

## Annual report

# Clinton Soil Conservation District



Harvesting sod, one of the many different kinds of crops grown in Clinton County, on the Jerry Bower farm in DeWitt Township.

## Verlun Kruger speaker

# Annual meeting

The Annual Meeting will be held at noon in the St. Johns High School, February 2, 1974. Dinner tickets are \$3.35 each. The tickets may be purchased from District Directors Stanley Baird, David Conklin, Kenneth Loudenbeck, William Mayers, and Robert Moore, or from the office at 100 South Ottawa, St. Johns. Or, you may call 224-4318 and reserve your tickets for the annual meeting. Pierce Bakery, St. Johns, is catering the dinner of ham and chicken. We need to know by January 23, how many dinners to order.

For the Annual Meeting, District Directors have arranged for Verlun Kruger to present his colored slides with sound on tape program. Verlun Kruger is the man who went 7,000 miles by canoe from Montreal to the Bering Sea in Alaska. This very interesting trevelog "Once in a Lifetime"

will not be a repeat of last year's program. Kruger will show some slides from Sault Ste Marie to the Alaska border at this year's Annual Meeting. This is the summer part of the trip. This section of "Once in a Lifetime" is a fantastic story of two men, alone, who paddled and portaged the long way northwest across the North American Continent, following the old historic fur trade canoe

route. You will remember, they began in Montreal on April 17, going by way of Ottawa, Sault Ste Marie, Grand Portage, International Falls, Lake Winnipeg, Methye Portage, Great Slave, Arctic Red River, McDougall Pass, Fort Yukon and ending at the Bering Sea on October 10. This section (Sault Ste Marie to the Alaska Border) you will not want to miss. Kruger's slide presentation

uses multiple projectors with living sound on tape. This was a historic, never before accomplished, canoe adventure establishing new long distance endurance records -- 7,000 miles, 184,999 paddle strokes in 176 days. See the trip from Sault Ste Marie to the Alaska border at the Annual Meeting.

February 2, 1974, the directors will present Conservation Signs to Leon Armbrustmacher, Joe Houska, Jr., Willis Kosht, John Schmitt, Howard Hess, and James Rossio. The Outstanding Conservation Farmer of the year is Warren Swanson, who will be presented a plaque at the Annual Meeting.

At the Annual Meeting

The terms of Kenneth Loudenbeck and William Mayers expire at this year's Annual Meeting. An election of directors will be held at the Annual Meeting. The Nominating Committee, Max Loudenbeck, Ray Mayers, George Baird, Warren Swanson, and Burton Tabor has selected Kenneth Loudenbeck, Alan Anderson, Jerry Becker, and Dennis Thelen to be on the ballot for these positions.



# HAVE WE GOT A DEAL FOR YOU IN '74!

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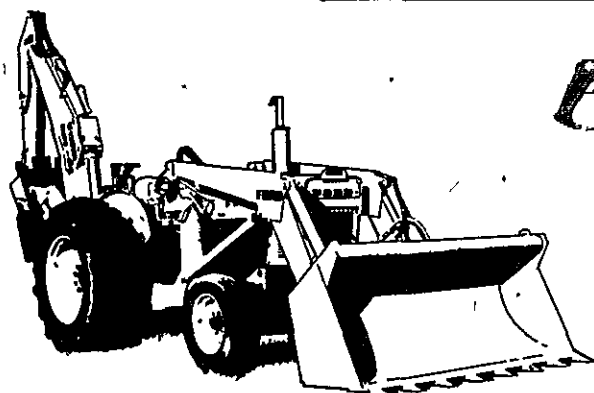
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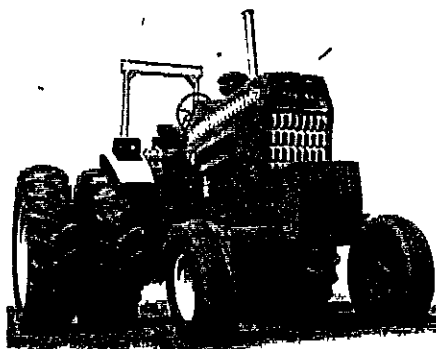
**COMPLETE PARTS, SERVICE  
AND  
SALES FACILITIES**



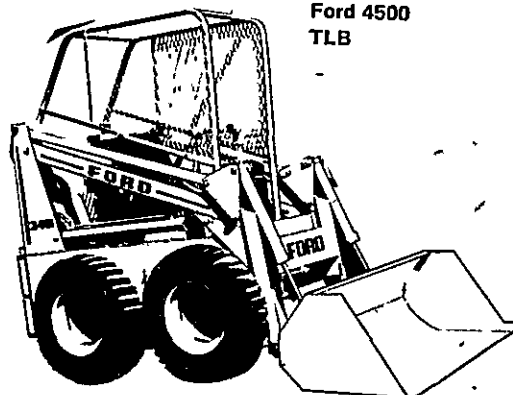
Ford 4500  
TLB



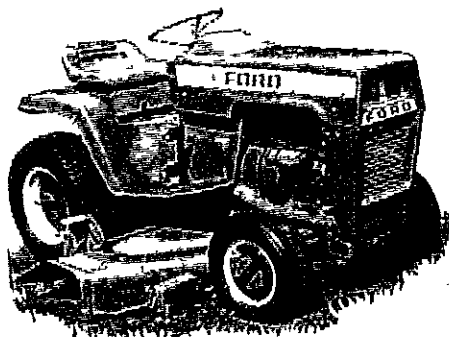
Ford Chain Saws



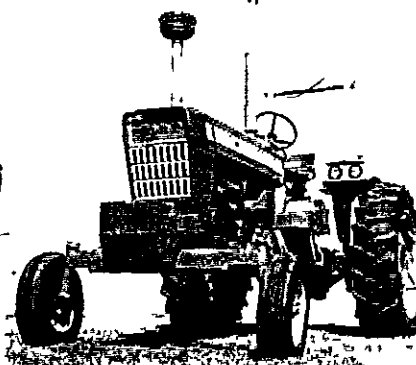
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Ford 370  
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The Ford 7000

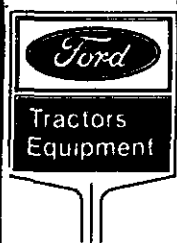
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Ford Field Cultivators	Ford Mower Conditioners	Ford Corn Pickers	Big Blue Spreaders	Tigerline Trailers
Melroe Reset Plows	Ford Hay Rakes	Ford Loaders	Ford Rotary Cutters	Ford Compact Loaders
Ford Cultivators	Ford Hay Balers	Ford Scraper Blades	Warner Sawassy Forklifts	Ford Chain Saws
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Natural  
resources our  
heritage

The natural resources of  
America are the heritage of the  
whole nation and should be  
conserved and utilized for the  
benefit of all our people.

Earth  
earns control

The man who works with the  
good earth controls the future of  
the human race.

Long,  
long time

It takes Nature 400 to 1,000  
years to build one inch of top-  
soil.

It's the  
board's job

Each Board of Directors of a  
Soil Conservation District are  
responsible for soil and water  
conservation within its district.  
In addition to deciding on a  
district program, and planning  
and arranging for assistance to  
put the program into effect.  
They are responsible for  
making cooperative  
agreements with farmers and  
ranchers; seeing that soil  
surveys needed for sound  
technical work are made;  
making the best use of available  
funds; establishing practical  
work priorities; cooperating in  
adopting practices and rates for  
cost sharing in applying needed  
conservation; acquainting  
landowners and operators with  
sources of credit; and in-  
forming all people of the soil  
and water conservation  
problems in the district.

A public  
servant

The Land Operator who  
improves the fertility of his soil  
is truly a public servant and will  
leave more for posterity than he  
takes for himself.

Soil is  
not just dirt

Our soil is not just dirt. It is a  
factory where everything  
needed to feed plants, animals,  
and human beings is made.

People  
and soil

"Soil cannot be considered as  
soil alone. People live on it.  
They own it, rent it, plow and  
cultivate its crops, and live  
upon the fruits of the harvest.  
When the soil fails, people  
suffer." --Katherine Glover,  
"America Begins Again."

# Planning Commission reports

The Clinton County Planning Commission has completed only part of its assigned task of preparing a comprehensive land use plan. This master plan should be long range and realistic. It must always be looking ahead 20 or 30 years, and therefore requires periodic review and revision. This means that the Planning Commission's job will be of an ever continuing nature.

The master plan should be general; it is not intended to establish precise boundaries of land use, or provide for enforcement of its goals and objectives. Its function is to guide growth toward long range, broad goals. It establishes the framework required to assure that more detailed decisions can be made in a logical manner in the future.

In addition to these very locally oriented planning purposes, state and federal agencies also require submission of a plan before grants or loans will be made to any community. Clinton County's active planning program has already paid off in additional funds being granted to local units of government.

The Planning Commission cannot perform its role unless it understands and expresses the wishes of the people. For effective programs to be developed, it is essential that

two things take place:

(1) The citizen (that means you) of the county must take the time necessary to understand what this Planning Commission is doing and

(2) The Planning Commission must constantly work at making understanding possible through meetings, reports, interactions, and responses to your questions.

What will Clinton County be like next year, five years from now or in the year 2000? You can help decide the issues if you will express your wishes to your Planning Commission.

Here are the questions asked most often about planning:  
**WHAT IS COMMUNITY PLANNING?**

It is the identification of community problems and the development of programs to solve these problems based upon present and future needs. The process encompasses all aspects of the community, its social and economic system, the natural features or environment, transportation, community facilities, and land use.

#### WHY PLAN?

1. Anticipate Needs and Problems
2. Guide Development
3. Assist Decision-Makers

#### WHO PLANS?

The planning process involves the participation of many

people who are called "planners". Often this word is applied only to technicians employed in a planning office, however, in practice, it includes public officials and concerned citizens. In fact, it is the public officials and citizens who make the most important decisions regarding the solution of community problems. The basic function of a professional planning staff is to provide for technical expertise ranging from map-making and research to trend analysis and writing skills.

Public officials and concerned citizens must make the basic determinations regarding future development policy. This action incorporates local desires into the plan allowing it to be created by and for the community.

#### WHAT DO YOU PLAN FOR?

**YOU PLAN FOR PEOPLE!**  
This involves an investigation of the physical community including such concerns as land use activities, community services, and transportation facilities, which are influenced by economic resources, social structures, and the natural environment. Peoples' needs and desires are manifested in the past and present physical and social structure of the community. You attempt to ascertain future needs and desires, then plan accordingly

using sound logic and common sense.

#### HOW DOES A COMMUNITY BEGIN PLANNING?

The first step is the recognition of the need or desire to plan, which often occurs when a local problem or crisis is identified. The formulation of an organization to meet the problem is the second step. On a local governmental level, this takes the form of a Planning Commission, which guides or performs the necessary planning operations. The Planning Commission should assess community resources to ascertain possible needs for outside help and assistance in conducting their planning program. (Public agencies and/or private consultants.)

#### HOW DOES THE PLANNING PROCESS WORK?

The planning process can be capsulized into five basic parts -

1. Recognition of the Need for Planning
2. Survey of the Community
3. Formation of Goals and Policies
4. Evaluation of Alternatives
5. Compilation of Data and Analysis into the Plan

#### HOW IS THE PLAN IMPLEMENTED?

The implementation phase of the planning process is where the ultimate influence of a Plan can be realized. The Plan, itself,

is simply a policy document which illustrates a desirable future land use relationship for a given community.

To implement the Plan four basic "tools" are often used: coordinated decisions, zoning ordinances, subdivision regulations, and capital improvement programs. Each of these tools complement one another, and can be used in conjunction to realize effective implementation.

1. Decision Making
2. Zoning
3. Subdivision Regulations
4. Capital Improvement Programs

#### WHAT ARE THE DUTIES OF A PLANNING COMMISSION?

The five principal functions assigned to Planning Commissions under the State statutes may be summarized as follows:

1. Plan Formulation and Adoption
  2. Formulation of a Zoning Ordinance
  3. Advisors to a Governing Body
  4. Formulation of Capital Improvement Programs
- Regular meetings of the Planning Commission are held on the second Wednesday of each month in the County Commissioners Room, Court House, St Johns, Michigan. You are cordially invited to attend.



# 57

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COUNTRY**



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# Without soil conservation... Good-bye land

"As it was in the Beginning,  
Is now and ever shall be,  
World without end, Amen."

"World without end!" Many of us have repeated this so often that we've come to believe it means "land without end". More and more, we're realizing that if indeed it is "land without end", strong measures need to be taken daily to keep it that way. No one knows this better than conservation people.

Estimates are that about 50,000 acres of prime farmland are being developed every year. But some 125,000 acres of combined open spaces and farmland are lost in Michigan annually. If these lands are not conserved, it's "Goodbye, Land".

The Republicans in your state Legislature are well aware of the problems and questions of soil conservation the residents of Clinton County must face. One proposal now being considered, similar to a bill I introduced a couple of years ago, is a "development rights" proposal now pending before the Senate Committee on Taxation and Veterans Affairs.

A Senate ad hoc committee has been revising HB 4244 since last summer. Representatives of such diverse groups as the Farm Bureau, the Office of Land Use in the Department of Natural Resources, Senate Republican and Democratic Caucus personnel, the Michigan Municipal League, staff members of Governor Milliken's office including the Department of Management and Budget, the Department of

Agriculture, and the Western Michigan Environmental Action Council have been included in deliberations on this proposal. The Michigan Cooperative Extension Service also was used by the task force for consultation.

Thirty states have enacted some form of tax relief for the farmers; 15 of the most appropriate statutes from the various states were studied by the Senate ad hoc committee. It has been imperative for the New England states as well as California to adopt land use measures to help the land owner withstand pressure from rapidly expanding metropolitan areas. But even sparsely populated states like South Dakota, Utah and Wyoming have passed land use legislation as well. The Michigan farmer is clearly not alone in feeling the need for tax relief to keep his lands from the developer.

Accordingly, the Michigan Legislature is considering a "development rights" agreement to allow the farmer who is seriously interested in keeping his farmland to voluntarily enter into an individual agreement with the State of Michigan, in order to gain tax relief in return for keeping his farmland as farmland for a 10-year period. Eligible farms would be those classified as having 40 acres or more or those that are between five and 40 acres in size. The

agreement is attached to the deed of the property held by the County Register of Deeds. The property can be sold, given away, or inherited, but the new owner must abide by the contract to have the same tax relief advantages. The farmer still owns and controls the property. The owner maintains and constructs buildings necessary to the routine farm operation. A general or basic covenant or agreement will be designed, with specifics differing with each owner.

The farmer desiring tax relief would apply through his local governmental unit. If approved by the local government unit, the application would then be approved by the state, after consultation with the farmer. Some of the benefits to the farmer are: The land is appraised by the State Tax Commission as farmlands; the owner gets property tax credits on his state income tax; and, while the owner is in the program, he'll be exempt from all non-farm assessments such as drains or sewers.

If the farmer wants to get out of the program at any time during the ten-year period, it's possible for him to do so. He again applies to the local unit and, if approved for egress from the program, then approval must come from the state. However, he must pay a penalty. A lien is placed on the deed, indicating that when the land is put into use other than

farming, the owner pays back to the state the credits received on his income tax plus 25 percent of the value of the land as reappraised by the State Tax Commission at the time the owner gets out of the program. If the owner of the farmland remains in the program for the full 10 years, he can either re-

sign up for another 10 years or have the program terminated. Upon natural termination, he must pay back seven years of credit which he received on his income tax. The repayment of the credit only comes due at the time the land is converted to another use or sold.

## This is what they said almost 40 years ago

"Nature treats the earth kindly. Man treats her harshly. He overplows the cropland, overgrazes the pastureland, and overcuts the timberland. He destroys millions of acres completely. He pours fertility year after year into the cities.

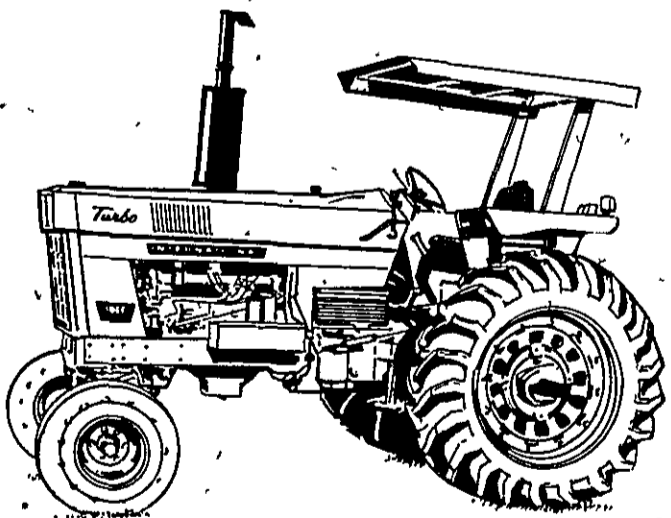
which in turn pour what they do not use down the sewers. This terribly destructive process is not excusable, the public is waking up just in time. In another thirty years, it might have been too late." —taken from the U.S.D.A. yearbook of 1938.

## Unique land

Acres suitable for orchards, vineyards, and the production of truck crops is becoming less plentiful each year because of the spread of non-farm uses of land. This poses a special problem affecting not only the production and availability, but the cost and quality of fruits and

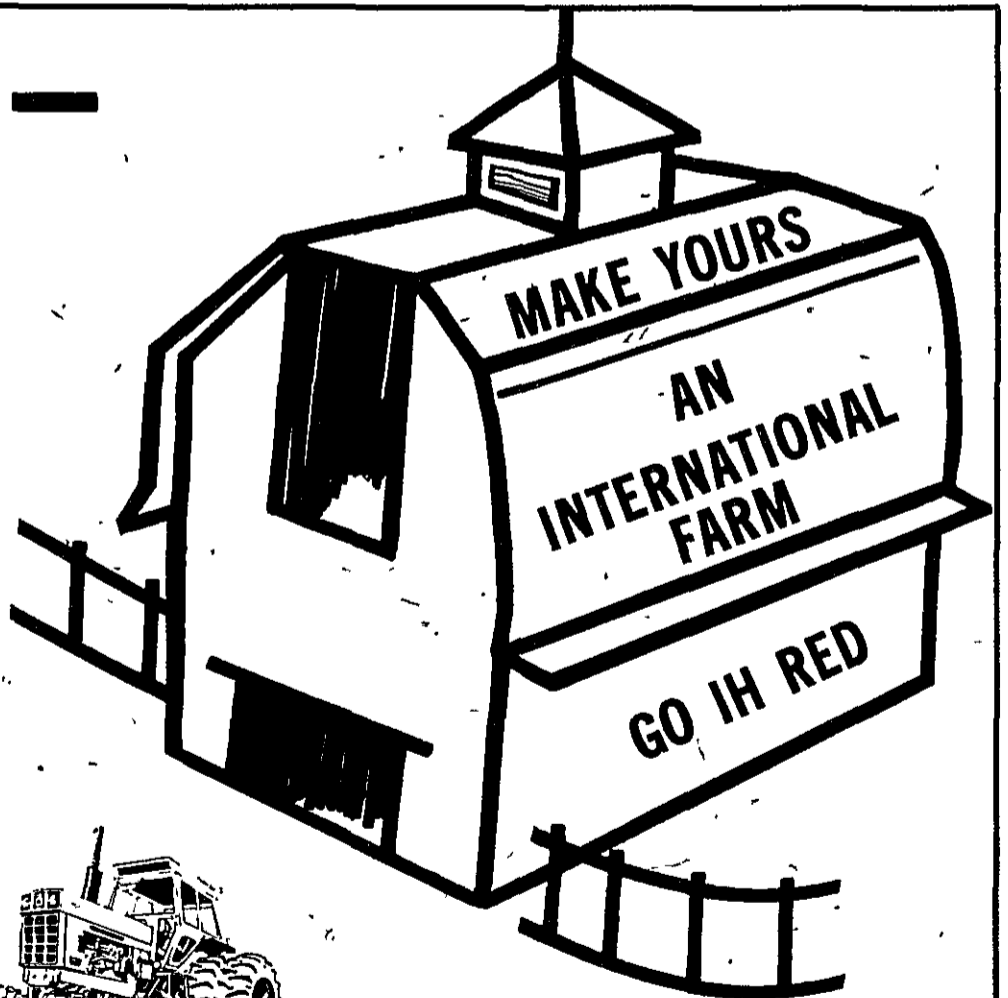
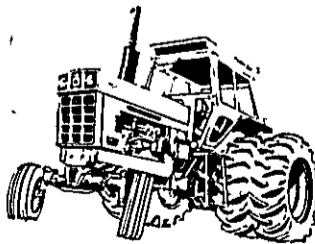
vegetables for the consumers. The directors favor legislation that would preserve these unique and limited lands for agricultural use. The directors also support legislation that would protect other types of prime agricultural land against irresponsible conversion to non-farm uses.

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- New choice—gas, diesel, turbo, non-turbo, gear drive or Hydro
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CARSON CITY

# Community discovers river

A special report of the Michigan State Chamber of Commerce describes an excellent example of community action, in the use and management of its natural resources. Through an active river association and the Owosso Area Chamber of Commerce, the Shiawassee River has been developed into a functional part of the community.

Most Michigan towns and cities are located on one or more streams. Traditionally, the waterways have been used as sewage disposal systems, but today alert citizens are demanding quality water and improved shorelines.

Owosso has been the farm-market center for Shiawassee County. The River runs through the center of town. People used to carefully build their houses facing the stream. Throughout most of the year, the slow-moving Shiawassee River was an area to be avoided. Most citizens preferred to look the other way rather than to face up to the major issue -- what to do about the massive pollution problem right at home. But for many years, now the quality of the river's water has been improving. Most domestic waste is treated at the city's sewage disposal plant. Industries have also assumed their share in abating pollution. However, to the Shiawassee River Association, a clean stream also means one which the community can use -- not only for fishing and boating, but a waterway that will incorporate aesthetic value with functional uses. Since 1965, this non-profit citizens-action organization has been actively bringing about many changes to the river and the adjacent landscape.

What has been done? The eyes of the community are on the Shiawassee River. Homes are being built facing the river, with landscaped slopes and bank improvement. Brush has been cleared to permit better vistas from the five bridges in the town. Many "River Clean-Up Days" have been held, to remove litter and junk. Trees are being planted. Foot and bicycle paths are being laid out along the banks on public-owned land (there is considerable land both in and out of the city). Ultimately, the improved area will extend for the entire 6½ miles between Owosso and Corunna. Most of the work is by volunteers, including much equipment and materials. The city has helped to the extent of about 10 percent, and volunteer work by private citizens amounts to 90 percent.

-30-

No-till Farming increasing in Maple River Watershed Project--John Swanson

Use of no-till planting doubled from 1972 to 1973 in the Maple River Watershed Project in Clinton, Gratiot and Shiawassee Counties. In 1973 about 600 or 700 acres of corn were planted with the no-till system in the watershed. No-till planting involves planting corn with no plowing or fitting. The corn is planted directly in sod or residues from last year's crop.

No-till planting is not a substitute for good

management or good drainage. This could be seen where it was used this year. In some areas, no-till was used as a last resort to plant corn on fields that were too wet to plow. The results were generally variable and poor. But the results were good where it was used on tilled or naturally well drained sites.

Soil loss from erosion can be reduced as much as eighty or ninety percent with no-till. Corn on the Ed Visssering farm near Ashley was planted on the same field with no-till for the third year. Rotting stalks from the first and second year were still evident late in the growing season. They made a mulch that protected the soil from runoff and erosion.

No-till not only saves soil, it saves energy. Only about one fifth or one sixth as much energy is used planting and harvesting corn with no-till as with conventional tillage. This factor could become even more important if the current fuel crisis continues or worsens.

The biggest risk with no-till planting is failure of the chemicals to give good weed control. Chemicals are used for all weed control. Cultivating can't be used if the chemicals fail. In time, new chemicals will

probably be developed that will lessen this risk.

No-till planting has its advantages and disadvantages. It is not a practice that everyone will or can use. However, its use could be increased many times

more than it is used now in the Maple River Watershed and agriculture all over. The best advice is to talk to someone who has used it, evaluate it as it applies to one's own operation and then make a decision whether or not to use it.

## 4-H tackles litter

How much litter will show up along your roadside when the snow disappears this spring? This past spring was the 5th annual year that 4-H clubs and other youth groups joined forces to make Clinton county a cleaner place for people to live and be proud of. In 1973 561 youth and 96 adults covered 221 miles of county roadsides picking up 89 pickup loads of trash.

The youth and adults spent over 2300 hours of labor in

cleaning the county roadsides. The youth learned how much effort it takes each year to clean up litter thrown there by thoughtless people. Local communities and private contractors provided free space that day for disposing of the trash in their effort to help. The Clinton County Road Commission helped also by providing trucks to haul trash where there were no landfill areas close by.

This spring will probably be

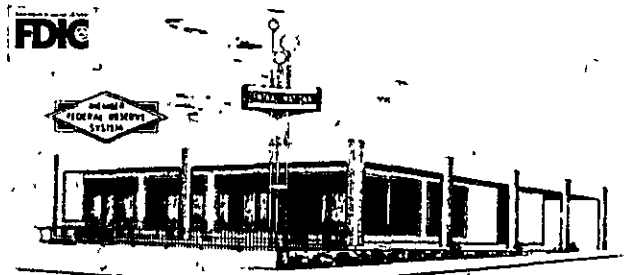
the 6th year for this project since there are some roads that have not been covered in the past plus many roads that were cleaned in 1973 will need it again in 1974 due to inconsiderate people.

Money available to the Road Commission is urgently needed for repair, maintenance and new roads and not for litter pickup. People are urged to "Pitch In" and "Stash the Trash" in proper litter containers.

**OUR CONGRATULATIONS to the  
Clinton County Soil Conservation District  
for Outstanding Accomplishments in Soil Conservation and Management**

**OUR SOIL IS STRENGTH...  
The Way We Use it - OUR FUTURE**

*The prosperity of your farm is  
vital to the future of Clinton  
County... one more reason  
why we are eager to serve your  
farm financing needs.*



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St. Johns

Ovid

Pewamo

# Lloyd is your man

Lloyd B. Campbell serves as the District Conservationist for the St Johns Work Unit, an office of the Soil Conservation Service. The United States Department of Agriculture, which gives Soil and Water Conservation assistance to the Clinton County Soil Conservation District. His duties are to direct office work within the Work Unit. He gives soil and water conservation information and technical assistance on specific practices to a single farmer or a group of farmers or landowners. He records Soil and Water Conservation Plans, based on the land-owners, or operators decision on wise land use.

It is his job to analyze worklands, develop annual plan of operations, and decide on

goals in line with needs, manpower and other resources. He must give guidance to the Directors of the Clinton County Soil Conservation District in development of the Work Unit program which is coordinated with the District's program and work plan. He must develop and carry out an effective information program, concerning the Soil and Water Conservation program in the Work Unit.

The District Conservationist, which is his title, must direct the training and safety program in the Work Unit. He must supervise the work of all men assigned to the Work Unit and see that they are trained for the job. He does not stay in the office. He does field work too.

He is the lowest line officer of a line staff organization. In short,

as the District Conservationist, he is the local working field

Administrator for the Soil Conservation Service.

## FHA housing

Some 120,000 families will borrow about \$2 billion from the Farmers Home Administration for single homes in the rural area and small towns in the year 1974. Specifications for each new house must be approved and inspections are conducted while work is underway and at completion.

Potential builders or buyers should not ignore the soil on which they build. Not all soils are suitable for building purposes. A good look at the soil

before building may save you a great deal of grief - and money - afterwards.

In Michigan, the two main problems to look for and guard against, are wet basements and inadequate septic systems.

USDA soil scientists have surveyed and mapped most of our soils. Traditionally, soil surveys have been used to identify farmland and the suitability for farm crops. Now soil surveys are used by both rural and urban people.

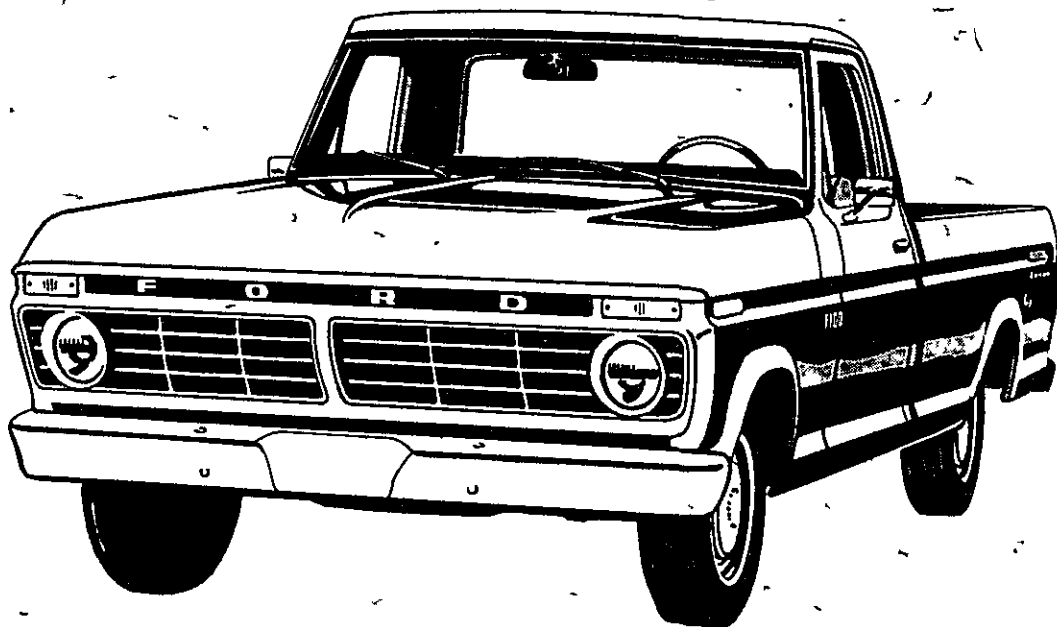
As an individual home buyer or builder, it will pay you to check the soil on which you plan to build. The right soil can go a long way toward insuring you the house of your dreams. The wrong soil can wreck your house and your bank account.

"Know The Soil You Build On", a free publication by the Soil Conservation Service, is available for the asking at your local Soil Conservation Office or at the Farmers Home Administration Office.

## 12 REASONS

### WHY YOU SHOULD BUY A FORD PICKUP

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- BEHIND SEAT STORAGE SPACE.
- BETWEEN-THE-FRAME POSITION FOR GAS TANK.
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- DEEP, ADJUSTABLE FULL-FOAM SEAT.
- WIDE CHOICE OF FORD SIX OR V-8'S.
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- EXCLUSIVE TWIN-BEAM FRONT SUSPENSION.
- SIZES FOR TODAY'S BIG CAMPERS.
- FORD IS FIRST IN TRUCK SALES FOR 5 YEARS.
- OVER 92 OUT OF 100 FORD TRUCKS BUILT IN THE LAST 12 YEARS ARE STILL ON THE JOB.



## 12 REASONS

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## Recycling or what what cost convenience

RECYCLING VALUE - or what cost convenience? The pros and cons of recycling glass, paper and cans have often been presented from the standpoint of the environmentalist, the industrialist and the merchant. What of the consumer? A survey of five grocery stores in Ann Arbor last

August revealed the following on 72 ounces of beverage in three-types of containers: non-returnable bottle - \$1.01, can - \$.94, and returnable - \$.65. Thus compared to buying returnables, it cost 35 percent more in throw-away bottles, and 31 percent more in cans. Again, what cost convenience?

**IF** your present credit source doesn't understand why modern farming takes so much money, see...



PCA lends farmers money for anything... and in any amount. You have seven years to repay... you pay only simple interest on the unpaid balance... and only for the actual days you use the money. Interested? Stop in at your PCA office today or ask a PCA man to call on you!

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*We Congratulate  
the Clinton Soil  
District on a Job  
Well done.*

# It is our business

With the enactment of Act 347 (State Sediment and Erosion Control Law), the role of soil conservation districts in Michigan in dealing with problems of our environment is substantially broadened. Soil conservation districts have been actively working with land users solving problems of erosion and sedimentation for the past 35 years on a voluntary basis. Act 347 now provides that after June 30, 1974, "A person shall not maintain or undertake a land use or earth change covered by this act or the rules, except in accordance with this act and the rules, and pursuant to a permit approved by the appropriate enforcing agency." This in effect means that conservation measures will be a mandatory part of a large portion of our state's land use activity.

The act designates several specific responsibilities to soil conservation districts in dealing with all land users.

1. Section 10-2 sets forth procedures whereby land users engaged in agricultural pursuits may enter into agreement with soil conservation districts to develop conservation plans in lieu of site plans, land use plans or permits otherwise required. The Act also provides that:

2. Sediment and erosion control ordinances or amendments to such ordinances, developed by the city, village or charter township, shall be submitted to the Water Resources Commission and referred to the appropriate soil conservation district for review or comment after July 1, 1974.

3. A local or county agency may apply to the Water Resources Commission for designation as an authorized public agency. Soil erosion and sediment control procedures of such applications shall be submitted to appropriate soil conservation district for review and comment.

4. An authorized public agency or county or local enforcing agency may enter into agreement with the soil conservation district for assistance and advice in overseeing and reviewing compliance with adequate soil erosion and sediment control procedures and in reviewing existing or proposed land uses, land use plans or site plans with regard to technical matters pertaining to soil erosion and sedimentation control. In addition, the Proposed

Rules and Regulations for Act 347 state that SCDs shall:

1. Provide soil erosion and sedimentation control standards and specifications to the county and local enforcing agencies.
2. Approve variances and

amendments to the established standards and specifications.

3. Approve a waiver of requirement of permit or plan for those persons engaged in agricultural practices and attest that said practices are being con-

ducted in compliance with the act.

The residents of Clinton County are indeed fortunate to have the reliable and experienced services provided by Clinton Soil Conservation District

## Prevents leaching

Will winter cover crops help prevent nitrates leaching? Apparently so. Dr. Jones (kan) reports sandy soil receiving both manure and nitrogen

under irrigation accumulated "significant" nitrate-nitrogen down to 4 feet. But two fields with fall-planted rye showed much lower nitrate-nitrogen levels down to 2 feet the next spring.

We Can Help You

Conserve Your Farm Dollars

Yes, soil conservation starts with the soil. Making the best use of the potential productivity of your soil will give you the greatest dollar return.

**CONSERVE**  
Your Building \$ \$

Money invested in farm buildings represents a sizable investment. Protect this investment by making constant repairs and meeting new building needs. For years we have served this community with quality building materials, and this service we plan to continue.

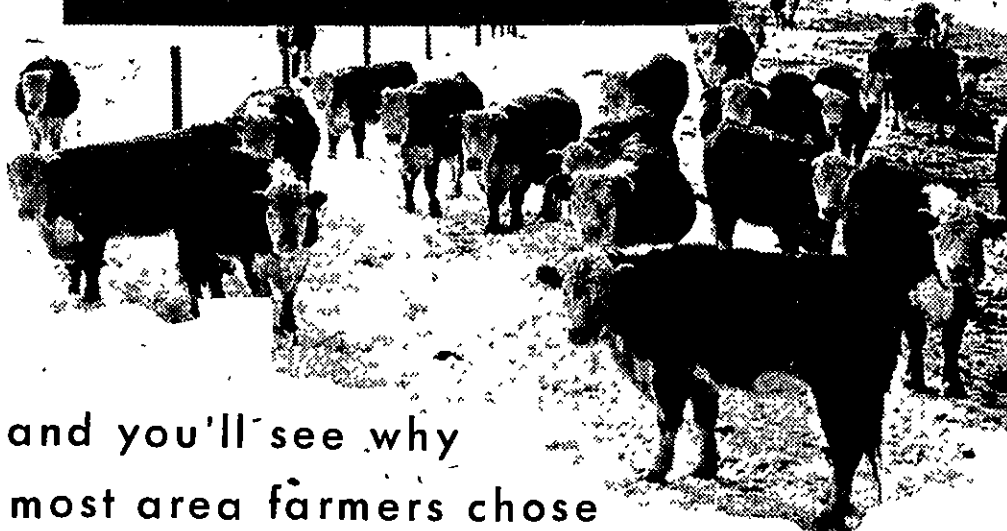


**Wieber Lumber Co.**

Phone 593-2280

FOWLER

TAKE ANOTHER  
**LOOK!**



and you'll see why  
most area farmers chose

## Soil Erosion Structures

built with

## CONCRETE BLOCKS

from

- \*Quality
- \*Durability
- \*Know-How

# KARBER

We salute the Clinton County Soil Conservation District and the farmers and men who assist them.

SAND, GRAVEL, BLACK DIRT, MORTAR, MORTAR SAND, READY-MIX

## Karber Block Co.

Phone 224-2327

ST. JOHNS

817 S. Church St.

# Trees--a cool commodity

COMMUNITY  
AIR CONDITIONERS

this spring--to replace our dead elms. Without trees and other

vegetation, man could not live. Not only does vegetation give

off oxygen for man to breathe, it also transforms the energy of

the sun into food for animals to eat.

Besides adding beauty, trees act as community air conditioners. It's been said that a large elm tree, for example, has a total leaf area of almost an acre, offering a tremendous absorptive surface to collect dust, smoke, and organic gases from the air. Plan to plant trees

"I know of no pursuit in which more real and important service can be rendered to any country than by improving its agriculture." --George Washington

"Nothing, in my opinion, would contribute more to the welfare of the States than the proper management of the lands." --George Washington

is not only the foundation of a nation's economy; it is the basis of civilization itself." --Louis Bromfield

"If this nation is to hold the basis for its future greatness, each generation must preserve and enhance the soil resources for use of generations to come." --Chester C. Davis

## Thoughts about nature

"When the lands are impoverished, people lower their standards, both physically and spiritually." --Dr. Walter Lowdermilk

It is said jokingly that Cleopatra's bath water is around somewhere, which refers to the fact that water is indestructible and in just about the same amount throughout the world, even though it changes form as it "circulates" in the water cycle.

"To skin and exhaust the land will result in undermining the days of our children." --Theodore Roosevelt

More than three-fifths of all land in the 50 states is privately owned. Privately owned land produces 80 percent of the game for hunting and has 85 percent of the wildlife habitat.

Any dust in the air is a sign that the wind is stealing the topsoil.

Raindrops can't hit the ground running if they fall into a good grass sod.

"I can think of few things more important than teaching both children and grown-ups the value of the soil. The good earth

Save the thin layer of soil in which your living is rooted.

The fabled land of Canaan, once flowing with milk and honey, is now a desert.

### The World Will Know Us By Our Soil

Yes, our strength is in our soil. . . the responsibility for this strength is in the hands of our Soil Conservation District and our farmers. We congratulate the farmers of this area for their forward step in preserving our strength . . . the fertility of our soil.

and . . . we look forward to serving their needs for satisfying the requirements of a soil conservation program.



LET US ASSIST YOU  
in Your Yearly Conservation Programs

GET YOUR SEED NOW  
TEWELES BRAND ALFALFAS  
Certified Vernal

#### CLOVER

Mammoth	Sweet Clover
Alsike Clover	Ladino Certified
June	Mixtures

Pasture, Plow Down

#### GRASS

Timothy Brome

All Seeds Are State Tested  
Mixing and Inoculating Service

**MATHEWS Elevator Co.**

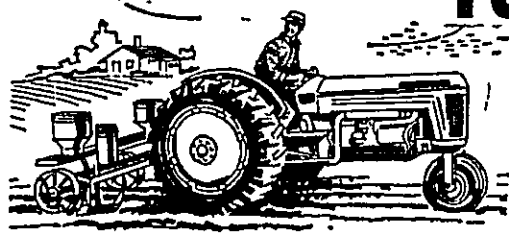
FOWLER

PHONE 593-2111

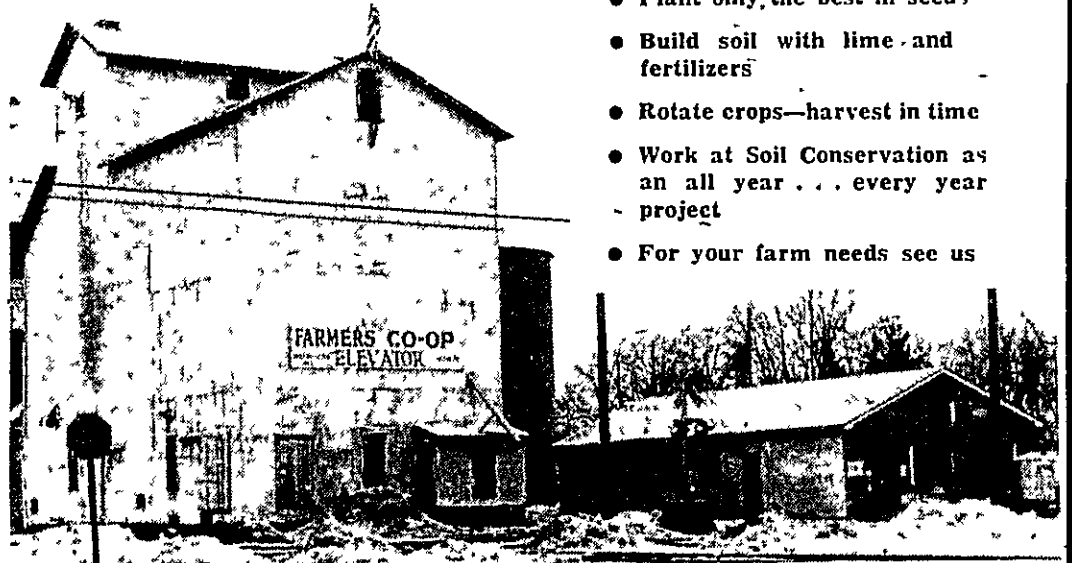
CONSERVATION PAYS OFF TO YOU!

## Your Cash Income

from Your Farm Depends  
on the Productivity  
of Your Soil



Practice Tried and Tested Methods of  
**Soil Conservation**



- Plant only the best in seeds
- Build soil with lime and fertilizers
- Rotate crops--harvest in time
- Work at Soil Conservation as an all year . . . every year project
- For your farm needs see us

**FARMERS' CO-OP ELEVATOR**

FOWLER

Phone 593-2420

# Cover is beautiful

It may be a patch of weeds, or a marsh, or swamp, or even a bog. Perhaps it is a field of wheat or potatoes; or a stand of aspen, or maple. Whatever it may be, it is cover on the land. It is land's pleasant counterpane.

Land, we know, is our basic resource, our common denominator of all that is material. However high man may elevate himself on the stilts of modern living, he must at all times be aware that his props have their bottom poked into the earth. Man cannot, must not forget this, ever.

Likewise, man must at all times consider cover on the land. Without this cover, be it swamp, maple, potatoes or whatever, land is virtually worthless and so too, is man.

Cover on the land is abode to the pheasant, the cottontail, the fox, the coyote, the bear, the deer, the hawk, the robin. In a sense, it is fundamental to the existence of the bluegill, the pike, the bullhead, the rainbow, the muskie. Cover on the land is home to countless creatures, food to all that lives.

Down through the years man, on occasion, treated cover on the land with abuse and greed. Man was a loser in these conflicts. Dust storms, erosion, abandoned farms, denuded forest — these were results along with famine and poverty. No victories here, certainly, for man or land.

It was not until man learned to treat land's cover with respect and consideration that optimism became associated with the land-man relationship. We have that optimism now. It is reflected in soil conservation practices, in a return of the forest, in sound management of

vast areas of game cover, in the protection of water resources, in the progress of agriculture. In short, we see it more often than ever before in the wise use of cover on the land.

In this wise use there can be no relaxing of man's respect for and consideration of land and its cover. A constant awareness of his total subservience is essential if he is to enjoy life, or rather, if he is to exist.

Working your soil too much does several undesirable things, and one of the worst is breaking down the structure of the soil. When groups of soil particles (aggregates) are reduced in size by excessive tillage, there is a tendency for the soil to crust. This obstructs good aeration, slows water intake, and reduces amount of water that can be stored in your soil. Since water runoff also increases as soil structure breaks down, erosion losses become worse. SCS research reports that too many tillage operations can break down and pack the surface layer of a silty clay loam until a cubic foot weighs 110 to 125 pounds compared to a normal 85 to 90 pounds.

## Evaporate and cool

The evaporation from a single properly watered tree can produce an estimated cooling effect of more than a million B.T.U.'s in its lifetime—equal to ten room-sized air conditioners running twenty hours a day.

Another important point to keep in mind is that all crop residues give maximum protection from wind and water erosion when left on top of the soil. The minute you start cutting residues in, you start

losing protection. Disking just once, for example, reduces protection by 50 percent. If wind erosion is your problem, you might be better off to leave all residues standing, rather than shred them. As you go thru

winter, you might compare the value of your crop residues left on your land. And next spring when you head for the field, you might consider leaving some of your favorite tillage equipment in the shed.

## CONSERVING YOUR SOIL CONSERVES YOUR MONEY



**You paid for your land when you purchased it.**

**You pay for it again every time you pay taxes.**

Make all your land pay for itself and more by keeping it in good condition for profitable production. Soil erosion and depletion creep up slowly and often go unnoticed until suddenly your profits are down. Keep well ahead of poor soil conditions, it pays many times over.

## We Congratulate

THE CLINTON COUNTY SOIL  
CONSERVATION DISTRICT . . . .

And its farmers for the  
excellent work they have done  
in conserving our most precious

resources . . . **OUR SOIL AND WATER**

### IT'S OUR AIM:

To help you keep your soil in top productive shape. Your cash income from your farm depends on the productivity of your soil. Protect both by keeping your soil well supplied with the nutrients it needs.

YOUR SOIL IS YOUR LIVELIHOOD AND WHAT YOU KNOW AND DO ABOUT NUTRIENTS YOUR SOIL NEEDS WILL MAKE THE BIG DIFFERENCE IN THE FUTURE PRODUCTIVITY OF YOUR FARM. SEE ZEEB FERTILIZERS TODAY . . . SEE HOW ZEEB FERTILIZERS, GOOD FARM MANAGEMENT, AND SOIL CONSERVATION PRACTICES CAN ASSURE YOU OF CONTINUED PROFITABLE PRODUCTION.

Our Aim is to Help You Keep Your Soil in Top Productive Shape

## ZEEB FERTILIZERS

'Where Quality Is Our Greatest Asset'

208 W. Railroad St., St. Johns - Phone 224-3234

Ashley - Phone 487-3571

YOUR  
CLINTON COUNTY DEALERS  
for

**ZERO**  
LOW VACUUM  
**MILKING SYSTEMS**

We also handle . . .  
**JAMESWAY, CLAY and ZERO**  
BARN EQUIPMENT

SOIL CONSERVATION IS  
DOLLAR CONSERVATION . . .

We congratulate the Clinton County  
Soil Conservation District for its fine  
work throughout this past year.

**Nemanis Electric Co.**

201 N. Main

OVID, MICH.

Phone 834-2200

# Swanson is Conservation winner

The "Conservation Farmer of 1973" is Warren Swanson of Bingham and Olive Townships according to the Clinton County Soil Conservation District Board. The board meeting on December 18, 1973, selected Warren for the award because of the outstanding job he has done of establishing conservation practices on his farm. Warren and his wife, Doris, and four children, Marsha, Dana May, Jack, and Wesley live at 3601 West Centerline Road. Warren was born and lived in Lewiston, Montmorency County until he joined the U.S. Air

Force in 1952. He served for four years. He said he was a carpenter and worked in the woods before he joined the Air Force. He also said that as long as he could remember he had always wanted to be a farmer.

While Warren was in the Service, his folks sold their

home in Lewiston and moved to Clinton County. They built a house on Warren's brother David's farm in Essex Township and they live there now.

After Warren got out of the Air Force in 1956, he came to Clinton County, also. He finally realized his life's ambition when he rented the Charles Smith farm in Greenbush Township and started farming. He and Doris were married in 1958. After three years, they rented the Audrey Fruchtl farm in Bingham Township and lived and farmed there until they bought their present farm in 1966.

Warren now owns 230 acres and rents another 130 acres. He cash crops and also has a dairy herd of 31 cows.

He just received a "500 Honor Roll Certificate" from the Michigan Dairy Herd Improvement Association. In order to receive this certificate, dairy herds must average 500 pounds of butter fat every year for five consecutive years. Warren's cows averaged 14,826 pounds of milk and 540 pounds

of butter fat per year for the last five years.

Warren is a strong advocate of lime and fertilizer according to soil tests. He grows wheat, soybeans, corn, and hay.

Some of the conservation practices that Warren has established on his farm are, 227 acres of conservation cropping system, 140 acres of minimum tillage, 200 acres of crop residue management, 67 acres of pasture and hayland planting, 19 acres of field and contour strip cropping, 4 acres of woodland harvest cutting, 36,640 feet of tile drains and 5,000 feet of ditch deepening and cleanout. He worked with his neighbors in getting an open drain deepened for tile outlets and also with several neighbors on a group tile drain.

Warren is also active in the Farm Bureau, Dairy Herd Improvement Association, and the Michigan Milk Producers.

For a young man who started from scratch in 1956, Warren has come a long way to the present very successful farmer of today.

## SOIL BUILD-UP HEADQUARTERS

We Salute  
**WARREN  
SWANSON**

FOR BEING SELECTED

"Outstanding  
Conservation  
Farmer of  
the Year"

and soil  
conservation

award winners:

Leon Armbrustmacher  
Joe Houska, Jr.  
Willis Kosht  
John Schmitt  
Howard Hess  
James Rossie

We Salute These men and  
all others who have worked  
for and with the Clinton County  
Soil Conservation District.

SOIL CONSERVATION  
STARTS ON  
YOUR FARM



There has never been a successful Farmer yet that didn't keep on the look-out for trouble areas on his farm where erosion or poor soil need attention. He knows that he would take a loss on the overall production per acre if these problems were not corrected when they occur. Soil conservation is money.

Where Your Farm Comes First

**Farm  
Bureau**

SEE US FOR . . .

- Grain & Bean Handling
- Complete Line Farm Bureau Products
- Complete Fertilizing Spreading
- Michigan Certified Seed
- Farm Bureau Petroleum Products
- Herbicides and Application

• Bulk Feed Delivery Service

# ST. JOHNS CO-OP

N. CLINTON, ST. JOHNS

OFFICE PHONE 224-2381

FEED MILL 224-2401

## SOIL CONSERVATION SAVES YOU MONEY

Insure the Life of Your Moving  
Equipment with Quality . . .

**ENGINE OILS  
AND  
LUBRICANTS**

— We Deliver to Your Door —

Use the finest . . .

**FUEL OIL — GASOLINE  
and DIESEL FUEL**

We look forward to serving your  
spring farming needs. Just call us.

## Ovid Oil Co.

108 N. MHI

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834-2828

# This is the story of 1973

accomplishments  
Clinton County Soil Conservation District  
Fiscal Year 1973

	THIS YEAR		TO DATE	
	Number	ACRES	Number	ACRES
District Cooperators	55	7,111	1053	160,325
Conservation Plans Prepared	107	10,831	909	140,312
Conservation Plans Revised	9	2,772		
Soil Survey		22,030		365,440
Conservation Cropping System		4,574		106,820
Critical Area Planting		3		237
Minimum Tillage		1,582		59,948
Grass Waterways		2.0		92
Land Smoothing		35		3,238
Tile Drains		423,099 ft.		12,999,683 ft.
Grade Stabilization Structures	2		211	
Field Windbreaks	23990 ft.		164,010 ft.	
Farm Ponds	12		165	
Tree Planting		163		990
Woodland Management		121		1,875
Wildlife Habitat Management		311		3,246
Stripcropping, Field & Contour		0		1,536
Cropland to Grassland		98		2,362
Cropland to Woodland		22		534
Cropland to Wildlife Recreation		27		3,918
Non Cropland to Wildlife Recreation		24		1,004
Open & Field Ditches		4,360 ft.		522,422 ft.
Land Adequately Treated		4,659		121,115

In addition to the above conservation practices, Lee Sheerwood, conservation forester, Department of Natural Resources, gave woodland management assistance to several cooperators, marking trees for harvesting or culling, assisting on tree planting sites, varieties, insect, and weed tree control.

During 1970, the Clinton County Board of Commissioners and the U.S. Soil Conservation service signed a contract to complete the Clinton County Soil Survey. Karl E. Pregitzer, soil scientist SCS was named party leader, assisted by Glenn Weesies, soil scientist SCS. Since that date, they have completed the field work in

Westphalia, Dallas, Lebanon, and Essex townships for this soil survey.

The district employees have colored septic field limitations on advance copies of the soil maps for Bath; DeWitt, Watertown, Eagle, Riley, Olive; Victor, Ovid, Bingham, Bengal, Greenbush, Duplain, Westphalia, Essex, Lebanon, and Dallas townships for the Clinton County Planning Commission and town boards of these townships. The County Planning Commission has used these advance copies of the soil survey for their various planning activities. The township boards are using these soil maps to assist them to make township plans.

These accomplishments were made possible by the combined efforts of the cooperating landowners, the directors of the Clinton County Soil Conservation District, and technical staff provided by the U.S. Soil Conservation Service, and other cooperating agencies.

LLOYD B. CAMPBELL  
District conservationist  
AUDITED  
- FINANCIAL REPORT

Clinton County Soil Conservation District  
July 1, 1972 - June 30, 1973

Balance on Hand July 1, 1972	\$ 1,508.31
<b>RECEIPTS:</b>	
District Administrative Funds (State of Mich.)	\$ 897.00
Conservation District Aide Funds (State of Mich.)	3,477.00
State and Regional Meeting Funds	43.59
County Boards of Commissioners	3,600.00
Sale of Tree and Shrub Planting Stock	3,708.75
Annual Meeting Receipts	330.75
Sale of Equipment	300.00
Sale of Crownvetch	3,475.70
Other Receipts	338.00
<b>Total Receipts</b>	<b>\$16,170.79</b>

**TOTAL AVAILABLE FUNDS \$17,679.10**

**DISBURSEMENTS:**

Office Supplies and Postage	\$ 314.27
Directors Mileage and Expense	612.68
Equipment Purchased	158.40
Conservation District Aide	7,847.95
Social Security	435.10
Bond, Workmen's Compensation	142.65
Trees & Hauling	2,551.28
Annual Meeting	534.15
Youth Activities	85.90
Publications	131.50
Educational Materials	203.65
Crownvetch Sales	3,175.27
Region IV Meeting	199.75
State & National Dues	275.00
<b>Total Disbursements</b>	<b>\$16,667.55</b>

**BALANCE OF CASH AVAILABLE - June 30, 1973 \$ 1,011.55**

## Tips For A Better Future

**TIP NO. 1 . . .**

Invest your work now in Soil Conservation for greater farm earnings in the future!

**TIP NO. 2 . . .**

Invest your savings now at CAPITOL for greater dividends NOW! . . . and a better future!

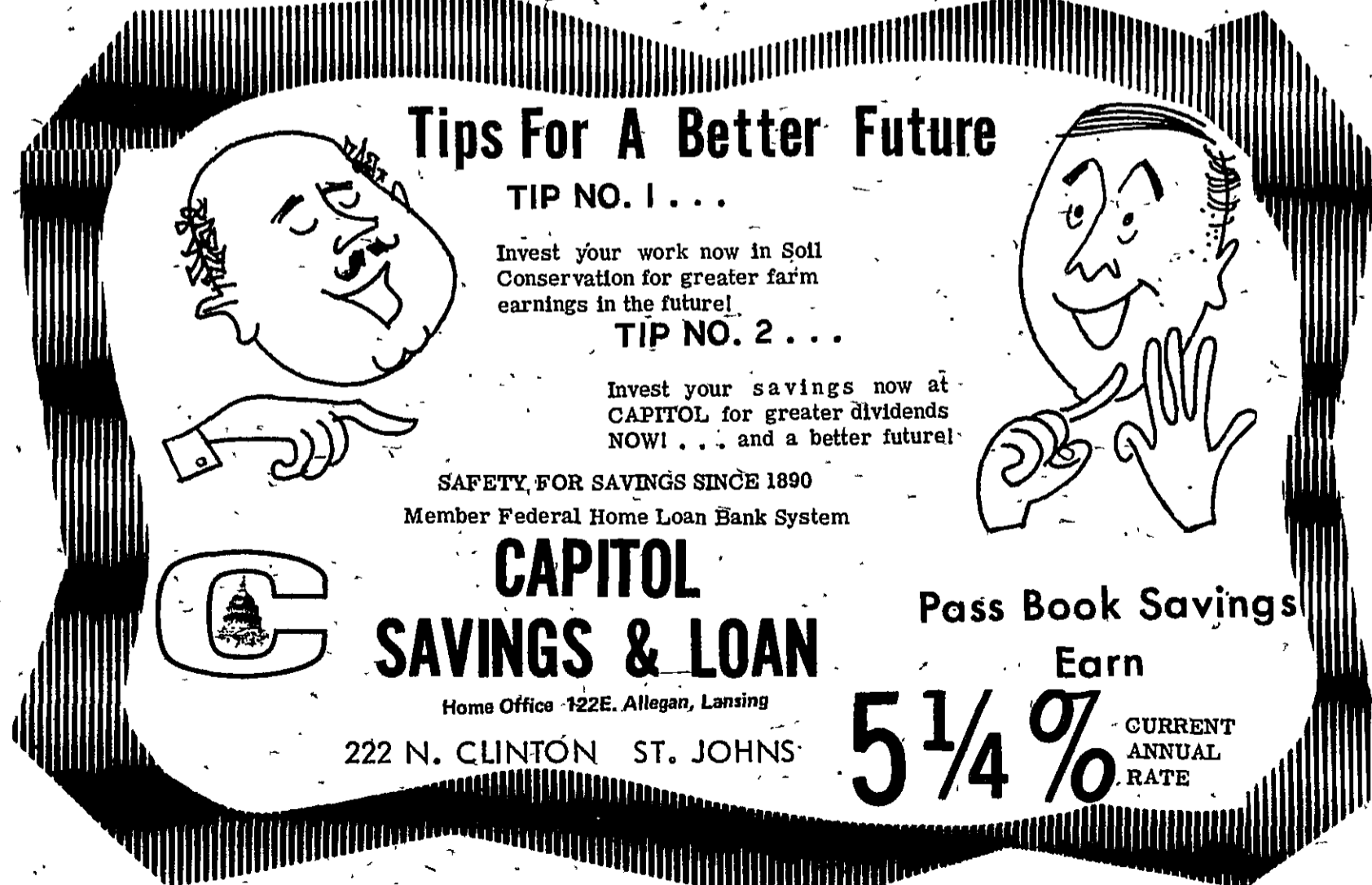
SAFETY FOR SAVINGS SINCE 1890  
Member Federal Home Loan Bank System

# CAPITOL SAVINGS & LOAN

Home Office 122E. Allegan, Lansing

222 N. CLINTON ST. JOHNS

Pass Book Savings  
Earn  
**5 1/4 %** CURRENT ANNUAL RATE



# Congratulations

BY RUSSELL HILL  
DEPT OF RESOURCE DEVELOPMENT  
MICHIGAN STATE UNIVERSITY

community. Local people are telling us that land use planning should be done by them. The acid test will come in the near future as to whether or not they will do it.

Our congratulations are again extended to the Clinton County Soil Conservation District on completion of another outstanding year. Other portions of this Annual report will detail these accomplishments. As one looks back over the work of your district such activities as erosion control, surface water management, watershed development, farm conservation planning, non-farm erosion and sedimentation assistance, educational contests and programs, soil surveys and many others highlight the district's success.

Another major concern now before us is Land Use Planning. Some communities have developed a land use policy and adopted a variety of ordinances to implement this policy. However, the extent of this effort is far too limited. Even many zoning ordinances are too weak in spelling out comprehensive land use provisions and in providing for their enforcement.

We are not running out of land at this time but the competition for numerous kinds of land uses in many areas is reaching a critical stage. In Michigan at least 50,000 acres of cropland are being diverted to non-agricultural purposes each year. There is a growing population with an ever greater portion of them desiring to reside in a country atmosphere. This land use housing problem alone is severe. Farmland tax assessments are increasing due to their proximity to high land

value developments. Growing populations in these areas also mean additional services of all kinds. Our present and predicted population means more competition for land to build shopping centers, highways, schools, waste disposal dumps, recreation areas, factories and utilities. This loss of food producing land will steadily continue unless people decide where these developments should logically occur.

All this means that someone will have to get busy inventorying our land resources as to quantity, quality and location; next deciding what kind of community they wish to have and finally agreeing what lands should be used for specific purposes. That someone is us and the time is now.

National and State Governments are developing programs and legislation dealing with overall land use policy guidelines. However, in each case emphasis is given to basic planning being done on a regional, county or community basis depending on the nature of the problem.

It is clear that some form of land use planning is going to take place. If local people do not accept this responsibility to determine their own land use future than some higher government unit probably will do it. I believe that soil conservation districts and other organized groups must be alert to these problems and provide initiative to develop a practical land use program for their

## Soil is nation's most valuable resource

"The most valuable resource of this Nation is the soil. Gold is more spectacular; iron has two generations made men richer; copper has opened up greater possibilities of advancing techniques. But, it is the soil which produced the lasting and essential wealth of the Nation." --Brinsler and Shepard, in "Our Use of the Land."

**AUTOMATIC FIELD DRAINAGE**



with a  
**PARMA DRAINAGE PUMP**

PARMA, INC.  
PARMA, IDAHO  
MORE THAN 30 YEARS OF SERVICE

- \* 200 to 2000 gallons per minute
- \* Self Priming — Non Clogging
- \* Easy Installation — Trouble Free Service

LET US HELP YOU  
with Your Soil Conservation  
and Farm Drainage Problems

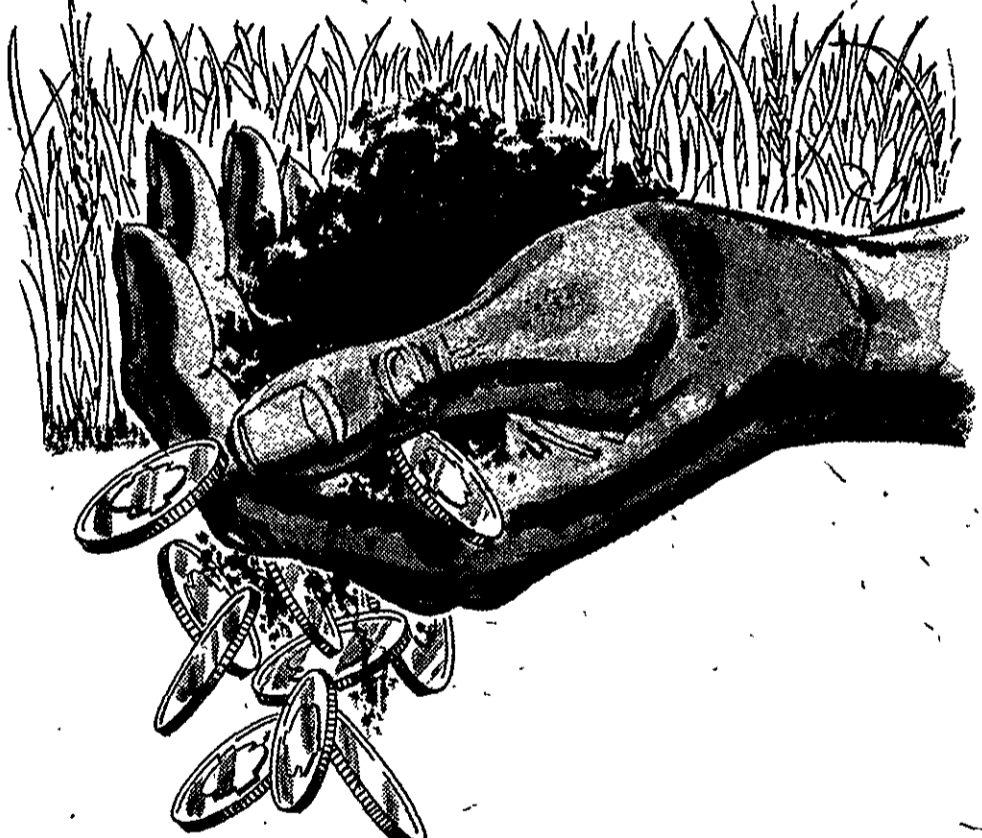
ALSO LIQUID MANURE HANDLING

**Kuehnemund Hdwe. Inc.**

Phones — Munger 517-OL 9-2221 Bay City TW-3-9252  
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*Congratulations*

CLINTON COUNTY SOIL CONSERVATION DISTRICT



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- \*Fertilizer—Bagged & Bulk
- \*Anhydrous Ammonia \*Chemicals
- Grain Drying & Storage Bins
- DeLaval Milking Machines
- Starline and Badger Laborsavers

**OVID ROLLER MILLS**

Ovid, Mich. Phone 834-5111

## Land use

One of the encouraging trends on the conservation scene today is the widespread attention being given to land use policy and planning. Legislation on land use is being proposed in the Congress and legislatures throughout the nation. National, regional, state and local meetings and conferences have been and are being held to learn about land use problems and how to solve them.

The Michigan Association of Soil Conservation Districts established a Land Use Committee in 1972 to address this important question. The Michigan Chapter of the Soil Conservation Society of America has a Land use Position Statement to bring the thinking of this professional society to the attention of others. A strong interest in land use policy and planning is evidenced by Michigan United Conservation Clubs and affiliate members.

The Soil Conservation Society of America's National Land Use Policy conference (November 1972) is but one example of what is going on in this field. A conference such as this attracts governors, congressmen, administrators, educators, planners, and numerous others in a wide range of disciplines.

In Michigan, Governor Milliken is giving strong direction in developing a state land use plan. Legislation is now being considered which will establish a land use policy for the state.

Another group that has for some time been involved in land use planning is the professional planners. Planners at the regional, county and local levels are constantly challenged to produce effective and acceptable land use plans. These planners have had some success in primarily urban and suburban areas.

Currently most soil conservation districts now are providing the leadership to refine this prime lands map for their county. The soil conservation districts are in a unique position to provide leadership in land use planning on private lands. Furthermore, if they wish to do so, soil conservation districts can play a significant role in the development of county land use plans.

It should be noted that the implementation of any land use plan will not be easy. Opposition to plans based on social, political and economic factors is certain to occur. Perhaps the most important factor in opposition to planned land use is our historic land ethic. It's the one that goes like this: "This is my land. I own it in fee title. I can do with it and use it as I wish." It is unlikely that society will accept this reasoning in the future.

Soil conservation districts for more than two decades have promoted the concept that landowners are stewards of the land. This concept implies wise use and proper care so that all citizens and future generations will have adequate land to meet their needs.

# Tractor Power is . . .

## B.F. Goodrich

### WEAR

Call us for **FAST, EFFICIENT**  
**ON-THE-FARM**  
**TIRE SERVICE!**



We'll fix your tire on the spot or leave you a **FREE B.F. Goodrich LOANER** to use while we repair your tire.

**DON'T LOSE VALUABLE WORKING TIME!**

## NYLON power-grip rear tractor tire

### PERFORMANCE

# PRICE!

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**SILVERTOWN**  
**POWER GRIP**  
**30° LUG**  
Most Sizes  
**In Stock NOW!**

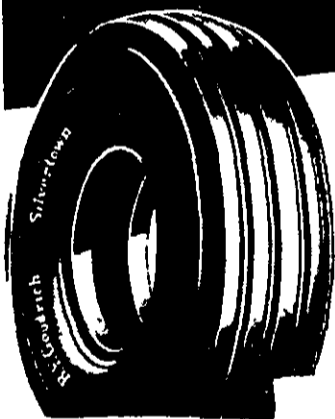
**Installed Free**



Chloride Extra

Save on all your Farm Tires at Hub

## ALL NEW!



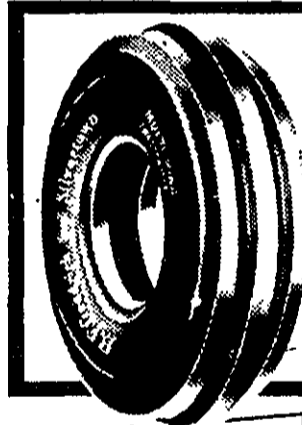
B.F. Goodrich  
**NYLON**  
**Farm Wagon**  
**IMPLEMENT**  
**TIRE**

- Carries bigger loads with less rolling resistance
- Wide tread for extra flotation
- Deep tread for longer wear

**SPECIAL FARM**  
**NYLON**

**FREE, Fast Mounting**  
**CROP PAYMENT TERMS**

Call us for **ON-THE-FARM SERVICE**



**IMPROVED**  
**FOR**  
**WEAR**  
*and*  
**PERFORMANCE**

**NEW MULTI-RING**  
**FRONT TRACTOR TIRE**

- Wide center tread wears longer
- Wider tread for more uniform wear
- Shoulder scuff pad to prevent sidewall abrasion and bruise breaks
- Trash shield to prevent rubble from lodging between tire bead and rim
- Stronger casing to resist bruises, impact breaks

See Us  
For All  
Your Tire  
Needs!

**FREE, FAST MOUNTING**  
**CROP PAYMENT TERMS**  
Call Us For On-The-Farm Tire Service

**WE CONGRATULATE THE CLINTON COUNTY SOIL CONSERVATION DISTRICT and the farmers of this area for their outstanding job in soil conservation. Leadership in this cause is truly deserving of the highest award.**

# The Hub Tire Center

CHARLES WEBER, Manager

North US-27.

Phone 224-3218

# Aerial Seeding Fertilizing Spraying-Dusting

Our Aerial System Gets the Job.  
Done Quickly and at Low Cost

**STAY OFF THE SOIL,**

**USE OUR AERIAL SYSTEM**  
Which Is Approved by Your  
County Soil Conservation District

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## Max Miller

OVID

8664 Kinley Rd.

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## District earns outstanding label

The Clinton County Soil Conservation District is recognized as one of the outstanding districts in our state, and as a leader in any project completed in Michigan. I want to congratulate this district for the example it sets to other districts, and the services it provides to the people of Clinton county.

Increased food production will be needed in the coming years. I am sure agriculture will respond to this challenge as it has in times of past crises. The need for additional food and fiber is very apparent if we are to maintain our own standard of living as well as our position in the world's agricultural marketplace.

As we move into 1974 and the future, increased production demands obviously will mean that many thousands of acres of land now idle will be "brought under the plow." While a portion of this land was idle due to

various set-aside programs, a large part of this acreage was not used for crops because of such limitations as poor drainage, high susceptibility to wind and water erosion, poor soil structure and others.

As this land is brought back into production, provisions to deal with these hazards must be made so that undue soil erosion and sedimentation do not occur. The need for increased conservation planning and establishment of more sound conservation practices on the land is apparent. Let's join the

national campaign of "production with protection."

At this time in history, the technical services available through soil conservation districts become even more valuable. Not only should we be concerned about these newly tilled lands, but care must also be exercised that conservation practices established on the land over the past years are continued. I urge land users to avail themselves of these services so that our food and fiber production capability will be protected and maintained.

## Accepting inconvenience

It is often said that man profits by his mistakes. Yet many large cities as well as small ones, and a few houses are located in floodplains of streams and rivers which are subject to periodic flooding of

varying magnitude at regular intervals. The people seem to accept the inconvenience and losses. Our Indian predecessors did not build permanent encampments within the floodplains.

## Future--the important factor

It has been said that time is divided into three parts--the Past, the Present, and the Future. We can do nothing about the past. It is gone and

can never be recalled. The present is only an instant. The future is the only period of time that we can do anything about

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# Tractor program can help

How many farmers can afford a \$10,000 fine and a liability lawsuit? Not many, but evidently some feel they can as they hire youth other than their own children under 16 years of age to drive a tractor or operate certain farm machinery without the tractor exemption. Saying I don't know anything

about the bill "Youth Employment in Hazardous Occupations in Agriculture" won't hold up in Court. The bill became effective February 1, 1970.

The Hazardous Occupations Order makes it unlawful to hire or even permit any youth under

16 years of age to do any of the jobs listed as hazardous unless: (1) the youth is working on a farm owned or operated by the youth's parent or legal guardian or (2) the youth 14 years - 16 years of age has a training certificate which provides exemption from specific hazardous jobs. Youth cannot operate machinery classified as hazardous or do other jobs listed as hazardous on a neighbor's property unless the property is leased or operated by his parent which would not be the case in custom work or exchange labor situations.

What jobs are off limits? (1) Tractor operation with tractors 20 pto horsepower in size, (2) general harvest machinery, (3) specialized equipment such as chain saws, (4) handling breeding animals, (5) woodlot work, (6) high elevation work of 20 feet or above, (7) certain transportation equipment, (8) toxic atmosphere, (9) handling

chemicals, (10) blasting and (11) working with anhydrous ammonia.

With today's society ready to sue at a moment's notice, it seems strange that farmers are willing to gamble with this risk. Whether you agree or disagree with the law doesn't help you in Court.

However, the US Department of Labor has given a vote of confidence to the 4-H tractor program for youth 14 and 15 years of age to drive tractors and operate machinery. This approval comes provided they have an exemption showing he or she has successfully completed safety units in this 4-H tractor program, can pass a written examination and the operators skill test.

There are three distinct programs: (1) 4-H tractor operation program - completion of this program permits a youth to be employed to drive a tractor. (2) 4-H Machinery-

Operation Program - completion of this program permits a youth to be employed to operate 16 different types of general farm machinery. (3) A combination of tractor and machinery program.

If you are thinking of employing a youth over 14 and under 16 years of age to work on the farm, be sure you know what jobs a youth can and cannot do. If you want him to drive a tractor, encourage him to take the 4-H tractor program for exemption. There is no exemption for tractor or machinery operation by youth under 14 years of age.

This past year about 20 Clinton County boys under 16 years of age passed the tractor program for exemption to operate a farm tractor. For more information contact John Aylsworth, Extension 4-H Youth Agent, 1003 South Oakland, St Johns or phone 224-3288. You could be \$ ahead.

## You and your disposal system

Don Oderkirk - Sanitarian

If your house depends on a septic tank-drainfield method of wastewater disposal the following comments may be useful.

This type of wastewater disposal partially treats the effluent from your house and depends upon the surrounding soils to filter and absorb the water used to carry the wastes away from the house. The average household today uses two to three hundred gallons of water each day to carry off perhaps two gallons of waste material.

The septic tank accepts this dirty water, settles out some of the solids, and discharges a like amount of effluent to the drainfield and the surrounding soils, which in turn must filter and absorb several hundred gallons of dirty water each day, every day, year after year. A drainfield can only be as good as the soils that surround the

drain during the growing season, a properly maintained lawn over your drainfield may transevaporate twenty to thirty percent of the effluent. However during the non-growing season or with snow or frost cover, the soils must accept the entire load.

This type of disposal system will not last forever, especially under the heavy loadings we place on these systems today.

To get the most out of your drainfield and prevent premature failure the following procedures are recommended by Mid-Michigan District Health Department.

1. Under no circumstances should water softener brine be discharged into your sewage disposal system. The chloride ions of the brine tend to seal off the absorptive capacity of the soils adjacent to the drainfield.

(SEE PAGE 17C)

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# Managing livestock waste

Animal waste management is rapidly becoming a vital part of our soil and water conservation program in SCS Area V of Michigan. This 13-County area comprising the "Thumb" and Saginaw Valley area of Michigan produces nearly one third of the state's livestock and poultry products. In Clinton County, approximately four fifths of the value of farm products sold are from livestock. Problems of animal

wastes are often a by-product of this much needed production. The Area Office of the Soil Conservation Service (SCS) at Flint is providing leadership in waste management to the 13 SCS Field Offices in the "Thumb" and Saginaw Valley area. A major objective of the Area Office during the past year has been to take action to more effectively provide assistance in correcting agricultural pollution problems. Training

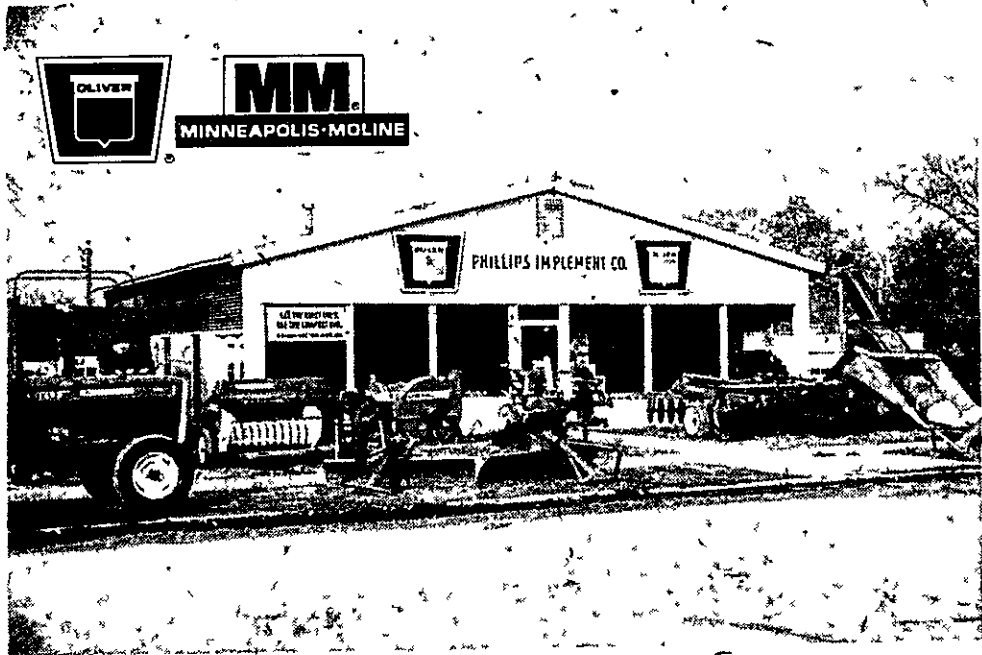
workshops for all SCS personnel in the area have been conducted to improve their ability in dealing with animal waste problems. Area and Field Office personnel are available to plan and design animal and other agricultural waste management systems. Livestock waste management is now considered in all conservation plans where there is a livestock-enterprise. Proper waste handling by

agriculture is essential to clean up and maintain a pure waste resource. SCS will help plan and install efficient agricultural waste management systems for nearly all situations. This is a

most significant contribution to the remedy of our pollution problems as we continue to be a leader in agricultural production.

## ...Vital part of program

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# Drainage goal for 1974

Many have not forgotten the difficulty we had in harvesting our crops from unusually wet fields in the fall in 1972 and in preparing the seed bed and planting our crops in the wet spring of 1973. For those who farm the heavier soils, this excess moisture re-emphasized our need for a complete drainage system to remove both the ponded water on the ground surface and the gravitational water within the root zone of our crops.

Some of our lighter soils also have drainage problems like a waterway that is very wet when seepage occurs from the adjacent hills and we get stuck in the saturated soil with our heavy equipment. In addition, we frequently have a few wet areas. Here we usually install a tile main under the waterway and run branch lines (sub mains) out to these small wet areas. We then add a few closely spaced laterals to remove the excess root zone water within these pockets. When several inches of surface water accumulates, we may need to add a surface or a blind inlet to these tile laterals.

I have felt for many years that we have not given enough attention to depressions in which surface water accumulates. It is not reasonable to expect the tile drains to do the job of removing the excess water from the root zone and this surface water too unless we design the system with surface inlets or blind inlets to quickly remove the standing water. Sometimes we can recommend a shallow Vee ditch with very gentle side slopes to take out the surface water. In planning for surface drainage it is necessary to do some "sizing up" and surveying. The Soil Conservation District staff could help with this if you are a District Cooperator. Some work has been done in the state and more is needed on moving soil into the shallow depressions to

reshape the land to a uniform slope. Considerable advance planning which includes soil borings should be done to be sure that we will not be removing too much depth or surface soil from adjoining areas of the field.

In order for agriculture to have continued good drainage there are some six requirements that must be met. These are:

1. Good Outlets
2. Good Layout
3. Good Design
4. Good Construction
5. Good Materials
6. Good Maintenance

Probably one of the most troublesome of the above is a combination of number one and six - the maintenance of our drainage outlets. These outlets may be open ditches, large diameter tile lines and pumps. The open ditch and the large tile lines quite often are our public drains and are covered by our County Drain Laws. In most counties they are under the jurisdiction of our elected County Drain Commissioner. When a drain crosses county lines the law classifies it as an inter county drain and its administration involves the County Drain Commissions of the counties involved and the State Department of Agriculture. The construction of these public drains in the "early days" was necessary to convert swamps to highly productive agricultural fields which provides food for our growing population and today also provides food for other parts of the world. There are some in our society who would now like to turn back the clock to that early period. They have tried hard to pass restrictive legislation to make it more costly and procedurally more difficult to maintain our drainage outlets, namely the open ditch. Our drainage ditches to perform their designed function of removing excess

water rapidly should be free of brush and need cleanouts of accumulated sediment to prevent obstruction of the outlets of our individual farm tile drainage systems. If prolonged obstruction of the ends of tile lines is allowed to continue these lines can accumulate enough sediment that the system fails.

The general public sometimes forgets that the drainage ditch also provides (1) an outlet for water flowing off our highways right of ways, and (2) an outlet for the storm drains of the city. The individual who builds a house in either the country or the city usually puts footing drains around the house foundation to collect and remove the excess water from the soil to an outlet, hence avoiding a personal drainage problem of water in his basement.

What I have tried to say here is that not only does the farmer need good, well maintained drainage outlets; but also, the general public. I recall a community that I visited several years ago that had an almost solidly willow choked drainage ditch going between a new subdivision and the public school yard. The presence of the brush greatly reduced the water carrying capacity of the ditch to the point where most of the water flowed along side the ditch. Where did the runoff go? - it flooded into the basements of the new homes and into the

school yard. The solution to this problem would be the removal of the brush, a cleaning out of the accumulated sediment; and, probably the ditch would have to be enlarged to remove the even more rapid runoff from

the paved streets and storm sewers.

A desirable goal for 1974 would be the cleaning out of our drainage ditches so that they can perform as designed for the rapid removal of "excess water"

## You and your disposal system

(FROM PAGE 15 C)

2. Sump water from footing drains must not be pumped into your system. This added volume of relatively clean water can severely damage your system by pumping large volumes of water into a septic tank which is designed to operate under quiescent conditions.

3. Have your septic tank pumped by a licensed pumper at least every three years. Failure to pump your tank regularly greatly increases the amounts of suspended solids discharged into your drainfield. These suspended solids accumulate in the drainfield, eventually plugging the lines or the stone surrounding these lines.

4. Ensure ponding of surface

water does not occur over your drainfield. Check to ensure your downspouts do not discharge in the area of your drainfield.

5. Attempt to reduce your water usage. A small item like a dripping faucet can add hundreds of gallons of water each month to your system. It is especially important to reduce your water usage during the wet months of the year when mother nature may add several inches of water to your drainfield over a single weekend.

We hope this article has informed the reader of some of the do's and don't's of a sewage disposal system, and given the reader a greater appreciation of the role our soils play in the operation of such a system.

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# Resources for people

By Kenneth e. Grant  
Administrator, Soil conservation Service

America has a lot of people to feed and to provide living space for; that we are able to do so well is a tribute not only to the tremendous natural resource base we have but also to the people who know how to manage it.

For nearly 20 years the people of Clinton County have been aided in their resource management efforts by the Clinton County Soil Conservation District. Through close working relationships with Lloyd Campbell and Orville Beachler of the Soil Conservation Service and with other agencies that have technical information or financial assistance to offer, the

district supervisors have brought valuable help to landowners. They also have brought valuable ideas from landowners and themselves to aid in statewide and national conservation programs.

It's a tremendous partnership that has improved the environment more and in more ways than many people appreciate. And it's a very satisfying partnership.

We will need more food and fiber than our record crops last year could provide. It's encouraging to know that conservation districts will be working to help farmers decide which acres can be brought back into cultivation without erosion hazards, and how production can be boosted in other ways.

Conservation districts also aid in many other kinds of land-

use decisions and in treating environmental problems. When Michigan's sedimentation control law takes effect, conservation districts will be helping achieve the desired reduction in sediment pollution. They also will be aiding planning groups in land-use decisions, particularly around growing metropolitan areas such as Lansing.

Conservation districts have a tremendous capability to help meet national as well as community land-use aims because they understand people and resources. With all of the state and national legislation being considered related to land use, the main emphasis still will be on local needs and interests and local ideas.

Congratulations to the Clinton County Soil Conservation District and its leaders and cooperators for outstanding work in soil and water conservation. The Soil Conservation Service looks forward to an even closer partnership and more environmental action for people in the future.

## Complete field work

By E.P. White side

Field work on a National Cooperative Soil Survey of Clinton County was completed during 1973. The Soil Conservation Service (of the U.S. Dept of Agriculture) and the Michigan Agricultural Experiment Station (represented by the Crop and Soil Sciences Department at Michigan State University) cooperated in the characterization, mapping and interpretation of the soil information for various uses. The County Board of Commissioners and the Tri-County Planning Commission also provided part of the funds needed for this resurvey of Clinton County soils.

Individuals interested in soil information on their land can obtain a copy of the new map sheets of their area, with a legend describing the soils and an interpretation sheet for each soil series indicating its limitations for various uses. These are available through the county offices of the Soil Conservation Service or the Cooperative Extension Service in St Johns. Interpretations are provided for rural, urban, engineering design and wildlife uses of the soils. The county office of the Soil Conservation Service has prepared single purpose, degree of limitation maps for various uses for each township in the county with the assistance of the Soil Conservation District. These should be very useful in township and community planning work in Clinton County.

A soil survey report including these items for the whole county is currently being prepared for publication by the Government Printing Office in Washington.

D.C. That report will contain the medium intensity soil maps just completed, on an aerial photo base, and a general soil map of the county at a scale of about 3 miles per inch, in color. It will probably be 2 or 3 years before this publication is available for distribution.

In the meantime all the soil information is available locally

as indicated above. In addition, some copies of the 1" equals 1 mile colored soil map of the county, published in 1942, are still available in the Crop and Soil Sciences Department. This intermediate scale of detail is still very useful for general planning, particularly at the county or township levels.

## Dutch thrive on fertility

There probably will always be some people who believe chemical fertilizers are bad for the soil, ecology, and downright unhealthy for the people who eat the food produced on chemically fertilized land. Dr. Billy Tucker, O.S.U. Extension Agronomist, is one of several scientists who have spoken out on this subject recently. He points out that the fertilizer industry has helped the U.S. and much of the rest of the world

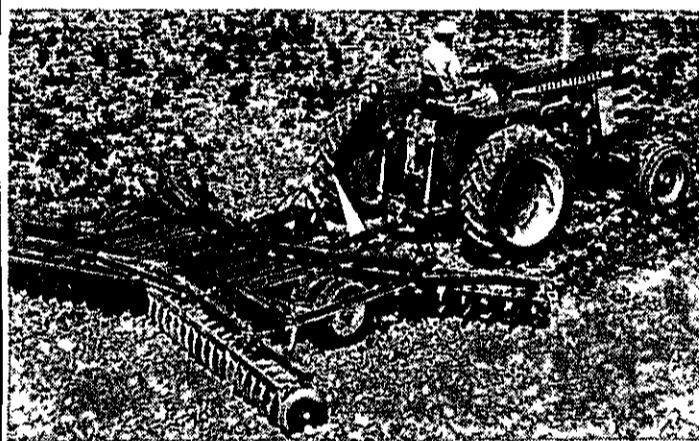
maintain high nutrition standards. Holland, he said, is proof of the value of commercial fertilizer. That country has the rate several times higher than the U.S. At the same time, people in Holland have the highest standard of public health in the world, the highest birth rate, the lowest mortality, and the life span is two years longer than that of people in the U.S. They also have the highest yield of farm products.

## Land is sustaining product

"A country can only continue long prosperous, and be truly

independent, which is sustained by agricultural intelligence, agricultural industry, and agricultural wealth. Though its commerce may be swept from the ocean — and its manufacturers perish — yet, if its soil is tilled, and well tilled, by farmers it can still be made to yield all the absolute necessities of life — it can sustain its population and its independence — and when its misfortunes abate, it can, like the trunkless roots of a recently cut-down tree, firmly braced in, and deriving nourishment from the soil, send forth a new trunk, new branches, new foliage, and new fruits — it can rear again the edifice of its manufactures, and spread again the sales of its commerce." — Jess Buehl.

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# Alfalfa improves soil

A good crop of alfalfa will surely improve your soil. The deep growing roots improve soil structure and aid water infiltration of the soil, while the nitrogen fixing ability of the legume increases the fertility of the soil.

Last winter a lot of alfalfa was winter killed and as you recall 80 percent of the winter killing occurred on April 18, 1973. The temperature went down to 24 degrees and stayed there for twenty-four hours. The alfalfa killed was mainly on areas where there was a lot of water held in the soil and on areas that were not fertilized the previous year. Fertilizing your alfalfa, especially with potash, will reduce winter killing.

Here are a few ideas of how to get and keep a good stand.

**Well drained soil** -- Alfalfa ground should be well drained -- rolling or tilled -- if high yields are desired. Alfalfa does not thrive on wet soils.

**Soil Test** -- Mainly to determine the pH. Apply lime 6 to 12 months before seeding, to bring the soil pH to 6.8 or above. Lime is slow acting and requires time to correct soil acidity. Low pH is the main reason alfalfa yields are low. Corn may grow on a soil of pH of 5.5, but alfalfa will not do well. In rotation soil should be sweetened for alfalfa. This will improve the yield of the subsequent corn crop.

**Good Seedbed** -- Minimum tillage in the spring -- usually plowing and one tillage operation before seeding -- is

adequate. In summer, a firmer seedbed is required to prevent drying.

**Inoculation** -- Inoculate seed by hand before planting to be sure the plant acts as a nitrogen factory or buy pre-inoculated seed. Cost is nominal.

**Adapted Seed** -- Use recommended varieties, preferably certified, to insure genetic quality, high germination and purity.

Only wilt resistant varieties are recommended and they should be winter hardy or moderately winter hardy.

For short-term stand Saranac, 520, Weevlchek, Iroguis, ATRA 55 and Thor are equally good.

For short-term stand Saranc, 520, Weevlchek, Iroguis, ATRA 55 and Thor are equally good.

For long-term stands, five years or more, Vernal, WL202, 525, Progress, WL215, Superstan and Titan.

**Band Seed Above Fertilizer** -- Plant in early April for best moisture conditions or late July or early August for summer seeding.

Band seeding insures shallow planting -- 1/4 to 3/4 inch. The alfalfa seed is placed on top of the ground in a band above a band of fertilizer placed 1 to 1 1/2 inches deep. This gives more vigorous and much more uniform stands than broadcast seedings since all seedlings are adequately fertilized with phosphorus, which stimulates root growth and potassium

(potash), which results in top growth and winter hardiness.

**Fertilize according to soil test.** Five tons of alfalfa generally requires about 400 to 500 pounds of 5-20-20 when seeded with oats or 0-26-26 when seeded without oats.

Press wheels or a cultipacker towed behind the band-seeder drill will improve stands an average of 10 percent in the spring and 50 to 100 percent in the summer. Press wheels are

more effective than a cultipacker, especially in the summer but both achieve coverage and soil compaction around the seed.

**Rate of Seeding** -- Ten pounds per acre -- for excellent seedbeds; band seeding with press wheels or cultipacker after seeding. Twelve pounds per acre -- for moderately good seedbeds; seeding technique not ideal.

Oat competition -- Oat

competition in spring seedings can be reduced by removing the oats early as silage, preferably in the boot stage.

**Seeding With Wheat** -- Alfalfa should not be seeded in wheat in spring or fall because of poor stands. Plowing the wheat stubble under and making a summer seeding in early August gives as good or better stands than spring seeded alfalfa.

**Fall Management** -- Summer seedings must not be grazed, clipped or disturbed during the fall of the seeding year. They need adequate time for root and top growth for food storage.

Alfalfa stands (except summer seedings) can be cut in September or October if:

1. The alfalfa is moderately winter hardy (French types) or winter hardy (vernal).

2. The alfalfa is top dressed annually.

3. The alfalfa is wilt resistant.

4. As long as the alfalfa starts to bloom in each cutting (1st, 2nd, 3rd) it will have stored enough food in the roots so it can be cut in the fall without reaching stand or hurting next year's yield.

**Preventing Winter Kill** -- Seed winter hardy wilt resistant varieties, seed on well-drained soils, fertilize annually with phosphorus and potash, especially potash, and correct the pH to 6.8.

**Herbicides** -- With clear seeded alfalfa (alfalfa seeded alone in spring) Eptam works well. You can control annual weeds with 2 quarts of Eptam worked in (incorporate) to weed problems develop after using Eptam then Butyrac 118 can be used at a rate of 3 pints per acre.

On alfalfa seeded with oats Butyrac 118 (3/4 lbs) or Premerge (3/4 lbs) can be used to control yellow rocket and broadleaved winter annuals. They must be applied after a killing frost when the alfalfa is dormant.

## Rep Stanley Powell discusses land use legislation

Probably the most significant soil conservation bill to hit the Michigan Legislature in many years is the proposed "Land Use" legislation. It has been my privilege to become quite involved in that proposal since it is being considered by the Committee on Towns and Counties on which I serve.

The idea that the public has an interest in how land is used is not new. Our zoning laws have, for years, recognized that how one man uses his property has an effect on adjacent properties and the community. But these laws have been local in nature.

Only recently has there been indication that the state as a whole has an interest in how land is used. Probably the most significant area is in agriculture where each year more of the state's good production land is lost to other development. The same thing is happening to forest lands, recreation areas and to wild life habitat.

And when we talk about legislating how land shall be used, we must recognize we are running head on into one of the most sacred inherent rights of individuals, the right to own property and use it as he sees fit.

Thus, when we put together a land use bill, it seems to me we have to establish some basic principles and guidelines.

For instance, any bill must keep the decision making power as close to home as possible. It must recognize those inherent property rights and involve the state only in those areas of statewide concern. It must define these areas of state interest but assure the maximum input from the local people in determining how they should be used.

It should provide for "getting the state's own house in order", since there is indication that the state itself, through location of highways, governmental buildings and institutions can be one of the biggest violators of sound land use policies.

But, probably the most important requirement for sound land use legislation must be a

system of incentives which will make people want to use their land in the best possible manner. These may come through purchase of some lands or rights to lands, or through a tax treatment which would recognize and encourage that kind of use, but it will have to come.

It is my belief we are getting close to the kind of bill I have outlined. One of the valuable contributions has come from Soil Conservation organizations in the form of soil data and experience of having worked in this field for a good many years.

Within the next few weeks we expect to have the bill ready for discussion by the entire House of Representatives. I will be glad to send copies to any interested persons and hope they would give me their thoughts in return.

CONGRATULATIONS  
CLINTON  
SOIL  
CONSERVATION  
CARSON CITY FARM SERVICE



JOHN DEERE

NEW-IDEA

Sales -- Service -- Parts  
WM. "HUGH" ROBERTS - Owner

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Phone 584-3550 - Carson City

NEW HOLLAND

14" x 18"

HAYLINER® BALER  
with BALE THROWER

Two days' hay baling and loading in one day with a New Holland bale thrower on your baler.



BUY Where you can count on all 3

AUTHORIZED  
NEW HOLLAND  
SALES • PARTS  
SERVICE

Come in . . . we'll show you why the "273" is the most popular baler ever built in the low-price field. It has an overall ruggedness that gives you long, dependable service.

Convenient Terms To Fit Your Budget!

S&amp;H FARMS

ST. JOHNS

N. U.S. 27 at FRENCH RD.

PH. 224-4661



IN A TIME OF OUR LIVES WHERE THE WORD "CONSERVATION" MEANS SO MUCH TO US ALL, LET US PAY TRIBUTE TO THOSE WHO HAVE WORKED SO DILIGENTLY TO PRESERVE THE SOIL. IT IS THEIR SOIL-SAVING PRACTICES THAT WILL PROTECT OUR FUTURE LIVELIHOODS.

**"Our Congratulations To The  
Clinton County Soil Conservation  
District For A Job Well Done."**

*The wide-awake bank makes it all so easy.*

**CLINTON NATIONAL BANK**

and Trust Company

Member FDIC



Main Office: St. Johns

• Bath • Elsie • Eureka • Fowler • Hubbardston • Laingsburg • Maple Rapids • Valley Farms • Wacousta



LET KROGER

# Mini-Mizer

YOUR FOOD COST

Supplement To: Battle Creek Enquirer & News, Buchanan Hi Lites, Benton Harbor News Palladium Herald Press, Lansing State Journal, St. Johns Clinton County News, Grand Rapids Press, Muskegon Chronicle, Alma Reminder, Cheboygan Shoppers Fair, Traverse City Record Eagle, Mt. Pleasant Daily Times News, Petoskey Super Shopper

Copyright 1974. The Kroger Co. We Reserve The Right To Limit Quantities, Prices and Coupons Good Monday, January 28 thru Sunday, February 3, 1974.

Kroger Grade A Fresh

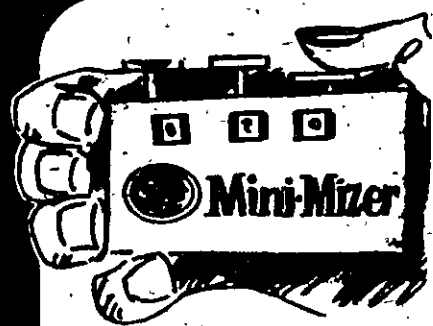
## Large Eggs

# 75¢

Dozen

Save Up To 18¢

With Coupon and \$5.00 Purchase



### The Mini-Mizer Can Prove It.

### See For Yourself.

Make the Mini-Mizer test. Total up your shopping list at Kroger then do the same at any other supermarket. We expect Kroger to save you money.

\*Every week, Kroger offers you many low-priced weekly specials on items our skilled buyers have been able to get for us at bargain prices...plus everyday X-tra Low discount prices.

\*And every week, Kroger's Advertisements feature a group of Mini-Mizer Coupons you can redeem for exceptional savings.

Kroger Grade A Fresh

## Large Eggs

# 75¢

Doz

With coupon & \$5.00 purchase excluding beer, wine, cigarettes. Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

KROGER MINI-MIZER COUPON

Valuable Offer Inside!  
*Fine China*  
at Remarkable Savings!

Valuable Offer Inside!  
*Charlie Brown Dictionary*

## SAVE UP TO

# \$11.24

WITH VALUABLE MINI-MIZER COUPONS IN THIS WEEK'S AD!



Refreshing

**Pepsi Cola**

8  
16-Fl Oz Btls

**68¢**

Plus Deposit

With Coupon and \$5.00 Purchase

Save Up To 51¢

Liquid

**Joy Detergent**

32-Fl Oz Btl

**48¢**

With Coupon and \$5.00 Purchase

Save Up To 31¢

MINI-MIZER COUPON

Refreshing

**Pepsi Cola**

8  
16-Fl Oz Btls

**68¢**

Plus Deposit

With coupon & \$5.00 purchase, excluding beer, wine, cigarettes. Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

SAVE UP TO 51¢

Detergent

**Joy Liquid**

32-Fl Oz Btl

**48¢**

Save Up To 31¢

With coupon & \$5.00 purchase excluding beer, wine, cigarettes. Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

Crispy

**Kroger Saltines** ..... 3 1-Lb Pkgs \$1

Sliced

**Stokely Beets** ..... 4 16-Oz Wt Cans 88¢

Tasti-D-Lite

**Whole Kernel Corn** ..... 4 12 Oz Wt Cans 88¢

Syrup Packed

**Kroger Pears** ..... 3 16-Oz Wt Cans \$1

Frozen

**Kroger Orange Juice** ... 16-Oz Wt Cans 53¢

Rich's

**Coffee Rich** ..... 32-Oz Wt Ctn 44¢

**Nabisco**

**Triscuit Crackers**

9.5 Oz Pkg

**49¢**

**Kroger Biscuits** ..... 15-Ct Pkg 14¢

Kroger

**Sour Cream** ..... 1-Lb Ctn 58¢

Country Morning

**Kellogg's Cereal** ..... 16-Oz Wt Pkg 77¢

Sweet

**Hillcrest Pickles** ..... 32-Oz Wt Jar 58¢

Streusel

**Pillsbury Cake Mix** ..... 28½ Oz Pkg 77¢

Air Deodorizer

**Listerol** ..... 7-Oz Can 66¢

Kroger

**Cottage Cheese**

12-Oz Wt Ctn

**44¢**

Save Up To 7¢

3 Varieties Kroger

**Chicken Soups**

**588¢**

10½-Oz Wt Cans

Strawberry

**Smuckers Jam**

**288¢**

Lb Jar

New Fangled Potato Chips

**Pringles**

9 Oz Twin Pak

**68¢**

**MINI-MIZE YOUR FOOD COSTS AT KROGER**

Country Club Assorted Flavors

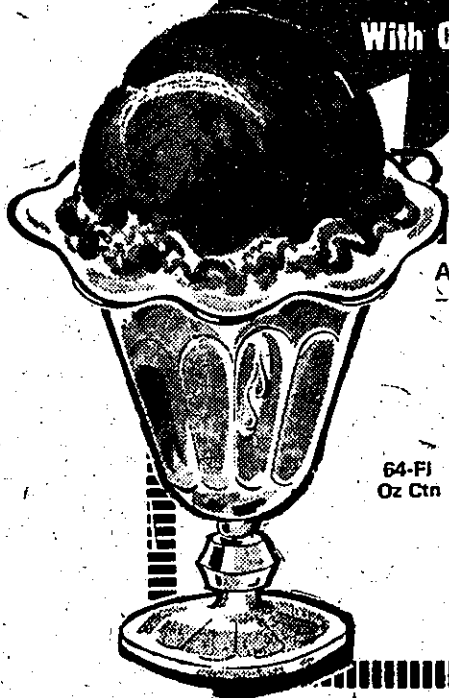
**Ice Cream**

64-Fl  
Oz  
Ctn

**58¢**

Save  
Up To  
31¢

With Coupon and \$5.00 Purchase

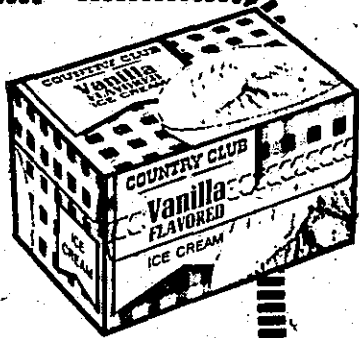


Assorted Flavors Country Club

**Ice Cream**

64-Fl  
Oz Ctn

**58¢**



With coupon & \$5.00 purchase excluding beer, wine, cigarettes. Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

Kroger

**Mel-O-Soft Bread**

3  
20-Oz  
Wt  
Lvs

**88¢**

Save  
Up To  
17¢

Hart

**Green Beans**

**3 \$1**  
29-Oz  
Wt Cans

Macaroni & Cheese

**Kroger Dinners**

**4 88¢**  
7 1/2-Oz  
Wt Boxes

Royal Viking

**Danish Pastry**

**69¢**  
Pkg Save 10¢ Pkg

Breck \$1.09 Size

**Hair Spray**

**59¢**  
13-Oz  
Wt Can

Shampoo or Creme Rinse

**Breck Sale**

15-Oz  
Wt  
Btl

**99¢**

Up To \$2.25 Value

MINI-MIZER COUPON

**10¢ OFF**  
one bag 16-oz

**Spotlight Bean Coffee**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**10¢ OFF**  
one 24-fl oz btl

**Embassy Pancake Syrup**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**10¢ OFF**

the regular price of one 1-lb pkg (2 8-oz) tubs

**Imperial Soft Margarine**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**10¢ OFF**

one package Freezer Pleezer Twin Pops, Fudge Bars, or

**Ice Milk Bars**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**25¢ OFF**  
one 28-oz btl

**Ajax Liquid Cleaner**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**19¢ OFF**  
any two bars

**P-300 Deodorant Soap**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**25¢ OFF**

with purchase of \$3.00 or more

**Health & Beauty Aids**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**16¢ OFF**  
any 4 cans Heinz

**Great American Soups**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

MINI-MIZER COUPON

**8¢ OFF**

two - 200-ct pkgs

**Puffs Facial Tissues**

Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

**MINI-MIZE YOUR FOOD COSTS AT KROGER**



Serve-N-Save  
**Fish Sticks**  
8-Oz Pkg **39¢**

Mixed  
**Fryer Parts**  
Includes: 3 Forequarters with Wing & Back Attached, 3 Hindquarters with Back Attached, 3 Wings, 3 Pkgs Giblets  
Lb **59¢**

**SAVE 31¢ LB**

**PORK CHOP SALE!**

Quarter Pork Loin Sliced Into <b>Pork Chops</b> Lb <b>108¢</b>	Rib <b>Center Cut Pork Chops</b> Lb <b>138¢</b>	Loin <b>Center Cut Pork Chops</b> Lb <b>148¢</b>
---	---	--

**All Meat Wieners**

12-Oz Wt Pkg **69¢** **Save 26¢ Pkg**

U.S. Gov't. Inspected

**Young Hen Turkeys**

**Save 30¢ Lb**

10-Lbs and Up  
**59¢**



**Fresh Hamburger**

**Save 21¢ Lb**

5-Lb Chub  
**88¢**



Kroger <b>Burger-Pro Meat Loaf</b> 3-Lbs or More Lb <b>84¢</b>	Extra Lean <b>Fresh Hamburg</b> 3-Lbs or More Lb <b>119¢</b>	Fresh <b>Ground Chuck</b> Lb <b>139¢</b>	Fresh <b>Ground Round</b> Lb <b>159¢</b>
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Herrud Regular or Hot  
**Pork Roll Sausage**.....Lb **89¢**

Oscar Mayer  
**Sliced Bacon**.....Lb **1.59**

Breasts-Thighs-Drums  
**Best-O-Fryers**.....Lb **89¢**

Oscar Mayer  
**Bologna**.....12-Oz Wt Pkg **1.09**

Eckrich or Oscar Mayer All Meat or  
**All Beef Franks**.....Lb **1.29**

Herrud Smoked or  
**Polish Sausage**.....Lb **1.39**

Bulk All Meat  
**Bologna**  
Lb **89¢**

Kroger All Meat Regular, Thick or  
**Garlic Bologna**.....12-Oz Wt Pkg **88¢**

Eckrich Smoked Sausage, Smorgas Pak or Regular or  
**Thick Sliced Bologna**.....Lb **1.59**

Herrud Regular or Garlic  
**Ring Bologna**.....Lb **1.29**

Random Weight  
**Ocean Perch**.....Lb **89¢**

Pre-Cooked Perch or  
**Perch or Sandwich Squares**.....Lb **99¢**

Fres-Shore Shrimp Dinner 7-Oz or  
**Seafood Platter**.....9-Oz Wt Pkg **79¢**

The People's Choice  
U.S. Govt Graded Choice

**Chuck Steak**

Lb **119¢** **Save 30¢ Lb**

Kwick Krisp  
**Sliced Bacon**  
12-Oz Wt Pkg **99¢** **Save 10¢ Pkg**

**People's Choice**  
U.S. GOV'T GRADED CHOICE BEEF

You asked for it...Kroger's got it!

**People's Choice**  
U.S. GOV'T GRADED CHOICE BEEF

Boneless  
**Turbot Fillet**  
Lb **79¢** **Save 10¢ Lb**

Whole  
**Semi-Boneless Ham**

Lb **98¢** **Save 31¢ Lb**

KROGER MINI-MIZER COUPON

**\$5.00 OFF**  
the purchase of any Whole  
**Boneless Rib Eye**  
9 to 11-Lb Avg  
Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

KROGER MINI-MIZER COUPON

**\$1.00 OFF**  
the purchase of any  
8-lb size  
**Canned Ham**  
Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

KROGER MINI-MIZER COUPON

**\$1.00 OFF**  
the purchase of any  
3-lb or larger.  
**Boston Roll Roast**  
Limit one coupon per customer. Prices good thru Sunday, February 3. Subject to applicable state and local taxes.

**MINI-MIZE YOUR MEAT COSTS AT KROGER**

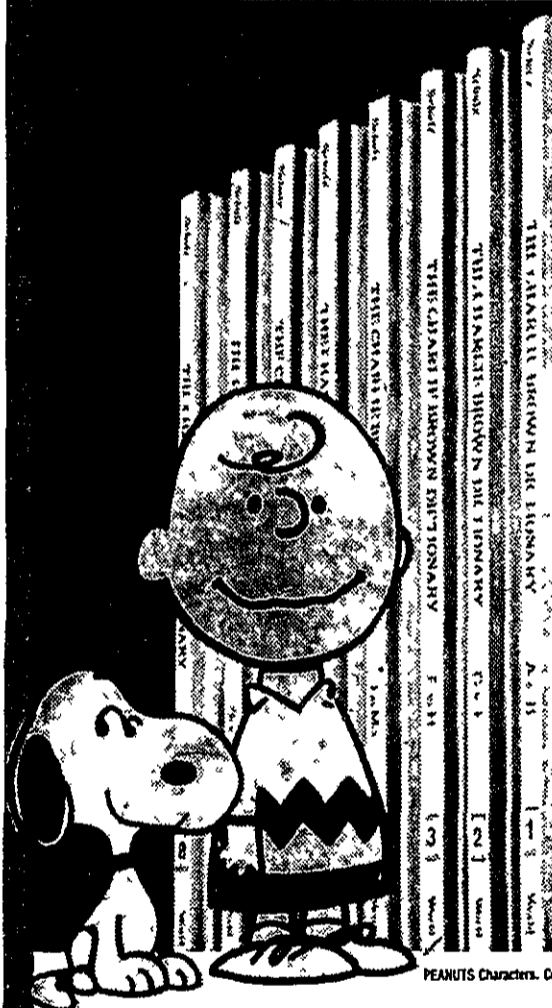
# The Charlie Brown Dictionary

**SPECIAL OFFER**

**VOLUME ONE  
NOW ON  
SALE....**

**49¢**

**VOLUMES 2 thru 8 - \$1.29 each**



## The Charlie Brown Dictionary

by Charles M. Schulz

VOLUME 1

THE 8 VOLUME SET CONTAINS OVER 600 PICTURES IN FULL COLOR • 2500 WORDS DEFINED • 50 U.S. MAPS

Based on the Random Dictionary by Wendell W. Wright, Dean of the School of Education, Indiana University



TO



**New and delightful.**

**Now it's fun to learn words!**

\*Here is a new and appealing way to help children learn words and their meanings. The Charlie Brown Dictionary is no ordinary work but a fresh, happy, educationally sound collection of words and definitions.

\*Children love the over 600 Charles M. Schulz drawings of Charlie Brown and the Peanuts gang that brighten the pages. They respond to the definitions that are easy to read and understand.

\*Charlie Brown himself, Snoopy wearing his dish as a hat, Linus with his security blanket, Lucy giving advice, all help to

motivate children to learn about the over 2,500 carefully chosen words defined in these volumes.

\*In addition there are 53 pages of world and state maps and facts to make geography come alive.

\*The Charlie Brown Dictionary uses a new educational technique developed by Wendell W. Wright, Ph.D., Dean of the School of Education, University of Indiana. The result is a true children's classic of eight colorful, hard cover volumes that belong in every home.

**START  
YOUR  
SET  
TODAY!**

Here's how you can have this complete set of



# Fine China

Full-sized 10" Dinner Plate

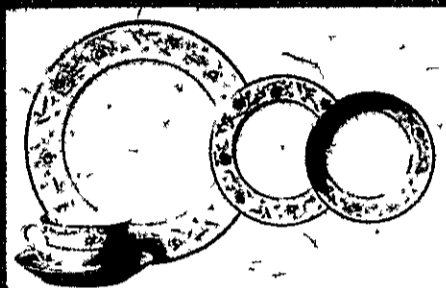
only **49¢** This Week

at remarkable savings

This plate will start your collection of fine, translucent china. Just put us on your shopping list for the featured "Piece-a-Week." Pick up one piece with a \$3.00 purchase, two with a \$6.00 purchase, etc. Then follow our schedule. No coupon! No limit!

THIS CYCLE WILL BE REPEATED FOR ANOTHER TEN WEEKS

DATE	"PIECE-A-WEEK"	PRICE
JAN. 28 THRU FEB. 3	10" Dinner Plate	*49¢
FEB. 4 THRU FEB. 10	Bread and Butter	*49¢
FEB. 11 THRU FEB. 17	Tea Cup	*49¢
FEB. 18 THRU FEB. 24	Saucer	*49¢
FEB. 25 THRU MARCH 3	Dessert Dish	*49¢



English Garden Pattern



Blossom  
670



All these Completer pieces available in either pattern at low prices.

## Choose from two classic patterns

**Cherry Blossom**  
lovely pink sprays on a contemporary coupe shape.

**English Garden**  
delicate blue floral pattern borders the traditional rim shape.

### Open Stock Guaranteed

That's right! Open stock on both English Garden and Cherry Blossom will continue to be available for a minimum of three years. No replacement worries! And that's just part of the beauty of collecting this fine imported china now!



COMPLETER "FEATURE-OF-THE-WEEK"

JANUARY 28 THRU MAY 11

This coupon worth **\$1.60** TOWARD THE PURCHASE OF

### FOUR SOUP DISHES

**\$5.09** PRICE  
**\$1.60** COUPON VALUE  
**\$3.49** WITH COUPON

CHOICE OF PATTERN



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Kroger also has these "Summertime Favorites" Fresh Red Ripe Watermelon, Honeydews, Mangoes, Papayas, & Avocados



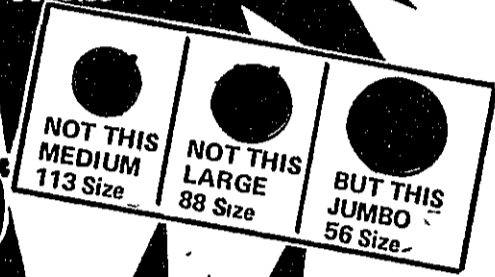
From the Sunkist Growers California Seedless Navel Oranges

1299¢

For Jumbo 56 Size

Low in Calories Fresh Eggplant

29¢



Fresh Red Ripe Strawberries

69¢

Washington State Golden or Red Delicious Apples

4 Lbs \$1

Extra Fancy!

Green Tender

Fresh Broccoli.....Bunch 39¢

Salad Favorites - Escarole, Endive or

Romaine Lettuce.....Head 25¢

Indian River Marsh Seedless

White Grapefruit.....4 For \$1

Jumbo 23's

U.S. No. 1

Red Potatoes

Lb Bag

Ripe Ready to Eat

Fresh Pineapple

Ea

Great with Steaks Fresh

White Mushrooms

Lb

MINI-MIZE YOUR FOOD COSTS AT KROGER