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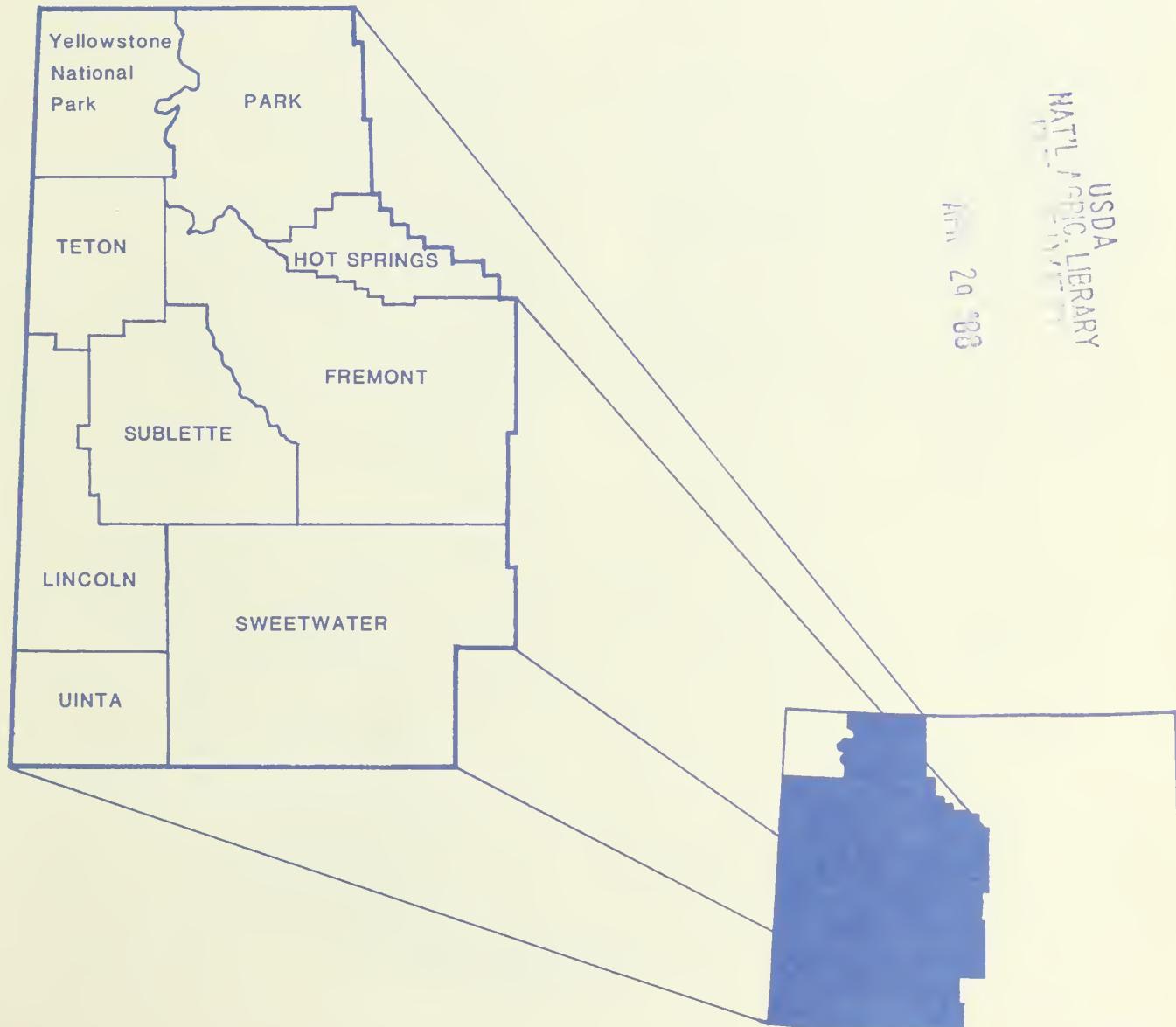
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# Timberland and Woodland Resources Outside National Forests in Western Wyoming, 1984

Roger C. Conner  
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## PREFACE

Forest Survey is a continuing nationwide undertaking conducted by the Forest Service, U.S. Department of Agriculture, with the primary objective of providing an assessment of the renewable resources on the Nation's forests. This requires periodic State-by-State resource inventories. Originally, Forest Survey was authorized by the McSweeney-McNary Act of 1928. The current authorization is through the Renewable Resources Research Act of 1978.

The Intermountain Research Station with headquarters in Ogden, UT, administers the forest resource inventories for the Rocky Mountain States of Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming, western South Dakota, western Texas, and Oklahoma's Panhandle. These inventories provide information on the extent and condition of State and privately owned forest lands, volume of timber, and rates of timber growth and mortality. These data, when combined with similar information for Federal lands, provide a basis for forest policies and programs and for the orderly development and use of the resources.

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## ACKNOWLEDGMENTS

This report is the result of the combined efforts of numerous people on the Forest Survey staff. In addition to the photo interpretation and field crews, several individuals played key roles in the reduction of basic data into information describing the extent, nature, and condition of the forest resources in Wyoming: Dennis Collins supervised the data collection; Sharon Woudenberg and Shirley Waters compiled the data and made summaries; and Susan Brown transformed the data summaries into tables of information. And we extend a special note of gratitude to the private land owners who allowed the field crews access to the sample locations on their properties.

## RESEARCH SUMMARY

Presents highlights of the timberland and woodland resources outside National Forests in western Wyoming. Includes statistical tables of area, volume, growth, and mortality based on Forest Survey data collected in 1983.

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# Timberland and Woodland Resources Outside National Forests in Western Wyoming, 1984

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## INTRODUCTION

For the latest inventory of forest land in Wyoming, completed in 1983, the State was divided into three multi-county Sample Areas. Within those sample areas all nonreserved forest lands, including woodland not under the administration of the Forest Service, were inventoried.

Sample Area 1, the subject of this report, is largest in geographic area and encompasses the eight counties that make up the western third of the State (fig. 1). Sample Areas 2 and 3 cover the rest of the State and are the subjects of separate reports.

**The data presented here pertain only to those lands not administered by the Forest Service or USDI**

**National Park Service.** Data for public lands administered by other agencies such as the USDI Bureau of Land Management (BLM) and the State of Wyoming are included along with those for privately owned lands.

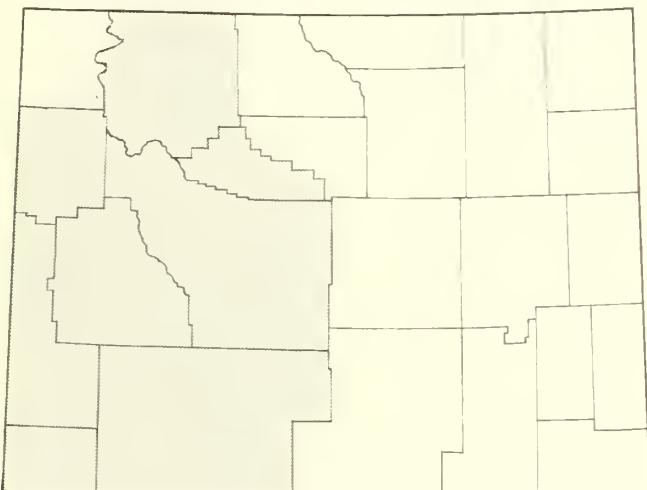


Figure 1—Sample Area 1, western Wyoming.

## HIGHLIGHTS

### Area, Forest Type, and Stand Size

Land area of western Wyoming is nearly 27.9 million acres. Roughly 73 percent, 20.4 million acres, is publicly owned, and the remaining 27 percent, 7.5 million acres, is privately owned.

Approximately 6.3 million acres of the public land is administered and managed by the Forest Service, and another 2.2 million acres is managed by the National Park Service (table 1).

The remaining 11.8 million acres of "other" public land are largely distributed between the Bureau of Land Management with 10.5 million acres and the State with 1.2 million. Miscellaneous Federal lands account for less than 1 percent of the area, approximately 126,000 acres.

About 1.9 million acres of the private land in the sample area—25 percent—are Indian trust lands. The remaining 5.6 million acres include all other private land owners.

Forests occupy roughly 2.9 million acres of land outside National Forests in western Wyoming (fig. 2), over 1.8 million acres of which are reserved.

Approximately 677,000 acres of the nonreserved forest land are classified as timberland, and the remaining 372,000 acres are woodlands.

About half of the timberland area and over a third of the woodland area are privately owned.

Softwood forest types occupy over 81 percent of the timberland outside National Forests in western Wyoming. The major types are limber pine (46 percent), Douglas-fir (19 percent), lodgepole pine (17 percent), spruce-fir (12 percent), and spruce (5 percent).

The rest of the timberland area is composed of hardwood forest types, specifically aspen (78 percent) and cottonwood (22 percent).

Stocking is adequate on much of the timberland area; 44 percent is at least medium to fully stocked with growing-stock trees, but a third, or 218,000 acres, is poorly stocked or nonstocked.



Figure 2—General geographic location of forest land in western Wyoming.

Sawtimber stands occupy about 299,000 acres (44 percent), and poletimber stands account for about 190,000 acres (28 percent) of the timberland area.

Juniper, the dominant woodland forest type, occupies about 94 percent of the woodland area. Pinyon-juniper (P-J) stands account for another 4 percent.

## Volume

Net growing-stock volume on timberland amounts to 752.9 million cubic feet, and sawtimber volume totals nearly 2.3 billion board feet (International  $\frac{1}{4}$ -inch rule). Just over half of the growing-stock volume is privately owned.

Three-fourths of the softwood growing-stock volume is accounted for by Douglas-fir (*Pseudotsuga menziesii*), lodgepole pine (*Pinus contorta*), and Engelmann spruce (*Picea engelmannii*) species combined.

Limber pine (*Pinus flexilis*), which accounts for nearly half of the area of timberland softwoods, contributes only 12 percent of the net cubic-foot volume.

Aspen accounts for almost 82 percent of the hardwood growing-stock volume, about 111 million cubic feet.

Timberland productivity is generally low; 66 percent of the area is incapable of producing 50 cubic feet of wood per acre per year.

Over half of the timberland area—345,000 acres—supports less than 1,500 board feet per acre (International  $\frac{1}{4}$ -inch rule).

Nearly 75 percent of the growing-stock volume and 57 percent of the sawtimber volume is in trees less than 15 inches diameter at breast height (d.b.h.).

Cull and salvable dead volume on timberland totaled 111.9 million cubic feet, and only 5 percent of this is in rotten cull trees.

Net volume on woodland amounts to approximately 120.6 million cubic feet, about a third of which is on private land. Net dead volume totaled nearly 24.5 million cubic feet.

Juniper species (*Juniperus monosperma*, *J. osteosperma*, and *J. scopulorum*) account for nearly all of the woodland net volume.

## COMPONENTS OF CHANGE

### Growth

Net annual growth of growing stock on timberland was about 13.1 million cubic feet in 1983; sawtimber growth was over 46.6 million board feet (International  $\frac{1}{4}$ -inch rule).

Just under half of the net growth on timberland was accounted for by subalpine fir (*Abies lasiocarpa*) and Douglas-fir species combined.

Net annual growth on woodland was over 1.1 million cubic feet in 1983, and nearly 80 percent was accounted for by pinyon and juniper species.

### Mortality

Annual mortality on timberland of 5.8 million cubic feet offsets about 31 percent of the gross annual growth.

Lodgepole pine and limber pine combined represent 71 percent of the mortality.

About 53 percent of mortality on timberland was due to disease. Insects caused another 30 percent.

### Removals

An estimated 38.5 million board feet (International  $\frac{1}{4}$ -inch rule), or 6.6 million cubic feet, of industrial roundwood was harvested from western Wyoming in 1983. Only 9 percent came from private and other public lands. Some 35 million board feet (International  $\frac{1}{4}$ -inch rule) was harvested from National Forest lands, and over half of this came from Teton County (McLain 1987b).

The major roundwood product harvested was sawlogs, which accounted for 97 percent of the cubic-foot volume. Roughly 81 percent of the harvest was from lodgepole pine, amounting to nearly 5.4 million cubic feet. The lodgepole pine and sawlog harvest statistics include all land owners in the Sample Area.

Fuelwood harvest in western Wyoming in 1983 amounted to more than 51,000 cords, equal to over 3.7 million cubic feet (McLain 1987a). About a quarter of the harvest came from private and other public lands (includes BLM).

Lodgepole pine was the major contributor to the fuelwood harvested from all lands, accounting for over half the total for the Sample Area.

## HOW THE INVENTORY WAS CONDUCTED

The inventory was designed to provide reliable statistics primarily at the State and Sample Area levels.

### Prefield

Primary area estimates were based on the classification of 114,005 sample points systematically placed on the latest aerial photographs available. The photo points, adjusted to meet known land areas by owner class, were used to stratify and compute expansion factors for the field sample data.

### Field

Land classification and estimates for forest characteristics and volume were based on observations and measurements recorded at 2,581 ground sample locations, of which 180 were forested. Sample trees on timberland plots were selected using 5-point cluster, which included 1/300-acre fixed radius plots for trees less than 5 inches d.b.h., and variable radius plots (40 BAF) for trees 5 inches d.b.h. or larger. Sample trees on woodland plots were selected using a 1/5-, 1/10-, or 1/20-acre fixed plot for trees 3 inches diameter at root collar (d.r.c.) and larger. Trees less than 3 inches d.r.c. were tallied on a 1/100-acre subplot.

### Compilation

All photo and field data were entered into a computer for editing, computation, and tabulation. Final estimates from these data were based on statistical summaries, a portion of which is included in this bulletin. Volume and defect were computed using equations developed by Edminster and others (1980, 1981), Kemp (1958), Chojnacky (1985), Meyers (1964), Meyers and Edminster (1972). Defect for woodland species was computed from field observations.

### DATA RELIABILITY

Individual cells within tables should be used with caution. Some are based on small sample sizes, which may result in high sampling errors. The standard error percentages shown in tables 2 and 3 were calculated at the 67 percent confidence level.

### STANDARD FOREST SURVEY TERMINOLOGY

*Acceptable trees*—Growing-stock trees meeting specified standards of size and quality, but not qualifying as desirable trees.

*Area condition class*—A classification of timberland reflecting the degree to which the site is being utilized by growing-stock trees and other conditions affecting current and prospective timber growth (see Stocking): Class 10—Areas fully stocked with desirable trees and not overstocked.

Class 20—Areas fully stocked with desirable trees, but overstocked with all live trees.

Class 30—Areas medium to fully stocked with desirable trees and with less than 30 percent of the area controlled by other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

Class 40—Areas medium to fully stocked with desirable trees and with 30 percent or more of the area controlled by other trees, or conditions that ordinarily prevent occupancy by desirable trees, or both.

Class 50—Areas poorly stocked with desirable trees, but fully stocked with growing-stock trees.

Class 60—Areas poorly stocked with desirable trees, but with medium to full stocking of growing-stock trees.

Class 70—Areas nonstocked or poorly stocked with desirable trees, and poorly stocked with growing-stock trees.

Class 80—Low-risk old-growth stands.

Class 90—High-risk old-growth stands.

*Nonstocked*—Areas less than 10 percent stocked with growing-stock trees.

*Basal area*—The cross-sectional area of a tree expressed in square feet. For timber species the calculation is based on diameter at breast height (d.b.h.); for woodland species it is based on diameter at root collar (d.r.c.).

*Christmas tree grade*—Pinyon species are classified as Christmas trees using the following guidelines:

Premium—Excellent conical form with no gaps in branches and a straight bole.

Standard—Good conical form with small gaps in branches and bole slightly malformed.

Utility—Conical in form with branches missing and bole bent or malformed.

Cull—Not meeting one of the above classifications or over 12 feet in height.

*Cord*—A pile of stacked wood equivalent to 128 cubic feet of wood and air space having standard dimensions of 4 by 4 by 8 feet.

*Cull trees*—Live trees that are unmerchantable now or prospectively (see Rough tree and Rotten tree).

*Cull volume*—Portions of a tree's volume that are not usable for wood products because of rot, missing or dead material, or other cubic-foot defect.

*Deferred forest land*—Forest lands within the National Forest System that are under study for possible inclusion in the Wilderness System.

*Desirable trees*—Growing-stock trees (1) having no serious defect in quality to limit present or prospective use for timber products, (2) of relatively high vigor, and (3) containing no pathogens that may result in death or serious deterioration within the next decade.

*Diameter at breast height (d.b.h.)*—Diameter of the stem measured at 4.5 feet above the ground.

*Diameter at root collar (d.r.c.)*—Diameter equivalent at the point nearest the ground line that represents the basal area of the tree stem or stems.

*Diameter classes*—Tree diameters, either d.b.h. or d.r.c., grouped into 2-inch classes labeled by the midpoint of the class.

*Farmer/rancher-owned lands*—Lands owned by a person who operates a farm or a ranch and who either does the work or directly supervises the work.

*Forest industry lands*—Lands owned by companies or individuals operating a primary wood-processing plant.

*Forest land*—Land at least 10 percent stocked by forest trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width at least 120 feet wide to qualify as forest land. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if less than 120 feet wide.

*Forest trees*—Woody plants having a well-developed stem or stems, usually more than 12 feet in height at maturity, with a generally well-defined crown.

*Forest type*—A classification of forest land based upon and named for the tree species presently forming a plurality of live-tree stocking.

*Gross annual growth*—The average annual increase in the net volume of trees during a specified period.

*Growing-stock trees*—Live sawtimber trees, poletimber trees, saplings, and seedlings of timber species meeting specified standards of quality and vigor; excludes cull trees.

*Growing-stock volume*—Net cubic-foot volume in live poletimber-size and sawtimber-size growing-stock trees from a 1-foot stump to a minimum 4-inch top (of central stem) outside bark or to the point where the central stem breaks into limbs.

*Growth*—See definition for Net annual growth.

*Hardwood trees*—Dicotyledonous trees, usually broad-leaved and deciduous.

*High-risk old-growth stands*—Timber stands over 100 years old in which the majority of the trees are not expected to survive more than 10 years.

*Indian lands*—Indian lands held in trust by the Federal Government.

*Industrial wood*—All commercial roundwood products except fuelwood.

*Land area*—The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and river flood plains, streams, sloughs, estuaries, and canals less than 120 feet wide; and lakes, reservoirs, and ponds less than 1 acre in size.

*Logging residues*—The unused portions of growing-stock trees cut or killed by logging.

*Low-risk old-growth stands*—Timber stands over 100 years old in which the majority of the trees are expected to survive more than 10 years.

*Miscellaneous Federal lands*—Lands administered by Federal agencies other than the U.S. Department of Agriculture, Forest Service or U.S. Department of the Interior, Bureau of Land Management.

*Mortality*—The net volume of growing-stock trees that have died from natural causes during a specified period.

*National Forest lands*—Public lands administered by the U.S. Department of Agriculture, Forest Service.

*National Resource lands*—Public lands administered by the U.S. Department of the Interior, Bureau of Land Management.

*Net annual growth*—Gross annual growth minus average annual mortality.

*Net dead volume*—Total net volume of dead trees plus the net volume of dead material in live trees.

*Net volume in board feet*—The gross board-foot volume in the sawlog portion of growing-stock trees, less deductions for cull volume.

*Net volume in cubic feet*—Gross cubic-foot volume in the merchantable portion of trees less deductions for cull volume. For timber species, volume is computed for the merchantable stem from a 1-foot stump to a minimum 4-inch top diameter outside bark (d.o.b.), or to the point where the central stem breaks into limbs. For woodland species, volume is computed outside bark (o.b.) for all woody material above d.r.c. that is larger than 1.5 inches d.o.b.

*Nonforest land*—Land that does not currently qualify as forest land.

*Nonindustrial private*—All private ownerships except forest industry.

*Nonstocked areas*—Forest land less than 10 percent stocked with live trees.

*Old-growth stands*—Stands of timber species over 100 years old.

*Other private land*—Privately owned land other than forest industry or farmer-owned.

*Other public land*—Public land administered by agencies other than the U.S. Department of Agriculture, Forest Service.

*Other removals*—The net volume of growing-stock trees removed from the inventory by cultural operations such as timber-stand improvement, by land clearing, and by changes in land use, such as a shift to wilderness.

*Poletimber stands*—Stands at least 10 percent stocked with growing-stock trees, in which half or more of the stocking is sawtimber or poletimber trees or both, with poletimber stocking exceeding that of sawtimber (see definition for Stocking).

*Poletimber trees*—Live trees of timber species at least 5 inches d.b.h. but smaller than sawtimber size.

*Posts*—Juniper and oak species are evaluated for post potential using the following criteria:

Line post—A 7-foot minimum length with 5 to 7 inches diameter at the butt, 2.5-inch minimum small end diameter, and reasonably straight and solid.

Corner post—An 8-foot minimum length with 7 to 9 inches diameter at the butt, 2.5-inch minimum small end diameter, and reasonably straight and solid.

*Potential growth*—The average net annual cubic-foot growth per acre at culmination of mean annual growth attainable in fully stocked natural stands.

*Primary wood-processing plants*—Plants using roundwood products such as sawlogs, pulpwood bolts, veneer logs, and so forth.

*Productivity class*—A classification of forest land that reflects biological potential. For timberland the potential net annual growth at culmination of mean annual increment in fully stocked natural stands is the index used. For woodland, characteristics that affect the land's ability to produce wood, such as soil depth and aspect, are used. Furthermore, woodland is classified as high site where sustained wood production is likely, or low site where the continuous production of wood is unlikely.

**Removals**—The net volume of growing-stock trees removed from the inventory by harvesting, cultural operations, land clearings, or changes in land use.

**Reserved forest land**—Forest land withdrawn from tree utilization through statute or administrative designation.

**Residues:**

Coarse residues—Plant residues suitable for chipping, such as slabs, edgings, and ends.

Fine residues—Plant residues not suitable for chipping, such as sawdust, shavings, and veneer clippings.

Plant residues—Wood materials from primary manufacturing plants that are not used for any product.

**Rotten tree**—A live poletimber or sawtimber tree with more than 67 percent of its total volume cull (cubic-foot), and with more than half of the cull volume attributable to rotten or missing material.

**Rough tree**—A live poletimber or sawtimber tree with more than 67 percent of its total volume cull (cubic-foot), and with less than half of the cull volume attributable to rotten or missing material.

**Roundwood**—Logs, bolts, or other round sections cut from trees.

**Salvable dead trees**—Standing or down dead trees that are currently merchantable by regional standards.

**Saplings**—Live trees of timber species 1 to 4.9 inches d.b.h., or woodland species 1 to 2.9 inches d.r.c.

**Sapling and seedling stands**—Timberland stands at least 10 percent stocked on which more than half of the stocking is saplings or seedlings or both.

**Sawlog portion**—That part of the bole of sawtimber trees between a 1-foot stump and the sawlog top.

**Sawlog top**—The point on the bole of sawtimber trees above which a sawlog cannot be produced. The minimum sawlog top is 7 inches d.o.b. for softwoods and 9 inches d.o.b. for hardwoods.

**Sawtimber stands**—Stands at least 10 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

**Sawtimber trees**—Live trees of timber species meeting regional size and defect specifications. Softwood trees must be at least 9 inches d.b.h. and hardwood trees 11 inches d.b.h.

**Sawtimber volume**—Net volume in board feet of the sawlog portion of live sawtimber trees.

**Seedlings**—Established live trees of timber species less than 1 inch d.b.h. or woodland species less than 1 inch d.r.c.

**Softwood trees**—Monocotyledonous trees, usually evergreen, having needle or scalelike leaves.

**Standard error**—An expression of the degree of confidence that can be placed on an estimated total or average obtained by statistical sampling methods.

Standard errors do not include technique errors that could occur in photo classification of areas, field measurements, or compilation of data.

**Stand-size classes**—A classification of forest land based on the predominant size of trees present (see Sawtimber stands, Poletimber stands, and Sapling and seedling stands).

**State, county, and municipal lands**—Lands administered by States, counties, and local public agencies, or lands leased by these governmental units for more than 50 years.

**Stocking**—An expression of the extent to which growing space is effectively utilized by present or potential growing-stock trees of timber species.

**Timberland**—Forest land where timber species make up at least 10 percent stocking.

**Timber species**—Tree species traditionally used for industrial wood products. In the Rocky Mountain States, these include aspen and cottonwood hardwood species and all softwood species except pinyon and juniper.

**Timber stand improvement**—Treatments such as thinning, pruning, release cutting, girdling, weeding, or poisoning of unwanted trees aimed at improving growing conditions for the remaining trees.

**Upper-stem portion**—That part of the main stem or fork of sawtimber trees above the sawlog top to a minimum top diameter of 4 inches outside bark or to the point where the main stem or fork breaks into limbs.

**Water**—Streams, sloughs, estuaries, and canals more than 120 feet wide, and lakes, reservoirs, and ponds more than 1 acre in size at mean high water level.

**Wilderness**—An area of undeveloped land currently included in the Wilderness System, managed so as to preserve its natural conditions and retain its primeval character and influence.

**Woodland**—Forest land where timber species make up less than 10 percent stocking.

**Woodland species**—Tree species not usually converted into industrial wood products. Common uses are fuelwood, fenceposts, and Christmas trees.

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# FOREST SURVEY TABLES

Table 1--Total land and water area by ownership class in western Wyoming, 1984

Ownership class	Area
<u>- - - Acres - - -</u>	
Land:	
Public:	
National Forest	6,305,975
Other:	
Bureau of Land Management	10,523,622
National Parks <sup>1</sup>	2,226,609
Miscellaneous Federal	126,392
State	<u>1,190,010</u>
Total other public	<u>14,066,633</u>
Total public	<u>20,372,608</u>
Private:	
Indian	1,886,703
Other private	<u>5,589,188</u>
Total private	<u>7,475,891</u>
Total land area	<u>27,848,499</u>
Census water	<u>353,670</u>
Total land and water <sup>2</sup>	28,202,169

<sup>1</sup>Not included with miscellaneous Federal, a component of other public, for purpose of clarity. These lands, and other reserved lands, are included in tables 1, 2, 4, and 5 only.

<sup>2</sup>U.S. Department of Commerce, Bureau of Census. Area measurement reports, GE-20 No. 1, 22 p., 1970, updated to account for changes in inland water estimates obtained from the USDA, Soil Conservation Service's National Resource Inventory, 1982.

Table 2--Area of forest land outside National Forests with percent standard error in western Wyoming, 1984

Item	Softwoods		Hardwoods		All types	
	Acres	Percent standard error	Acres	Percent standard error	Acres	Percent standard error
Timberland	548,446	±7.4	128,335	±20.7	676,781	±5.8
Woodland	361,450	±15.1	10,073	±71.6	371,523	±14.7
Reserved forest land: <sup>1</sup>						
Timberland	1,829,412		6,060		1,835,472	
Woodland	491		--		491	
Total forest land <sup>2</sup>	2,739,799		144,468		2,884,267	

<sup>1</sup>Reserved land areas are estimated from aerial photos without field verification; therefore, standard errors are not calculated.

<sup>2</sup>On this and all following tables, totals may vary due to rounding.

Table 3--Net volume, net annual growth, and annual mortality of growing stock and sawtimber on timberland outside National Forests with percent standard error in western Wyoming

Item	Softwoods		Hardwoods		All species	
	Volume	Percent standard error	Volume	Percent standard error	Volume	Percent standard error
<b>Net volume, 1984:</b>						
Growing stock (M cubic feet)	617,301	±13.5	135,618	±23.1	752,919	±11.6
Sawtimber <sup>1</sup> (M board feet)	2,116,054	±15.8	180,337	±37.3	2,296,391	±14.9
Sawtimber <sup>2</sup> (M board feet)	1,794,136	±15.8	153,617	±37.5	1,947,753	±14.9
<b>Net annual growth, 1983:</b>						
Growing stock (M cubic feet)	10,502	±25.5	2,558	±30.5	13,060	±21.4
Sawtimber <sup>1</sup> (M board feet)	37,091	±34.2	9,557	±62.3	46,648	±29.9
Sawtimber <sup>2</sup> (M board feet)	30,713	±34.7	8,347	±61.8	39,060	±30.1
<b>Annual mortality, 1983:</b>						
Growing stock (M cubic feet)	5,111	±39.0	711	±57.6	5,822	±35.8
Sawtimber <sup>1</sup> (M board feet)	18,590	±44.4	218	±100.0	18,808	±43.9
Sawtimber <sup>2</sup> (M board feet)	15,770	±44.3	168	±100.0	15,938	±43.8

<sup>1</sup>International ½-inch rule.

<sup>2</sup>Scribner rule.

Table 4--Total land area outside National Forests by major land class and ownership class in western Wyoming, 1984

Land class	Ownership class		
	Other public	Private	Total
<u>Acres</u>			
<b>Timberland:</b>			
Reserved	1,747,962	87,510	1,835,472
Nonreserved	332,742	344,039	676,781
Total	2,080,704	431,549	2,512,253
 <b>Woodland:</b>			
Reserved	234	257	491
Nonreserved	237,405	134,118	371,523
Total	237,639	134,375	372,014
 <b>Total forest land:</b>			
Reserved	1,748,196	87,767	1,835,963
Nonreserved	570,147	478,157	1,048,304
Total	2,318,343	565,924	2,884,267
 Nonforest land	11,748,286	6,909,971	18,658,257
 Total land area	14,066,629	7,475,895	21,542,524

Table 5--Area of forest land outside National Forests by forest type, ownership class, and land class in western Wyoming, 1984

Forest type	Ownership class and land class						
	Other public		Private		All owners		Total
	Reserved	Nonreserved	Reserved	Nonreserved	Reserved	Nonreserved	
<u>Acres</u>							
Douglas-fir	--	45,374	--	59,375	--	104,749	104,749
Lodgepole pine	1,464,179	52,936	11,325	41,926	1,475,504	94,862	1,570,366
Limber pine	--	136,122	--	117,395	--	253,517	253,517
Spruce	50,906	7,562	26,253	22,400	77,159	29,962	107,121
Spruce-fir	227,589	60,499	49,160	4,858	276,749	65,357	342,106
Aspen	4,262	30,249	772	69,650	5,034	99,899	104,933
Cottonwood	1,026	--	--	28,435	1,026	28,435	29,461
Total timberland	1,747,962	332,742	87,510	344,039	1,835,472	676,781	2,512,253
Pinyon-juniper	--	13,071	257	--	257	13,071	13,328
Juniper	234	218,407	--	129,973	234	348,380	348,614
Other hardwoods	--	5,927	--	4,145	--	10,072	10,072
Total woodland	234	237,405	257	134,118	491	371,523	372,014
Total all types	1,748,196	570,147	87,767	478,157	1,835,963	1,048,304	2,884,267

Table 6--Cubic feet of net volume in trees on forest land outside National Forests by species and ownership class in western Wyoming, 1984

Species	Ownership class		
	Other public	Private	Total
- - - - Thousand cubic feet - - - -			
Douglas-fir	120,889	76,930	197,819
Lodgepole pine	88,735	85,462	174,197
Limber pine	35,041	40,217	75,258
Subalpine fir	66,225	15,212	81,437
Engelmann spruce	13,495	76,884	90,379
Aspen	46,344	64,686	111,030
Cottonwood	459	24,588	25,047
Total timberland species	371,188	383,979	755,167
Woodland softwoods	70,723	49,748	120,471
Woodland hardwoods	541	10,703	11,244
Total woodland species	71,264	60,451	131,715
Total all species	442,452	444,430	886,882

Table 7--Cubic feet of net annual growth in trees on forest land outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
- - - - Thousand cubic feet - - - -			
Douglas-fir	1,936	1,083	3,019
Lodgepole pine	1,565	205	1,770
Limber pine	1,734	-687	1,047
Subalpine fir	2,426	791	3,217
Engelmann spruce	414	1,139	1,553
Aspen	904	1,120	2,024
Cottonwood	9	534	543
Total timberland species	8,988	4,185	13,173
Woodland softwoods	627	304	931
Woodland hardwoods	14	175	189
Total woodland species	641	479	1,120
Total all species	9,629	4,664	14,293

Table 8--Cubic feet of annual mortality in trees on forest land outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
<u>- - - - Thousand cubic feet - - - -</u>			
Douglas-fir	--	--	--
Lodgepole pine	829	1,448	2,277
Limber pine	135	1,734	1,869
Subalpine fir	965	--	965
Engelmann spruce	--	--	--
Aspen	183	477	660
Cottonwood	--	51	51
Total timberland species	2,112	3,710	5,822
Woodland softwoods	--	--	--
Woodland hardwoods	--	--	--
Total woodland species	--	--	--
Total all species	2,112	3,710	5,822

Table 9--Area of timberland outside National Forests by forest type,  
stand-size class, and productivity class in western Wyoming, 1984

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
<u>Acres</u>					
Douglas-fir:					
Sawtimber	--	17,913	60,786	10,350	89,049
Poletimber	--	--	10,124	2,788	12,912
Sapling and seedling	--	--	2,788	--	2,788
Nonstocked	--	--	--	--	--
Total	--	17,913	73,698	13,138	104,749
Lodgepole pine:					
Sawtimber	--	22,245	42,286	--	64,531
Poletimber	--	--	22,770	--	22,770
Sapling and seedling	--	--	7,562	--	7,562
Nonstocked	--	--	--	--	--
Total	--	22,245	72,618	--	94,863
Limber pine:					
Sawtimber	--	4,548	34,640	26,864	66,052
Poletimber	--	16,740	42,131	4,147	63,018
Sapling and seedling	--	7,562	6,390	27,091	41,043
Nonstocked	--	--	31,865	51,538	83,403
Total	--	28,850	115,026	109,640	253,516
Spruce-fir:					
Sawtimber	7,562	12,420	7,562	--	27,544
Poletimber	--	15,125	--	--	15,125
Sapling and seedling	--	22,687	--	--	22,687
Nonstocked	--	--	--	--	--
Total	7,562	50,232	7,562	--	65,356
Spruce:					
Sawtimber	7,562	11,966	2,788	--	22,316
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	2,788	--	2,788
Nonstocked	--	4,858	--	--	4,858
Total	7,562	16,824	5,576	--	29,962

(con.)

Table 9 (con.)

Forest type and stand-size class	Productivity class				Total acres	
	85-119	50-84	20-49	0-19		
<u>Acres</u>						
<b>Aspen:</b>						
Sawtimber	7,762	--	--	--	7,762	
Poletimber	--	46,199	25,757	--	71,956	
Sapling and seedling	7,562	7,762	4,858	--	20,182	
Nonstocked	--	--	--	--	--	
Total	15,324	53,961	30,615	--	99,900	
<b>Cottonwood:</b>						
Sawtimber	5,872	--	12,841	2,788	21,501	
Poletimber	--	4,146	--	--	4,146	
Sapling and seedling	--	--	--	--	--	
Nonstocked	--	--	--	2,788	2,788	
Total	5,872	4,146	12,841	5,576	28,435	
<b>All types:</b>						
Sawtimber	28,758	69,092	160,903	40,002	298,755	
Poletimber	--	82,210	100,782	6,935	189,927	
Sapling and seedling	7,562	38,011	24,386	27,091	97,050	
Nonstocked	--	4,858	31,865	54,326	91,049	
Total	36,320	194,171	317,936	128,354	676,781	

Table 10--Area of other publicly owned timberland by forest type, stand-size class, and productivity class in western Wyoming, 1984

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
<u>Acres</u>					
Douglas-fir:					
Sawtimber	--	15,125	22,687	7,562	45,374
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	15,125	22,687	7,562	45,374
Lodgepole pine:					
Sawtimber	--	15,125	15,125	--	30,250
Poletimber	--	--	15,125	--	15,125
Sapling and seedling	--	--	7,562	--	7,562
Nonstocked	--	--	--	--	--
Total	--	15,125	37,812	--	52,937
Limber pine:					
Sawtimber	--	--	15,125	7,562	22,687
Poletimber	--	7,562	22,687	--	30,249
Sapling and seedling	--	7,562	--	15,125	22,687
Nonstocked	--	--	22,687	37,812	60,499
Total	--	15,124	60,499	60,499	136,122
Spruce-fir:					
Sawtimber	7,562	7,562	7,562	--	22,686
Poletimber	--	15,125	--	--	15,125
Sapling and seedling	--	22,687	--	--	22,687
Nonstocked	--	--	--	--	--
Total	7,562	45,374	7,562	--	60,498
Spruce:					
Sawtimber	7,562	--	--	--	7,562
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	7,562	--	--	--	7,562

(con.)

Table 10 (con.)

Forest type and stand-size class	Productivity class				Total acres	
	85-119	50-84	20-49	0-19		
<u>Acres</u>						
<b>Aspen:</b>						
Sawtimber	--	--	--	--	--	
Poletimber	--	15,125	7,562	--	22,687	
Sapling and seedling	7,562	--	--	--	7,562	
Nonstocked	--	--	--	--	--	
Total	7,562	15,125	7,562	--	30,249	
<b>Cottonwood:</b>						
Sawtimber	--	--	--	--	--	
Poletimber	--	--	--	--	--	
Sapling and seedling	--	--	--	--	--	
Nonstocked	--	--	--	--	--	
Total	--	--	--	--	--	
<b>All types:</b>						
Sawtimber	15,124	37,812	60,499	15,124	128,559	
Poletimber	--	37,812	45,374	--	83,186	
Sapling and seedling	7,562	30,249	7,562	15,125	60,498	
Nonstocked	--	--	22,687	37,812	60,499	
Total	22,686	105,873	136,122	68,061	332,742	

Table 11--Area of privately owned timberland by forest type, stand-size class, and productivity class in western Wyoming, 1984

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
<u>Acres</u>					
Douglas-fir:					
Sawtimber	--	2,788	38,099	2,788	43,675
Poletimber	--	--	10,124	2,788	12,912
Sapling and seedling	--	--	2,788	--	2,788
Nonstocked	--	--	--	--	--
Total	--	2,788	51,011	5,576	59,375
Lodgepole pine:					
Sawtimber	--	7,120	27,161	--	34,281
Poletimber	--	--	7,645	--	7,645
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	7,120	34,806	--	41,926
Limber pine:					
Sawtimber	--	4,548	19,515	19,302	43,365
Poletimber	--	9,178	19,444	4,147	32,769
Sapling and seedling	--	--	6,390	11,966	18,356
Nonstocked	--	--	9,178	13,726	22,904
Total	--	13,726	54,527	49,141	117,394
Spruce-fir:					
Sawtimber	--	4,858	--	--	4,858
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	4,858	--	--	4,858
Spruce:					
Sawtimber	--	11,966	2,788	--	14,754
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	2,788	--	2,788
Nonstocked	--	4,858	--	--	4,858
Total	--	16,824	5,576	--	22,400

(con.)

Table 11 (con.)

Forest type and stand-size class	Productivity class				Total acres	
	85-119	50-84	20-49	0-19		
<u>Acres</u>						
<b>Aspen:</b>						
Sawtimber	7,762	--	--	--	7,762	
Poletimber	--	31,074	18,195	--	49,269	
Sapling and seedling	--	7,762	4,858	--	12,620	
Nonstocked	--	--	--	--	--	
Total	7,762	38,836	23,053	--	69,651	
<b>Cottonwood:</b>						
Sawtimber	5,872	--	12,841	2,788	21,501	
Poletimber	--	4,146	--	--	4,146	
Sapling and seedling	--	--	--	--	--	
Nonstocked	--	--	--	2,788	2,788	
Total	5,872	4,146	12,841	5,576	28,435	
<b>All types:</b>						
Sawtimber	13,634	31,280	100,404	24,878	170,196	
Poletimber	--	44,398	55,408	6,935	106,741	
Sapling and seedling	--	7,762	16,824	11,966	36,552	
Nonstocked	--	4,858	9,178	16,514	30,550	
Total	13,634	88,298	181,814	60,293	344,039	

Table 12--Area of timberland outside National Forests by stand volume and ownership class in western Wyoming, 1984

Stand volume per acre <sup>1</sup>	Ownership class		
	Other public	Private	Total
Less than 1,500 board feet	173,933	171,121	345,054
1,500 to 4,999 board feet	83,186	103,759	186,945
5,000 to 9,999 board feet	52,936	34,497	87,433
10,000 board feet or more	22,687	34,662	57,349
All classes	332,742	344,039	676,781

<sup>1</sup> International 4-inch rule.

Table 13--Area of timberland outside National Forests by forest type and area condition class in western Wyoming, 1984

Forest type	Area condition class						Nonstocked	All classes
	10	20	30	40	50	60		
Douglas-fir	--	--	2,788	7,562	15,699	8,363	--	70,335
Lodgepole pine	--	--	--	25,558	19,982	17,470	--	31,852
Limber pine	--	--	7,562	8,364	47,163	83,175	--	23,850
Spruce-fir	--	--	15,125	15,125	15,125	--	--	19,982
Spruce	--	--	--	--	7,562	2,788	2,788	11,966
Aspen	--	--	--	30,449	61,805	7,646	--	4,858
Cottonwood	--	--	--	--	14,165	7,336	--	4,147
All types	--	--	25,475	87,058	181,501	126,778	2,788	162,132
							91,049	676,781

Table 14--Number of growing-stock trees on timberland outside National Forests by species and diameter class in western Wyoming, 1984

Species	Diameter class (inches at breast height)										All classes					
	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9	29.0+	
Douglas-fir	8,214	5,241	7,382	4,726	3,467	1,200	1,445	423	233	138	140	82	61	36	33,111	
Lodgepole pine	5,185	3,861	7,642	4,956	3,386	1,736	750	466	76	87	9	39	6	9	--	
Limber pine	16,845	11,385	9,107	4,689	2,123	1,092	474	262	78	47	13	--	12	--	28,208	
Subalpine fir	13,414	15,722	6,169	3,751	1,715	832	600	220	37	27	--	--	--	--	46,168	
Engelmann spruce	2,951	2,114	910	1,435	896	564	618	409	208	118	73	32	55	--	42,487	
Total softwoods	46,609	38,323	31,210	19,557	11,587	5,424	3,887	1,780	722	512	233	211	155	70	81	160,361
Aspen	11,811	12,539	12,881	8,508	2,812	911	52	127	44	--	--	--	--	--	49,685	
Cottonwood	--	1,108	702	459	597	326	296	76	40	74	46	22	--	--	21	3,767
Total hardwoods	11,811	13,647	13,583	8,967	3,409	1,237	348	203	84	74	46	22	--	--	21	53,452
All species	58,420	51,970	44,793	28,524	14,996	6,661	4,235	1,983	806	586	279	233	155	70	102	213,813

Table 15--Number of cull and salvable dead trees on timberland outside National Forests by ownership class, and softwoods and hardwoods in western Wyoming, 1984

Ownership class and species group	Cull trees			Salvable dead trees	Total
	Rough	Rotten	Total		
- - - - - Thousand trees - - - - -					
Other public:					
Softwoods	502	787	1,289	6,543	7,832
Hardwoods	--	956	956	3,025	3,981
Total	502	1,743	2,245	9,568	11,813
Private:					
Softwoods	805	105	910	6,755	7,665
Hardwoods	183	288	471	5,070	5,541
Total	988	393	1,381	11,825	13,206
Total:					
Softwoods	1,307	892	2,199	13,298	15,497
Hardwoods	183	1,244	1,427	8,095	9,522
Total	1,490	2,136	3,626	21,393	25,019

Table 16--Net volume of growing stock on timberland outside National Forests by ownership class, forest type, and stand-size class in western Wyoming, 1984

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/seedling	Nonstocked	
<u>Thousand cubic feet</u>						
Other public:						
Douglas-fir	99,084	--	--	--	--	99,084
Lodgepole pine	53,945	23,751	--	--	--	77,696
Limber pine	9,001	24,690	2,061	2,903	--	38,655
Spruce-fir	72,989	13,459	13,801	--	--	100,249
Spruce	13,181	--	--	--	--	13,181
Aspen	--	37,345	3,134	--	--	40,479
Cottonwood	--	--	--	--	--	--
All types	248,200	99,245	18,996	2,903	--	369,344
Private:						
Douglas-fir	78,219	15,220	273	--	--	93,712
Lodgepole pine	62,331	13,716	--	--	--	76,047
Limber pine	26,627	15,699	760	1,488	--	44,574
Spruce-fir	25,452	--	--	--	--	25,452
Spruce	48,168	--	--	1,940	--	50,108
Aspen	9,669	48,121	6,801	--	--	64,591
Cottonwood	27,044	1,879	--	168	--	29,091
All types	277,510	94,635	7,834	3,596	--	383,575
Total:						
Douglas-fir	177,303	15,220	273	--	--	192,796
Lodgepole pine	116,276	37,467	--	--	--	153,743
Limber pine	35,628	40,389	2,821	4,391	--	83,229
Spruce-fir	98,441	13,459	13,801	--	--	125,701
Spruce	61,349	--	--	1,940	--	63,289
Aspen	9,669	85,466	9,935	--	--	105,070
Cottonwood	27,044	1,879	--	168	--	29,091
All types	525,710	193,880	26,830	6,499	--	752,919

Table 17--Net volume of sawtimber (International  $\frac{1}{4}$ -inch rule) on timberland outside National Forests by ownership class, forest type, and stand-size class in western Wyoming, 1984

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/ seedling	Nonstocked	
- - - Thousand board feet, International $\frac{1}{4}$ -inch rule - - -						
Other public:						
Douglas-fir	393,801	--	--	--	--	393,801
Lodgepole pine	176,012	13,686	--	--	--	189,698
Limber pine	30,425	34,413	--	3,523	68,361	
Spruce-fir	275,899	25,981	31,087	--	332,967	
Spruce	64,320	--	--	--	64,320	
Aspen	--	41,625	8,640	--	50,265	
Cottonwood	--	--	--	--	--	
All types	940,457	115,705	39,727	3,523	1,099,412	
Private:						
Douglas-fir	269,912	31,785	1,356	--	303,053	
Lodgepole pine	233,899	22,345	--	--	256,244	
Limber pine	98,536	25,440	1,855	2,523	128,354	
Spruce-fir	87,038	--	--	--	87,038	
Spruce	222,175	--	--	5,477	227,652	
Aspen	22,954	37,002	20,473	--	80,429	
Cottonwood	113,433	--	--	776	114,209	
All types	1,047,947	116,572	23,684	8,776	1,196,979	
Total:						
Douglas-fir	663,713	31,785	1,356	--	696,854	
Lodgepole pine	409,911	36,031	--	--	445,942	
Limber pine	128,961	59,853	1,855	6,046	196,715	
Spruce-fir	362,937	25,981	31,087	--	420,005	
Spruce	286,495	--	--	5,477	291,972	
Aspen	22,954	78,627	29,113	--	130,694	
Cottonwood	113,433	--	--	776	114,209	
All types	1,988,404	232,277	63,411	12,299	2,296,391	

Table 18--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by ownership class, forest type, and stand-size class in western Wyoming, 1984

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/ seedling	Nonstocked	
- - - - - Thousand board feet, Scribner rule - - - - -						
Other public:						
	Douglas-fir	334,872	--	--	--	334,872
	Lodgepole pine	151,098	12,000	--	--	163,098
	Limber pine	25,687	28,476	--	3,081	57,244
	Spruce-fir	235,453	22,078	26,134	--	283,665
	Spruce	53,426	--	--	--	53,426
	Aspen	--	35,763	7,040	--	42,803
	Cottonwood	--	--	--	--	--
	All types	800,536	98,317	33,174	3,081	935,108
Private:						
	Douglas-fir	230,358	26,447	1,119	--	257,924
	Lodgepole pine	198,426	19,035	--	--	217,461
	Limber pine	82,800	20,478	1,308	1,936	106,522
	Spruce-fir	74,284	--	--	--	74,284
	Spruce	185,678	--	--	4,715	190,393
	Aspen	20,079	31,675	17,162	--	68,916
	Cottonwood	96,657	--	--	488	97,145
	All types	888,282	97,635	19,589	7,139	1,012,645
Total:						
	Douglas-fir	565,230	26,447	1,119	--	592,796
	Lodgepole pine	349,524	31,035	--	--	380,559
	Limber pine	108,487	48,954	1,308	5,017	163,766
	Spruce-fir	309,737	22,078	26,134	--	357,949
	Spruce	239,104	--	--	4,715	243,819
	Aspen	20,079	67,438	24,202	--	111,719
	Cottonwood	96,657	--	--	488	97,145
	All types	1,688,818	195,952	52,763	10,220	1,947,753

Table 19--Net volume of growing stock on timberland outside National Forests by species and ownership class in western Wyoming, 1984

Species	Ownership class		
	Other public	Private	Total
<u>Thousand cubic feet</u>			
Douglas-fir	120,444	76,931	197,375
Lodgepole pine	88,735	85,462	174,197
Limber pine	34,101	39,812	73,913
Subalpine fir	66,225	15,212	81,437
Engelmann spruce	13,495	76,884	90,379
Total softwoods	323,000	294,301	617,301
Aspen	46,344	64,686	111,030
Cottonwood	--	24,588	24,588
Total hardwood	46,344	89,274	135,618
All species	369,344	383,575	752,919

Table 20--Net volume of sawtimber (International  $\frac{1}{4}$ -inch rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1984

Species	Ownership class		
	Other public	Private	Total
<u>- Thousand board feet, International <math>\frac{1}{4}</math>-inch rule -</u>			
Douglas-fir	505,619	278,216	783,835
Lodgepole pine	236,796	299,065	535,861
Limber pine	75,148	107,106	182,254
Subalpine fir	185,531	31,995	217,526
Engelmann spruce	59,000	337,578	396,578
Total softwoods	1,062,094	1,053,960	2,116,054
Aspen	37,318	49,228	86,546
Cottonwood	--	93,791	93,791
Total hardwoods	37,318	143,019	180,337
All species	1,099,412	1,196,979	2,296,391

Table 21--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1984

Species	Ownership class		
	Other public	Private	Total
- - - Thousand board feet, Scribner rule - - -			
Douglas-fir	431,215	236,143	667,358
Lodgepole pine	202,942	254,327	457,269
Limber pine	62,085	88,744	150,829
Subalpine fir	157,759	27,102	184,861
Engelmann spruce	49,163	284,656	333,819
Total softwoods	903,164	890,972	1,794,136
Aspen	31,944	42,115	74,059
Cottonwood	--	79,558	79,558
Total hardwoods	31,944	121,673	153,617
All species	935,108	1,012,645	1,947,753

Table 22--Net volume of growing stock on timberland outside National Forests by species and diameter class in western Wyoming,  
1984

Species	Diameter class (inches at breast height)										A11 classes
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	
- - - - - Thousand cubic feet - - - - -											
Douglas-fir	13,783	22,013	32,252	17,648	34,296	13,357	13,885	12,628	7,611	10,811	8,708
Lodgepole pine	18,330	32,788	40,991	33,698	19,586	15,039	3,339	5,118	562	3,153	574
Limber pine	12,034	15,609	13,156	11,112	7,351	5,281	1,927	1,508	483	--	691
Subalpine fir	11,869	18,690	16,609	11,745	13,895	5,596	1,641	1,392	--	--	--
Engelmann spruce	1,663	6,895	9,061	9,518	17,465	14,802	9,972	7,470	5,181	2,719	5,074
Total softwoods	57,679	95,995	112,069	83,721	92,593	54,075	30,764	28,116	13,837	16,683	15,047
Aspen	23,749	40,842	28,184	13,239	946	2,878	1,192	--	--	--	--
Cottonwood	353	1,113	3,721	3,927	5,528	1,347	690	2,811	1,839	984	--
Total hardwoods	24,102	41,955	31,905	17,166	6,474	4,225	1,882	2,811	1,839	984	--
A11 species	81,781	137,950	143,974	100,887	99,067	58,300	32,646	30,927	15,676	17,667	15,047
											6,397
											12,600
											752,919
											617,301

Table 23-Net volume of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class  
in western Wyoming, 1984

Species	Diameter class (inches at breast height)										All classes
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9	
- - - - - Thousand board feet, International 4-inch rule - - - - -											
Douglas-fir	109,252	79,665	171,411	69,124	73,784	68,126	41,096	60,828	50,607	30,655	29,287
Lodgepole pine	140,580	150,454	96,153	76,218	17,216	26,659	2,943	16,914	3,121	5,603	783,835
Limber pine	41,134	38,558	30,376	23,486	8,913	7,437	2,435	--	3,678	--	535,861
Subalpine fir	57,622	51,385	66,680	26,689	8,197	6,953	--	--	--	26,237	182,254
Engelmann spruce	31,468	43,626	86,256	73,968	50,100	38,366	27,111	14,669	27,779	--	217,526
Total softwoods	380,056	363,688	450,876	269,485	158,210	147,541	73,585	92,411	85,185	36,258	58,759
Aspen	XXXXXX	61,993	4,539	14,158	5,857	--	--	--	--	--	--
Cottonwood	XXXXXX	19,907	27,739	6,607	3,257	13,028	8,400	4,383	--	10,469	86,547
Total hardwoods	XXXXXX	81,900	32,278	20,765	9,114	13,028	8,400	4,383	--	10,469	93,790
All species	380,056	445,588	483,154	290,250	167,324	160,569	81,985	96,794	85,185	36,258	69,228
											2,296,391
											180,337

Table 24--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class in western Wyoming, 1984

Species	Diameter class (inches at breast height)									All classes
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	
- - - - - Thousand board feet, Scribner rule - - - - -										
Douglas-fir	95,837	68,240	142,089	56,493	60,322	57,356	34,858	53,885	45,040	27,172
Lodgepole pine	121,530	127,677	80,894	63,771	14,667	23,324	2,589	15,054	2,777	4,986
Limber pine	29,615	33,039	25,950	19,884	7,504	6,237	2,032	--	3,221	--
Subalpine fir	51,079	44,380	55,236	21,969	6,612	5,584	--	--	--	23,347
Engelmann spruce	27,672	37,041	70,798	60,107	40,678	33,130	23,737	13,055	24,723	--
Total softwoods	325,733	310,377	374,967	222,224	129,783	125,631	63,216	81,994	75,761	32,158
Aspen	XXXXX	53,294	3,882	11,939	4,944	--	--	--	--	--
Cottonwood	XXXXX	15,854	23,345	5,556	2,750	11,454	7,399	3,882	--	9,318
Total hardwoods	XXXXX	69,148	27,227	17,495	7,694	11,454	7,399	3,882	--	9,318
All species	325,733	379,525	402,194	239,719	137,477	137,085	70,615	85,876	75,761	32,158
										1,947,753
										153,617
										79,558

Table 25--Net volume of timber on timberland outside National Forests by class of timber, and softwoods and hardwoods in western Wyoming, 1984

Class of timber	Softwoods	Hardwoods	Total
- - - - - Thousand cubic feet - - - - -			
Sawtimber trees:			
Sawlog portion	414,172	28,534	442,706
Upper-stem portion	49,455	9,121	58,576
Total	463,627	37,655	501,282
Pole timber trees	153,674	97,963	251,637
All growing-stock trees	617,301	135,618	752,919
Rough cull trees	2,459	809	3,268
Rotten cull trees	2,242	2,946	5,188
Salvable dead trees	83,491	19,923	103,414
All timber	705,493	159,296	864,789

Table 26--Net volume of growing stock on timberland outside National Forests by forest type and species in western Wyoming, 1984

Forest type	Species							All species	
	Douglas-fir	Lodgepole pine	Limber pine	Subalpine fir	Engelmann spruce	Total softwoods	Aspen	Cottonwood	
- - - - - Thousand cubic feet - - - - -									
Douglas-fir	154,586	5,844	11,779	2,599	13,251	188,059	4,738	--	4,738
Lodgepole pine	--	139,426	3,291	5,168	1,051	148,936	4,806	--	4,806
Limber pine	11,510	5,161	54,162	5,284	5,956	82,073	1,156	--	1,156
Spruce-fir	25,220	11,374	3,228	60,764	10,470	111,056	14,645	--	14,645
Spruce	2,331	3,506	1,034	1,548	54,870	63,289	--	--	--
Aspen	3,728	8,886	419	6,074	279	19,386	85,685	--	85,685
Cottonwood	--	--	--	--	4,502	4,502	--	24,588	24,588
All types	197,375	174,197	73,913	81,437	90,379	617,301	111,030	24,588	135,618
									752,919

Table 27--Net volume of sawtimber (International  $\frac{1}{4}$ -inch rule) on timberland outside National Forests by forest type and species in western Wyoming, 1984

Forest type	Species							All species	
	Douglas-fir	Lodgepole pine	Limber pine	Subalpine fir	Engelmann spruce	Total softwoods	Aspen	Cottonwood	
- - - - - Thousand board feet, International $\frac{1}{4}$ -inch rule - - - - -									
Douglas-fir	597,970	15,754	34,368	10,223	38,539	696,854	--	--	696,854
Lodgepole pine	--	411,965	14,134	14,176	5,667	445,942	--	--	445,942
Limber pine	38,369	6,573	119,005	8,367	24,401	196,715	--	--	196,715
Spruce-fir	120,248	52,310	7,850	168,643	53,242	402,293	17,712	--	17,712
Spruce	10,551	15,181	5,163	7,585	253,491	291,971	--	--	291,971
Aspen	16,697	34,078	1,734	8,532	819	61,860	68,835	--	68,835
Cottonwood	--	--	--	--	20,419	20,419	--	93,790	93,790
All types	783,835	535,861	182,254	217,526	396,578	2,116,054	86,547	93,790	180,337
									2,296,391

Table 28--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by forest type and species in western Wyoming, 1984

Forest type	Species								All species
	Douglas-fir	Lodgepole pine	Limber pine	Subalpine fir	Engelmann spruce	Total softwoods	Aspen	Cottonwood	
- - - - - Thousand board feet, Scribner rule - - - - -									
Douglas-fir	508,357	13,447	29,162	8,467	33,363	592,796	--	--	592,796
Lodgepole pine	--	351,739	11,856	12,116	4,848	380,559	--	--	380,559
Limber pine	32,820	5,432	97,607	7,419	20,488	163,766	--	--	163,766
Spruce-fir	103,622	44,581	6,246	143,122	45,248	342,819	15,129	--	357,948
Spruce	8,638	12,907	4,479	6,239	211,557	243,820	--	--	243,820
Aspen	13,920	29,163	1,479	7,498	729	52,789	58,930	--	58,930
Cottonwood	--	--	--	17,587	17,587	--	79,558	79,558	97,145
All types	667,357	457,269	150,829	184,861	333,820	1,794,136	74,059	79,558	153,617
									1,947,753

Table 29--Net annual growth of growing stock on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
<u>Thousand cubic feet</u>			
Douglas-fir	1,915	1,083	2,998
Lodgepole pine	1,565	205	1,770
Limber pine	1,672	-708 <sup>(1)</sup>	964
Subalpine fir	2,426	791	3,217
Engelmann spruce	414	1,139	1,553
Total softwoods	7,992	2,510	10,502
Aspen	904	1,120	2,024
Cottonwood	--	534	534
Total hardwoods	904	1,654	2,558
All species	8,896	4,164	13,060

<sup>1</sup>Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 30--Net annual growth of sawtimber (International  $\frac{1}{4}$ -inch rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
- Thousand board feet, International $\frac{1}{4}$ -inch rule -			
Douglas-fir	10,900	3,593	14,493
Lodgepole pine	11,570	1,383	12,953
Limber pine	4,067	-5,100 <sup>(1)</sup>	-1,033
Subalpine fir	2,901	1,044	3,945
Engelmann spruce	2,042	4,691	6,733
Total softwoods	31,480	5,611	37,091
Aspen	3,375	5,411	8,786
Cottonwood	--	771	771
Total hardwoods	3,375	6,182	9,557
All species	34,855	11,793	46,648

<sup>1</sup>Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 31--Net annual growth of sawtimber (Scribner rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class			Total
	Other public	Private	Total	
- - Thousand board feet, Scribner rule - - -				
Douglas-fir	9,406	3,036		12,442
Lodgepole pine	9,474	1,426		10,900
Limber pine	3,012	-4,394 <sup>(1)</sup>		-1,382
Subalpine fir	2,307	823		3,130
Engelmann spruce	1,690	3,933		5,623
Total softwoods	25,889	4,824		30,713
Aspen Cottonwood				
	2,945	4,659		7,604
	--	743		743
Total hardwoods	2,945	5,402		8,347
All species	28,834	10,226		39,060

<sup>1</sup>Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 32--Net annual growth of growing stock on timberland outside National Forests by species and diameter class in western Wyoming, 1983

Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 33--Net annual growth of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class in western Wyoming, 1983

Species	Diameter class (inches at breast height)										All classes
	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	23.0-	25.0-	27.0-	
	10.9	12.9	14.9	16.9	18.9	20.9	22.9	24.9	26.9	28.9	
Thousand board feet, International 4-inch rule											
Douglas-fir	8,164	1,779	1,789	911	626	338	175	316	148	148	99
Lodgepole pine	13,453	1,214	-1,254	-1,174 <sup>(1)</sup>	95	534	10	59	13	4	--
Limber pine	3,192	-1,656	-1,845	398	-837	51	5	-429	12	--	76
Subalpine fir	1,884	770	513	590	32	156	--	--	--	--	-1,033
Engelmann spruce	649	1,151	1,315	1,424	612	654	268	313	327	--	19
Total softwoods	27,342	3,258	518	2,149	528	1,733	458	259	500	152	194
Thousand board feet, International 4-inch rule											
Aspen	XXXXX	8,645	39	78	24	--	--	--	--	--	--
Cottonwood	XXXXX	373	37	60	27	136	49	37	--	--	8,786
Total hardwoods	XXXXX	9,018	76	138	51	136	49	37	--	--	771
All species	27,342	12,276	594	2,287	579	1,869	507	296	500	152	246
											46,648

<sup>1</sup>Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 34--Net annual growth of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class in western Wyoming, 1983

Species	Diameter class (inches at breast height)										All classes
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-24.9	25.0-26.9	27.0-28.9	
- - - - - Thousand board feet, Scribner rule - - - - -											
Douglas-fir	7,272	1,405	1,409	717	507	324	160	297	132	131	88
Lodgepole pine	11,283	965	-1,069	-947 <sup>(1)</sup>	89	503	10	52	11	4	--
Limber pine	2,155	-1,368	-1,562	330	-703	42	5	-360	11	--	10,901
Subalpine fir	1,641	539	339	462	26	123	--	--	--	68	-1,382
Engelmann spruce	579	903	1,033	1,119	503	643	255	279	291	--	3,130
Total softwoods	22,930	2,444	150	1,681	422	1,635	430	268	445	135	173
Aspen	XXXXX	7,483	32	68	21	--	--	--	--	--	7,604
Cottonwood	XXXXX	344	69	56	25	124	45	34	--	46	743
Total hardwoods	XXXXX	7,827	101	124	46	124	45	34	--	46	8,347
All species	22,930	10,271	251	1,805	468	1,759	475	302	445	135	219
											39,060

<sup>1</sup>Net annual growth is negative when annual mortality exceeds gross annual growth.

Table 35--Annual mortality of growing stock on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
<u>Thousand cubic feet</u>			
Douglas-fir	--	--	--
Lodgepole pine	829	1,448	2,277
Limber pine	135	1,735	1,870
Subalpine fir	965	--	965
Engelmann spruce	--	--	--
Total softwoods	1,929	3,183	5,112
Aspen	183	477	660
Cottonwood	--	50	50
Total hardwoods	183	527	710
All species	2,112	3,710	5,822

Table 36--Annual mortality of sawtimber (International  $\frac{1}{4}$ -inch rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
<u>Thousand board feet, International <math>\frac{1}{4}</math>-inch rule</u>			
Douglas-fir	--	--	--
Lodgepole pine	2,588	5,785	8,373
Limber pine	402	7,381	7,783
Subalpine fir	2,434	--	2,434
Engelmann spruce	--	--	--
Total softwoods	5,424	13,166	18,590
Aspen	--	--	--
Cottonwood	--	218	218
Total hardwoods	--	218	218
All species	5,424	13,384	18,808

Table 37--Annual mortality of sawtimber (Scribner rule) on timberland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
- - - Thousand board feet, Scribner rule - - -			
Douglas-fir	--	--	--
Lodgepole pine	2,180	4,910	7,090
Limber pine	347	6,224	6,571
Subalpine fir	2,109	--	2,109
Engelmann spruce	--	--	--
Total softwoods	4,636	11,134	15,770
Aspen	--	--	--
Cottonwood	--	168	168
Total hardwoods	--	168	168
All species	4,636	11,302	15,938

Table 38--Annual mortality of growing stock on timberland outside National Forests by species and diameter class in western Wyoming, 1983

Species	Diameter class (inches at breast height)										All classes	
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9
- - - - - Thousand cubic feet - - - - -												- - - - -
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	--	439	490	492	481	375	--	--	--	--	--	2,277
Limber pine	--	--	346	749	497	--	193	--	--	--	--	1,869
Subalpine fir	162	188	181	205	229	--	--	--	--	--	--	965
Engelmann spruce	--	--	--	--	--	--	--	--	--	--	--	--
Total softwoods	162	627	1,017	1,446	1,207	375	193	--	--	84	--	5,111
- - - - - Thousand cubic feet - - - - -												- - - - -
Aspen	388	--	272	--	--	--	--	--	--	--	--	660
Cottonwood	6	--	--	--	--	45	--	--	--	--	--	51
Total hardwoods	394	--	272	--	45	--	--	--	--	--	--	711
All species	556	627	1,289	1,446	1,252	375	193	--	--	84	--	5,822

Table 39--Annual mortality of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class in western Wyoming, 1983

Species	Diameter class (inches at breast height)								All classes	
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-24.9	25.0-26.9	27.0-28.9
Thousand board feet, International 4-inch rule										
Douglas-fir	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	2,027	2,177	2,267	1,902	--	--	--	--	--	--
Limber pine	1,038	2,927	2,436	--	952	--	--	430	--	8,373
Subalpine fir	530	855	1,049	--	--	--	--	--	--	7,783
Engelmann spruce	--	--	--	--	--	--	--	--	--	2,434
Total softwoods	3,595	5,959	5,752	1,902	952	--	--	430	--	18,590
Aspen	XXXXX	--	--	--	--	--	--	--	--	--
Cottonwood	XXXXXX	--	218	--	--	--	--	--	--	218
Total hardwoods	XXXXXX	--	218	--	--	--	--	--	--	218
All species	3,595	5,959	5,970	1,902	952	--	--	430	--	18,808

Table 40--Annual mortality of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class  
in western Wyoming, 1983

Species	Diameter class (inches at breast height)										All classes
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-24.9	25.0-26.9	27.0-28.9	
- - - - - Thousand board feet, Scribner rule - - - - -											
Douglas-fir	--	--	--	--	--	--	--	--	--	--	--
Lodgepole pine	1,731	1,848	1,914	1,596	--	--	--	--	--	--	--
Limber pine	854	2,506	2,051	--	800	--	--	--	--	--	7,089
Subalpine fir	472	752	885	--	--	--	--	--	--	--	6,572
Engelmann spruce	--	--	--	--	--	--	--	--	--	--	2,109
Total softwood	3,057	5,106	4,850	1,596	800	--	--	361	--	--	--
- - - - - 15,770 - - - - -											
Aspen	XXXXX	--	--	--	--	--	--	--	--	--	--
Cottonwood	XXXXX	--	168	--	--	--	--	--	--	--	168
Total hardwoods	XXXXX	--	168	--	--	--	--	--	--	--	168
All species	3,057	5,106	5,018	1,596	800	--	--	361	--	--	15,938

Table 41--Annual mortality of growing stock on timberland outside National Forests by species and cause of death in western Wyoming, 1983

Species	Cause of death						Total
	Insects	Disease	Fire	Animal	Weather	Suppression	
- - - - - Thousand cubic feet - - - - -							
Lodgepole pine	1,318	829	--	--	--	--	130
Limber pine	--	1,785	--	--	--	--	2,277
Subalpine fir	433	351	--	--	--	--	181
Total softwoods	1,751	2,965	--	--	84	--	5,111
Aspen	--	138	--	--	--	--	522
Cottonwood	--	--	--	45	--	--	6
Total hardwoods	--	138	--	45	--	--	528
All species	1,751	3,103	--	45	84	--	5,822

<sup>1</sup>Because many destructive agents often attack trees in concert or in succession, it is often difficult to identify the actual causal agent. When the primary cause of death cannot be precisely determined, it is listed as unknown.

Table 42--Annual mortality of sawtimber (International 1-inch rule) on timberland outside National Forests by species and cause of death in western Wyoming, 1983

Species	Cause of death								Total
	Insects	Disease	Fire	Animal	Weather	Suppression	Logging	Unknown	
- - - - - Thousand board feet, International 1-inch rule - - - - -									
Lodgepole pine	5,102	2,588	--	--	--	--	--	683	8,373
Limber pine	--	7,353	--	--	430	--	--	--	7,783
Subalpine fir	1,904	--	--	--	--	--	--	530	2,434
Total softwoods	7,006	9,941	--	--	430	--	--	1,213	18,590
Aspen	--	--	--	--	--	--	--	--	--
Cottonwood	--	--	--	218	--	--	--	--	218
Total hardwoods	--	--	--	218	--	--	--	--	218
All species	7,006	9,941	--	218	430	--	--	1,213	18,808

Table 43--Annual mortality of sawtimber (Scribner rule) on timberland outside National Forests by species and cause of death in western Wyoming, 1983

Species	Cause of death								Total
	Insects	Disease	Fire	Animal	Weather	Suppression	Logging	Unknown	
- - - - - Thousand board feet, Scribner rule - - - - -									
Lodgepole pine	4,337	2,179	--	--	--	--	--	573	7,089
Limber pine	--	6,211	--	--	361	--	--	--	6,572
Subalpine fir	1,637	--	--	--	--	--	--	472	2,109
Total softwoods	5,974	8,390	--	--	361	--	--	1,045	15,770
Aspen	--	--	--	--	--	--	--	--	--
Cottonwood	--	--	--	168	--	--	--	--	168
Total hardwoods	--	--	--	168	--	--	--	--	168
All species	5,974	8,390	--	168	361	--	--	1,045	15,938

Table 44--Area of woodland outside National Forests by forest type and ownership class in western Wyoming, 1984

Forest type	Ownership class		
	Other public	Private	Total
<u>Acres</u>			
Pinyon-juniper	13,071	--	13,071
Juniper	218,407	129,973	348,380
Total woodland softwoods	231,478	129,973	361,451
Riparian <sup>1</sup>	--	4,145	4,145
Mountain brush	5,927	--	5,927
Other western hardwoods	--	--	--
Total woodland hardwoods	5,927	4,145	10,072
All types	237,405	134,118	371,523

<sup>1</sup>Mountain brush and riparian hardwood forest types are shown separately on this table only. These types are included in the "other" forest type category on the remaining woodland tables.

Table 45--Area of woodland outside National Forests by ownership class, forest type, and productivity class in western Wyoming, 1984

Ownership class	Forest type	Productivity class		All classes
		High	Low	
<u>Acres</u>				
Other public:	Pinyon-juniper	13,071	--	13,071
	Juniper	131,774	86,633	218,407
	Other	5,927	--	5,927
	Total	150,772	86,633	237,405
Private:	Pinyon-juniper	--	--	--
	Juniper	102,912	27,061	129,973
	Other	--	4,145	4,145
	Total	102,912	31,206	134,118
Total:	Pinyon-juniper	13,071	--	13,071
	Juniper	234,686	113,694	348,380
	Other	5,927	4,145	10,072
	Total	253,684	117,839	371,523

Table 46--Area of woodland outside National Forests by ownership class, forest type, and volume class in western Wyoming, 1984

Ownership class	Forest type	Volume class			AII classes
		0 - 499 cu ft/acre	500-999 cu ft/acre	1,000+ cu ft/acre	
- - - - - Acres					
Other public:	Pinyon-juniper	13,071	--	--	13,071
	Juniper	167,338	51,069	--	218,407
	Other	5,927	--	--	5,927
	Total	186,336	51,069	--	237,405
- - - - - Acres					
Private:	Pinyon-juniper	--	--	--	--
	Juniper	88,880	36,948	4,145	129,973
	Other	4,145	--	--	4,145
	Total	93,025	36,948	4,145	134,118
- - - - - Acres					
Total:	Pinyon-juniper	13,071	--	--	13,071
	Juniper	256,218	88,017	4,145	348,380
	Other	10,072	--	--	10,072
	Total	279,361	88,017	4,145	371,523

Table 47--Number of trees on woodland outside National Forests by ownership class, species, and diameter class in western Wyoming, 1984

		Two-inch diameter at root collar class															
Ownership class	and species	1.0-	3.0-	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	23.0-	25.0-	27.0-	29.0+	All classes
- - - - - Thousand trees - - - - -																	
Other public:																	
Pinyon		16,718	4,627	3,709	3,704	2,440	2,322	1,229	2,655	1,585	1,021	885	730	510	131	713	653
Juniper		1,185	474	--	119	119	--	--	--	--	--	--	--	--	--	--	42,979
Mtn. mahogany		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,016
Other																	--
Total		17,903	5,101	3,840	4,084	2,820	2,441	1,229	2,655	1,585	1,021	885	730	510	131	713	45,648
Private:																	
Pinyon		3,153	1,424	2,234	1,714	2,117	797	858	682	957	944	341	233	303	--	--	591
Juniper		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16,348
Mtn. mahogany		--	3,233	995	83	83	--	--	--	--	--	--	--	--	--	--	--
Other																	4,394
Total		3,153	4,657	3,229	1,797	2,200	797	858	682	957	944	341	233	303	--	591	20,742
Total:																	
Pinyon		19,871	6,051	5,943	5,418	4,557	3,119	2,087	3,337	2,542	1,965	1,226	963	813	131	1,304	653
Juniper		1,185	474	--	119	119	--	--	--	--	--	--	--	--	--	--	59,327
Mtn. mahogany		--	3,233	995	83	83	--	--	--	--	--	--	--	--	--	--	2,016
Other																	4,394
Total		21,056	9,758	7,069	5,881	5,020	3,238	2,087	3,337	2,542	1,965	1,226	963	813	131	1,304	66,390

Table 48--Net volume on woodland outside National Forests by species and ownership class in western Wyoming, 1984

Species	Ownership class			<u>Thousand cubic feet</u>
	Other public	Private	Total	
- - - - -				
Douglas-fir	445	--	445	
Limber pine	940	405	1,345	
Cottonwood	459	--	459	
Woodland softwoods	68,250	47,897	116,147	
Woodland hardwoods	541	1,712	2,253	
All species	70,635	50,014	120,649	

Table 49--Net volume of woodland species on woodland outside National Forests by ownership class, species, and diameter class  
in western Wyoming, 1984

Ownership class and species	Two-inch diameter at root collar class										All classes				
	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9	29.0+ 29.0+	All classes
- - - - - Thousand cubic feet - - - - -													- - - - -		
Other public:															
Pinyon	--	137	604	717	--	--	--	--	--	--	--	--	1,458		
Juniper	592	1,441	2,863	4,008	4,347	3,810	9,891	6,111	6,772	5,139	7,250	5,058	380	9,130	66,792
Mtn. mahogany	93	--	73	139	236	--	--	--	--	--	--	--	--	--	541
Other	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	685	1,578	3,540	4,864	4,583	3,810	9,891	6,111	6,772	5,139	7,250	5,058	380	9,130	68,791
Private:															
Pinyon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Juniper	206	1,159	1,668	3,050	1,985	2,371	2,808	5,603	6,923	2,778	4,949	--	--	12,119	47,897
Mtn. mahogany	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other	793	696	73	149	--	--	--	--	--	--	--	--	--	--	1,711
Total	999	1,855	1,741	3,199	1,985	2,371	2,808	5,603	6,923	2,778	4,949	--	12,119	49,608	
Total:															
Pinyon	--	137	604	717	--	--	--	--	--	--	--	--	--	--	1,458
Juniper	798	2,600	4,531	7,058	6,332	6,181	12,699	11,714	13,695	7,917	9,528	10,007	380	21,249	114,689
Mtn. mahogany	93	--	73	139	236	--	--	--	--	--	--	--	--	--	541
Other	793	696	73	149	--	--	--	--	--	--	--	--	--	--	1,711
Total	1,684	3,433	5,281	8,063	6,568	6,181	12,699	11,714	13,695	7,917	9,528	10,007	380	21,249	118,399

Table 50--Net volume of woodland species on woodland outside National Forests by ownership class, forest type, and productivity class in western Wyoming, 1984

Ownership class	Forest type	Productivity class		All classes
		High	Low	
<u>- - - - Thousand cubic feet - - -</u>				
Other public:	Pinyon-juniper	3,974	--	3,974
	Juniper	38,105	26,170	64,275
	Other	541	--	541
	Total	42,620	26,170	68,790
<hr/>				
Private:	Pinyon-juniper	--	--	--
	Juniper	43,475	4,423	47,898
	Other	--	1,711	1,711
	Total	43,475	6,134	49,609
<hr/>				
Total:	Pinyon-juniper	3,974	--	3,974
	Juniper	81,580	30,593	112,173
	Other	541	1,711	2,252
	Total	86,095	32,304	118,399

Table 51--Net volume of woodland species on woodland outside National Forests by ownership class, forest type, and volume class in western Wyoming, 1984

Ownership class	Forest type	Volume class			
		0 - 499 cu ft/acre	500-999 cu ft/acre	1,000+ cu ft/acre	All classes
<u>Thousand cubic feet</u>					
Other public:	Pinyon-juniper	3,974	--	--	3,974
	Juniper	32,297	31,978	--	64,275
	Other	541	--	--	541
	Total	36,812	31,978	--	68,790
Private:	Pinyon-juniper	--	--	--	--
	Juniper	18,465	23,864	5,568	47,897
	Other	1,712	--	--	1,712
	Total	20,177	23,864	5,568	49,609
Total:	Pinyon-juniper	3,974	--	--	3,974
	Juniper	50,762	55,842	5,568	112,172
	Other	2,253	--	--	2,252
	Total	56,989	55,842	5,568	118,399

Table 52--Net dead volume of woodland species on woodland outside National Forests by ownership class, species, and diameter class in western Wyoming, 1984

Ownership class and species	Two-inch diameter at root collar class										All classes				
	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9	29.0+ 28.9	All classes
<hr/>															
Other public:															
Pinyon	--	--	48	78	--	--	--	--	--	--	--	--	--		
Juniper	3	47	146	508	327	952	1,240	1,381	753	1,046	1,280	1,075	2,288	5,787	126
Mtn. mahogany	17	21	--	21	--	--	--	--	--	--	--	--	--	16,833	
Other	--	--	--	--	--	--	--	--	--	--	--	--	--	59	
Total	20	68	194	607	327	952	1,240	1,381	753	1,046	1,280	1,075	2,288	5,787	17,018
<hr/>															
Private:															
Pinyon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Juniper	1	62	7	249	492	667	138	421	653	373	244	1,215	--	2,673	7,195
Mtn. mahogany	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Other	196	35	18	--	--	--	--	--	--	--	--	--	--	249	
Total	197	97	25	249	492	667	138	421	653	373	244	1,215	--	2,673	7,444
<hr/>															
Total:															
Pinyon	--	--	48	78	--	--	--	--	--	--	--	--	--	126	
Juniper	4	109	153	757	819	1,619	1,378	1,802	1,406	1,419	1,524	2,290	2,288	8,460	24,028
Mtn. mahogany	17	21	--	21	--	--	--	--	--	--	--	--	--	59	
Other	196	35	18	--	--	--	--	--	--	--	--	--	--	249	
Total	217	165	219	856	819	1,619	1,378	1,802	1,406	1,419	1,524	2,290	2,288	8,460	24,462

Table 53--Net dead volume of woodland species on woodland outside  
National Forests by ownership class, forest type, and  
productivity class in western Wyoming, 1984

Ownership class	Forest type	Productivity class		All classes
		High	Low	
- - - Thousand cubic feet - - -				
Other public:	Pinyon-juniper	1,093	--	1,093
	Juniper	7,125	8,741	15,866
	Other	59	--	59
Total		8,277	8,741	17,018
- - -				
Private:	Pinyon-juniper	--	--	--
	Juniper	6,684	511	7,195
	Other	--	249	249
Total		6,684	760	7,444
- - -				
Total:				
Pinyon-juniper		1,093	--	1,093
Juniper		13,809	9,252	23,061
Other		59	249	308
Total		14,961	9,501	24,462

Table 54--Net dead volume of woodland species on woodland outside National Forests by ownership class, forest type, and volume class in western Wyoming, 1984

Ownership class	Forest type	Volume class			All classes
		0 - 499 cu ft/acre	500-999 cu ft/acre	1,000+ cu ft/acre	
<u>Thousand cubic feet</u>					
Other public:	Pinyon-juniper	1,094	--	--	1,094
	Juniper	4,928	10,937	--	15,865
	Other	59	--	--	59
	Total	6,081	10,937	--	17,018
Private:	Pinyon-juniper	--	--	--	--
	Juniper	4,203	2,563	429	7,195
	Other	249	--	--	249
	Total	4,452	2,563	429	7,444
Total:	Pinyon-juniper	1,094	--	--	1,094
	Juniper	9,131	13,500	429	23,060
	Other	308	--	--	308
	Total	10,533	13,500	429	24,462

Table 55--Net annual growth on woodland outside National Forests by species and ownership class in western Wyoming, 1983

Species	Ownership class		
	Other public	Private	Total
<u>- - - - - Thousand cubic feet - - - - -</u>			
Douglas-fir	21	--	21
Limber pine	62	20	82
Cottonwood	9	--	9
Woodland softwoods	613	292	905
Woodland hardwoods	14	92	106
All species	719	404	1,123

Table 56--Net annual growth of woodland species on woodland outside National Forests by ownership class, species, and diameter class in western Wyoming, 1983

Ownership class and species	Two-inch diameter at root collar class										All classes
	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	23.0- 22.9	25.0- 24.9
<hr/>											
Other public:											
Pinyon	--	7	16	19	--	--	--	--	--	--	--
Juniper	43	42	62	54	51	38	73	48	48	23	42
Mtn. mahogany	5	--	2	3	4	--	--	--	--	--	571
Other	--	--	--	--	--	--	--	--	--	--	14
Total	48	49	80	76	55	38	73	48	48	23	627
<hr/>											
Private:											
Pinyon	--	--	26	34	21	17	20	32	36	13	--
Juniper	21	21	--	--	--	--	--	--	--	7	19
Mtn. mahogany	--	--	1	3	--	--	--	--	--	--	--
Other	66	22	--	--	--	--	--	--	--	--	92
Total	87	43	27	37	21	17	20	32	36	13	384
<hr/>											
Total:											
Pinyon	--	7	16	19	--	--	--	--	--	--	--
Juniper	64	63	88	88	72	55	93	80	84	36	49
Mtn. mahogany	5	--	2	3	4	--	--	--	--	--	48
Other	66	22	1	3	--	--	--	--	--	--	863
Total	135	92	107	113	76	55	93	80	84	36	49
											1,011

Table 57--Net annual growth of woodland species on woodland outside National Forests by ownership class, forest type, and productivity class in western Wyoming, 1983

Ownership class	Forest type	Productivity class		All classes
		High	Low	
- - - Thousand cubic feet - - -				
Other public:	Pinyon-juniper	64	--	64
	Juniper	363	186	549
	Other	14	--	14
	Total	441	186	627
- - - Thousand cubic feet - - -				
Private:	Pinyon-juniper	--	--	--
	Juniper	258	34	292
	Other	--	91	91
	Total	258	125	383
- - - Thousand cubic feet - - -				
Total:	Pinyon-juniper	64	--	64
	Juniper	621	220	841
	Other	14	91	105
	Total	699	311	1,010

Table 58--Net annual growth of woodland species on woodland outside National Forests by ownership class, forest type, and volume class in western Wyoming, 1983

Ownership class	Forest type	Volume class			All classes
		0 - 499 cu ft/acre	500-999 cu ft/acre	1,000+ cu ft/acre	
<u>Thousand cubic feet</u>					
Other public:	Pinyon-juniper	64	--	--	64
	Juniper	291	258	--	549
	Other	14	--	--	14
	Total	369	258	--	627
Private:	Pinyon-juniper	--	--	--	--
	Juniper	134	142	16	292
	Other	91	--	--	91
	Total	225	142	16	383
Total:	Pinyon-juniper	64	--	--	64
	Juniper	425	400	16	841
	Other	105	--	--	105
	Total	594	400	16	1,010

Table 59--Number of fenceposts on woodland outside National Forests by ownership class, species, and type of post in western Wyoming, 1984

Ownership class	Species	Type of post		
		Line	Corner	Total
<u>- - - - Thousand fenceposts - - -</u>				
Other public:	Juniper	3,749	1,520	5,269
Private:	Juniper	3,156	1,308	4,464
Total	Juniper	6,905	2,828	9,733



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Conner, Roger C.; Pawley, W. Thomas. 1988. Timberland and woodland resources outside National Forests in western Wyoming, 1984. Resour. Bull. INT-51. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 61 p.

Highlights the timberland and woodland resources outside National Forests in western Wyoming. Presents statistical tables of area, volume, growth, and mortality as of 1984.

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KEYWORDS: softwoods, hardwoods, growing-stock, sawtimber volumes, net annual growth, harvest

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## INTERMOUNTAIN RESEARCH STATION

The Intermountain Research Station provides scientific knowledge and technology to improve management, protection, and use of the forests and rangelands of the Intermountain West. Research is designed to meet the needs of National Forest managers, Federal and State agencies, industry, academic institutions, public and private organizations, and individuals. Results of research are made available through publications, symposia, workshops, training sessions, and personal contacts.

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