Marketing and the small private forest owner

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MARKETING AND THE SMALL PRIVATE FOREST OWNER

by

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To the small private forest owner, marketing is a significant factor in the overall management of his property. In forest management, marketing is more than an income producing process. The manner in which it is conducted not only influences the amount of income received, but often determines the continued productivity of the forest holding.

Small forest owners are subject to many external influences in marketing. Many of these influences can be eliminated or favorably controlled by a well informed seller. An indifferent or poorly informed owner, however, can lose much of his potential income through careless marketing practices.

The behavior of the individual forest owner in the market can have significant bearing upon the quality of his forest management. Poor marketing practices can undermine his incentive toward forest management and eventually result in the decreased productivity of his holding. When this occurs on a regional or national scale it causes unneeded economic loss and jeopardizes a significant portion of the nation's forest resources.

In the management of small private holdings it is necessary to understand the influences which affect forest products marketing. By recognizing and eliminating poor marketing practices the well-being of the forest owner is enhanced and the productivity of the timber resource is maintained.
CHAPTER I

INTRODUCTION

For the past few decades, the small private forest owner has been the subject of much discussion and debate in conservation circles. Historically, small private ownerships have constituted one of the chronic problem areas of forest management in this country. Among the various classes of the nation's timberland, small private holdings are the lowest in productivity. After a half-century of steady progress in other phases of American forestry, the unproductive small private holding continues to present a difficult problem.

Foresters in general, being occupied with the more immediate demands of bringing good management to the larger public and private holdings, have usually left the question of the small private owner to the public extension foresters, rural sociologists, and politicians. In 1955, however, the Timber Resource Review placed renewed emphasis on the importance of small holdings to the nation's future timber supply. The forestry profession began to take a harder look at the quality of management on the small private ownerships.

Within the forestry profession, the assumption has often been that an expanded market, caused by inevitable population increase, would eventually stimulate better management on small holdings. This is not entirely true; a good market may have no effect on an indifferent owner. It might stimulate some owners toward overcutting. However, if small private forests are to exist as timber producing economic units rather
than silvicultural models, the harvest and sale of timber must be primary considerations in management. In our free enterprise economy the best incentive to efficient production is the presence of an established market. The behavior of the individual forest owner in the market can determine his success, both as a producer of economic goods and as a steward of a national resource.

**Significance of the Problem**

A recent study by the U. S. Forest Service recognized three basic categories of private commercial forest ownership: forest industries, farm, and "other" private. It further defined small private ownerships as those holdings in the farm and "other" private categories less than 5,000 acres in size. This size class definition has been recognized by other authorities as being descriptive of small forest ownerships. Holdings included in the "other" private category are those owned by persons other than farmers or industrial forest owners. Included in this group would be businessmen, housewives, professional people and other persons who normally do not depend upon their forest land as a major source of income.

Of the total commercial forest land in the United States and coastal Alaska, which comprises 485 million acres, 61 per cent or 296 million acres is owned by farmers and private owners other than the forest industries. Over 50 per cent of the country's commercial timberland, or 259 million acres, is held in the small private ownerships of less

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than 5,000 acres. Of these small private ownerships, farm holdings include 159 million acres; "other" private holdings account for approximately 100 million acres (37).

The significance of having over 50 per cent of the nation's commercial timberland in small private holdings becomes apparent when the productivity of various classes of forest land ownership is considered. In preparing the Timber Resource Review, the U. S. Forest Service used a productivity index based upon four factors: (1) existing stocking, (2) prospects for stocking where existing stocking is deficient, (3) species composition, and (4) age of stand at harvest. The lowest category of productivity of all forest ownerships was found in the farm and "other" private holdings (See Appendix, Table III). For more than half of the holdings in this classification, the productivity index was less than 70 per cent of what was reasonably attainable on a scale of 100. Lands in this category where productivity was poorest were farm and "other" private ownerships in the South, while small private holdings in the West ranked best (See Appendix, Table IV). Throughout the country productivity varied directly with the size of the ownership being lowest on the smallest holdings (37).

Ownership as a Factor in Small Forest Management

Before condemning the small landowner for the low state of productivity on his timberlands it may be well to consider whether low productivity is an evil in itself or whether it is the result of complex forces affecting small woodland management. How these forces affect timber management decisions vary according to individual objectives in
owning forest land, the size of a given holding, and often according to whether timberland is held by farm or non-farm owners.

In the case of farm owners a certain amount of timberland has been part of many farms since their original settlement or purchase. In years past such farm woodlands were an important source of posts, poles and especially fuelwood; however, modern farm living makes few direct demands on the woodlot and it now occupies a minor position in most farm operations.

In many localities farm woodlands have furnished a debt-free source of capital for financing expansion of the farm into more productive crop and livestock operations. The low rate of return on forest land justified liquidation, particularly when farmers had trouble obtaining capital from other sources. Uncertainty of future timber yields and prices encouraged cutting and the preference for present income (29). While silviculturally unsound, farmers who overcut their woodlands were often maximizing their immediate returns as farmers. Probably few realized the long-term consequence of their poor cutting practices. Even if they did, why couldn't good timber management wait until the farm was paid for?

Non-farm or "other" private owners are a heterogeneous group with certain important differences from farm woodland owners; they are usually absentee owners and they have diverse reasons for owning forest land (22). Some acquire land through inheritance, others hold it for speculation. A few even purchase it for definite forest management objectives. In recent years, purchase of forest land for recreational purposes has become an important motive with affluent urban dwellers.
Stoddard (35) reports a psychic urge on the part of some to own land apart from apparent economic motives. Non-farm owners of forest land represent all occupational groups from housewives to bankers. Significantly, the only difference noted among owners was that business and professional people with higher income and educational levels have given better management to their timberland (35). A study in Michigan showed concepts of timber management to be low among non-farm owners, although certain well-informed exceptions were found. Farmers, on the other hand, were characterized as having few long range woodland objectives apart from their farm needs (22).

**Inherent Problems Regardless of Ownership**

All small owners, regardless of occupation or background, have certain forces working against them as potential timber growers. For the most part, these are influences over which the owner has little or no control. The first, and most limiting of these factors is size. As in any other production operation, there are certain economies of scale that accrue to productive units of an optimum size. Many small private woodlands may be below an adequate size for profitable forest production. Of the 4.5 million private forest owners in the United States, 50 per cent own less than 50 acres each. The total acreage of these small holdings amounts to only 6 per cent of the nation's commercial timberland. Some authorities question the desirability of directing forestry efforts toward such small units, where some production will occur without good management. This is particularly true of farm forests, which average only 49 acres in size over the country as a whole;
"other" private holdings average 118 acres or over twice the size of farm forests (37).

A small-sized holding places a double handicap on its owner. Such a holding will yield a merchantable harvest of timber only at infrequent intervals. In addition, the volume of timber offered for sale is likely to be too small or too low in quality to attract the best buyer. When such circumstances occur the landowner is likely to lose his effectiveness as a timber producer since he is out of contact with the market for long intervals and has difficulty obtaining experience, both in the management and marketing of his timber (36).

The poor quality of the growing stock on many holdings, due to past overcutting, places the small owner at an additional disadvantage. Understocked, or poorly stocked, woodlands require improvements which must be carried forward at compound interest over the life of the stand. Small owners may be unable to afford these costs or are not interested in deferring income for such long periods. On some holdings the poor quality of the growing stock may be due to a lack of cutting in recent years rather than overcutting. Such stands, particularly in hardwood regions, may be occupied by undesirable species, a result of poor cutting practices in earlier years.

A small woodland owner with a poor supply of timber, either through low quality or lack of quantity, finds few markets open to him. In some areas he may find none. With the absence of a good market, relative to his own circumstances, the incentive for continuous forest management is lost. The small owner is then the victim of economic circumstance. He has a poor market because he has a poor woodland; he
is unable to satisfy the requirements of his potential market. The connection between good forest management and successful marketing is close (12). The amalgam of the two depends upon the interest of the landowner and his expectations of a future market for his timber.

Since most small private forest owners obtain their livelihood from other occupations, their best efforts may not be directed toward the management of their timberland. In the case of absentee owners, those holding land for recreational purposes, or those obtaining land through inheritance, this may be particularly true. The minor position of forest products as a source of income to these people results in lack of interest in timber production and consequently, reduced returns from their land.
CHAPTER II

PRODUCTION CHARACTERISTICS AND MARKET OUTLETS

The Small Owner as a Producer

Certain similarities exist between the small forest owner and the farmer who grows agricultural products. Both are usually primary producers, or people who sell the output of their lands in the raw form. Both are so numerous as a group, that they as individuals have little effect on their market. Here the similarity ends. Where most farmers produce crops for a specific type of market, the timber grower is faced with a market that is less well-defined. In a given locality he may have a market for everything from pulpwood to veneer logs. In another area the woodland owner may be faced with a monopsony situation, or worse yet, no market at all.

Normally, farmers have a cash crop at least once a year, possibly several times a year. Owners of small woodlands, with few exceptions, can expect income from their property only every few years. When long intervals occur between timber sales, landowners may be lax in giving their best attention to this source of income, particularly if the sale is small and the owner considers his woodlot profits as windfalls. Farmers, similarly selling a raw product in a competitive market, at least give their best attention to their chief source of income (12). Timber products, when sold from small woodlands are often the "minor product of a minor producer" (Duerr, 1949:186).
In spite of their inherent handicaps, small owners usually possess some advantages as producers. Good access to small holdings is provided by existing public roads in most areas. While advantageous from the standpoint of harvesting and transportation, a good road network also facilitates fire protection (34). In many areas small private holdings include lands of better than average site quality, since they were often chosen for their agricultural possibilities by their original owners. As such, they often occupy bottomlands and relatively gentle terrain compared to larger public and private holdings.

Often the most significant advantage a small forest owner has is his proximity to an established wood using industry. This has been well demonstrated in the Northeast where local industries have depended heavily upon small holdings for their raw material since colonial days (19). While obviously providing a ready market, many wood-using industries have lately been providing small owners with technical assistance and services in an effort to guarantee a local source of raw material (1). Such a practice benefits the entire locality, as well as the landowner, by encouraging the growth and stability of a local forest industry.

**Range of Products**

Depending upon the section of the country, products of small woodlands include everything from veneer logs to tool stock. In some areas Christmas trees and maple syrup yield considerable income. However, most owners throughout the country are primarily concerned with the sale of wood in the round form as logs, poles, or cordwood. Specific products vary from region to region depending upon species and the utilization
standards of the local industries.

In general, small private owners are best adapted to selling small materials, that is, posts, cordwood, tool stock, and small sawlogs rather than large sawlogs and veneer logs. In some areas, particularly in the hardwood furniture regions of the East, veneer logs are a valuable product for the owner of a well-stocked, all-aged forest. However, unless his woodland is presently well stocked with large merchantable trees, the small owner would probably do better to concentrate on smaller materials if he has an available market.

Small materials require less time, or a shorter rotation, to reach merchantable size. This provides the owner with more frequent income and helps to maintain his interest in forest management. In addition, small products are easier to harvest, enabling the owner to do much of his own logging without need for specialized equipment. A study in New England (15) has shown that an owner can increase his returns by three to four times per cord by doing his own logging rather than selling his timber as marked stumpage.

Management prospects are also enhanced by the ability to sell a variety of products from a given holding. In this respect owners in the East have an advantage over those in the West, due both to the greater variety of species and a more diverse wood-using industry. However, in such a situation owners must be careful in their selection of market outlets in order to gain the maximum value from a particular timber sale. Where no single product is of particular importance small woodland owners often have little information on which to base their choice of a particular market (12).
**Types of Markets Available**

The markets available to the timberland owner fall into two categories; the market outlet may be either a primary or secondary producer depending upon who performs the actual logging. If the landowner chooses to do his own harvesting his market outlet becomes a wood-using industry, or secondary producer. If the owner sells his timber as stumpage, his market outlet is a primary producer; these are normally contract loggers or portable sawmill operators.

The distinction between the two types of outlets is important in that they afford varying degrees of market stability for the woodland owner. Stability of the market may be the most important factor affecting timber management in certain areas (2). Lumber mills, pulp mills and other established wood-using industries provide stability to their respective localities. Contract loggers contribute to a stable industry in that they provide forest owners with a means of selling their timber when the owners themselves are unable to do their own logging. They also benefit mill owners by procuring raw material efficiently from scattered small holdings.

Portable sawmills, however, are of questionable value to small woodland management. In order to decrease their unit costs, portable mills are forced to cut as much merchantable timber as possible from a given setting. Consequently, they do not encourage the partial cuts so often necessary to good timber management. Due to the small investment required, portable mill operations are often undertaken by persons with inadequate financing and business experience. When such ventures fail
the landowner often takes the loss since he must accept a stumpage price that is less than fair value (19).

In a study in northwestern Montana, Bolle (2) found small landowners almost entirely dependent upon portable sawmills. Large mills in the area were uninterested in private, second-growth stumpage, since they were mainly geared for large public timber sales. They would buy delivered logs, but many landowners were uninterested or were unable to perform their own logging.

In depending upon portable sawmills, the small forest owner was depending upon the "most cyclic and unstable sector of the timber industry" (Bolle, 1960:6). The output of the portable mills was sold as cants and rough lumber to large mills with finishing facilities. During periods of decreased lumber demand the large mills would cease purchase of rough lumber from the portable mills. The portable mills were then forced to shut down or offer lower stumpage prices to the woodland owners (2). Under such uncertain market conditions the incentive for good woodlot management is lessened and the old destructive practice of "cut and get out" is prolonged.
CHAPTER III

THE SELLING PROCESS

It can be said, with a high degree of certainty, that the selling, or marketing, process is the most critical operation encountered in small woodland management. In the sale of raw wood products, or stumpage, the productive purpose of forestry is fulfilled. However, the process of selling has additional implications, for the manner in which forest products are sold often determines the future monetary productivity of a given holding.

In the process of converting raw forest products into finished goods, more value may be lost through indifferent marketing than through mismanagement of the logging operation or manufacturing process (34). Loss of value through indifferent, uninformed, or untimely marketing represents needless waste for the small forest owner. Experience in many parts of the country seems to indicate that loss of value through poor marketing technique may be a common characteristic of most small private timber transactions.

Much of the reason for this loss of value has been placed on the unequal bargaining strength found between woodland owners and their market outlets. Unequal bargaining strength exists for several reasons. Since sale of timber or harvested raw wood products is a sideline enterprise with most small forest owners, it is not surprising that their knowledge of markets and timber values is limited. When sales are infrequent woodlot owners have little opportunity to gain experience in
marketing. A study in California showed that:

Previous marketing experience and some familiarity with logging are important in developing timber marketing abilities. . . .
Usually sales are made at irregular, infrequent intervals; many owners, therefore, are slow in accumulating experience, and have no contact with the market for considerable periods of time (Teegarden, et al. 1959:32).

Inexperience or imperfect knowledge of the market are not the only causes of unequal bargaining strength, however. It may also be found where (a) the buyer is financially strong and well established, (b) the seller is weak due to the small size of his operations and/or is under continued pressure to increase his income, or (c) both conditions exist simultaneously (25). Under such circumstances the landowner is under compulsion to sell, but the buyer is under no pressure to buy at any given time.

Usually buyers of such unstandardized products as logs and stumpage have a much better idea of their market value than do sellers. Often each transaction, particularly in stumpage sales, is treated as an isolated case, with the buyer striving for the maximum margin and the final selling price depending upon the sales resistance of the seller (12).

A seller's weak financial situation may place him at a disadvantage by forcing him to sell for immediate cash. Rather than hold his timber for a more favorable price, he may have to sell when the market demand is low. The need for immediate cash payment may exclude him from certain markets, i.e., a large mill that may schedule harvesting at some later date (12). Conversely, a financially sound owner with an outside income, may defer his timber harvest until a time when the market price is favorable.
Reasons for Selling

Throughout the country small private timber transactions are often characterized by the prominent position of the buyer. Exceptions to this general occurrence can be found in the northeastern states, where buyers initiated less than one-fourth of the sales (26), and in northern Idaho where sellers initiated half of the sales (17). However, studies in California (9), Illinois (20), and Michigan (22) have shown that the buyer's offer was usually the most important factor in initiating a timber sale. In one study (36), where the buyer contacted the seller two-thirds of the time, the decision to sell timber was arrived at when the opportunity to sell arose. Apparently, timber owners in this area had given little forethought to the potential value of their timber or other market possibilities.

One study in California found that: "The owner, as a seller, is essentially a passive marketing agent whose fortunes are inordinately connected with the opportunities offered by the buyer" (Casamajor, et al., 1960:31). In the same study, some sellers were as interested in having a road built as they were in the timber sale, taking a lower stumpage price in exchange for this service. James (22), in Michigan, found that the decision to sell was based mostly on an attractive offer from a buyer or on the owner's need for cash. The decision to sell was based on maturity of the timber and other timber management factors only one-fourth of the time. A study in Pennsylvania (8) found timber maturity and the need of cash for current expenses as the two reasons most frequently given for selling timber.
In the above studies, the low incidence of timber sales based on timber maturity or timber management factors provides some indication of the degree to which small private forest owners are motivated by forest management considerations in selling their timber. Where timber management motives are absent from the selling motive it is quite likely that the woodland owner has jeopardized his future income for the sake of immediate gain.

Acceptance of the Buyer's Offer

In the sale of timber products, such unstandardized commodities as logs, cordwood, and stumpage are subject to a wide range of values; in any transaction the price of these products may depend upon such factors as species, quality, quantity offered, potential use, and the degree of buyer competition in a given area. With so many variables affecting the price of his product it is difficult for the seller to evaluate the offers of his potential buyers, particularly when his market contacts are infrequent and the number of buyers is limited. For this reason, an owner contemplating a sale of timber must investigate his potential market thoroughly and obtain several price offers in order to receive fair value for his product.

The nature of forest products often makes it impossible to bring the product and a group of potential buyers together, particularly when the quantity offered is small and the distances involved are great. Consequently, woodland owners are likely to neglect this phase of marketing and accept the offer of the first potential buyer; this is very likely where the buyer is initiating the sale and the forest owner is
the passive marketing agent (12). It may also apply in areas where there is little competition between buyers.

In Michigan, James (22), in a study of pulpwood sales on both farm and non-farm holdings, found that nearly all were concluded with a single price bid. Farmers were likely to accept the first offer made. Non-farm owners, due to distance from their holdings and the pressure of other interests were likely to accept a single bid. Only those owners who depended upon timber income for most of their earnings were likely to seek more than one bid.

In Idaho, offers from more than one buyer resulted in a significantly higher price. The final selling price was directly related to the number of bids received. Here, also, higher prices were received when the timber owner contacted the buyer and initiated his own sale (17).

The reliability of the buyer, or his willingness to carry out the terms of the sale, is an important consideration in most sections of the country. In the northeastern region, reliability was only slightly less important than the offer of the best price; these two reasons accounted for 41 per cent of the sales. Buyer reliability was the prime reason for selection in New England, where timber sales from small private holdings are a long established practice (26). In California, higher selling prices were obtained where the buyer was chosen on the basis of good reputation, personal relationship, and previous business relationship (36).

In sales of stumpage rather than severed products, a reputable buyer is especially important, not only for obtaining a fair price, but
for maintaining the future productivity of the timber stand. An owner who accepts a good price, only to find his residual stand damaged and his land scarred by erosion is sacrificing his potential income. A little extra effort in choosing a reputable buyer or logger can result in increased future income and greater owner satisfaction.

**Determination of Price**

In negotiating the sale of forest products the conditions of a good transaction must necessarily include a fair price for the commodity sold. Just what is meant by a "fair" price is a complex question based upon variables that the small forest owner is unable to evaluate. As a small producer of a homogeneous product, the individual landowner may make every effort to secure the "going" price, but there is little he can do to influence that price. The primary price making forces are outside of the influence of the small woodland owner (17).

Price determination has been characterized by lack of competitive bidding, wide variation in condition of sales, and no generally applicable market price (36). In any given transaction prices may be subject to buyer competition, distance from a manufacturing point, quantity and quality of the commodity, and the current condition of the lumber market.

Bruce (6) found that market conditions for lumber exerted a major influence on sawlog prices, to which supply conditions would adjust. Prices did not have distinct seasonal movements, nor were they greatly influenced by logging conditions or the volume of logs available for sale. He did note a distinct relationship between prices paid for sawlogs and the distance to a market center. In eastern Washington, prices
decreased at an average rate of six cents per mile out to a distance of sixty miles.

Often prices in limited local areas are subject to forces peculiar to that area. In the Flathead valley of Montana, where small landowners depend heavily on portable sawmills, stumpage prices were negotiated between sawmill operators and woodlot owners, and depended upon the degree of competition among the small sawmills at any given time (2). A study in Pennsylvania (8), where a majority of sales involved mixed hardwood species, showed that higher prices were paid for individual species sold for some specific use.

It is quite likely that some relationship exists between the expectation of satisfactory prices and the incentive toward good forest management, although it is also possible that high prices may induce overcutting in the short run. A study in northern Idaho showed that those owners who had received higher prices in the past were more likely to have future plans for continued forest production (17). It is likely that those who received the higher prices were those whose interest led them to seek out the better buyers, and were therefore motivated toward better management from the start. While the owner has little direct control over the prices he receives, he can improve his chances of obtaining a good price by seeking bids from several buyers and by attempting to locate the best market for his particular product.

**Basis of Payment**

In selling forest products, a forest owner receives payment based upon the volume, or quantity of timber that he sells. In this respect
timber sales appear to resemble transactions of most other raw materials. However, the determination of actual timber volume is a non-standardized procedure which varies from region to region and is not readily understood by the forest landowner. In many instances a woodland owner may have only a remote idea of the volume he is actually selling.

Determination of volume is arrived at by one of three means: scaling, cruising, or buyer's estimate. Of these methods, cruising is least often used on small private holdings. Scaling is undoubtedly most common, although many stumpage sales are sold on the basis of the buyer's estimate. Each of these methods is capable of deceiving an unwary landowner.

Scaling, while potentially the most accurate means of determining volume, is subject to inherent errors. In addition to the inherent log rule errors, an unscrupulous buyer may intentionally give a "short" scale. It has not been uncommon for some buyers to quote an attractive price per unit and then under-scale the volume purchased; lately this practice seems to be declining. In a study in Washington (4), Bruce found that owners were wary of an attractive price offering. Instead, they would sell to a sawmill that was known for a fair scale and one that would accept some low quality logs along with the high quality materials.

In California, owners preferred scaling as a basis of payment, particularly if some recognition for good grade recovery was given in the form of increased price (36). In this area log grading was not a standard practice and mills purchased on a set price per unit; however, good grade would increase the price per unit in some cases. Grading of logs on the basis of quality is an accepted practice in some sections
of the country, particularly in the hardwood furniture and veneer regions. According to Duerr and Vaux (1953:373), "The purpose of a tree or log grading system is to facilitate accurate description of the raw material . . . by sorting it into groups that are reasonably homogeneous with respect to value." For a forest owner, grading is a beneficial practice since it results in more equitable prices and provides an incentive to produce quality materials. A Pennsylvania study (8) has shown that the prices of ungraded forest products tend to be fixed by the poorest quality material in the lot. By attempting to find markets that pay on the basis of grade, a landowner can increase his returns considerably.

Cruising, as a means of determining volume prior to a sale of timber, appears to be an uncommon practice on small private holdings. In the northeastern states, approximately two-thirds of all sales were made without pre-sale knowledge of the volume being sold (26). In northern Idaho, only 6 per cent of the owners had volume data determined by a cruise (17). Apparently, most landowners do not think such volume information is needed, since all states furnish a certain amount of free forestry assistance to small private owners if they request it, and pre-sale volume information could be easily obtained. James (22) found few Michigan pulpwood sales preceded by a volume estimate; he concluded that this was not necessarily a poor marketing practice since owners were paid on the basis of the volume removed rather than on a lump sum, or buyer's estimate basis.

Lump sum, or buyer's estimate sales account for a large proportion of small private sales, although their number has undoubtedly been
declining in recent years. In a lump sum sale the landowner is given a 
lump sum price for his timber, rather than a fixed price per unit. The 
volume sold is usually based upon the buyer's estimate, often an ocular 
estimate, and consequently may vary considerably from the actual volume 
removed. Historically, small private forest owners have lost much of 
their forest products income by accepting such sales. The practice is 
still prevalent in some areas. In the Northeast, a majority of stumpage 
buyers used an ocular estimate in procuring timber from private holdings 
smaller than 500 acres in size (27).

One-third of fifty-five sales studied in California were sold on 
a lump sum basis (9). However, of these only half were based upon an 
ocular estimate; the other half were based upon a known timber cruise 
and were therefore based upon a known pre-sale volume. In this area some 
owners preferred lump sum sales since they could receive payment before 
the timber was harvested.

When based upon inadequate knowledge of volume lump sum sales 
depend entirely upon the integrity of the buyer. When based upon a re-
liable cruise or a tally of marked timber, however, lump sum sales 
possess certain advantages for a small landowner. They may be desirable 
when an owner sells small volumes at infrequent intervals and cannot 
afford the costs of scaling (36). By having his timber cruised, the 
woodland owner has an intelligent basis for evaluating a buyer's lump 
sum offer. By accepting a lump sum offer without knowing the volume 
being sold, the owner, in effect, allows the buyer to establish his own 
price. An owner who sells timber in this manner obviously surrenders a 
good share of his potential return through his own indifference.
Type of Agreement Used

Timber sales from small private holdings seem to be characterized by a high frequency of verbal agreements governing the terms of the sale. While some authorities (36) suggest that this indicates a casual approach to marketing, another (17) maintains that the high frequency of verbal agreements results from a high frequency of sales at the roadside or mill. The distinction is important. In the case of stumpage sales written contracts are necessary to delineate the rights and responsibilities of each of the parties; in sales of products the owner himself has harvested written agreements are usually unnecessary and may add to the costs of marketing. As some authorities have stated:

A timber sale contract is an important feature of a stumpage sale. As a legal instrument it establishes the rights, liabilities, and performance requirements of both buyer and seller. Such a contract can also be a tool in forest management, as specific provisions can be made covering method of logging, fire prevention, selection of trees to be cut, and slash disposal. Experience . . . shows that a written contract provides little or no protection to the seller unless it is prepared with adequate knowledge of legal and forestry considerations and unless there is effective supervision of the sale (Casamajor, et al. 1960:32).

A study of two hundred stumpage sale contracts in California (9) showed that the legal aspects of selling timber were regarded casually by most owners. Their contracts were characterized by what they failed to include: definition of timber to be cut, utilization standards, assignability, responsibility for fire protection and slash disposal, and other important legal considerations. However, the fact that some sort of written agreement existed, however informal, resulted in increased protection for both buyer and seller and a higher sales price.

In most areas, written contracts tend to be associated with a
higher selling price, possibly because an owner who attempts to protect himself with a written agreement puts greater effort into finding a reputable buyer. In the state of Washington, however, the opposite was true; use of a written contract did not increase sales price, although it possibly increased the net scale by specifying a minimum top diameter. It may have lowered the price slightly by restricting the choice of buyers. The end result of a written agreement seems to have had more effect on the owner's peace of mind and the future productivity of his holding than it did on his selling price (11).

Where written agreements are used they are not encouraged exclusively by forest owners; buyers often originate contracts to protect their own interests in their supply of raw material and to prevent action by forest owners seeking to recover for damages caused during logging. To an inexperienced person, a tract of timber often appears devastated for several years following logging and small private owners unfamiliar with logging requirements may seek to recover for the apparent damages. Whether mentioned in a contract or not, the logger has implied rights to build skid roads, perform grading, and damage some trees and grass in the performance of his job (14).

While some damage is incidental to logging, the logger is always liable for negligent damage and failure to perform in a workmanlike manner if stipulated in the contract. However, in the absence of state forest practice laws, negligence and poor workmanship may be difficult to prove and substantial judgments against loggers for poor workmanship are rare (14). Since the landowner always has the duty to mitigate damages, a well-drawn contract will not eliminate the need for super-
vision of the logging operation. However, by making contracts specific as to desired performance, exercising supervision of the sale, and choosing a reputable buyer from the start, a forest owner can do much to insure the successful performance of his stumpage sales.
CHAPTER IV

POINT OF SALE

In selling timber from their woodlands, landowners commonly have two choices; they may sell the standing timber as stumpage, or they may do their own logging and sell the timber products at the roadside or mill. Under either method an owner may obtain fair value for his products and continue to have a productive forest. Either method, performed without provision for good forest practices, can cause needless loss of both present and potential income.

Under any circumstances the sale of timber is important to forest management, not only because it changes a resource to a useful raw material, but because it involves the major cultural operation in the life of the timber stand. Logging, properly done, perpetuates and improves the timber stand. When performed without skill or without knowledge of silviculture, logging can be an agent of destruction, reducing the productive capability of the forest for decades.

Studies have shown that the method by which timber is sold, whether by stumpage sale, or by sale at the roadside or mill, often determines the character of the timber harvest and consequently, the condition of the woodland following the harvest. The method of sale can be a key issue in determining the cutting practices used as well as the prices received (4). Of the two types, stumpage sales are most often criticized as being detrimental to small woodland management.
**Stumpage Sales**

Stumpage sales are those in which cutting rights to a designated stand of timber, or selected trees within a stand are sold to a buyer. The buyer is responsible for harvesting the timber and transporting the logs or cordwood to a mill. Under normal circumstances, title passes to the buyer when the timber is severed from the stump. The seller is paid on the basis of the volume removed or a previously agreed upon lump sum price.

Objections to stumpage sales arise when the landowner yields his prerogatives to the buyer, either by failing to exercise control over the harvesting operation, or by accepting less than fair market value for his timber. Stumpage sales in themselves are not necessarily damaging; however, lack of supervision or contractual guarantees may make them damaging. As some authorities have stated:

> The sale of standing timber is more than the simple exchange of a commodity. The effects of logging on the residual stand and the balance of the property ... and accuracy of scaling have great impact on the net benefits of the sale to the landowner (Teegarden, et al., 1960:39).

While it is necessary to know the hazards involved, it is important to realize that stumpage sales, in some cases, may be necessary or even desirable. In many cases the need arises due to the landowner's lack of knowledge of proper harvesting techniques and/or lack of equipment (12). Absentee owners, in particular, may lack both the equipment, skills and time required to perform their own logging. In some instances an owner in weak financial condition may lack the working capital needed to purchase equipment, hire help, etc.; his only
alternative is to sell stumpage. In this case his weak financial condi-
tion has forced him to sell his timber by the least profitable means
(12).

Studies in California (9, 36) have shown that few small private
owners have the equipment or skills necessary to perform their own
logging. Over 85 per cent of all sales studies were made on the stump,
mainly because owners lacked equipment heavy enough to handle the large
timber of that area. Contributing factors were infrequent sales, and
pressure of other interests on the owner's time.

In other areas of the country the frequency of stumpage sales
tends to be lower, undoubtedly due to the fact that smaller-sized trees
are easier for the average landowner to handle. James (22), in Michigan
found that farmers only sold one-fourth of their pulpwood as stumpage,
but sold almost all sawtimber in this manner. He concluded that the
small size and low value of pulpwood stumpage encouraged farmers to do
their own pulpwood harvesting during slack winter periods. Similarly,
Bruce (51) noted a tendency for stumpage sales to increase as the volume
available for sale increased. Contract loggers were reluctant to pur-
chase small volumes resulting from improvement or partial cuttings.
They preferred stumpage sales where all merchantable timber could be
removed.

Therein lies one of the common objections to stumpage sales.
Stumpage sales often result in all merchantable volume being removed;
landowners doing their own logging were more likely to lightly partial
cut or salvage log (41). Obviously, the tendency toward overcutting is
much more likely under stumpage sales, particularly if the merchantable
timber is not well marked and the logging operation is unsupervised by the owner.

James (22) substantiates this. He found that most farmers' stumpage sales were unsupervised. None of their contracts contained provisions for protecting the residual stand. Farmers failed to specify a minimum diameter limit, nor did they observe one themselves unless required to do so by a purchaser. Non-farm owners, while failing to supervise cutting on their holdings due to absentee ownership, were more likely to specify diameter limits and other conditions to protect their holdings.

In selling their timber as stumpage, small forest owners are likely to have difficulty in judging its fair market value. Since stumpage value depends upon such variable factors as distance to a mill, ease of logging, etc., the means of determining stumpage price may be too complex for many owners (12). However, a landowner who is conscious of his own costs, and gains experience through frequent sales, should be able to evaluate stumpage prices well enough to recognize a good offer. Prices paid for federal, state, or other private stumpage often furnish an indication of the range of prices in a given locality. The owner willing to investigate his market in advance can undoubtedly enhance his chances of receiving fair market value.

Other difficulties arise over performance of the logging operation by the person buying the stumpage. In the absence of contractual provisions and adequate supervision an owner has little recourse against a careless or unreliable logger. When a woodland is left in a devastated state the logger is usually given the blame when actually, the landowner
is responsible, either through lack of supervision, or failure to prepare an adequate contract or choose a reputable buyer. Loggers have complained that owners are, in some cases, overly concerned over logging damage and are unsympathetic with the loggers' viewpoint. This may be true, particularly when the landowner has had no previous experience with logging and fails to understand the reproductive capability of forest land. While abuses are common, much of the misunderstanding could be eliminated if landowners obtain technical forestry assistance beforehand.

A variation of the stumpage sale exists that should be mentioned for its questionable value to small woodland management. While not common, this practice involves a sale of standing timber in which title to the timber passes to the buyer prior to the time when logging takes place; the owner retains title to the land but sells the standing timber as real property. Supposedly, the fact that the landowner knows the sale price prior to cutting gives him an advantage he lacks when selling on the basis of actual volume removed. However, it contains an obvious pitfall for the seller; the buyer is more likely to be aware of the actual volume and value of any timber in a given tract and will adjust his price accordingly. The seller is also free of any responsibility for woods operations, a dubious advantage, since he also relinquishes control over cutting for the contract period. It is advantageous to the buyer in that he gains greater control over his source of supply and can harvest according to his needs. From the point of view of the forest owner, this would seem to be an undesirable means of selling timber.
**Roadside or Mill Sales**

As distinguished from stumpage sales, roadside or mill sales are sales in which the landowner performs his own logging and sells timber at a mill or some other delivery point such as a roadside or railroad siding. For the woodland owner with the time, logging skill, and necessary equipment, this method has definite advantages and is usually encouraged by those familiar with the small woodland situation.

By performing his own logging, the owner invests time and money in converting his standing timber into raw material. Consequently, he is able to retain a greater share of the timber sale proceeds for himself, proceeds that would otherwise accrue to others in the form of wages, margin for profit and risk, and, in some cases, pure profit. In some areas, the difference between stumpage sales and roadside sales may be as much as ten to fifteen dollars per thousand board feet (20). For farmers, or other landowners who have slack periods during the year, logging their own woodlots may provide a profitable use of both time and equipment.

A study in New England showed that woodland owners could make three to four times as much per cord by doing their own logging rather than selling marked stumpage (15). Another study in the Northeast (26) concluded that New England owners increased their returns per unit sold by avoiding stumpage sales; at the same time, owners in the Middle Atlantic states selling stumpage, received less value for their timber.

An additional advantage gained through owner harvesting is better control of damage to the residual stand. In some cases, this advantage
may be more apparent than real. A skillful logger, performing under a written agreement, may do less damage than a novice landowner. However, when woodland owners have a financial interest, and often an aesthetic interest, in their property, it is likely that those owners conscious of timber values would exercise better care than the average logger.

In addition to a certain amount of logging skill, a successful owner-logger should know the raw material specifications used in his locality in order to receive maximum value for his efforts. For this reason, a New York authority (21) has stated that small woodland owners should leave logging to the loggers, who are both skilled and familiar with raw material standards. While this may be necessary in some hardwood specialty regions, most landowners are not selling to a market requiring complex specifications. The average pulpwood or sawtimber sale involves little more than requirements for minimum size, percentage of sound wood, and desired species; such standards are within the capability of most woodland owners. To avoid making costly mistakes, however, an owner should secure a market and know the market specifications prior to performing any logging.
CHAPTER V

USE OF MARKETING ASSISTANCE

It has long been acknowledged that successful management of small private holdings requires, above all else, the education and motivation of the landowner. Toward this goal, various programs, both public and private, have been organized in recent years to provide forest owners with conservation education and technical assistance. While such assistance has generally been oriented toward applied silviculture and general forest management, some efforts have been made to improve the marketing abilities of the forest owner.

Types of Assistance Available

As early as 1924, forest management assistance was provided to farmers through the Clarke-McNary Act. This was a federal program administered by the Extension Service of the U. S. Department of Agriculture. On-the-ground assistance is carried on by extension foresters working through county agriculture agents. The extension forestry program was based on the idea that farmers would practice good forestry if the benefits and techniques were made known to them (35). Since the potential need for forestry assistance far exceeded the scope of this program, results in terms of good forest practice were slow in coming; however, extension forestry undoubtedly provided the groundwork for later assistance efforts (35).

The most significant effort toward assistance since that time,
and probably more effective, has been the program provided by the Coop­
erative Forest Management Act of 1950. This act provided federal-state
cooperative assistance to all small forest owners, both farmers and
non-farmers. The actual technical assistance is provided by service
foresters employed by state forestry departments; they are locally as­
signed and work directly with the landowner. The functions of a service
forester are summarized as follows:

The service forester provides on-the-ground advice or assistance
concerning forest management, including timber marketing. This
marketing assistance covers such matters as volume determination,
marking timber for cutting, finding and selecting a buyer, price
information, contractual arrangements, and administering the sale.
The function of the service forester is to develop the owner's
interest in forest management, advise and assist him in initiating
management practices, supply needed information, and to encourage
him to follow good forest practice. The direct conduct of these
activities is carried on by the owner, not by the service forester

Normally, service foresters are limited to a few days of free assistance
to each forest owner; owners of tracts that are too big to service in
that time, or those where good management is already in progress, are
referred to private consulting foresters. Since the CFM program began,
approximately forty million acres, representing about 15 per cent of
the total small forest acreage, have been brought under better manage­
ment (35).

Additional public forestry assistance is advanced to farmers
through their local Soil Conservation Districts. Woodland management
is encouraged as part of the total farm management plan. The work of
the SCS work unit conservationists tends to be similar to that performed
by service foresters, although it probably involves less technical for­
ery. Where farmers require extensive assistance, they are referred
Undoubtedly, few small private holdings are located where they are unable to be served by a service forester. However, since service foresters are limited both in the number of days they can spend with one owner and in the size of the holding they can adequately serve, owners often require additional assistance. In most parts of the country forest owners can hire a professional consulting forester to handle all or part of their forest management needs.

Consulting foresters perform a variety of functions, including marketing and sales administration, and will usually take complete charge of all forest management activities on a fee basis. Consultants seem to work mostly on tracts larger than one hundred acres in size, since a fairly large volume of timber is required to justify their employment (35). For the owner with a sizable holding, and little time to carry on his own management, the management and marketing services furnished by the consultant can prove very satisfactory.

In some areas, local wood-using industries, particularly pulp and paper companies, furnish a full range of management services to private forest owners. In return for such assistance the companies request the right to bid first on any sales from a given tract (1). Owners using this system are part of the company's "Tree Farm Family" and have a ready market for all of their timber. Indications are that this is a successful arrangement, furnishing a market for the landowners and maintaining a supply of raw material for the sponsoring company (1).

In the northeastern states assistance is sometimes furnished to forest owners by hardwood specialty industries, such as furniture manu-
facturers, cooperage plants, and tool manufacturers. As quality hardwoods have become scarce, the number of industries furnishing this service has increased. Buyers for these companies inspect private timber before it is cut, advising the owner which trees to harvest and which to retain (26). While the total impact of such services is not great, it can be a definite help in the marketing area served by these industries.

**Degree to Which Assistance is Used**

With the services of extension foresters, and state service foresters, as well as consultants, available throughout the country, it would seem that small forest owners would make use of such assistance. Studies have shown, however, that the proportion of forest owners using available assistance is actually quite low; a high percentage of owners are still unaware that such assistance exists. Many owners, while aware that free public assistance is available, question the need for using it.

A recent study in California (9), where stumpage sales were predominant, showed that 73 per cent of the owners had no assistance in marketing their timber. Those who used assistance had often relied upon neighbors, friends, and buyers to furnish them with price information. Only a small percentage (17 per cent) had obtained information from service foresters and private timber cruisers. Many who failed to obtain assistance were unaware that it was available, especially absentee owners and those whose occupations were not related to forest ownership.

The same situation existed in another part of California (36).
Here 67 per cent had failed to obtain marketing assistance; half of these were aware that help could be obtained but did not deem it necessary. In the Northeast approximately half of the owners selling timber knew that assistance was available; however, the number of owners actually using such assistance was thought to be much lower (26).

As these studies indicate, many forest owners question the need for obtaining management or marketing assistance. Little data exist to prove the value of such assistance; however, a study in the state of Washington indicates that professional services may result in long-term benefits rather than immediate gains. Here, timber sales made after receiving assistance sometimes resulted in a higher price, but there was no significant difference in price between these sales and sales made without assistance. One of the more important services, marking timber for sale, may have lowered the selling price; marking tended to reduce the volume and quality of the timber sold and resulted in higher unit costs of logging, especially with intermediate or partial cuttings (11).

A California study (36), however, showed that the use of assistance resulted in a significant increase in selling price (See Appendix, Table V). This contradiction of the findings of the Washington study can probably be explained by the difference in the average volume offered per individual sale in the two localities. In Washington, the average volume offered was 162,000 board feet; in the central Sierra Nevada region of California it was 570,000 board feet. These findings seem to indicate that the use of technical assistance favorably affects selling price as the volume offered for sale increases. This is a reasonable
assumption; as the volume available for sale increases the number of interested buyers should also increase. Professional assistance may then be of greater value in gaining concessions from potential buyers.

These same findings suggest that a minimum sized volume exists below which the use of assistance does not materially affect selling price. Professional assistance should still be beneficial, however, in finding a reputable buyer, preparing the contract, and designating the trees to be harvested (14). In such a case the use of technical assistance would result in a long-term increase in the value of the holding rather than an immediate gain through the sale of timber.

**Shortcomings of Available Assistance**

All of the recent studies of small private holdings indicate a generally low use of public assistance by forest owners. Since public forestry assistance is available to almost all owners, this low use suggests a weakness in the present approach, particularly when many owners felt such assistance was unnecessary. Some authorities (28, 35) have suggested that the weakness in the present system lies in the emphasis on applied silviculture, rather than on efficient harvesting and marketing techniques.

As an example, Flair (28) contrasts the silvicultural approach used in this country with the approach used in the Scandinavian countries. There, 75-90 per cent of public assistance for forest landowners is aimed at increasing growing and harvesting efficiency. Silvicultural considerations are not neglected, nor are they emphasized over operating efficiency. The aim of the Scandinavian programs is to teach the
owner the techniques he needs to operate his own woodland.

A subtle, but important difference exists between this approach and that used in the United States. Here the emphasis seems to be on the desirability of practicing good silviculture. Harvesting and operating techniques are taught but they are not emphasized as being the most important tools a forest owner needs to operate his own woodland.

That silvicultural considerations are emphasized in this country is not surprising; our forestry assistance programs were born during a time when private woodlands were being overcut. Undoubtedly, many foresters and conservationists would have been adverse to teaching owners how to increase their harvesting efficiency.

While the conservationist objective may have been desirable thirty years ago, conditions today seem to indicate that the landowner needs more than an awareness of good silviculture. He needs an incentive to operate his own holdings. He needs to be taught the techniques of logging and use of equipment, and how to market his timber wisely. Such knowledge will enable him to perform his own operations on his own land and will serve to increase his interest in his own holding.

Without doubt, there will always be a large number of landowners with neither the ability nor the desire to operate their own woodlands. These people must be encouraged to rely heavily on professional assistance, often to the point of having consulting foresters, or others, responsible for the management of their property. In the future, it is likely that these services will become more widespread. For the present they should make use of professional assistance wherever it is economically feasible to do so.
CHAPTER VI

INSTITUTIONAL AIDS TO FOREST PRODUCTS MARKETING

Since the early 1930's various attempts have been made to improve the bargaining power, or efficiency of the small forest owner in the market. Rather than the individual approach taken by the public assistance programs, these methods have sought to influence small forest owners as a group, either locally or over a fairly extensive area. Some of these efforts have failed, others are too recent to be fully evaluated, but each has contributed to the knowledge of forest products marketing.

Forest Products Cooperatives

The first attempts to bring the benefits of large scale operation to the small forest owner took place in the early 1930's with the formation of the forest products cooperatives. Rural landowners were the subject of much public attention during that period and forest cooperatives were one of several publicly supported programs designed to improve the economic status of the rural resident. Since agricultural cooperatives had enjoyed a certain degree of success, it was thought that the idea of cooperative marketing could be applied to small woodlands.

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2"Institutional," used here in a limited sense, refers to formal, organized efforts. It is recognized that the public technical assistance programs discussed in Chapter V are also institutional aids; however, the distinction is made here to emphasize organized marketing efforts; rather than the broader, more inclusive area of forestry assistance in general.
Between 1935 and 1941, fifty-seven forest cooperatives were in operation, almost all were located in the northeastern and Lake states (11). Most commonly, these were marketing associations; that is, their prime reason for existence was to market their members’ forest products, although most had a corollary objective of improving the condition of their members’ woodlands. A few processing cooperatives were formed; these were cooperatives that possessed sawmills and were able to market finished lumber. For a long while it appeared that processing cooperatives had the best foundation for long-term success.

Most forest cooperatives were established with the aid of long-term loans from the Resettlement Administration or the Farm Security Administration; all depended heavily upon public agencies for managerial and technical assistance. The moving force behind them was often the local extension forester rather than the landowners themselves. In time this heavy reliance on outside assistance contributed to their decline.

Prior to World War II the forest cooperatives operated with mixed success; after that period few were able to survive. The buyer’s market that had provided the incentive for cooperative effort changed with the outbreak of the war. Individual owners were able to obtain high prices without the aid of the cooperative. In addition, the demand for greater food production and the general labor shortage caused landowners to devote less time to their timberlands. Finally, when the public agency foresters were called into military service, the major cohesive force was lost and member interest lagged (3).

In the years following World War II the need for cooperative
effort became less acute. Increasing population growth, better transportation facilities, and better communications had opened more markets for forest products. While the small forest owner was not without his marketing problems, there were few areas in the country where market outlets were not available.

In many ways cooperatives failed due to weaknesses in their own establishment. To survive the competition with expanding private industries cooperatives needed managerial talent that their limited resources could not attract. Public servants could not hold them together indefinitely. Capital requirements were one of the most limiting factors. Where cooperatives had relied on government loans, repayment added a heavy burden to their operation. In addition, where many members' lands were poorly stocked, it was difficult to show enough return to maintain member interest.

While inherent weakness in the cooperative organization contributed to the decline, much of the difficulty was caused by the members themselves. The close association and frequent member contact found in agricultural cooperatives was missing due to the infrequent nature of timber harvest (35). Many owners were unskilled in harvesting methods, and in some cases, would not carry out their own logging and timber culture operations (35).

In 1961, one of the most successful of processing cooperatives, the Itsego Forest Products Cooperative Association, located in New York, went out of business after 26 years of operation. From the start, many members had been reluctant to do their own logging. The Association was forced to initiate a logging service in order to meet its raw
material needs. In the long run this proved to be a costly service and a contributing factor in the failure of the Association; other factors were the lack of member interest and failure of the mill to modernize and compete with the more mechanized private mills in the area (23).

When any of the cooperatives failed, lack of member interest has usually been cited as a principal cause. The difficulty in maintaining member interest is supposedly a result of infrequent sales and income from any given holding. One authority (30), however, suggests that the reason may be more basic than this. Successful cooperative effort requires members to share responsibilities and surrender some of their rights as individuals. Since rural landowners have functioned as independent, competitive producers for a long time, they may be unwilling to yield their individual prerogatives to group effort, particularly when forest products furnish a minor part of their income. In order to succeed in a cooperative, forest owners must modify their old ways of thinking; while this may be possible it would necessarily occur only over a long period of time.

In many cases it is likely that a woodland owner would be unwilling to confine his market to a cooperative, particularly if the woodland furnished a good share of his income and other markets were available. Undoubtedly, this occurred to some degree in recent years as forest products industries expanded into new areas.

In addition to the expansion of markets, the services available to the individual owner increased considerably with the Cooperative Forest Management program and the gradual growth of consulting forestry. In some areas the forest industries began to provide services to small
landowners in an effort to maintain a local supply of raw material. Each of these developments contributed to a decreased need for cooperative effort.

The best example of a successful cooperative today is the Au Sable Forest Products Association in Michigan; in 1961 its sales totaled $1,36,000 and average member income was over $1,100 (16). However, the biggest factor in its success is the fact that it does not have to rely upon its members' lands for raw material; the Au Sable Association purchases national forest stumpage and markets pulpwood. It continues to operate as one of the few remaining forest products cooperatives in the country.

Although a few successful examples survive, it is unlikely that the cooperative movement in forestry will ever achieve the promise that was forecast in the 1930's. While the idea may have been sound, the conditions under which it was fostered have changed considerably and the need for cooperative effort has diminished.

Management Service Associations

During the post-war period two new associations arose that were distinctly different from those formed before the war. Both operate in New England; both have been financed through private capital. One is known as the New England Forestry Foundation, the other as Connwood, Inc. They are primarily management service associations, formed to manage the lands of owners who were favorable toward good forestry but were unable to practice it due to the pressure of other interests. Most of the woodlands served by these two groups are owned by people who work
in a city and live in the country, rather than farmers (35).

Both Connwood, Inc., and the New England Forestry Foundation provide marketing services, although neither owns processing facilities. Although privately financed, Connwood, Inc., is chartered as a cooperative and the New England Forestry Foundation is organized as a non-profit service corporation. Both have operated successfully for the past several years. In 1957 Connwood returned approximately $110,000 to its members; the N.E.F.F. earned $168,000 during the same period (35).

The operation of these two associations has emphasized the importance of adequate financing and good management to this type of an organization. Significantly, neither association has depended upon active member participation. Rather, the owner-members preferred to have hired association personnel perform the actual woods operations and deduct the harvesting costs from the sale of their timber. This was a departure from the type of cooperative group effort that the earlier associations had encouraged. To date Connwood, Inc., and the New England Forestry Foundation have been the best examples of successful group effort in handling the small private forest. Their approach has provided the benefits of large scale operation while maintaining individual ownership (35).

**Price Reporting**

One of the more recent aids to forest products marketing in some areas has been the periodic reporting of forest product prices. While not extensive in operation, price reporting has been used in several states to some degree and has been advocated on a national basis.
There are two basic types of price reporting; that which reports current prices of harvested products in selected areas and that which reports the current value of standing timber. It is the latter type that has been advocated on a national basis by Senator Hubert Humphrey and others through Senate Bill No. 840, originally introduced in the Senate in 1957 (32). However, this type of price reporting has never existed in practice, and objections to it are widespread.

In general, objections to federal stumpage price reporting take two forms: (a) It is unneeded and undesirable since it represents an attempt to control forest products prices through federal intervention (32), and (b) it is not feasible because the variables which determine stumpage value are too complex to resolve in a price reporting system (39). The first objection is largely a matter of personal opinion and can neither be confirmed, nor denied. The second objection is based upon evident facts and is worthy of consideration.

The factors that determine stumpage price on any given timber sale are variable, not only between local market areas, but between individual sales. Stumpage price depends upon such factors as species, quality, and accessibility of a given tract of timber, as well as ease of logging, the amount of road construction needed and the current market demand for timber (39). To resolve these differences not only between individual timber sales, but between different localities would indeed be a monumental accomplishment.

An additional objection has been advanced from the point of view of the woodland owner; price reporting may be unwanted by those holding timber subject to tax assessment (18). Price reporting could result in
increased ad valorem or severance taxes. Frequent reminders of market value may induce some owners to liquidate their timber. However, as one authority (18) states: "Such views seem out of harmony with the American tradition of unobstructed choice based on equal knowledge of the market place."

While stumpage price reporting has never been put into practice, several states have periodically furnished woodland owners with price information for products such as sawlogs, poles, and pulpwood. One of the more successful examples of this type of effort is the report used in the state of Washington, published quarterly by the Washington Crop Reporting Service.

A study (5) of owners receiving this report has shown that it has both desirable and undesirable effects. It was desirable in that it encouraged management activity, enhanced equal bargaining strength on the part of the landowner, and provided needed information to a segment of the economy that has lacked such information. It did, however, in some instances encourage landowners to harvest their timber without regard to future income possibilities. Often this was in conjunction with removing land from forest uses to agricultural uses. Receipt of this market report, however, was also associated with an increase in size of holdings and an increase in forest management activity. Seventy-six per cent of the owners sampled had engaged in management activity such as salvage, thinning, pruning, etc., during the previous year.

While price reporting is a recent development and has only operated on a limited scale, indications are that it may prove to be a useful aid to forest products marketing. Whether stumpage price reporting
would be feasible, desirable, or even necessary is an unanswered ques-
tion. The commodity approach to price reporting, however, seems to 
have definite possibilities, particularly on a state or regional basis.

**Long-term Agreements With Purchasers**

The steady expansion of the forest products industries has, in 
some areas, resulted in increased cooperation between these industries 
and the small woodland owners in their locality. Examples of such small 
owner-industry cooperation can be found principally in the southern and 
Lake states, where the pulp and paper industry is well established.

In an effort to develop a stable, more dependable source of raw 
material, several pulp and paper companies have developed a small owner 
assistance program known as the Tree Farm Family. Under this system, 
small private landowners within the procurement area of a given company 
are provided with free forest management assistance by company forest-
ers. The landowners are under no obligation to the parent company ex-
ccept to maintain sound forest practices and permit the company to bid 
upon the owner's timber at the going price. In return for this the 
company assures the woodland owner of a market. It is advantageous to 
the parent company in that it develops a highly probable source of local 
raw material, while at the same time saving the company the investment 
in land and annual costs of operation and taxes (1).

The landowner served by such a program is indeed fortunate; what 
better incentive could exist for good management than the presence of 
an established market. One authority (2) sees this mutual dependence 
between forest industries and small private owners as an increasingly
common trend in the future. Rather than owning large blocks of land, many forest industries will stress efficient, competitive operation and put their capital into plant and equipment. Small private holdings will furnish the raw material under cooperative management and marketing agreements.

While admittedly speculative, such a prediction is not improbable for many parts of the country. The industry sponsored Tree Farm Family program is a step in this direction. However, this forest industry-small owner cooperation may be only an interim trend. There are indications that forest industries may seek greater consolidation of forest land under their own ownership (31). Once a company has invested heavily in plant and equipment it cannot leave such investments vulnerable to an uncontrolled supply of raw material subject to shortages, labor problems, and competition. By owning a certain amount of timberland, companies not only guarantee a source of supply, they also maintain leverage over the prices they must pay for purchased wood. From the standpoint of forest management, consolidation of small holdings under industrial ownership would certainly be desirable. Providing federal, state, and local tax laws favor consolidation, it would seem to be most advantageous from the standpoint of the forest industries also.
CONCLUSIONS AND RECOMMENDATIONS

The problem of increasing productivity on a multitude of small private forest holdings has no easy solutions, nor does it have any immediate solutions. However, there is possibly one prime cause underlying the entire problem; the generally low awareness of timber values on the part of the owner has undoubtedly been the principal reason for the low level of management found on most small holdings.

That many forest owners have a low concept of timber value is not surprising. Until comparatively recent years timber was an abundant and relatively cheap commodity. In the total economy of the country its place was one of importance, but not one of prominence. Owners of small tracts of timber, therefore, have not thought of themselves as holders of potential wealth by virtue of their forest ownership, particularly when so many depended upon endeavors other than land ownership for their livelihood. Small wonder then, that the small forest holding was regarded as a residual asset, nor really worthy of entrepreneurial effort.

The situation is much the same today, although expanding population and expanding industries have gradually focused attention on the small private holding. In many parts of the country the timber held by the small owner is in demand. The owners, not realizing the potential of a forest holding, have too often accepted this new demand as a windfall, an opportunity for a quick profit, rather than a steady income.
After decades of holding a commodity of doubtful value, this was an understandable reaction. Unfortunately, it resulted in overcutting and eventually a low level of productivity on the small private holdings.

Increasing the productivity of these small holdings involves creating an awareness of timber values on the part of the owners. In order to practice good forest management owners must be convinced that it is economically worthwhile. In some parts of the country, where markets are lacking, profitable management of small timber tracts may not be feasible. For most owners, however, markets are available and are steadily increasing. In the presence of an existing market, the key to increased productivity and good management must lie in the market orientation of the forest owner. Only through successful marketing can the economic goals of the owner be fulfilled.

The marketing efficiency of the small private owner could be improved considerably through the existing public forestry assistance programs. While marketing aid has always been furnished by CFM and extension foresters, it could be stressed to a greater degree. Many of the recent marketing studies have shown that small private owners as a group make little use of public forestry assistance. This seems to indicate that such assistance may not be serving the most immediate needs of many owners.

Characteristically, technical assistance in this country has placed heavy emphasis on silviculture, undoubtedly because overcutting was a common practice during the time when the assistance programs began. While certainly necessary, silviculture is only one important aspect of good forest management; efficient operating techniques and marketing are
just as necessary. Preoccupation with silviculture may have persisted because the foresters who provided the assistance had strong backgrounds in silviculture as a result of their forestry education. In the operations aspects of harvesting, transportation, and marketing they were less well prepared, and consequently less competent in the field.

The basic weakness in the silvicultural approach to small landowner assistance is that silviculture by its nature is a professional subject far too complex for the average forest owner to understand. In effect, the existing public assistance programs have attempted to teach the forest owner more than he needs to know about a professional aspect of forestry; at the same time the operational techniques of harvesting, equipment use, and marketing have been neglected. From the standpoint of the landowner, he has not been taught the skills of forest management that he is most qualified to perform.

A change in emphasis from silviculture to operating techniques would undoubtedly result in an increased demand for public forestry assistance. It is also likely that owner interest in forest management would increase if more owners were able to perform their own woods operations. Of course there will always be large numbers of owners either unable or unwilling to operate their own holdings. These people should be encouraged to make use of consulting foresters' services. Much of the effort of bringing good management to the lands of absentee owners might best be left to consultants. By limiting their assistance to farmers and other resident owners public service foresters would then be teaching those owners most likely to perform their own operations.

Public forestry assistance would be made more effective by
limiting services to holdings of a minimum size. As the Timber Resource Review (37) showed, half of the small private holdings in the country may be too small for profitable management. By designating a minimum-sized ownership the efforts of the public service foresters could be directed toward greater production on holdings of manageable size.

Undoubtedly, the steady migration of rural residents to urban areas will eventually result in a consolidation of these small holdings into larger ownerships where the scale of operations will be more favorable for forest management. This has already been observed in the South where the out-migration from small farms has enabled neighboring owners to increase their forest holdings (10). By increasing the scale of operations and the tenure under one owner, the prospects of changing indifferent attitudes toward forest management are enhanced.

The situation on the small private holdings should improve considerably in the next few decades. An expanding population, and increasing demand for all types of wood will provide a growing market for the products of small holdings. Owners will become increasingly aware of the value of their forests, and will accept forestry as a good investment. Foresters, in general, and public assistance foresters in particular, can accelerate this trend by encouraging owners to accept greater responsibility for the operation of their own holdings wherever possible. Forestry on the small private holdings will succeed when it is accepted as a sound investment by the owners. This, in the end, is the key to private forest management.
### TABLE I

**NUMBER OF PRIVATE OWNERSHIPS OF COMMERCIAL FOREST LAND AND AREA OWNED IN THE UNITED STATES AND COASTAL ALASKA, BY SIZE OF HOLDING AND SECTION, 1953**

**ALL SECTIONS**

<table>
<thead>
<tr>
<th>Size of ownership (acres)</th>
<th>Number</th>
<th>Thousand acres</th>
<th>Proportion of commercial forest area</th>
<th>Average size of holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3,875,093</td>
<td>121,023</td>
<td>2.48</td>
<td>31</td>
</tr>
<tr>
<td>100-500</td>
<td>586,467</td>
<td>97,882</td>
<td>20.0</td>
<td>167</td>
</tr>
<tr>
<td>500-5,000</td>
<td>16,326</td>
<td>6,378</td>
<td>9.5</td>
<td>1,001</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,507,886</td>
<td>265,283</td>
<td>54.3</td>
<td>59</td>
</tr>
<tr>
<td>5,000-50,000&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2,330</td>
<td>34,669</td>
<td>7.1</td>
<td>14,879</td>
</tr>
<tr>
<td>Over 50,000&lt;sup&gt;2&lt;/sup&gt;</td>
<td>283</td>
<td>58,317</td>
<td>11.9</td>
<td>206,067</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,510,499</td>
<td>358,269</td>
<td>73.3</td>
<td>79</td>
</tr>
</tbody>
</table>

<sup>1</sup>Number of ownerships shown for holdings of 3-100 acres in the East and 10-100 acres in the West.

<sup>2</sup>Ownerships in a given size class on a sectional basis do not add to national totals because holdings of a given owner located in different regions were combined in determining number of ownerships on a national basis.

### TABLE II

**NUMBER OF AREA OF FARM AND "OTHER" PRIVATE OWNERSHIPS OF COMMERCIAL FOREST LAND IN THE UNITED STATES AND COASTAL ALASKA, BY SECTION AND REGION, 1953**

<table>
<thead>
<tr>
<th>Section and region</th>
<th>Total farm and &quot;other&quot; private</th>
<th>Farm</th>
<th>&quot;Other&quot; private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner-ships</td>
<td>Area</td>
<td>Owner-ships</td>
</tr>
<tr>
<td></td>
<td>Thou-sands Million acres</td>
<td>Thou-sands Million acres</td>
<td>Thou-sands Million acres</td>
</tr>
<tr>
<td>North:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England</td>
<td>252</td>
<td>21</td>
<td>94</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>762</td>
<td>35</td>
<td>544</td>
</tr>
<tr>
<td>Lake States</td>
<td>191</td>
<td>29</td>
<td>371</td>
</tr>
<tr>
<td>Central</td>
<td>883</td>
<td>38</td>
<td>767</td>
</tr>
<tr>
<td>Plains</td>
<td>157</td>
<td>5</td>
<td>153</td>
</tr>
<tr>
<td>Total</td>
<td>2,545</td>
<td>128</td>
<td>1,929</td>
</tr>
<tr>
<td>South:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Atlantic</td>
<td>591</td>
<td>36</td>
<td>175</td>
</tr>
<tr>
<td>Southeast</td>
<td>774</td>
<td>72</td>
<td>617</td>
</tr>
<tr>
<td>West Gulf</td>
<td>450</td>
<td>35</td>
<td>298</td>
</tr>
<tr>
<td>Total</td>
<td>1,815</td>
<td>143</td>
<td>1,390</td>
</tr>
<tr>
<td>West:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Northwest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir subregion</td>
<td>66</td>
<td>6</td>
<td>39</td>
</tr>
<tr>
<td>Pine subregion</td>
<td>16</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>California</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Northern Rocky Mt.</td>
<td>27</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Southern Rocky Mt.</td>
<td>8</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>25</td>
<td>64</td>
</tr>
<tr>
<td>Coastal Alaska</td>
<td>_1</td>
<td>_1</td>
<td>_1</td>
</tr>
<tr>
<td>Total, all regions</td>
<td>4,487</td>
<td>296</td>
<td>3,383</td>
</tr>
</tbody>
</table>

1Includes 286 "other" private owners with 19,000 acres of commercial forest land.

TABLE III

PRODUCTIVITY OF RECENTLY CUT PRIVATE LANDS\(^1\) IN CONTINENTAL UNITED STATES, BY TYPE OF OWNER AND SIZE CLASS, 1953

<table>
<thead>
<tr>
<th>Type of owner and size class(^2)</th>
<th>Commercial forest area</th>
<th>Proportion of operating area by productivity class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Operating(^3)</td>
</tr>
<tr>
<td></td>
<td>Million acres</td>
<td>Million acres</td>
</tr>
<tr>
<td>Farms:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>160</td>
<td>51</td>
</tr>
<tr>
<td>Medium and large</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Lumber manufacturing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Medium</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Large</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Pulp manufacturing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small and medium</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Large</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Other wood manufacturing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small and medium</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Large</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other private:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>Medium</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Large</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Total or average</td>
<td>358</td>
<td>139</td>
</tr>
</tbody>
</table>

\(^1\) During period January 1, 1947, to date of examination in 1953 or 1954.

\(^2\) Size class based on the total commercial forest area in the ownership. Small, 3-5,000 acres in the East, 10-5,000 acres in the West. Medium, 5,000-50,000 acres. Large, 50,000 acres or larger. Excludes 19,000 acres of private forest land in Coastal Alaska.

\(^3\) The operating area of an individual ownership is the combined area of the forest types, within the ownership, in which some recent cutting was done. The operating area of any size class or type of ownership is the sum of the operating areas on individual ownerships in that same class or type of ownership. Excludes operating area on some large private ownerships to which access was denied.

### TABLE IV

**PRODUCTIVITY OF RECENTLY CUT LANDS IN FARM AND OTHER PRIVATE OWNERSHIPS IN THE CONTINENTAL UNITED STATES, BY SECTION AND REGION**

<table>
<thead>
<tr>
<th>Section and region</th>
<th>Farm ownerships—proportion of area by productivity class</th>
<th>Other private ownerships—proportion of area by productivity class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upper</td>
<td>Medium</td>
</tr>
<tr>
<td>North:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>62</td>
<td>29</td>
</tr>
<tr>
<td>Lake States</td>
<td>59</td>
<td>29</td>
</tr>
<tr>
<td>Central</td>
<td>45</td>
<td>42</td>
</tr>
<tr>
<td>Plains</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>35</td>
</tr>
<tr>
<td>South:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Atlantic</td>
<td>45</td>
<td>38</td>
</tr>
<tr>
<td>Southeast</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>West Gulf</td>
<td>18</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>West:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Northwest</td>
<td>16</td>
<td>42</td>
</tr>
<tr>
<td>California</td>
<td>61</td>
<td>33</td>
</tr>
<tr>
<td>Northern Rocky Mt.</td>
<td>15</td>
<td>61</td>
</tr>
<tr>
<td>Southern Rocky Mt.</td>
<td>56</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>

1. Recently cut lands (or operating area) in an ownership is the area of forest types in which there was some commercial cutting in the period 1947-54.

### TABLE V

**PRICE-DETERMINING FACTORS IN SALES OF PONDEROSA PINE SECOND-GROWTH STUMPAGE, CENTRAL SIERRA NEVADA REGION, 1953-1958**

<table>
<thead>
<tr>
<th>Price determining factor or practice</th>
<th>Number of sales</th>
<th>Average price DEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons for selecting the buyer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal or business relationship,</td>
<td>13</td>
<td>$11.90</td>
</tr>
<tr>
<td>and good reputation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only buyer known</td>
<td>10</td>
<td>7.70</td>
</tr>
<tr>
<td>Method of determining price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest offer, seller's asking price,</td>
<td>14</td>
<td>$12.80</td>
</tr>
<tr>
<td>negotiated price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single buyer's offer</td>
<td>17</td>
<td>8.30</td>
</tr>
<tr>
<td>Seller's knowledge of price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had knowledge</td>
<td>24</td>
<td>$10.80</td>
</tr>
<tr>
<td>No knowledge</td>
<td>8</td>
<td>9.00</td>
</tr>
<tr>
<td>Type of contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written</td>
<td>18</td>
<td>$11.10</td>
</tr>
<tr>
<td>Verbal</td>
<td>15</td>
<td>9.10</td>
</tr>
<tr>
<td>Outside assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>$13.80</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>9.70</td>
</tr>
<tr>
<td>Sale inspection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>$11.20</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>8.40</td>
</tr>
<tr>
<td>Basis for cutting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter limit</td>
<td>17</td>
<td>$10.20</td>
</tr>
<tr>
<td>Buyer's choice or all merchantable</td>
<td>10</td>
<td>8.60</td>
</tr>
<tr>
<td>timber</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Prices significantly different at 5 per cent level.*

LITERATURE CITED
LITERATURE CITED


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