

I. Introduction



A Sixth Grader

Spells Out Our

'Dependetses' on

the Land

By Merrill L. Petoskey

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More years ago than one likes to remember, my son John, then a sixth grader, and I were returning home from a business trip. I had been helping with a conservation school for teachers. John had attended every minute of the two-day session.

John had quite a yen for notebooks. In fact he had, for this trip, a new shorthand notebook my secretary had given him. During the sessions he had been doing a lot of writing and, quite obviously to me, more than some of the teachers. During one of the long periods of silence in our ride, I decided to quiz him on what he might have learned. "Just what did you get out of the session, John?"

Without a moment's hesitation he wrote, "Man is dependetses on the land." Sparkling, and to the point! Although the spelling was wrong, his idea was right. I could only hope that the teachers had drawn the same conclusion: Our roots are in the soil.

Too often, many of us—particularly those who live in large cities—forget that we, human beings, depend on the land and on the many things that make up the land.

The rest of the story is John's as he told me what he had learned:

"Man is an animal, just like a fox, a lion or a chimpanzee. Men are luckier than most animals, because they can control all the other animals, but man is on this earth for the same reason they are. The reason is to have young, so that there will always

be men on the earth. In order to raise children, man needs only food and a place to live and doesn't really need a fancy bicycle, a pretty doll, or a color TV.

"People come in many different colors. Brown people come from the islands and Mideast, white people from Europe, yellow people from the Orient, black people from Africa. Color does not make people different. They are very much like each other and are really all animals, with the three basic needs of food, shelter and reproduction. People are more intelligent than all of the rest of the animals, except themselves.

Community Relationship

"Animals and plants may be grouped in two different ways. One way is by the family relationship, the other, the community relationship. This latter grouping, as communities, is the most interesting way to understand plants, animals, and their interrelationships.

"Two Greek words are used to make a word which describes the grouping of living things together. The two words are *oikos* meaning house, and *logos* meaning reason. Together they make the roots that form the word 'ecology' which, broadly interpreted, means the 'household of nature.' There is a more modern definition of ecology—'The study of living things and their environment'. Plants and animals in this association are known as 'communities.'



John Petoskey about the time he was a sixth grader and impressed Dad with his quick

grasp of natural resources fundamentals, if not his spelling.

"An interesting thing about these living communities is that they are always changing. The change is often slow and not easily seen. The process by which a plant community gradually changes so that it is recognized as a different community is called 'succession.'

"Plant communities differ in various parts of our country and the world. They differ primarily because of climate, moisture, latitude, elevation, and soil type.

"There are a variety of stages in this process which is called 'plant succession.' Nature, when left alone, and barring the violence of nature—for example, fire, floods or other disasters—is very orderly in the steps of progression in plant succession.

"This order continues only until people enter the picture. We are able to change the plant community, sometimes good, sometimes bad. If you have ever planted a garden or have seen a farmer's field, you have seen an

example of upsetting or changing the order of plant succession.

The Biotic Pyramid

“These plant communities are capable of supporting lots of different kinds of plants and animals. The plants are the base that support everything else. Animals called herbivores eat the plants, and animals called carnivores eat the herbivores. This is known as the ‘biotic pyramid’ with people at the top.

“Plant communities can support certain numbers of animals without being destroyed. This is called ‘carrying capacity.’ Some animals, like deer, can multiply very rapidly and can destroy their food supply, causing many to starve. I wonder if people will ever do that, exceed the carrying capacity of the Earth.”

My son and I rode the rest of the way in silence. But I did some deep thinking. The boy had a good understanding of the biotic community relationship, and had begun to think in terms of succession, carrying capacity, and the like. He had begun to realize that he was only a small part of this wonderful world of nature. The idea of sharing it with others, with reason and understanding, was there. Nurtured, it could grow to help solve the frightening problems of our times, overpopulation, pollution, the mad clamor to make money despite what happens to the environment. I wonder—will there ever be enough people that really understand?

We have organized this book beginning with the basic resources of soil and water and the plant and animal communities indigenous thereon, range, forests, agricultural lands, and other unique lands. All support varied and different communities. With the different plant communities come different forms of wildlife.

Understanding these “community” relationships can help all of us to realize why a bird like the wild turkey is a creature of the mature forest, the antelope is an inhabitant of the western rangelands, and the quality and quantity of soil and water are essential to our future existence.

This is what the book is all about. We are trying to inform our readers of the kinds of plant and animal communities in North America and what these communities mean to all of us in terms of food, fiber, wildlife, all the good things in life, and some of the bad. If we can create a better understanding of the community relationship, and the realization that we—as human beings—are a part of it, this book will be a success.

That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is fact long known, but latterly often forgotten.

—Aldo Leopold, *A Sand County Almanac*, 1948