages for the full value of the loss of natural resources, including interest from the date payment is demanded in writing. Failure to comply with the administrative order for clean-up could result in a \$25,000 fine for each day of non-compliance, or an amount three times the cost of response activity.

...for example, if property is acquired after the disposal of a hazardous substance, the purchaser must present evidence that they had no knowledge of the disposal...

All unpaid costs and damages for which a person is liable shall constitute a lien in favor of the state upon a facility that has been the subject of response activity and shall have priority over all other liens.

A citizen who feels their health or enjoyment of the environment is or may be adversely affected by a release or threat of release, may commence a civil action against any potentially reponsible party.



Are you age 55 or older? Then you can save big money on your homeowners insurance.

Farm Bureau General Insurance Company of Michigan is offering a 25% discount on home insurance for homeowners 55 and over.

Why this special treatment? Because your age group costs us less in claims, so you've earned a discount rate.

No matter what your age, you can feel

safe with our quality home protection.
Our homeowners program for high valued homes provides replacement cost coverage on your house and contents, and offers many other enhanced coverage features.

Find out why nearly 70,000 Michigan homeowners insure their homes with us. Call your local Farm Bureau Insurance agent for a free, no-obligation price quotation.



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