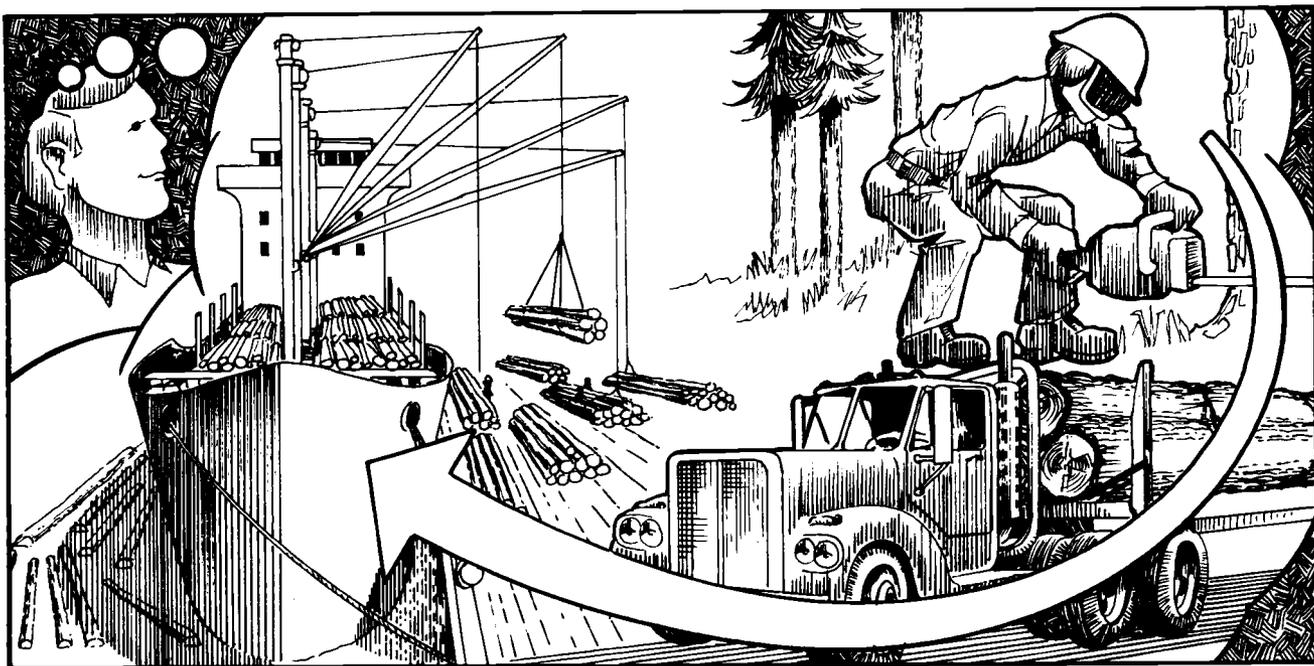


Marketing



Log Exports and the Private Woodland Owner: An Overview of Operations and Markets



Oregon State University Extension Service

This publication is intended to give you, the private woodland owner, an overview of the activities and markets involved in exporting logs. It is organized in a question-and-answer format with information based on the log export market and practices of the United States West Coast, particularly southwestern Oregon. Prices used for illustration are in 1982 dollars.

General nature of export logs

What species and sorts are exported?

Exported species include Douglas-fir, hemlock, spruce, grand fir, Port-Orford-cedar, Alaska yellow-cedar, western redcedar, and Sitka spruce. A number of these species are categorized by their characteristics into *sorts*. Log characteristics defining specific sorts vary from species to species. Some of the major species and sorts are discussed below.

Douglas-fir. This is the species exported in the greatest volume. It is priced in three sorts: old-growth, second-growth, and small-log.

The *old-growth sort* is usually in the greatest demand; for export, it attracts the highest prices. It must have fine grain (eight or more rings per inch) and must come from trees more than 150 years old. The logs are of large diameter and should average 850+ board feet per piece (individual log).

The sort consists of logs in No. 2 Sawmill (2M) and better grades as defined in *Official Rules for the Columbia River Log Scaling and Grading Bureau*, January 1, 1982 edition. (For more information on log measurements and grades, see

EC 1127, *Measuring Timber Products Harvested From Your Woodland*, in press, 1983.)

The logs usually have thick, reddish bark. They must be clean—that is, free from an excessive number of knots and untrimmed limbs—and must have existing knots trimmed flush. Most export logs of this quality come from a few large, private timber companies. Few small woodlot owners have logs of this type available today.

The *second-growth sort* is becoming more popular in the export market. It has no ring-count restrictions and comes from trees 80 to 150 years old. Average piece size is about 400 board feet. The logs must be clean and in 2M and better grades. The logs have medium-thick, whitish bark. Many private woodlot owners have logs meeting these specifications.

The *small-log sort* consists of logs with an 8- to 11-inch small-end diameter. They are graded as No. 3 Sawmill (3M) but must have 2M surface characteristics. In other words, they are good, clean, long, small logs with no ring-count restriction.

Whitewoods. Whitewood types also are exported in fairly large quantities. These sorts are called "hemlock," but they include spruce and grand fir with no distinction in quantity, quality, or price. Whitewoods are divided into three basic categories: Cascade, coastal, and small-log hemlock sorts.

The *Cascade hemlock sort* is the most preferred and commands the highest price. It traditionally is a very fine-grain (12 or more rings per inch), old-growth log that must be graded 2M and better. The average log is about 350 to 400 board feet in size and originates from higher

elevations in the Cascade range. Most export logs of this sort come from large, private, industrial timber holdings.

The *coastal hemlock sort* is more common on private woodland ownerships. This log must also be 2M and better in grade. It has no strict ring-count restriction, but fast-growth, coarse-grain logs are less desirable; if marketable, their price will depend on overall quality.

The *small-log hemlock sort* has basically the same requirements as the Douglas-fir small-log sort.

Port-Orford-cedar. Port-Orford-cedar (POC) is also an important export species in Oregon. Exporters generally recognize two main categories of POC logs, old-growth and second-growth.

The *old-growth sort* consists of fine-grain, good quality logs graded 2M and better. It is within this sort that the extraordinarily high prices, exceeding \$8500/MBF (thousand board feet) have been attained. In general within this sort, the greater the diameter, the longer the length, and finer the grain—the higher the value.

The majority of exported logs meeting this sort come from U.S. Forest Service land within restricted areas of Coos and Curry Counties, Oregon. A smaller volume comes from large, private timber holdings. Virtually all POC logs meeting this sort are exported as there is little domestic use and value for Port-Orford-cedar.

The *second-growth sort* consists of any POC logs graded No. 4 Sawmill (4M) and better that do not qualify as old-growth. Many woodlot owners on the southern Oregon coast have this type of timber on their properties. The domestic mills will usually pay about the same price for this POC as for the

equivalent grade of western redcedar. Often export buyers can pay significantly higher prices for these logs than domestic users can.

The export demand and price for this second-growth POC is often tied to the export hemlock market because its end use in Japan is similar. When export demand and prices for hemlock are low, there is frequently little or no export market for the second-growth POC.

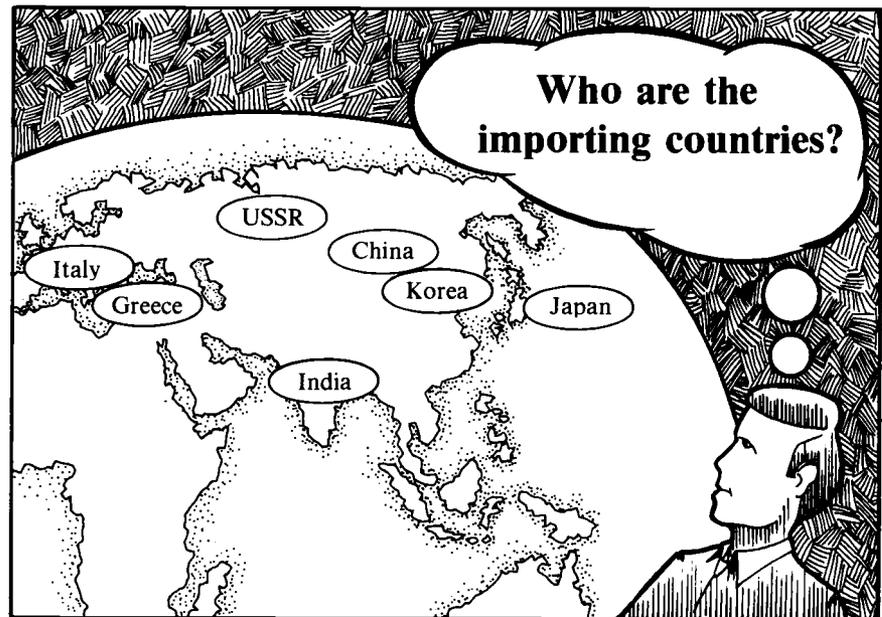
In the State of Washington, where good quality Alaska yellow-cedar, western redcedar, and Sitka spruce are available in quantity, these are also important export species. Northern California produces good quality grand fir for a special export sort.

What log characteristics are important in the export market?

In most cases, export logs are the "cream of the crop" in appearance and quality. Their outside surface should be relatively smooth, clean, and free of a large number of knots, large-sized knots, sweep, burls, deep scars, burn, and crook. No conk, sap rot, excessive twist or excessive pitch is allowed; all ends should be bucked clean.

Grain or ring count is very important in most sorts. The finer the grain, the better the log. Extremely coarse grain (less than six rings per inch) is undesirable in any sort.

Especially in the old-growth sorts, large diameter and average piece size are important considerations. In good quality old-growth logs, large diameters are more desirable because they will yield more and better grades of lumber. Also, many importing countries still have older mills, which (like ours) use the large logs more efficiently. Length and



diameter, of course, determines piece size.

In general, greater length is a primary factor in determining the highest price, because lumber is usually cut in multiples of 4 meters in Japan. Premium prices are paid for the length and lack of waste associated with longer logs in which more length options are available.

For Japan, the longer the better: up to 40 feet, with a 20-foot minimum; those 26 feet and longer are more desirable.

China will not accept logs over 40 feet because its transportation system is not equipped to handle them.

Length and diameter are more important than grades. Importing countries distribute or sell their logs by diameter grouping and length, as well as quality within these classes. They do not use grades.

Therefore, grades are becoming less important to those involved in exporting here in the United States. In most cases, logs graded Special Mill (SM) and 2M for export are now priced the same. Average length and diameter determine the price.

To make products more desirable for the export market, then, cut for length and diameter. Ignore grade. For instance, do not buck a 20-foot SM and a 20-foot 2M from a log. You will produce a better export product taking a 40-foot 2M, providing the entire log meets the other specifications.

Movement of export logs

Who are the importing countries?

Japan is now the greatest volume buyer. It purchases virtually all the sorts and species mentioned here. Since early 1980, China has been increasingly active in the market. The Chinese purchase mainly second-growth Douglas-fir and some coastal hemlock, but they have indicated interest in other sorts, primarily the small-log fir and hemlock.

Korea, another log importer, purchases mainly the hemlock and Douglas-fir small-log sorts. The Koreans sometimes will accept a log of lower quality than will the Japanese, but the price is also lower.

Taiwan purchases Port-Orford-cedar, and Douglas-fir and hemlock small-logs.

How do export logs flow from timber owner to their ultimate destination?

Exported logs change hands a number of times during their flow from timber owner to final user. The process is discussed below and illustrated in table 1.

Table 1.—*Export flows: Stump to foreign mill*

Parties involved*	Responsibilities	Costs and profits
Domestic timber owners—Exporting <i>Oregon, Washington</i> <i>private timber owners</i> Burlington Northern International Paper Co. ITT Rayonier Menasha Land and Timber Murphy Company Reservation Ranch Weyerhaeuser . . . and independent firms	<ul style="list-style-type: none"> • Locates export buyer • Sells logs or timber to broker 	<i>Costs:</i> Logging and transportation costs about \$100/MBF <i>Profit: ?</i>
Domestic broker <i>Northern California, Oregon, Washington brokers</i> Burlington Northern Caffall Bros. International Paper Co. ITT Rayonier Murray-Pacific Co. Pacific Lumber and Shipping Weyerhaeuser	<ul style="list-style-type: none"> • Gets export order from trading company and makes sale agreement • Buys from owner • Accumulates cargo • Checks sorts and specifications • Makes payments • Oversees operations and costs to bring logs f.a.s. (free alongside ship)—sorting, bundling, scaling, dumping, rafting, etc. 	<i>Costs:</i> \$30-\$50/MBF <i>Profit and risk:</i> 5-10%
Foreign trading company <i>Northern California, Oregon, Washington, British Columbia</i> Ataka C. Itoh Kobiashi Marubeni Mitsubishi Mitsui Sumitomo Yuasa (about 30 Japanese companies in all)	<ul style="list-style-type: none"> • Locates cargo in U.S. • Negotiates price • Charters ship • Distributes to foreign markets • Conducts market research • Makes conversions between scaling and grading practices • Pays cash in U.S. • Sells on 180-day note in foreign currency • Risks market fluctuations and exchange rates 	<i>Costs:</i> \$135-\$150/MBF <i>Profit and risk:</i> 1-2%
Foreign wholesaler <i>Example wholesaler</i> Yamamoto (Japan)	<ul style="list-style-type: none"> • Buys from the trading company • Resorts logs • Sells to mills on a 180-day note 	<i>Costs:</i> \$20/MBF <i>Profit and risk:</i> 3-5%
Foreign mill <i>Japan</i> 20,200 small sawmills cutting 720-MBF average per year	<ul style="list-style-type: none"> • Custom-cut logs to order 	<i>Cost:</i> At mill for a log purchased from a U.S. timber owner for \$350/MBF, would cost about \$570/MBF

* Names of the various parties are examples of some currently operating on the U.S. West Coast. The list is not intended to be complete, nor does it signify endorsement by the OSU Extension Service.

Domestic owner. The timber owner, whether large or small, commercial or private, deals first with a broker. Timber owners who are not also brokers must sell to one. A few large industrial timber owners employ their own export marketing personnel, who act in a brokering capacity to handle their own logs and purchase from small private owners as well. There are also smaller independent agents or companies that act as brokers.

Domestic broker. The broker performs a necessary and important function that requires a great deal of coordination and involves considerable risk. Initially, a domestic broker must locate and confirm an export order from a foreign buyer. Usually, export orders involve enough volume for a full ship cargo (3 to 6 million board feet) and are made on a "free alongside ship" (f.a.s.) basis. This simply means that all costs involved in getting the logs to shipside have been included once they arrive there.

The broker negotiates a sale price with contract terms, locates the cargo to meet the specifications, then negotiates a purchase price that covers the broker's costs and allows for profit and risk. The broker arranges and pays to have the logs scaled, sorted, merchandised, bundled, dumped, towed, or trucked to shipside, and insures proper timing of each.

A broker's risks can be large. The seller may not provide the proper quality logs and on time. The buyer may cancel out, delay the ship (causing inventory financing problems), be extremely fussy, reject an excessive number of logs, or attempt to reduce prices.

As a private woodlot owner, you will generally deal only with the broker, although you may be introduced to a foreign buyer. To protect yourself, you should have a good contract with the broker, clearly stating log specifications, prices, and the nature and time of payment. When you sell logs, you should receive payment when they are delivered to the broker.

Payment for timber should be either on a pay-as-cut or lump-sum basis. It would be quite risky if you do not receive payment until the logs are loaded aboard ship and the broker is paid.

Foreign trading company. The domestic broker sells the logs to a foreign trading company whose responsibility covers everything necessary to buy the logs in the U.S. and resell them delivered to a wholesale yard in its country. Foreign trading companies perform a great amount of market research at home and abroad to determine species, sorts, and volumes that can be handled at a profit.

The trading company negotiates a purchase in the U.S., arranges payment to seller, charts a ship, clears customs on both ends, distributes and sells the logs into its market, arranges payment terms with its buyers, and pays all associated costs.

The trading company's risks are high, and, on the average, its profits in the log business are very low. Its major risks are market price fluctuations, log measurement conversion factors, and currency exchange rate fluctuations. For example, a Japanese trading company must pay for a cargo in cash (U.S. dollars/MBF) upon invoice, usually several days after loading.

After two weeks, the ship arrives in Japan. Two or three weeks later, the ship clears customs, unloads,

and the logs are rescaled in Japanese cubic measurement (Koku). Then a sale price is negotiated with a buyer and the logs are delivered. The buyer gives the trading company a note covering the negotiated value, promising to pay the trading company in yen/Koku approximately 180 days later.

About 7 months will elapse before the trading company gets paid. During this time, exchange rates may vary considerably. Currently (1982 average), one yen/Koku equals \$2.50 to \$3.00/MBF; therefore, if the exchange rate varies by 10, this accounts for \$25 to \$30/MBF. Between 1980 and 1982, the rate has varied by as much as 60 points or \$150 to \$180/MBF.

Logs are sold to a trading company on a dollar/MBF (Scribner scale) basis. Scribner measurement is a relatively inaccurate, one-end measure. Japanese scale, Koku, is a one-end cubic scale. Log sizes greatly affect the conversion factors. If a trading company gets a cargo with a smaller piece size than anticipated, and the exchange rate varies unfavorably, it can incur large losses in a single cargo.

There are about 30 different importing or foreign trading companies buying logs in the United States. Most of them have offices in Portland or Seattle and have several log buyers stationed full-time in the U.S. The buyers have tours usually lasting 3 to 7 years; they regularly travel the coast coordinating their business with the brokering firms.

Foreign wholesalers. In Japan, wholesale yards purchase logs from the trading companies. They then sort and sell the logs to small specialized mills throughout their area. The mills pay the wholesaler in yen/Koku, again with a 150- to 180-day payment note.

Foreign mills. In Japan in 1979 there were some 20,200 sawmills, employing about 9 people per mill and cutting about 720 MBF per year per mill (some U.S. mills will cut that amount in 4 hours). These mills are very specialized.

For example, a large, old-growth Douglas-fir, prime log (#1 or #2 peeler) that ends up in a Japanese sawmill may lie in the yard until a contractor building a custom home needs some lumber. The contractor and homeowner go to the mill to look at the logs. From several #1 and #2 peelers, they may pick one of whose grain pattern, quality, and color they approve.

They might then have the mill cut several boards from a certain portion of the log; then the log goes back to the yard to await another custom-cut order. The logs may seem unusually high priced in the export market, but their careful use at the consumer end supports this price.

Little is known about the Chinese mills other than they are small, old, labor-intensive mills that produce mainly a heavy construction product.

Log prices on the export market

How do export prices compare to domestic values?

Export log prices must always be higher than domestic prices. If they were not, there would be no export market. The spread between export and domestic prices can range from nothing to \$125/MBF (or more for logs having special value for their unusual quality). As the price spread increases, more logs are exported; as it closes, the export market simply dries up.

Because prices are higher when there is an available export market, if you want to obtain the highest possible return for your timber, you should always inquire into the export market before you sell.

Be sure, however, to consult a firm that is specifically involved in exporting. Most local mills are not involved in log exports and do not recognize export prices because they use all the logs they purchase in their own mills.

Of course, no buyer will pay any more than necessary to purchase logs. If export buyers can purchase logs at domestic prices and then sell to the export market, they can increase their returns. If you have export quality logs for sale, state your intent to enter your logs in the export market and demand export price consideration. Log buyers will then know that they must be competitive with export pricing.

Keep in mind, however, that the log export market varies greatly according to the economic conditions at the time, in both the exporting and importing countries. Supply and demand, currency exchange rates, and ocean transport costs greatly effect the market volumes and prices. Fluctuations can be rapid. The species and

quality of the logs acceptable to the export market, likewise, will vary according to existing conditions when a deal is consummated.

What are the approximate costs and profits involved in the export market?

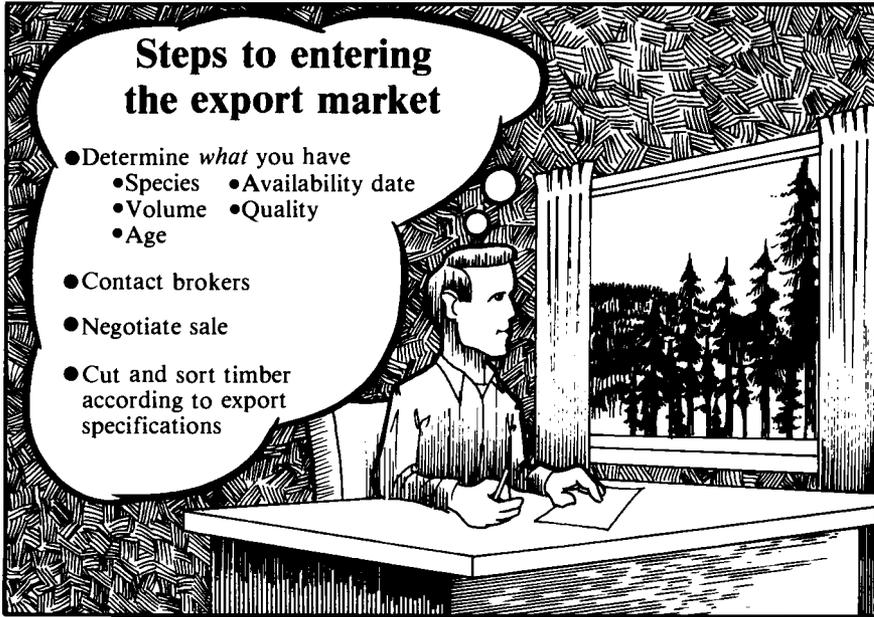
As mentioned earlier, U.S. timber owners/sellers may receive as much as a \$125/MBF premium by selling on the export market. However, their costs may be somewhat higher because of additional sorting and handling.

The brokers' costs are somewhere between \$30 and \$50/MBF, and they anticipate about five to ten percent profit. The trading companies' costs are in the neighborhood of \$135 to \$150/MBF but can be larger. They expect about one to two percent profit.

The foreign wholesaler likes to make at least three to five percent profit when selling to the foreign mill. Thus, if a U.S. timber owner sells logs to a broker for \$350/MBF, then the ultimate cost to the foreign mill will be approximately \$570/MBF.

Steps to entering the export market

- Determine *what* you have
 - Species
 - Availability date
 - Volume
 - Quality
 - Age
- Contact brokers
- Negotiate sale
- Cut and sort timber according to export specifications



Entering the export market

When and how should a small private owner go about exporting logs?

The best time to sell logs into the export market is, of course, when prices are highest above domestic values. Usually, when the domestic market is good, so is the export market. The reason is that when good quality logs are in demand domestically, export supplies are reduced, thus causing prices to rise.

This does not *always* hold true, however. Sometimes one market may be good while the other is not. Export prices will also be higher when the foreign exchange rate is favorable to the importer.

If you are interested in selling to the export market, survey your timber first, to determine what is there. Initially, be prepared to give buyers information about species, appropriate volume of exportable wood, age of trees, and availability of the logs.

Next, contact several brokers, provide the above information, and ask for prices. The brokers will probably want to look at the timber to determine its quality for export. What is important here is that you make clear that you have export logs, are looking for a premium price, and are willing to go to the extra effort to get it.

Accept the best price after considering the contract terms. After negotiating a sale with a broker, insure that the logs are cut and sorted to the specifications of the export sale agreement.

There are no set geographic boundaries within which brokers purchase logs or maximum distances to which they limit themselves. A broker will generally quote a delivered price to an export yard facility—the higher the transport costs, the smaller the potential margin between the export price and the local domestic price.

There is no minimum volume that you must have to sell to the export market. Keep in mind, however, that brokers must be able to accumulate a large volume at a particular time to compile an export order. When the export market is poor, independent brokers are not

regularly buying logs, and the large industrial owners/brokers may be exporting only their own logs. When export demand is good, both may be continually purchasing and accumulating volumes of any size for an anticipated sale.

You should be certain that you have shopped the market to obtain the highest possible price; that is the best you can do. There are many misconceptions about the export market. Sellers hear rumors of high prices; when the quotes they receive are not as high as expected, they may feel the broker is taking advantage of them.

It is true that at times a broker may construct a deal that goes well, making a big profit in a single transaction. However, a broker's risks are high; at times, the losses in a single transaction may be devastating and completely offset any gains.

Summary

Barring Federal legislation to limit export of private logs—an unlikely event—a good export market should exist for quite some time. As the supply of old-growth timber diminishes, the export staple will become second-growth and small logs. While most woodland owners don't have high quality old-growth, they do have smaller logs that are of export quality and quantity. Meeting the specifications demanded in an export sale requires extra effort from timber owners. When export markets exist, however, owners' efforts are compensated by prices exceeding domestic prices.

If you are considering export sales, familiarize yourself with the log exporting process, work through a timber broker, and always use a contract when selling your logs.

The Woodland Workbook is a collection of more than 50 publications prepared by the Oregon State University Extension Service specifically for owners and managers of private, nonindustrial woodlands. The Workbook is organized into 10 sections containing information of long-range and day-to-day value for anyone interested in wise management, conservation, and use of woodland properties. The sections are Management Planning, Forest Measurements, Reforestation, Stand Management, Logging, Marketing Forest Products, Multiple Use, Forestry Issues, Business Management, and Woodland Assistance.

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