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Timberland and Woodland
Resources Outside
National Forests in New
Mexico, 1987

Dwane D. Van Hooser

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RESEARCH SUMMARY

The forest land base outside the National Forests in New Mexico totals more than 8 million acres. Three-quarters of these forests are owned by private individuals or companies. Acres supporting stands of timber species total 2.1 million, while the woodland resource, typified by stands of pinyon-juniper, accounts for more than 5.7 million acres. These areas contain wood volumes of 2.1 billion cubic feet and 2.7 billion cubic feet, respectively. This report presents additional information on the land base, timberland and woodland area, and associated inventory volume, growth, and mortality.

PREFACE

The primary objective of Forest Survey—a continuing nationwide undertaking of the Forest Service, U.S. Department of Agriculture—is to provide an assessment of the renewable resources for the forest lands of the Nation. Fundamental to the accomplishment of the objective are the 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, conducts the forest resource inventories for the Rocky Mountain States of Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, and Wyoming. These inventories provide information on the extent and condition of the forests—its volume of wood and stand dynamics as expressed by growth, removals, and mortality for State, privately owned, and most other forest lands not in the National Forest System. These data, when combined with similar information on National Forest lands, provide a basis for forming forest policies and programs and for the orderly development and use of the resources.

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Timberland and Woodland Resources Outside National Forests in New Mexico, 1987

Dwane D. Van Hooser

INTRODUCTION

This report presents the principal findings of the most recent forest survey of the timberland and woodland resources outside the National Forests in New Mexico (fig. 1). Phase I of the survey began in 1985 with the collection and reconciliation of area information and aerial photo interpretation. The field phase began in early June 1986 and was completed in mid-November 1987.

The resource statistics in this report include estimates for those lands in private ownership and those public lands administered by the Bureau of Land Management (BLM), U.S. Department of the Interior (USDI); other Federal agencies; the State of New Mexico; and county and municipal governments. Reserved areas, such as those lands administered by the National Park Service, USDI, are not field sampled but are included in the total area summaries (table 1). Area estimates for those lands administered by the Forest Service, U.S. Department of Agriculture, are also included in table 1, but resource estimates are not included in this report. They will be combined with the estimates presented here and in previous substate reports to form the basis for a comprehensive statewide analysis of New Mexico's forest resources.

Figure 1—New Mexico counties.

HIGHLIGHTS

Area

The total land area of the State of New Mexico is 77.8 million acres. Some 36.6 million acres are administered by public agencies (fig. 2).

Those lands outside the National Forests, the subject of this report, amount to 68.4 million acres. Of these, BLM and other Federal agencies administer 16.5 million acres, while New Mexico State agencies and county and municipal governments control over 9.7 million acres.

Of the 68.4 million acres outside the National Forests, 8.1 million meet the minimum tree stocking criteria to be considered forest (fig. 3). A small amount of this area—some 3 percent—is reserved by statute or administrative regulation. Just over one-fourth of the nonreserved forest land is timberland, and 73 percent is classified as woodland.

Figure 2—Distribution of land by ownership in New Mexico, 1987.

Figure 3—Distribution of land outside National Forests by type of land in New Mexico, 1987.

Timberland

Area—Of the 2.1 million acres of timberland, most—94 percent—is in private holdings. The timberland areas are concentrated in the Sangre de Cristo Mountains in the north central portion of the State and in the Sacramento Mountains to the south. More than half of the timberland is concentrated in four counties—Colfax, Rio Arriba, Mora, and Taos.

The ponderosa pine forest type is predominant on nearly 60 percent of the timberland area (fig. 4). The Douglas-fir type accounts for 18 percent. The white fir, spruce-fir, and spruce forest types combined occupy another 17 percent. Other softwoods, aspen, and cottonwood types are found on the remainder of the timberland areas, with the cottonwood occurring primarily along the Rio Grande River in the central part of the State.

More than three-quarters of the timberland area is in sawtimber stands (fig. 5). Poletimber stands predominate on 18 percent of the area. Nonstocked conditions occur on only 4 percent of the timberland acres.

Figure 4—Distribution of timberland outside National Forests by forest type in New Mexico, 1987.

Figure 5—Distribution of timberland outside National Forests by stand-size class in New Mexico, 1987.

All of the timberland has the potential to produce at least 20 cubic feet of volume per acre per year at culmination of mean annual increment (MAI). More than one-fourth of the land has the inherent ability to grow more than 50 cubic feet MAI.

Nearly half of the timberland area supports between 1,500 and 5,000 board feet of sawtimber per acre (fig. 6). A small amount—6 percent of the timberland base—supports stands containing 10,000 or more board feet of volume per acre.

Nearly three-fifths of the timberland acres are at least medium to fully stocked, and 28 percent are considered fully stocked. About one-fifth of the timberland is in stands over 100 years of age. The remaining 22 percent is either nonstocked or poorly stocked (fig. 7).

The timbered acres support more than 684 million trees, 96 percent of which are considered growing stock. Of these, about 60 percent are saplings, and 2 percent exceed 17.0 inches diameter at breast height (d.b.h.) (fig. 8). Most of the non-growing-stock trees are those that are dead but still meet merchantability standards for growing stock. Less than 1 percent of the standing inventory is in rough or rotten cull trees.

Volume—The volume in growing-stock trees is estimated to be more than 2 billion cubic feet and includes nearly 8 billion board feet of sawtimber. Trees classified as rough or rotten cull, or salvable dead, contribute an additional 151 million cubic feet of volume.

More than 80 percent of the growing-stock volume is contained in sawtimber-size stands. Less than 1 percent is in nonstocked and seedling/sapling stands. Nearly 95 percent of both the growing-stock and sawtimber inventories are in private ownership.

Figure 6—Distribution of timberland outside National Forests by stand-volume class in New Mexico, 1987.

Figure 7—Distribution of timberland outside National Forests by stocking condition in New Mexico, 1987.

Figure 8—Distribution of growing-stock trees on timberland outside National Forests by tree-size class in New Mexico, 1987.

One-half of the growing stock inventory is in small sawtimber-size trees, and more than one-fifth is in poletimber-size trees (fig. 9). Three-fifths of the sawtimber inventory is in trees less than 17.0 inches d.b.h.

The most abundant species in terms of growing stock and sawtimber volume is ponderosa pine (*Pinus ponderosa*) (fig. 10). Altogether this species accounts for 45 percent of the cubic volume and fully half of the 7.9 billion board feet of sawtimber. Douglas-fir (*Pseudotsuga menziesii*) is the second most abundant species, contributing about one-fifth of the total cubic-foot and board-foot volume. White fir (*Abies concolor*) and Engelmann spruce (*Picea engelmannii*) each contribute about 10 percent to the standing inventory. Aspen (*Populus tremuloides*) is the dominant hardwood species, adding some 155 million cubic feet to the growing-stock inventory.

Components of Change—On an average annual basis, gross growth of growing stock is increasing the standing inventory by 61 million cubic feet or 3 percent. When mortality is deducted, however, the annual rate of change in the absence of harvest is 55 million cubic feet or 2.6 percent.

Mortality of growing stock is low, amounting to 6.2 million cubic feet and representing only three-tenths of 1 percent of the inventory. Nearly two-thirds of the mortality was due to insect-killed Douglas-fir. A minor amount of disease activity was also noted. For just over a fourth of the dead trees, a cause of death could not be determined.

Woodland

Area—Some 5.7 million acres or 73 percent of the forested area is classified as woodland. The BLM administers nearly a million acres. Other public agencies exercise control over an additional 750,000 acres. The bulk of the woodland—nearly 70 percent—is privately owned (fig. 11).

Figure 9—Distribution of growing-stock volume on timberland outside National Forests by tree-size class in New Mexico, 1987.

Figure 10—Distribution of growing-stock volume on timberland outside National Forests by species in New Mexico, 1987.

Figure 11—Distribution of woodland outside National Forests by ownership in New Mexico, 1987.

The most dominant vegetative type on the woodland areas is the pinyon-juniper complex. Altogether this type occupies more than 5 million acres—88 percent of the woodland area (fig. 12). The next most abundant type is made up of more or less pure stands of juniper that contain no pinyon (*Pinus edulis*). Rocky Mountain (*Juniperus scopulorum*), Utah (*J. osteosperma*), oneseed (*J. monosperma*), or alligator (*J. deppeana*) juniper occupy 522,000 acres. A third type, which is found on 181,000 acres of woodland, is oak, the principal species being Gambel oak (*Quercus gambelii*).

Each woodland site is classified according to its ability to produce sustained crops of trees and its potential for management. About 80 percent of the pinyon-juniper sites demonstrated the physical and biological characteristics that might make them candidates for formal management and are thus classified as high site. Nearly 90 percent of the oak stands demonstrated similar characteristics. Overall, 80 percent of the woodland area was considered to be in this category (fig. 13). The 1.2 million acres placed in the low-site category were usually found on harsh, dry sites with shallow soils or steep slopes where vigorous growth and successful regeneration would be difficult, if not impossible, to achieve.

The woodland area supports more than 1.3 billion trees. The distribution of the inventory by size class bodes well for future stand development. Nearly one-third of the stems are less than 3.0 inches diameter at root collar (d.r.c.), and nearly 80 percent are less than 9.0 inches d.r.c. (fig. 14).

More than half of the trees are pinyon. The juniper species account for some 37 percent of the standing inventory, and the oaks account for 12 percent. A small segment is made up of other woodland species such as *Prunus* sp., walnut (*Juglans major*), maple (*Acer glabrum*, *A. grandidentatum*), box elder (*Acer negundo*), and ash (*Fraxinus cuspidata*, *F. velutina*). With the exception of the minor woodland species, the trees are well distributed by size class, with trees being present in all d.r.c. classes. The juniper, however, tends to predominate in the larger d.r.c. classes.

Volume—New Mexico's woodlands support 2.7 billion cubic feet of volume; 72 percent is privately owned. Nearly half of the total volume is in juniper species, and 44 percent is in pinyon. The oaks contribute 4 percent to the standing volume. The remainder is in the minor woodland species and in timber species such as ponderosa pine, Douglas-fir, white fir, and cottonwood (*Populus trichocarpa*) found growing on woodland sites.

Figure 12—Distribution of woodland outside National Forests by forest type in New Mexico, 1987.

Figure 13—Distribution of woodland outside National Forests by productivity class in New Mexico, 1987.

Figure 14—Distribution of trees on woodland outside National Forests by diameter at root collar class in New Mexico, 1987.

The average woodland acre supports 457 cubic feet of volume in woodland species. There are 844,000 acres supporting stands that contain more than 1,000 cubic feet (fig. 15). Of these high-volume stands, 92 percent contain pinyon. On the other hand, more than two-thirds of the pure juniper stands contain fewer than 400 cubic feet per acre. Stands in the oak type are represented across all stand volume classes, but 30 percent contain less than 200 cubic feet per acre, while one-fourth of the oak stands support more than 1,000 cubic feet per acre.

Unlike their timber counterparts, the only merchantability standard that applies to woodland species is the ability of given users to convert standing trees into products useful for them. Thus, all of the material is potentially usable. In addition to the 2.6 billion cubic feet of live material potentially available, there is an additional 631 million cubic feet present in the form of dead wood (fig. 16). And all of it would qualify as fuelwood. Ironically, most of this dead material is contained in live trees, and 42 percent is in stands that support more than 1,000 cubic feet per acre.

One product that commonly comes from pinyon is Christmas trees. Criteria have been developed, based on height and form, for classifying pinyon into various Christmas-tree grades, and these standards were applied to each pinyon tallied. Of the 688 million pinyon trees represented in the inventory, 83 million met the minimum standards for Christmas trees. Most of these, some 61 million, were utility grade. About 20 million trees met the specifications for the more desirable standard grade, and just over 3 million made the premium class, which is the most desirable.

A common product generated from the juniper and oak species is fenceposts. Two classes are generally recognized—line and corner. Altogether, an estimated 112 million fenceposts could be harvested from the woodland acres. About two-thirds of these are line posts, while some 37 million are the more valuable corner variety.

Components of Change—Net annual growth per acre equals 5.1 cubic feet. This amounts to an annual increase of nearly 30 million cubic feet in woodland inventory. The most productive woodland sites are those on which oak predominates, and they are growing 11.5 cubic feet per acre per year. Stands in which pinyon is present are producing about 5.2 cubic feet per acre per year, while the juniper types are adding 2.3 cubic feet per acre annually. In total, the woodland inventory is increasing at a net annual rate of 1.1 percent.

Figure 15—Distribution of woodland outside National Forests by stand-volume class in New Mexico, 1987.

Figure 16—Distribution of volume on woodland outside National Forests by type of volume and diameter at root collar class in New Mexico, 1987.

HOW THE INVENTORY WAS CONDUCTED

The inventory was designed to provide reliable statistics primarily at the State and sample area levels.

Prefield

Initial area estimates were based on the classification of 273,497 sample points systematically placed on the latest aerial photographs available. The sample points were summarized and grouped into strata for subsequent field sampling. The photo points, adjusted to meet known land areas, were used to compute area expansion factors for the sampling strata means.

Field

Land classification and estimates of timberland and woodland characteristics and volume were based on observations and measurements recorded at 9,747 field sample locations, of which 1,171 were forested (fig. 17).

Sample trees for timberland were selected on a 5-point cluster. Trees less than 5.0 inches d.b.h. were measured on a $\frac{1}{300}$ -acre fixed radius plot. Trees 5.0 inches d.b.h. or larger were selected using a variable radius plot. A 20 basal area factor prism was used for ponderosa pine locations, while other timberland locations were measured using a 40 basal area factor prism. Sample trees for woodland were selected on a $\frac{1}{10}$ -acre or a $\frac{1}{5}$ -acre fixed radius plot for trees 3.0 inches d.r.c. and larger. Trees less than 3.0 inches d.r.c. were tallied on $\frac{1}{300}$ -acre subplots.

Compilation

All editing, computation, and tabulation of photo and field data are through application of customized software systems. 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 the most appropriate equations, including those developed by Chojnacky (1985), Hann and Bare (1978), and Edminster (1977).

Figure 17—Distribution of timberland and woodland field locations outside National Forests in New Mexico, 1986 and 1987.

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.

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, or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees, or both.

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 trees and Rotten trees).

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.

Fenceposts—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.

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

Forest lands—Lands at least 10 percent stocked by forest trees of any size, including lands 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 Forest Service, U.S. Department of Agriculture, or Bureau of Land Management, U.S. Department of the Interior.

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 Forest Service, U.S. Department of Agriculture.

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

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 lands—Lands that do 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 lands—Privately owned lands other than forest industry or farmer-owned.

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

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.

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 timberlands the index used is the potential net annual growth at culmination of mean annual increment in fully stocked natural stands. 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 trees—Live poletimber or sawtimber trees with more than 67 percent of their total volume cull (cubic-foot) and with more than half of the cull volume attributable to rotten or missing material.

Rough trees—Live poletimber or sawtimber trees with more than 67 percent of their 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 New Mexico, 1987

Ownership class	Area
	- - <u>Acres</u> - -
Land:	
Public:	
National Forest	9,325,185
Other public:	
Bureau of Land Management	12,851,491
National Parks ¹	251,010
Miscellaneous Federal	3,438,865
State	9,681,981
County and municipal	16,541
Total other public	26,239,888
Total public	35,565,073
Private:	
Indian	7,934,493
Other private	34,211,179
Total private	42,145,672
Total land area	77,710,745
Census water	108,474
Total land and water ²	77,819,219

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

²U.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 New Mexico, 1987

Item	Acres	Percent standard error
Timberland	2,099,292	±3.6
Woodland	5,741,451	±2.6
Reserved forest land: ¹		
Timberland	161,422	
Woodland	115,198	
Total forest land ²	8,117,363	

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

²On 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 forest land outside National Forests with percent standard error in New Mexico

Forest land	Item	All species	
		Volume	Percent standard error
Timberland:	Net volume, 1987:		
	Growing stock (M cubic feet)	2,081,464	±5.9
	Sawtimber ¹ (M board feet)	7,910,338	±6.4
	Sawtimber ² (M board feet)	6,564,142	±6.4
	Net annual growth, 1986:		
	Growing stock (M cubic feet)	54,564	±9.3
	Sawtimber ¹ (M board feet)	248,311	±10.3
	Sawtimber ² (M board feet)	205,309	±9.7
	Annual mortality, 1986:		
	Growing stock (M cubic feet)	6,221	±56.6
	Sawtimber ¹ (M board feet)	19,351	±52.1
	Sawtimber ² (M board feet)	15,224	±49.9
Woodland:	Volume, 1987 (M cubic feet)	2,693,813	±3.7
	Growth, 1986 (M cubic feet)	29,526	±4.1
	Mortality, 1986 (M cubic feet)	353	±51.2

¹International 4-inch rule.

²Scribner rule.

Table 4--Total land area outside National Forests by major land class and ownership class in New Mexico, 1987

Land class	Ownership class		
	Other public	Private	Total
- - - - - Acres - - - - -			
Timberland:			
Reserved	53,414	108,008	161,422
Nonreserved	135,235	1,964,057	2,099,292
Total	188,649	2,072,065	2,260,714
Woodland:			
Reserved	55,635	59,563	115,198
Nonreserved	1,736,185	4,005,266	5,741,451
Total	1,791,820	4,064,829	5,856,649
Total forest land:			
Reserved	109,049	167,571	276,620
Nonreserved	1,871,420	5,969,323	7,840,743
Total	1,980,469	6,136,894	8,117,363
Nonforest land	24,259,419	36,008,778	60,268,197
Total land area	26,239,888	42,145,672	68,385,560

TIMBERLAND TABLES

Table 5--Area of timberland outside National Forests by forest type, stand-size class, and productivity class in New Mexico, 1987

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Douglas-fir:					
Sawtimber	6,014	94,383	164,848	--	265,245
Poletimber	--	28,659	44,176	--	72,835
Sapling and seedling	--	--	--	--	--
Nonstocked	--	13,486	24,865	--	38,351
Total	6,014	136,528	233,889	--	376,431
Ponderosa pine:					
Sawtimber	--	90,864	943,058	--	1,033,922
Poletimber	--	--	186,285	--	186,285
Sapling and seedling	--	--	12,347	--	12,347
Nonstocked	--	--	21,239	--	21,239
Total	--	90,864	1,162,929	--	1,253,793
Spruce-fir:					
Sawtimber	--	36,445	29,814	--	66,259
Poletimber	--	23,847	24,131	--	47,978
Sapling and seedling	--	--	--	--	--
Nonstocked	--	7,949	--	--	7,949
Total	--	68,241	53,945	--	122,186
White fir:					
Sawtimber	21,038	87,291	31,103	--	139,432
Poletimber	1,993	--	7,949	--	9,942
Sapling and seedling	--	--	--	--	--
Nonstocked	--	5,626	--	--	5,626
Total	23,031	92,917	39,052	--	155,000

(con.)

Table 5 (Con.)

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Spruce:					
Sawtimber	--	38,998	7,949	--	46,947
Poletimber	7,949	4,186	7,949	--	20,084
Sapling and seedling	--	--	7,949	--	7,949
Nonstocked	--	--	--	--	--
Total	7,949	43,184	23,847	--	74,980
Other softwoods:					
Sawtimber	--	6,014	7,575	--	13,589
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	6,014	7,575	--	13,589
Aspen:					
Sawtimber	7,949	7,949	7,575	--	23,473
Poletimber	5,018	14,371	15,898	--	35,287
Sapling and seedling	--	5,018	6,632	--	11,650
Nonstocked	--	--	--	--	--
Total	12,967	27,338	30,105	--	70,410
Cottonwood:					
Sawtimber	--	24,954	--	--	24,954
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	7,949	--	--	7,949
Total	--	32,903	--	--	32,903
All types:					
Sawtimber	35,001	386,898	1,191,922	--	1,613,821
Poletimber	14,960	71,063	286,388	--	372,411
Sapling and seedling	--	5,018	26,928	--	31,946
Nonstocked	--	35,010	46,104	--	81,114
Total	49,961	497,989	1,551,342	--	2,099,292

Table 6--Area of other publicly owned timberland by forest type, stand-size class, and productivity class in New Mexico, 1987

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Douglas-fir:					
Sawtimber	--	5,603	6,132	--	11,735
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	5,603	6,132	--	11,735
Ponderosa pine:					
Sawtimber	--	--	85,779	--	85,779
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	941	--	941
Total	--	--	86,720	--	86,720
Spruce-fir:					
Sawtimber	--	--	--	--	--
Poletimber	--	--	4,249	--	4,249
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	--	4,249	--	4,249
White fir:					
Sawtimber	942	16,870	4,249	--	22,061
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	942	16,870	4,249	--	22,061

(con.)

Table 6 (Con.)

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Spruce:					
Sawtimber	--	--	--	--	--
Poletimber	--	4,186	--	--	4,186
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	4,186	--	--	4,186
Other softwoods:					
Sawtimber	--	--	--	--	--
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	--	--	--	--
Aspen:					
Sawtimber	--	--	--	--	--
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	--	--	--	--
Cottonwood:					
Sawtimber	--	6,284	--	--	6,284
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	6,284	--	--	6,284
All types:					
Sawtimber	942	28,757	96,160	--	125,859
Poletimber	--	4,186	4,249	--	8,435
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	941	--	941
Total	942	32,943	101,350	--	135,235

Table 7--Area of privately owned timberland by forest type, stand-size class, and productivity class in New Mexico, 1987

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Douglas-fir:					
Sawtimber	6,014	88,780	158,716	--	253,510
Poletimber	--	28,659	44,176	--	72,835
Sapling and seedling	--	--	--	--	--
Nonstocked	--	13,486	24,865	--	38,351
Total	6,014	130,925	227,757	--	364,696
Ponderosa pine:					
Sawtimber	--	90,864	857,279	--	948,143
Poletimber	--	--	186,285	--	186,285
Sapling and seedling	--	--	12,347	--	12,347
Nonstocked	--	--	20,298	--	20,298
Total	--	90,864	1,076,209	--	1,167,073
Spruce-fir:					
Sawtimber	--	36,445	29,814	--	66,259
Poletimber	--	23,847	19,882	--	43,729
Sapling and seedling	--	--	--	--	--
Nonstocked	--	7,949	--	--	7,949
Total	--	68,241	49,696	--	117,937
White fir:					
Sawtimber	20,096	70,421	26,854	--	117,371
Poletimber	1,993	--	7,949	--	9,942
Sapling and seedling	--	--	--	--	--
Nonstocked	--	5,626	--	--	5,626
Total	22,089	76,047	34,803	--	132,939

(con.)

Table 7 (Con.)

Forest type and stand-size class	Productivity class				Total acres
	85-119	50-84	20-49	0-19	
	- - - - - Acres - - - - -				
Spruce:					
Sawtimber	--	38,998	7,949	--	46,947
Poletimber	7,949	--	7,949	--	15,898
Sapling and seedling	--	--	7,949	--	7,949
Nonstocked	--	--	--	--	--
Total	7,949	38,998	23,847	--	70,794
Other softwoods:					
Sawtimber	--	6,014	7,575	--	13,589
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	--	--	--	--
Total	--	6,014	7,575	--	13,589
Aspen:					
Sawtimber	7,949	7,949	7,575	--	23,473
Poletimber	5,018	14,371	15,898	--	35,287
Sapling and seedling	--	5,018	6,632	--	11,650
Nonstocked	--	--	--	--	--
Total	12,967	27,338	30,105	--	70,410
Cottonwood:					
Sawtimber	--	18,670	--	--	18,670
Poletimber	--	--	--	--	--
Sapling and seedling	--	--	--	--	--
Nonstocked	--	7,949	--	--	7,949
Total	--	26,619	--	--	26,619
All types:					
Sawtimber	34,059	358,141	1,095,762	--	1,487,962
Poletimber	14,960	66,877	282,139	--	363,976
Sapling and seedling	--	5,018	26,928	--	31,946
Nonstocked	--	35,010	45,163	--	80,173
Total	49,019	465,046	1,449,992	--	1,964,057

Table 8--Area of timberland outside National Forests by stand volume and ownership class in New Mexico, 1987

Stand volume per acre ¹	Ownership class		
	Other public	Private	Total
	- - - - - Acres - - - - -		
Less than 1,500 board feet	29,929	570,266	600,195
1,500 to 4,999 board feet	78,916	931,663	1,010,579
5,000 to 9,999 board feet	26,390	334,331	360,721
10,000 board feet or more	--	127,797	127,797
All classes	135,235	1,964,057	2,099,292

¹International ½-inch rule.

Table 9--Area of timberland outside National Forests by forest type and area condition class in New Mexico, 1987

Forest type	Area condition class										
	10	20	30	40	50	60	70	80	90	Nonstocked	All classes
	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	9,568	64,703	110,751	101,722	5,626	45,709	38,351	376,430
Douglas-fir	--	--	--	--	425,417	397,185	174,015	7,575	228,362	21,239	1,253,793
Ponderosa pine	--	5,966	--	7,949	27,831	20,148	5,966	--	46,377	7,949	122,186
Spruce-fir	--	--	--	16,031	31,343	30,792	23,828	7,575	39,804	5,626	154,999
White fir	--	--	--	12,135	15,151	15,898	23,848	--	7,949	--	74,981
Spruce	--	--	--	--	--	--	6,014	--	7,575	--	13,589
Other softwoods	--	--	--	--	10,036	38,219	14,207	--	7,949	--	70,411
Aspen	--	--	--	--	--	--	24,954	--	--	7,949	32,903
Cottonwood	--	--	--	--	--	--	--	--	--	--	--
All types	--	5,966	--	45,683	574,481	612,993	374,554	20,776	383,725	81,114	2,099,292

Table 10--Number of growing-stock trees on timberland outside National Forests by species and diameter class in New Mexico, 1987

Species	Diameter class (inches at breast height)																		
	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- 30.9	31.0- 32.9	33.0- 34.9	35.0- 36.9	All classes
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Douglas-fir	36,575	25,861	21,047	12,372	7,855	4,219	2,457	1,457	958	655	366	84	162	40	85	114,193			
Ponderosa pine	61,235	62,465	42,873	30,216	20,570	11,399	7,344	4,165	2,321	1,497	873	535	345	174	164	246,176			
Whitebark pine	4,397	3,000	2,399	1,948	949	607	299	151	54	24	28	36	26	--	--	13,926			
Limber pine	30,160	15,152	6,164	5,323	1,219	1,440	342	185	--	89	25	--	--	--	--	60,099			
Subalpine fir	35,367	13,742	8,419	3,822	4,222	2,340	1,406	725	774	402	247	25	--	53	60	71,604			
White fir	22,361	17,043	9,195	7,536	3,364	3,227	1,217	420	629	118	99	41	18	41	18	65,327			
Engelmann spruce	190,095	137,263	90,097	61,217	38,179	23,232	13,120	7,103	4,736	2,814	1,686	721	551	308	335	571,457			
Total softwoods																			
Aspen	34,245	25,033	13,339	3,900	2,819	1,175	987	358	229	84	26	21	--	--	--	82,216			
Cottonwood	643	--	--	--	652	218	--	32	75	84	--	27	15	15	--	1,761			
Total hardwoods	34,888	25,033	13,339	3,900	3,471	1,393	987	390	304	168	26	48	15	15	--	83,977			
All species	224,983	162,296	103,436	65,117	41,650	24,625	14,107	7,493	5,040	2,982	1,712	769	566	323	335	655,434			

Table 11--Number of cull and salvable dead trees on timberland outside National Forests by ownership class, and softwoods and hardwoods in New Mexico, 1987

Ownership class and species group	Cull trees			Salvable dead trees	Total
	Rough	Rotten	Total		
	- - - - - <u>Thousand trees</u> - - - - -				
Other public:					
Softwoods	--	53	53	910	963
Hardwoods	--	--	--	644	644
Total	--	53	53	1,554	1,607
Private:					
Softwoods	918	601	1,519	15,800	17,319
Hardwoods	426	1,666	2,092	8,295	10,387
Total	1,344	2,267	3,611	24,095	27,706
Total:					
Softwoods	918	654	1,572	16,710	18,282
Hardwoods	426	1,666	2,092	8,939	11,031
Total	1,344	2,320	3,664	25,649	29,313

Table 12--Net volume of growing stock on timberland outside National Forests by ownership class, forest type, and stand-size class in New Mexico, 1987

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/ seedling	Nonstocked	
<hr/>						
----- Thousand cubic feet -----						
<hr/>						
Other public:						
	Douglas-fir	23,883	--	--	--	23,883
	Ponderosa pine	47,341	--	--	--	47,341
	Spruce-fir	--	3,318	--	--	3,318
	White fir	33,342	--	--	--	33,342
	Spruce	--	11,291	--	--	11,291
	Other softwoods	--	--	--	--	--
	Aspen	--	--	--	--	--
	Cottonwood	10,987	--	--	--	10,987
		<hr/>				
	All types	115,553	14,609	--	--	130,162
		<hr/>				
Private:						
	Douglas-fir	307,455	60,110	--	5,671	373,236
	Ponderosa pine	776,423	114,180	254	2,063	892,920
	Spruce-fir	98,835	90,393	--	1,674	190,902
	White fir	230,681	3,853	--	1,315	235,849
	Spruce	129,657	19,128	1,369	--	150,154
	Other softwoods	20,981	--	--	--	20,981
	Aspen	40,036	33,217	2,271	--	75,524
	Cottonwood	11,736	--	--	--	11,736
		<hr/>				
	All types	1,615,804	320,881	3,894	10,723	1,951,302
		<hr/>				
Total:						
	Douglas-fir	331,338	60,110	--	5,671	397,119
	Ponderosa pine	823,764	114,180	254	2,063	940,261
	Spruce-fir	98,835	93,711	--	1,674	194,220
	White fir	264,023	3,853	--	1,315	269,191
	Spruce	129,657	30,419	1,369	--	161,445
	Other softwoods	20,981	--	--	--	20,981
	Aspen	40,036	33,217	2,271	--	75,524
	Cottonwood	22,723	--	--	--	22,723
		<hr/>				
	All types	1,731,357	335,490	3,894	10,723	2,081,464

Table 13--Net volume of sawtimber (International 4-inch rule) on timberland outside National Forests by ownership class, forest type, and stand-size class in New Mexico, 1987

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/ seedling	Nonstocked	
<hr/>						
- - - - Thousand board feet, International 4-inch rule - - - -						
<hr/>						
Other public:	Douglas-fir	85,385	--	--	--	85,385
	Ponderosa pine	211,908	--	--	--	211,908
	Spruce-fir	--	5,792	--	--	5,792
	White fir	103,637	--	--	--	103,637
	Spruce	--	27,141	--	--	27,141
	Other softwoods	--	--	--	--	--
	Aspen	--	--	--	--	--
	Cottonwood	39,373	--	--	--	39,373
		<hr/>				
	All types	440,303	32,933	--	--	473,236
		<hr/>				
Private:	Douglas-fir	1,168,501	89,017	--	30,040	1,287,558
	Ponderosa pine	3,454,489	228,395	1,031	11,192	3,695,107
	Spruce-fir	383,714	205,804	--	4,655	594,173
	White fir	956,317	6,842	--	6,024	969,183
	Spruce	514,707	36,971	7,047	--	558,725
	Other softwoods	74,242	--	--	--	74,242
	Aspen	161,690	56,879	--	--	218,569
	Cottonwood	39,545	--	--	--	39,545
		<hr/>				
	All types	6,753,205	623,908	8,078	51,911	7,437,102
		<hr/>				
Total:	Douglas-fir	1,253,886	89,017	--	30,040	1,372,943
	Ponderosa pine	3,666,397	228,395	1,031	11,192	3,907,015
	Spruce-fir	383,714	211,596	--	4,655	599,965
	White fir	1,059,954	6,842	--	6,024	1,072,820
	Spruce	514,707	64,112	7,047	--	585,866
	Other softwoods	74,242	--	--	--	74,242
	Aspen	161,690	56,879	--	--	218,569
	Cottonwood	78,918	--	--	--	78,918
		<hr/>				
	All types	7,193,508	656,841	8,078	51,911	7,910,338

Table 14--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by ownership class, forest type, and stand-size class in New Mexico, 1987

Ownership class	Forest type	Stand-size class				All classes
		Sawtimber	Poletimber	Sapling/ seedling	Nonstocked	
<hr/>						
- - - - - Thousand board feet, Scribner rule - - - - -						
Other public:						
	Douglas-fir	67,830	--	--	--	67,830
	Ponderosa pine	177,395	--	--	--	177,395
	Spruce-fir	--	4,556	--	--	4,556
	White fir	86,320	--	--	--	86,320
	Spruce	--	21,742	--	--	21,742
	Other softwoods	--	--	--	--	--
	Aspen	--	--	--	--	--
	Cottonwood	33,904	--	--	--	33,904
	All types	365,449	26,298	--	--	391,747
<hr/>						
Private:						
	Douglas-fir	950,103	71,427	--	25,655	1,047,185
	Ponderosa pine	2,918,763	185,965	776	9,794	3,115,298
	Spruce-fir	305,185	163,041	--	3,496	471,722
	White fir	798,749	5,863	--	5,123	809,735
	Spruce	415,299	31,216	5,607	--	452,122
	Other softwoods	62,132	--	--	--	62,132
	Aspen	134,133	45,393	--	--	179,526
	Cottonwood	34,675	--	--	--	34,675
	All types	5,619,039	502,905	6,383	44,068	6,172,395
<hr/>						
Total:						
	Douglas-fir	1,017,933	71,427	--	25,655	1,115,015
	Ponderosa pine	3,096,158	185,965	776	9,794	3,292,693
	Spruce-fir	305,185	167,597	--	3,496	476,278
	White fir	885,069	5,863	--	5,123	896,055
	Spruce	415,299	52,958	5,607	--	473,864
	Other softwoods	62,132	--	--	--	62,132
	Aspen	134,133	45,393	--	--	179,526
	Cottonwood	68,579	--	--	--	68,579
	All types	5,984,488	529,203	6,383	44,068	6,564,142

Table 15--Net volume of growing stock on timberland outside National Forests by species and ownership class in New Mexico, 1987

Species	Ownership class		Total
	Other public	Private	
- - - - - <u>Thousand cubic feet</u> - - - - -			
Douglas-fir	31,303	355,580	386,883
Ponderosa pine	47,730	886,627	934,357
Whitebark pine	--	4,014	4,014
Limber pine	736	40,875	41,611
Subalpine fir	389	91,256	91,645
White fir	23,683	188,323	212,006
Engelmann spruce	10,624	221,885	232,509
Total softwoods	114,465	1,788,560	1,903,025
Aspen	4,710	151,006	155,716
Cottonwood	10,987	11,736	22,723
Total hardwoods	15,697	162,742	178,439
All species	130,162	1,951,302	2,081,464

Table 16--Net volume of sawtimber (International 4-inch rule) on timberland outside National Forests by species and ownership class in New Mexico, 1987

Species	Ownership class		Total
	Other public	Private	
<hr/>			
- Thousand board feet, International 1/4-inch rule -			
Douglas-fir	107,484	1,338,621	1,446,105
Ponderosa pine	208,881	3,763,579	3,972,460
Whitebark pine	--	20,794	20,794
Limber pine	2,730	138,364	141,094
Subalpine fir	--	241,827	241,827
White fir	87,692	671,487	759,179
Engelmann spruce	27,076	816,449	843,525
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Total softwoods	433,863	6,991,121	7,424,984
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Aspen	--	406,436	406,436
Cottonwood	39,373	39,545	78,918
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Total hardwoods	39,373	445,981	485,354
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All species	473,236	7,437,102	7,910,338

Table 17--Net volume of sawtimber (Scribner rule) on timberland
outside National Forests by species and ownership class in
New Mexico, 1987

Species	Ownership class		
	Other public	Private	Total
<hr/>			
	- - - <u>Thousand board feet, Scribner rule</u> - -		
Douglas-fir	84,658	1,072,622	1,157,280
Ponderosa pine	175,352	3,185,918	3,361,270
Whitebark pine	--	18,270	18,270
Limber pine	2,402	116,606	119,008
Subalpine fir	--	191,515	191,515
White fir	73,891	572,582	646,473
Engelmann spruce	21,540	653,913	675,453
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Total softwoods	357,843	5,811,426	6,169,269
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Aspen	--	326,294	326,294
Cottonwood	33,904	34,675	68,579
	<hr/>		
Total hardwoods	33,904	360,969	394,873
	<hr/>		
All species	391,747	6,172,395	6,564,142

Table 18--Net volume of growing stock on timberland outside National Forests by species and diameter class in New Mexico, 1987

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	29.0+		
	Thousand cubic feet														
Douglas-fir	32,882	51,415	58,567	49,379	44,534	37,717	31,782	26,177	19,358	4,498	13,022	3,760	13,792	386,883	
Ponderosa pine	51,087	106,533	140,249	129,320	122,929	97,633	71,883	62,106	47,539	35,718	28,063	16,764	24,533	934,357	
Whitebark pine	--	--	--	--	956	--	--	836	2,222	--	--	--	--	4,014	
Limber pine	4,111	6,271	6,770	7,571	3,834	3,713	1,223	945	1,484	1,971	2,502	--	1,216	41,611	
Subalpine fir	12,169	28,107	10,430	21,356	8,075	6,471	--	4,080	958	--	--	--	--	91,646	
White fir	12,951	15,740	31,428	30,971	27,636	18,643	27,572	18,149	13,632	1,674	--	4,312	9,298	212,006	
Engelmann spruce	17,968	39,919	33,159	48,290	28,155	13,429	27,008	5,506	5,757	3,583	1,537	5,218	2,979	232,508	
Total softwoods	131,168	247,985	280,603	286,887	236,119	177,606	159,468	117,799	90,950	47,444	45,124	30,054	51,818	1,903,025	
Aspen	26,475	24,966	30,068	20,305	23,424	12,280	10,039	4,663	1,767	1,729	--	--	--	155,716	
Cottonwood	--	--	6,325	4,750	--	1,280	2,988	3,699	--	1,470	1,053	1,158	--	22,723	
Total hardwoods	26,475	24,966	36,393	25,055	23,424	13,560	13,027	8,362	1,767	3,199	1,053	1,158	--	178,439	
All species	157,643	272,951	316,996	311,942	259,543	191,166	172,495	126,161	92,717	50,643	46,177	31,212	51,818	2,081,464	

Table 19--Net volume of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class in New Mexico, 1987

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	29.0+		
----- Thousand board feet, International 4-inch rule -----													
Douglas-fir	194,222	211,485	215,123	195,450	171,806	145,202	109,593	25,746	75,280	21,771	80,427	1,446,105	
Ponderosa pine	475,405	588,812	639,618	545,610	417,194	372,338	288,331	217,786	172,087	103,706	151,574	3,972,461	
Whitebark pine	--	--	4,599	--	--	4,328	11,867	--	--	--	--	20,794	
Limber pine	21,871	32,214	17,754	18,423	6,202	4,847	7,890	10,784	14,011	--	7,098	141,094	
Subalpine fir	36,976	104,275	41,350	33,353	--	20,936	4,937	--	--	--	--	241,827	
White fir	104,778	133,594	124,421	83,508	120,333	76,154	55,260	6,625	--	16,910	37,596	759,179	
Engelmann spruce	124,842	235,761	144,939	69,718	139,791	28,425	29,752	18,642	8,042	27,667	15,946	843,525	
Total softwoods	958,094	1,306,141	1,187,804	946,062	855,326	652,230	507,630	279,583	269,420	170,054	292,641	7,424,985	
Aspen	XXXXX	107,552	130,352	69,012	55,761	25,176	9,466	9,116	--	--	--	406,435	
Cottonwood	XXXXX	23,817	--	6,299	14,424	17,529	--	6,735	4,814	5,300	--	78,918	
Total hardwoods	XXXXX	131,369	130,352	75,311	70,185	42,705	9,466	15,851	4,814	5,300	--	485,353	
All species	958,094	1,437,510	1,318,156	1,021,373	925,511	694,935	517,096	295,434	274,234	175,354	292,641	7,910,338	

Table 20--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class in New Mexico, 1987

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	29.0+	
----- Thousand board feet, Scribner rule -----												
Douglas-fir	143,318	157,515	167,478	156,344	141,241	122,189	92,994	21,838	64,257	18,800	71,305	1,157,279
Ponderosa pine	370,051	464,518	531,260	467,289	366,523	330,829	256,614	193,830	153,157	92,299	134,901	3,361,271
Whitebark pine	--	--	3,871	--	--	3,838	10,561	--	--	--	--	18,270
Limber pine	17,323	26,074	14,720	15,792	5,419	4,274	7,022	9,598	12,470	--	6,317	119,009
Subalpine fir	29,842	79,783	32,966	27,216	--	17,539	4,169	--	--	--	--	191,515
White fir	86,622	106,705	104,043	71,684	106,242	67,589	49,181	5,897	--	15,050	33,460	646,473
Engelmann spruce	98,315	179,946	115,431	56,680	115,924	23,798	25,104	15,853	6,862	23,756	13,783	675,452
Total softwoods	745,471	1,014,541	969,769	795,005	735,349	570,056	445,645	247,016	236,746	149,905	259,766	6,169,269
Aspen	XXXXX	82,413	103,644	56,636	46,439	21,314	8,043	7,805	--	--	--	326,294
Cottonwood	XXXXX	19,693	--	5,495	12,796	15,600	--	5,994	4,284	4,717	--	68,579
Total hardwoods	XXXXX	102,106	103,644	62,131	59,235	36,914	8,043	13,799	4,284	4,717	--	394,873
All species	745,471	1,116,647	1,073,413	857,136	794,584	606,970	453,688	260,815	241,030	154,622	259,766	6,564,142

Table 21--Net volume of timber on timberland outside National
Forests by class of timber, and softwoods and hardwoods
in New Mexico, 1987

Class of timber	Softwoods	Hardwoods	Total
- - - - - <u>Thousand cubic feet</u> - - - - -			
Sawtimber trees:			
Sawlog portion	1,432,377	84,027	1,516,404
Upper-stem portion	91,495	6,578	98,073
Total	1,523,872	90,605	1,614,477
Poletimber trees	379,153	87,834	466,987
All growing-stock trees	1,903,025	178,439	2,081,464
Rough cull trees	6,528	1,393	7,921
Rotten cull trees	6,141	5,813	11,954
Salvable dead trees	101,336	29,914	131,250
All timber	2,017,030	215,559	2,232,589

Table 24--Net volume of sawtimber (Scribner rule) on timberland outside National Forests by forest type and species in New Mexico, 1987

Forest type	Species											
	Douglas- fir	Ponderosa pine	Whitebark pine	Limber pine	Subalpine fir	White fir	Engelmann spruce	Total softwoods	Aspen	Cottonwood	Total hardwoods	All species
	Thousand board feet, Scribner rule											
Douglas-fir	717,221	183,958	--	54,913	2,944	92,907	47,808	1,099,751	15,266	--	15,266	1,115,017
Ponderosa pine	173,979	3,009,482	--	18,592	--	50,489	2,434	3,254,976	37,717	--	37,717	3,292,693
Spruce-fir	17,950	--	18,270	--	137,833	3,372	252,630	430,055	46,223	--	46,223	476,278
White fir	221,074	157,395	--	11,354	--	446,200	30,207	866,230	29,823	--	29,823	896,053
Spruce	13,202	--	--	--	23,742	16,556	329,630	383,130	90,733	--	90,733	473,863
Other softwoods	2,116	10,436	--	34,150	--	4,519	10,911	62,132	--	--	--	62,132
Aspen	11,737	--	--	--	26,996	32,430	1,832	72,995	106,532	--	106,532	179,527
Cottonwood	--	--	--	--	--	--	--	--	--	68,579	68,579	68,579
All types	1,157,279	3,361,271	18,270	119,009	191,515	646,473	675,452	6,169,269	326,294	68,579	394,873	6,564,142

Table 25--Net annual growth of growing stock on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		
	Other public	Private	Total
- - - - - Thousand cubic feet - - - - -			
Douglas-fir	917	5,703	6,620
Ponderosa pine	1,300	24,523	25,823
Whitebark pine	--	43	43
Limber pine	24	828	852
Subalpine fir	23	2,448	2,471
White fir	541	5,833	6,374
Engelmann spruce	324	6,504	6,828
Total softwoods	3,129	45,882	49,011
Aspen	89	4,546	4,635
Cottonwood	424	494	918
Total hardwoods	513	5,040	5,553
All species	3,642	50,922	54,564

Table 26--Net annual growth of sawtimber (International 4-inch rule) on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		
	Other public	Private	Total
- Thousand board feet, International 4-inch rule -			
Douglas-fir	1,597	24,792	26,389
Ponderosa pine	15,787	119,203	134,990
Whitebark pine	--	252	252
Limber pine	56	4,848	4,904
Subalpine fir	--	4,012	4,012
White fir	3,931	35,540	39,471
Engelmann spruce	700	23,603	24,303
Total softwoods	22,071	212,250	234,321
Aspen	--	11,459	11,459
Cottonwood	1,246	1,285	2,531
Total hardwoods	1,246	12,744	13,990
All species	23,317	224,994	248,311

Table 27--Net annual growth of sawtimber (Scribner rule) on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		
	Other public	Private	Total
- - - Thousand board feet, Scribner rule - - -			
Douglas-fir	1,370	20,336	21,706
Ponderosa pine	11,083	97,832	108,915
Whitebark pine	--	226	226
Limber pine	50	3,711	3,761
Subalpine fir	--	3,491	3,491
White fir	3,505	31,603	35,108
Engelmann spruce	581	20,157	20,738
Total softwoods	16,589	177,356	193,945
Aspen	--	9,102	9,102
Cottonwood	1,094	1,168	2,262
Total hardwoods	1,094	10,270	11,364
All species	17,683	187,626	205,309

Table 28--Net annual growth of growing stock on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+		
----- Thousand cubic feet -----															
Douglas-fir	2,445	1,263	1,145	75	133	706	324	370	252	-114	-141	39	124	6,621	
Ponderosa pine	5,230	4,537	4,859	3,482	2,454	1,837	1,170	770	535	412	242	126	169	25,823	
Whitebark pine	--	--	--	--	15	--	--	7	21	--	--	--	--	43	
Limber pine	201	144	143	136	61	83	9	11	8	31	19	--	5	851	
Subalpine fir	995	690	259	230	155	74	--	63	4	--	--	--	--	2,470	
White fir	1,587	644	1,016	875	769	383	514	232	212	13	--	41	88	6,374	
Engelmann spruce	2,101	1,313	746	1,408	569	169	294	62	75	30	13	33	16	6,829	
Total softwoods	12,559	8,591	8,168	6,206	4,156	3,252	2,311	1,515	1,107	372	133	239	402	49,011	
Aspen	2,660	666	594	282	388	153	152	33	-313	20	--	--	--	4,635	
Cottonwood	--	--	372	155	--	29	135	139	--	44	16	28	--	918	
Total hardwoods	2,660	666	966	437	388	182	287	172	-313	64	16	28	--	5,553	
All species	15,219	9,257	9,134	6,643	4,544	3,434	2,598	1,687	794	436	149	267	402	54,564	

Table 29--Net annual growth of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+		
----- Thousand board feet, International 4-inch rule -----													
Douglas-fir	12,352	2,626	1,783	4,228	2,054	2,299	1,524	-634	-805	226	736	26,389	
Ponderosa pine	61,727	22,468	16,283	12,188	7,710	5,076	3,453	2,640	1,548	814	1,084	134,991	
Whitebark pine	--	--	86	--	--	42	124	--	--	--	--	252	
Limberr pine	2,815	789	347	452	51	62	51	189	116	--	31	4,903	
Subalpine fir	900	1,546	837	379	--	328	22	--	--	--	--	4,012	
White fir	25,662	4,391	3,619	1,671	1,968	828	751	49	--	163	368	39,470	
Engelmann spruce	9,506	8,121	3,080	880	1,504	320	391	161	72	179	89	24,303	
Total softwoods	112,962	39,941	26,035	19,798	13,287	8,955	6,316	2,405	931	1,382	2,308	234,320	
Aspen	XXXXX	8,912	2,357	844	776	160	-1,692	102	--	--	--	11,459	
Cottonwood	XXXXX	829	--	127	584	594	--	194	72	132	--	2,532	
Total hardwoods	XXXXX	9,741	2,357	971	1,360	754	-1,692	296	72	132	--	13,991	
All species	112,962	49,682	28,392	20,769	14,647	9,709	4,624	2,701	1,003	1,514	2,308	248,311	

Table 30--Net annual growth of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+		
----- Thousand board feet, Scribner rule -----													
Douglas-fir	8,704	2,617	1,835	3,620	1,864	2,098	1,347	-572	-659	199	654	21,707	
Ponderosa pine	43,297	19,496	14,682	11,192	7,132	4,625	3,073	2,349	1,378	725	965	108,914	
Whitebark pine	--	--	77	--	--	39	110	--	--	--	--	226	
Limber pine	1,911	682	307	411	47	57	45	169	103	--	28	3,760	
Subalpine fir	777	1,370	713	327	--	285	19	--	--	--	--	3,491	
White fir	22,620	3,860	3,292	1,551	1,852	749	668	43	--	146	328	35,109	
Engelmann spruce	8,274	6,724	2,623	758	1,303	278	340	140	63	157	78	20,738	
Total softwoods	85,583	34,749	23,529	17,859	12,198	8,131	5,602	2,129	885	1,227	2,053	193,945	
Aspen	XXXX	6,815	2,050	747	690	142	-1,432	90	--	--	--	9,102	
Cottonwood	XXXX	698	--	124	555	532	--	172	64	117	--	2,262	
Total hardwoods	XXXX	7,513	2,050	871	1,245	674	-1,432	262	64	117	--	11,364	
All species	85,583	42,262	25,579	18,730	13,443	8,805	4,170	2,391	949	1,344	2,053	205,309	

Table 31--Annual mortality of growing stock on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		Total
	Other public	Private	
	- - - - - <u>Thousand cubic feet</u> - - - - -		
Douglas-fir	266	4,585	4,851
Ponderosa pine	--	355	355
Whitebark pine	--	--	--
Limber pine	--	--	--
Subalpine fir	--	575	575
White fir	--	--	--
Engelmann spruce	--	--	--
Total softwoods	266	5,515	5,781
Aspen	--	440	440
Cottonwood	--	--	--
Total hardwoods	--	440	440
All species	266	5,955	6,221

Table 32--Annual mortality of sawtimber (International $\frac{1}{4}$ -inch rule) on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		Total
	Other public	Private	
<hr/>			
- <u>Thousand board feet, International $\frac{1}{4}$-inch rule</u> -			
Douglas-fir	1,183	13,968	15,151
Ponderosa pine	--	1,335	1,335
Whitebark pine	--	--	--
Limber pine	--	--	--
Subalpine fir	--	997	997
White fir	--	--	--
Engelmann spruce	--	--	--
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Total softwoods	1,183	16,300	17,483
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Aspen	--	1,868	1,868
Cottonwood	--	--	--
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Total hardwoods	--	1,868	1,868
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All species	1,183	18,168	19,351

Table 33--Annual mortality of sawtimber (Scribner rule) on timberland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		
	Other public	Private	Total
- - - Thousand board feet, Scribner rule - - -			
Douglas-fir	920	10,891	11,811
Ponderosa pine	--	1,082	1,082
Whitebark pine	--	--	--
Limber pine	--	--	--
Subalpine fir	--	743	743
White fir	--	--	--
Engelmann spruce	--	--	--
Total softwoods	920	12,716	13,636
Aspen	--	1,588	1,588
Cottonwood	--	--	--
Total hardwoods	--	1,588	1,588
All species	920	14,304	15,224

Table 34--Annual mortality of growing stock on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+		
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Thousand cubic feet														
Douglas-fir	477	967	506	1,341	832	--	182	124	--	179	243	--	--	4,851	
Ponderosa pine	--	58	70	106	121	--	--	--	--	--	--	--	--	355	
Whitebark pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Limber pine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Subalpine fir	--	362	--	213	--	--	--	--	--	--	--	--	--	575	
White fir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Engelmann spruce	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Total softwoods	477	1,387	576	1,660	953	--	182	124	--	179	243	--	--	5,781	
Aspen	91	--	--	--	--	--	--	--	349	--	--	--	--	440	
Cottonwood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Total hardwoods	91	--	--	--	--	--	--	--	349	--	--	--	--	440	
All species	568	1,387	576	1,660	953	--	182	124	349	179	243	--	--	6,221	

Table 35--Annual mortality of sawtimber (International 4-inch rule) on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+		
----- Thousand board feet, International 4-inch rule -----													
Douglas-fir	1,500	5,599	3,943	--	995	690	--	1,022	1,403	--	--	--	15,152
Ponderosa pine	269	465	601	--	--	--	--	--	--	--	--	--	1,335
Whitebark pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Limber pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Subalpine fir	--	996	--	--	--	--	--	--	--	--	--	--	996
White fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Engelmann spruce	--	--	--	--	--	--	--	--	--	--	--	--	--
Total softwoods	1,769	7,060	4,544	--	995	690	--	1,022	1,403	--	--	--	17,483
Aspen	XXXXX	--	--	--	--	--	1,868	--	--	--	--	--	1,868
Cottonwood	XXXXX	--	--	--	--	--	--	--	--	--	--	--	--
Total hardwoods	XXXXX	--	--	--	--	--	1,868	--	--	--	--	--	1,868
All species	1,769	7,060	4,544	--	995	690	1,868	1,022	1,403	--	--	--	19,351

Table 36--Annual mortality of sawtimber (Scribner rule) on timberland outside National Forests by species and diameter class in New Mexico, 1986

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	29.0+						
	-	-	-	-	-	-	-	Thousand board feet, Scribner rule				-	-	-	-	-	-
Douglas-fir	1,249	4,085	3,010	--	809	566	--	910	1,181	--	--	--	11,810				
Ponderosa pine	204	372	506	--	--	--	--	--	--	--	--	--	1,082				
Whitebark pine	--	--	--	--	--	--	--	--	--	--	--	--	--				
Limber pine	--	--	--	--	--	--	--	--	--	--	--	--	--				
Subalpine fir	--	744	--	--	--	--	--	--	--	--	--	--	744				
White fir	--	--	--	--	--	--	--	--	--	--	--	--	--				
Engelmann spruce	--	--	--	--	--	--	--	--	--	--	--	--	--				
Total softwoods	1,453	5,201	3,516	--	809	566	--	910	1,181	--	--	--	13,636				
Aspen	XXXXX	--	--	--	--	--	1,588	--	--	--	--	--	1,588				
Cottonwood	XXXXX	--	--	--	--	--	--	--	--	--	--	--	--				
Total hardwoods	XXXXX	--	--	--	--	--	1,588	--	--	--	--	--	1,588				
All species	1,453	5,201	3,516	--	809	566	1,588	910	1,181	--	--	--	15,224				

Table 37--Annual mortality of growing stock on timberland outside National Forests by species and cause of death in New Mexico, 1986

Species	Cause of death								Total
	Insects	Disease	Fire	Animal	Weather	Suppression	Logging	Unknown ¹	
	----- Thousand cubic feet -----								
Douglas-fir	3,951	358	--	--	--	--	--	542	4,851
Ponderosa pine	--	6	--	--	--	--	--	349	355
Whitebark pine	--	--	--	--	--	--	--	--	--
Limber pine	--	--	--	--	--	--	--	--	--
Subalpine fir	--	255	--	--	--	--	--	320	575
White fir	--	--	--	--	--	--	--	--	--
Engelmann spruce	--	--	--	--	--	--	--	--	--
Total softwoods	3,951	619	--	--	--	--	--	1,211	5,781
Aspen	--	--	--	--	--	--	--	440	440
Cottonwood	--	--	--	--	--	--	--	--	--
Total hardwoods	--	--	--	--	--	--	--	440	440
All species	3,951	619	--	--	--	--	--	1,651	6,221

¹Because 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 38--Annual mortality of sawtimber (International 4-inch rule) on timberland outside National Forests by species and cause of death in New Mexico, 1986

Species	Cause of death								Total
	Insects	Disease	Fire	Animal	Weather	Suppression	Logging	Unknown	
	----- Thousand board feet, International 4-inch rule -----								
Douglas-fir	11,858	547	--	--	--	--	--	2,747	15,152
Ponderosa pine	--	--	--	--	--	--	--	1,335	1,335
Whitebark pine	--	--	--	--	--	--	--	--	--
Limber pine	--	--	--	--	--	--	--	--	--
Subalpine fir	--	--	--	--	--	--	--	996	996
White fir	--	--	--	--	--	--	--	--	--
Engelmann spruce	--	--	--	--	--	--	--	--	--
Total softwoods	11,858	547	--	--	--	--	--	5,078	17,483
Aspen	--	--	--	--	--	--	--	1,868	1,868
Cottonwood	--	--	--	--	--	--	--	--	--
Total hardwoods	--	--	--	--	--	--	--	1,868	1,868
All species	11,858	547	--	--	--	--	--	6,946	19,351

WOODLAND TABLES

Table 40--Area of woodland outside National Forests by forest type and ownership class in New Mexico, 1987

Forest type	Ownership class		
	Other public	Private	Total
	- - - - - Acres - - - - -		
Pinyon-juniper	1,526,290	3,512,189	5,038,479
Juniper	186,354	335,166	521,520
Total woodland softwoods	1,712,644	3,847,355	5,559,999
Oak	23,541	157,911	181,452
Total woodland hardwoods	23,541	157,911	181,452
All types	1,736,185	4,005,266	5,741,451

Table 41--Area of woodland outside National Forests by ownership class, forest type, and productivity class in New Mexico, 1987

Ownership class	Forest type	Productivity class		
		High	Low	All classes
		- - - - - Acres - - - - -		
Other public:	Pinyon-juniper	1,159,473	366,817	1,526,290
	Juniper	155,601	30,753	186,354
	Oak	16,779	6,762	23,541
	Total	1,331,853	404,332	1,736,185
Private:	Pinyon-juniper	2,860,291	651,898	3,512,189
	Juniper	246,570	88,596	335,166
	Oak	145,841	12,070	157,911
	Total	3,252,702	752,564	4,005,266
Total:	Pinyon-juniper	4,019,764	1,018,715	5,038,479
	Juniper	402,171	119,349	521,520
	Oak	162,620	18,832	181,452
	Total	4,584,555	1,156,896	5,741,451

Table 42--Area of woodland outside National Forests by ownership class, forest type, and volume class in New Mexico, 1987

Ownership class	Forest type	Volume class							All classes
		0 - 199 ft³/acre	200 - 399 ft³/acre	400 - 599 ft³/acre	600 - 799 ft³/acre	800 - 999 ft³/acre	1,000+ ft³/acre		
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
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Table 43--Number of trees on woodland outside National Forests by ownership class, species, and diameter class in New Mexico, 1987

Ownership class and species	Diameter class (inches at root collar)																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+		
----- Thousand trees -----																	
Other public:																	
Pinyon	80,054	48,070	31,208	17,776	9,121	4,604	2,150	1,496	453	325	54	104	--	32	--	195,447	
Juniper	26,504	20,985	23,500	20,375	17,869	15,230	12,355	9,208	5,682	4,387	2,529	1,684	980	526	506	162,320	
Oak	822	11,377	1,395	583	363	273	171	270	--	36	--	--	--	--	--	15,290	
Other woodland	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Total	107,380	80,432	56,103	38,734	27,353	20,107	14,676	10,974	6,135	4,748	2,583	1,788	980	558	506	373,057	
Private:																	
Pinyon	158,235	122,622	97,290	55,175	28,101	15,961	7,851	3,679	2,354	1,285	179	58	82	104	70	493,046	
Juniper	88,732	36,419	42,753	37,620	33,274	25,556	20,742	16,912	10,610	6,288	4,059	3,391	1,702	1,498	1,584	331,140	
Oak	68,033	50,211	17,567	4,393	1,239	1,009	953	116	134	128	183	45	35	64	109	144,219	
Other woodland	2,588	184	100	40	20	40	60	20	20	120	20	--	--	--	--	3,212	
Total	317,588	209,436	157,710	97,228	62,634	42,566	29,606	20,727	13,118	7,821	4,441	3,494	1,819	1,666	1,763	971,617	
Total:																	
Pinyon	238,289	170,692	128,498	72,951	37,222	20,565	10,001	5,175	2,807	1,610	233	162	82	136	70	688,493	
Juniper	115,236	57,404	66,253	57,995	51,143	40,786	33,097	26,120	16,292	10,675	6,588	5,075	2,682	2,024	2,090	493,460	
Oak	68,855	61,588	18,962	4,976	1,602	1,282	1,124	386	134	164	183	45	35	64	109	159,509	
Other woodland	2,588	184	100	40	20	40	60	20	20	120	20	--	--	--	--	3,212	
Total	424,968	289,868	213,813	135,962	89,987	62,673	44,282	31,701	19,253	12,569	7,024	5,282	2,799	2,224	2,269	1,344,674	

Table 44--Net volume on woodland outside National Forests by species and ownership class in New Mexico, 1987

Species	Ownership class		Total
	Other public	Private	
	<u>Thousand cubic feet</u>		
Douglas-fir	--	3,283	3,283
Ponderosa pine	10,158	52,512	62,670
White fir	--	372	372
Cottonwood	--	1,357	1,357
Pinyon	281,973	912,034	1,194,007
Juniper	459,135	869,451	1,328,586
Oak	8,790	89,974	98,764
Other woodland	--	4,774	4,774
All species	760,056	1,933,757	2,693,813

Table 45---Net volume of woodland species on woodland outside National Forests by ownership class, species, and diameter class in New Mexico, 1987

Ownership class and species	Diameter class (inches at root collar)															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+		
	Thousand cubic feet															
Other public:																
Pinyon	20,072	37,674	51,560	47,464	38,076	28,744	29,268	12,877	8,235	1,881	4,764	--	1,358	--		281,973
Juniper	5,873	18,753	30,482	43,250	55,862	56,577	60,270	48,545	40,896	28,596	24,206	19,469	12,519	13,836		459,134
Oak	2,560	1,163	832	955	696	800	1,630	--	155	--	--	--	--	--		8,791
Other woodland	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--
Total	28,505	57,590	82,874	91,669	94,634	86,121	91,168	61,422	49,286	30,477	28,970	19,469	13,877	13,836		749,898
Private:																
Pinyon	53,022	127,145	151,748	139,112	134,426	107,960	69,129	60,519	44,295	5,762	1,707	4,035	8,024	5,150		912,034
Juniper	10,940	33,933	59,362	87,002	94,081	106,403	108,345	86,743	66,579	50,540	52,200	28,445	31,667	53,211		869,451
Oak	19,054	23,763	11,417	4,078	6,191	9,587	663	1,181	1,501	3,915	1,720	108	1,782	5,013		89,973
Other woodland	124	219	122	19	166	701	54	207	3,068	94	--	--	--	--		4,774
Total	83,140	185,060	222,649	230,211	234,864	224,651	178,191	148,650	115,443	60,311	55,627	32,588	41,473	63,374		1,876,232
Total:																
Pinyon	73,094	164,819	203,308	186,576	172,502	136,704	98,397	73,396	52,530	7,643	6,471	4,035	9,382	5,150		1,194,007
Juniper	16,813	52,686	89,844	130,252	149,943	162,980	168,615	135,288	107,475	79,136	76,406	47,914	44,186	67,047		1,328,585
Oak	21,614	24,926	12,249	5,033	6,887	10,387	2,293	1,181	1,656	3,915	1,720	108	1,782	5,013		98,764
Other woodland	124	219	122	19	166	701	54	207	3,068	94	--	--	--	--		4,774
Total ¹	111,645	242,650	305,523	321,880	329,498	310,772	269,359	210,072	164,729	90,788	84,597	52,057	55,350	77,210		2,626,130

¹Timberland species are not included in this table because of the difference between point of diameter measurement.

Table 46--Net volume on woodland outside National Forests by ownership class, forest type, and productivity class in New Mexico, 1987

Ownership class	Forest type	Productivity class		
		High	Low	All classes
<hr/>				
		<hr/> - - - - - <u>Thousand cubic feet</u> - - - - - <hr/>		
Other public:	Pinyon-juniper	563,136	116,544	679,680
	Juniper	65,303	7,336	72,639
	Oak	4,678	3,059	7,737
	Total	633,117	126,939	760,056
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Private:	Pinyon-juniper	1,497,823	196,797	1,694,620
	Juniper	93,707	25,712	119,419
	Oak	118,381	1,337	119,718
	Total	1,709,911	223,846	1,933,757
<hr/>				
Total:	Pinyon-juniper	2,060,959	313,341	2,374,300
	Juniper	159,010	33,048	192,058
	Oak	123,059	4,396	127,455
	Total	2,343,028	350,785	2,693,813

Table 47--Net volume on woodland outside National Forests by ownership class, forest type, and volume class in New Mexico, 1987

Ownership class	Forest type	Volume class							All classes
		0 - 199 ft ³ /acre	200 - 399 ft ³ /acre	400 - 599 ft ³ /acre	600 - 799 ft ³ /acre	800 - 999 ft ³ /acre	1,000+ ft ³ /acre		
		----- Thousand cubic feet -----							
Other public:	Pinyon-juniper	28,621	84,732	143,547	127,665	92,878	202,237	679,680	
	Juniper	1,881	19,968	7,140	11,424	23,736	8,490	72,639	
	Oak	1,503	--	6,234	--	--	--	7,737	
	Total	32,005	104,700	156,921	139,089	116,614	210,727	760,056	
Private:	Pinyon-juniper	56,243	243,898	300,570	244,350	199,825	649,734	1,694,620	
	Juniper	11,024	38,728	22,870	6,705	8,072	32,021	119,420	
	Oak	4,909	6,686	8,215	9,651	9,424	80,832	119,717	
	Total	72,176	289,312	331,655	260,706	217,321	762,587	1,933,757	
Total:	Pinyon-juniper	84,864	328,630	444,117	372,015	292,703	851,971	2,374,300	
	Juniper	12,905	58,696	30,010	18,129	31,808	40,511	192,059	
	Oak	6,412	6,686	14,449	9,651	9,424	80,832	127,454	
	Total	104,181	394,012	488,576	399,795	333,935	973,314	2,693,813	

Table 48--Net dead volume of woodland species on woodland outside National Forests by ownership class, species, and diameter class in New Mexico, 1987

Ownership class and species	Diameter class (inches at root collar)														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+	
----- Thousand cubic feet -----															
Other public:															
Pinyon	741	4,567	8,377	7,998	7,640	6,074	6,390	1,526	2,243	6,428	919	--	160	--	53,063
Juniper	338	1,284	4,525	8,934	17,791	19,165	21,334	17,798	17,926	16,104	8,694	5,996	4,578	3,791	148,258
Oak	238	504	592	186	141	162	175	220	45	--	--	--	164	--	2,427
Other woodland	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,317	6,355	13,494	17,118	25,572	25,401	27,899	19,544	20,214	22,532	9,613	5,996	4,902	3,791	203,748
Private:															
Pinyon	2,544	10,304	18,150	22,068	27,348	16,500	16,382	10,607	9,094	3,209	3,051	3,529	253	--	143,039
Juniper	447	2,588	6,612	12,782	20,875	31,706	34,588	28,737	26,682	25,048	24,288	12,704	14,549	31,389	272,995
Oak	1,642	1,291	1,003	252	1,211	572	139	120	325	1,001	--	--	238	973	8,767
Other woodland	43	81	51	76	144	121	179	138	944	374	--	--	--	--	2,151
Total	4,676	14,264	25,816	35,178	49,578	48,899	51,288	39,602	37,045	29,632	27,339	16,233	15,040	32,362	426,952
Total:															
Pinyon	3,285	14,871	26,527	30,066	34,988	22,574	22,772	12,133	11,337	9,637	3,970	3,529	413	--	196,102
Juniper	785	3,872	11,137	21,716	38,666	50,871	55,922	46,535	44,608	41,152	32,982	18,700	19,127	35,180	421,253
Oak	1,880	1,795	1,595	438	1,352	734	314	340	370	1,001	--	--	402	973	11,194
Other woodland	43	81	51	76	144	121	179	138	944	374	--	--	--	--	2,151
Total	5,993	20,619	39,310	52,296	75,150	74,300	79,187	59,146	57,259	52,164	36,952	22,229	19,942	36,153	630,700

Table 49--Net dead volume of woodland species on woodland outside National Forests by ownership class, forest type, and productivity class in New Mexico, 1987

Ownership class	Forest type	Productivity class		
		High	Low	All classes
<hr/>				
		<hr/> - - - - Thousand cubic feet - - - -		
Other public:	Pinyon-juniper	145,040	43,402	188,442
	Juniper	12,822	1,501	14,323
	Oak	126	857	983
	<hr/>			
	Total	157,988	45,760	203,748
<hr/>				
Private:	Pinyon-juniper	329,765	67,214	396,979
	Juniper	13,421	5,719	19,140
	Oak	10,713	120	10,833
	<hr/>			
	Total	353,899	73,053	426,952
<hr/>				
Total:	Pinyon-juniper	474,805	110,616	585,421
	Juniper	26,243	7,220	33,463
	Oak	10,839	977	11,816
	<hr/>			
	Total	511,887	118,813	630,700

Table 50--Net dead volume of woodland species on woodland outside National Forests by ownership class, forest type, and volume class in New Mexico, 1987

Ownership class	Forest type	Volume class							All classes
		0 - 199 ft ³ /acre	200 - 399 ft ³ /acre	400 - 599 ft ³ /acre	600 - 799 ft ³ /acre	800 - 999 ft ³ /acre	1,000+ ft ³ /acre		
		----- Thousand cubic feet -----							
Other public:	Pinyon-juniper Juniper Oak	3,070	17,580	38,588	33,024	27,477	68,704	188,443	
		254	4,692	2,430	2,793	2,542	1,611	14,322	
		45	--	938	--	--	--	983	
	Total	3,369	22,272	41,956	35,817	30,019	70,315	203,748	
Private:	Pinyon-juniper Juniper Oak	6,092	40,042	57,953	53,991	61,534	177,367	396,979	
		1,025	3,370	1,700	3,391	2,165	7,489	19,140	
		207	202	344	308	173	9,599	10,833	
	Total	7,324	43,614	59,997	57,690	63,872	194,455	426,952	
Total:	Pinyon-juniper Juniper Oak	9,162	57,622	96,541	87,015	89,011	246,071	585,422	
		1,279	8,062	4,130	6,184	4,707	9,100	33,462	
		252	202	1,282	308	173	9,599	11,816	
	Total	10,693	65,886	101,953	93,507	93,891	264,770	630,700	

Table 51--Net annual growth on woodland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		Total
	Other public	Private	
<hr/>			
	<hr/> <div>- - - - - <u>Thousand cubic feet</u> - - - - -</div>		
Douglas-fir	--	86	86
Ponderosa pine	248	1,095	1,343
White fir	--	47	47
Cottonwood	--	114	114
Pinyon	4,113	12,881	16,994
Juniper	3,010	6,054	9,064
Oak	203	1,652	1,855
Other woodland	--	23	23
<hr/>			
All species	7,574	21,952	29,526

Table 52--Net annual growth of woodland species on woodland outside National Forests by ownership class, species, and diameter class in New Mexico, 1986

Ownership class and species	Diameter class (inches at root collar)														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+	
	Thousand cubic feet														
Other public:															
Pinyon	1,020	762	792	598	406	200	205	75	34	7	12	--	3	--	4,114
Juniper	258	324	368	401	422	357	323	223	9	112	83	63	34	33	3,010
Oak	133	18	14	12	7	7	12	--	1	--	--	--	--	--	204
Other woodland	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,411	1,104	1,174	1,011	835	564	540	298	44	119	95	63	37	33	7,328
Private:															
Pinyon	2,670	2,758	2,423	1,713	1,391	933	454	298	182	17	5	10	19	8	12,881
Juniper	476	588	739	846	754	700	618	439	287	178	163	85	81	100	6,054
Oak	949	342	132	43	53	63	5	5	8	23	5	1	8	15	1,652
Other woodland	2	3	1	(1)	1	4	(1)	1	11	(1)	--	--	--	--	23
Total	4,097	3,691	3,295	2,602	2,199	1,700	1,077	743	488	218	173	96	108	123	20,610
Total:															
Pinyon	3,690	3,520	3,215	2,311	1,797	1,133	659	373	216	24	17	10	22	8	16,995
Juniper	734	912	1,107	1,247	1,176	1,057	941	662	296	290	246	148	115	133	9,064
Oak	1,082	360	146	55	60	70	17	5	9	23	5	1	8	15	1,856
Other woodland	2	3	1	(1)	1	4	(1)	1	11	(1)	--	--	--	--	23
Total ²	5,508	4,795	4,469	3,613	3,034	2,264	1,617	1,041	532	337	268	159	145	156	27,938

¹Less than 500 cubic feet.

²Timberland species are not included in this table because of the difference between point of diameter measurement.

Table 53--Net annual growth on woodland outside National Forests by ownership class, forest type, and productivity class in New Mexico, 1986

Ownership class	Forest type	Productivity class		
		High	Low	All classes
<hr/>				
		<hr/> - - - - - Thousand cubic feet - - - - - <hr/>		
Other public:	Pinyon-juniper	5,902	1,098	7,000
	Juniper	380	57	437
	Oak	113	24	137
	<hr/>			
	Total	6,395	1,179	7,574
<hr/>				
Private:	Pinyon-juniper	17,300	1,926	19,226
	Juniper	617	164	781
	Oak	1,908	37	1,945
	<hr/>			
	Total	19,825	2,127	21,952
<hr/>				
Total:	Pinyon-juniper	23,202	3,024	26,226
	Juniper	997	221	1,218
	Oak	2,021	61	2,082
	<hr/>			
	Total	26,220	3,306	29,526

Table 54--Net annual growth on woodland outside National Forests by ownership class, forest type, and volume class in New Mexico, 1986

Ownership class	Forest type	Volume class							All classes
		0 - 199 ft ³ /acre	200 - 399 ft ³ /acre	400 - 599 ft ³ /acre	600 - 799 ft ³ /acre	800 - 999 ft ³ /acre	1,000+ ft ³ /acre		
- - - - - Thousand cubic feet - - - - -									
Other public:	Pinyon-juniper Oak	480	927	1,376	1,334	991	1,892	7,000	
		16	157	68	52	110	34	437	
		90	--	47	--	--	--	137	
	Total	586	1,084	1,491	1,386	1,101	1,926	7,574	
Private:	Pinyon-juniper Oak	1,198	3,403	3,860	2,979	1,963	5,823	19,226	
		138	296	163	28	72	85	782	
		462	112	220	173	122	855	1,944	
	Total	1,798	3,811	4,243	3,180	2,157	6,763	21,952	
Total:	Pinyon-juniper Oak	1,678	4,330	5,236	4,313	2,954	7,715	26,226	
		154	453	231	80	182	119	1,219	
		552	112	267	173	122	855	2,081	
	Total	2,384	4,895	5,734	4,566	3,258	8,689	29,526	

Table 55--Annual mortality on woodland outside National Forests by species and ownership class in New Mexico, 1986

Species	Ownership class		
	Other public	Private	Total
- - - - - <u>Thousand cubic feet</u> - - - - -			
Douglas-fir	--	--	--
Ponderosa pine	--	--	--
White fir	--	--	--
Cottonwood	--	--	--
Pinyon	58	122	180
Juniper	161	5	166
Oak	7	--	7
Other woodland	--	--	--
All species	226	127	353

Table 56--Number of pinyon Christmas trees on woodland outside National Forests by ownership class, grade, and height class in New Mexico, 1987

Ownership class	Christmas-tree grade	Height class			All classes
		0-5 ft	6-10 ft	11-12 ft	
- - - - - <u>Thousand trees</u> - - - - -					
Other public:	Premium	30	362	64	456
	Standard	1,824	3,912	825	6,561
	Utility	2,941	9,536	1,596	14,073
	Total	4,795	13,810	2,485	21,090
Private:	Premium	952	1,620	138	2,710
	Standard	3,378	8,325	1,428	13,131
	Utility	16,120	25,849	4,554	46,523
	Total	20,450	35,794	6,120	62,364
Total:	Premium	982	1,982	202	3,166
	Standard	5,202	12,237	2,253	19,692
	Utility	19,061	35,385	6,150	60,596
	Total	25,245	49,604	8,605	83,454

Table 57--Number of fenceposts on woodland outside National Forests
by ownership class, species, and type of post in New Mexico,
1987

Ownership class	Species	Type of post		
		Line	Corner	Total
<hr/>				
- - - - <u>Thousand fenceposts</u> - - - -				
Other public:	Juniper	22,997	11,419	34,416
	Oak	540	102	642
	Total	23,537	11,521	35,058
<hr/>				
Private:	Juniper	39,630	22,400	62,030
	Oak	12,236	3,132	15,368
	Total	51,866	25,532	77,398
<hr/>				
Total:	Juniper	62,627	33,819	96,446
	Oak	12,776	3,234	16,010
	Total	75,403	37,053	112,456

COUNTY TABLES

Table 58--Area of timberland outside
National Forests by county
in New Mexico, 1987

County	Area
	- - Acres - -
Bernalillo	16,300
Catron	40,302
Chaves	515
Cibola	101,619
Colfax	456,111
Curry	--
De Baca	691
Dona Ana	1,910
Eddy	--
Grant	13,170
Guadalupe	6,117
Harding	6,144
Hidalgo	4,268
Lea	--
Lincoln	20,435
Los Alamos	1,973
Luna	1,733
McKinley	104,904
Mora	183,042
Otero	270,263
Quay	6,098
Rio Arriba	319,936
Roosevelt	--
Sandoval	100,075
San Juan	126,250
San Miguel	95,097
Santa Fe	37,665
Sierra	2,282
Socorro	9,870
Taos	123,844
Torrance	23,428
Union	13,026
Valencia	12,224
Total	2,099,292

Table 59--Net volume of growing stock and sawtimber on timberland outside National Forests by county in New Mexico, 1987

County	Growing stock	Sawtimber	
	Thousand cubic feet	Thousand board feet International 1-inch rule	Thousand board feet Scribner rule
Bernalillo	20,268	73,533	60,683
Catron	25,377	99,276	85,303
Chaves	499	2,077	1,792
Cibola	96,302	367,761	304,173
Colfax	427,632	1,403,361	1,133,397
Curry	--	--	--
De Baca	669	2,787	2,404
Dona Ana	2,582	9,090	7,821
Eddy	--	--	--
Grant	13,996	50,085	42,342
Guadalupe	2,741	8,222	6,713
Harding	3,564	12,593	10,312
Hidalgo	4,215	14,734	12,484
Lea	--	--	--
Lincoln	19,935	80,349	68,253
Los Alamos	3,123	9,911	8,130
Luna	1,733	5,903	5,070
McKinley	67,033	305,685	260,223
Mora	173,852	705,228	583,659
Otero	268,696	1,077,514	916,783
Quay	2,615	7,902	6,480
Rio Arriba	359,349	1,440,748	1,200,587
Roosevelt	--	--	--
Sandoval	124,395	455,128	376,849
San Juan	124,843	612,281	524,099
San Miguel	95,066	295,310	237,212
Santa Fe	32,773	120,446	97,827
Sierra	2,470	8,544	7,343
Socorro	8,364	29,533	25,230
Taos	157,011	568,174	462,164
Torrance	20,416	67,107	53,772
Union	8,778	29,342	23,818
Valencia	13,167	47,714	39,219
Total	2,081,464	7,910,338	6,564,142

Table 60--Net annual growth of growing stock and sawtimber on timberland outside National Forests by county in New Mexico, 1986

County	Growing stock	Sawtimber	
		Thousand board feet International - - <u>1/4-inch rule</u> - -	Thousand board feet Scribner rule - -
	Thousand - - <u>cubic feet</u> - -		
Bernalillo	523	2,333	1,989
Catron	781	3,209	2,746
Chaves	10	56	45
Cibola	2,589	11,031	9,269
Colfax	7,537	32,723	26,641
Curry	--	--	--
De Baca	13	76	61
Dona Ana	106	285	250
Eddy	--	--	--
Grant	328	1,560	1,255
Guadalupe	118	706	490
Harding	118	961	672
Hidalgo	125	452	368
Lea	--	--	--
Lincoln	458	2,467	2,063
Los Alamos	79	380	317
Luna	78	183	160
McKinley	1,568	5,589	4,815
Mora	5,980	25,250	20,941
Otero	9,243	50,653	41,878
Quay	114	676	469
Rio Arriba	8,907	38,288	32,373
Roosevelt	--	--	--
Sandoval	3,170	15,560	13,336
San Juan	2,705	12,493	10,604
San Miguel	2,975	14,038	10,691
Santa Fe	887	4,084	3,477
Sierra	107	264	232
Socorro	308	836	750
Taos	4,476	16,092	13,519
Torrance	663	4,978	3,535
Union	243	1,785	1,264
Valencia	355	1,303	1,099
Total	54,564	248,311	205,309

Table 61--Annual mortality of growing stock and sawtimber on timberland outside National Forests by county in New Mexico, 1986

County	Growing stock	Sawtimber	
	Thousand - - <u>cubic feet</u> - -	Thousand board feet International - - <u>1/4-inch rule</u> - -	Thousand board feet - - <u>Scribner rule</u> - -
Bernalillo	28	110	90
Catron	--	--	--
Chaves	3	15	14
Cibola	230	895	718
Colfax	4,278	11,724	8,889
Curry	--	--	--
De Baca	4	21	18
Dona Ana	--	--	--
Eddy	--	--	--
Grant	--	--	--
Guadalupe	--	--	--
Harding	12	36	28
Hidalgo	--	--	--
Lea	--	--	--
Lincoln	85	401	356
Los Alamos	3	12	10
Luna	--	--	--
McKinley	51	200	164
Mora	11	48	36
Otero	313	1,241	1,105
Quay	--	--	--
Rio Arriba	566	2,208	1,814
Roosevelt	--	--	--
Sandoval	195	760	625
San Juan	12	45	37
San Miguel	38	166	125
Santa Fe	46	179	147
Sierra	--	--	--
Socorro	--	--	--
Taos	274	1,070	879
Torrance	--	--	--
Union	58	167	126
Valencia	14	53	43
Total	6,221	19,351	15,224

Table 62--Area, net volume, net annual growth, and net annual mortality of woodland species on woodland outside National Forests by county in New Mexico

County	Area (1987)	Net volume (1987)	Net annual growth (1986)	Annual mortality (1986)
	- - Acres - -	- - - - -	Thousand cubic feet - - - - -	
Bernalillo	79,376	36,882	583	(1)
Catron	422,393	226,803	2,175	6
Chaves	5,504	1,435	22	--
Cibola	611,688	305,035	2,933	197
Colfax	177,237	143,790	1,714	--
Curry	1,945	578	8	--
De Baca	3,007	913	13	--
Dona Ana	35,532	11,463	123	(1)
Eddy	2,499	490	8	--
Grant	100,271	44,041	427	29
Guadalupe	99,149	25,476	311	--
Harding	76,627	21,988	366	--
Hidalgo	50,283	18,658	180	8
Lea	4,262	1,107	16	--
Lincoln	209,023	79,461	1,038	--
Los Alamos	1,783	871	10	(1)
Luna	26,456	7,916	79	(1)
McKinley	721,729	374,583	3,597	42
Mora	85,439	33,751	493	--
Otero	155,061	111,639	1,657	--
Quay	52,816	15,501	205	--
Rio Arriba	579,853	349,388	3,674	50
Roosevelt	3,189	929	13	--
Sandoval	305,941	126,144	1,169	7
San Juan	476,140	217,534	1,956	1
San Miguel	411,671	149,539	2,065	--
Santa Fe	205,446	55,010	695	(1)
Sierra	54,847	19,730	210	(1)
Socorro	295,806	118,385	1,267	2
Taos	123,411	65,142	859	(1)
Torrance	205,721	80,410	943	--
Union	122,043	36,296	589	--
Valencia	35,303	12,925	128	11
Total	5,741,451	2,693,813	29,526	353

¹Less than 500 cubic feet.

Van Hooser, Dwane D. 1990. Timberland and woodland resources outside National Forests in New Mexico, 1987. Resour. Bull. INT-68. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 72 p.

Presents land area, timberland and woodland area, associated volume, and components of change for the forest lands outside the National Forests in New Mexico.

KEYWORDS: forest survey, inventory, volume, pinyon-juniper

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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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Bozeman, Montana (in cooperation with Montana State University)

Logan, Utah (in cooperation with Utah State University)

Missoula, Montana (in cooperation with the University of Montana)

Moscow, Idaho (in cooperation with the University of Idaho)

Ogden, Utah

Provo, Utah (in cooperation with Brigham Young University)

Reno, Nevada (in cooperation with the University of Nevada)

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