Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

Roger C. Conner
William T. Pawley
THE AUTHORS

ROGER C. CONNER is a forester with the Forest Survey research work unit at the Intermountain Research Station in Ogden, UT. His primary area of responsibility is in resource analysis. He holds a B.S. degree in forestry from Virginia Polytechnic Institute and State University. He began his Forest Service career with the Intermountain Station in 1980.

WILLIAM T. PAWLEY is a forester with the Forest Survey research work unit at the Intermountain Research Station in Ogden, UT. His primary area of responsibility is in data collection. He holds a B.S. degree in forestry from Northern Arizona University. He has been with the Intermountain Station since 1980.

ACKNOWLEDGMENTS

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

RESEARCH SUMMARY

Presents land area, timberland area, woodland area, timber inventory, and growth and mortality data for seven counties in Colorado’s southern Front Range. Information and statistical tables are based on Forest Survey data collected from 1982 and 1983 and cover State and private resources.

CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Highlights</td>
<td>2</td>
</tr>
<tr>
<td>Area</td>
<td>2</td>
</tr>
<tr>
<td>Inventory</td>
<td>2</td>
</tr>
<tr>
<td>Components of Change</td>
<td>3</td>
</tr>
<tr>
<td>How the Inventory was Conducted</td>
<td>3</td>
</tr>
<tr>
<td>Prefield</td>
<td>3</td>
</tr>
<tr>
<td>Field</td>
<td>3</td>
</tr>
<tr>
<td>Compilation</td>
<td>3</td>
</tr>
<tr>
<td>Data Reliability</td>
<td>3</td>
</tr>
<tr>
<td>Terminology and Data Tables</td>
<td>3</td>
</tr>
<tr>
<td>Terminology</td>
<td>3</td>
</tr>
<tr>
<td>References</td>
<td>6</td>
</tr>
<tr>
<td>Figures</td>
<td></td>
</tr>
<tr>
<td>1. Counties covered by this report</td>
<td>1</td>
</tr>
<tr>
<td>2. Distribution of land area in Colorado’s southern Front Range by owner group</td>
<td>2</td>
</tr>
<tr>
<td>Page</td>
<td>Forest Survey Tables</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
</tr>
<tr>
<td>7</td>
<td>1. Area of State and privately owned forest land with percent standard error in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>7</td>
<td>2. Net volume, net annual growth, and annual mortality of growing stock and sawtimber on State and privately owned timberland with percent standard error in Colorado’s southern Front Range</td>
</tr>
<tr>
<td>8</td>
<td>3. Total land and water area by ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>8</td>
<td>4. Total land area on State and privately owned land by major land class and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>9</td>
<td>5. Area of forest land on State and privately owned land by forest type, ownership class, and land class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>10</td>
<td>6. Cubic feet of net volume in trees on State and privately owned forest land by species and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>10</td>
<td>7. Cubic feet of net annual growth in trees on State and privately owned forest land by species and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>11</td>
<td>8. Cubic feet of annual mortality in trees on State and privately owned forest land by species and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>12</td>
<td>9. Area of State and privately owned timberland by forest type, stand-size class, and productivity class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>14</td>
<td>10. Area of State owned timberland by forest type, stand-size class, and productivity class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>16</td>
<td>11. Area of nonindustrial privately owned timberland by forest type, stand-size class, and productivity class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>18</td>
<td>12. Area of State and privately owned timberland by stand volume and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>18</td>
<td>13. Area of State and privately owned timberland by forest type and area condition class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>19</td>
<td>14. Number of growing-stock trees on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>20</td>
<td>15. Number of cull and salvable dead trees on State and privately owned timberland by ownership class, and softwoods and hardwoods in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>20</td>
<td>16. Net volume of growing stock on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>21</td>
<td>17. Net volume of sawtimber (International 1/4-inch rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>22</td>
<td>18. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>23</td>
<td>19. Net volume of growing stock on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>24</td>
<td>20. Net volume of sawtimber (International 1/4-inch rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>24</td>
<td>21. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>25</td>
<td>22. Net volume of growing stock on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>26</td>
<td>23. Net volume of sawtimber (International 1/4-inch rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>27</td>
<td>24. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>28</td>
<td>25. Net volume of timber on State and privately owned timberland by class of timber, and softwoods and hardwoods in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>29</td>
<td>26. Net volume of growing stock on State and privately owned timberland by forest type and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>29</td>
<td>27. Net volume of sawtimber (International 1/4-inch rule) on State and privately owned timberland by forest type and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>30</td>
<td>28. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by forest type and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td>30</td>
<td>29. Net annual growth of growing stock on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>31</td>
<td>30. Net annual growth of sawtimber (International 1/4-inch rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>31</td>
<td>31. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>Page</td>
<td>32. Net annual growth of growing stock on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>33. Net annual growth of sawtimber (International 1/4-inch rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>34. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>35. Annual mortality of growing stock on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>36. Annual mortality of sawtimber (International 1/4-inch rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>37. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>38. Annual mortality of growing stock on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>39. Annual mortality of sawtimber (International 1/4-inch rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>40. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>41. Annual mortality of growing stock on State and privately owned timberland by cause of death and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>42. Annual mortality of sawtimber (International 1/4-inch rule) on State and privately owned timberland by cause of death and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>43. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by cause of death and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>44. Area of State and privately owned woodland by ownership class and forest type in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>45. Net volume of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>46. Net annual growth of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>47. Annual mortality of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>48. Area of State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>49. Net volume of growing stock on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>50. Net volume of sawtimber (International 1/4-inch rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>51. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>52. Net annual growth of growing stock on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>53. Net annual growth of sawtimber (International 1/4-inch rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>54. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>55. Annual mortality of growing stock on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>56. Annual mortality of sawtimber (International 1/4-inch rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>57. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>58. Area of State and privately owned woodland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>59. Net volume of State and privately owned woodland by county and ownership class in Colorado’s southern Front Range, 1983</td>
</tr>
<tr>
<td></td>
<td>60. Net annual growth of State and privately owned woodland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
<tr>
<td></td>
<td>61. Annual mortality of State and privately owned woodland by county and ownership class in Colorado’s southern Front Range, 1982</td>
</tr>
</tbody>
</table>

Roger C. Conner
William T. Pawley

INTRODUCTION

This resource bulletin reports the findings of the Forest Survey inventory of a sample area defined as State and private lands in Chaffee, Costilla, Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties of the southern Front Range in Colorado (fig. 1). The two-phase survey began with prefld work in June 1981. The field phase involved, in whole or in part, successive summers from 1981 to 1984 with the bulk of the data collected in 1982.

The data in this report pertain only to the State and private forest resources of the counties listed above. Data for lands administered by various public agencies, such as National Forest Systems and Bureau of Land Management will be included in a subsequent, comprehensive statewide report that will include all lands and all owners.

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 forest and rangelands 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.

Figure 1—Counties covered by this report.
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, western South Dakota, Utah, Wyoming, western Texas, and Oklahoma’s Panhandle. These inventories provide information on the extent and condition of State and privately owned forest lands and most other lands not in the National Forest System, volume of timber, and rates of timber growth, removals, and mortality.

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.

HIGHLIGHTS

Area

- State and private lands comprise nearly 6.9 million acres, or 81 percent of the total land area in Colorado's southern Front Range (fig. 2).
- Forests occupy over 2 million acres, including reserved land, or 30 percent of the total State and private land area.
- About 47 percent of the forest land, 948,500 acres, is classified nonreserved timberland, and 95 percent of this area is privately owned.
- Approximately 1.1 million acres are classified as nonreserved woodland, 92 percent of which is privately owned.
- Ponderosa pine forest type occurs on 50 percent of the privately owned timberland, while Douglas-fir, spruce, and white fir forest types combined make up 29 percent of the area.
- Nearly 94 percent of the woodland area is occupied by juniper or pinyon-juniper forest types, 92 percent of which is privately owned.

Inventory

- Timberland growing-stock volume is about 1.1 billion cubic feet, and sawtimber volume totals 3.2 billion board feet (International 1/4-inch rule).
- Of the timberland growing-stock volume, 28 percent, about 290 million cubic feet, is ponderosa pine, with Engelmann spruce (22 percent), Douglas-fir (21 percent), and lodgepole pine (7 percent) adding another 50 percent.
- Woodland volume amounts to about 338 million cubic feet, 97 percent of which is pinyon and juniper species, and woodland hardwoods the remaining 3 percent.
- Private ownership accounts for 96 percent of the timberland growing-stock volume and 92 percent of the woodland volume.
- Nearly 89 percent of the timberland growing-stock volume is in trees less than 19 inches diameter at breast height (d.b.h.).
- About 81 percent of the sawtimber volume, 2.6 billion board feet (International 1/4-inch rule), is in trees less than 19 inches d.b.h.
- Rough, rotten, and salvable dead trees total about 65 million cubic feet, about 6 percent of the timberland sound wood volume.
- About a fifth of the timberland area is capable of producing more than 50 cubic feet of wood per acre per year. However, net annual growth in 1982 was just over 21 cubic feet per acre per year.
- Nearly 65 percent of both the timberland growing-stock and sawtimber volumes are in Las Animas and Costilla Counties.

Figure 2—Distribution of land area in Colorado's southern Front Range by owner group.
Components of Change

Growth
- Net annual growth for timberland was over 20.2 million cubic feet in 1982, of which 97 percent was on private land.
- Ponderosa pine and lodgepole pine each account for 25 percent of the timberland net growth, with Engelmann spruce (17 percent) and Douglas-fir (12 percent) adding to the remainder.
- Woodland net annual growth was about 4.6 million cubic feet in 1982, of which 92 percent was on private land.

Mortality
- The annual mortality of 4 million cubic feet of growing stock offsets 17 percent of the timberland gross annual growth.
- Douglas-fir accounts for more than 1 million cubic feet, 26 percent of the timberland annual mortality.
- Weather, insects, and disease caused 68 percent of the mortality.

Removals
- An estimated 1.5 million cubic feet of industrial roundwood material (8.7 million board feet, International 1/4-inch rule) was harvested in 1982, of which 56 percent came from State and private land (McLain 1985).
- Custer and Huerfano Counties combined account for 45 percent of the industrial roundwood cubic-foot volume harvested.
- Ponderosa pine contributed the largest percentage to the total board-foot (International 1/4-inch rule) harvest (56 percent), with Douglas-fir (23 percent) and spruce (15 percent) accounting for most of the remaining percentage (includes all land owners in the sample area).
- Sawlogs accounted for nearly 100 percent of the industrial roundwood volume harvested (includes all land owners in the sample area).
- Total fuelwood harvest was about 28,500 cords (2.3 million cubic feet) in 1982, of which about 84 percent was cut from State and private land. This was 1.5 times the industrial roundwood harvest (McLain 1985).
- Of the fuelwood, 59 percent was harvested from Pueblo County, and nearly 75 percent of this volume was taken from private land (McLain and Booth 1985).
- Cottonwood accounted for 64 percent of the total fuelwood harvest, with lodgepole pine (20 percent) and pinyon (15 percent) making up most of the remaining percentage (McLain and Booth 1985) (includes all land owners in the sample area).
- Over 99 percent of fuelwood harvested (23,700 cords) from State and private land was from dead trees (McLain and Booth 1985).

Prefield
Primary area estimates were based on the classification of 34,355 sample points systematically placed on the latest aerial photographs available. The photo points, adjusted to meet known land areas, were used to stratify and compute area expansion factors for the field sample data.

Field
Land classification and estimates for timber characteristics and volume were based on observations or measurements or both recorded at 829 ground sample locations, of which 281 were forested. Sample trees were selected using a 5-point sample cluster, which included 1/300-acre fixed radius plots for trees less than 5 inches d.b.h., and 40 basal area factor variable radius plots for trees 5 inches d.b.h. or larger.

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

DATA RELIABILITY
Individual cells within tables should be used with caution. Some are based on small sample sizes resulting in high sampling errors. The standard error percentages shown in tables 1 and 2 were calculated at the 67 percent confidence level.

TERMINOLOGY AND DATA TABLES
The following section contains definitions that are relevant to the timber resource data in this bulletin. Forest area and timber resource data for Colorado’s southern Front Range are displayed in tables 3 through 61.

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.).
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, form, missing material, or other cubic-foot defect. Form and sound defects include severe sweep and crook, forks, extreme form reduction, large deformities, and dead material.
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-owned lands—Lands owned by a person who operates a farm and who either does the work or directly supervises the work.
Forest industry lands—Lands owned by companies or individuals operating a primary wood-processing plant.
Forest land—Land at least 10 percent stocked by forest trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width at least 120 feet wide to qualify as forest land. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if less than 120 feet wide.

Forest trees—Woody plants having a well-developed stem or stems, usually more than 12 feet in height at maturity, with a generally well-defined crown.
Forest type—A classification of forest land based upon and named for the tree species presently forming a plurality of live-tree stocking.
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 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.
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.
Net annual growth—The net average annual increase in the volume of trees during a specified period.
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, 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 in diameter (o.b.).

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

Nonindustrial private—All private ownerships except forest industry.

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

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

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

Other public land—Public land administered by agencies other than the 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 stock 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, etc.

Productivity class—A classification of forest land in terms of potential growth.

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

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

Residues:
Coarse residues—Plant residues suitable for chipping, such as slabs, edgings, and ends.
Fine residues—Plant residues not suitable for chipping, such as sawdust, shavings, and veneer clippings.
Plant residues—Wood materials from primary manufacturing plants that are not used for any product.

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

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

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

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

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

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

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

Sawlog top—The point on the bole of sawtimber trees above which a sawlog cannot be produced. The minimum sawlog top is 7 inches diameter o.b. for softwoods, and 9 inches diameter 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 scallike 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, or 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. Percentage stocking is the ratio of actual stocking to full stocking for comparable sites and stands, using basal area as the basis for comparison.

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 o.b. 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 dead volume—Net volume of dead woodland trees and dead net volume portion of live woodland tree species.

Woodland species live volume—Net cubic-foot volume in live woodland tree species.

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

REFERENCES


## Table 1. -- Area of State and privately owned forest land with percent standard error in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Item</th>
<th>Softwoods Acres</th>
<th>Percent standard error</th>
<th>Hardwoods Acres</th>
<th>Percent standard error</th>
<th>All types Acres</th>
<th>Percent standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timberland</td>
<td>848,838</td>
<td>±6.4</td>
<td>99,624</td>
<td>±23.5</td>
<td>948,462</td>
<td>±5.6</td>
</tr>
<tr>
<td>Woodland</td>
<td>1,003,191</td>
<td>±6.3</td>
<td>69,126</td>
<td>±40.7</td>
<td>1,072,317</td>
<td>±6.3</td>
</tr>
<tr>
<td>Reserved forest land:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timberland</td>
<td>--</td>
<td></td>
<td>500</td>
<td></td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td>2,900</td>
<td></td>
<td>31</td>
<td></td>
<td>2,931</td>
<td></td>
</tr>
<tr>
<td>Total forest land</td>
<td>1,854,929</td>
<td></td>
<td>169,281</td>
<td></td>
<td>2,024,210</td>
<td></td>
</tr>
</tbody>
</table>

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

## Table 2. -- Net volume, net annual growth, and annual mortality of growing stock and sawtimber on State and privately owned timberland with percent standard error in Colorado's southern Front Range

<table>
<thead>
<tr>
<th>Item</th>
<th>Softwoods Volume</th>
<th>Percent standard error</th>
<th>Hardwoods Volume</th>
<th>Percent standard error</th>
<th>All species Volume</th>
<th>Percent standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net volume, 1983:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growing stock (M cubic feet)</td>
<td>958,829</td>
<td>±9.9</td>
<td>97,606</td>
<td>±23.5</td>
<td>1,056,435</td>
<td>±9.1</td>
</tr>
<tr>
<td>Sawtimber(^1) (M board feet)</td>
<td>3,098,649</td>
<td>±12.1</td>
<td>119,581</td>
<td>±30.6</td>
<td>3,218,230</td>
<td>±11.7</td>
</tr>
<tr>
<td>Sawtimber(^2) (M board feet)</td>
<td>2,618,818</td>
<td>±12.1</td>
<td>102,426</td>
<td>±30.8</td>
<td>2,721,244</td>
<td>±11.7</td>
</tr>
<tr>
<td><strong>Net annual growth, 1982:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growing stock (M cubic feet)</td>
<td>17,828</td>
<td>±16.8</td>
<td>2,390</td>
<td>±37.7</td>
<td>20,218</td>
<td>±15.3</td>
</tr>
<tr>
<td>Sawtimber(^1) (M board feet)</td>
<td>60,237</td>
<td>±19.7</td>
<td>10,226</td>
<td>±64.4</td>
<td>70,463</td>
<td>±18.3</td>
</tr>
<tr>
<td>Sawtimber(^2) (M board feet)</td>
<td>50,080</td>
<td>±19.7</td>
<td>8,828</td>
<td>±64.3</td>
<td>58,908</td>
<td>±18.5</td>
</tr>
<tr>
<td><strong>Annual mortality, 1982:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growing stock (M cubic feet)</td>
<td>3,408</td>
<td>±29.5</td>
<td>594</td>
<td>±75.7</td>
<td>4,002</td>
<td>±27.7</td>
</tr>
<tr>
<td>Sawtimber(^1) (M board feet)</td>
<td>11,624</td>
<td>±33.8</td>
<td>1,463</td>
<td>±70.0</td>
<td>13,087</td>
<td>±32.1</td>
</tr>
<tr>
<td>Sawtimber(^2) (M board feet)</td>
<td>10,010</td>
<td>±33.5</td>
<td>1,257</td>
<td>±70.0</td>
<td>11,267</td>
<td>±31.9</td>
</tr>
</tbody>
</table>

\(^1\)International 1-inch rule.

\(^2\)Scribner rule.
Table 3.--Total land and water area by ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public:</td>
<td>-- Acres --</td>
</tr>
<tr>
<td>National Forest</td>
<td>964,032</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Bureau of Land Management</td>
<td>531,364</td>
</tr>
<tr>
<td>Miscellaneous federal</td>
<td>79,085</td>
</tr>
<tr>
<td>State</td>
<td>533,360</td>
</tr>
<tr>
<td>County and municipal</td>
<td>49,113</td>
</tr>
<tr>
<td>Total other public</td>
<td>1,192,922</td>
</tr>
<tr>
<td>Total public</td>
<td>2,156,954</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6,319,058</td>
</tr>
<tr>
<td>Total land area</td>
<td>8,476,012</td>
</tr>
<tr>
<td>Census water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27,046</td>
</tr>
<tr>
<td>Total land and water(^1)</td>
<td>8,503,058</td>
</tr>
</tbody>
</table>

\(^1\)U.S. Bureau of the Census, land and water area of the United States, 1980.

Table 4.--Total land area on State and privately owned land by major land class and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Land class</th>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-- -- -- -- -- -- Acres -- -- -- -- -- --</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timberland:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserved</td>
<td></td>
<td>500</td>
<td>--</td>
<td>500</td>
</tr>
<tr>
<td>Nonreserved</td>
<td></td>
<td>42,811</td>
<td>905,651</td>
<td>948,462</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>43,311</td>
<td>905,651</td>
<td>948,962</td>
</tr>
<tr>
<td>Woodland:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserved</td>
<td></td>
<td>2,931</td>
<td>--</td>
<td>2,931</td>
</tr>
<tr>
<td>Nonreserved</td>
<td></td>
<td>80,755</td>
<td>991,562</td>
<td>1,072,317</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>83,686</td>
<td>991,562</td>
<td>1,075,248</td>
</tr>
<tr>
<td>Total forest land:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserved</td>
<td></td>
<td>3,431</td>
<td>--</td>
<td>3,431</td>
</tr>
<tr>
<td>Nonreserved</td>
<td></td>
<td>123,566</td>
<td>1,897,213</td>
<td>2,020,779</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>126,997</td>
<td>1,897,213</td>
<td>2,024,210</td>
</tr>
<tr>
<td>Nonforest land:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>406,363</td>
<td>4,421,845</td>
<td>4,828,208</td>
</tr>
<tr>
<td>Total land area</td>
<td></td>
<td>533,360</td>
<td>6,319,058</td>
<td>6,852,418</td>
</tr>
</tbody>
</table>
Table 5.--Area of forest land on State and privately owned land by forest type, ownership class, and land class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Ownership class and land class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>All owners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reserved</td>
<td>Nonreserved</td>
<td>Reserved</td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>--</td>
<td>6,653</td>
<td>--</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>--</td>
<td>24,561</td>
<td>--</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>--</td>
<td>884</td>
<td>--</td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>--</td>
<td>458</td>
<td>--</td>
</tr>
<tr>
<td>Spruce subalpine-fir</td>
<td></td>
<td>--</td>
<td>1,381</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>--</td>
<td>3,011</td>
<td>--</td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td>--</td>
<td>2,340</td>
<td>--</td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>--</td>
<td>2,694</td>
<td>--</td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>500</td>
<td>829</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total timberland</strong></td>
<td></td>
<td>500</td>
<td>42,811</td>
<td>--</td>
</tr>
<tr>
<td>Pinyon-juniper</td>
<td></td>
<td>2,900</td>
<td>60,471</td>
<td>--</td>
</tr>
<tr>
<td>Juniper</td>
<td></td>
<td>--</td>
<td>18,231</td>
<td>--</td>
</tr>
<tr>
<td>Oak</td>
<td></td>
<td>31</td>
<td>1,824</td>
<td>--</td>
</tr>
<tr>
<td>Other west hardwoods</td>
<td></td>
<td>--</td>
<td>229</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total woodland</strong></td>
<td></td>
<td>2,931</td>
<td>80,755</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total all types</strong></td>
<td></td>
<td>3,431</td>
<td>123,566</td>
<td>--</td>
</tr>
</tbody>
</table>

9
### Table 6: Cubic feet of net volume in trees on State and privately owned forest land by species and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - Thousand cubic feet - - - - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>9,634</td>
<td>208,946</td>
<td>218,580</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>13,560</td>
<td>276,887</td>
<td>290,447</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,345</td>
<td>69,670</td>
<td>71,015</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>598</td>
<td>19,044</td>
<td>19,642</td>
</tr>
<tr>
<td>Limber pine</td>
<td>816</td>
<td>21,682</td>
<td>22,498</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>1,474</td>
<td>46,062</td>
<td>47,536</td>
</tr>
<tr>
<td>White fir</td>
<td>2,865</td>
<td>56,999</td>
<td>59,864</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>6,481</td>
<td>222,886</td>
<td>229,367</td>
</tr>
<tr>
<td>Aspen</td>
<td>2,347</td>
<td>74,192</td>
<td>76,539</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>285</td>
<td>20,782</td>
<td>21,067</td>
</tr>
<tr>
<td>Total timberland species</td>
<td>39,405</td>
<td>1,017,150</td>
<td>1,056,555</td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td>28,240</td>
<td>333,617</td>
<td>361,857</td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td>1,308</td>
<td>24,367</td>
<td>25,675</td>
</tr>
<tr>
<td>Total woodland species</td>
<td>29,548</td>
<td>357,984</td>
<td>387,532</td>
</tr>
<tr>
<td>Total all species</td>
<td>68,953</td>
<td>1,375,134</td>
<td>1,444,087</td>
</tr>
</tbody>
</table>

### Table 7: Cubic feet of net annual growth in trees on State and privately owned forest land by species and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - Thousand cubic feet - - - - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>139</td>
<td>2,214</td>
<td>2,353</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>250</td>
<td>4,762</td>
<td>5,012</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>97</td>
<td>4,879</td>
<td>4,976</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>7</td>
<td>224</td>
<td>231</td>
</tr>
<tr>
<td>Limber pine</td>
<td>11</td>
<td>235</td>
<td>246</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>37</td>
<td>1,107</td>
<td>1,144</td>
</tr>
<tr>
<td>White fir</td>
<td>-20</td>
<td>374</td>
<td>354</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>122</td>
<td>3,392</td>
<td>3,514</td>
</tr>
<tr>
<td>Aspen</td>
<td>63</td>
<td>1,572</td>
<td>1,635</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>3</td>
<td>752</td>
<td>755</td>
</tr>
<tr>
<td>Total timberland species</td>
<td>709</td>
<td>19,511</td>
<td>20,220</td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td>391</td>
<td>4,376</td>
<td>4,767</td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td>-4</td>
<td>160</td>
<td>156</td>
</tr>
<tr>
<td>Total woodland species</td>
<td>387</td>
<td>4,536</td>
<td>4,923</td>
</tr>
<tr>
<td>Total all species</td>
<td>1,096</td>
<td>24,047</td>
<td>25,143</td>
</tr>
</tbody>
</table>
Table 8.—Cubic feet of annual mortality in trees on State and privately owned forest land by species and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>43</td>
<td>1,000</td>
<td>1,043</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>25</td>
<td>622</td>
<td>647</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>78</td>
<td>913</td>
<td>991</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td></td>
<td>--</td>
<td>727</td>
<td>727</td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>--</td>
<td>594</td>
<td>594</td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total timberland species</td>
<td></td>
<td>146</td>
<td>3,856</td>
<td>4,002</td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td></td>
<td>18</td>
<td>476</td>
<td>494</td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td></td>
<td>34</td>
<td>342</td>
<td>376</td>
</tr>
<tr>
<td>Total woodland species</td>
<td></td>
<td>52</td>
<td>818</td>
<td>870</td>
</tr>
<tr>
<td>Total all species</td>
<td></td>
<td>198</td>
<td>4,674</td>
<td>4,872</td>
</tr>
</tbody>
</table>
Table 9.--Area of State and privately owned timberland by forest type, stand-size class, and productivity class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
<td>50-84</td>
</tr>
<tr>
<td>Douglas-fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>14,448</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>3,799</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>3,839</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>22,086</td>
</tr>
<tr>
<td>Ponderosa pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>16,526</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>12,098</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>28,624</td>
</tr>
<tr>
<td>Lodgepole pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Limber pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Spruce-subalpine fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>8,263</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>8,263</td>
</tr>
</tbody>
</table>

(cont.)
Table 9. (con.)

<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
</tr>
<tr>
<td></td>
<td>Acres</td>
</tr>
</tbody>
</table>

**White fir:**
- Sawtimber: 13,568, 28,625, --, 42,193
- Poletimber: 8,553, --, --, 8,553
- Sapling and seedling: 9,184, 3,835, --, 13,019
- Nonstocked: 3,835, --, --, 3,835
- Total: 3,835, 31,305, 32,460, --, 67,600

**Spruce:**
- Sawtimber: --, 51,101, 18,283, --, 69,384
- Poletimber: 4,714, --, 3,799, --, 8,513
- Sapling and seedling: --, --, 4,714, --, 4,714
- Nonstocked: --, --, --, --, --
- Total: 4,714, 51,101, 26,796, --, 82,611

**Aspen:**
- Sawtimber: --, 8,262, 9,428, --, 17,690
- Poletimber: --, 14,545, --, --, 14,545
- Sapling and seedling: --, 3,840, 10,184, 23,266, 37,290
- Nonstocked: --, --, --, --, --
- Total: --, 26,647, 19,612, 23,266, 69,525

**Cottonwood:**
- Sawtimber: --, 9,957, 10,184, --, 20,141
- Poletimber: --, 9,958, --, --, 9,958
- Sapling and seedling: --, --, --, --, --
- Nonstocked: --, --, --, --, --
- Total: --, 19,915, 10,184, --, 30,099

**All types:**
- Sawtimber: 122,125, 439,009, 9,734, 570,868
- Poletimber: 4,714, 48,953, 169,566, --, 223,233
- Sapling and seedling: 13,024, 18,733, 23,266, 55,023
- Nonstocked: 3,835, 3,839, 91,664, --, 99,338
- Total: 8,549, 187,941, 718,972, 33,000, 948,462
Table 10.—Area of State owned timberland by forest type, stand-size class, and productivity class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
<td>50-84</td>
</tr>
<tr>
<td>Douglas-fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poletimber</td>
<td>229</td>
<td>4,157</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>656</td>
<td>1,611</td>
</tr>
<tr>
<td>Nonstocked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>885</td>
<td>5,768</td>
</tr>
<tr>
<td>Ponderosa pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>853</td>
<td>12,374</td>
</tr>
<tr>
<td>Poletimber</td>
<td>698</td>
<td>3,770</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonstocked</td>
<td></td>
<td>6,866</td>
</tr>
<tr>
<td>Total</td>
<td>1,551</td>
<td>23,010</td>
</tr>
<tr>
<td>Lodgepole pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poletimber</td>
<td></td>
<td>458</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonstocked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>884</td>
</tr>
<tr>
<td>Limber pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poletimber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonstocked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>229</td>
</tr>
<tr>
<td>Spruce-subalpine fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>426</td>
<td>955</td>
</tr>
<tr>
<td>Poletimber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonstocked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>426</td>
<td>955</td>
</tr>
</tbody>
</table>

(con.)
<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
<td>50-84</td>
</tr>
<tr>
<td>White fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poletimber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>271</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>271</td>
<td>918</td>
</tr>
<tr>
<td>Spruce:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>-</td>
<td>1,183</td>
</tr>
<tr>
<td>Poletimber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>1,183</td>
</tr>
<tr>
<td>Aspen:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>-</td>
<td>426</td>
</tr>
<tr>
<td>Poletimber</td>
<td>-</td>
<td>325</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>751</td>
</tr>
<tr>
<td>Cottonwood:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poletimber</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All types:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>-</td>
<td>3,617</td>
</tr>
<tr>
<td>Poletimber</td>
<td>-</td>
<td>1,679</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>-</td>
<td>418</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>271</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>271</td>
<td>5,714</td>
</tr>
</tbody>
</table>
Table 11.—Area of nonindustrial privately owned timberland by forest type, stand-size class, and productivity class in Colorado’s southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
<td>50-84</td>
</tr>
<tr>
<td>Douglas-fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>14,219</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>3,143</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>3,839</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>21,201</td>
</tr>
<tr>
<td>Ponderosa pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>15,673</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>11,400</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>27,073</td>
</tr>
<tr>
<td>Lodgepole pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Limber pine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Spruce-subalpine fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>7,837</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>--</td>
<td>7,837</td>
</tr>
</tbody>
</table>

(con.)
Table 11. (con.)

<table>
<thead>
<tr>
<th>Forest type and stand-size class</th>
<th>Productivity class</th>
<th>Total acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85-119</td>
<td>50-84</td>
</tr>
<tr>
<td>White fir:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>13,068</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>8,553</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>8,766</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>3,564</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>3,564</td>
<td>30,387</td>
</tr>
<tr>
<td>Spruce:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>49,918</td>
</tr>
<tr>
<td>Poletimber</td>
<td>4,714</td>
<td>--</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>4,714</td>
<td>49,918</td>
</tr>
<tr>
<td>Aspen:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>7,836</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>14,220</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>3,840</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>25,896</td>
</tr>
<tr>
<td>Cottonwood:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>9,957</td>
</tr>
<tr>
<td>Poletimber</td>
<td>--</td>
<td>9,958</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>--</td>
<td>19,915</td>
</tr>
<tr>
<td>All types:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber</td>
<td>--</td>
<td>118,508</td>
</tr>
<tr>
<td>Poletimber</td>
<td>4,714</td>
<td>47,274</td>
</tr>
<tr>
<td>Sapling and seedling</td>
<td>--</td>
<td>12,606</td>
</tr>
<tr>
<td>Nonstocked</td>
<td>3,564</td>
<td>3,839</td>
</tr>
<tr>
<td>Total</td>
<td>8,278</td>
<td>182,227</td>
</tr>
</tbody>
</table>
Table 12.--Area of State and privately owned timberland by stand volume and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Stand volume per acre¹</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 1,500 board feet</td>
<td>19,183</td>
<td>354,655</td>
<td>373,838</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,500 to 4,999 board feet</td>
<td>14,820</td>
<td>319,493</td>
<td>334,313</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000 to 9,999 board feet</td>
<td>7,310</td>
<td>165,107</td>
<td>172,417</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000 board feet or more</td>
<td>1,498</td>
<td>66,396</td>
<td>67,894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All classes</td>
<td>42,811</td>
<td>905,651</td>
<td>948,462</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹International 1-inch rule.

Table 13.--Area of State and privately owned timberland by forest type and area condition class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Area condition class</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>Nonstocked</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All types</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.18
Table 14.--Number of growing-stock trees on State and privately owned timberland by species and diameter class in Colorado’s southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Diameter class (inches at breast height)</th>
<th>Thousand trees</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>1,040</td>
<td>9,416</td>
<td>7,590</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>3,202</td>
<td>15,071</td>
<td>15,417</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,445</td>
<td>9,583</td>
<td>13,995</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>--</td>
<td>--</td>
<td>864</td>
</tr>
<tr>
<td>Limber pine</td>
<td>--</td>
<td>3,467</td>
<td>1,099</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>2,065</td>
<td>3,933</td>
<td>4,503</td>
</tr>
<tr>
<td>White fir</td>
<td>7,266</td>
<td>3,460</td>
<td>6,173</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>18,300</td>
<td>8,089</td>
<td>5,013</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>33,318</td>
<td>53,019</td>
<td>54,654</td>
</tr>
<tr>
<td>Aspen</td>
<td>33,419</td>
<td>19,627</td>
<td>13,641</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>--</td>
<td>--</td>
<td>1,435</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>33,419</td>
<td>19,627</td>
<td>15,076</td>
</tr>
<tr>
<td>All species</td>
<td>66,737</td>
<td>72,646</td>
<td>69,730</td>
</tr>
</tbody>
</table>
Table 15.—Number of cull and salvable dead trees on State and privately owned timberland by ownership class, and softwoods and hardwoods in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class and species group</th>
<th>Cull trees</th>
<th></th>
<th></th>
<th>Salvable dead trees</th>
<th>All dead trees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sound</td>
<td>Rotten</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>State:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softwoods</td>
<td></td>
<td>62</td>
<td>47</td>
<td>109</td>
<td>459</td>
</tr>
<tr>
<td>Hardwoods</td>
<td></td>
<td>--</td>
<td>17</td>
<td>17</td>
<td>171</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>62</td>
<td>64</td>
<td>126</td>
<td>630</td>
</tr>
<tr>
<td>Nonindustrial private:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softwoods</td>
<td>1,134</td>
<td>1,040</td>
<td>2,174</td>
<td>9,194</td>
<td>11,368</td>
</tr>
<tr>
<td>Hardwoods</td>
<td></td>
<td>--</td>
<td>590</td>
<td>590</td>
<td>4,137</td>
</tr>
<tr>
<td>Total</td>
<td>1,134</td>
<td>1,630</td>
<td>2,764</td>
<td>13,331</td>
<td>16,095</td>
</tr>
<tr>
<td>Total:</td>
<td>1,196</td>
<td>1,087</td>
<td>2,283</td>
<td>9,653</td>
<td>11,936</td>
</tr>
<tr>
<td>Hardwoods</td>
<td></td>
<td>--</td>
<td>607</td>
<td>607</td>
<td>4,308</td>
</tr>
<tr>
<td>Total</td>
<td>1,196</td>
<td>1,694</td>
<td>2,890</td>
<td>13,961</td>
<td>16,851</td>
</tr>
</tbody>
</table>
Table 16.--Net volume of growing stock on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>Forest type</th>
<th>Stand-size class</th>
<th>Sawtimber</th>
<th>Poletimber</th>
<th>Sapling/seedling</th>
<th>Nonstocked</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>State:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>7,010</td>
<td>3,336</td>
<td>--</td>
<td>--</td>
<td>10,346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>9,895</td>
<td>3,449</td>
<td>--</td>
<td>--</td>
<td>13,827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>602</td>
<td>736</td>
<td>--</td>
<td>--</td>
<td>1,338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limber pine</td>
<td>387</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>3,340</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3,340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td>2,217</td>
<td>--</td>
<td>218</td>
<td>--</td>
<td>2,435</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td>4,541</td>
<td>892</td>
<td>--</td>
<td>--</td>
<td>5,433</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>823</td>
<td>735</td>
<td>345</td>
<td>--</td>
<td>1,903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>387</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All types</td>
<td>29,202</td>
<td>9,148</td>
<td>563</td>
<td>483</td>
<td>39,396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonindustrial private:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>136,903</td>
<td>64,855</td>
<td>--</td>
<td>--</td>
<td>202,144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>203,776</td>
<td>77,344</td>
<td>--</td>
<td>--</td>
<td>287,856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>29,466</td>
<td>44,876</td>
<td>--</td>
<td>--</td>
<td>74,342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limber pine</td>
<td>16,073</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>16,073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>103,542</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>103,542</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td>43,914</td>
<td>13,027</td>
<td>5,269</td>
<td>--</td>
<td>62,210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td>178,484</td>
<td>9,144</td>
<td>750</td>
<td>--</td>
<td>188,378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>25,130</td>
<td>30,047</td>
<td>5,378</td>
<td>--</td>
<td>60,555</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>8,708</td>
<td>13,231</td>
<td>--</td>
<td>--</td>
<td>21,939</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All types</td>
<td>745,996</td>
<td>252,524</td>
<td>11,397</td>
<td>7,122</td>
<td>1,017,039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>143,913</td>
<td>68,191</td>
<td>--</td>
<td>--</td>
<td>212,490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>213,671</td>
<td>80,793</td>
<td>--</td>
<td>--</td>
<td>301,683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>30,068</td>
<td>45,612</td>
<td>--</td>
<td>--</td>
<td>75,680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limber pine</td>
<td>16,460</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>16,460</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>106,882</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>106,882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td>46,131</td>
<td>13,027</td>
<td>5,487</td>
<td>--</td>
<td>64,645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td>183,025</td>
<td>10,036</td>
<td>750</td>
<td>--</td>
<td>193,811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>25,953</td>
<td>30,782</td>
<td>5,723</td>
<td>--</td>
<td>62,458</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>9,095</td>
<td>13,231</td>
<td>--</td>
<td>--</td>
<td>22,326</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All types</td>
<td>775,198</td>
<td>261,672</td>
<td>11,960</td>
<td>7,605</td>
<td>1,056,435</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17.—Net volume of sawtimber (International 1-inch rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>Forest type</th>
<th>Sawtimber</th>
<th>Poletimber</th>
<th>Sapling/seedling</th>
<th>Nonstocked</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>State:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>23,715</td>
<td>8,699</td>
<td>--</td>
<td>--</td>
<td>32,414</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>36,415</td>
<td>5,879</td>
<td>--</td>
<td>2,215</td>
<td>44,509</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>1,503</td>
<td>131</td>
<td>--</td>
<td>--</td>
<td>1,634</td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>1,183</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,183</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td></td>
<td>10,127</td>
<td>--</td>
<td>--</td>
<td>10,127</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>8,113</td>
<td>--</td>
<td>--</td>
<td>9,015</td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td>17,693</td>
<td>648</td>
<td>--</td>
<td>--</td>
<td>18,341</td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>2,334</td>
<td>992</td>
<td>371</td>
<td>--</td>
<td>3,697</td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>1,811</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,811</td>
</tr>
<tr>
<td>All types</td>
<td></td>
<td>102,894</td>
<td>16,349</td>
<td>1,273</td>
<td>2,215</td>
<td>122,731</td>
</tr>
<tr>
<td>Nonindustrial private:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>505,199</td>
<td>165,425</td>
<td>--</td>
<td>1,270</td>
<td>671,894</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>724,110</td>
<td>127,445</td>
<td>--</td>
<td>31,914</td>
<td>883,469</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>79,350</td>
<td>5,417</td>
<td>--</td>
<td>--</td>
<td>84,767</td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>49,126</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>49,126</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td></td>
<td>325,685</td>
<td>--</td>
<td>--</td>
<td>325,685</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>151,226</td>
<td>17,720</td>
<td>19,031</td>
<td>--</td>
<td>187,977</td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td>696,720</td>
<td>9,476</td>
<td>2,052</td>
<td>--</td>
<td>708,248</td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>77,614</td>
<td>47,485</td>
<td>11,633</td>
<td>--</td>
<td>136,732</td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>40,730</td>
<td>6,871</td>
<td>--</td>
<td>--</td>
<td>47,601</td>
</tr>
<tr>
<td>All types</td>
<td></td>
<td>2,649,760</td>
<td>379,839</td>
<td>32,716</td>
<td>33,184</td>
<td>3,095,499</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>528,914</td>
<td>174,124</td>
<td>--</td>
<td>1,270</td>
<td>704,308</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>760,525</td>
<td>133,324</td>
<td>--</td>
<td>34,129</td>
<td>927,978</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>80,853</td>
<td>5,548</td>
<td>--</td>
<td>--</td>
<td>86,401</td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>50,309</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>50,309</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td></td>
<td>335,812</td>
<td>--</td>
<td>--</td>
<td>335,812</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>159,339</td>
<td>17,720</td>
<td>19,933</td>
<td>--</td>
<td>196,992</td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td>714,413</td>
<td>10,124</td>
<td>2,052</td>
<td>--</td>
<td>726,589</td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>79,948</td>
<td>48,477</td>
<td>12,004</td>
<td>--</td>
<td>140,429</td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>42,541</td>
<td>6,871</td>
<td>--</td>
<td>--</td>
<td>49,412</td>
</tr>
<tr>
<td>All types</td>
<td></td>
<td>2,752,654</td>
<td>396,188</td>
<td>33,989</td>
<td>35,399</td>
<td>3,218,230</td>
</tr>
</tbody>
</table>
Table 18.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>Forest type</th>
<th>Stand-size class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sawtimber</td>
<td>Poletimber</td>
</tr>
<tr>
<td>State:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>20,040</td>
<td>7,343</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>30,741</td>
<td>4,810</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,298</td>
<td>116</td>
</tr>
<tr>
<td>Limber pine</td>
<td>1,005</td>
<td>--</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>8,623</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td>6,913</td>
<td>--</td>
</tr>
<tr>
<td>Spruce</td>
<td>14,902</td>
<td>577</td>
</tr>
<tr>
<td>Aspen</td>
<td>1,996</td>
<td>841</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>1,600</td>
<td>--</td>
</tr>
<tr>
<td>All types</td>
<td>87,118</td>
<td>13,687</td>
</tr>
<tr>
<td>Nonindustrial private:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>428,550</td>
<td>139,850</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>611,285</td>
<td>103,879</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>67,823</td>
<td>4,821</td>
</tr>
<tr>
<td>Limber pine</td>
<td>41,772</td>
<td>--</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>277,221</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td>129,127</td>
<td>14,876</td>
</tr>
<tr>
<td>Spruce</td>
<td>585,568</td>
<td>8,111</td>
</tr>
<tr>
<td>Aspen</td>
<td>66,809</td>
<td>40,084</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>35,710</td>
<td>5,511</td>
</tr>
<tr>
<td>All types</td>
<td>2,243,865</td>
<td>317,132</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>448,590</td>
<td>147,193</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>642,026</td>
<td>108,689</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>69,121</td>
<td>4,937</td>
</tr>
<tr>
<td>Limber pine</td>
<td>42,777</td>
<td>--</td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td>285,844</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td>136,040</td>
<td>14,876</td>
</tr>
<tr>
<td>Spruce</td>
<td>600,470</td>
<td>8,588</td>
</tr>
<tr>
<td>Aspen</td>
<td>68,805</td>
<td>40,925</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>37,310</td>
<td>5,511</td>
</tr>
<tr>
<td>All types</td>
<td>2,330,983</td>
<td>330,819</td>
</tr>
</tbody>
</table>
Table 19.--Net volume of growing stock on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>9,634</td>
<td>208,946</td>
<td>218,580</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>13,551</td>
<td>276,775</td>
<td>290,326</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,345</td>
<td>69,670</td>
<td>71,015</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>598</td>
<td>19,045</td>
<td>19,643</td>
</tr>
<tr>
<td>Limber pine</td>
<td>816</td>
<td>21,682</td>
<td>22,498</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>1,474</td>
<td>46,062</td>
<td>47,536</td>
</tr>
<tr>
<td>White fir</td>
<td>2,865</td>
<td>56,999</td>
<td>59,864</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>6,481</td>
<td>222,886</td>
<td>229,367</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>36,764</td>
<td>922,065</td>
<td>958,829</td>
</tr>
<tr>
<td>Aspen</td>
<td>2,347</td>
<td>74,192</td>
<td>76,539</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>285</td>
<td>20,782</td>
<td>21,067</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>2,632</td>
<td>94,974</td>
<td>97,606</td>
</tr>
<tr>
<td>All species</td>
<td>39,396</td>
<td>1,017,039</td>
<td>1,056,435</td>
</tr>
</tbody>
</table>

Table 20.--Net volume of sawtimber (International ⅛-inch rule) on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>35,831</td>
<td>808,524</td>
<td>844,355</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>44,451</td>
<td>886,774</td>
<td>931,225</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,197</td>
<td>67,467</td>
<td>68,664</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>1,580</td>
<td>63,013</td>
<td>64,593</td>
</tr>
<tr>
<td>Limber pine</td>
<td>2,365</td>
<td>84,077</td>
<td>86,442</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>2,160</td>
<td>78,992</td>
<td>81,152</td>
</tr>
<tr>
<td>White fir</td>
<td>9,404</td>
<td>160,253</td>
<td>169,657</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>22,238</td>
<td>830,323</td>
<td>852,561</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>119,226</td>
<td>2,979,423</td>
<td>3,098,649</td>
</tr>
<tr>
<td>Aspen</td>
<td>2,206</td>
<td>74,258</td>
<td>76,464</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>1,299</td>
<td>41,818</td>
<td>43,117</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>3,505</td>
<td>116,076</td>
<td>119,581</td>
</tr>
<tr>
<td>All species</td>
<td>122,731</td>
<td>3,095,499</td>
<td>3,218,230</td>
</tr>
</tbody>
</table>
Table 21.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
<td>-----------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Thousand board feet, Scribner rule</td>
<td>100,751</td>
<td>2,518,067</td>
<td>2,618,818</td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>30,182</td>
<td>683,209</td>
<td>713,391</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>37,520</td>
<td>748,127</td>
<td>785,647</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,057</td>
<td>57,974</td>
<td>59,031</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>1,320</td>
<td>52,879</td>
<td>54,199</td>
</tr>
<tr>
<td>Limber pine</td>
<td>2,020</td>
<td>72,142</td>
<td>74,162</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>1,874</td>
<td>67,884</td>
<td>69,758</td>
</tr>
<tr>
<td>White fir</td>
<td>7,997</td>
<td>136,161</td>
<td>144,158</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>18,781</td>
<td>699,691</td>
<td>718,472</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>100,751</td>
<td>2,518,067</td>
<td>2,618,818</td>
</tr>
<tr>
<td>Aspen</td>
<td>1,875</td>
<td>63,190</td>
<td>65,065</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>1,155</td>
<td>36,206</td>
<td>37,361</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>3,030</td>
<td>99,396</td>
<td>102,426</td>
</tr>
<tr>
<td>All species</td>
<td>103,781</td>
<td>2,617,463</td>
<td>2,721,244</td>
</tr>
</tbody>
</table>
Table 22.—Net volume of growing stock on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Diameter class (inches at breast height)</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ponderosa pine</td>
<td>26,049</td>
<td>55,876</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>35,671</td>
<td>17,448</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>1,386</td>
<td>2,497</td>
</tr>
<tr>
<td>Limber pine</td>
<td>1,598</td>
<td>831</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>15,824</td>
<td>11,393</td>
</tr>
<tr>
<td>White fir</td>
<td>8,505</td>
<td>10,644</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>11,629</td>
<td>31,202</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>114,934</td>
<td>161,921</td>
</tr>
<tr>
<td>Aspen</td>
<td>24,719</td>
<td>22,232</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>1,443</td>
<td>3,213</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>26,162</td>
<td>25,445</td>
</tr>
<tr>
<td>All species</td>
<td>141,096</td>
<td>187,366</td>
</tr>
</tbody>
</table>
Table 23.—Net volume of sawtimber (International 1-inch rule) on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Diameter class (inches at breast height)</th>
<th>Thousand board feet, International 1-inch rule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.0-</td>
<td>11.0-</td>
</tr>
<tr>
<td></td>
<td>10.9</td>
<td>12.9</td>
</tr>
<tr>
<td></td>
<td>13.0-</td>
<td>14.9</td>
</tr>
<tr>
<td></td>
<td>15.0-</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>17.0-</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>19.0-</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td>21.0-</td>
<td>22.9</td>
</tr>
<tr>
<td></td>
<td>23.0-</td>
<td>24.9</td>
</tr>
<tr>
<td></td>
<td>25.0-</td>
<td>26.9</td>
</tr>
<tr>
<td></td>
<td>27.0-</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>29.0+</td>
<td>All classes</td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>67,791</td>
<td>103,375</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>156,293</td>
<td>117,307</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>23,397</td>
<td>23,526</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>7,755</td>
<td>15,643</td>
</tr>
<tr>
<td>Limber pine</td>
<td>10,983</td>
<td>31,104</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>63,571</td>
<td>9,873</td>
</tr>
<tr>
<td>White fir</td>
<td>31,209</td>
<td>46,948</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>92,224</td>
<td>260,530</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>453,223</td>
<td>608,308</td>
</tr>
<tr>
<td>Aspen</td>
<td>XXXX</td>
<td>40,992</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>XXXX</td>
<td>6,871</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>XXXX</td>
<td>47,863</td>
</tr>
<tr>
<td>All species</td>
<td>453,223</td>
<td>656,171</td>
</tr>
</tbody>
</table>

27
Table 24.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1983

| Species          | 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+ | All  |
|------------------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| Douglas-fir      | 60,237 | 88,906 | 135,135 | 146,521 | 78,906 | 68,811 | 73,076 | 28,141 | 17,442 | 4,381 | 11,835 | 713,391 |
| Ponderosa pine   | 116,979 | 94,585 | 181,703 | 105,435 | 125,617 | 71,898 | 29,414 | 11,048 | 25,268 | 6,451 | 15,249 | 785,647 |
| Lodgepole pine   | 20,634 | 20,064 | 18,333 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Whitebark pine   | 5,933 | 13,435 | 13,411 | 13,724 | 5,441 | -- | -- | -- | -- | -- | -- | -- | 54,199 |
| Limber pine      | 9,561 | 26,644 | 7,003 | 3,773 | 5,773 | 7,560 | 1,766 | -- | -- | 4,156 | 4,438 | 3,488 | 74,162 |
| Subalpine fir     | 55,040 | 8,455 | -- | 2,990 | 3,273 | -- | -- | -- | -- | -- | 69,758 |
| White fir        | 27,402 | 40,354 | 15,097 | 26,494 | 6,992 | 9,331 | 11,420 | -- | -- | 4,125 | 2,943 | 144,158 |
| Engelmann spruce  | 82,003 | 222,050 | 127,693 | 109,717 | 77,241 | 37,784 | 19,874 | 7,708 | 34,402 | -- | -- | 718,472 |
| Total softwoods  | 379,789 | 514,493 | 498,375 | 408,654 | 303,243 | 197,639 | 135,550 | 46,897 | 81,268 | 19,395 | 33,515 | 2,618,818 |
| Aspen            | XXXXX | 35,128 | 17,386 | 12,551 | -- | -- | -- | -- | -- | -- | -- | 65,065 |
| Cottonwood       | XXXXX | 5,512 | -- | 4,358 | 3,838 | -- | -- | -- | -- | -- | 23,653 | 37,361 |
| Total hardwoods  | XXXXX | 40,640 | 17,386 | 16,909 | 3,838 | -- | -- | -- | -- | -- | -- | 102,426 |
| All species      | 379,789 | 555,133 | 515,761 | 425,563 | 307,081 | 197,639 | 135,550 | 46,897 | 81,268 | 19,395 | 57,168 | 2,721,244 |
Table 25.--Net volume of timber on State and privately owned timberland by class of timber, and softwoods and hardwoods in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Class of timber</th>
<th>Softwoods</th>
<th>Hardwoods</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- - - - - - Thousand cubic feet - - - - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawtimber trees:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saw-log portion</td>
<td>593,991</td>
<td>19,387</td>
<td>613,378</td>
</tr>
<tr>
<td>Upper-stem portion</td>
<td>87,984</td>
<td>5,630</td>
<td>93,614</td>
</tr>
<tr>
<td>Total</td>
<td>681,975</td>
<td>25,017</td>
<td>706,992</td>
</tr>
<tr>
<td>Poletimber trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>276,854</td>
<td>72,589</td>
<td>349,443</td>
</tr>
<tr>
<td>All growing stock trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>958,829</td>
<td>97,606</td>
<td>1,056,435</td>
</tr>
<tr>
<td>Sound cull trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,769</td>
<td>--</td>
<td>1,769</td>
</tr>
<tr>
<td>Rotten cull trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,054</td>
<td>1,994</td>
<td>6,048</td>
</tr>
<tr>
<td>Salvageable dead trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>49,933</td>
<td>7,194</td>
<td>57,127</td>
</tr>
<tr>
<td>All timber</td>
<td>1,014,585</td>
<td>106,794</td>
<td>1,121,379</td>
</tr>
</tbody>
</table>

Table 26.--Net volume of growing stock on State and privately owned timberland by forest type and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Species</th>
<th>Douglas-fir</th>
<th>Ponderosa pine</th>
<th>Lodgepole pine</th>
<th>Whitebark pine</th>
<th>Limber pine</th>
<th>Subalpine fir</th>
<th>White fir</th>
<th>Engelmann spruce</th>
<th>Total softwoods</th>
<th>Aspen</th>
<th>Cottonwood</th>
<th>Total hardwoods</th>
<th>All species</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- - - - - - - Thousand cubic feet - - - - - -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>143,980</td>
<td>11,933</td>
<td>4,625</td>
<td>3,325</td>
<td>10,000</td>
<td>1,130</td>
<td>18,806</td>
<td>11,615</td>
<td>205,414</td>
<td>7,076</td>
<td>212,490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>16,774</td>
<td>265,919</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4,922</td>
<td>286,715</td>
<td>14,968</td>
<td>301,683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td></td>
<td>--</td>
<td>66,390</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,528</td>
<td>--</td>
<td>7,066</td>
<td>74,984</td>
<td>696</td>
<td>75,680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limber pine</td>
<td></td>
<td>2,320</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>7,563</td>
<td>--</td>
<td>2,668</td>
<td>--</td>
<td>12,551</td>
<td>3,909</td>
<td>16,460</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce-subalpine fir</td>
<td></td>
<td>19,711</td>
<td>--</td>
<td>14,542</td>
<td>4,615</td>
<td>35,533</td>
<td>--</td>
<td>32,581</td>
<td>--</td>
<td>106,882</td>
<td>--</td>
<td>--</td>
<td>106,882</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>22,215</td>
<td>7,096</td>
<td>--</td>
<td>--</td>
<td>420</td>
<td>--</td>
<td>27,567</td>
<td>--</td>
<td>57,298</td>
<td>7,347</td>
<td>64,645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td></td>
<td>2,086</td>
<td>--</td>
<td>1,143</td>
<td>--</td>
<td>8,690</td>
<td>--</td>
<td>175,695</td>
<td>--</td>
<td>187,524</td>
<td>6,287</td>
<td>193,811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>11,494</td>
<td>5,019</td>
<td>--</td>
<td>633</td>
<td>--</td>
<td>745</td>
<td>5,901</td>
<td>2,410</td>
<td>26,202</td>
<td>36,256</td>
<td>62,458</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td></td>
<td>--</td>
<td>1,259</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,259</td>
<td>--</td>
<td>21,067</td>
<td>21,067</td>
<td>22,326</td>
<td></td>
</tr>
<tr>
<td>All types</td>
<td></td>
<td>218,580</td>
<td>290,326</td>
<td>71,015</td>
<td>19,643</td>
<td>22,498</td>
<td>47,536</td>
<td>59,864</td>
<td>229,367</td>
<td>958,829</td>
<td>76,539</td>
<td>76,539</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 27.-Net volume of sawtimber (International 1-inch rule) on State and privately owned timberland by forest type and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Douglas-fir</th>
<th>Ponderosa pine</th>
<th>Lodgepole pine</th>
<th>Whitebark pine</th>
<th>Limber pine</th>
<th>Subalpine fir</th>
<th>White fir</th>
<th>Engelmann spruce</th>
<th>Total softwoods</th>
<th>Aspen</th>
<th>Cottonwood</th>
<th>Total hardwoods</th>
<th>All species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand board feet, International 1-inch rule</td>
<td>530,386</td>
<td>45,114</td>
<td>1,867</td>
<td>12,576</td>
<td>36,210</td>
<td>2,774</td>
<td>51,485</td>
<td>23,896</td>
<td>704,308</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>704,308</td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>69,280</td>
<td>821,858</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>13,428</td>
<td>--</td>
<td>904,566</td>
<td>23,412</td>
<td>927,978</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>--</td>
<td>--</td>
<td>66,797</td>
<td>--</td>
<td>--</td>
<td>7,099</td>
<td>12,505</td>
<td>86,401</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>86,401</td>
<td>--</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>5,635</td>
<td>--</td>
<td>--</td>
<td>29,236</td>
<td>--</td>
<td>--</td>
<td>11,107</td>
<td>45,978</td>
<td>4,331</td>
<td>--</td>
<td>--</td>
<td>50,309</td>
<td>--</td>
</tr>
<tr>
<td>Limber pine</td>
<td>98,511</td>
<td>52,017</td>
<td>18,880</td>
<td>50,926</td>
<td>--</td>
<td>115,478</td>
<td>335,812</td>
<td>--</td>
<td>--</td>
<td>14,413</td>
<td>196,992</td>
<td>335,812</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td>71,516</td>
<td>32,001</td>
<td>--</td>
<td>2,116</td>
<td>76,946</td>
<td>--</td>
<td>182,579</td>
<td>14,413</td>
<td>--</td>
<td>14,413</td>
<td>196,992</td>
<td>335,812</td>
<td>--</td>
</tr>
<tr>
<td>Spruce</td>
<td>11,251</td>
<td>--</td>
<td>--</td>
<td>16,682</td>
<td>--</td>
<td>691,400</td>
<td>719,333</td>
<td>7,256</td>
<td>--</td>
<td>7,256</td>
<td>726,589</td>
<td>726,589</td>
<td>--</td>
</tr>
<tr>
<td>Aspen</td>
<td>57,776</td>
<td>25,957</td>
<td>--</td>
<td>--</td>
<td>6,295</td>
<td>--</td>
<td>43,117</td>
<td>--</td>
<td>43,117</td>
<td>37,361</td>
<td>102,426</td>
<td>2,721,244</td>
<td>--</td>
</tr>
<tr>
<td>All types</td>
<td>844,355</td>
<td>931,225</td>
<td>68,664</td>
<td>64,593</td>
<td>86,442</td>
<td>81,152</td>
<td>169,657</td>
<td>852,561</td>
<td>3,098,649</td>
<td>76,464</td>
<td>43,117</td>
<td>37,361</td>
<td>2,721,244</td>
</tr>
</tbody>
</table>

Table 28.-Net volume of sawtimber (Scribner rule) on State and privately owned timberland by forest type and species in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Douglas-fir</th>
<th>Ponderosa pine</th>
<th>Lodgepole pine</th>
<th>Whitebark pine</th>
<th>Limber pine</th>
<th>Subalpine fir</th>
<th>White fir</th>
<th>Engelmann spruce</th>
<th>Total softwoods</th>
<th>Aspen</th>
<th>Cottonwood</th>
<th>Total hardwoods</th>
<th>All species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand board feet, Scribner rule</td>
<td>448,740</td>
<td>38,535</td>
<td>1,473</td>
<td>10,668</td>
<td>31,414</td>
<td>2,451</td>
<td>43,225</td>
<td>20,408</td>
<td>596,914</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>596,914</td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>57,097</td>
<td>691,361</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>11,534</td>
<td>--</td>
<td>759,992</td>
<td>19,979</td>
<td>779,971</td>
<td>--</td>
<td>779,971</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>--</td>
<td>--</td>
<td>57,558</td>
<td>--</td>
<td>--</td>
<td>6,004</td>
<td>--</td>
<td>74,058</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>74,058</td>
<td>--</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>4,873</td>
<td>--</td>
<td>--</td>
<td>24,890</td>
<td>--</td>
<td>--</td>
<td>9,252</td>
<td>39,015</td>
<td>3,762</td>
<td>--</td>
<td>--</td>
<td>42,777</td>
<td>--</td>
</tr>
<tr>
<td>White fir</td>
<td>60,542</td>
<td>27,684</td>
<td>--</td>
<td>1,766</td>
<td>--</td>
<td>65,639</td>
<td>--</td>
<td>155,631</td>
<td>12,192</td>
<td>--</td>
<td>--</td>
<td>167,823</td>
<td>--</td>
</tr>
<tr>
<td>Spruce</td>
<td>9,342</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>14,616</td>
<td>--</td>
<td>6,245</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>610,984</td>
<td>--</td>
</tr>
<tr>
<td>Aspen</td>
<td>49,085</td>
<td>22,607</td>
<td>--</td>
<td>--</td>
<td>2,990</td>
<td>14,508</td>
<td>7,975</td>
<td>22,887</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>120,052</td>
<td>--</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>--</td>
<td>5,460</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>5,460</td>
<td>--</td>
<td>37,361</td>
<td>--</td>
<td>--</td>
<td>37,361</td>
<td>42,821</td>
</tr>
<tr>
<td>All types</td>
<td>713,391</td>
<td>785,647</td>
<td>59,031</td>
<td>54,199</td>
<td>74,162</td>
<td>69,758</td>
<td>144,158</td>
<td>718,472</td>
<td>2,618,818</td>
<td>65,065</td>
<td>37,361</td>
<td>102,426</td>
<td>2,721,244</td>
</tr>
</tbody>
</table>
Table 29.--Net annual growth of growing stock on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>139</td>
<td>2,214</td>
<td>2,353</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>250</td>
<td>4,780</td>
<td>5,030</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>97</td>
<td>4,879</td>
<td>4,976</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>7</td>
<td>224</td>
<td>231</td>
</tr>
<tr>
<td>Limber pine</td>
<td>11</td>
<td>235</td>
<td>246</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>37</td>
<td>1,107</td>
<td>1,144</td>
</tr>
<tr>
<td>White fir</td>
<td>-20</td>
<td>374</td>
<td>354</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>122</td>
<td>3,392</td>
<td>3,514</td>
</tr>
<tr>
<td><strong>Total softwoods</strong></td>
<td>643</td>
<td>17,185</td>
<td>17,828</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Thousand board feet, International 1-inch rule</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>712</td>
<td>18,628</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>1,187</td>
<td>24,299</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>27</td>
<td>2,960</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>13</td>
<td>638</td>
</tr>
<tr>
<td>Limber pine</td>
<td>26</td>
<td>908</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>59</td>
<td>1,980</td>
</tr>
<tr>
<td>White fir</td>
<td>-109</td>
<td>-471</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>449</td>
<td>11,295</td>
</tr>
<tr>
<td><strong>Total softwoods</strong></td>
<td>2,364</td>
<td>60,237</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Thousand cubic feet</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen</td>
<td>63</td>
<td>1,572</td>
<td>1,635</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>3</td>
<td>752</td>
<td>755</td>
</tr>
<tr>
<td><strong>Total hardwoods</strong></td>
<td>66</td>
<td>2,324</td>
<td>2,390</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All species</strong></td>
<td>709</td>
<td>19,509</td>
<td>20,218</td>
</tr>
</tbody>
</table>

Table 30.--Net annual growth of sawtimber (International 1-inch rule) on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Thousand board feet, International 1-inch rule</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>712</td>
<td>18,628</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>1,187</td>
<td>24,299</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>27</td>
<td>2,960</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>13</td>
<td>638</td>
</tr>
<tr>
<td>Limber pine</td>
<td>26</td>
<td>908</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>59</td>
<td>1,980</td>
</tr>
<tr>
<td>White fir</td>
<td>-109</td>
<td>-471</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>449</td>
<td>11,295</td>
</tr>
<tr>
<td><strong>Total softwoods</strong></td>
<td>2,364</td>
<td>60,237</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Thousand cubic feet</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen</td>
<td>291</td>
<td>9,298</td>
<td>9,589</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>16</td>
<td>621</td>
<td>637</td>
</tr>
<tr>
<td><strong>Total hardwoods</strong></td>
<td>307</td>
<td>9,919</td>
<td>10,226</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All species</strong></td>
<td>2,671</td>
<td>67,792</td>
<td>70,463</td>
</tr>
</tbody>
</table>
Table 31.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>595</td>
<td>15,255</td>
<td>15,850</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>988</td>
<td>19,243</td>
<td>20,231</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>28</td>
<td>2,444</td>
<td>2,472</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>11</td>
<td>548</td>
<td>559</td>
</tr>
<tr>
<td>Limber pine</td>
<td>21</td>
<td>739</td>
<td>760</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>49</td>
<td>1,563</td>
<td>1,612</td>
</tr>
<tr>
<td>White fir</td>
<td>-96</td>
<td>-338</td>
<td>-434</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>362</td>
<td>8,668</td>
<td>9,030</td>
</tr>
<tr>
<td><strong>Total softwoods</strong></td>
<td>1,958</td>
<td>48,122</td>
<td>50,080</td>
</tr>
<tr>
<td>Aspen</td>
<td>251</td>
<td>8,000</td>
<td>8,251</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>14</td>
<td>563</td>
<td>577</td>
</tr>
<tr>
<td><strong>Total hardwoods</strong></td>
<td>265</td>
<td>8,563</td>
<td>8,828</td>
</tr>
<tr>
<td><strong>All species</strong></td>
<td>2,223</td>
<td>56,685</td>
<td>58,908</td>
</tr>
</tbody>
</table>
Table 32.--Net annual growth of growing stock on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Diameter class (inches at breast height)</th>
<th>Thousand cubic feet</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>602</td>
<td>584</td>
<td>-147</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>1,075</td>
<td>1,450</td>
<td>851</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>4,002</td>
<td>682</td>
<td>189</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>61</td>
<td>41</td>
<td>36</td>
</tr>
<tr>
<td>Limber pine</td>
<td>64</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>428</td>
<td>268</td>
<td>379</td>
</tr>
<tr>
<td>White fir</td>
<td>233</td>
<td>261</td>
<td>-127</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>667</td>
<td>635</td>
<td>611</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>7,132</td>
<td>3,936</td>
<td>1,824</td>
</tr>
<tr>
<td>Aspen</td>
<td>1,234</td>
<td>488</td>
<td>-19</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>326</td>
<td>68</td>
<td>229</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>1,560</td>
<td>556</td>
<td>210</td>
</tr>
<tr>
<td>All species</td>
<td>8,692</td>
<td>4,492</td>
<td>2,034</td>
</tr>
</tbody>
</table>
Table 33.—Net annual growth of sawtimber (International 1-inch rule) on State and privately owned timberland by species and diameter class in Colorado's Southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>9.0-10.9</th>
<th>11.0-12.9</th>
<th>13.0-14.9</th>
<th>15.0-16.9</th>
<th>17.0-18.9</th>
<th>19.0-20.9</th>
<th>21.0-22.9</th>
<th>23.0-24.9</th>
<th>25.0-26.9</th>
<th>27.0-28.9</th>
<th>29.0+</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>10,802</td>
<td>1,680</td>
<td>2,329</td>
<td>2,421</td>
<td>1,022</td>
<td>478</td>
<td>-402</td>
<td>137</td>
<td>96</td>
<td>17</td>
<td>48</td>
<td>18,628</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>14,803</td>
<td>3,220</td>
<td>2,899</td>
<td>27</td>
<td>1,656</td>
<td>930</td>
<td>308</td>
<td>90</td>
<td>178</td>
<td>81</td>
<td>107</td>
<td>24,299</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>2,362</td>
<td>406</td>
<td>192</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>28</td>
<td>48</td>
<td>17</td>
<td>17</td>
<td>2,960</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>120</td>
<td>238</td>
<td>127</td>
<td>103</td>
<td>27</td>
<td>23</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>638</td>
</tr>
<tr>
<td>Limber pine</td>
<td>173</td>
<td>388</td>
<td>123</td>
<td>31</td>
<td>40</td>
<td>58</td>
<td>2</td>
<td>--</td>
<td>28</td>
<td>48</td>
<td>17</td>
<td>908</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>1,603</td>
<td>270</td>
<td>--</td>
<td>76</td>
<td>31</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,980</td>
</tr>
<tr>
<td>White fir</td>
<td>-623</td>
<td>-124</td>
<td>-594</td>
<td>408</td>
<td>112</td>
<td>115</td>
<td>165</td>
<td>--</td>
<td>--</td>
<td>45</td>
<td>25</td>
<td>-471</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>2,100</td>
<td>4,519</td>
<td>1,617</td>
<td>1,159</td>
<td>974</td>
<td>485</td>
<td>218</td>
<td>79</td>
<td>144</td>
<td>--</td>
<td>--</td>
<td>11,295</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>31,340</td>
<td>10,597</td>
<td>6,693</td>
<td>4,225</td>
<td>3,862</td>
<td>2,089</td>
<td>291</td>
<td>306</td>
<td>446</td>
<td>191</td>
<td>197</td>
<td>60,237</td>
</tr>
</tbody>
</table>

Aspen

Cottonwood

| Total hardwoods      | XXXXX    | 9,169     | 439       | 211       | 53        | --        | --        | --        | --        | --        | 354   | 10,226      |

All species

|                | 31,340   | 19,766    | 7,132     | 4,436     | 3,915     | 2,089     | 291       | 306       | 446       | 191       | 551   | 70,463      |
Table 34.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>9.0-10.9</th>
<th>11.0-12.9</th>
<th>13.0-14.9</th>
<th>15.0-16.9</th>
<th>17.0-18.9</th>
<th>19.0-20.9</th>
<th>21.0-22.9</th>
<th>23.0-24.9</th>
<th>25.0-26.9</th>
<th>27.0-28.9</th>
<th>29.0+</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>9,600</td>
<td>1,315</td>
<td>1,831</td>
<td>1,904</td>
<td>804</td>
<td>412</td>
<td>-297</td>
<td>135</td>
<td>88</td>
<td>15</td>
<td>43</td>
<td>15,850</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>11,702</td>
<td>2,880</td>
<td>2,596</td>
<td>55</td>
<td>1,483</td>
<td>832</td>
<td>275</td>
<td>81</td>
<td>159</td>
<td>72</td>
<td>96</td>
<td>20,231</td>
</tr>
<tr>
<td>Lodgepole pine</td>
<td>1,975</td>
<td>337</td>
<td>160</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,472</td>
</tr>
<tr>
<td>Whitebark pine</td>
<td>128</td>
<td>197</td>
<td>105</td>
<td>85</td>
<td>25</td>
<td>19</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>559</td>
</tr>
<tr>
<td>Limber pine</td>
<td>144</td>
<td>322</td>
<td>101</td>
<td>25</td>
<td>33</td>
<td>48</td>
<td>2</td>
<td>--</td>
<td>25</td>
<td>45</td>
<td>15</td>
<td>760</td>
</tr>
<tr>
<td>Subalpine fir</td>
<td>1,316</td>
<td>212</td>
<td>--</td>
<td>60</td>
<td>24</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,612</td>
</tr>
<tr>
<td>White fir</td>
<td>-486</td>
<td>-147</td>
<td>-520</td>
<td>319</td>
<td>87</td>
<td>90</td>
<td>158</td>
<td>--</td>
<td>--</td>
<td>43</td>
<td>22</td>
<td>-434</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>1,858</td>
<td>3,465</td>
<td>1,235</td>
<td>885</td>
<td>766</td>
<td>401</td>
<td>214</td>
<td>77</td>
<td>129</td>
<td>--</td>
<td>--</td>
<td>9,030</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>26,237</td>
<td>8,581</td>
<td>5,508</td>
<td>3,333</td>
<td>3,222</td>
<td>1,802</td>
<td>352</td>
<td>293</td>
<td>401</td>
<td>175</td>
<td>176</td>
<td>50,080</td>
</tr>
<tr>
<td>Aspen</td>
<td>XXXXX</td>
<td>7,749</td>
<td>376</td>
<td>126</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>8,251</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>XXXXX</td>
<td>151</td>
<td>--</td>
<td>62</td>
<td>49</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>315</td>
<td>577</td>
<td></td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>XXXXX</td>
<td>7,900</td>
<td>376</td>
<td>188</td>
<td>49</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>315</td>
<td>8,828</td>
</tr>
<tr>
<td>All species</td>
<td>26,237</td>
<td>16,481</td>
<td>5,884</td>
<td>3,521</td>
<td>3,271</td>
<td>1,802</td>
<td>352</td>
<td>293</td>
<td>401</td>
<td>175</td>
<td>491</td>
<td>58,908</td>
</tr>
</tbody>
</table>
Table 35.—Annual mortality of growing stock on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>43</td>
<td>1,000</td>
<td>1,043</td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>25</td>
<td>622</td>
<td>647</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td>78</td>
<td>913</td>
<td>991</td>
<td></td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>727</td>
<td>727</td>
<td></td>
</tr>
<tr>
<td>Total softwoods</td>
<td>146</td>
<td>3,262</td>
<td>3,408</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>594</td>
<td>594</td>
<td></td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>--</td>
<td>594</td>
<td>594</td>
<td></td>
</tr>
<tr>
<td>All species</td>
<td>146</td>
<td>3,856</td>
<td>4,002</td>
<td></td>
</tr>
</tbody>
</table>

Table 36.—Annual mortality of sawtimber (International 1-inch rule) on State and privately owned timberland by ownership class and species in Colorado’s southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thousand board feet, International 1-inch rule</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>76</td>
<td>2,820</td>
<td>2,896</td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>100</td>
<td>1,932</td>
<td>2,032</td>
<td></td>
</tr>
<tr>
<td>White fir</td>
<td>262</td>
<td>2,923</td>
<td>3,185</td>
<td></td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>3,511</td>
<td>3,511</td>
<td></td>
</tr>
<tr>
<td>Total softwoods</td>
<td>438</td>
<td>11,186</td>
<td>11,624</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>1,463</td>
<td>1,463</td>
<td></td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>--</td>
<td>1,463</td>
<td>1,463</td>
<td></td>
</tr>
<tr>
<td>All species</td>
<td>438</td>
<td>12,649</td>
<td>13,087</td>
<td></td>
</tr>
</tbody>
</table>
Table 37.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - Thousand board feet, Scribner rule - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>68</td>
<td>2,476</td>
<td>2,544</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>88</td>
<td>1,696</td>
<td>1,784</td>
</tr>
<tr>
<td>White fir</td>
<td>225</td>
<td>2,547</td>
<td>2,772</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>2,911</td>
<td>2,911</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>381</td>
<td>9,630</td>
<td>10,011</td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>1,256</td>
<td>1,256</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>--</td>
<td>1,256</td>
<td>1,256</td>
</tr>
<tr>
<td>All species</td>
<td>381</td>
<td>10,886</td>
<td>11,267</td>
</tr>
</tbody>
</table>

Table 38.--Annual mortality of growing stock on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.9</td>
<td>8.9</td>
<td>10.9</td>
<td>12.9</td>
<td>14.9</td>
<td>16.9</td>
<td>18.9</td>
<td>20.9</td>
<td>22.9</td>
<td>24.9</td>
<td>26.9</td>
<td>28.9</td>
<td>29.0+</td>
<td>All classes</td>
</tr>
<tr>
<td>- - - - Thousand cubic feet - - -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>--</td>
<td>245</td>
<td>543</td>
<td>71</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>184</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,043</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>40</td>
<td>105</td>
<td>252</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>250</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>647</td>
</tr>
<tr>
<td>White fir</td>
<td>178</td>
<td>72</td>
<td>314</td>
<td>246</td>
<td>181</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>991</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>380</td>
<td>190</td>
<td>157</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>727</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>218</td>
<td>422</td>
<td>1,019</td>
<td>697</td>
<td>371</td>
<td>407</td>
<td>--</td>
<td>--</td>
<td>184</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3,408</td>
</tr>
<tr>
<td>Aspen</td>
<td>XXXXX</td>
<td>--</td>
<td>286</td>
<td>308</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>594</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>XXXXX</td>
<td>--</td>
<td>286</td>
<td>308</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>594</td>
</tr>
<tr>
<td>All species</td>
<td>218</td>
<td>422</td>
<td>1,395</td>
<td>1,005</td>
<td>371</td>
<td>407</td>
<td>--</td>
<td>--</td>
<td>184</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4,002</td>
</tr>
</tbody>
</table>
Table 39.--Annual mortality of sawtimber (International 1-inch rule) on State and privately owned timberland by species and diameter class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>9.0-10.9</th>
<th>11.0-12.9</th>
<th>13.0-14.9</th>
<th>15.0-16.9</th>
<th>17.0-18.9</th>
<th>19.0-20.9</th>
<th>21.0-22.9</th>
<th>23.0-24.9</th>
<th>25.0-26.9</th>
<th>27.0-28.9</th>
<th>29.0+</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand board feet, International 1-inch rule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>1,628</td>
<td>271</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>997</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,896</td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>753</td>
<td>--</td>
<td>1,279</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,032</td>
</tr>
<tr>
<td>White fir</td>
<td>1,302</td>
<td>1,103</td>
<td>780</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3,185</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>1,809</td>
<td>935</td>
<td>767</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3,511</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>3,683</td>
<td>3,183</td>
<td>1,715</td>
<td>2,046</td>
<td>--</td>
<td>997</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>11,624</td>
<td></td>
</tr>
</tbody>
</table>

Aspen

<table>
<thead>
<tr>
<th>Species</th>
<th>9.0-10.9</th>
<th>11.0-12.9</th>
<th>13.0-14.9</th>
<th>15.0-16.9</th>
<th>17.0-18.9</th>
<th>19.0-20.9</th>
<th>21.0-22.9</th>
<th>23.0-24.9</th>
<th>25.0-26.9</th>
<th>27.0-28.9</th>
<th>29.0+</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand board feet, Scribner rule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>1,448</td>
<td>242</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>854</td>
<td>--</td>
<td>--</td>
<td>2,544</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>671</td>
<td>--</td>
<td>--</td>
<td>1,113</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,784</td>
</tr>
<tr>
<td>White fir</td>
<td>1,158</td>
<td>946</td>
<td>668</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,772</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>1,514</td>
<td>769</td>
<td>628</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,911</td>
</tr>
<tr>
<td>Total softwoods</td>
<td>3,277</td>
<td>2,702</td>
<td>1,437</td>
<td>1,741</td>
<td>--</td>
<td>854</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>10,011</td>
<td></td>
</tr>
</tbody>
</table>

Aspen

<table>
<thead>
<tr>
<th>Species</th>
<th>9.0-10.9</th>
<th>11.0-12.9</th>
<th>13.0-14.9</th>
<th>15.0-16.9</th>
<th>17.0-18.9</th>
<th>19.0-20.9</th>
<th>21.0-22.9</th>
<th>23.0-24.9</th>
<th>25.0-26.9</th>
<th>27.0-28.9</th>
<th>29.0+</th>
<th>All classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand board feet, Scribner rule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>XXXXX</td>
<td>1,256</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,256</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>XXXXX</td>
<td>1,256</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,256</td>
</tr>
<tr>
<td>All species</td>
<td>3,277</td>
<td>3,958</td>
<td>1,437</td>
<td>1,741</td>
<td>--</td>
<td>854</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>11,267</td>
<td></td>
</tr>
</tbody>
</table>
### Table 41.--Annual mortality of growing stock on State and privately owned timberland by cause of death and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Cause of death</th>
<th>Insects</th>
<th>Disease</th>
<th>Fire</th>
<th>Animal</th>
<th>Weather</th>
<th>Suppression</th>
<th>Logging</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>-</td>
<td>133</td>
<td>-</td>
<td>-</td>
<td>910</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,043</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>395</td>
<td>252</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>647</td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>387</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>308</td>
<td>57</td>
<td>58</td>
<td>181</td>
<td>991</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td></td>
<td>-</td>
<td>157</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>570</td>
<td>727</td>
</tr>
<tr>
<td>Total softwoods</td>
<td></td>
<td>782</td>
<td>542</td>
<td>-</td>
<td>1,218</td>
<td>57</td>
<td>58</td>
<td>751</td>
<td>3,408</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>-</td>
<td>171</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>423</td>
<td>594</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td></td>
<td>-</td>
<td>171</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>423</td>
<td>594</td>
</tr>
<tr>
<td>All species</td>
<td></td>
<td>782</td>
<td>713</td>
<td>-</td>
<td>1,218</td>
<td>57</td>
<td>58</td>
<td>1,174</td>
<td>4,002</td>
<td></td>
</tr>
</tbody>
</table>

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 42.--Annual mortality of sawtimber (International 1-inch rule) on State and privately owned timberland by cause of death and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Cause of death</th>
<th>Insects</th>
<th>Disease</th>
<th>Fire</th>
<th>Animal</th>
<th>Weather</th>
<th>Suppression</th>
<th>Logging</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td></td>
<td>-</td>
<td>272</td>
<td>-</td>
<td>-</td>
<td>2,624</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,896</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td></td>
<td>1,279</td>
<td>753</td>
<td>-</td>
<td>-</td>
<td>1,103</td>
<td>-</td>
<td>-</td>
<td>780</td>
<td>3,185</td>
</tr>
<tr>
<td>White fir</td>
<td></td>
<td>1,302</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>767</td>
<td>-</td>
<td>-</td>
<td>2,744</td>
<td>3,511</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td></td>
<td>-</td>
<td>887</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,611</td>
</tr>
<tr>
<td>Total softwoods</td>
<td></td>
<td>2,581</td>
<td>1,792</td>
<td>-</td>
<td>3,727</td>
<td>-</td>
<td>-</td>
<td>3,524</td>
<td>11,624</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td></td>
<td>-</td>
<td>838</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>625</td>
<td>1,463</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td></td>
<td>-</td>
<td>838</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>625</td>
<td>1,463</td>
</tr>
<tr>
<td>All species</td>
<td></td>
<td>2,581</td>
<td>2,630</td>
<td>-</td>
<td>3,727</td>
<td>-</td>
<td>-</td>
<td>4,149</td>
<td>13,087</td>
<td></td>
</tr>
</tbody>
</table>

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 43.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by cause of death and species in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Insects</th>
<th>Disease</th>
<th>Fire</th>
<th>Animal</th>
<th>Weather</th>
<th>Suppression</th>
<th>Logging</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>--</td>
<td>242</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,302</td>
<td>--</td>
<td>--</td>
<td>2,544</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>1,113</td>
<td>671</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,784</td>
</tr>
<tr>
<td>White fir</td>
<td>1,159</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>946</td>
<td>--</td>
<td>--</td>
<td>2,772</td>
</tr>
<tr>
<td>Engelmann spruce</td>
<td>--</td>
<td>627</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,284</td>
<td>2,911</td>
<td></td>
</tr>
<tr>
<td>Total softwoods</td>
<td>2,272</td>
<td>1,540</td>
<td>--</td>
<td>--</td>
<td>3,248</td>
<td>--</td>
<td>2,951</td>
<td>10,011</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>717</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>539</td>
<td>1,256</td>
</tr>
<tr>
<td>Total hardwoods</td>
<td>--</td>
<td>717</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>539</td>
<td>1,256</td>
</tr>
<tr>
<td>All species</td>
<td>2,272</td>
<td>2,257</td>
<td>--</td>
<td>--</td>
<td>3,248</td>
<td>--</td>
<td>3,490</td>
<td>11,267</td>
<td></td>
</tr>
</tbody>
</table>

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 44.--Area of State and privately owned woodland by ownership class and forest type in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Ownership class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Acres</td>
</tr>
<tr>
<td>Pinyon-juniper</td>
<td>60,471</td>
</tr>
<tr>
<td>Juniper</td>
<td>18,231</td>
</tr>
<tr>
<td>Total woodland softwoods</td>
<td>78,702</td>
</tr>
<tr>
<td>Oak</td>
<td>1,824</td>
</tr>
<tr>
<td>Other west hardwoods</td>
<td>229</td>
</tr>
<tr>
<td>Total woodland hardwoods</td>
<td>2,053</td>
</tr>
<tr>
<td>All types</td>
<td>80,755</td>
</tr>
</tbody>
</table>
Table 45.--Net volume of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1983

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>9</td>
<td>111</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td>26,166</td>
<td>301,383</td>
<td>327,549</td>
<td></td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td>764</td>
<td>9,463</td>
<td>10,227</td>
<td></td>
</tr>
<tr>
<td>All species</td>
<td>26,939</td>
<td>310,957</td>
<td>337,896</td>
<td></td>
</tr>
</tbody>
</table>

Table 46.--Net annual growth of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>(1)</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td>367</td>
<td>4,268</td>
<td>4,635</td>
<td></td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td>-13</td>
<td>-78</td>
<td>-91</td>
<td></td>
</tr>
<tr>
<td>All species</td>
<td>354</td>
<td>4,192</td>
<td>4,546</td>
<td></td>
</tr>
</tbody>
</table>

1Less than 500 cubic feet.

Table 47.--Annual mortality of State and privately owned woodland by ownership class and species in Colorado’s southern Front Range, 1982

<table>
<thead>
<tr>
<th>Species</th>
<th>Ownership class</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Nonindustrial private</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Douglas-fir</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Aspen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Pinyon/juniper</td>
<td>2</td>
<td>69</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Woodland hardwoods</td>
<td>35</td>
<td>341</td>
<td>376</td>
<td></td>
</tr>
<tr>
<td>All species</td>
<td>37</td>
<td>410</td>
<td>447</td>
<td></td>
</tr>
</tbody>
</table>
### Table 48. -- Area of State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>County</th>
<th>State Acres</th>
<th>Nonindustrial private Acres</th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffee</td>
<td>3,234</td>
<td>32,883</td>
<td>36,117</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>189,272</td>
<td>189,272</td>
</tr>
<tr>
<td>Custer</td>
<td>3,316</td>
<td>76,721</td>
<td>80,037</td>
</tr>
<tr>
<td>Fremont</td>
<td>10,513</td>
<td>75,596</td>
<td>86,109</td>
</tr>
<tr>
<td>Huerfano</td>
<td>5,441</td>
<td>100,586</td>
<td>106,027</td>
</tr>
<tr>
<td>Las Animas</td>
<td>15,684</td>
<td>368,057</td>
<td>383,741</td>
</tr>
<tr>
<td>Pueblo</td>
<td>4,623</td>
<td>62,536</td>
<td>67,159</td>
</tr>
<tr>
<td>Total</td>
<td>42,811</td>
<td>905,651</td>
<td>948,462</td>
</tr>
</tbody>
</table>

### Table 49. -- Net volume of growing stock on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>County</th>
<th>State Thousand cubic feet</th>
<th>Nonindustrial private Thousand cubic feet</th>
<th>Total Thousand cubic feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffee</td>
<td>4,114</td>
<td>38,360</td>
<td>42,474</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>309,373</td>
<td>309,373</td>
</tr>
<tr>
<td>Custer</td>
<td>3,776</td>
<td>87,736</td>
<td>91,512</td>
</tr>
<tr>
<td>Fremont</td>
<td>10,358</td>
<td>66,451</td>
<td>76,809</td>
</tr>
<tr>
<td>Huerfano</td>
<td>5,791</td>
<td>103,255</td>
<td>109,046</td>
</tr>
<tr>
<td>Las Animas</td>
<td>12,862</td>
<td>360,051</td>
<td>372,913</td>
</tr>
<tr>
<td>Pueblo</td>
<td>2,495</td>
<td>51,813</td>
<td>54,308</td>
</tr>
<tr>
<td>Total</td>
<td>39,396</td>
<td>1,017,039</td>
<td>1,056,435</td>
</tr>
</tbody>
</table>

### Table 50. -- Net volume of sawtimber (International 1-inch rule) on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>County</th>
<th>State Thousand board feet, International 1-inch rule</th>
<th>Nonindustrial private Thousand board feet, International 1-inch rule</th>
<th>Total Thousand board feet, International 1-inch rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffee</td>
<td>13,428</td>
<td>118,396</td>
<td>131,824</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>892,199</td>
<td>892,199</td>
</tr>
<tr>
<td>Custer</td>
<td>12,133</td>
<td>274,745</td>
<td>286,878</td>
</tr>
<tr>
<td>Fremont</td>
<td>28,434</td>
<td>185,743</td>
<td>214,177</td>
</tr>
<tr>
<td>Huerfano</td>
<td>17,316</td>
<td>318,423</td>
<td>335,739</td>
</tr>
<tr>
<td>Las Animas</td>
<td>41,925</td>
<td>1,142,518</td>
<td>1,184,443</td>
</tr>
<tr>
<td>Pueblo</td>
<td>9,495</td>
<td>163,475</td>
<td>172,970</td>
</tr>
<tr>
<td>Total</td>
<td>122,731</td>
<td>3,095,499</td>
<td>3,218,230</td>
</tr>
</tbody>
</table>
Table 51.--Net volume of timber (timber rule) on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand board feet, Scribner rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>11,328</td>
<td>99,993</td>
<td>111,321</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>756,854</td>
<td>756,854</td>
</tr>
<tr>
<td>Custer</td>
<td>10,251</td>
<td>232,179</td>
<td>242,430</td>
</tr>
<tr>
<td>Fremont</td>
<td>24,156</td>
<td>157,659</td>
<td>181,815</td>
</tr>
<tr>
<td>Huerfano</td>
<td>14,632</td>
<td>269,070</td>
<td>283,702</td>
</tr>
<tr>
<td>Las Animas</td>
<td>35,322</td>
<td>963,141</td>
<td>998,463</td>
</tr>
<tr>
<td>Pueblo</td>
<td>8,092</td>
<td>138,567</td>
<td>146,659</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>103,781</td>
<td>2,617,463</td>
<td>2,721,244</td>
</tr>
</tbody>
</table>

Table 52.--Net annual growth of growing stock on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>73</td>
<td>778</td>
<td>851</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>6,504</td>
<td>6,504</td>
</tr>
<tr>
<td>Custer</td>
<td>74</td>
<td>1,680</td>
<td>1,754</td>
</tr>
<tr>
<td>Fremont</td>
<td>186</td>
<td>1,307</td>
<td>1,493</td>
</tr>
<tr>
<td>Huerfano</td>
<td>141</td>
<td>2,315</td>
<td>2,456</td>
</tr>
<tr>
<td>Las Animas</td>
<td>193</td>
<td>5,875</td>
<td>6,068</td>
</tr>
<tr>
<td>Pueblo</td>
<td>42</td>
<td>1,050</td>
<td>1,092</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>709</td>
<td>19,509</td>
<td>20,218</td>
</tr>
</tbody>
</table>

Table 53.--Net annual growth of sawtimber (International 1-inch rule) on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand board feet, International 1-inch rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>544</td>
<td>4,572</td>
<td>5,116</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>18,209</td>
<td>18,209</td>
</tr>
<tr>
<td>Custer</td>
<td>362</td>
<td>9,611</td>
<td>9,973</td>
</tr>
<tr>
<td>Fremont</td>
<td>282</td>
<td>2,087</td>
<td>2,369</td>
</tr>
<tr>
<td>Huerfano</td>
<td>630</td>
<td>11,743</td>
<td>12,373</td>
</tr>
<tr>
<td>Las Animas</td>
<td>579</td>
<td>15,860</td>
<td>16,439</td>
</tr>
<tr>
<td>Pueblo</td>
<td>274</td>
<td>5,710</td>
<td>5,984</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,671</td>
<td>67,792</td>
<td>70,463</td>
</tr>
</tbody>
</table>
Table 54.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in Colorado’s southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Thousand board feet, Scribner rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>451</td>
<td>3,802</td>
<td>4,253</td>
</tr>
<tr>
<td>Chaffee</td>
<td></td>
<td>303</td>
<td>8,037</td>
<td>8,340</td>
</tr>
<tr>
<td>Costilla</td>
<td></td>
<td>232</td>
<td>1,749</td>
<td>1,981</td>
</tr>
<tr>
<td>Custer</td>
<td></td>
<td>512</td>
<td>9,602</td>
<td>10,114</td>
</tr>
<tr>
<td>Fremont</td>
<td></td>
<td>504</td>
<td>13,603</td>
<td>14,107</td>
</tr>
<tr>
<td>Huerfano</td>
<td></td>
<td>221</td>
<td>4,713</td>
<td>4,934</td>
</tr>
<tr>
<td>Las Animas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pueblo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,223</td>
<td>56,685</td>
<td>58,908</td>
</tr>
</tbody>
</table>

Table 55.--Annual mortality of growing stock on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td></td>
<td>12</td>
<td>110</td>
<td>122</td>
</tr>
<tr>
<td>Costilla</td>
<td></td>
<td></td>
<td>1,875</td>
<td>1,875</td>
</tr>
<tr>
<td>Custer</td>
<td></td>
<td>13</td>
<td>339</td>
<td>352</td>
</tr>
<tr>
<td>Fremont</td>
<td></td>
<td>68</td>
<td>411</td>
<td>479</td>
</tr>
<tr>
<td>Huerfano</td>
<td></td>
<td>16</td>
<td>288</td>
<td>304</td>
</tr>
<tr>
<td>Las Animas</td>
<td></td>
<td>23</td>
<td>637</td>
<td>660</td>
</tr>
<tr>
<td>Pueblo</td>
<td></td>
<td>14</td>
<td>196</td>
<td>210</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>146</td>
<td>3,856</td>
<td>4,002</td>
</tr>
</tbody>
</table>

Table 56.--Annual mortality of sawtimber (International ⅛-inch rule) on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>Ownership class</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Thousand board feet, International ⅛-inch rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td></td>
<td>33</td>
<td>304</td>
<td>337</td>
</tr>
<tr>
<td>Costilla</td>
<td></td>
<td></td>
<td>6,952</td>
<td>6,952</td>
</tr>
<tr>
<td>Custer</td>
<td></td>
<td>30</td>
<td>859</td>
<td>889</td>
</tr>
<tr>
<td>Fremont</td>
<td></td>
<td>261</td>
<td>1,626</td>
<td>1,887</td>
</tr>
<tr>
<td>Huerfano</td>
<td></td>
<td>44</td>
<td>759</td>
<td>803</td>
</tr>
<tr>
<td>Las Animas</td>
<td></td>
<td>57</td>
<td>1,756</td>
<td>1,813</td>
</tr>
<tr>
<td>Pueblo</td>
<td></td>
<td>13</td>
<td>393</td>
<td>406</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>438</td>
<td>12,649</td>
<td>13,087</td>
</tr>
</tbody>
</table>
Table 57.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand board feet, Scribner rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>29</td>
<td>266</td>
<td>295</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>5,887</td>
<td>5,887</td>
</tr>
<tr>
<td>Custer</td>
<td>26</td>
<td>754</td>
<td>780</td>
</tr>
<tr>
<td>Fremont</td>
<td>225</td>
<td>1,406</td>
<td>1,631</td>
</tr>
<tr>
<td>Huerfano</td>
<td>39</td>
<td>667</td>
<td>706</td>
</tr>
<tr>
<td>Las Animas</td>
<td>51</td>
<td>1,563</td>
<td>1,614</td>
</tr>
<tr>
<td>Pueblo</td>
<td>11</td>
<td>343</td>
<td>354</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>381</strong></td>
<td><strong>10,886</strong></td>
<td><strong>11,267</strong></td>
</tr>
</tbody>
</table>

Table 58.--Area of State and privately owned woodland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>County</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>1,118</td>
<td>18,851</td>
<td>19,969</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>82,241</td>
<td>82,241</td>
</tr>
<tr>
<td>Custer</td>
<td>501</td>
<td>16,122</td>
<td>16,623</td>
</tr>
<tr>
<td>Fremont</td>
<td>14,384</td>
<td>112,298</td>
<td>126,682</td>
</tr>
<tr>
<td>Huerfano</td>
<td>7,988</td>
<td>131,176</td>
<td>139,164</td>
</tr>
<tr>
<td>Las Animas</td>
<td>48,316</td>
<td>564,746</td>
<td>613,062</td>
</tr>
<tr>
<td>Pueblo</td>
<td>8,448</td>
<td>66,128</td>
<td>74,576</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80,755</strong></td>
<td><strong>991,562</strong></td>
<td><strong>1,072,317</strong></td>
</tr>
</tbody>
</table>

Table 59.--Net volume of State and privately owned woodland by county and ownership class in Colorado's southern Front Range, 1983

<table>
<thead>
<tr>
<th>County</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand cubic feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaffee</td>
<td>560</td>
<td>7,115</td>
<td>7,675</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>21,549</td>
<td>21,549</td>
</tr>
<tr>
<td>Custer</td>
<td>91</td>
<td>4,969</td>
<td>5,080</td>
</tr>
<tr>
<td>Fremont</td>
<td>6,518</td>
<td>50,343</td>
<td>56,861</td>
</tr>
<tr>
<td>Huerfano</td>
<td>3,461</td>
<td>53,681</td>
<td>57,142</td>
</tr>
<tr>
<td>Las Animas</td>
<td>13,366</td>
<td>149,947</td>
<td>163,313</td>
</tr>
<tr>
<td>Pueblo</td>
<td>2,943</td>
<td>23,333</td>
<td>26,276</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26,939</strong></td>
<td><strong>310,957</strong></td>
<td><strong>337,896</strong></td>
</tr>
</tbody>
</table>
Table 60.--Net annual growth of State and privately owned woodland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffee</td>
<td>9</td>
<td>99</td>
<td>108</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>273</td>
<td>273</td>
</tr>
<tr>
<td>Custer</td>
<td>1</td>
<td>79</td>
<td>80</td>
</tr>
<tr>
<td>Fremont</td>
<td>67</td>
<td>455</td>
<td>522</td>
</tr>
<tr>
<td>Huerfano</td>
<td>52</td>
<td>818</td>
<td>870</td>
</tr>
<tr>
<td>Las Animas</td>
<td>103</td>
<td>2,125</td>
<td>2,308</td>
</tr>
<tr>
<td>Pueblo</td>
<td>42</td>
<td>343</td>
<td>385</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>354</td>
<td>4,192</td>
<td>4,546</td>
</tr>
</tbody>
</table>

Table 61.--Annual mortality of State and privately owned woodland by county and ownership class in Colorado's southern Front Range, 1982

<table>
<thead>
<tr>
<th>County</th>
<th>State</th>
<th>Nonindustrial private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffee</td>
<td>(¹)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Costilla</td>
<td>--</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Custer</td>
<td>(¹)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fremont</td>
<td>34</td>
<td>332</td>
<td>366</td>
</tr>
<tr>
<td>Huerfano</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Las Animas</td>
<td>1</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Pueblo</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>410</td>
<td>447</td>
</tr>
</tbody>
</table>

¹Less than 500 cubic feet.

Presents land area, timberland area, woodland area, timber inventory, and growth and mortality data for seven counties in Colorado’s southern Front Range. Information and statistical tables are based on Forest Survey data collected from 1982 and 1983 and cover State and private resources.

KEYWORDS: timberland, woodland, growing-stock volume, net annual growth, round-wood harvest, fuelwood harvest
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.

The Intermountain Research Station territory includes Montana, Idaho, Utah, Nevada, and western Wyoming. Eighty-five percent of the lands in the Station area, about 231 million acres, are classified as forest or rangeland. They include grasslands, deserts, shrublands, alpine areas, and forests. They provide fiber for forest industries, minerals and fossil fuels for energy and industrial development, water for domestic and industrial consumption, forage for livestock and wildlife, and recreation opportunities for millions of visitors.

Several Station units conduct research in additional western States, or have missions that are national or international in scope. Station laboratories are located in:

Boise, Idaho

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)

USDA policy prohibits discrimination because of race, color, national origin, sex, age, religion, or handicapping condition. Any person who believes he or she has been discriminated against in any USDA-related activity should immediately contact the Secretary of Agriculture, Washington, DC 20250.