

THE ECONOMICS OF FORESTRY IN NEW ENGLAND
MOTIVATIONS OF LANDOWNERS IN ADOPTING DIFFERENT MANAGEMENT PRACTICES

Ernest M. Gould, Jr., Research Associate
Harvard Forest

I would like to say a few more words to help set the stage for a discussion of the research that we are carrying on in the field of forest economics. This research is designed to help the owners and operators of New England's forest resource reach management decisions during the "transition period" that Dr. Brinser has described.

I suppose it is a truism to say that what we can do with our forests in the future depends largely on what we have done with them in the past, and that the resources we have today constitute a point of departure for any plans for future use. We have to decide what growing stock we have to work with and how it came to be in its present condition. We also must see what kind of operating units we have in order to foresee the things we can do in the future.

At the Harvard Forest, in the Federal Forest Service, and elsewhere we are doing a good deal of work to determine the characteristics of our present growing stock and to find out how it reached the condition it is in today. One thing that we have found out is that we have a very definite natural succession of forest growth in this region. You are probably all familiar with the fact that old fields in this area frequently seed in to white pine, and that on the moister soils this stand is followed by hardwoods.

I was at a meeting yesterday where the importance of the white pine weevil was discussed. It was stated that we have pretty well worked through the white pine phase of this old-field succession, and we shall not have to worry too much about it from now on. However, I looked over some figures last night that indicate, at least to me, that nearly half of our abandoned fields went out of agricultural use since 1920. As a minimum figure, somewhere in the vicinity of 8 million acres have been abandoned. About 4 million of these acres will have been out of agricultural use for 40 to 50 years sometime after 1960. Any white pine on these acres will then be reaching merchantable size, according to present standards. This makes me believe that we must still think about the old-field white pine succession -- it will continue to be an important part of our forest resource for some time to come.

But I am not going to dwell on the present condition of our forest growing stock. I am more interested in the problems of the owners of the operating units that contain forest land here in New England: what are the characteristics of these units, and what do the people who own the land want to do with it? We do not know as much about these operating units as we should like, but we do have a lot of information that is helpful.

We know that only about 5 percent of the woodland in New England is owned by governments -- Federal, State or local -- most of it concentrated in the White and Green Mountain National Forests. Another 36 percent of the woodland is in large blocks, privately owned. (In the Forest Survey these

were classified as medium or large holdings in ownerships of 5,000 acres or more.) Government holdings and these large private ownerships -- there are only about 134 of them, mostly industrial -- I suspect, are fairly well able to take care of their own salvation. They can figure out for themselves how to use their forest resources to the greatest advantage.

But that leaves something like 59 percent of our woodland -- much of which is potentially our most productive and accessible land -- in the hands of people with small holdings. There are almost 2½ million of these people owning woodlands in blocks of less than 5,000 acres. I think that simply the large number and small size of these holdings will have severe repercussions on what we can do in the line of forest management.

About 21 percent of our woodland, the Census says, is owned as parts of farms, and the balance of 38 percent is in small non-farm ownerships. Actually, if you look closely at these figures, it seems reasonable to reduce farm ownership to somewhere in the vicinity of 11 or 12 percent of our woodland. This is because of the peculiar definition of a farm used by the Census. Thus we have about 11 or 12 percent of the woodland held in small commercial farm ownerships and about 47 percent in small non-farm holdings. These facts will also affect what we can do with our woodlands, since these owners are in vastly different positions when it comes to forest management.

The farmer is probably most favorably placed in this group of owners with small holdings. Ordinarily he lives on or near his land. He also usually has a certain amount of labor and equipment available for woods work, and is more or less familiar with local forest product markets. Another important factor is that he is used to working with nature to grow things -- he is likely to have a "feel" for natural production.

The non-farm owner is in a far less favorable position. Many of them are absentee owners, although some may have part-time or residence farms. Even these people, however, are seldom equipped with the labor, capital, and knowledge needed to work their forest lands.

Using as a base this knowledge about the kinds of operating units that contain our woodland, we have tried to find out more concerning what people expect to gain from their holdings. Why do they acquire their land in the first place? A few years ago Dr. Barraclough made a study of small forest holdings here in New England. He added to our available information about sizes of ownerships; but what he was after primarily was an answer to the questions of: "Who are these people?" "What do they do for a living?" "Why did they get their land and what do they expect to get out of it?"

When Dr. Barraclough first talked with people about his project he got a very simple answer to the question of how many reasons are there for owning forest land. "There are just as many reasons as there are people". But after sampling the owners in 23 New England towns he was able to correct this guess. He found that there are more reasons than there are owners!

It seems that there is a lot of duplication; most people have more than one reason for owning forest land. In fact, a fair assessment of the situation

seems to be that owners have a bundle of motives for holding land. Also, the reasons that make up this bundle are different between individuals and will change over time for any particular person.

In his sample towns Dr. Barraclough found about 25 percent of the small holdings were owned by people connected with some wood-using industry, such as a sawmill. They bought the land simply for what they could cut from it and put through their mills. Another group bought woodland for speculative purposes -- they planned to hold it and sell later at a higher price.

Another important point that he was able to clarify is the fact that a lot of small holdings have not been held by their present owners for very long. Thirty to 40 percent of the owners have had their land less than 10 years. This is important to us when we start talking about forest management and improvements where the benefits may not accrue to the owner for a long time. If land is going to change hands every 10 to 15 years, it is hard to interest people in a form of management that requires holding the land longer than that.

Dr. Barraclough also found that about three-fourths of the land had been purchased and about 20 percent inherited. The largest group of non-farm woodland owners could be characterized as business men, laborers and housewives. Most of the housewives inherited their land. Most of these people earned their living by some means totally unconnected with land management. I believe that until we can work out some new types of operating units it is going to be very difficult to get these people to practice more than a bare minimum of forest management.

Here are some of the specific reasons that caused the owners to acquire and keep small woodland holdings: 43 percent of the people said they held their land for its timber value; 20 percent for recreational use; 15 percent for the satisfaction of owning land, a somewhat nebulous but none the less real motive; 15 percent for residential use; 15 percent for speculation; and other reasons about 17 percent. If anyone has been adding that up, it comes to about 125 percent, showing the extent of duplication.

I think that in addition to illustrating the variety of motives for owning land, this study brought to light another point important to the future of forest management. Although many people had gotten no income from their land and did not expect any in the near future -- in spite of this -- most of the people questioned were interested in getting some monetary return from their land, even if this was not their primary motive for ownership. They wanted income, but most attached a great big if to this desire. "If I don't have to do too much in order to get it". I suspect that the kind of management they use will depend largely on the kind of operating units that we can work out to help these people make use of their woodlands and get better returns.

From Dr. Barraclough's study we know a good deal about how and why people acquire woodland and continue to hold it. We plan to start a new project in October that will build on this information and will carry the analysis one step farther. We will try and find out what motivates the owners of these

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small holdings to use the kind of forest practices that they do use when they make a cutting. This project is written up and is available upstairs, so I won't say too much about it.

We plan to sample the owners of small holdings throughout the entire region -- in all the forest type areas, and in all the forest marketing regions of New England. We want this sample to be made up of woodland owners who have done some active management within the last 5 years -- people who have actually made cuttings. We also want this sample divided equally between people who have made obviously short-sighted cuttings, aimed only at immediate profit without thought for future growth and returns, and people who have made far-sighted cuttings aimed at immediate profit but tempered by consideration for future returns.

We hope that by questionnaires, visits and inspections we shall be able to determine the factors that influenced these people to do either a short-sighted or a far-sighted cutting. We hope that splitting the sample this way will show up the different motives affecting each group. If Dr. Barraclough came out with 125 percent on his motives, I suspect we shall find even more duplication. However, I hope that we shall be able to set these motives in some sort of order that will help us gauge their importance. This information may then guide research designed to get information about forestry that owners need and can use to reach management decisions. It can also guide our extension and education work that will disseminate this kind of information.

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