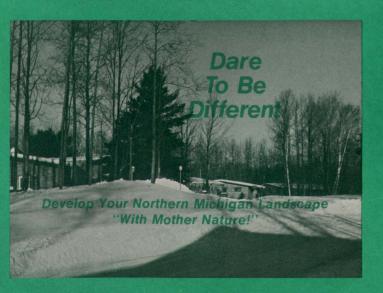
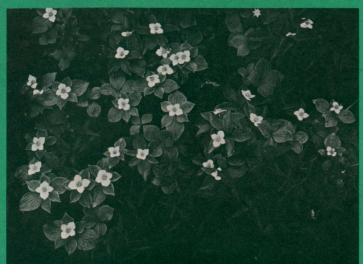


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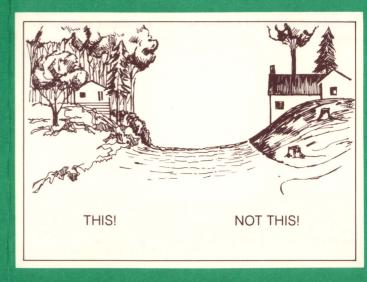










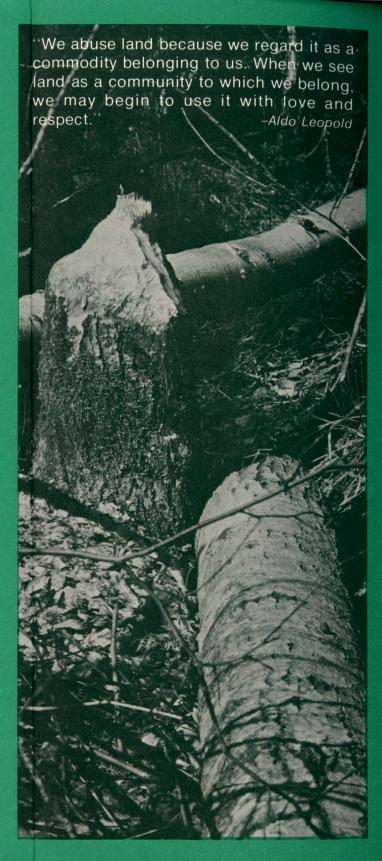










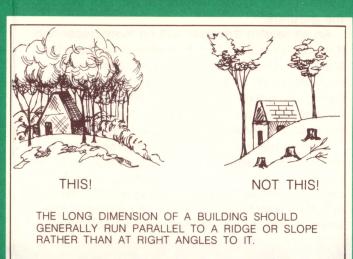


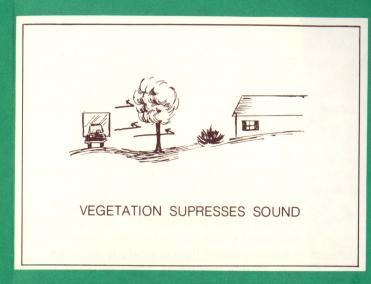




















SYMPTOM OF THREATENING AIR NO DISCOLORATION POLLUTION

FOLIAGE CAN INDICATE SIGNS OF THREATENING AIR POLLUTION

structed out of natural materials found on the site. A trained naturalist can provide hints on how to encourage wildlife without permitting their presence to become overly destructive or annoying at a later time.

What is Society's Moral Obligation to Our Dwindling Natural Resource Areas?

Recent crises in the environment—energy, and now the expected crisis in food—have raised serious questions about how wastefully Americans are using up earthly resources. Many of these resources are nonrenewable: once they're gone, there won't be any more. Our next step as a society must be to conserve our remaining resources in every way possible. Some ways to do this are:

- To disturb raw land as little as possible when adapting it for human use so it retains its quality of production, restores air and water, and remains beautiful.
- To engage all possible natural forces, such as vegetation, wind, seasonal temperature, precipitation, solar energy and otherwise unused forces to reduce our drain on rapidly diminishing fossil fuel supplies.
- To curtail nonessential cultivation of the earth's surface to save fuel and to permit revegetation of those areas for better air and water and reduction of pollution.
- To reorient the so-called "demands" of society for across-the-board electrification, air conditioning, unjustifiable travel, unrestricted commercialism and general disregard for conservation.
- To reaffirm that individual efforts of people do lead to a cumulative and valuable societal effort, enormously effective in turning the tide against environmental decline and lessening demands on reserves of natural resources.

4

Bracken Fern, Arbutus, Kinnikinnick, etc. Many Sumacs, Dogwoods, (bush types) and Elderberries grow abundantly. These shrubs are generally taller than the low ground covers, but they make good cover for wildlife. They also protect the soil against erosion and provide a bonus of riotous fall color.

Structures added to the natural landscape should be designed to fit the contours of the land to avoid clearing and bulldozing. The long dimension of a building should generally run parallel to a ridge or slope rather than at right angles to it. This produces a better "esthetic fit" and minimizes high building peaks and heavy exposed foundation walls. Stock plans may be a good starting point, but simple changes will often provide better indoor-outdoor relationships and an efficient, livable arrangement of space. Porches and patios can best be utilized if they are screened to keep insects out. These comfortable outdoor rooms are most useful if they're built as a planned part of the living unit rather than added on as an afterthought. Porches and patios are more effective when they allow entrance and exit at one corner and do not act as halls or access to other parts of the home.

Driveways help establish the theme of the whole grounds. Straight drives lend an air of formality to your grounds. They are also a space saving route to the garage. A driveway that flows through a less formal and more natural landscape in easy curves better accommodates movement through the grounds.

An all-season driveway will be more dependable if its center is 6 in. to 1 ft. higher than the edges. Making such provision for drainage is essential on soils which retain natural rainfall indefinitely. Sandy and gravelly soils, on the other hand, accept natural water quickly and grading is seldom necessary. (Moral: Know your soil type!)

When adapting natural areas to man's use, don't neglect native wildlife. Wild animals play an important role in any area's ecology. Many families enjoy building, stocking and observing wildlife feeders and then watching the habits and antics of the animals. These accessories, too, may best be con-

3

Give Yourself Time to Adjust to Natural Landscape Advantages

Interest in nature's constantly changing details can be a worthy substitute for present day gadgetry. Though some comfort-producing conveniences such as lawn furniture, screen fences and garden ornaments may be used tastefully, the ecologically sound use of natural materials such as ledge rock, pressure treated wood for decks and naturally hollowed stones to replace commercial bird baths lends itself particularly well to a north woods setting.

Many seasoned backwoods residents say they became acquainted with the advantages of a natural landscape very slowly. Now, after years of enjoyment, they would *not* be willing to exchange the low maintenance advantages of a natural landscape for that of a manicured lawn and a work-filled flower garden. Each of these extremes has its place in our society. Your choice should be an outgrowth of the needs of your family and home site potential. Live with your newly chosen home site several seasons before you make drastic changes. There will be plenty of time to consider alterations as you experience each season.

Adapt Your Environment Only When Absolutely Necessary—It's Less Costly That Way!

If a lawn seems essential to your family, establish it where it could be made larger or smaller as your needs change. Design it as a connection between different areas of the lot—public, private, service—or as a transition area to your natural woodland. A small lawn has a very distinct advantage if, because of the energy shortage, we have to give up the power mower.

Consider local ground cover plants as possible lawn substitutes if they appear uniform and are not likely to become weedy or ridden with pests.

Common ground covers suitable as a replacement for lawns in northern Michigan are: Horizontal Juniper, Sweetfern, Dwarf Bushhoneysuckle, Mosses, Periwinkle, Bearberry, Huckleberry,



In the past fifty years, a natural balance between man and nature has developed in northern Michigan. That balance is threatened, however, by intrusions into the forest. Homes designed for city living do not fit well in a backwoods setting. They conflict with northern forests and their delicate ecology. This discord can be avoided if you keep natural harmony in mind as you prepare to build your home, whether for vacations or year-round use.

Before building be sure to check local land-use regulations. They may seem like just more bothersome restrictions—but remember, you have a part in protecting wholesome area characteristics.

Before you begin to develop your land, take a careful inventory of what makes it attractive and useful. If its appeal is that it's wooded, reject the temptation to clear away its natural endowment of trees. A radically cleared piece of forest land is very different from a city lot without vegetation. The raw land has not been altered to conform to intensive usage. Underground drains have not been installed, utilities are not nearby, its future use is not one of consistent occupancy.

Rather than bulldozing the land clear, consider leaving it for the most part untouched, modifying the vegetation only as much as necessary to construct your home or vacation cottage and a path in and out.

Why save the vegetation? Because it:

- helps keep your home cooler in summer, warmer in winter
- reduces wind velocity
- suppresses sound
- filters out dust and dissipates odors
- provides wildlife habitat and thereby enjoyment for people
- balances carbon dioxide and oxygen
- its foliage can indicate signs of threatening air pollution
- enhances esthetic qualities.

If you're thinking about developing a piece of land in northern Michigan, this folder has some suggestions for you. First, get to know the area before you make any large-scale commitments. Look into the economic conditions and figure out how jobs, the availability and cost of utilities, roads and road maintenance, soils, vegetative cover and water tables will affect your plans. Seemingly minor decisions about any of these can become vital—all affect your landscape.

Pros and Cons of Northern Michigan

Northern Michigan offers its share of both opportunities and hardships. Before you decide to move there, you'd better get acquainted with both sides of the coin. Recreation opportunities abound, and each season has its own appeal to the sportsman and sightseer. But, if you have never experienced a long, cold winter in the north, you should consider talking to those who have before you make a big move.

The pace of living in a small northern community may be considerably slower than that in a larger city. Some results may include greater opportunities to become involved in local affairs, smaller schools and fewer social problems. Others not so pleasant may include limited job opportunities, lower pay, higher costs and less diverse school curriculums. On the positive side is northern Michigan's natural beauty. Many people willingly endure the inconveniences of the north to benefit from the clean air and crystal clear waters.

Much of the land is state-owned and is not likely to be spoiled by people for many years. Private land owners can also help preserve the natural beauty if they develop their land to harmonize with the natural surroundings and to preserve the features they moved north to find.

Northern Michigan's forest lands appeal to most people, with an interesting mix of hardwoods, conifers and smaller plants as well as animals. Flowering and fruiting shrubs abound, and wildflowers produce a constant parade of color and form, from spring through autumn.

Getting Started

As you develop your raw land, you are in a unique position to achieve some of the goals discussed in this folder. Consider the following suggestions:

- (a) Small lawns can be hand mowed and other areas returned to natural conditions with local plants providing handsome vegetative cover.
- (b) Deciduous trees can be planted to provide shade in summer and to permit sun to penetrate in winter.
- (c) Evergreen trees may be used for attractive windbreaks and wind screens as well as wood products.
- (d) Landscape materials, including indigenous (native) plants, can be selected for food production as well as landscape effect.
- (e) Natural landscapes can be selected to provide food and cover for wildlife.
- (f) You can choose to limit soil disturbances for drains, sanitary systems and utilities and preserve the natural contours of the land.

Aldo Leopold, author of A Sand County Almanac, expresses it this way—"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

If these ideas appeal to you, contact your local County Extension office for further recommendations and assistance.

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