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SOUTH CAROLINA'S TIMBER

by

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HIGHLIGHTS

Total timber volume in South Carolina is increasing but size and quality is decreasing. The total inventory volume in hardwood trees increased 16 percent, but growth of softwood timber barely replaced the cut and mortality over the past 22 years. The volume of softwood growing stock, timber now or prospectively suitable for saw logs, dropped 6 percent, and the volume of large sawtimber, trees 15.0 inches and larger, dropped 30 percent. Hardwood growing stock increased 8 percent but large sawtimber dropped 16 percent.

While timber size and quality has decreased, the need for softwoods and the larger and better-quality hardwoods has increased. The spectacular rise in pulpwood production has brought about a big increase in the use of softwoods, and the substantial increase in hardwood lumber and veneer bolt production has increased the demand for high-quality hardwoods. At the same time, the significant drop in use of wood for fuel has reduced the opportunities to utilize the mounting volume of poor-quality timber.

In the light of past trends, the outlook for industries dependent upon large, high-quality timber is bleak. If past trends continue, and this appears quite likely, further decreases in size and quality of timber may be expected. Current and prospective growth will not replace the current cut of large-size timber.

For industries that are able to shift their use to smaller and lower-quality timber, the outlook is much brighter. The supply and growth of both small softwoods and hardwoods is increasing rapidly.

Because of forest land ownership, however, this increase in small timber has added very little to the supply readily available to new industries. A large part of this surplus growth is on land owned by forest industries, where an attempt is being made to build up the growing stock and the productivity of the land. On forest land owned by farmers and others not connected with forest industries, overcutting and reduction in productivity continues.

The large amount of unused timber-growing capacity, especially on land not owned by forest industries, offers numerous opportunities to make additional supplies of timber available for new industries and the expansion of existing industries. Productivity can be substantially increased on at least half of the State's 12 million acres of forest land. Over five million acres, including unproductive forest land and idle and abandoned cropland, are potentially available for planting to pine. Productivity on an additional 3 million acres of medium to well stocked forest land can be increased by releasing the desirable trees from the competition of undesirable culls and shrubs.

How much and what kind of timber will be available to forest industries in South Carolina depends very largely upon action taken by farmers and other miscellaneous private owners not connected with forest industries to increase productivity of the forest land they own. These more than 100,000 individual owners with forest holdings averaging less than 100 acres own 77 percent of the total forest area in the State and supply 80 percent of the current softwood cut. Also, four-fifths of the land that would profit from treatment is in this type of ownership.

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In June of 1958, the third survey of South Carolina's timber resources was completed. The first survey was finished in 1936 and the second in 1947.

Comparison between the recent and earlier surveys reveals important changes and trends in the State's timber supply. Some have been

desirable and reflect substantial improvement in forest practices during the 22-year interval. But many of the changes taking place are not desirable. While the need for the larger and better-quality timber has been increasing, this kind of timber has been decreasing.

TRENDS IN TIMBER CUT

Softwood Cut Increasing

The 22-year trend shows that forest industries were using, on the average, 13 percent more softwood timber in 1957 than in 1936 (fig. 1). In contrast to softwoods, the trend line in hardwood timber cut shows a 17-percent decline. Based on this line, the proportion of the cut coming from softwoods rose from 62 percent in 1936 to 69 percent in 1957.

Heavier Cut From Large Timber

Timber large enough and of good enough quality for saw logs continues to be South Carolina's most important timber resource (table A). The current trend level of softwood lumber production is up 11 percent and the trend of hardwood lumber production is up 19 percent since 1936 (fig. 1). Saw logs make up a slightly smaller proportion of the total softwood timber cut now than in 1936, but the proportion of the hardwood cut going to sawmills has increased.

The increase in use of hardwood timber for

veneer has also heightened the need for large, high-quality timber. In 1957, timber cut for veneer bolts made up 26 percent of the total volume of hardwood timber cut, compared to only 14 percent in the late thirties. The volume of timber cut for softwood veneer has declined, but the amount of softwood timber cut for this purpose has never been large.

More Timber Cut for Pulpwood

The increase in the use of softwoods reflects mainly the sharp upward trend in the use of yellow-pine pulpwood during the past 20 years. Pine pulpwood production has jumped from 364,400 cords in 1937, when the first large pulpmill in South Carolina began operating, to 1,342,100 cords in 1959 (table B). Pulpwood in 1957 accounted for 41 percent of the total softwood cut.

While hardwoods are used more and more for pulpwood, they are still not nearly as important a source of pulpwood as softwoods. By 1959, hardwoods climbed to 22 percent of the total pulpwood cut.

Less Timber Cut for Fuel

While the demand for high-quality timber has gone up, opportunities to utilize the smaller, lower-grade timber, especially the low-quality hardwoods, have declined. In 1936, fuelwood use, both hardwood and softwood, ranked second only to saw logs, but wood as a fuel has declined rapidly during the past 20 years. Just during the period between 1940 and 1950, the number of dwellings in South Carolina using wood for heating and cooking dropped 26 percent. Wood for curing tobacco, formerly an important use, diminished rapidly as oil replaced wood.

For softwoods, this decline in the use of

wood for fuel has been more than offset by the increase in the use of pine for pulpwood. But for hardwoods, the increased cut for other products did not offset the decline in use of fuelwood. Thus, the drop in use of hardwoods for all products reflects almost entirely the dwindling use of hardwoods for fuel.

As a result of these shifts in timber use, the need for the kind of timber most in demand in 1936 — all sizes of softwoods and the larger hardwoods — is even greater now than 22 years ago. At the same time, with the decline in use of wood for fuel, the opportunity to use the mounting surplus of small, low-quality hardwoods is also declining.

Figure 1.--Forest industries are using more softwoods, mainly because of the greater use for pulpwood. While the use of hardwoods for all products is decreasing, use of hardwoods for both saw logs and pulpwood is increasing.

Table A. --Estimated lumber production in
South Carolina, 1936 to 1956 ^{1/}
(In million board feet)

Year	Softwoods	Hardwoods	Total
1936	610.2	169.8	780.0
1937	572.6	167.4	740.0
1938	577.1	182.9	760.0
1939	643.5	200.5	844.0
1940	682.3	190.2	872.5
1941	879.9	231.0	1,110.9
1942	886.3	196.9	1,083.2
1943	800.3	200.9	1,001.2
1944	708.0	194.1	902.1
1945	550.6	176.1	726.7
1946	748.5	245.0	993.5
1947	685.7	185.4	871.1
1948	--	--	--
1949	636.7	167.4	804.1
1950	719.8	231.6	951.4
1951	678.0	234.8	912.8
1952	722.0	236.0	958.0
1953	705.0	216.0	921.0
1954	626.0	190.9	816.9
1955	621.0	201.0	822.0
1956	628.0	199.0	827.0

^{1/} Source: U. S. Bureau of the Census.

Table B. --Round pulpwood production in
South Carolina, 1936 to 1958
(In thousand cords)

Year	Pine	Hardwood	Total
1936	35.8	12.8	48.6
1937	364.4	29.3	393.7
1938	362.7	21.6	384.3
1939	533.6	17.0	550.6
1940	602.8	67.5	670.3
1941	744.0	55.5	799.5
1942	863.0	44.2	907.2
1943	954.0	32.6	986.6
1944	1,010.0	43.5	1,053.5
1945	823.8	53.7	877.5
1946	909.2	112.8	1,022.0
1947	862.6	85.7	948.3
1948	1,000.1	108.4	1,108.5
1949	913.5	98.7	1,012.2
1950	1,068.6	113.8	1,182.4
1951	1,105.2	145.8	1,251.0
1952	1,132.5	143.2	1,275.7
1953	1,273.4	172.8	1,446.2
1954	1,160.5	170.4	1,330.9
1955	1,268.7	244.6	1,513.3
1956	1,582.9	223.7	1,806.6
1957	1,384.7	270.3	1,655.0
1958	1,346.3	246.4	1,592.7
1959	1,342.1	367.8	1,709.9

More Complete Use of Timber Cut

In recent years, substantial progress has been made toward more complete utilization of the timber cut. In 1957, 45 percent of the total volume of wood left over from the manufacture of primary forest products was used (fig. 2), mainly for fuel and fiber. While the volume of unused logging and plant residue is substantial (102 million cubic feet), opportunities to add to the timber in short supply by using more of this material are quite limited. Over 40 percent of the logging and plant residue comes from hardwood timber. More than half of this consists of hardwood tops left in the woods following saw-log and veneer-bolt operations. The remainder is plant byproducts consisting mainly of slabs, edgings, shavings, and sawdust produced during the manufacture of hardwood lumber.

This leftover material does not provide a substitute for pine or timber cut from large sawtimber trees. Veneer cores produced by the hardwood veneer industry represent a somewhat higher grade of plant residue, but the volume produced is small, and for the most part it is already being used.

Currently, 42 percent of the byproduct from hardwood plants is being used, mostly for fuelwood. A small amount, 31,297 cords, was used for pulpwood in 1959. This accounted for about 8 percent of the total production of hardwood pulpwood.

Little Usable Softwood Left in Woods

Softwoods, being in greater demand, are utilized much more closely than hardwoods and thus offer limited opportunities for more complete utilization. Very little merchantable softwood timber is left in the woods following logging. Sawtimber trees usually are utilized to a small top diameter, frequently well above the merchantable top recognized by the Forest Survey. Also, a large share of the topwood not utilized for saw logs becomes pulpwood, either during combined saw log-pulpwood operations or during a followup pulpwood operation. In 1957, only about 8 percent (23 million cubic feet) of the softwood timber cut qualifying as growing stock was left in the woods; this is in contrast to 18 percent of the hardwood timber cut. Most of this material left

in the woods consists of exceedingly limby tops too widely scattered and too low in quality to justify utilization — especially in view of the currently good supply of small standing roundwood.

The use of softwoods, large and small, and the use of large, high-quality hardwoods has increased during the past 22 years.

Some Increase in Use of Plant Residues Possible

The prospects for utilizing plant residue from softwood timber are somewhat better. But, like logging residue, the usable amount of softwood residue produced is comparatively small, and almost half of what is produced is already being used.

In 1957, the manufacture of softwood timber produced 66 million cubic feet of plant residues (24 percent of the total cut). Of this volume, 35 million cubic feet, more than half, is fine material — sawdust and shavings, with little potential use except for fuel. Fourteen million cubic feet are now being used, mainly for fuel.

Of the remaining 31 million cubic feet of coarse material, mainly slabs and edgings, 17 million cubic feet is already being used for fuel and pulpwood. Use of slabs and edgings for pulpwood is sharply upward; much of this material formerly used for fuel is now being chipped. In 1957, pulpwood chips equivalent to 76,700 cords of roundwood were produced from slabs and edgings. In 1959, the volume of chips jumped to 191,794 cords — 12.5 percent of total pine pulpwood production, almost half the coarse residue available from plants that year.

Opportunities to utilize the remaining are limited by the problem of collecting the slabs and edgings from hundreds of small sawmills scattered throughout the countryside. Most of these mills are too small to justify the cost of installing chippers or debarkers.

Figure 2.--Almost half of the plant residue produced is now being used. Much of the unused material has little commercial value at the present time or, at best, provides a substitute only for timber already in good supply.

The use of plant residue is complicated by the problem of collecting this material from hundreds of small sawmills scattered throughout the countryside.

TRENDS IN THE TIMBER SUPPLY

Decrease in Timber Size and Quality

During the 22 years between the first and third Survey the total volume of timber in South Carolina has increased, but a larger share of the volume is in smaller and poorer quality trees. The total net volume in hardwood trees increased 16 percent, but the growth of softwood timber barely replaced the cut and mortality (table C). The volume of softwood growing stock, timber now or prospectively suitable for saw logs, dropped 6 percent, and the volume of large sawtimber, trees 15.0 inches and larger, dropped 30 percent.

Hardwood timber has also decreased in size and quality. In contrast to the 16-percent increase in total inventory volume, hardwood timber good enough to make saw logs now or prospectively increased only 8 percent and the volume of large sawtimber dropped 16 percent.

Changes in timber volume during the past 11 years indicate a speed-up in this shift to smaller and lower quality timber. Reduction in the volume of large sawtimber, both softwoods and hardwoods, was more severe between 1947 and 1958 than between 1936 and 1947. Moreover, this decrease in the availability of large sawtimber coupled with the increased demand for softwood timber inten-

sified the cutting on small sawtimber. As a result, the volume of small softwood sawtimber cut exceeded growth during the past 11-year period. This is in distinct contrast to the surplus of growth over cut during the preceding 11-year period.

The growth and cut relationship in 1957, though much less indicative of the long-term trend than net change in volume between Surveys, provided little or no basis for anticipating an early reversal in this long-term trend towards smaller and lower quality timber. While growth was sufficient to replace the cut of poletimber and small sawtimber, both softwood and hardwood large sawtimber were still being overcut (table D).

Table C. --Percent change in timber volume
between 1936 and 1958, by type of timber
and species group

Type of timber	Species group	1936-1947	1947-1958	1936-1958
Large sawtimber	Softwoods	-15	-18	-30
	Hardwoods	-6	-11	-16
Small sawtimber	Softwoods	+7	-12	-6
	Hardwoods	+19	-4	+14
Growing stock	Softwoods	+3	-8	-6
	Hardwoods	+10	-1	+8
All timber	Softwoods	+4	-4	-1
	Hardwoods	+8	+8	+16

Table D. --Net volume of timber growth and cut, by type of timber and species group, 1957

Type of timber	Timber growth and cut	Softwoods	Hardwoods	Total
----- Million cubic feet -----				
Large sawtimber	Growth	67.5	58.7	126.2
	Cut	87.2	69.9	157.1
	Net change	-19.7	-11.2	-30.9
Small sawtimber	Growth	128.2	33.8	162.0
	Cut	129.1	28.9	158.0
	Net change	-0.9	+4.9	+4.0
Growing stock	Growth	280.9	123.2	404.1
	Cut	277.4	115.3	392.7
	Net change	+3.5	+7.9	+11.4
All timber	Growth	296.5	140.8	437.3
	Cut	288.5	121.5	410.0
	Net change	+8.0	+19.3	+27.3

Severe Overcutting in Southern Coastal Plain

State-wide comparisons conceal significant differences in timber supply trends in various parts of the State. During the past 22 years, cutting in excess of growth has been especially severe in the Southern Coastal Plain. Here softwood inventory volume dropped 24 percent, growing stock 29 percent, and large softwood sawtimber 49 percent (table E). Somewhat less intensive cutting in relation to growth in recent years has resulted in some leveling off of this downward trend. The reduction in volume has not been so great during the past 11 years as between 1936 and 1947.

In contrast to the Southern Coastal Plain, timber cutting in relation to growth has been much less intensive in the Piedmont. Here total softwood volume increased 27 percent, and cutting in excess of growth reduced the volume of large sawtimber by only 6 percent.

In the Piedmont, hardwood volume increased by nearly two-thirds and even the growth of large hardwood sawtimber was sufficient to replace the cut.

Timber trends in the Northern Coastal Plain follow closely the trends for the entire State.

Softwood Growth Increases

Changes in timber volume have markedly affected the amount and kind of timber that can be cut without exceeding growth. Since inventory volume has dropped, current growth will sustain a smaller cut from large, high-quality timber.

But growth will replace a substantially larger cut from smaller and lower quality softwood timber. Between 1936 and 1957, softwood growth increased 38 percent. Part of this increase can be attributed to faster diameter growth, but most of it reflects the rapid buildup in number of small trees. In the 22-year period, the number of trees in the 2-inch d.b.h. class jumped from 663 million in 1936 to 1,326 million in 1958, an annual increase of over 30 million trees. This growing backlog of saplings has the effect of increasing the contribution of small trees to total growth (ingrowth). The number of softwood trees reaching 5.0 inches annually has increased from 31 million in 1936 to 54 million in 1957.

The increase in both average growth rate and number of small trees reflects improvement in fire protection. In the late thirties and early forties, uncontrolled fire swept through about a million acres of forest land annually, killing countless pine seedlings and saplings and reducing the growth of the larger trees that survived. Area burned dropped sharply after 1945, when fire protection was extended to the entire State. During the 3-year period, 1956-1958, the annual burn averaged only 51,000 acres.

The reversion of abandoned cropland to forest also contributed substantially to the increase in small pine timber. Between 1936 and 1958, the reversion of cropland to forest, usually to pine, exceeded land clearing by 1.3 million acres.

The low initial density of these old-field pine stands and the heavy and frequent cutting of the stands may have contributed also to the increase in diameter growth.

Table E. --Percent change in timber volume between 1936 and 1958, by type of timber, species group, and Survey Unit

Type of timber	Species group	State	Southern Coastal Plain	Northern Coastal Plain	Piedmont
Large sawtimber	Softwoods	-30	-49	-24	-6
	Hardwoods	-16	-25	-18	+7
Small sawtimber	Softwoods	-6	-19	-7	+10
	Hardwoods	+14	+5	+3	+60
Growing stock	Softwoods	-6	-29	-6	+21
	Hardwoods	+8	-4	0	+50
All timber	Softwoods	-1	-24	-1	+27
	Hardwoods	+16	-3	+11	+64

Decrease in Hardwood Growth

In contrast to softwoods, hardwood trees are growing slower now than in 1936. As a result, net volume of growth has dropped slightly, the increase in volume having failed to compensate for the decline in diameter growth.

This reduction in diameter growth reflects the increase in hardwoods on upland sites not suited to growing hardwoods, and the increasing density of hardwood stands, especially the younger stands, which receive little or no cutting. Increase in density not only intensifies the competition among the trees

in the main canopy, but increases the number of overtopped trees in the understory. These overtopped hardwoods, unlike pine, which die soon after they are crowded out of the main canopy, survive and grow very slowly for many years. Thus, if the less thrifty trees are not removed, the natural development of hardwood stands will result in a gradual decrease in the average diameter growth rate.

This drop in hardwood growth has not seriously affected the timber supply outlook. The reduction was moderate and confined almost entirely to small timber. In 1957, net growth of this kind of timber was still sufficient to replace the cut and mortality.

Large trees for high-quality lumber and construction timber are becoming more difficult to find.

Since 1936, the supply of small pine timber has increased substantially.

Figure 3.--Total volume of timber is increasing but the average size is decreasing. Neither the current nor the projected stand will provide the growth needed to replace current cut and mortality.

THE TIMBER SUPPLY OUTLOOK

On Basis of Past Trends

A continuation of past trends in timber volume has far-reaching implications to forest industries, especially to industries dependent upon large timber. Prospective growth based on a continuation of the past average annual change in timber volume by diameter class would sustain a substantial increase in the total cut, but it would not sustain the current size-class distribution of even the present cut. Total softwood volume, of course, would remain about the same, but even assuming no change in current diameter growth and mortality rates, a continuation of the buildup in small timber would result in increasing total softwood growth from 296 million cubic feet in 1958 to 359 million cubic feet in 1988 — an increase of 21 percent. This is an increase of 32,000 cords a year. If past trends continue, this increase in growth will permit increasing the cut at a substantially faster rate than it has increased over the past 22 years.

While total cut could be increased, much less growth would be available to replace the cut of large timber. The volume of softwood timber in trees 19.0 inches and larger would not sustain the average annual change for 30 years; the volume of this size timber, even with the gradual reduction in annual cut implied by a constant annual change, would be depleted before 1988 (fig. 3). The volume of timber 15.0 inches and larger would be greatly reduced. This size timber would contribute only 10 percent of the total growth in 30 years, compared to 24 percent in 1958 and 35 percent in 1936. By comparison, in 1957 a third of the total softwood cut came from large sawtimber.

A continuation of past trends in hardwood volume would result in an increase in both inventory volume and growth. But like softwoods, growth available to replace the cut of large timber would be greatly reduced. The growth of timber 15.0 inches and larger would increase, but even by 1988 growth would still not be sufficient to replace even the current cut, especially in view of the trend in timber quality.

The present timber supply will not sustain the size class distribution of the current cut; moreover, the possibility of making adjustments in the cut that would eventually permit timber volume to build up enough to

sustain the current cut appears highly remote. Even if self-imposed regulation of the cut by hundreds of forest industries were feasible, the drastic adjustments required would be highly disruptive to the State's forest economy. For softwoods, the total cut would have to be reduced initially by 9 percent to permit the required buildup to take place in 30 years. The cut of timber 15.0 inches and larger would have to be reduced by more than 50 percent.

Adjustments in the hardwood cut would have to be even greater. At first, very little hardwood timber 15.0 inches and larger could be cut. And for hardwood timber 17.0 inches and larger, current net annual growth is less than the average annual increase needed to build up the inventory volume to the required level in 30 years.

Clearly, then, adjustments in the cut offer little hope of preventing forest industries from being forced to rely more and more on small, low-grade timber for their raw material.

Prospective Changes in Timber Cut

Although it is highly unlikely that past trends will continue unchanged, these trends and their long-term implications provide a valuable guide to the future. They reveal opportunities to reinforce desirable trends and reverse or minimize the undesirable. Many forces now at work will influence future trends in both timber cut and growth. A projection of the past 22-year trend in softwood timber cut in South Carolina to 1988 is only 10 percent greater than the present cut. If the timber is available, the chances are good that softwood timber cut will increase much faster than this. The short-run outlook is for a substantial increase in timber cut for pulpwood. Recent and planned expansion of pulping facilities in and near South Carolina could add more than a million cords to the annual cut of pine. The annual increase in growth will replace an annual increase in cut of about 32,000 cords. Serious overcutting and reduction in growth could consequently occur unless this increase in cut is spread out over a long period.

Continued rise in demand for pine is also highly probable in the light of the long-term outlook. A recent estimate by the U. S.

Bureau of Census indicates that the nation's population will increase 26 percent between 1959 and 1975. Because of the rise in standard of living, the need for raw materials has risen even faster than the increase in population. With the cutting out of the old-growth timber in the West, moreover, the U. S. as a whole will look more and more to states like South Carolina, with its large area of forest land, rapid growth rates, and nearby markets, to supply an increasingly large share of the timber needs. Thus, the cut of softwood timber may be expected to rise at least as fast as the growth, making the prospect of a growth surplus and a buildup in inventory volume highly unlikely in the foreseeable future.

Hardwood timber cut has dropped since 1936. In the light of the upward trend in hardwoods used for lumber, pulpwood, and veneer, the chances are good that this downward trend will be reversed. The hardwood cut will probably increase but perhaps not so fast as the cut of pine.

Prospective Changes in Timber Growth

Between 1936 and 1957, total softwood growth increased 38 percent, mainly in the small trees. Continued increase in growth depends upon at least maintaining the present inventory volume, continued increase in diameter growth, and continued increase in number of small trees. Although diameter growth increased 10 percent between 1936 and 1957, there is little basis for anticipating a significant change in diameter growth in the future; increasing density of the stands may be expected to depress diameter growth, but this probably will be largely offset by more frequent thinnings and stand improvement cuts.

Trends in growth are very closely associated with the number of seedlings becoming established each year. Since 1936, the establishment of new pine seedlings or regeneration has more than kept pace with the increase in growth. The number of 2-inch softwoods increased at an annual rate of 30,120,000 trees over the 22-year period between surveys.

Continuation of this upward trend in natural pine regeneration is not likely, since conditions favorable to the natural regeneration of pine are not as prevalent now

as they were in the late thirties and early forties. Uncontrolled fire, which annually killed millions of seedlings, also temporarily created conditions favorable to natural pine regeneration. With the improvements in fire protection, thousands of acres which formerly were kept poorly stocked by repeated fire became stocked with pine. However, areas that did not readily restock with pine reverted to low-quality hardwoods. Also, thousands of acres of pine stands, when cut over, did not come back to pine but reverted to hardwoods. Thus, in spite of the widespread invasion of pine on over a million acres of old cropland, the reversion of pine to hardwood type offset the increase in pine type by a substantial margin. The area of pine and oak-pine type dropped 17 percent, while the area of hardwood type increased 89 percent. In 1936, pine and oak-pine types covered 73 percent of the forest area, compared to 54 percent in 1958 (fig. 4).

Currently, partly because of better fire protection, conditions on very little of the forest land cut over annually favor natural pine regeneration. Because of this tendency for forest land to be taken over by shrubs and hardwoods very soon after cutting, the area of forest land with conditions favoring natural pine regeneration is small; in 1958, only 47,000 acres of recently cut upland sites had both an adequate pine seed source and a favorable seedbed.

The 1.4 million acres of idle or abandoned cropland represent most of the land favorable to the natural regeneration of pine. The trend in this kind of land, however, is down. The area of abandoned farmland about doubled between 1936 and 1947, but dropped 10 percent between 1947 and 1958.

In view of the growing population and the greater need for cropland, pasture, and land for building sites, roads, reservoirs, and rights-of-way, the area of abandoned farmland available for timber production will probably decrease. While the land devoted to urban and other related uses is still small, the area used for these purposes increased 37 percent between 1947 and 1958.

Without action to offset this rising trend in conditions unfavorable to natural pine regeneration, a continuation of the past upward trend in pine growth is unlikely.

Total hardwood growth may be expected to more than keep pace with the total cut, but in the absence of a substantial increase

Figure 4. --The invasion of hardwoods into pine stands has more than offset the reversion of idle agricultural land to old field pine.

in stand improvement measures, the quality of hardwood timber will continue to decline.

Mortality and Its Effect on Outlook

The volume in trees that die each year offsets a substantial part of the gross annual growth; in 1957 this mortality reduced gross softwood growth by 26 percent and hardwood growth by 45 percent. A certain amount of mortality is, of course, part of natural development in unmanaged timber stands. As trees increase in size, some must die to make room for growth and development of those

that remain. For example, according to stocking standards used by the Forest Survey, only 115 well-spaced 12-inch trees are needed to stock an acre, compared to 400 6-inch trees. Hence, mortality during the time it takes these trees to grow from 6 to 12 inches can remove up to 285 trees without reducing the optimum stocking.

A study of growth and cut in relation to net change in inventory volume over the past 22 years provides no evidence of abnormally high mortality rates in South Carolina as a whole. Volume losses due to mortality averaged 2.2 percent of the inventory volume for softwoods and 2.5 percent for

Uncontrolled fires in the late 30's and early 40's kept thousands of acres of pine land poorly stocked.

With improved fire protection, small pines rapidly filled in the many forest openings created by frequent burning.

hardwoods. A mortality rate as high as 3.7 percent for softwoods, if distributed evenly, would not have reduced the stocking. However, in some areas, notably in the Piedmont, where littleleaf disease is especially prevalent, concentrated losses have virtually eliminated shortleaf sawtimber. Except in shortleaf pine stands, the state-wide mortality rate does not appear to be excessive for the State's predominantly unmanaged pine stands.

The hardwood mortality rate was slightly in excess of the normal rate of 2.2 percent. This probably reflects the effect of overstocking in many hardwood stands, and not a reduction in hardwood stocking.

While the present state-wide mortality rate is not excessive for unmanaged stands, it is high for managed stands. Much of this mortality can be anticipated if trees are

utilized in thinnings and improvement cuts before they die, and in fact this premortality salvage of littleleaf trees has minimized losses from the disease. In future, much of the loss from littleleaf can be eliminated by early harvest of shortleaf on sites especially susceptible to the disease, followed by conversion to less susceptible species such as loblolly pine.

The total volume in pine trees that die throughout the State each year amounts to more than a million cords. Much of the dead timber is so widely scattered throughout the stands that very little of it is salvaged in the course of normal harvest operations. The utilization of more of this mortality through salvage of dying or recently killed timber could add several hundred thousand cords to the annual net growth.

The threat of abnormal or catastrophic mortality by such agents as fire, insects, disease and wind is ever present and must be taken into account in evaluating the growth outlook. Vigilance is needed to detect incipient flare-ups so that prompt action can prevent or minimize loss and safeguard investment. The recently discovered preva-

ence of *Fomes annosus* root rot in many thinned slash pine plantations is an example. Similarly, sign of a buildup in pine bark beetle should be watched and action taken to prevent large-scale tree killing. Also, where timber loss cannot be anticipated or prevented, such as in the case of damage from wind or fire, prompt salvage operations can reduce the impact.

Reseeding of thousands of acres of idle cropland to pine also reinforced the supply of small pine timber.

With the reversal of the upward trend in idle cropland and the increase in low-quality hardwoods, the outlook for natural pine regeneration is not nearly so favorable now as it was 10 years ago.

MANY WAYS TO IMPROVE TIMBER SUPPLY OUTLOOK

In the light of past and prospective trends there appears to be room for some expansion of industries able to use small, low-quality timber, but industries dependent upon large, high-quality timber will find this type of material increasingly hard to locate. Opportunities for expansion will be highly dependent upon maintaining or improving the growth-cut balance, which will mean, on one hand, keeping the annual increase in cut below the annual increase in growth, and, on the other hand, taking advantage of the many opportunities to increase the productivity of forest land.

Forests cover 12 million acres, or 62 percent of the total land area in the State. Practically all this area will grow high-quality timber, but on over half of the commercial forest land timber-growing capacity is being wasted (table F). In 1958, the State had 8.5 million acres of upland sites capable of growing pine. This does not include the 200,000 acres of the best upland sites now growing hardwoods, which can grow either high-quality pine or hardwoods. Practically all of this upland area grew pine at one time or another in the past, but now only 3.0 million acres is well stocked with pine. Another 432,100 acres is medium- to well-stocked with pine, and conditions favor full stocking without treatment in a comparatively short time.

About half of the 3.4 million acres of the sites best suited to growing hardwoods, mainly lowland hardwood sites, is well stocked.

Opportunities to Improve Current Stands

South Carolina has 2.8 million acres of forest land medium- to well-stocked with pine or hardwood growing stock, but the outlook for further improvement in stocking is very poor because of the presence of such unwanted material as shrubs, culls, and low-quality hardwoods.

On 1.3 million acres where pine stocking is between 40 and 70 percent, hardwoods and shrubs control 20 percent or more of the area. These stands have a high potential productivity; average stocking of pine 1.0 inch and larger is 47 percent. But hardwoods 1.0 inch and larger control 34 percent of the

Table F. --Commercial forest area by major type of action needed to increase productivity, 1958

Type of action needed	Commercial forest area	
	Thousand acres	Percent
No action needed:		
Pine stands	3,443.8	28.8
Hardwood stands	1,679.3	14.1
Total	5,123.1	42.9
Stand improvement:		
Pine stands	1,293.1	10.9
Hardwood stands	1,518.3	12.7
Total	2,811.4	23.6
Regeneration to pine:		
Without site preparation	458.8	3.8
With site preparation	3,541.6	29.7
Total	4,000.4	33.5
All commercial forest area	11,934.9	100.0

area. The desirable hardwood stocking averages only 7 percent; the remaining hardwoods are either culls or species which, as a rule, do not develop into high-quality timber on these upland sites.

This undesirable timber makes up 2.7 cords out of the total average volume of 10.6 cords per acre (table G). Of the material that should be removed, only 269 board feet per acre qualify as sawtimber.

Currently, landowners will find it difficult to sell very much of this type of material; usually they will have to deaden these unwanted trees.¹ Some idea of the size and character of the stand improvement job is shown by the number and size of undesirable trees:

Size of trees (Inches)	Undesirable trees per acre (Number)
11.0 plus	5
3.0 to 11.0	83
1.0 to 3.0	303

¹ Lotti, Thomas. Growing loblolly pine in the South Atlantic states. U. S. Dept. Agr. Farmers' Bul. 2097, 33 pp., illus. 1956.

Table G. --Net volume per acre, by size and type of timber, of medium-to-well-stocked pine stands needing stand improvement, 1958

Size of timber (Inches d. b. h.)	Softwoods		Preferred hardwoods		Culls and other hardwoods		Total	
	Cords	Bd. ft.	Cords	Bd. ft.	Cords	Bd. ft.	Cords	Bd. ft.
15.0 +	1.7	757	0.4	169	0.6	130	2.7	1,056
11.0 +	3.7	1,453	.7	251	1.3	269	5.7	1,973
9.0 +	4.9	1,833	.8	251	1.7	269	7.4	2,353
5.0 +	6.8	--	1.1	--	2.7	--	10.6	--

Many hardwood stands even on the best hardwood sites also need stand improvement. On nearly half of the 3.4 million acres of lowland forest area, the area best suited to growing hardwoods, culls control 20 percent or more of the area. Cull timber in these stands averages 3.6 cords per acre, or 27 percent of the total volume. Moreover, the least desirable species contain a large share of the growing stock volume (table H). Thus, in many instances stand productivity would be improved not only by removing the culls, but also by removing some of the poorer-quality trees that barely qualify as growing stock, especially where they are interfering with the development of better-quality trees.

Opportunities to Establish New Stands

An increase in planting and in measures to improve conditions favoring natural regeneration will be needed to offset the generally unfavorable outlook for natural pine regeneration. Until recently, planting played a minor role in forest regeneration. Between 1950 and 1955, the average distribution of 28 million pine seedlings a year accounted for only 10 percent of the number of seedlings that must be established annually to sustain

current softwood growth. Since 1955, planting has increased rapidly; for instance, during the 1958-59 season 166 million pine seedlings were set out.

South Carolina has plenty of land on which pine could be established. On 4 million acres of upland sites capable of growing pine, both current and prospective growth of either pine or good-quality hardwoods is very low. Pine stocking is less than 40 percent, seed source is inadequate, and shrubs, culls, and other worthless hardwoods control 20 percent or more of the area (table I).

The 1.4 million acres of idle and abandoned farmland represents still another important potential source of land available to grow pine. Not all of this land may be available for timber production; some may be returned to crops, some may be converted to improved pasture. But in the past, a large share of this land was not put to other uses and was allowed to revert to forest. This area should be planted to assure prompt, full stocking of desirable trees.

Altogether, land potentially available for planting to pine adds up to 5.4 million acres. About a third of this area could be planted without preparation; the remainder requires site preparation.

Table H. --Net volume per acre, by size and type of timber, of lowland hardwood sites with 20 percent or more of the area controlled by culls, 1958

Size of timber (Inches d. b. h.)	Preferred species		Other hardwoods		Culls		Total	
	Cords	Bd. ft.	Cords	Bd. ft.	Cords	Bd. ft.	Cords	Bd. ft.
15.0 +	1.4	618	2.0	814	1.3	--	4.7	1,432
11.0 +	2.7	1,048	3.7	1,322	2.2	--	8.6	2,370
5.0 +	3.9	1,094	5.6	1,322	3.6	--	13.1	2,416

How fast this pine land should be planted depends on future trends in both timber needs and conditions favoring natural pine regeneration. Each year, cutting adds over 200,000 acres to the planting job. In light of mounting demands for wood and probable deterioration in conditions favoring natural pine regeneration, planting should be maintained at a high level until the next Forest Survey, planned in 7 to 10 years. At that time, the need for future planting can be evaluated in accordance with trends.

Table I. --Land area available for planting to pine, by type of land, 1958

Type of land	Area
	<u>Thousand acres</u>
Without site preparation:	
Commercial forest area, 1957	420.7
Annual increase due to cutting, 1957	38.1
Idle and abandoned cropland, 1958	1,423.4
Total, 1958	1,882.2
With site preparation:	
Commercial forest area, 1957	3,358.4
Annual increase due to cutting, 1957	183.2
Total, 1958	3,541.6
All types, 1958	5,423.8

Over most of South Carolina, forests dominate the landscape. Available for the production of timber is 12 million acres or 62 percent of the total land area in the state.

About half a million acres of forest land is unproductive because of sparse stocking. But much more serious is the 50 percent of the State's forest land where low-quality trees and shrubs prevent growth of worthwhile timber.

Only 43 percent of the forest land is well stocked--3.4 million acres with pine and 1.7 million acres with hardwoods.

Productivity of 2.8 million acres can be improved by removing the low-grade material. But 3.5 million acres has very little potential. Complete removal of the present low-grade material will usually be needed prior to measures to regenerate the stands.

Large numbers of pine seedlings will be needed to restock the areas that do not readily seed in to pine.

By far the largest share (3.5 million acres) of the land in need of regeneration requires first of all the removal of unwanted vegetation. Planting will usually be required following site preparation.

Prompt planting of abandoned farm-
land will very often mean the difference
between incomplete stocking with low-
quality trees and prompt full stocking
with high-quality timber.

OWNERS OF SMALL TRACTS CONTROL FUTURE TRENDS

The volume and kind of timber available to forest industries in the future will depend to a very large extent upon the action individual private forest landowners take to increase the productivity of the forest land they own. By far the largest share of the cut now comes and will continue to come from relatively small tracts of timber owned by thousands of individual owners whose interests are not directly connected with forest industries. Over 100,000 farmers own 57 percent of the commercial forest land and 52 percent of the timber volume. Their lands in 1957 supplied forest industry with 58 percent of the softwood timber cut. An additional 20 percent of the forest land is owned by about 12,000 miscellaneous nonfarm owners, including bankers, lawyers, merchants, doctors, and housewives. In 1957, 21 percent of the softwood cut came from these lands. Fourteen percent of the forest land is owned by 732 forest industries; timber cut from these lands contributed 14 percent of the softwood cut in 1957. Publicly-owned forest land (about half of it national forest land) accounts for only 9 percent of the total and in 1957 supplied only 6 percent of the softwood cut (table J). Clearly, South Carolina must look to these thousands of small private landowners for about 80 percent of the softwood cut.

These lands, which must supply the bulk of the future cut, are not so productive as either public lands or land owned by forest industries. The average sawtimber growth on public land is 19 percent higher than the

average for all forest land, 23 percent higher than private farm, and 28 percent greater than miscellaneous nonfarm (table K). Average sawtimber growth per acre on industrial forest land is very nearly as high as on public land. In fact, in terms of volume per acre of timber 5.0 inches and larger (growing stock), growth on land owned by forest industries exceeds the average for public land by 14 percent. Growth per acre on public land is only slightly better than the average.

Not only are private farms and miscellaneous nonfarm tracts less productive than public and forest industry lands, but the growth-cut relationship is less favorable. While softwood growth on public and forest industry land exceeds the cut by a substantial margin, softwoods on other forest land are being overcut, especially land owned by farmers, where 1957 cut exceeded growth by 10 percent. Thus, until growth on these lands can be increased and a more favorable growth-cut balance achieved, there is no room for the expansion of industries that must depend primarily on these lands for their timber supply.

The lower productivity of private farm and miscellaneous ownerships can be traced in part at least to poorer stocking on these lands. The average volume per acre of 2,969 board feet per acre on public land is 24 percent above the average for all land and 38 percent above the average for private farms (table L).

Table J. --Commercial forest land, softwood timber growth, and cut, by ownership

Ownership	Forest area, 1958		Net growth, 1957		Timber cut, 1957	
	Thousand acres	Percent	Million cu. ft.	Percent	Million cu. ft.	Percent
Public	1, 059. 5	8. 9	27. 3	9. 7	16. 3	5. 9
Private:						
Forest industry	1, 671. 3	14. 0	50. 1	17. 8	39. 6	14. 3
Farm	6, 810. 5	57. 1	146. 9	52. 3	162. 2	58. 5
Miscellaneous	2, 393. 6	20. 0	56. 6	20. 2	59. 3	21. 3
Total	10, 875. 4	91. 1	253. 6	90. 3	261. 1	94. 1
All ownerships	11, 934. 9	100. 0	280. 9	100. 0	277. 4	100. 0

Table K. --Net volume and gross growth per acre on commercial forest land,
by ownership and species group, 1958

Ownership and species group	Net volume per acre			Gross growth per acre		
	<u>Bd. ft.</u>	<u>Cu. ft.</u>	<u>Cords</u>	<u>Bd. ft.</u>	<u>Cu. ft.</u>	<u>Cords</u>
Public:						
Softwood	2,279	633.2	8.5	173	39.9	0.6
Hardwood	690	255.1	3.5	33	12.0	0.2
Total	2,969	888.3	12.0	206	51.9	0.8
Private:						
Forest industry:						
Softwood	1,598	466.3	6.3	127	40.3	0.6
Hardwood	1,298	424.7	5.7	67	18.7	0.3
Total	2,896	891.0	12.0	194	59.0	0.9
Farm:						
Softwood	1,081	319.6	4.3	107	28.6	0.4
Hardwood	1,071	368.1	5.0	61	20.0	0.3
Total	2,152	687.7	9.3	168	48.6	0.7
Miscellaneous:						
Softwood	1,229	373.1	5.1	106	31.6	0.5
Hardwood	1,231	388.2	5.2	55	17.6	0.3
Total	2,460	761.3	10.3	161	49.2	0.8
All ownerships:						
Softwood	1,289	378.7	5.1	115	31.8	0.5
Hardwood	1,101	370.0	5.0	58	18.6	0.3
Total	2,390	748.7	10.1	173	50.4	0.8

Part of this difference in stocking and average annual growth per acre between classes of ownership reflects differences in site quality. Forest industry lands tend to be the most productive lands in the State; 57 percent of the forest land in this ownership class is classed as good, compared to only 40 percent for private farm and 38 percent for miscellaneous private (table M). Sites on forest industry lands average 8 percent higher than the average for all forest lands in the State.

The better growth and stocking on public land, however, cannot be attributed to superior sites. The average site index is just about the same as the average for all forest land. Public lands have been under management much longer than areas recently acquired by pulp companies, and for this reason are currently more productive. Potentially, these industrial lands are among the most productive in the State, and under continued good management should outproduce

the national forest lands. While 18 percent of the public forest land is classed as poor site, only 9 percent of the industrial forest land is classed as poor site.

Amount and kind of timber that will be available to forest industries in South Carolina depend very largely upon the action private forest landowners take to increase productivity of their land. Farmers and other miscellaneous owners not connected with forest industries own 77 percent of the total commercial forest area. Educational efforts of the State Extension Foresters and County Agricultural Agents, and on-the-ground technical woodland management assistance provided by Service Foresters of the State Forestry Commission and of industrial associations are helping these landowners to practice better forestry. Federal cost sharing with landowners for tree planting and timber stand improvement provided through the Agricultural Conservation Program is also contributing to better forestry. Yet, in spite

of this effort, the small private ownerships include 81 percent of the forest land that would profit from treatment (table N).

The above percentages reflect the large area in farm ownership in the State and the poorer condition of farm woodlands. Sixty-two percent of the farm woodlands are in need

of treatment, compared to 46 percent of the publicly-owned forest land and 48 percent of the forest land owned by forest industries (table O). The principal challenge in South Carolina is getting the thousands of small landowners not connected with forest industries to grow more and better-quality timber.

Table L. --Commercial forest land, by ownership and stocking, 1958

Ownership	Poorly stocked		Medium stocked		Well stocked		Total	
	Thousand acres	Percent	Thousand acres	Percent	Thousand acres	Percent	Thousand acres	Percent
Public	180.7	17.0	220.2	20.8	658.6	62.2	1,059.5	100.0
Private:								
Forest industry	233.0	13.9	412.5	24.7	1,025.8	61.4	1,671.3	100.0
Farm	1,444.0	21.2	1,719.7	25.3	3,646.8	53.5	6,810.5	100.0
Miscellaneous	537.9	22.5	590.0	24.6	1,265.7	52.9	2,393.6	100.0
Total	2,214.9	20.4	2,722.2	25.0	5,938.3	54.6	10,875.4	100.0
All ownerships	2,395.6	20.1	2,942.4	24.6	6,596.9	55.3	11,934.9	100.0

Forest industries depend upon farm woodlots to supply 58 percent of the annual cut.
Farmers own 57 percent of the forest area.

Table M. --Commercial forest land, by site quality and ownership, 1958

Ownership	Good site		Fair site		Poor site		Total	
	Thousand acres	Percent	Thousand acres	Percent	Thousand acres	Percent	Thousand acres	Percent
Public	503.3	47.5	367.2	34.7	189.0	17.8	1,059.5	100.0
Private:								
Forest industry	956.8	57.2	557.7	33.4	156.8	9.4	1,671.3	100.0
Farm	2,689.8	39.5	3,314.3	48.7	806.4	11.8	6,810.5	100.0
Miscellaneous	913.6	38.2	1,065.8	44.5	414.2	17.3	2,393.6	100.0
Total	4,560.2	41.9	4,937.8	45.4	1,377.4	12.7	10,875.4	100.0
All ownerships	5,063.5	42.4	5,305.0	44.5	1,566.4	13.1	11,934.9	100.0

Table N. --Commercial forest land needing regeneration, site preparation, and stand improvement, by ownership, 1958
(In thousand acres)

Ownership	Needing regeneration		Needing stand improvement	Total
	Without site preparation	With site preparation		
Public	25.5	258.2	193.1	476.8
Private:				
Forest industry	34.0	361.8	400.9	796.7
Farm	275.4	2,254.2	1,675.1	4,204.7
Miscellaneous	123.9	667.4	542.3	1,333.6
Total	433.3	3,283.4	2,618.3	6,335.0
All ownerships	458.8	3,541.6	2,811.4	6,811.8

Table O. --Commercial forest area needing treatment, by type of ownership, South Carolina, 1958

Ownership	Total	Needing treatment	
	Thousand acres	Thousand acres	Percent ^{1/}
Public	1,034.4	476.8	46
Private:			
Forest industry	1,672.5	796.7	48
Farm	6,827.2	4,204.7	62
Miscellaneous	2,400.8	1,333.6	56
Total	10,900.5	6,335.0	58
All ownerships	11,934.9	6,811.8	57

^{1/} Percent of total acreage in type of ownership specified.

The future of South Carolina's forests is in the hands of the thousands of individual private owners of small woodland tracts. Farmers and other owners not connected with forest industries own three-fourths of the forest area in the state.

Appendix

ACCURACY OF FOREST SURVEY ESTIMATES

Forest resource information collected by the Forest Survey includes estimates based on sampling which have an associated sampling error. A large enough sample is taken to keep the sampling error below a specified minimum for forest area and timber volume. Nonsampling errors such as may arise from mistakes in judgment, measurement, recording, and compilation are kept to a minimum or eliminated through training, supervision, field check cruises, and complete editing and machine verification in compiling the data.

Forest Area

Estimates of forest area were based on the classification of 97,379 sample points systematically spaced on aerial photographs, followed by a ground check of 5,284 of these points, to provide the basis for making adjustments for changes in land use since the date of photography. The sampling error for the 12 million acres of forest area in the State is 0.5 percent.

Sampling errors for areas smaller than the State total and for forest proportions other than 61.5 percent can be obtained by referring to figures 5 and 6. For example, the sampling error of the forest proportion of 0.60 in the Southern Coastal Plain is 0.54 percent — from the lower curve from figure 6. Forest area in the Southern Coastal Plain includes 26 percent of the total forest area. The appropriate multiplying factor of 1.9 is obtained from figure 5; the sampling error is 0.54×1.9 , or 1.03 percent.

In like manner, the sampling error for the estimate of forest area in a county may be determined. The error for the forest proportion of 0.509 in Bamberg County is 0.64 percent (fig. 6). The multiplying factor for the proportion 0.011 ($128.3 \div 11,934.9$) is 9.6 (fig. 5). The sampling error, then, is 9.6×0.64 , or 6.1 percent.

Breakdown of Forest Area

State and Unit forest areas by ownership shown in table 2 of the Appendix are compiled from ownership records and do not have sampling errors. Other estimates of forest areas, such as forest area by forest type, stand size, stocking, and ownership by the above detail are based on the 4,021 ground plots and have a sampling error. Thus, ownership breakdowns based on the plots will differ slightly from those based on compilations from records.

Sampling error of forest area breakdowns depends upon the proportion that the breakdown is of the forest area and the proportion that the forest area is of the total forest area in the State. The sampling error for breakdowns for all forest area in the State may be obtained from the upper curve in figure 6. For example, the proportion of the forest area that is pine and oak-pine type in South Carolina is $6,483,700 \text{ acres} \div 11,934,900 \text{ acres}$, or 0.543. The sampling error corresponding to this breakdown is 1.5 percent. This error includes the error for the estimate of the total forest area based on the average forest proportion of 61.5 percent.

The sampling error for the estimate of the area of pine and oak-pine type in the Southern Coastal Plain requires also the use of figure 6. The proportion of pine and oak-pine type is 0.50, which, if this was for the entire State, would give a sampling error of 1.6 percent. But the total commercial forest area in the Southern Coastal Plain is only 26 percent of the State total. The appropriate multiplying factor in figure 5 is 1.9. The sampling error is 1.6×1.9 , or 3.0 percent.

The sampling error would be slightly higher if the forest proportion is lower than the State average of 61.5 percent and slightly lower if above this average. This difference through the range of forest proportions in the State represents a very small part of the total sampling error and for all practical purposes can be ignored.

Timber Volume

Estimates of inventory volume, growth, and timber cut are based on measurements recorded at 4,021 of the photo points classed as forest land. Sampling errors for the entire State and per billion are shown below:

<i>Estimate</i>	<i>Total</i> (Percent)	<i>Per billion</i> (Percent)
Inventory volume:		
Cubic feet	± 1.7	± 5.1
Board feet	± 2.0	± 10.7
Gross growth—cubic feet	± 1.3	± 1.0
Timber cut—cubic feet	± 5.5	± 3.0

Estimates for detailed breakdown or for areas covering less than the State have larger sampling errors. The sampling error for part of the total is obtained by applying the appropriate multiplying factor corresponding to the proportionate part of the total to the total error for the State (fig. 5). For example, the sampling error for the volume

Figure 5. --Ratio of standard error of an area (or volume) breakdown to percentage standard error of estimate of total area or volume.

of yellow pine in cubic feet is 1.7×1.45 , or 2.5 percent. The multiplying factor of 1.45 corresponds to the proportion of yellow pine to the total volume ($4,116.6 \div 8,936.1$ million cubic feet, or 0.46). The sampling error for the 886.4 million cubic feet of yellow pine in the Southern Coastal Plain is 1.7×3.1 , or 5.3 percent.

Sampling errors for net growing stock volume range from a low of 7.0 percent for Berkeley County with 7,157,000 cords to a high of 19.0 percent for Lee County with 929,000 cords. As a rule, the sampling errors for individual county statistics are too high to be useful; they are presented by county to permit adding any combination of counties together until the total is large enough to meet the desired degree of reliability. To obtain an estimate with a sampling error of 10 percent, data for enough counties must be added together to total about 3.5 million cords.

Figure 6. --Percent standard error by proportion of land area and commercial forest area. Errors for the proportion of forest area are based on 4,021 ground locations; also includes error of total forest area based on 61.5 percent forest area. Errors for proportion of total land area are based on the classification of 97,379 photo points; errors include the effect of shifts in land use.

HOW THE FOREST INVENTORY IS MADE

Forest statistics in South Carolina were estimated from a double sampling scheme. A large number of points on aerial photos were examined and classified by land use. A much smaller subsample of these points was selected for examination on the ground. The detailed procedure was as follows:

1. Preliminary estimates of the acreage of land in forests and other land-use classes were obtained by classifying points printed on every third aerial photograph in alternate flight lines within a county. The proportion of points falling in each class was used to estimate the acreage. This estimate was later checked and revised through the use of ground plots.

2. Ground sample plots were selected in a systematic manner from the forest land classifications made in Step 1, using an interval which would provide sufficient plots to meet established limits of error per billion cubic feet of timber. This resulted in a proportional sample of all exist-

ing timber stands. Field crews recorded measurements and observations on a variable plot with a basal area factor of 10 to obtain data on timber volume, quality, stocking, mortality, and timber cut. Samples of agricultural and other photo classifications were also checked on the ground to verify or adjust the area estimates based on these classifications.

3. Growth estimates were based on increment borings taken on all trees tallied. The volume of timber cut was computed from a tally of the stumps of trees cut on the plots during a specified period. Production surveys and utilization studies provided a breakdown of timber cut by product.

4. All field data were sent to Asheville for editing and were placed on punch cards for machine computing, sorting, and tabulation. Final estimates were based on statistical summaries of the data.

DEFINITION OF TERMS

Land-Use Classes

Forest land: Includes (a) lands which are at least 10 percent stocked with trees of any size and capable of producing sawtimber or other wood products, and (b) lands from which the trees described in (a) have been removed to less than 10-percent stocking but which have not been developed for other use; subdivided into the following classes:

Commercial: Forest land which is (a) producing, or physically capable of producing, usable crops of wood (usually sawtimber), (b) economically accessible now or in the future, and (c) not withdrawn from timber use.

Noncommercial: Forest land (a) withdrawn from timber utilization through statute, ordinance, or administrative order, but which otherwise qualifies as commercial forest land, or (b) incapable of yielding usable wood products (usually sawtimber) because of adverse site conditions, or so physically inaccessible as to be unavailable economically in the foreseeable future.

Nonforest land: Includes land under cultivation or in pasture where the timber has been cleared to less than 10-percent stocking, idle or abandoned agricultural land, marsh land, and land in urban, residential, or industrial areas, school yards, cemeteries, roads, railroads, and other rights-of-way.

Water: Includes lakes, bays, and estuaries over 40 acres in size, and streams, canals, and sloughs at least $\frac{1}{8}$ mile in width, which are classed as "inland water" by the Bureau of the Census. Smaller lakes and ponds between 1 acre and 40 acres in size, and waterways between 120 feet and 660 feet in width, which are classed as land area by the Bureau of the Census, are also included as water areas.

Forest Types

Forest type is determined on the basis of cubic volume for all stand sizes except seedlings and saplings (stand size 4), in which case the number of stems is the criterion.

Yellow pine types: Forests in which 50 percent or more of the cubic volume or number of stems in the stand is longleaf, slash, loblolly, pond, shortleaf, or Virginia pine. In mixtures the predominating species determines the type.

White pine-hemlock type: Forests in which 50 percent or more of the cubic volume or number of stems in the stand is white pine or hemlock, singly or in combination.

Hardwood-pine type: Forests in which 50 percent or more of the stand is in hardwoods, but in which southern yellow pine species make up 25 to 49 percent of the stand.

Oak-hickory type: Upland hardwood

forests in which 50 percent or more of the stand is composed of upland oaks, hickory, yellow-poplar, soft maple, and other associated hardwood species, except where yellow pines make up 25 to 49 percent, in which case the stand would be classified as oak-pine.

Maple-beech-birch type: Upland hardwood forests in which 50 percent or more of the stand is sugar maple, beech, or yellow birch, singly or in combination, except where yellow pines make up 25 to 49 percent of the stand.

Oak-gum-cypress type: Bottomland forests in which 50 percent or more of the stand is tupelo, blackgum, sweetgum, ash, lowland oaks, elm, soft maple, cypress, and other associated species, except where pines comprise 25 to 49 percent of the stand. In the mountains, flat areas of forest bordering streams may be given this classification. River birch, sycamore, willow, and alder are characteristic of such areas.

Site Quality

Site quality of pine and oak-pine types is based on the total height of pine at age 50 years. For loblolly pine and oak-loblolly pine types, an index of 60 feet or shorter is regarded as poor site, 70 fair site, and 80 and taller good site.

For other pine and oak-pine types, a site index of 50 feet or shorter is considered poor site, 60 fair site, and 70 and taller good site.

Site quality of hardwood types is based upon the number of 16-foot saw logs in hardwood trees at maturity. Sites capable of growing hardwoods with three or more saw logs are considered good sites, two logs fair sites, and one log and less poor sites.

Stand-Size Classes

Sawtimber: Stands containing at least 1,500 board feet net volume per acre, International 1/4-inch log rule, in sound, live, softwood trees 9.0 inches d.b.h. or larger, or hardwood trees 11.0 inches d.b.h. or larger. Two classes of sawtimber stands are recognized:

Large sawtimber: Stands of sawtimber having more than 50 percent of the net board-foot volume in trees 15.0 inches d.b.h. or larger.

Small sawtimber: Stands of sawtimber having 50 percent or more of the net board-foot volume in trees smaller than 15.0 inches d.b.h.

Poletimber: Stands failing to meet the minimum sawtimber specifications, but at least 10 percent

stocked with trees 5.0 inches d.b.h. or larger and with at least half the minimum stocking in pole-size trees.

Seedlings and saplings: Stands not qualifying as sawtimber or poletimber stands, but having at least a 10-percent stocking of trees of commercial species and with half the minimum stocking in seedlings and saplings.

Nonstocked and other areas: Forest areas not qualifying as sawtimber, poletimber, or seedling and sapling stands.

Diameters

D.b.h. (diameter at breast height): Stem diameter in inches, outside bark, measured at 4½ feet above the ground.

Diameter class: All trees were tallied by 0.1-inch diameter classes and tabulated by 2-inch diameter classes, each class including diameters 1.0 inch below and 0.9 inch above the stated midpoint, e.g., trees 7.0 to and including 8.9 inches are included in the 8-inch class. Corresponding limits apply to other diameter classes.

Timber Quality

Classification

Growing Stock

Sawtimber trees: Live softwood trees 9.0 inches d.b.h. or larger and hardwood trees 11.0 inches d.b.h. or larger, with a sound volume of at least 50 percent of the gross board-foot volume up to the point of minimum saw-log merchantability. To be considered sound, a saw log must be at least 8 feet long, must be at least 50 percent sound, and must meet the following additional requirements:

Softwood logs² must have a scaling diameter of 6 inches or more, and sweep or crook must not exceed one-third of the scaling diameter per 8 feet of log length.

Hardwood logs must have a scaling diameter of 8 inches or more and must pass specifications³ for standard lumber logs or tie and timber logs.

Sound poletimber trees: Straight-boled trees between 5.0 inches d.b.h. and sawtimber size that can be expected to become sawtimber.

Sound saplings: Trees 1.0 inch to 4.9 inches d.b.h. which show promise of growing into sawtimber.

² For detailed specifications of log grades, see "Interim log grades for southern pine." Southern Forest Expt. Station, 18 pp. 1953.

³ For detailed hardwood log grade specifications, see "Hardwood log grades for standard lumber: proposals and results." U. S. Forest Products Laboratory, D1737. 1949.

Other Material

Sound cull trees: Live trees of all sizes that are unmerchantable for saw logs now or prospectively because of species, poor form, excessive limbiness, or other sound defect.

Rotten cull trees: Live trees of all sizes that are unmerchantable for saw logs now or prospectively because of rotten defect.

Hardwood limbs: The limb volume of all hardwood sawtimber and cull trees to a minimum diameter of 4.0 inches inside bark.

Species Groups

Yellow pines: Includes loblolly, longleaf, slash, pond, shortleaf, pitch, Table-Mountain, Virginia pine, and spruce pine.

Other softwoods: White pine, hemlock, cypress, eastern redcedar, and white-cedar.

Soft hardwoods: Blackgum, tupelo, yellow-poplar, sweetgum, cottonwood, soft maple, basswood, willow, elm, hackberry, sycamore, magnolia, sweetbay, and black cherry.

Hard hardwoods: All the oaks, hickories, ash, beech, hard maple, birch, black walnut, black locust, honeylocust, mulberry, sourwood, dogwood, holly, and persimmon.

Volume Estimates

Board-foot volume: The volume in board feet, measured by the International $\frac{1}{4}$ -inch rule, exclusive of defect, of that portion of sound sawtimber trees between the stump and the upper limit of merchantability for saw logs.

Volume in cords: For sound trees the volume in standard cords (including bark) of the sound portion of trees 5.0 inches d.b.h. or larger, between stump and a minimum top stem diameter of 4.0 inches inside bark. Similar volumes are given for cull trees. The volume in limbs which are at least 4.0 inches in diameter inside bark is shown separately.

Volume in cubic feet: Cubic-foot volume of the same material shown in cords except that bark is not included.

International $\frac{1}{4}$ -inch log rule: A rule for estimating the board-foot volume of 4-foot log sections, according to the formula $V=0.905 (0.22D^2 - 0.71D)$. The taper allowance for computing the volume in log lengths greater than four feet is 0.5 inch per 4-foot section. Allowance for saw kerf is $\frac{1}{4}$ inch.

Standard cord: A stacked pile, 4x4x8 feet, of

round or split bolts, estimated to contain, on the average, about 74 cubic feet of solid wood.

Growth and Timber Cut

Gross growth: The growth on trees that were of volume size at the beginning of the year and the ingrowth resulting from smaller trees growing into volume size during the year.

Mortality: The net volume in trees dying from natural cause during the year.

Net growth: Gross growth minus mortality.

In board feet: The change during the calendar year in sawtimber volume resulting from growth, ingrowth, and mortality losses.

In cubic feet or cords: The change during the calendar year in the volume of all trees 5.0 inches and larger resulting from growth, ingrowth, and mortality losses.

Timber cut: The volume of timber cut is based on the measurement and tally of stumps found on regular ground sample plots. Stumps of all trees cut during the past 3-year period are recorded and the measurements are converted into equivalent tree volume. The average yearly volume of timber cut for the 3-year period is then taken as the annual estimate. Board-foot volumes include the saw-log portion of all sawtimber-size trees which were cut. Estimates in cubic feet or cords include the entire stem from stump to 4.0-inch top of all sound trees 5.0 inches in diameter and larger. Timber cut from cull or dead trees is not included.

Stocking

Stocking is a measure of the degree to which growing space is effectively utilized by trees.

The stocking of trees tallied (trees 1.0 inch and larger) was based on crown measurements of sound, free-growing trees. Understory trees, trees with less than 50 percent of their crown area exposed to direct light from above, were not used in determining stocking. For softwoods, stocking was equal to 3 times the crown area for 2-inch saplings, 2 times the crown area for 4-inch saplings, and 1.7 times the crown area for trees 5.0 inches and larger. For hardwoods, stocking was equal to the crown area.

The stocking of sound seedlings is based on 10-milacre quadrats along a 1-chain transect. Each stocked milacre quadrat completely free from overtopped trees 1.0 inch and larger counted as 10-percent stocking.

Detailed Tables

Table 1.--Land area^{1/} by class and Survey Unit, South Carolina, 1958

(In thousand acres)

Land class	State	Southern Coastal Plain	Northern Coastal Plain	Piedmont
Commercial forest land	11,934.9	3,112.9	4,676.2	4,145.8
Noncommercial forest land:				
Unproductive forest land	7.0	--	2.7	4.3
Productive-reserved forest land	73.9	5.6	14.4	53.9
Total forest	12,015.8	3,118.5	4,693.3	4,204.0
Nonforest land:				
Cropland	3,835.6	1,135.7	1,686.0	1,013.9
Improved pasture	743.5	164.4	171.8	407.3
Idle or abandoned	1,423.4	252.0	376.4	795.0
Marsh or prairie ^{2/}	709.7	338.6	324.6	46.5
Urban and other ^{3/}	676.5	168.3	234.0	274.2
Total nonforest	7,388.7	2,059.0	2,792.8	2,536.9
All land ^{4/}	19,404.5	5,177.5	7,486.1	6,740.9

^{1/} From U. S. Bureau of the Census, land and water area of the United States, 1950.

^{2/} Includes 182,500 acres of water according to Survey standards but defined by the Bureau of the Census as land area.

^{3/} Includes urban, suburban residential and industrial areas, rights-of-way, cemeteries, schools, etc.

^{4/} Adjusted to include 9,300 acres classified as water by the Bureau of the Census but as land by Forest Survey.

Table 2.--Commercial forest land by ownership and Survey Unit,
South Carolina, 1958
(In thousand acres)

Ownership class	State	Southern Coastal Plain	Northern Coastal Plain	Piedmont
National forest	566.3	--	237.3	329.0
Other Federal:				
Bureau of Land Management	--	--	--	--
Indian	--	--	--	--
Other Federal	292.7	157.1	104.7	30.9
Total	292.7	157.1	104.7	30.9
Other public:				
State	152.7	12.1	116.7	23.9
County and municipal	22.7	2.8	10.6	9.3
Total	175.4	14.9	127.3	33.2
Forest industry:				
Pulp company	1,164.2	320.3	535.1	308.8
Other wood-using industries	508.3	201.7	240.2	66.4
Total	1,672.5	522.0	775.3	375.2
Farm	6,827.2	1,931.0	2,488.8	2,407.4
Miscellaneous private	2,400.8	487.9	942.8	970.1
Total commercial	11,934.9	3,112.9	4,676.2	4,145.8

Table 3.--Commercial forest land by ownership,^{1/} stand size, and stocking,
South Carolina, 1958

(In thousand acres)

Stand size and stocking	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Large sawtimber stands:							
Well stocked	1,451.8	155.1	8.3	17.5	264.8	743.0	263.1
Medium stocked	635.1	21.4	19.9	--	125.5	319.8	148.5
Poorly stocked	221.3	11.1	5.0	2.5	35.2	101.3	66.2
Total	2,308.2	187.6	33.2	20.0	425.5	1,164.1	477.8
Small sawtimber stands:							
Well stocked	1,875.3	182.9	32.8	32.3	322.6	960.2	344.5
Medium stocked	568.1	40.2	9.4	8.7	92.4	295.4	122.0
Poorly stocked	179.9	7.0	--	--	27.0	94.5	51.4
Total	2,623.3	230.1	42.2	41.0	442.0	1,350.1	517.9
Poletimber stands:							
Well stocked	2,125.1	76.0	36.4	31.9	283.0	1,259.6	438.2
Medium stocked	882.5	16.2	2.1	20.9	88.9	592.8	161.6
Poorly stocked	506.7	--	3.1	13.1	44.7	333.8	112.0
Total	3,514.3	92.2	41.6	65.9	416.6	2,186.2	711.8
Seedling and sapling stands:							
Well stocked	1,140.2	10.5	51.8	23.1	155.4	679.5	219.9
Medium stocked	842.2	9.6	50.1	21.7	105.7	497.2	157.9
Poorly stocked	759.5	14.0	30.6	19.9	55.9	472.9	166.2
Total	2,741.9	34.1	132.5	64.7	317.0	1,649.6	544.0
Nonstocked and other areas							
	747.2	4.9	31.9	37.6	70.2	460.5	142.1
All classes	11,934.9	548.9	281.4	229.2	1,671.3	6,810.5	2,393.6

^{1/} Forest area by ownership is estimated from the ground samples. These estimates include a sampling error and for this reason differ slightly from areas compiled from ownership records shown in tables 2 and 37.

Table 4.--Commercial forest land by ownership,^{1/} major forest type, and stocking,
South Carolina, 1958

(In thousand acres)

Type and stocking	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:							
Well stocked	3,737.2	316.3	101.2	66.7	637.4	1,903.7	711.9
Medium stocked	1,102.1	48.6	30.4	48.4	159.7	552.4	262.6
Poorly stocked	749.3	2.9	25.3	17.2	80.2	442.0	181.7
Total	5,588.6	367.8	156.9	132.3	877.3	2,898.1	1,156.2
Oak-pine type:							
Well stocked	610.9	39.1	3.1	--	114.6	333.6	120.5
Medium stocked	319.9	15.6	4.1	--	29.7	213.0	57.5
Poorly stocked	164.2	2.9	3.1	--	16.9	99.8	41.5
Total	1,095.0	57.6	10.3	--	161.2	646.4	219.5
Hardwood types:							
Well stocked	2,248.8	69.1	25.0	38.1	273.8	1,409.5	433.3
Medium stocked	1,520.4	23.2	47.0	2.9	223.1	954.3	269.9
Poorly stocked	1,482.1	31.2	42.2	55.9	135.9	902.2	314.7
Total	5,251.3	123.5	114.2	96.9	632.8	3,266.0	1,017.9
All types:							
Well stocked	6,596.9	424.5	129.3	104.8	1,025.8	3,646.8	1,265.7
Medium stocked	2,942.4	87.4	81.5	51.3	412.5	1,719.7	590.0
Poorly stocked	2,395.6	37.0	70.6	73.1	233.0	1,444.0	537.9
Total	11,934.9	548.9	281.4	229.2	1,671.3	6,810.5	2,393.6

^{1/} Forest area by ownership is estimated from the ground samples. These estimates include a sampling error and for this reason differ slightly from areas compiled from ownership records shown in tables 2 and 37.

Table 5.--Commercial forest land by forest type and Survey Unit,
South Carolina, 1958

(In thousand acres)

Forest type	State	Southern Coastal Plain	Northern Coastal Plain	Piedmont
Softwood types:				
Longleaf pine	723.0	353.1	369.9	--
Slash pine	199.1	172.3	26.8	--
Loblolly pine	2,819.4	567.9	1,284.2	967.3
Shortleaf pine	1,235.8	49.1	85.1	1,101.6
Pond pine	495.8	162.5	333.3	--
Virginia pine	115.5	--	4.3	111.2
Total	5,588.6	1,304.9	2,103.6	2,180.1
Hardwood types:				
Oak-pine	1,095.0	266.8	390.8	437.4
Oak-hickory:				
Upland hdwds.	1,588.2	197.8	249.3	1,141.1
Scrub oak	465.6	240.9	216.5	8.2
Oak-gum-cypress:				
Bench-hardwood	360.5	90.6	185.6	84.3
Water-oak-gum	2,301.8	767.8	1,239.3	294.7
Gum-cypress	535.2	244.1	291.1	--
Total	6,346.3	1,808.0	2,572.6	1,965.7
All types	11,934.9	3,112.9	4,676.2	4,145.8

Table 6.--Commercial forest land by ownership,^{1/} major forest type, site quality, and Survey Unit,
South Carolina, 1958
(In thousand acres)

Type and site quality ^{2/}	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
STATE							
Pine types:							
Poor site	829.3	48.3	31.6	24.9	117.9	344.0	262.6
Fair site	1,917.1	100.9	45.0	53.5	230.4	1,088.6	398.7
Good site	2,842.2	218.6	80.3	53.9	529.0	1,465.5	494.9
Total	5,588.6	367.8	156.9	132.3	877.3	2,898.1	1,156.2
Oak-pine type:							
Poor site	102.4	4.3	--	--	8.0	51.4	38.7
Fair site	271.5	6.6	7.2	--	9.0	191.1	57.6
Good site	721.1	46.7	3.1	--	144.2	403.9	123.2
Total	1,095.0	57.6	10.3	--	161.2	646.4	219.5
Hardwood types:							
Poor site	634.7	--	34.0	45.9	30.9	411.0	112.9
Fair site	3,116.4	77.6	42.0	34.4	318.3	2,034.6	609.5
Good site	1,500.2	45.9	38.2	16.6	283.6	820.4	295.5
Total	5,251.3	123.5	114.2	96.9	632.8	3,266.0	1,017.9
All types:							
Poor site	1,566.4	52.6	65.6	70.8	156.8	806.4	414.2
Fair site	5,305.0	185.1	94.2	87.9	557.7	3,314.3	1,065.8
Good site	5,063.5	311.2	121.6	70.5	956.8	2,689.8	913.6
Total	11,934.9	548.9	281.4	229.2	1,671.3	6,810.5	2,393.6
SOUTHERN COASTAL PLAIN							
Pine types:							
Poor site	75.8	--	6.2	--	15.1	36.4	18.1
Fair site	389.9	--	18.7	2.9	29.3	255.4	83.6
Good site	839.2	--	52.3	--	189.0	456.4	141.5
Total	1,304.9	--	77.2	2.9	233.4	748.2	243.2
Oak-pine type:							
Poor site	7.5	--	--	--	--	5.5	2.0
Fair site	28.7	--	3.1	--	2.0	20.5	3.1
Good site	230.6	--	3.1	--	54.2	135.0	38.3
Total	266.8	--	6.2	--	56.2	161.0	43.4
Hardwood types:							
Poor site	277.8	--	18.7	--	23.6	198.8	36.7
Fair site	754.5	--	29.0	2.5	73.4	551.7	97.9
Good site	508.9	--	31.2	2.5	135.7	272.6	66.9
Total	1,541.2	--	78.9	5.0	232.7	1,023.1	201.5
All types:							
Poor site	361.1	--	24.9	--	38.7	240.7	56.8
Fair site	1,173.1	--	50.8	5.4	104.7	827.6	184.6
Good site	1,578.7	--	86.6	2.5	378.9	864.0	246.7
Total	3,112.9	--	162.3	7.9	522.3	1,932.3	488.1

^{1/} Forest area by ownership is estimated from the ground samples. These estimates include a sampling error and for this reason differ slightly from areas compiled from ownership records shown in tables 2 and 37.

^{2/} See description of site quality under Definition of Terms.

Table 6.--Commercial forest land by ownership,^{1/} major forest type, site quality, and Survey Unit,
 South Carolina, 1958 (continued)
 (In thousand acres)

Type and site quality ^{2/}	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
NORTHERN COASTAL PLAIN							
Pine types:							
Poor site	154.3	5.8	17.1	16.1	29.8	45.2	40.3
Fair site	623.6	26.1	9.3	38.1	113.2	321.6	115.3
Good site	1,325.7	108.7	11.5	40.8	263.6	687.9	213.2
Total	2,103.6	140.6	37.9	95.0	406.6	1,054.7	368.8
Oak-pine type:							
Poor site	6.3	--	--	--	--	4.1	2.2
Fair site	54.3	2.9	--	--	7.0	27.8	16.6
Good site	330.2	26.1	--	--	55.0	188.9	60.2
Total	390.8	29.0	--	--	62.0	220.8	79.0
Hardwood types:							
Poor site	268.1	--	15.3	42.0	7.3	143.9	59.6
Fair site	1,189.1	21.7	4.3	24.5	176.0	703.8	258.8
Good site	724.6	30.4	2.9	10.2	126.1	374.7	180.3
Total	2,181.8	52.1	22.5	76.7	309.4	1,222.4	498.7
All types:							
Poor site	428.7	5.8	32.4	58.1	37.1	193.2	102.1
Fair site	1,867.0	50.7	13.6	62.6	296.2	1,053.2	390.7
Good site	2,380.5	165.2	14.4	51.0	444.7	1,251.5	453.7
Total	4,676.2	221.7	60.4	171.7	778.0	2,497.9	946.5
PIEDMONT							
Pine types:							
Poor site	599.2	42.5	8.3	8.8	73.0	262.4	204.2
Fair site	903.6	74.8	17.0	12.5	87.9	511.6	199.8
Good site	677.3	109.9	16.5	13.1	76.4	321.2	140.2
Total	2,180.1	227.2	41.8	34.4	237.3	1,095.2	544.2
Oak-pine type:							
Poor site	88.6	4.3	--	--	8.0	41.8	34.5
Fair site	188.5	3.7	4.1	--	--	142.8	37.9
Good site	160.3	20.6	--	--	35.0	80.0	24.7
Total	437.4	28.6	4.1	--	43.0	264.6	97.1
Hardwood types:							
Poor site	88.8	--	--	3.9	--	68.3	16.6
Fair site	1,172.8	55.9	8.7	7.4	68.9	779.1	252.8
Good site	266.7	15.5	4.1	3.9	21.8	173.1	48.3
Total	1,528.3	71.4	12.8	15.2	90.7	1,020.5	317.7
All types:							
Poor site	776.6	46.8	8.3	12.7	81.0	372.5	255.3
Fair site	2,264.9	134.4	29.8	19.9	156.8	1,433.5	490.5
Good site	1,104.3	146.0	20.6	17.0	133.2	574.3	213.2
Total	4,145.8	327.2	58.7	49.6	371.0	2,380.3	959.0

^{1/} Forest area by ownership is estimated from the ground samples. These estimates include a sampling error and for this reason differ slightly from areas compiled from ownership records shown in tables 2 and 37.

^{2/} See description of site quality under Definition of Terms.

Table 7.--Commercial forest land^{1/} by ownership, area condition, and Survey Unit,
South Carolina, 1958

(In thousand acres)

Area condition	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
STATE							
Well stocked with pine	2,964.4	261.8	90.3	59.6	531.3	1,401.3	620.1
Medium stocking of pine:							
Other stocking ^{2/} less than 20 percent	432.1	18.4	16.8	29.5	45.4	239.0	83.0
Other stocking 20 percent or more	1,293.1	82.1	22.4	21.6	204.4	740.8	221.8
Poor stocking of pine:							
Other stocking less than 20 percent:							
Pine seed source adequate	47.3	--	--	--	6.8	25.3	15.2
Pine seed source inadequate	458.8	--	12.6	12.9	34.0	275.4	123.9
Other stocking 20 percent or more:							
Pine seed source adequate	419.3	37.2	2.2	8.7	70.7	239.3	61.2
Pine seed source inadequate	3,122.3	82.9	69.4	57.8	291.1	2,014.9	606.2
Total all conditions	8,737.3	482.4	213.7	190.1	1,183.7	4,936.0	1,731.4
SOUTHERN COASTAL PLAIN							
Well stocked with pine	530.8	--	49.2	2.9	118.6	265.7	94.4
Medium stocking of pine:							
Other stocking ^{2/} less than 20 percent	133.1	--	12.5	--	23.7	82.5	14.4
Other stocking 20 percent or more	289.7	--	3.1	--	40.0	212.3	34.3
Poor stocking of pine:							
Other stocking less than 20 percent:							
Pine seed source adequate	11.6	--	--	--	--	8.8	2.8
Pine seed source inadequate	181.9	--	6.2	--	11.9	122.7	41.1
Other stocking 20 percent or more:							
Pine seed source adequate	107.8	--	--	--	32.0	61.7	14.1
Pine seed source inadequate	755.6	--	39.5	--	95.9	488.8	131.4
Total all conditions	2,010.5	--	110.5	2.9	322.1	1,242.5	332.5

^{1/} Excludes bottomland hardwood type.

^{2/} Includes hardwood growing stock, culls, and inhibiting shrubs.

Table 7.--Commercial forest land^{1/} by ownership, area condition, and Survey Unit,
South Carolina, 1958 (continued)

(In thousand acres)

Area condition	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
NORTHERN COASTAL PLAIN							
Well stocked with pine	1,187.6	112.3	12.2	44.1	241.6	561.1	216.3
Medium stocking of pine:							
Other stocking ^{2/} less than 20 percent	131.0	5.0	4.3	20.8	12.9	75.7	12.3
Other stocking 20 percent or more	544.4	34.8	6.4	12.9	104.1	286.5	99.7
Poor stocking of pine:							
Other stocking less than 20 percent:							
Pine seed source adequate	19.6	--	--	--	2.3	12.9	4.4
Pine seed source inadequate	149.4	--	6.4	12.9	18.6	79.1	32.4
Other stocking 20 percent or more:							
Pine seed source adequate	147.1	9.4	2.2	8.7	29.6	79.7	17.5
Pine seed source inadequate	781.0	15.9	21.7	38.2	86.1	465.9	153.2
Total all conditions	2,960.1	177.4	53.2	137.6	495.2	1,560.9	535.8
PIEDMONT							
Well stocked with pine	1,246.0	149.5	28.9	12.6	171.1	574.5	309.4
Medium stocking of pine:							
Other stocking ^{2/} less than 20 percent	168.0	13.4	--	8.7	8.8	80.8	56.3
Other stocking 20 percent or more	459.0	47.3	12.9	8.7	60.3	242.0	87.8
Poor stocking of pine:							
Other stocking less than 20 percent:							
Pine seed source adequate	16.1	--	--	--	4.5	3.6	8.0
Pine seed source inadequate	127.5	--	--	--	3.5	73.6	50.4
Other stocking 20 percent or more:							
Pine seed source adequate	164.4	27.8	--	--	9.1	97.9	29.6
Pine seed source inadequate	1,585.7	67.0	8.2	19.6	109.1	1,060.2	321.6
Total all conditions	3,766.7	305.0	50.0	49.6	366.4	2,132.6	863.1

^{1/} Excludes bottomland hardwood type.

^{2/} Includes hardwood growing stock, culls, and inhibiting shrubs.

Table 8.--Commercial forest land cut over annually, by ownership and
Survey Unit, South Carolina, 1957

(In thousand acres)

Ownership	State	Southern Coastal Plain	Northern Coastal Plain	Piedmont
Public	32.0	1.0	15.2	15.8
Private:				
Pulp company	89.3	24.4	32.7	32.2
Other wood-using industries	20.9	11.0	8.5	1.4
Farm	460.7	111.6	138.1	211.0
Miscellaneous private	153.2	27.5	42.0	83.7
Total	724.1	174.5	221.3	328.3
Total cutover	756.1	175.5	236.5	344.1

Table 9.--Net volume of sawtimber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958
(In million board feet^{1/})

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
STATE							
Pine types:							
Softwood	11,829.7	1,590.8	204.3	274.4	1,897.4	5,594.1	2,268.7
Hardwood	834.1	82.6	7.6	9.8	172.8	400.3	161.0
Total	12,663.8	1,673.4	211.9	284.2	2,070.2	5,994.4	2,429.7
Oak-pine type:							
Softwood	1,358.9	152.0	--	--	246.7	712.5	247.7
Hardwood	1,227.2	125.9	--	--	215.1	658.6	227.6
Total	2,586.1	277.9	--	--	461.8	1,371.1	475.3
Hardwood types:							
Softwood	2,199.6	160.2	19.7	13.4	527.0	1,054.3	425.0
Hardwood	11,080.9	231.1	200.4	73.5	1,781.3	6,237.2	2,557.4
Total	13,280.5	391.3	220.1	86.9	2,308.3	7,291.5	2,982.4
All types:							
Softwood	15,388.2	1,903.0	224.0	287.8	2,671.1	7,360.9	2,941.4
Hardwood	13,142.2	439.6	208.0	83.3	2,169.2	7,296.1	2,946.0
Total	28,530.4	2,342.6	432.0	371.1	4,840.3	14,657.0	5,887.4
SOUTHERN COASTAL PLAIN							
Pine types:							
Softwood	2,657.6	--	23.5	14.9	561.9	1,567.5	489.8
Hardwood	194.2	--	2.8	--	56.2	106.8	28.4
Total	2,851.8	--	26.3	14.9	618.1	1,674.3	518.2
Oak-pine type:							
Softwood	365.7	--	--	--	112.3	200.4	53.0
Hardwood	325.6	--	--	--	104.0	163.0	58.6
Total	691.3	--	--	--	216.3	363.4	111.6
Hardwood types:							
Softwood	824.1	--	13.2	--	281.5	462.6	66.8
Hardwood	3,181.4	--	194.4	7.2	618.6	1,930.7	430.5
Total	4,005.5	--	207.6	7.2	900.1	2,393.3	497.3
All types:							
Softwood	3,847.4	--	36.7	14.9	955.7	2,230.5	609.6
Hardwood	3,701.2	--	197.2	7.2	778.8	2,200.5	517.5
Total	7,548.6	--	233.9	22.1	1,734.5	4,431.0	1,127.1

^{1/} International 1/4-inch rule.

Table 9.--Net volume of sawtimber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958 (continued)
(In million board feet^{1/})

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
NORTHERN COASTAL PLAIN							
Pine types:							
Softwood	5,500.0	578.7	99.8	179.0	887.5	2,722.9	1,032.1
Hardwood	376.8	33.4	4.8	2.2	97.6	167.5	71.3
Total	5,876.8	612.1	104.6	181.2	985.1	2,890.4	1,103.4
Oak-pine type:							
Softwood	648.2	86.8	--	--	106.7	326.1	128.6
Hardwood	493.9	50.0	--	--	77.1	256.7	110.1
Total	1,142.1	136.8	--	--	183.8	582.8	238.7
Hardwood types:							
Softwood	1,224.3	135.1	6.5	13.4	225.3	517.8	326.2
Hardwood	5,493.5	112.8	6.0	66.3	990.7	2,652.9	1,664.8
Total	6,717.8	247.9	12.5	79.7	1,216.0	3,170.7	1,991.0
All types:							
Softwood	7,372.5	800.6	106.3	192.4	1,219.5	3,566.8	1,486.9
Hardwood	6,364.2	196.2	10.8	68.5	1,165.4	3,077.1	1,846.2
Total	13,736.7	996.8	117.1	260.9	2,384.9	6,643.9	3,333.1
PIEDMONT							
Pine types:							
Softwood	3,672.1	1,012.1	81.0	80.5	448.0	1,303.7	746.8
Hardwood	263.1	49.2	--	7.6	19.0	126.0	61.3
Total	3,935.2	1,061.3	81.0	88.1	467.0	1,429.7	808.1
Oak-pine type:							
Softwood	345.0	65.2	--	--	27.7	186.0	66.1
Hardwood	407.7	75.9	--	--	34.0	238.9	58.9
Total	752.7	141.1	--	--	61.7	424.9	125.0
Hardwood types:							
Softwood	151.2	25.1	--	--	20.2	73.9	32.0
Hardwood	2,406.0	118.3	--	--	172.0	1,653.6	462.1
Total	2,557.2	143.4	--	--	192.2	1,727.5	494.1
All types:							
Softwood	4,168.3	1,102.4	81.0	80.5	495.9	1,563.6	844.9
Hardwood	3,076.8	243.4	--	7.6	225.0	2,018.5	582.3
Total	7,245.1	1,345.8	81.0	88.1	720.9	3,582.1	1,427.2

^{1/} International 1/4-inch rule.

Table 10.--Net volume of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958

Type and species group	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
STATE														
Growing stock:														
Pine types:														
Softwood	3,644.7	50,156	440.0	5,910	70.6	985	83.4	1,149	594.9	8,212	1,731.9	23,884	723.9	10,016
Hardwood	367.7	5,212	43.0	608	3.0	41	4.9	72	60.6	838	193.5	2,779	62.7	874
Total	4,012.4	55,368	483.0	6,518	73.6	1,026	88.3	1,221	655.5	9,050	1,925.4	26,663	786.6	10,890
Oak-pine type:														
Softwood	348.1	4,592	33.9	431	--	--	--	--	62.3	821	186.9	2,478	65.0	862
Hardwood	470.0	6,498	48.7	674	--	--	--	--	82.7	1,142	251.9	3,480	86.7	1,202
Total	818.1	11,090	82.6	1,105	--	--	--	--	145.0	1,963	438.8	5,958	151.7	2,064
Hardwood types:														
Softwood	526.9	6,472	34.8	401	4.6	57	3.7	48	122.0	1,470	257.8	3,232	104.0	1,264
Hardwood	3,578.7	48,187	82.7	1,111	63.0	857	24.9	334	566.5	7,584	2,061.9	27,873	779.7	10,428
Total	4,105.6	54,659	117.5	1,512	67.6	914	28.6	382	688.5	9,054	2,319.7	31,105	883.7	11,692
All types:														
Softwood	4,519.7	61,220	508.7	6,742	75.2	1,042	87.1	1,197	779.2	10,503	2,176.6	29,594	892.9	12,142
Hardwood	4,416.4	59,897	174.4	2,393	66.0	898	29.8	406	709.8	9,564	2,507.3	34,132	929.1	12,504
Total	8,936.1	121,117	683.1	9,135	141.2	1,940	116.9	1,603	1,489.0	20,067	4,683.9	63,726	1,822.0	24,646
Cull timber:														
Softwood	166.7	2,224	8.6	111	2.7	36	5.1	64	21.5	283	82.5	1,121	46.3	609
Hardwood	1,047.1	14,257	40.4	562	20.8	284	7.9	116	166.1	2,234	575.7	7,885	236.2	3,176
Total	1,213.8	16,481	49.0	673	23.5	320	13.0	180	187.6	2,517	658.2	9,006	282.5	3,785
SOUTHERN COASTAL PLAIN														
Growing stock:														
Pine types:														
Softwood	759.3	10,218	--	--	15.2	227	4.2	57	164.0	2,220	434.3	5,808	141.6	1,906
Hardwood	68.6	946	--	--	0.7	8	--	--	14.3	187	44.6	630	9.0	121
Total	827.9	11,164	--	--	15.9	235	4.2	57	178.3	2,407	478.9	6,438	150.6	2,027
Oak-pine type:														
Softwood	82.0	1,043	--	--	--	--	--	--	26.1	334	45.6	585	10.3	124
Hardwood	109.9	1,490	--	--	--	--	--	--	31.5	426	62.3	850	16.1	214
Total	191.9	2,533	--	--	--	--	--	--	57.6	760	107.9	1,435	26.4	338
Hardwood types:														
Softwood	199.6	2,435	--	--	3.3	40	0.3	4	67.2	815	113.5	1,399	15.3	177
Hardwood	1,031.5	13,876	--	--	61.8	841	4.7	65	199.9	2,683	643.3	8,686	121.8	1,601
Total	1,231.1	16,311	--	--	65.1	881	5.0	69	267.1	3,498	756.8	10,085	137.1	1,778
All types:														
Softwood	1,040.9	13,696	--	--	18.5	267	4.5	61	257.3	3,369	593.4	7,792	167.2	2,207
Hardwood	1,210.0	16,312	--	--	62.5	849	4.7	65	245.7	3,296	750.2	10,166	146.9	1,936
Total	2,250.9	30,008	--	--	81.0	1,116	9.2	126	503.0	6,665	1,343.6	17,958	314.1	4,143
Cull timber:														
Softwood	37.4	482	--	--	0.8	10	--	--	8.6	107	20.2	264	7.8	101
Hardwood	319.5	4,291	--	--	14.6	202	0.4	5	55.3	734	197.7	2,675	51.5	675
Total	356.9	4,773	--	--	15.4	212	0.4	5	63.9	841	217.9	2,939	59.3	776

Table 10.--Net volume of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958 (continued)

Type and species group	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
NORTHERN COASTAL PLAIN														
Growing stock:														
Pine types:														
Softwood	1,535.5	20,844	156.8	2,098	24.7	326	55.6	769	270.3	3,713	731.3	9,865	296.8	4,073
Hardwood	156.9	2,209	10.6	142	2.3	33	1.7	24	33.0	451	79.5	1,137	29.8	422
Total	1,692.4	23,053	167.4	2,240	27.0	359	57.3	793	303.3	4,164	810.8	11,002	326.6	4,495
Oak-pine type:														
Softwood	153.7	1,994	19.1	241	--	--	--	--	25.7	336	78.1	1,015	30.8	402
Hardwood	179.6	2,465	21.6	305	--	--	--	--	33.8	468	87.7	1,198	36.5	494
Total	333.3	4,459	40.7	546	--	--	--	--	59.5	804	165.8	2,213	67.3	896
Hardwood types:														
Softwood	272.9	3,277	30.0	346	1.3	17	3.4	44	48.5	568	113.3	1,385	76.4	917
Hardwood	1,666.9	22,273	38.7	514	1.2	16	18.6	246	300.1	3,998	830.1	11,162	478.2	6,337
Total	1,939.8	25,550	68.7	860	2.5	33	22.0	290	348.6	4,566	943.4	12,547	554.6	7,254
All types:														
Softwood	1,962.1	26,115	205.9	2,685	26.0	343	59.0	813	344.5	4,617	922.7	12,265	404.0	5,392
Hardwood	2,003.4	26,947	70.9	961	3.5	49	20.3	270	366.9	4,917	997.3	13,497	544.5	7,253
Total	3,965.5	53,062	276.8	3,646	29.5	392	79.3	1,083	711.4	9,534	1,920.0	25,762	948.5	12,645
Cull timber:														
Softwood	67.1	858	4.2	52	1.2	17	5.1	64	6.1	78	29.9	393	20.6	254
Hardwood	464.1	6,242	20.1	276	5.7	75	5.1	76	90.6	1,215	219.3	2,962	123.3	1,638
Total	531.2	7,100	24.3	328	6.9	92	10.2	140	96.7	1,293	249.2	3,355	143.9	1,892
PIEDMONT														
Growing stock:														
Pine types:														
Softwood	1,349.9	19,094	283.2	3,812	30.7	432	23.6	323	160.6	2,279	566.3	8,211	285.5	4,037
Hardwood	142.2	2,057	32.4	466	--	--	3.2	48	13.3	200	69.4	1,012	23.9	331
Total	1,492.1	21,151	315.6	4,278	30.7	432	26.8	371	173.9	2,479	635.7	9,223	309.4	4,368
Oak-pine type:														
Softwood	112.4	1,555	14.8	190	--	--	--	--	10.5	151	63.2	878	23.9	336
Hardwood	180.5	2,543	27.1	369	--	--	--	--	17.4	248	101.9	1,432	34.1	494
Total	292.9	4,098	41.9	559	--	--	--	--	27.9	399	165.1	2,310	58.0	830
Hardwood types:														
Softwood	54.4	760	4.8	55	--	--	--	--	6.3	87	31.0	448	12.3	170
Hardwood	880.3	12,038	44.0	597	--	--	1.6	23	66.5	903	588.5	8,025	179.7	2,490
Total	934.7	12,798	48.8	652	--	--	1.6	23	72.8	990	619.5	8,473	192.0	2,660
All types:														
Softwood	1,516.7	21,409	302.8	4,057	30.7	432	23.6	323	177.4	2,517	660.5	9,537	321.7	4,543
Hardwood	1,203.0	16,638	103.5	1,432	--	--	4.8	71	97.2	1,351	759.8	10,469	237.7	3,315
Total	2,719.7	38,047	406.3	5,489	30.7	432	28.4	394	274.6	3,868	1,420.3	20,006	559.4	7,858
Cull timber:														
Softwood	62.2	884	4.4	59	0.7	9	--	--	6.8	98	32.4	464	17.9	254
Hardwood	263.5	3,724	20.3	286	0.5	7	2.4	35	20.2	285	158.7	2,248	61.4	863
Total	325.7	4,608	24.7	345	1.2	16	2.4	35	27.0	383	191.1	2,712	79.3	1,117

Table 11a.--Net volume of sawtimber and growing stock on commercial forest land by species group and stand size for the entire State of South Carolina, 1958

Stand size	Total	Softwood	Hardwood
SAWTIMBER (In million bd. ft.)			
Sawtimber stands	25,374.0	13,469.6	11,904.4
Poletimber stands	2,059.9	1,235.8	824.1
Seedling and sapling stands	885.1	558.2	326.9
Nonstocked and other areas	211.4	124.6	86.8
Total	28,530.4	15,388.2	13,142.2
GROWING STOCK (In million cu. ft.)			
Sawtimber stands	6,950.2	3,369.7	3,580.5
Poletimber stands	1,706.1	980.1	726.0
Seedling and sapling stands	225.9	138.7	87.2
Nonstocked and other areas	53.9	31.2	22.7
Total	8,936.1	4,519.7	4,416.4
GROWING STOCK (In thousand cords)			
Sawtimber stands	91,769	44,110	47,659
Poletimber stands	25,637	14,840	10,797
Seedling and sapling stands	2,997	1,853	1,144
Nonstocked and other areas	714	417	297
Total	121,117	61,220	59,897

Table 11b.--Net volume of sawtimber and growing stock on commercial forest land by species group and stand size for the Southern Coastal Plain of South Carolina, 1958

Stand size	Total	Softwood	Hardwood
SAWTIMBER (In million bd. ft.)			
Sawtimber stands	6,747.5	3,321.0	3,426.5
Poletimber stands	444.9	286.1	158.8
Seedling and sapling stands	277.1	181.1	96.0
Nonstocked and other areas	79.1	59.2	19.9
Total	7,548.6	3,847.4	3,701.2
GROWING STOCK (In million cu. ft.)			
Sawtimber stands	1,838.1	810.2	1,027.9
Poletimber stands	329.0	175.7	153.3
Seedling and sapling stands	64.4	41.0	23.4
Nonstocked and other areas	19.4	14.0	5.4
Total	2,250.9	1,040.9	1,210.0
GROWING STOCK (In thousand cords)			
Sawtimber stands	24,081	10,414	13,667
Poletimber stands	4,835	2,564	2,271
Seedling and sapling stands	836	534	302
Nonstocked and other areas	256	184	72
Total	30,008	13,696	16,312

Table 11c.--Net volume of sawtimber and growing stock on commercial forest land by species group and stand size for the Northern Coastal Plain of South Carolina, 1958

Stand size	Total	Softwood	Hardwood
SAWTIMBER (In million bd. ft.)			
Sawtimber stands	12,346.0	6,480.2	5,865.8
Poletimber stands	890.6	548.1	342.5
Seedling and sapling stands	412.9	281.6	131.3
Nonstocked and other areas	87.2	62.6	24.6
Total	13,736.7	7,372.5	6,364.2
GROWING STOCK (In million cu. ft.)			
Sawtimber stands	3,260.4	1,553.8	1,706.6
Poletimber stands	584.7	326.5	258.2
Seedling and sapling stands	98.9	66.6	32.3
Nonstocked and other areas	21.5	15.2	6.3
Total	3,965.5	1,962.1	2,003.4
GROWING STOCK (In thousand cords)			
Sawtimber stands	42,762	20,146	22,616
Poletimber stands	8,717	4,887	3,830
Seedling and sapling stands	1,298	880	418
Nonstocked and other areas	285	202	83
Total	53,062	26,115	26,947

Table 11d.--Net volume of sawtimber and growing stock on commercial forest land by species group and stand size for the Piedmont of South Carolina, 1958

Stand size	Total	Softwood	Hardwood
SAWTIMBER (In million bd. ft.)			
Sawtimber stands	6,280.5	3,668.4	2,612.1
Poletimber stands	724.4	401.6	322.8
Seedling and sapling stands	195.1	95.5	99.6
Nonstocked and other areas	45.1	2.8	42.3
Total	7,245.1	4,168.3	3,076.8
GROWING STOCK (In million cu. ft.)			
Sawtimber stands	1,851.7	1,005.7	846.0
Poletimber stands	792.4	477.9	314.5
Seedling and sapling stands	62.6	31.1	31.5
Nonstocked and other areas	13.0	2.0	11.0
Total	2,719.7	1,516.7	1,203.0
GROWING STOCK (In thousand cords)			
Sawtimber stands	24,926	13,550	11,376
Poletimber stands	12,085	7,389	4,696
Seedling and sapling stands	863	439	424
Nonstocked and other areas	173	31	142
Total	38,047	21,409	16,638

Table 12.--Net volume of sawtimber and growing stock on commercial forest land by species
and Survey Unit, South Carolina, 1958

Species	STATE			SOUTHERN COASTAL PLAIN		
	Sawtimber	Growing stock		Sawtimber	Growing stock	
	Million bd.-ft. <u>1/</u>	Million cu. ft. <u>2/</u>	Thousand cords <u>3/</u>	Million bd.-ft. <u>1/</u>	Million cu. ft. <u>2/</u>	Thousand cords <u>3/</u>
Yellow pine:						
Longleaf pine	1,586.8	510.3	7,045	665.6	214.9	2,936
Slash pine	214.3	69.7	965	192.7	62.9	873
Loblolly pine	8,645.5	2,348.3	31,581	1,867.1	464.8	6,094
Shortleaf pine	2,085.6	814.5	11,699	130.8	37.9	513
Pond pine	980.7	302.8	4,179	310.6	93.3	1,268
Virginia pine	83.0	54.5	796	--	--	--
Other yellow pine	64.4	16.5	215	51.1	12.6	162
Total	13,660.3	4,116.6	56,480	3,217.9	886.4	11,846
Other softwoods:						
White pine	<u>4/</u> 151.0	<u>5/</u> 25.8	<u>6/</u> 284	--	--	--
Cypress	1,501.0	349.1	4,091	629.5	154.5	1,850
Redcedar	75.9	28.2	365	--	--	--
Total	1,727.9	403.1	4,740	629.5	154.5	1,850
Total softwoods	15,388.2	4,519.7	61,220	3,847.4	1,040.9	13,696
Preferred hardwoods:						
Sweetgum	2,624.7	860.8	11,625	730.2	223.4	2,974
Yellow-poplar	845.5	240.1	3,188	153.6	43.4	574
White and swamp chestnut oaks	765.5	265.9	3,637	134.1	40.4	546
No. red and swamp red oaks	313.9	91.6	1,229	58.6	15.5	207
Ash	430.0	194.8	2,745	150.5	62.5	871
Hard maple	9.2	4.8	70	--	0.3	5
Yellow birch	4.2	0.9	11	--	--	--
Black walnut	16.1	5.1	66	--	--	--
Total	5,009.1	1,664.0	22,571	1,227.0	385.5	5,177
Other hardwoods:						
Tupelo and blackgum	2,967.5	960.7	12,811	1,043.2	348.5	4,645
Cottonwood	84.5	24.8	331	27.0	5.8	72
Soft maple	695.8	264.3	3,637	149.4	61.3	853
Other white oaks	645.4	199.7	2,680	135.7	41.7	557
Other red oaks	2,240.5	749.6	10,246	736.0	241.8	3,296
Hickory	669.3	203.5	2,738	170.3	48.1	643
Beech	99.5	27.4	356	9.3	1.9	24
Dogwood, holly, persimmon	22.9	39.0	609	5.1	8.6	130
Other hardwoods	707.7	283.4	3,918	198.2	66.8	915
Total	8,133.1	2,752.4	37,326	2,474.2	824.5	11,135
Total hardwoods	13,142.2	4,416.4	59,897	3,701.2	1,210.0	16,312
All species	28,530.4	8,936.1	121,117	7,548.6	2,250.9	30,008

1/ International 1/4-inch rule.

2/ Excludes bark.

3/ Sound wood and bark.

4/ Includes 7.5 million board-feet of hemlock.

5/ Includes 1.3 million cubic feet of hemlock.

6/ Includes 14,000 cords of hemlock.

Table 12.--Net volume of sawtimber and growing stock on commercial forest land by species
and Survey Unit, South Carolina, 1958 (continued)

Species	NORTHERN COASTAL PLAIN			PIEDMONT		
	Sawtimber	Growing stock		Sawtimber	Growing stock	
	<u>Million</u> <u>bd.-ft.^{1/}</u>	<u>Million</u> <u>cu. ft.^{2/}</u>	<u>Thousand</u> <u>cords^{3/}</u>	<u>Million</u> <u>bd.-ft.^{1/}</u>	<u>Million</u> <u>cu. ft.^{2/}</u>	<u>Thousand</u> <u>cords^{3/}</u>
Yellow pine:						
Longleaf pine	914.1	294.2	4,095	7.1	1.2	14
Slash pine	21.6	6.8	92	--	--	--
Loblolly pine	4,661.5	1,183.0	15,743	2,116.9	700.5	9,744
Shortleaf pine	211.3	66.8	940	1,743.5	709.8	10,246
Pond pine	670.1	209.5	2,911	--	--	--
Virginia pine	--	0.3	5	83.0	54.2	791
Other yellow pine	--	--	--	13.3	3.9	53
Total	6,478.6	1,760.6	23,786	3,963.8	1,469.6	20,848
Other softwoods:						
White pine	--	--	--	^{4/} 151.0	^{5/} 25.8	^{6/} 284
Cypress	871.5	194.6	2,241	--	--	--
Redcedar	22.4	6.9	88	53.5	21.3	277
Total	893.9	201.5	2,329	204.5	47.1	561
Total softwoods	7,372.5	1,962.1	26,115	4,168.3	1,516.7	21,409
Preferred hardwoods:						
Sweetgum	1,305.4	411.9	5,525	589.1	225.5	3,126
Yellow-poplar	201.0	58.0	779	490.9	138.7	1,835
White and swamp chestnut oaks	229.9	66.0	887	401.5	159.5	2,204
No. red and swamp red oaks	160.7	41.3	542	94.6	34.8	480
Ash	201.2	80.9	1,124	78.3	51.4	750
Hard maple	--	--	--	9.2	4.5	65
Yellow birch	--	--	--	4.2	0.9	11
Black walnut	2.1	0.5	6	14.0	4.6	60
Total	2,100.3	658.6	8,863	1,681.8	619.9	8,531
Other hardwoods:						
Tupelo and blackgum	1,884.4	592.3	7,884	39.9	19.9	282
Cottonwood	25.1	11.4	164	32.4	7.6	95
Soft maple	430.5	157.3	2,157	115.9	45.7	627
Other white oaks	261.7	68.9	912	248.0	89.1	1,211
Other red oaks	1,109.0	326.9	4,390	395.5	180.9	2,560
Hickory	222.7	61.6	818	276.3	93.8	1,277
Beech	20.4	4.9	63	69.8	20.6	269
Dogwood, holly, persimmon	14.9	19.0	293	2.9	11.4	186
Other hardwoods	295.2	102.5	1,403	214.3	114.1	1,600
Total	4,263.9	1,344.8	18,084	1,395.0	583.1	8,107
Total hardwoods	6,364.2	2,003.4	26,947	3,076.8	1,203.0	16,638
All species	13,736.7	3,965.5	53,062	7,245.1	2,719.7	38,047

^{1/} International 1/4-inch rule.

^{2/} Excludes bark.

^{3/} Sound wood and bark.

^{4/} Includes 7.5 million board-feet of hemlock.

^{5/} Includes 1.3 million cubic feet of hemlock.

^{6/} Includes 14,000 cords of hemlock.

Table 13.--Net volume of timber on commercial forest land by species group,
class of material, and Survey Unit, South Carolina, 1958

Class of material	Total		Softwood		Hardwood	
	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>
STATE						
Sawtimber trees:						
Saw-log portion	4,529.5	56,775	2,502.8	31,538	2,026.7	25,237
Upper stem	1,630.8	21,192	772.4	10,008	858.4	11,184
Total	6,160.3	77,967	3,275.2	41,546	2,885.1	36,421
Poletimber trees	2,775.8	43,150	1,244.5	19,674	1,531.3	23,476
Total growing stock	8,936.1	121,117	4,519.7	61,220	4,416.4	59,897
Cull trees:						
Sound culls:						
Sawtimber-size trees	765.2	9,619	131.2	1,668	634.0	7,951
Poletimber-size trees	396.7	6,113	31.4	498	365.3	5,615
Total	1,161.9	15,732	162.6	2,166	999.3	13,566
Rotten culls	51.9	749	4.1	58	47.8	691
Total cull trees	1,213.8	16,481	166.7	2,224	1,047.1	14,257
Hardwood limbs	360.8	4,458	--	--	360.8	4,458
Salvable dead trees	2.7	36	1.5	20	1.2	16
All timber	10,513.4	142,092	4,687.9	63,464	5,825.5	78,628
SOUTHERN COASTAL PLAIN						
Sawtimber trees:						
Saw-log portion	1,187.3	14,718	625.3	7,737	562.0	6,981
Upper stem	441.4	5,815	194.3	2,584	247.1	3,231
Total	1,628.7	20,533	819.6	10,321	809.1	10,212
Poletimber trees	622.2	9,475	221.3	3,375	400.9	6,100
Total growing stock	2,250.9	30,008	1,040.9	13,696	1,210.0	16,312
Cull trees:						
Sound culls:						
Sawtimber-size trees	234.5	2,928	32.2	405	202.3	2,523
Poletimber-size trees	112.7	1,709	4.8	71	107.9	1,638
Total	347.2	4,637	37.0	476	310.2	4,161
Rotten culls	9.7	136	0.4	6	9.3	130
Total cull trees	356.9	4,773	37.4	482	319.5	4,291
Hardwood limbs	106.8	1,332	--	--	106.8	1,332
Salvable dead trees	0.5	6	0.3	4	0.2	2
All timber	2,715.1	36,119	1,078.6	14,182	1,636.5	21,937

Table 13.--Net volume of timber on commercial forest land by species group,
class of material, and Survey Unit, South Carolina, 1958 (continued)

Class of material	Total		Softwood		Hardwood	
	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>
NORTHERN COASTAL PLAIN						
Sawtimber trees:						
Saw-log portion	2,150.4	26,906	1,187.6	14,917	962.8	11,989
Upper stem	776.7	9,968	362.2	4,609	414.5	5,359
Total	2,927.1	36,874	1,549.8	19,526	1,377.3	17,348
Poletimber trees	1,038.4	16,188	412.3	6,589	626.1	9,599
Total growing stock	3,965.5	53,062	1,962.1	26,115	2,003.4	26,947
Cull trees:						
Sound culls:						
Sawtimber-size trees	360.8	4,516	57.0	704	303.8	3,812
Poletimber-size trees	149.8	2,309	8.4	134	141.4	2,175
Total	510.6	6,825	65.4	838	445.2	5,987
Rotten culls	20.6	275	1.7	20	18.9	255
Total cull trees	531.2	7,100	67.1	858	464.1	6,242
Hardwood limbs	192.9	2,367	--	--	192.9	2,367
Salvable dead trees	0.9	13	0.4	5	0.5	8
All timber	4,690.5	62,542	2,029.6	26,978	2,660.9	35,564
PIEDMONT						
Sawtimber trees:						
Saw-log portion	1,191.8	15,151	689.9	8,884	501.9	6,267
Upper stem	412.7	5,409	215.9	2,815	196.8	2,594
Total	1,604.5	20,560	905.8	11,699	698.7	8,861
Poletimber trees	1,115.2	17,487	610.9	9,710	504.3	7,777
Total growing stock	2,719.7	38,047	1,516.7	21,409	1,203.0	16,638
Cull trees:						
Sound culls:						
Sawtimber-size trees	169.9	2,175	42.0	559	127.9	1,616
Poletimber-size trees	134.2	2,095	18.2	293	116.0	1,802
Total	304.1	4,270	60.2	852	243.9	3,418
Rotten culls	21.6	338	2.0	32	19.6	306
Total cull trees	325.7	4,608	62.2	884	263.5	3,724
Hardwood limbs	61.1	759	--	--	61.1	759
Salvable dead trees	1.3	17	0.8	11	0.5	6
All timber	3,107.8	43,431	1,579.7	22,304	1,528.1	21,127

Table 14.--Net volume of sawtimber on commercial forest land by diameter class and species, South Carolina, 1958

(In million board feet)

Species	All classes	Diameter class (In inches)				
		10	12	14	16-18	20+
Yellow pine:						
Longleaf pine	1,586.8	538.1	443.0	295.7	280.6	29.4
Slash pine	214.3	57.9	44.1	46.5	59.5	6.3
Loblolly pine	8,645.5	1,309.3	1,516.0	1,536.7	2,586.9	1,696.6
Shortleaf pine	2,085.6	778.4	567.4	356.6	297.9	85.3
Pond pine	980.7	224.7	253.7	230.4	203.2	68.7
Virginia pine	83.0	21.9	29.0	12.9	14.4	4.8
Other yellow pine	64.4	10.6	11.5	3.5	18.1	20.7
Total	13,660.3	2,940.9	2,864.7	2,482.3	3,460.6	1,911.8
Other softwoods:						
White pine	151.0	8.1	11.2	4.8	50.0	76.9
Cypress	1,501.0	190.4	312.0	284.6	402.3	311.7
Redcedar	75.9	29.0	18.7	6.5	15.0	6.7
Total	1,727.9	227.5	341.9	295.9	467.3	395.3
Total softwoods	15,388.2	3,168.4	3,206.6	2,778.2	3,927.9	2,307.1
Preferred hardwoods:						
Sweetgum	2,624.7	--	572.7	565.4	806.8	679.8
Yellow-poplar	845.5	--	176.5	163.4	283.4	222.2
White and swamp chestnut oaks	765.5	--	203.3	154.4	202.3	205.5
No. red and swamp red oaks	313.9	--	50.6	60.8	71.5	131.0
Ash	430.0	--	137.0	105.1	106.5	81.4
Hard maple	9.2	--	5.8	3.4	--	--
Yellow birch	4.2	--	--	--	--	4.2
Black walnut	16.1	--	2.1	--	14.0	--
Total	5,009.1	--	1,148.0	1,052.5	1,484.5	1,324.1
Other hardwoods:						
Tupelo and blackgum	2,967.5	--	595.8	737.8	939.8	694.1
Cottonwood	84.5	--	10.9	21.8	16.1	35.7
Soft maple	695.8	--	175.5	169.6	208.3	142.4
Other white oaks	645.4	--	123.4	99.8	193.8	228.4
Other red oaks	2,240.5	--	387.4	346.3	617.2	889.6
Hickory	669.3	--	130.1	107.2	196.2	235.8
Beech	99.5	--	10.0	20.2	24.4	44.9
Dogwood, holly, persimmon	22.9	--	6.4	12.0	4.5	--
Other hardwoods	707.7	--	149.6	134.5	227.9	195.7
Total	8,133.1	--	1,589.1	1,649.2	2,428.2	2,466.6
Total hardwoods	13,142.2	--	2,737.1	2,701.7	3,912.7	3,790.7
All species	28,530.4	3,168.4	5,943.7	5,479.9	7,840.6	6,097.8

Table 15.--Net volume of growing stock on commercial forest land by diameter class and species,
South Carolina, 1958

Species	All classes		Diameter class (In inches)					
			6		8		10	
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
Yellow pine:								
Longleaf pine	510.3	7,045	48.1	820	99.6	1,497	122.0	1,651
Slash pine	69.7	965	11.1	186	10.6	153	13.2	181
Loblolly pine	2,348.3	31,581	254.9	4,374	293.8	4,403	341.0	4,595
Shortleaf pine	814.5	11,699	162.4	2,767	191.9	2,850	186.8	2,568
Pond pine	302.8	4,179	34.5	592	52.6	789	59.0	800
Virginia pine	54.5	796	15.4	257	18.1	264	6.4	89
Other yellow pine	16.5	215	1.6	26	1.8	26	2.6	35
Total	4,116.6	56,480	528.0	9,022	668.4	9,982	731.0	9,919
Other softwoods:								
White pine	25.8	284	0.2	3	--	--	2.1	26
Cypress	349.1	4,091	7.2	110	28.3	381	52.5	644
Redcedar	28.2	365	6.3	95	6.1	81	6.8	85
Total	403.1	4,740	13.7	208	34.4	462	61.4	755
Total softwoods	4,519.7	61,220	541.7	9,230	702.8	10,444	792.4	10,674
Preferred hardwoods:								
Sweetgum	860.8	11,625	64.6	1,152	104.4	1,593	122.2	1,691
Yellow-poplar	240.1	3,188	11.4	208	21.3	325	25.9	358
White and swamp chestnut oaks	265.9	3,637	25.5	457	33.3	506	40.5	557
No. red and swamp red oaks	91.6	1,229	6.2	108	11.2	169	8.5	120
Ash	194.8	2,745	27.3	481	34.9	533	35.2	494
Hard maple	4.8	70	1.1	21	--	--	1.3	18
Yellow birch	0.9	11	--	--	--	--	--	--
Black walnut	5.1	66	0.5	8	--	--	0.8	11
Total	1,664.0	22,571	136.6	2,435	205.1	3,126	234.4	3,249
Other hardwoods:								
Tupelo and blackgum	960.7	12,811	31.0	572	91.4	1,391	151.1	2,134
Cottonwood	24.8	331	1.6	29	2.3	36	2.1	30
Soft maple	264.3	3,637	28.1	494	38.7	586	40.8	571
Other white oaks	199.7	2,680	18.1	319	20.4	309	24.7	344
Other red oaks	749.6	10,246	89.4	1,579	92.9	1,416	102.6	1,428
Hickory	203.5	2,738	20.3	358	18.9	292	22.0	308
Beech	27.4	356	1.2	21	--	--	3.7	52
Dogwood, holly, persimmon	39.0	609	16.1	280	10.9	168	6.6	91
Other hardwoods	283.4	3,918	31.2	552	45.7	702	43.4	604
Total	2,752.4	37,326	237.0	4,204	321.2	4,900	397.0	5,562
Total hardwoods	4,416.4	59,897	373.6	6,639	526.3	8,026	631.4	8,811
All species	8,936.1	121,117	915.3	15,869	1,229.1	18,470	1,423.8	19,485

Table 15.--Net volume of growing stock on commercial forest land by diameter class and species,
South Carolina, 1958 (continued)

Species	Diameter class (In inches)							
	12		14		16-18		20+	
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
Yellow pine:								
Longleaf pine	110.9	1,469	66.0	835	58.4	712	5.3	61
Slash pine	11.0	145	10.4	134	12.2	152	1.2	14
Loblolly pine	345.1	4,502	320.4	4,101	489.8	6,034	303.3	3,572
Shortleaf pine	127.4	1,687	73.2	932	57.5	715	15.3	180
Pond pine	58.2	764	47.9	619	38.3	470	12.3	145
Virginia pine	7.3	96	3.1	39	3.2	39	1.0	12
Other yellow pine	2.6	34	0.7	9	3.4	42	3.8	43
Total	662.5	8,697	521.7	6,669	662.8	8,164	342.2	4,027
Other softwoods:								
White pine	2.4	29	0.9	10	8.4	92	11.8	124
Cypress	71.4	850	59.1	681	78.8	886	51.8	539
Redcedar	3.9	46	1.2	14	2.8	32	1.1	12
Total	77.7	925	61.2	705	90.0	1,010	64.7	675
Total softwoods	740.2	9,622	582.9	7,374	752.8	9,174	406.9	4,702
Preferred hardwoods:								
Sweetgum	136.0	1,806	129.6	1,662	173.7	2,145	130.3	1,576
Yellow-poplar	42.1	562	37.3	481	59.7	743	42.4	511
White and swamp chestnut oaks	46.9	627	35.2	453	43.6	541	40.9	496
No. red and swamp red oaks	11.4	153	13.8	180	15.2	191	25.3	308
Ash	32.9	430	24.7	317	23.2	289	16.6	201
Hard maple	1.5	20	0.9	11	--	--	--	--
Yellow birch	--	--	--	--	--	--	0.9	11
Black walnut	0.5	6	--	--	3.3	41	--	--
Total	271.3	3,604	241.5	3,104	318.7	3,950	256.4	3,103
Other hardwoods:								
Tupelo and blackgum	162.9	2,118	190.7	2,484	199.4	2,495	134.2	1,617
Cottonwood	2.6	34	5.3	69	3.5	44	7.4	89
Soft maple	42.1	545	39.6	517	45.2	565	29.8	359
Other white oaks	28.3	374	22.9	291	41.3	512	44.0	531
Other red oaks	85.7	1,148	77.9	1,000	129.1	1,593	172.0	2,082
Hickory	31.0	412	24.2	310	41.4	511	45.7	547
Beech	2.5	34	4.9	65	5.6	69	9.5	115
Dogwood, holly, persimmon	1.5	19	2.9	39	1.0	12	--	--
Other hardwoods	39.0	509	32.6	420	51.4	643	40.1	488
Total	395.6	5,193	401.0	5,195	517.9	6,444	482.7	5,828
Total hardwoods	666.9	8,797	642.5	8,299	836.6	10,394	739.1	8,931
All species	1,407.1	18,419	1,225.4	15,673	1,589.4	19,568	1,146.0	13,633

Table 16.--Net volume of timber on commercial forest land by diameter class, species group, class of material, and Survey Unit, South Carolina, 1958

Species group and class of material	All classes		Diameter class (In inches)					
			6		8		10	
	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>ords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>ords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>ords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>ords</u>
STATE								
Growing stock:								
Softwood	4,519.7	61,220	541.7	9,230	702.8	10,444	792.4	10,674
Hardwood	4,416.4	59,897	373.6	6,639	526.3	8,026	631.4	8,811
Total	8,936.1	121,117	915.3	15,869	1,229.1	18,470	1,423.8	19,485
Sound culls:								
Softwood	162.6	2,166	12.3	213	19.1	285	41.4	571
Hardwood	999.3	13,566	82.6	1,482	135.4	2,066	147.3	2,067
Total	1,161.9	15,732	94.9	1,695	154.5	2,351	188.7	2,638
Rotten culls	51.9	749	12.3	217	13.6	208	5.7	82
Hardwood limbs	360.8	4,458	--	--	--	--	--	--
All timber	10,510.7	142,056	1,022.5	17,781	1,397.2	21,029	1,618.2	22,205
SOUTHERN COASTAL PLAIN								
Growing stock:								
Softwood	1,040.9	13,696	74.9	1,238	146.4	2,137	179.8	2,418
Hardwood	1,210.0	16,312	86.4	1,533	145.8	2,203	168.7	2,364
Total	2,250.9	30,008	161.3	2,771	292.2	4,340	348.5	4,782
Sound culls:								
Softwood	37.0	476	0.9	14	3.9	57	9.5	127
Hardwood	310.2	4,161	18.4	348	41.4	616	48.1	674
Total	347.2	4,637	19.3	362	45.3	673	57.6	801
Rotten culls	9.7	136	1.7	33	1.2	20	1.2	18
Hardwood limbs	106.8	1,332	--	--	--	--	--	--
All timber	2,714.6	36,113	182.3	3,166	338.7	5,033	407.3	5,601

Table 16.--Net volume of timber on commercial forest land by diameter class,
species group, class of material, and Survey Unit, South Carolina, 1958
(continued)

Species group and class of material	Diameter class (In inches)							
	12		14		16-18		20+	
	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>
STATE								
Growing stock:								
Softwood	740.2	9,622	582.9	7,374	752.8	9,174	406.9	4,702
Hardwood	666.9	8,797	642.5	8,299	836.6	10,394	739.1	8,931
Total	1,407.1	18,419	1,225.4	15,673	1,589.4	19,568	1,146.0	13,633
Sound culls:								
Softwood	30.2	399	16.8	206	24.4	294	18.4	198
Hardwood	145.2	1,902	121.9	1,570	169.8	2,091	197.1	2,388
Total	175.4	2,301	138.7	1,776	194.2	2,385	215.5	2,586
Rotten culls	2.8	34	2.5	31	5.4	68	9.6	109
Hardwood limbs	36.7	473	27.3	323	93.7	1,249	203.1	2,413
All timber	1,622.0	21,227	1,393.9	17,803	1,882.7	23,270	1,574.2	18,741
SOUTHERN COASTAL PLAIN								
Growing stock:								
Softwood	178.1	2,284	160.4	1,998	203.8	2,495	97.5	1,126
Hardwood	189.1	2,507	188.7	2,435	232.0	2,871	199.3	2,399
Total	367.2	4,791	349.1	4,433	435.8	5,366	296.8	3,525
Sound culls:								
Softwood	8.4	107	5.5	67	6.9	83	1.9	21
Hardwood	41.7	548	36.0	461	60.6	744	64.0	770
Total	50.1	655	41.5	528	67.5	827	65.9	791
Rotten culls	0.9	12	0.6	7	1.4	17	2.7	29
Hardwood limbs	13.5	182	8.0	100	27.9	373	57.4	677
All timber	431.7	5,640	399.2	5,068	532.6	6,583	422.8	5,022

Table 16.--Net volume of timber on commercial forest land by diameter class, species group, class of material, and Survey Unit, South Carolina, 1958
(continued)

Species group and class of material	All classes		Diameter class (In inches)					
			6		8		10	
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
NORTHERN COASTAL PLAIN								
Growing stock:								
Softwood	1,962.1	26,115	169.1	2,934	243.2	3,655	302.6	4,036
Hardwood	2,003.4	26,947	139.4	2,489	209.9	3,217	276.8	3,893
Total	3,965.5	53,062	308.5	5,423	453.1	6,872	579.4	7,929
Sound culls:								
Softwood	65.4	838	2.9	51	5.5	83	16.7	229
Hardwood	445.2	5,987	28.3	503	54.4	844	58.7	828
Total	510.6	6,825	31.2	554	59.9	927	75.4	1,057
Rotten culls	20.6	275	2.4	40	3.7	58	2.5	35
Hardwood limbs	192.9	2,367	--	--	--	--	--	--
All timber	4,689.6	62,529	342.1	6,017	516.7	7,857	657.3	9,021
PIEDMONT								
Growing stock:								
Softwood	1,516.7	21,409	297.7	5,058	313.2	4,652	310.0	4,220
Hardwood	1,203.0	16,638	147.8	2,617	170.6	2,606	185.9	2,554
Total	2,719.7	38,047	445.5	7,675	483.8	7,258	495.9	6,774
Sound culls:								
Softwood	60.2	852	8.5	148	9.7	145	15.2	215
Hardwood	243.9	3,418	35.9	631	39.6	606	40.5	565
Total	304.1	4,270	44.4	779	49.3	751	55.7	780
Rotten culls	21.6	338	8.2	144	8.7	130	2.0	29
Hardwood limbs	61.1	759	--	--	--	--	--	--
All timber	3,106.5	43,414	498.1	8,598	541.8	8,139	553.6	7,583

Table 16.--Net volume of timber on commercial forest land by diameter class,
species group, class of material, and Survey Unit, South Carolina, 1958
(continued)

Species group and class of material	Diameter class (In inches)							
	12		14		16-18		20+	
	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>	<u>Million</u> <u>cu. ft.</u>	<u>Thousand</u> <u>cords</u>
NORTHERN COASTAL PLAIN								
Growing stock:								
Softwood	340.7	4,452	276.1	3,525	402.7	4,877	227.7	2,636
Hardwood	282.7	3,689	301.2	3,906	399.1	4,984	394.3	4,769
Total	623.4	8,141	577.3	7,431	801.8	9,861	622.0	7,405
Sound culls:								
Softwood	8.6	115	8.9	109	11.0	130	11.8	121
Hardwood	65.8	858	57.1	739	80.3	991	100.6	1,224
Total	74.4	973	66.0	848	91.3	1,121	112.4	1,345
Rotten culls	1.2	14	1.5	19	3.3	41	6.0	68
Hardwood limbs	20.1	234	12.9	146	45.7	632	114.2	1,355
All timber	719.1	9,362	657.7	8,444	942.1	11,655	854.6	10,173
PIEDMONT								
Growing stock:								
Softwood	221.4	2,886	146.4	1,851	146.3	1,802	81.7	940
Hardwood	195.1	2,601	152.6	1,958	205.5	2,539	145.5	1,763
Total	416.5	5,487	299.0	3,809	351.8	4,341	227.2	2,703
Sound culls:								
Softwood	13.2	177	2.4	30	6.5	81	4.7	56
Hardwood	37.7	496	28.8	370	28.9	356	32.5	394
Total	50.9	673	31.2	400	35.4	437	37.2	450
Rotten culls	0.7	8	0.4	5	0.7	10	0.9	12
Hardwood limbs	3.1	57	6.4	77	20.1	244	31.5	381
All timber	471.2	6,225	337.0	4,291	408.0	5,032	296.8	3,546

Table 17.--Net volume of sawtimber on commercial forest land by species
and log grade, South Carolina, 1958

(In million board feet)

Species	All grades	Log grade			
		1	2	3	4
Softwoods:					
Yellow pine	13,660.3	323.6	3,566.6	6,103.7	3,666.4
White pine	151.0	6.7	3.8	113.4	27.1
Cypress	1,501.0	119.7	920.8	367.7	92.8
Other softwoods	75.9	--	--	69.9	6.0
Total	15,388.2	450.0	4,491.2	6,654.7	3,792.3
Hardwoods:					
Preferred white and red oaks ^{1/}	1,079.4	211.6	123.0	439.5	305.3
Other white and red oaks	2,885.9	181.4	369.8	625.1	1,709.6
Hickory	669.3	59.5	122.8	213.7	273.3
Yellow birch	4.2	0.8	1.3	1.3	0.8
Hard maple	9.2	--	0.6	7.0	1.6
Sweetgum	2,624.7	237.5	572.7	845.4	969.1
Tupelo and blackgum	2,967.5	532.5	665.1	1,177.8	592.1
Ash	430.0	--	125.7	188.2	116.1
Yellow-poplar	845.5	28.5	121.2	244.9	450.9
Black walnut	16.1	--	8.7	7.4	--
Other hardwoods	1,610.4	117.3	351.4	647.2	494.5
Total	13,142.2	1,369.1	2,462.3	4,397.5	4,913.3
All species	28,530.4	1,819.1	6,953.5	11,052.2	8,705.6

^{1/} Includes *Q. alba*, *Q. michauxii*, *Q. rubra*, *Q. falcata* var. *paga-daefolia*, and *Q. shumardii*.

Table 18.--Net volume of salvable dead trees on commercial forest land by species group, South Carolina, 1958

Species group	Volume	
	<u>Million</u> <u>bd. ft.</u>	<u>Million</u> <u>cu. ft.</u>
Softwood	4.5	1.5
Hardwood	--	1.2
Total	4.5	2.7

Table 19.--Number of growing stock, cull, and salvable dead trees on commercial forest land by species group, diameter class, and Survey Unit, South Carolina, 1958

(In thousand trees)

Tree quality and species group	Total	Diameter class (In inches)				
		2	4	6	8	10
STATE						
Growing stock:						
Softwood	2,277,840	1,149,530	532,362	276,676	147,372	80,596
Hardwood	3,509,851	2,436,742	564,877	220,268	112,079	68,774
Total	5,787,691	3,586,272	1,097,239	496,944	259,451	149,370
Sound culls:						
Softwood	187,260	130,217	28,212	12,301	5,567	6,181
Hardwood	2,040,788	1,620,494	256,179	77,858	34,950	21,017
Total	2,228,048	1,750,711	284,391	90,159	40,517	27,198
Rotten culls:						
Softwood	52,072	46,114	4,131	1,402	297	98
Hardwood	215,011	170,162	26,722	10,016	4,485	1,129
Total	267,083	216,276	30,853	11,418	4,782	1,227
Salvable dead trees	318	--	-	125	95	46
All trees	8,283,140	5,553,259	1,412,483	598,646	304,845	177,841
SOUTHERN COASTAL PLAIN						
Growing stock:						
Softwood	342,825	152,864	80,288	39,603	29,328	17,723
Hardwood	798,011	542,779	121,542	53,860	31,062	18,347
Total	1,140,836	695,643	201,830	93,463	60,390	36,070
Sound culls:						
Softwood	13,556	6,659	2,539	855	975	1,295
Hardwood	520,546	406,260	69,486	18,371	10,326	6,757
Total	534,102	412,919	72,025	19,226	11,301	8,052
Rotten culls:						
Softwood	5,980	5,122	706	149	--	--
Hardwood	49,882	41,711	5,006	1,538	607	311
Total	55,862	46,833	5,712	1,687	607	311
Salvable dead trees	70	--	--	44	11	3
All trees	1,730,870	1,155,395	279,567	114,420	72,309	44,436

Table 19.--Number of growing stock, cull, and salvable dead trees on commercial forest land by species group, diameter class, and Survey Unit, South Carolina, 1958 (continued)

(In thousand trees)

Tree quality and species group	Diameter class (In inches)					
	12	14	16	18	20	22+
STATE						
Growing stock:						
Softwood	44,432	23,055	12,679	6,166	2,628	2,344
Hardwood	44,145	28,188	15,602	8,579	4,867	5,730
Total	88,577	51,243	28,281	14,745	7,495	8,074
Sound culls:						
Softwood	2,763	917	629	229	135	109
Hardwood	12,942	7,125	4,093	2,618	1,420	2,092
Total	15,705	8,042	4,722	2,847	1,555	2,201
Rotten culls:						
Softwood	--	--	20	--	--	10
Hardwood	943	501	407	231	121	294
Total	943	501	427	231	121	304
Salvable dead trees	13	18	8	8	3	2
All trees	105,238	59,804	33,438	17,831	9,174	10,581

SOUTHERN COASTAL PLAIN

Growing stock:						
Softwood	10,413	6,316	3,407	1,717	628	538
Hardwood	12,455	8,225	4,738	2,100	1,391	1,512
Total	22,868	14,541	8,145	3,817	2,019	2,050
Sound culls:						
Softwood	681	294	172	58	22	6
Hardwood	3,699	2,066	1,504	905	503	669
Total	4,380	2,360	1,676	963	525	675
Rotten culls:						
Softwood	--	--	--	--	--	3
Hardwood	300	120	119	43	53	74
Total	300	120	119	43	53	77
Salvable dead trees	2	7	2	--	1	--
All trees	27,550	17,028	9,942	4,823	2,598	2,802

Table 19.--Number of growing stock, cull, and salvable dead trees on commercial forest land by species group, diameter class, and Survey Unit, South Carolina, 1958 (continued)

(In thousand trees)

Tree quality and species group	Total	Diameter class (In inches)				
		2	4	6	8	10
NORTHERN COASTAL PLAIN						
Growing stock:						
Softwood	728,544	354,418	165,651	85,818	48,807	30,127
Hardwood	1,546,139	1,094,350	235,984	92,615	44,449	30,028
Total	2,274,683	1,448,768	401,635	178,433	93,256	60,155
Sound culls:						
Softwood	38,660	27,113	3,256	2,932	1,370	2,361
Hardwood	790,804	634,358	92,306	28,253	13,548	8,288
Total	829,464	661,471	95,562	31,185	14,918	10,649
Rotten culls:						
Softwood	7,150	5,859	1,059	107	--	98
Hardwood	59,813	49,129	4,790	2,256	1,869	509
Total	66,963	54,988	5,849	2,363	1,869	607
Salvable dead trees	124	--	--	69	17	21
All trees	3,171,234	2,165,227	503,046	212,050	110,060	71,432
PIEDMONT						
Growing stock:						
Softwood	1,206,471	642,248	286,423	151,255	69,237	32,746
Hardwood	1,165,701	799,613	207,351	73,793	36,568	20,399
Total	2,372,172	1,441,861	493,774	225,048	105,805	53,145
Sound culls:						
Softwood	135,044	96,445	22,417	8,514	3,222	2,525
Hardwood	729,438	579,876	94,387	31,234	11,076	5,972
Total	864,482	676,321	116,804	39,748	14,298	8,497
Rotten culls:						
Softwood	38,942	35,133	2,366	1,146	297	--
Hardwood	105,316	79,322	16,926	6,222	2,009	309
Total	144,258	114,455	19,292	7,368	2,306	309
Salvable dead trees	124	--	--	12	67	22
All trees	3,381,036	2,232,637	629,870	272,176	122,476	61,973

Table 19.--Number of growing stock, cull, and salvable dead trees on commercial forest land by species group, diameter class, and Survey Unit, South Carolina, 1958 (continued)

(In thousand trees)

Tree quality and species group	Diameter class (In inches)					
	12	14	16	18	20	22+
NORTHERN COASTAL PLAIN						
Growing stock:						
Softwood	20,089	10,777	6,638	3,383	1,482	1,354
Hardwood	18,523	13,137	7,114	4,369	2,452	3,118
Total	38,612	23,914	13,752	7,752	3,934	4,472
Sound culls:						
Softwood	715	467	222	125	13	86
Hardwood	5,818	3,306	1,939	1,215	663	1,110
Total	6,533	3,773	2,161	1,340	676	1,196
Rotten culls:						
Softwood	--	--	20	--	--	7
Hardwood	406	302	230	121	32	169
Total	406	302	250	121	32	176
Salvable dead trees	5	3	4	3	1	1
All trees	45,556	27,992	16,167	9,216	4,643	5,845
PIEDMONT						
Growing stock:						
Softwood	13,930	5,962	2,634	1,066	518	452
Hardwood	13,167	6,826	3,750	2,110	1,024	1,100
Total	27,097	12,788	6,384	3,176	1,542	1,552
Sound culls:						
Softwood	1,367	156	235	46	100	17
Hardwood	3,425	1,753	650	498	254	313
Total	4,792	1,909	885	544	354	330
Rotten culls:						
Softwood	--	--	--	--	--	--
Hardwood	237	79	58	67	36	51
Total	237	79	58	67	36	51
Salvable dead trees	6	8	2	5	1	1
All trees	32,132	14,784	7,329	3,792	1,933	1,934

Table 20.--Average net sawtimber volume per acre on commercial forest land
by ownership, major forest type, species group, and Survey Unit, South
Carolina, 1958

(In board-feet)

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
STATE							
Pine types:							
Softwood	2,117	4,326	1,302	2,074	2,163	1,930	1,962
Hardwood	149	225	49	74	197	138	139
Total	2,266	4,551	1,351	2,148	2,360	2,068	2,101
Oak-pine type:							
Softwood	1,241	2,638	--	--	1,531	1,102	1,129
Hardwood	1,121	2,186	--	--	1,335	1,019	1,037
Total	2,362	4,824	--	--	2,866	2,121	2,166
Hardwood types:							
Softwood	419	1,297	172	139	833	323	418
Hardwood	2,110	1,871	1,755	758	2,815	1,910	2,512
Total	2,529	3,168	1,927	897	3,648	2,233	2,930
All types:							
Softwood	1,289	3,467	796	1,256	1,598	1,081	1,229
Hardwood	1,101	801	739	363	1,298	1,071	1,231
Total	2,390	4,268	1,535	1,619	2,896	2,152	2,460
SOUTHERN COASTAL PLAIN							
Pine types:							
Softwood	2,037	--	304	5,162	2,408	2,095	2,014
Hardwood	149	--	37	--	241	143	117
Total	2,186	--	341	5,162	2,649	2,238	2,131
Oak-pine type:							
Softwood	1,370	--	--	--	1,997	1,245	1,222
Hardwood	1,220	--	--	--	1,849	1,012	1,351
Total	2,590	--	--	--	3,846	2,257	2,573
Hardwood types:							
Softwood	535	--	168	--	1,210	452	331
Hardwood	2,064	--	2,463	1,426	2,659	1,887	2,137
Total	2,599	--	2,631	1,426	3,869	2,339	2,468
All types:							
Softwood	1,236	--	226	1,882	1,830	1,154	1,249
Hardwood	1,189	--	1,215	906	1,491	1,139	1,060
Total	2,425	--	1,441	2,788	3,321	2,293	2,309

Table 20.--Average net sawtimber volume per acre on commercial forest land
by ownership, major forest type, species group, and Survey Unit, South
Carolina, 1958 (continued)

(In board-feet)

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
NORTHERN COASTAL PLAIN							
Pine types:							
Softwood	2,615	4,118	2,634	1,883	2,182	2,582	2,799
Hardwood	179	238	126	24	240	159	193
Total	2,794	4,356	2,760	1,907	2,422	2,741	2,992
Oak-pine type:							
Softwood	1,659	2,996	--	--	1,723	1,477	1,626
Hardwood	1,264	1,727	--	--	1,244	1,163	1,393
Total	2,923	4,723	--	--	2,967	2,640	3,019
Hardwood types:							
Softwood	561	2,591	287	175	728	424	654
Hardwood	2,518	2,163	267	865	3,202	2,170	3,338
Total	3,079	4,754	554	1,040	3,930	2,594	3,992
All types:							
Softwood	1,577	3,612	1,760	1,120	1,568	1,428	1,571
Hardwood	1,361	885	178	399	1,498	1,232	1,951
Total	2,938	4,497	1,938	1,519	3,066	2,660	3,522
PIEDMONT							
Pine type:							
Softwood	1,684	4,454	1,941	2,342	1,888	1,190	1,372
Hardwood	121	217	--	219	80	115	113
Total	1,805	4,671	1,941	2,561	1,968	1,305	1,485
Oak-pine type:							
Softwood	789	2,275	--	--	644	703	681
Hardwood	932	2,651	--	--	792	903	607
Total	1,721	4,926	--	--	1,436	1,606	1,288
Hardwood types:							
Softwood	99	352	--	--	224	72	101
Hardwood	1,574	1,658	--	--	1,895	1,621	1,454
Total	1,673	2,010	--	--	2,119	1,693	1,555
All types:							
Softwood	1,005	3,369	1,381	1,623	1,337	657	881
Hardwood	742	744	--	152	606	848	607
Total	1,747	4,113	1,381	1,775	1,943	1,505	1,488

Table 21.--Average net volume per acre of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958

Forest type, species group, and class of material	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
STATE														
Pine types:														
Growing stock:														
Softwood	652.2	9.0	1,196.4	16.1	449.9	6.3	630.7	8.7	678.1	9.4	597.6	8.2	626.2	8.7
Hardwood	65.8	0.9	117.0	1.7	18.6	0.3	36.9	0.5	69.1	1.0	66.8	1.0	54.2	0.8
Total	718.0	9.9	1,313.4	17.8	468.5	6.6	667.6	9.2	747.2	10.4	664.4	9.2	680.4	9.5
Cull timber:														
Softwood	22.4	0.3	19.1	0.3	15.4	0.2	33.3	0.4	16.4	0.2	22.5	0.3	27.7	0.4
Hardwood	22.1	0.3	42.1	0.6	26.9	0.4	14.9	0.2	17.2	0.2	21.5	0.3	20.9	0.3
Total	44.5	0.6	61.2	0.9	42.3	0.6	48.2	0.6	33.6	0.4	44.0	0.6	48.6	0.7
Oak-pine type:														
Growing stock:														
Softwood	317.9	4.2	588.6	7.5	--	--	--	--	386.8	5.1	289.0	3.8	296.3	3.9
Hardwood	429.3	5.9	845.4	11.7	--	--	--	--	513.3	7.1	389.8	5.4	395.0	5.5
Total	747.2	10.1	1,434.0	19.2	--	--	--	--	900.1	12.2	678.8	9.2	691.3	9.4
Cull timber:														
Softwood	7.2	0.1	9.6	0.1	--	--	--	--	19.5	0.3	4.8	0.1	5.0	0.1
Hardwood	94.5	1.3	152.3	2.1	45.9	0.7	--	--	105.1	1.4	86.5	1.2	97.5	1.4
Total	101.7	1.4	161.9	2.2	45.9	0.7	--	--	124.6	1.7	91.3	1.3	102.5	1.5
Hardwood types:														
Growing stock:														
Softwood	100.3	1.2	281.7	3.2	40.0	0.5	37.6	0.5	192.9	2.3	79.0	1.0	102.1	1.2
Hardwood	681.5	9.2	669.2	9.0	552.9	7.5	257.7	3.4	895.3	12.0	631.3	8.5	766.0	10.2
Total	781.8	10.4	950.9	12.2	592.9	8.0	295.3	3.9	1,088.2	14.3	710.3	9.5	868.1	11.4
Cull timber:														
Softwood	6.4	0.1	8.1	0.1	2.7	(1/)	7.3	0.1	6.4	0.1	4.4	0.1	13.0	0.1
Hardwood	156.2	2.1	130.3	1.8	140.6	1.9	60.5	0.9	211.8	2.8	140.1	1.9	187.3	2.5
Total	162.6	2.2	138.4	1.9	143.3	1.9	67.8	1.0	218.2	2.9	144.5	2.0	200.3	2.6
All types:														
Growing stock:														
Softwood	378.7	5.1	926.8	12.3	267.1	3.7	379.9	5.2	466.3	6.3	319.6	4.3	373.1	5.1
Hardwood	370.0	5.0	317.7	4.4	234.7	3.2	130.2	1.8	424.7	5.7	368.1	5.0	388.2	5.2
Total	748.7	10.1	1,244.5	16.7	501.8	6.9	510.1	7.0	891.0	12.0	687.7	9.3	761.3	10.3
Cull timber:														
Softwood	14.0	0.2	15.6	0.2	9.7	0.1	22.3	0.3	12.9	0.2	12.1	0.2	19.4	0.3
Hardwood	87.7	1.2	73.5	1.0	73.7	1.0	34.2	0.5	99.3	1.3	84.6	1.2	98.7	1.3
Total	101.7	1.4	89.1	1.2	83.4	1.1	56.5	0.8	112.2	1.5	96.7	1.4	118.1	1.6
All timber	850.4	11.5	1,333.6	17.9	585.2	8.0	566.6	7.8	1,003.2	13.5	784.4	10.7	879.4	11.9

1/ Less than 0.05 cord per acre.

Table 21.--Average net volume per acre of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958 (continued)

Forest type, species group, and class of material	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
SOUTHERN COASTAL PLAIN														
Pine types:														
Growing stock:														
Softwood	581.9	7.8	--	--	197.0	2.9	1,469.1	19.7	702.6	9.5	580.5	7.8	582.2	7.8
Hardwood	52.5	0.7	--	--	8.3	0.1	--	--	61.4	0.8	59.7	0.8	36.8	0.5
Total	634.4	8.5	--	--	205.3	3.0	1,469.1	19.7	764.0	10.3	640.2	8.6	619.0	8.3
Cull timber:														
Softwood	18.8	0.2	--	--	6.1	0.1	--	--	20.3	0.3	18.1	0.2	23.5	0.3
Hardwood	22.5	0.3	--	--	27.7	0.3	--	--	13.3	0.2	22.6	0.3	29.6	0.4
Total	41.3	0.5	--	--	33.8	0.4	--	--	33.6	0.5	40.7	0.5	53.1	0.7
Oak-pine type:														
Growing stock:														
Softwood	307.3	3.9	--	--	--	--	--	--	464.2	5.9	283.2	3.6	237.2	2.9
Hardwood	412.0	5.6	--	--	--	--	--	--	559.7	7.6	386.9	5.3	372.9	4.9
Total	719.3	9.5	--	--	--	--	--	--	1,023.9	13.5	670.1	8.9	610.1	7.8
Cull timber:														
Softwood	9.0	0.1	--	--	--	--	--	--	21.8	0.3	6.5	0.1	3.3	(1/)
Hardwood	123.8	1.6	--	--	--	--	--	--	158.2	2.1	105.9	1.4	163.1	2.2
Total	132.8	1.7	--	--	--	--	--	--	180.0	2.4	112.4	1.5	166.4	2.2
Hardwood types:														
Growing stock:														
Softwood	129.5	1.6	--	--	41.6	0.5	51.2	0.8	288.9	3.5	111.0	1.4	75.9	0.9
Hardwood	669.3	9.0	--	--	784.0	10.7	934.2	12.9	859.2	11.5	628.7	8.5	604.6	7.9
Total	798.8	10.6	--	--	825.6	11.2	985.4	13.7	1,148.1	15.0	739.7	9.9	680.5	8.8
Cull timber:														
Softwood	6.8	0.1	--	--	3.9	0.1	--	--	11.5	0.1	5.4	0.1	9.9	0.1
Hardwood	166.8	2.2	--	--	157.8	2.2	78.9	1.0	186.1	2.5	160.1	2.2	184.7	2.4
Total	173.6	2.3	--	--	161.7	2.3	78.9	1.0	197.6	2.6	165.5	2.3	194.6	2.5
All types:														
Growing stock:														
Softwood	334.4	4.4	--	--	113.9	1.6	568.3	7.7	492.7	6.5	307.1	4.0	342.6	4.5
Hardwood	388.7	5.2	--	--	384.9	5.2	593.5	8.2	470.4	6.3	388.2	5.3	301.1	4.0
Total	723.1	9.6	--	--	498.8	6.8	1,161.8	15.9	963.1	12.8	695.3	9.3	643.7	8.5
Cull timber:														
Softwood	12.0	0.2	--	--	4.8	0.1	--	--	16.5	0.2	10.4	0.1	16.1	0.2
Hardwood	102.6	1.4	--	--	89.8	1.2	50.1	0.6	105.9	1.4	102.3	1.4	105.5	1.4
Total	114.6	1.6	--	--	94.6	1.3	50.1	0.6	122.4	1.6	112.7	1.5	121.6	1.6
All timber	837.7	11.2	--	--	593.4	8.1	1,211.9	16.5	1,085.5	14.4	808.0	10.8	765.3	10.1

1/ Less than 0.05 cord per acre.

Table 21.--Average net volume per acre of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958 (continued)

Forest type, species group, and class of material	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
NORTHERN COASTAL PLAIN														
Pine types:														
Growing stock:														
Softwood	730.0	9.9	1,115.8	14.9	651.6	8.6	585.3	8.1	664.8	9.1	693.4	9.4	804.9	11.0
Hardwood	74.6	1.1	75.5	1.0	60.1	0.9	17.4	0.3	81.0	1.1	75.4	1.1	80.9	1.1
Total	804.6	11.0	1,191.3	15.9	711.7	9.5	602.7	8.4	745.8	10.2	768.8	10.5	885.8	12.1
Cull timber:														
Softwood	20.4	0.3	18.5	0.2	31.8	0.4	46.4	0.6	9.3	0.1	21.2	0.3	23.4	0.3
Hardwood	25.8	0.4	55.2	0.8	55.0	0.8	15.3	0.3	18.7	0.3	22.2	0.3	32.5	0.4
Total	46.2	0.7	73.7	1.0	86.8	1.2	61.7	0.9	28.0	0.4	43.4	0.6	55.9	0.7
Oak-pine type:														
Growing stock:														
Softwood	393.2	5.1	659.1	8.3	--	--	--	--	414.7	5.4	353.5	4.6	389.7	5.1
Hardwood	459.7	6.3	746.1	10.5	--	--	--	--	546.0	7.6	397.3	5.4	461.3	6.2
Total	852.9	11.4	1,405.2	18.8	--	--	--	--	960.7	13.0	750.8	10.0	851.0	11.3
Cull timber:														
Softwood	8.2	0.1	19.1	0.2	--	--	--	--	26.0	0.3	1.4	(1/)	9.3	0.1
Hardwood	94.6	1.3	198.7	2.7	--	--	--	--	100.3	1.4	82.7	1.1	85.1	1.1
Total	102.8	1.4	217.8	2.9	--	--	--	--	126.3	1.7	84.1	1.1	94.4	1.2
Hardwood types:														
Growing stock:														
Softwood	125.1	1.5	575.5	6.6	57.3	0.8	44.1	0.6	156.6	1.8	92.7	1.1	153.2	1.8
Hardwood	764.0	10.2	741.4	9.9	56.1	0.7	243.7	3.2	970.2	12.9	679.0	9.1	958.8	12.7
Total	889.1	11.7	1,316.9	16.5	113.4	1.5	287.8	3.8	1,126.8	14.7	771.7	10.2	1,112.0	14.5
Cull timber:														
Softwood	9.6	0.1	19.1	0.2	--	--	9.3	0.1	2.4	(1/)	5.9	0.1	22.5	0.2
Hardwood	170.9	2.3	126.1	1.8	160.1	2.0	46.8	0.7	247.7	3.3	145.5	2.0	209.7	2.8
Total	180.5	2.4	145.2	2.0	160.1	2.0	56.1	0.8	250.1	3.3	151.4	2.1	232.2	3.0
All types:														
Growing stock:														
Softwood	419.6	5.6	929.0	12.1	430.4	5.7	343.7	4.7	442.8	5.9	369.4	4.9	426.8	5.7
Hardwood	428.4	5.8	319.8	4.3	58.6	0.8	118.5	1.6	471.6	6.3	399.2	5.4	575.2	7.7
Total	848.0	11.4	1,248.8	16.4	489.0	6.5	462.2	6.3	914.4	12.2	768.6	10.3	1,002.0	13.4
Cull timber:														
Softwood	14.4	0.2	18.7	0.2	20.0	0.3	29.8	0.4	7.9	0.1	12.0	0.2	21.8	0.3
Hardwood	99.2	1.3	90.6	1.2	94.1	1.2	29.4	0.4	116.3	1.6	87.9	1.2	130.3	1.7
Total	113.6	1.5	109.3	1.4	114.1	1.5	59.2	0.8	124.2	1.7	99.9	1.4	152.1	2.0
All timber	961.6	12.9	1,358.1	17.8	603.1	8.0	521.4	7.1	1,038.6	13.9	868.5	11.7	1,154.1	15.4

1/ Less than 0.05 cord per acre.

Table 21.--Average net volume per acre of growing stock and cull timber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1958 (continued)

Forest type, species group, and class of material	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
PIEDMONT														
Pine types:														
Growing stock:														
Softwood	619.2	8.8	1,246.3	16.8	734.7	10.3	685.7	9.4	676.7	9.6	517.1	7.5	524.7	7.4
Hardwood	65.2	0.9	142.7	2.1	--	--	93.6	1.4	56.0	0.8	63.4	0.9	43.8	0.6
Total	684.4	9.7	1,389.0	18.9	734.7	10.3	779.3	10.8	732.7	10.4	580.5	8.4	568.5	8.0
Cull timber:														
Softwood	26.5	0.4	19.5	0.3	17.7	0.2	--	--	24.8	0.4	26.6	0.4	32.5	0.5
Hardwood	18.1	0.3	33.9	0.5	--	--	15.0	0.2	18.2	0.3	20.1	0.3	9.2	0.1
Total	44.6	0.7	53.4	0.8	17.7	0.2	15.0	0.2	43.0	0.7	46.7	0.7	41.7	0.6
Oak-pine type:														
Growing stock:														
Softwood	257.1	3.6	517.2	6.6	--	--	--	--	245.4	3.5	238.7	3.3	246.6	3.5
Hardwood	412.7	5.8	945.9	12.9	--	--	--	--	405.4	5.8	385.2	5.4	351.0	5.1
Total	669.8	9.4	1,463.1	19.5	--	--	--	--	650.8	9.3	623.9	8.7	597.6	8.6
Cull timber:														
Softwood	5.3	0.1	--	--	--	--	--	--	7.3	0.1	6.7	0.1	2.3	(1/)
Hardwood	76.6	1.1	105.3	1.6	115.1	1.7	--	--	42.5	0.7	77.8	1.1	78.3	1.2
Total	81.9	1.2	105.3	1.6	115.1	1.7	--	--	49.8	0.8	84.5	1.2	80.6	1.2
Hardwood types:														
Growing stock:														
Softwood	35.6	0.5	67.0	0.8	--	--	--	--	70.0	1.0	30.4	0.4	38.5	0.5
Hardwood	576.0	7.9	616.4	8.4	--	--	104.1	1.5	732.9	10.0	576.7	7.9	565.8	7.8
Total	611.6	8.4	683.4	9.2	--	--	104.1	1.5	802.9	11.0	607.1	8.3	604.3	8.3
Cull timber:														
Softwood	1.4	(1/)	--	--	--	--	--	--	6.8	0.1	1.5	(1/)	--	--
Hardwood	124.6	1.7	133.4	1.8	--	--	123.8	1.8	155.3	2.1	113.7	1.6	153.8	2.1
Total	126.0	1.7	133.4	1.8	--	--	123.8	1.8	162.1	2.2	115.2	1.6	153.8	2.1
All types:														
Growing stock:														
Softwood	365.9	5.2	925.3	12.4	523.0	7.4	475.2	6.5	478.4	6.8	277.5	4.0	335.5	4.7
Hardwood	290.2	4.0	316.3	4.4	--	--	96.8	1.4	262.0	3.6	319.2	4.4	247.9	3.5
Total	656.1	9.2	1,241.6	16.8	523.0	7.4	572.0	7.9	740.4	10.4	596.7	8.4	583.4	8.2
Cull timber:														
Softwood	15.0	0.2	13.5	0.2	12.6	0.2	--	--	18.3	0.3	13.6	0.2	18.7	0.3
Hardwood	63.6	0.9	61.9	0.9	8.1	0.1	48.4	0.7	54.5	0.8	66.7	0.9	64.1	0.9
Total	78.6	1.1	75.4	1.1	20.7	0.3	48.4	0.7	72.8	1.1	80.3	1.1	82.8	1.2
All timber	734.7	10.3	1,317.0	17.9	543.7	7.7	620.4	8.6	813.2	11.5	677.0	9.5	666.2	9.4

1/ Less than 0.05 cord per acre.

Table 22.--Average net volume per acre of growing stock on commercial forest land by stand size, major forest type, stocking, and site quality, South Carolina, 1958

Site quality and stocking	Stand size									
	All stand sizes		Sawtimber		Poletimber		Seedling and sapling		Nonstocked and other	
	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>
PINE TYPES										
Good site:										
Well stocked	1,092.2	14.9	1,530.4	20.4	616.2	9.4	70.1	0.9	--	--
Medium stocked	619.7	8.4	1,099.7	14.6	441.2	6.5	60.4	0.8	446.1	5.6
Poorly stocked	187.1	2.6	800.0	10.4	232.3	3.4	47.1	0.7	49.8	0.7
Total	922.9	12.6	1,456.7	19.4	539.7	8.2	62.9	0.8	92.9	1.2
Fair site:										
Well stocked	681.6	9.6	1,176.5	15.9	519.1	8.1	94.1	1.3	--	--
Medium stocked	428.6	6.0	1,027.9	13.6	349.9	5.3	75.6	1.0	366.0	5.2
Poorly stocked	113.0	1.6	478.6	6.3	190.6	2.9	37.6	0.6	63.7	0.8
Total	539.4	7.6	1,130.5	15.2	444.1	6.9	74.7	1.0	76.2	1.0
Poor site:										
Well stocked	597.0	8.5	1,171.4	16.2	458.4	7.0	67.9	0.9	--	--
Medium stocked	284.8	4.0	801.4	10.7	367.6	5.5	36.4	0.5	--	--
Poorly stocked	194.0	2.7	581.9	7.8	224.1	3.4	62.3	0.9	50.5	0.7
Total	428.3	6.1	1,025.1	14.1	399.0	6.1	52.9	0.7	50.5	0.7
All sites:										
Well stocked	900.5	12.4	1,413.9	18.9	554.2	8.5	80.0	1.1	--	--
Medium stocked	480.2	6.6	1,045.6	13.9	385.5	5.8	57.4	0.8	421.0	5.4
Poorly stocked	157.5	2.2	635.5	8.4	215.6	3.2	45.2	0.6	56.2	0.8
Total	718.0	9.9	1,334.8	17.8	477.3	7.3	65.6	0.9	77.6	1.0
OAK-PINE TYPES										
Good site:										
Well stocked	1,017.8	13.7	1,504.7	19.8	586.9	8.7	105.9	1.5	--	--
Medium stocked	898.0	11.9	1,266.1	16.6	635.0	9.2	134.1	1.7	--	--
Poorly stocked	431.9	5.7	886.7	11.5	327.3	4.6	10.2	0.1	891.3	12.7
Total	910.0	12.2	1,377.4	18.1	567.3	8.4	92.0	1.2	891.3	12.7
Fair site:										
Well stocked	635.5	8.9	1,192.3	16.3	512.9	7.6	70.7	1.0	--	--
Medium stocked	404.4	5.9	987.4	13.8	441.9	6.7	58.6	0.8	--	--
Poorly stocked	137.8	2.0	522.7	7.0	292.7	4.7	60.0	0.8	84.0	1.3
Total	467.1	6.7	1,120.7	15.4	458.1	6.9	63.6	0.9	84.0	1.3
Poor site:										
Well stocked	542.2	7.7	1,487.7	20.7	439.3	6.4	163.5	2.3	--	--
Medium stocked	161.3	2.3	--	--	310.1	4.6	65.0	0.8	--	--
Poorly stocked	133.5	2.1	--	--	198.8	3.2	63.0	1.1	71.1	0.8
Total	343.1	4.9	1,487.7	20.7	353.1	5.2	102.7	1.5	71.1	0.8
All sites:										
Well stocked	898.8	12.2	1,456.1	19.3	547.4	8.1	102.6	1.4	--	--
Medium stocked	685.6	9.2	1,233.9	16.2	489.5	7.2	97.1	1.3	--	--
Poorly stocked	303.3	4.1	867.5	11.3	278.7	4.2	32.9	0.4	179.6	2.5
Total	747.2	10.1	1,344.8	17.8	497.1	7.4	84.4	1.1	179.6	2.5

Table 22.--Average net volume per acre of growing stock on commercial forest land by stand size, major forest type, stocking, and site quality, South Carolina, 1958 (continued)

Site quality and stocking	Stand size									
	All stand sizes		Sawtimber		Poletimber		Seedling and sapling		Nonstocked and other	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
HARDWOOD TYPES										
Good site:										
Well stocked	1,805.7	23.5	2,063.3	26.7	638.1	9.6	136.9	1.8	--	--
Medium stocked	1,331.1	17.4	1,515.5	19.6	705.2	10.3	187.4	2.4	--	--
Poorly stocked	821.8	10.7	1,079.4	13.9	400.6	5.6	214.5	2.7	62.0	0.8
Total	1,520.1	19.8	1,774.2	23.0	613.9	9.1	165.3	2.1	62.0	0.8
Fair site:										
Well stocked	710.9	9.8	1,309.9	17.5	519.6	7.7	106.4	1.4	--	--
Medium stocked	586.8	7.9	1,097.1	14.5	464.8	6.8	121.2	1.6	408.0	5.2
Poorly stocked	298.0	4.0	854.6	11.1	405.8	5.9	67.6	0.9	123.2	1.6
Total	566.6	7.7	1,169.4	15.5	482.3	7.1	98.6	1.3	123.7	1.6
Poor site:										
Well stocked	230.3	3.4	--	--	364.3	5.5	117.5	1.5	--	--
Medium stocked	219.4	3.0	--	--	420.5	6.0	115.4	1.5	387.1	5.2
Poorly stocked	49.6	0.7	898.9	12.2	234.1	3.3	30.6	0.4	37.2	0.5
Total	94.0	1.3	898.9	12.2	361.4	5.3	73.7	1.0	39.4	0.5
All sites:										
Well stocked	1,094.6	14.6	1,740.9	22.8	530.0	7.9	110.1	1.5	--	--
Medium stocked	797.0	10.6	1,316.0	17.2	498.0	7.2	125.4	1.6	397.5	5.2
Poorly stocked	291.8	3.9	963.5	12.5	394.2	5.7	61.7	0.8	64.8	0.9
Total	781.8	10.4	1,497.9	19.6	495.4	7.3	98.7	1.3	67.1	0.9
ALL TYPES										
Good site:										
Well stocked	1,258.0	16.8	1,696.5	22.3	614.6	9.3	84.3	1.1	--	--
Medium stocked	959.5	12.7	1,353.2	17.7	533.7	7.8	95.7	1.2	446.1	5.6
Poorly stocked	453.0	6.0	1,009.2	13.1	281.7	4.1	46.8	0.6	77.3	1.1
Total	1,098.0	14.7	1,571.6	20.6	555.4	8.3	80.3	1.1	106.3	1.4
Fair site:										
Well stocked	694.1	9.7	1,243.8	16.7	519.1	7.9	99.5	1.3	--	--
Medium stocked	533.0	7.3	1,080.0	14.3	424.5	6.3	105.6	1.4	383.8	5.2
Poorly stocked	241.7	3.3	807.8	10.5	332.8	4.9	58.5	0.8	104.7	1.4
Total	551.7	7.6	1,154.0	15.4	464.9	7.0	88.9	1.2	108.6	1.4
Poor site:										
Well stocked	544.3	7.8	1,190.7	16.5	444.5	6.7	90.2	1.2	--	--
Medium stocked	259.5	3.7	801.4	10.7	374.5	5.5	63.7	0.8	387.2	5.2
Poorly stocked	87.2	1.2	629.7	8.4	221.8	3.4	42.2	0.6	38.7	0.5
Total	287.3	4.1	1,041.5	14.3	388.0	5.8	64.9	0.9	40.8	0.5
All sites:										
Well stocked	966.5	13.1	1,535.2	20.3	546.5	8.3	93.5	1.2	--	--
Medium stocked	666.2	9.0	1,232.1	16.2	445.2	6.6	93.8	1.2	413.6	5.4
Poorly stocked	250.6	3.4	897.2	11.7	299.9	4.4	53.1	0.7	65.9	0.9
Total	748.7	10.1	1,409.3	18.6	485.5	7.3	82.4	1.1	72.2	1.0

Table 23.--Net annual growth and cut of sawtimber and growing stock on commercial forest land by species, South Carolina, 1957

Species	Sawtimber		Growing stock			
	Net annual growth	Annual cut	Net annual growth	Annual cut	Net annual growth	Annual cut
	<u>Million board feet</u>		<u>Million cubic feet</u>		<u>Thousand cords</u> ^{1/}	
Softwood	1,003.5	1,037.0	280.9	277.4	4,255	3,724
Hardwood:						
Preferred hwdws.:						
Yellow-poplar	57.7	33.7	13.6	7.5	201	93
Sweetgum	104.6	110.4	25.8	26.6	387	337
Oaks	38.4	46.6	15.6	10.9	246	139
Other preferred hwdws.	23.8	26.8	6.2	6.1	95	77
Other hwdws.	248.7	255.1	62.0	64.2	934	827
Total	473.2	472.6	123.2	115.3	1,863	1,473
All species	1,476.7	1,509.6	404.1	392.7	6,118	5,197

^{1/} Differences in the relationship between growth and timber cut expressed in cubic feet and cords reflect variation in the cubic-foot content of a stacked cord according to the size of the timber. Since the timber making up the growth volume is on the average smaller than the timber cut, a cord of growth contains less wood than a cord of timber cut.

Table 24.--Gross annual growth, mortality, and cut of sawtimber and growing stock on commercial forest land by ownership and species group, South Carolina, 1957

Growth, mortality, and cut by species group	All owner-ships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
SAWTIMBER (In million board feet)							
Gross annual growth:							
Softwood	1,375.5	127.8	23.7	31.5	211.4	728.5	252.6
Hardwood	695.9	20.8	6.0	8.0	111.6	418.2	131.3
Total	2,071.4	148.6	29.7	39.5	323.0	1,146.7	383.9
Annual mortality:							
Softwood	372.0	47.5	4.9	6.5	65.2	179.1	68.8
Hardwood	222.7	7.6	4.0	1.8	38.5	117.3	53.5
Total	594.7	55.1	8.9	8.3	103.7	296.4	122.3
Annual cut:							
Softwood	1,037.0	42.0	7.0	11.0	165.5	597.7	213.8
Hardwood	472.6	2.2	0.6	--	117.1	240.3	112.4
Total	1,509.6	44.2	7.6	11.0	282.6	838.0	326.2
GROWING STOCK (In million cubic feet)							
Gross annual growth:							
Softwood	379.9	29.0	6.0	7.2	67.3	194.8	75.6
Hardwood	222.2	7.8	2.5	2.4	31.3	136.2	42.0
Total	602.1	36.8	8.5	9.6	98.6	331.0	117.6
Annual mortality:							
Softwood	99.0	11.6	1.5	1.8	17.2	47.9	19.0
Hardwood	99.0	4.2	1.6	0.8	16.0	55.3	21.1
Total	198.0	15.8	3.1	2.6	33.2	103.2	40.1
Annual cut:							
Softwood	277.4	10.5	1.9	3.9	39.6	162.2	59.3
Hardwood	115.3	0.7	0.1	--	29.4	58.7	26.4
Total	392.7	11.2	2.0	3.9	69.0	220.9	85.7
GROWING STOCK (In thousand cords)							
Gross annual growth:							
Softwood	5,573	412	88	107	996	2,849	1,121
Hardwood	3,267	116	35	39	451	2,014	612
Total	8,840	528	123	146	1,447	4,863	1,733
Annual mortality:							
Softwood	1,318	151	22	25	227	638	255
Hardwood	1,404	59	22	10	223	793	297
Total	2,722	210	44	35	450	1,431	552
Annual cut:							
Softwood	3,724	139	26	57	506	2,197	799
Hardwood	1,473	9	2	--	381	750	331
Total	5,197	148	28	57	887	2,947	1,130

Table 25.--Annual mortality of sawtimber and growing stock on commercial forest land by species group and cause of death, South Carolina, 1957

Species group	Cause of death					
	All causes	Fire	Insects	Diseases	Other	Unknown
SAWTIMBER (In million board feet)						
Softwood	372.0	29.5	36.8	17.6	163.5	124.6
Hardwood	222.7	6.7	--	7.7	75.6	132.7
Total	594.7	36.2	36.8	25.3	239.1	257.3
GROWING STOCK (In million cubic feet)						
Softwood	99.0	5.1	8.4	18.3	30.4	36.8
Hardwood	99.0	7.9	--	2.5	28.8	59.8
Total	198.0	13.0	8.4	20.8	59.2	96.6
GROWING STOCK (In thousand cords)						
Softwood	1,318	57	110	261	376	514
Hardwood	1,404	121	--	33	402	848
Total	2,722	178	110	294	778	1,362

Table 26.--Average annual gross growth per acre of sawtimber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1957

(In board feet)

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
STATE							
Pine types:							
Softwood	208	306	144	235	200	209	189
Hardwood	8	5	1	2	7	8	11
Total	216	311	145	237	207	217	200
Oak-pine type:							
Softwood	94	148	--	--	103	93	79
Hardwood	73	147	--	--	137	62	44
Total	167	295	--	--	240	155	123
Hardwood types:							
Softwood	21	55	9	5	31	19	16
Hardwood	109	85	51	81	132	108	107
Total	130	140	60	86	163	127	123
All types:							
Softwood	115	233	84	137	127	107	106
Hardwood	58	38	21	35	67	61	55
Total	173	271	105	172	194	168	161
SOUTHERN COASTAL PLAIN							
Pine types:							
Softwood	194	--	25	(2/)	255	206	136
Hardwood	7	--	1	--	5	9	4
Total	201	--	26	(2/)	260	215	140
Oak-pine type:							
Softwood	104	--	--	--	149	106	53
Hardwood	61	--	--	--	132	47	32
Total	165	--	--	--	281	153	85
Hardwood types:							
Softwood	25	--	11	--	39	26	6
Hardwood	113	--	73	(2/)	119	115	98
Total	138	--	84	(2/)	158	141	104
All types:							
Softwood	102	--	17	(2/)	147	103	75
Hardwood	64	--	36	(2/)	70	68	45
Total	166	--	53	(2/)	217	171	120

Table 26.--Average annual gross growth per acre of sawtimber on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1957
(continued)

(In board feet)

Type and species group	All ownerships	National forest	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
NORTHERN COASTAL PLAIN							
Pine types:							
Softwood	237	335	234	184	180	252	235
Hardwood	9	4	3	(1/)	11	9	12
Total	246	339	237	184	191	261	247
Oak-pine type:							
Softwood	120	144	--	--	106	125	109
Hardwood	87	219	--	--	150	56	76
Total	207	363	--	--	256	181	185
Hardwood types:							
Softwood	26	106	(2/)	6	29	24	27
Hardwood	114	53	(2/)	28	123	115	131
Total	140	159	(2/)	34	152	139	158
All types:							
Softwood	129	256	150	104	114	129	115
Hardwood	65	44	3	13	67	65	80
Total	194	300	153	117	181	194	195
PIEDMONT							
Pine types:							
Softwood	189	288	282	(2/)	179	168	182
Hardwood	8	6	--	(2/)	2	7	14
Total	197	294	282	(2/)	181	175	196
Oak-pine type:							
Softwood	64	151	--	--	37	59	66
Hardwood	69	74	--	--	124	77	23
Total	133	225	--	--	161	136	89
Hardwood types:							
Softwood	8	18	--	--	17	8	7
Hardwood	96	107	--	(2/)	193	94	73
Total	104	125	--	(2/)	210	102	80
All types:							
Softwood	109	217	201	(2/)	123	87	112
Hardwood	47	34	--	(2/)	63	52	35
Total	156	251	201	(2/)	186	139	147

1/ Less than 0.5 board foot per acre.

2/ Excluded because of excessive sampling error.

Table 27.--Average annual gross growth per acre of growing stock on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1957

Type and species group	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
STATE														
Pine types:														
Softwood	58.8	0.9	72.2	1.0	36.8	0.5	53.3	0.8	66.4	1.0	57.2	0.8	56.4	0.8
Hardwood	4.2	0.1	6.4	0.1	0.7	(1/)	1.9	(1/)	3.5	0.1	5.0	0.1	3.0	(1/)
Total	63.0	1.0	78.6	1.1	37.5	0.5	55.2	0.8	69.9	1.1	62.2	0.9	59.4	0.8
Oak-pine type:														
Softwood	22.9	0.3	25.5	0.3	--	--	--	--	30.2	0.4	22.0	0.3	20.6	0.3
Hardwood	25.2	0.4	38.1	0.6	--	--	--	--	26.6	0.4	24.8	0.4	23.2	0.4
Total	48.1	0.7	63.6	0.9	--	--	--	--	56.8	0.8	46.8	0.7	43.8	0.7
Hardwood types:														
Softwood	5.0	0.1	8.1	0.1	1.8	(1/)	2.0	(1/)	6.6	0.1	4.5	0.1	5.8	0.1
Hardwood	32.5	0.5	26.4	0.4	20.8	0.3	22.7	0.4	37.9	0.5	32.3	0.5	32.9	0.5
Total	37.5	0.6	34.5	0.5	22.6	0.3	24.7	0.4	44.5	0.6	36.8	0.6	38.7	0.6
All types:														
Softwood	31.8	0.5	52.9	0.8	21.2	0.3	31.6	0.5	40.3	0.6	28.6	0.4	31.6	0.5
Hardwood	18.6	0.3	14.2	0.2	8.8	0.1	10.7	0.2	18.7	0.3	20.0	0.3	17.6	0.3
Total	50.4	0.8	67.1	1.0	30.0	0.4	42.3	0.7	59.0	0.9	48.6	0.7	49.2	0.8
SOUTHERN COASTAL PLAIN														
Pine types:														
Softwood	49.1	0.7	--	--	29.0	0.5	(2/)	(2/)	66.7	1.0	47.5	0.7	42.8	0.6
Hardwood	2.9	(1/)	--	--	0.2	(1/)	--	--	3.7	0.1	3.4	0.1	1.4	(1/)
Total	52.0	0.7	--	--	29.2	0.5	(2/)	(2/)	70.4	1.1	50.9	0.8	44.2	0.6
Oak-pine type:														
Softwood	24.1	0.3	--	--	--	--	--	--	38.0	0.5	23.9	0.3	10.2	0.1
Hardwood	16.5	0.2	--	--	--	--	--	--	22.6	0.3	16.6	0.2	10.8	0.2
Total	40.6	0.5	--	--	--	--	--	--	60.6	0.8	40.5	0.5	21.0	0.3
Hardwood types:														
Softwood	5.4	0.1	--	--	2.1	(1/)	(2/)	(2/)	9.2	0.1	5.4	0.1	2.5	(1/)
Hardwood	31.7	0.5	--	--	29.9	0.4	(2/)	(2/)	39.2	0.6	30.4	0.4	27.7	0.4
Total	37.1	0.6	--	--	32.0	0.4	(2/)	(2/)	48.4	0.7	35.8	0.5	30.2	0.4
All types:														
Softwood	25.3	0.4	--	--	14.8	0.2	(2/)	(2/)	38.0	0.5	23.2	0.3	23.3	0.3
Hardwood	18.3	0.3	--	--	14.6	0.2	(2/)	(2/)	21.5	0.3	18.8	0.3	13.1	0.2
Total	43.6	0.7	--	--	29.4	0.4	(2/)	(2/)	59.5	0.8	42.0	0.6	36.4	0.5

1/ Less than 0.05 cord per acre.

2/ Excluded because of excessive sampling error.

Table 27.--Average annual gross growth per acre of growing stock on commercial forest land by ownership, major forest type, species group, and Survey Unit, South Carolina, 1957 (continued)

Type and species group	All ownerships		National forest		Other Federal		State, county, and municipal		Forest industry		Farm		Misc. private	
	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>	<u>Cubic</u> <u>feet</u>	<u>Cords</u>
NORTHERN COASTAL PLAIN														
Pine types:														
Softwood	64.9	0.9	83.5	1.2	32.8	0.4	50.1	0.8	61.2	0.9	64.8	0.9	68.9	1.0
Hardwood	5.0	0.1	2.2	(1/)	2.6	(1/)	1.5	(1/)	3.6	0.1	6.7	0.1	3.6	0.1
Total	69.9	1.0	85.7	1.2	35.4	0.4	51.6	0.8	64.8	1.0	71.5	1.0	72.5	1.1
Oak-pine type:														
Softwood	28.7	0.4	34.0	0.5	--	--	--	--	23.8	0.3	26.6	0.4	36.6	0.5
Hardwood	27.4	0.4	45.6	0.7	--	--	--	--	30.5	0.5	26.5	0.4	20.6	0.3
Total	56.1	0.8	79.6	1.2	--	--	--	--	54.3	0.8	53.1	0.8	57.2	0.8
Hardwood types:														
Softwood	5.1	0.1	15.2	0.2	(2/)	(2/)	1.4	(1/)	5.0	0.1	4.7	0.1	5.6	0.1
Hardwood	34.3	0.5	25.8	0.4	(2/)	(2/)	19.3	0.3	37.9	0.5	33.4	0.5	39.2	0.6
Total	39.4	0.6	41.0	0.6	(2/)	(2/)	20.7	0.3	42.9	0.6	38.1	0.6	44.8	0.7
All types:														
Softwood	33.9	0.5	61.0	0.9	21.2	0.3	28.4	0.4	35.9	0.5	32.0	0.5	32.9	0.5
Hardwood	20.5	0.3	13.4	0.2	1.9	(1/)	9.5	0.1	19.4	0.3	21.5	0.3	23.8	0.3
Total	54.4	0.8	74.4	1.1	23.1	0.3	37.9	0.5	55.3	0.8	53.5	0.8	56.7	0.8
PIEDMONT														
Pine types:														
Softwood	58.8	0.9	65.2	0.9	54.7	0.8	(2/)	(2/)	74.9	1.1	56.5	0.9	54.0	0.8
Hardwood	4.4	0.1	9.0	0.1	--	--	(2/)	(2/)	3.0	(1/)	4.5	0.1	3.3	0.1
Total	63.2	1.0	74.2	1.0	54.7	0.8	(2/)	(2/)	77.9	1.1	61.0	1.0	57.3	0.9
Oak-pine type:														
Softwood	17.1	0.2	16.9	0.2	--	--	--	--	29.2	0.5	17.1	0.2	12.2	0.2
Hardwood	28.5	0.4	30.4	0.4	--	--	--	--	26.2	0.4	28.3	0.4	30.9	0.5
Total	45.6	0.6	47.3	0.6	--	--	--	--	55.4	0.9	45.4	0.6	43.1	0.7
Hardwood types:														
Softwood	4.5	0.1	3.0	(1/)	--	--	--	--	5.5	0.1	3.5	0.1	8.1	0.1
Hardwood	30.9	0.5	26.9	0.4	--	--	(2/)	(2/)	34.6	0.5	33.0	0.5	26.2	0.4
Total	35.4	0.6	29.9	0.4	--	--	(2/)	(2/)	40.1	0.6	36.5	0.6	34.3	0.5
All types:														
Softwood	34.3	0.5	47.4	0.7	38.9	0.6	(2/)	(2/)	52.6	0.8	29.4	0.4	34.6	0.5
Hardwood	16.7	0.3	14.8	0.2	--	--	(2/)	(2/)	13.4	0.2	19.4	0.3	13.7	0.2
Total	51.0	0.8	62.2	0.9	38.9	0.6	(2/)	(2/)	66.0	1.0	48.8	0.7	48.3	0.7

1/ Less than 0.05 cord per acre.

2/ Excluded because of excessive sampling error.

Table 28.--Average annual gross growth per acre of growing stock on commercial forest land by stand size, major forest type, stocking, and site quality, South Carolina, 1957

Site quality and stocking	Stand size									
	All stand sizes		Sawtimber		Poletimber		Seedling and sapling		Nonstocked and other	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
PINE TYPES										
Good site:										
Well stocked	94.8	1.4	99.0	1.4	118.1	1.9	18.7	0.3	--	--
Medium stocked	48.2	0.7	60.1	0.8	69.8	1.1	6.2	0.1	43.5	0.6
Poorly stocked	21.4	0.3	50.5	0.7	34.9	0.5	5.7	0.1	9.1	0.1
Total	79.7	1.2	92.7	1.3	99.8	1.6	12.7	0.2	12.8	0.2
Fair site:										
Well stocked	65.4	1.0	71.9	1.0	81.3	1.3	21.2	0.3	--	--
Medium stocked	34.9	0.5	49.2	0.7	45.4	0.7	6.7	0.1	44.7	0.6
Poorly stocked	14.2	0.2	11.4	0.2	23.2	0.4	13.9	0.2	4.6	0.1
Total	51.1	0.8	66.5	0.9	66.7	1.1	16.0	0.2	6.3	0.1
Poor site:										
Well stocked	48.6	0.7	62.6	0.9	53.5	0.8	18.0	0.3	--	--
Medium stocked	19.7	0.3	31.8	0.4	34.3	0.5	3.4	(1/)	--	--
Poorly stocked	15.0	0.2	24.6	0.3	20.9	0.3	12.5	0.2	1.7	(1/)
Total	33.7	0.5	51.8	0.7	43.4	0.7	10.5	0.2	1.7	(1/)
All sites:										
Well stocked	79.8	1.2	89.4	1.3	93.9	1.5	19.6	0.3	--	--
Medium stocked	37.4	0.5	53.9	0.7	51.2	0.8	5.5	0.1	43.9	0.6
Poorly stocked	17.0	0.3	30.7	0.4	27.8	0.4	10.9	0.2	5.6	0.1
Total	63.0	1.0	82.3	1.2	76.8	1.2	13.6	0.2	7.8	0.1
OAK-PINE TYPES										
Good site:										
Well stocked	69.4	1.0	86.2	1.2	66.5	1.0	19.2	0.3	--	--
Medium stocked	46.0	0.6	60.4	0.8	50.2	0.7	7.0	0.1	--	--
Poorly stocked	21.5	0.3	36.7	0.5	26.7	0.4	0.9	(1/)	71.1	1.0
Total	56.9	0.8	74.0	1.0	59.2	0.9	11.3	0.2	71.1	1.0
Fair site:										
Well stocked	35.8	0.6	(2/)	(2/)	81.5	1.3	1.4	(1/)	--	--
Medium stocked	40.8	0.6	(2/)	(2/)	28.1	0.4	3.6	0.1	--	--
Poorly stocked	11.8	0.2	(2/)	(2/)	33.4	0.5	2.0	(1/)	8.2	0.1
Total	33.5	0.5	(2/)	(2/)	51.7	0.8	2.3	(1/)	8.2	0.1
Poor site:										
Well stocked	28.9	0.4	51.9	0.7	22.8	0.3	26.9	0.4	--	--
Medium stocked	29.4	0.5	--	--	17.3	0.3	37.2	0.6	--	--
Poorly stocked	12.1	0.2	--	--	17.8	0.3	11.3	0.2	1.0	(1/)
Total	24.9	0.4	51.9	0.7	20.5	0.3	28.7	0.5	1.0	(1/)
All sites:										
Well stocked	59.1	0.9	74.3	1.1	63.8	1.0	15.0	0.2	--	--
Medium stocked	43.0	0.6	71.7	1.0	34.1	0.5	11.0	0.2	--	--
Poorly stocked	17.3	0.2	36.6	0.5	25.7	0.4	2.3	(1/)	13.6	0.2
Total	48.1	0.7	70.5	1.0	50.6	0.8	10.7	0.2	13.6	0.2

1/ Less than 0.05 cord per acre.

2/ Excluded because of excessive sampling error.

Table 28.--Average annual gross growth per acre of growing stock on commercial forest land by stand size, major forest type, stocking, and site quality, South Carolina, 1957 (continued)

Site quality and stocking	Stand size									
	All stand sizes		Sawtimber		Poletimber		Seedling and sapling		Nonstocked and other	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
HARDWOOD TYPES										
Good site:										
Well stocked	74.1	1.0	78.4	1.1	67.9	1.1	10.6	0.2	--	--
Medium stocked	51.5	0.7	54.0	0.7	49.8	0.7	23.6	0.4	--	--
Poorly stocked	31.2	0.4	38.0	0.5	18.3	0.3	47.6	0.8	2.1	(1/)
Total	61.1	0.9	66.0	0.9	53.1	0.8	19.7	0.3	2.1	(1/)
Fair site:										
Well stocked	43.8	0.7	61.5	0.9	48.9	0.8	10.8	0.2	--	--
Medium stocked	31.8	0.5	46.6	0.7	34.4	0.5	12.3	0.2	23.6	0.3
Poorly stocked	15.2	0.2	31.7	0.4	27.3	0.4	6.1	0.1	4.9	0.1
Total	32.8	0.5	52.0	0.7	40.5	0.6	9.8	0.1	5.0	0.1
Poor site:										
Well stocked	16.3	0.3	--	--	30.7	0.5	4.1	0.1	--	--
Medium stocked	12.4	0.2	--	--	23.1	0.3	6.4	0.1	32.7	0.4
Poorly stocked	2.5	(1/)	67.8	1.0	10.4	0.2	0.7	(1/)	1.8	(1/)
Total	5.4	0.1	67.8	1.0	24.0	0.4	3.1	(1/)	2.0	(1/)
All sites:										
Well stocked	54.0	0.8	71.2	1.0	50.9	0.8	10.2	0.1	--	--
Medium stocked	36.8	0.5	50.5	0.7	35.9	0.5	12.3	0.2	28.2	0.4
Poorly stocked	13.3	0.2	35.3	0.5	24.8	0.4	5.6	0.1	2.8	(1/)
Total	37.5	0.6	59.6	0.8	41.5	0.6	9.3	0.1	3.0	(1/)
ALL TYPES										
Good site:										
Well stocked	86.4	1.3	91.0	1.3	104.6	1.6	17.9	0.3	--	--
Medium stocked	49.2	0.7	56.8	0.8	62.2	0.9	8.9	0.1	43.5	0.6
Poorly stocked	24.9	0.4	39.4	0.5	30.2	0.5	6.8	0.1	9.0	0.1
Total	70.9	1.0	79.7	1.1	86.7	1.4	13.1	0.2	11.7	0.2
Fair site:										
Well stocked	53.2	0.8	64.2	0.9	66.0	1.1	14.4	0.2	--	--
Medium stocked	33.2	0.5	50.9	0.7	37.4	0.6	10.3	0.2	35.8	0.5
Poorly stocked	14.8	0.2	29.4	0.4	26.2	0.4	8.1	0.1	5.0	0.1
Total	39.4	0.6	57.0	0.8	52.1	0.8	11.4	0.2	5.5	0.1
Poor site:										
Well stocked	42.6	0.6	62.0	0.9	47.3	0.7	15.2	0.2	--	--
Medium stocked	18.6	0.3	31.8	0.4	30.5	0.5	7.3	0.1	32.7	0.4
Poorly stocked	5.8	0.1	31.1	0.4	18.5	0.3	4.9	0.1	1.8	(1/)
Total	21.7	0.3	52.1	0.8	37.8	0.6	8.9	0.1	2.0	(1/)
All sites:										
Well stocked	69.1	1.0	81.5	1.1	78.5	1.2	15.6	0.2	--	--
Medium stocked	37.7	0.5	53.8	0.7	42.8	0.7	9.3	0.1	38.9	0.5
Poorly stocked	14.8	0.2	34.6	0.5	26.3	0.4	7.3	0.1	3.7	0.1
Total	50.4	0.8	70.9	1.0	62.0	1.0	11.4	0.2	4.4	0.1

1/ Less than 0.05 cord per acre.

Table 29.--Output of timber products from roundwood and plant residues by product and species group, South Carolina, 1957

Product and species group	Standard unit	Output by source		
		Total	From plant residues	From roundwood
		Units	Units	Units
Saw logs:				
Softwood	M bd. ft. ^{1/}	678,300	--	678,300
Hardwood	M bd. ft. ^{1/}	217,100	--	217,100
Total	M bd. ft. ^{1/}	895,400	--	895,400
Veneer logs and bolts:				
Softwood	M bd. ft. ^{1/}	3,500	--	3,500
Hardwood	M bd. ft. ^{1/}	141,000	--	141,000
Total	M bd. ft. ^{1/}	144,500	--	144,500
Cooperage logs and bolts:				
Softwood	M bd. ft. ^{1/}	5,500	--	5,500
Hardwood	M bd. ft. ^{1/}	2,200	--	2,200
Total	M bd. ft. ^{1/}	7,700	--	7,700
Pulpwood:				
Softwood	Std. cords ^{2/}	1,461,400	76,700	1,384,700
Hardwood	Std. cords ^{2/}	281,600	11,300	270,300
Total	Std. cords ^{2/}	1,743,000	88,000	1,655,000
Piling:				
Softwood	M linear ft.	900	--	900
Hardwood	M linear ft.	--	--	--
Total	M linear ft.	900	--	900
Poles:				
Softwood	M pieces	300	--	300
Hardwood	M pieces	--	--	--
Total	M pieces	300	--	300
Hewn ties:				
Softwood	M pieces	100	--	100
Hardwood	M pieces	100	--	100
Total	M pieces	200	--	200
Posts:				
Softwood	M pieces	5,500	--	5,500
Hardwood	M pieces	4,900	--	4,900
Total	M pieces	10,400	--	10,400
Other industrial wood: ^{3/}				
Softwood	M cu. ft.	2,100	--	2,100
Hardwood	M cu. ft.	1,800	--	1,800
Total	M cu. ft.	3,900	--	3,900
Fuelwood: ^{4/}				
Softwood	Std. cords ^{2/}	798,800	159,800	639,000
Hardwood	Std. cords ^{2/}	672,700	134,500	538,200
Total	Std. cords ^{2/}	1,471,500	294,300	1,177,200
All products:				
Softwood	M cu. ft.	305,400	16,900	288,500
Hardwood	M cu. ft.	131,100	9,600	121,500
Total	M cu. ft.	436,500	26,500	410,000

^{1/} International 1/4-inch rule.

^{2/} Rough wood basis.

^{3/} Includes excelsior bolts, shingle bolts, turnery bolts, etc.

^{4/} Used for domestic heating and cooking and excludes industrial use.

Table 30.--Output of timber products from roundwood by source, product, and species group,
South Carolina, 1957
(In thousand cubic feet)

Product and species group	All roundwood	Growing stock				Dead trees	Cull trees and limbs
		Total	Sawtimber trees	Poletimber trees	Material left following logging		
Saw logs:							
Softwood	117,400	110,200	100,600	9,600	--	--	7,200
Hardwood	34,400	33,500	29,700	3,800	--	--	900
Total	151,800	143,700	130,300	13,400	--	--	8,100
Veneer logs and bolts:							
Softwood	600	600	600	--	--	--	--
Hardwood	21,500	20,900	20,900	--	--	--	600
Total	22,100	21,500	21,500	--	--	--	600
Cooperage logs and bolts:							
Softwood	1,000	1,000	1,000	--	--	--	--
Hardwood	300	300	300	--	--	--	--
Total	1,300	1,300	1,300	--	--	--	--
Pulpwood:							
Softwood	117,100	108,300	65,600	28,800	13,900	3,200	5,600
Hardwood	25,900	21,100	14,700	6,400	--	--	4,800
Total	143,000	129,400	80,300	35,200	13,900	3,200	10,400
Piling:							
Softwood	600	600	500	100	--	--	--
Hardwood	--	--	--	--	--	--	--
Total	600	600	500	100	--	--	--
Poles:							
Softwood	3,900	3,900	3,700	200	--	--	--
Hardwood	--	--	--	--	--	--	--
Total	3,900	3,900	3,700	200	--	--	--
Hewn ties:							
Softwood	600	600	600	--	--	--	--
Hardwood	300	300	300	--	--	--	--
Total	900	900	900	--	--	--	--
Posts:							
Softwood	3,600	2,300	400	1,700	200	300	1,000
Hardwood	3,200	2,000	300	1,500	200	300	900
Total	6,800	4,300	700	3,200	400	600	1,900
Other industrial wood: ^{1/}							
Softwood	2,100	1,900	700	1,200	--	100	100
Hardwood	1,800	1,700	900	800	--	100	--
Total	3,900	3,600	1,600	2,000	--	200	100
Fuelwood:							
Softwood	41,600	24,600	--	7,800	16,800	4,300	12,700
Hardwood	34,100	15,000	4,100	6,600	4,300	4,000	15,100
Total	75,700	39,600	4,100	14,400	21,100	8,300	27,800
All products:							
Softwood	288,500	254,000	173,700	49,400	30,900	7,900	26,600
Hardwood	121,500	94,800	71,200	19,100	4,500	4,400	22,300
Total	410,000	348,800	244,900	68,500	35,400	12,300	48,900

^{1/} Includes excelsior bolts, shingle bolts, turnery bolts, etc.

Table 31.--Timber cut from sawtimber and growing stock by product and species group,
South Carolina, 1957

Product	Sawtimber			Growing stock		
	Total	Softwood	Hardwood	Total	Softwood	Hardwood
	<u>Thousand board feet</u>			<u>Thousand cubic feet</u>		
Saw logs	919,400	699,200	220,200	175,400	132,200	43,200
Veneer logs and bolts	157,000	4,000	153,000	30,300	800	29,500
Cooperage logs and bolts	8,600	6,000	2,600	1,700	1,100	600
Pulpwood	361,000	293,100	67,900	130,000	108,300	21,700
Piling	3,000	3,000	--	700	700	--
Poles	20,500	20,500	--	4,500	4,500	--
Hewn ties	6,500	4,100	2,400	1,400	800	600
Posts	4,400	2,300	2,100	4,200	2,200	2,000
Other industrial wood ^{1/}	12,000	4,800	7,200	4,500	2,300	2,200
Fuelwood	17,200	--	17,200	40,000	24,500	15,500
All products	1,509,600	1,037,000	472,600	392,700	277,400	115,300

^{1/} Includes excelsior bolts, shingle bolts, turnery bolts, etc.

Table 32.--Disposition of timber cut, South Carolina, 1957

Disposition	Softwood		Hardwood		Total	
	<u>Thousand</u> <u>cu. ft.</u>	<u>Percent</u>	<u>Thousand</u> <u>cu. ft.</u>	<u>Percent</u>	<u>Thousand</u> <u>cu. ft.</u>	<u>Percent</u>
Left in woods (logging residue)	23,399	8.4	20,508	17.8	43,907	11.2
Transported to mill	253,965	91.6	94,829	82.2	348,794	88.8
Used in manufacture	188,453	68.0	54,798	47.5	243,251	61.9
Plant residue	65,512	23.6	40,031	34.7	105,543	26.9
Used	30,790	11.1	17,000	14.7	47,790	12.2
Coarse	16,905	6.1	9,594	8.3	26,499	6.8
Fine	13,885	5.0	7,406	6.4	21,291	5.4
Unused	34,722	12.5	23,031	20.0	57,753	14.7
Coarse	13,998	5.0	11,978	10.4	25,976	6.6
Fine	20,724	7.5	11,053	9.6	31,777	8.1
Total timber cut	277,364	100.0	115,337	100.0	392,701	100.0

Table 33.--Land area by class, major forest type, and Survey Unit,
South Carolina, 1936, 1947, and 1958

(In thousand acres)

Land class and forest type	Year of Survey			Change
	1936	1947	1958	1947 to 1958
STATE				
Commercial forest land:				
Pine and oak-pine type	7,794.6	7,324.1	6,483.7	-840.4
Hardwood type	2,884.0	4,575.4	5,451.2	+875.8
Total	10,678.6	11,899.5	11,934.9	+35.4
Noncommercial forest land	25.5	43.1	80.9	+37.8
Nonforest land:				
Cropland	6,531.2	4,849.6	3,835.6	(1/)
Improved pasture	304.0	(2/)	743.5	(1/)
Idle or abandoned	749.5	1,574.7	1,423.4	-151.3
Marsh	533.2	466.8	527.2	+60.4
Urban and other	499.5	494.3	676.5	+182.2
Total	8,617.4	7,385.4	7,206.2	-179.2
All land ^{3/}	19,321.5	19,328.0	19,222.0	-106.0
SOUTHERN COASTAL PLAIN				
Commercial forest land:				
Pine and oak-pine type	2,182.9	1,626.8	1,373.9	-252.9
Hardwood type	810.1	1,399.5	1,739.0	+339.5
Total	2,993.0	3,026.3	3,112.9	+86.6
Noncommercial forest land	--	5.9	5.6	-0.3
Nonforest land:				
Cropland	1,447.4	1,234.8	1,135.7	(1/)
Improved pasture	31.4	(2/)	164.4	(1/)
Idle or abandoned	379.3	571.3	252.0	-319.3
Marsh	212.2	230.3	280.3	+50.0
Urban and other	91.4	91.0	168.3	+77.3
Total	2,161.7	2,127.4	2,000.7	-126.7
All land ^{3/}	5,154.7	5,159.6	5,119.2	-40.4

1/ Comparison not valid; pasture included with cropland in 1947.

2/ Data not available; included with cropland.

3/ Excludes all water areas.

Table 33.--Land area by class, major forest type, and Survey Unit,
South Carolina, 1936, 1947, and 1958 (continued)

(In thousand acres)

Land class and forest type	Year of Survey			Change
	1936	1947	1958	1947 to 1958
NORTHERN COASTAL PLAIN				
Commercial forest land:				
Pine and oak-pine type	3,015.5	2,705.0	2,417.7	-287.3
Hardwood type	1,482.9	2,149.5	2,258.5	+109.0
Total	4,498.4	4,854.5	4,676.2	-178.3
Noncommercial forest land	9.6	20.3	17.1	-3.2
Nonforest land:				
Cropland	2,329.4	1,718.2	1,686.0	(1/)
Improved pasture	68.2	(2/)	171.8	(1/)
Idle or abandoned	124.4	368.0	376.4	+8.4
Marsh	321.0	236.5	246.9	+10.4
Urban and other	184.6	227.2	234.0	+6.8
Total	3,027.6	2,549.9	2,715.1	+165.2
All land ^{3/}	7,535.6	7,424.7	7,408.4	-16.3
PIEDMONT				
Commercial forest land:				
Pine and oak-pine type	2,596.2	2,992.3	2,692.1	-300.2
Hardwood type	591.0	1,026.4	1,453.7	+427.3
Total	3,187.2	4,018.7	4,145.8	+127.1
Noncommercial forest land	15.9	16.9	58.2	+41.3
Nonforest land:				
Cropland	2,754.4	1,896.6	1,013.9	(1/)
Improved pasture	204.4	(2/)	407.3	(1/)
Idle or abandoned	245.8	635.4	795.0	+159.6
Marsh	--	--	--	--
Urban and other	223.5	176.1	274.2	+98.1
Total	3,428.1	2,708.1	2,490.4	-217.7
All land ^{3/}	6,631.2	6,743.7	6,694.4	-49.3

1/ Comparison not valid; pasture included with cropland in 1947.

2/ Data not available; included with cropland.

3/ Excludes all water areas.

Table 34.--Net volume^{1/} of growing stock and cull timber by diameter class, species group, and Survey Unit, South Carolina, 1936, 1947, and 1958--State as a whole

Species group	Year	All classes	Diameter class (In inches)						
			6	8	10	12	14	16-18	20+
SAWTIMBER (In million board feet)									
Softwood	1936	17,817	--	--	2,754	3,233	3,089	4,468	4,273
	1947	17,104	--	--	3,110	3,313	3,265	4,385	3,031
	1958	14,637	--	--	2,935	2,991	2,622	3,831	2,258
Hardwood	1936	12,764	--	--	--	2,062	2,142	3,822	4,738
	1947	13,038	--	--	--	2,454	2,551	4,090	3,943
	1958	11,969	--	--	--	2,342	2,468	3,628	3,531
GROWING STOCK (In million cubic feet)									
Softwood	1936	4,604	356	549	691	750	651	855	752
	1947	4,725	475	651	776	765	684	841	533
	1958	4,331	537	688	734	690	550	734	398
Hardwood	1936	3,732	214	335	427	508	513	815	920
	1947	4,103	310	404	530	607	611	874	767
	1958	4,044	355	496	572	571	587	775	688
CULL TIMBER (In million cubic feet)									
Softwood	1936	111	10	19	18	16	12	14	22
	1947	164	12	16	36	27	20	24	29
	1958	355	19	35	100	80	50	43	28
Hardwood	1936	965	92	147	144	111	97	134	240
	1947	974	102	153	156	124	104	130	205
	1958	1,420	112	178	212	244	180	237	257
ALL TIMBER (In million cubic feet)									
Softwood	1936	4,715	366	568	709	766	663	869	774
	1947	4,889	487	667	812	792	704	865	562
	1958	4,686	556	723	834	770	600	777	426
Hardwood	1936	4,697	306	482	571	619	610	949	1,160
	1947	5,077	412	557	686	731	715	1,004	972
	1958	5,464	467	674	784	815	767	1,012	945

^{1/} In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards used in the two surveys. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

Table 34.--Net volume^{1/} of growing stock and cull timber by diameter class, species group, and Survey Unit, South Carolina, 1936, 1947, and 1958 (continued)--Southern Coastal Plain

Species group	Year	All classes	Diameter class (In inches)						
			6	8	10	12	14	16-18	20+
SAWTIMBER (In million board feet)									
Softwood	1936	5,751	--	--	770	938	923	1,383	1,737
	1947	4,282	--	--	711	724	692	1,085	1,070
	1958	3,700	--	--	672	723	725	1,030	550
Hardwood	1936	4,059	--	--	--	700	680	1,228	1,451
	1947	3,562	--	--	--	737	720	1,077	1,028
	1958	3,453	--	--	--	694	755	1,025	979
GROWING STOCK (In million cubic feet)									
Softwood	1936	1,406	71	148	195	221	197	266	308
	1947	1,109	72	150	176	171	146	206	188
	1958	1,005	75	144	169	170	153	197	97
Hardwood	1936	1,181	63	106	136	171	164	261	280
	1947	1,084	59	100	143	180	174	229	199
	1958	1,131	84	138	155	166	180	218	190
CULL TIMBER (In million cubic feet)									
Softwood	1936	20	1	3	4	2	2	3	5
	1947	21	1	1	6	2	1	5	5
	1958	73	1	6	20	17	13	13	3
Hardwood	1936	393	26	46	52	39	37	55	138
	1947	233	24	32	36	29	26	28	58
	1958	399	22	50	64	65	46	76	76
ALL TIMBER (In million cubic feet)									
Softwood	1936	1,426	72	151	199	223	199	269	313
	1947	1,130	73	151	182	173	147	211	193
	1958	1,078	76	150	189	187	166	210	100
Hardwood	1936	1,574	89	152	188	210	201	316	418
	1947	1,317	83	132	179	209	200	257	257
	1958	1,530	106	188	219	231	226	294	266

^{1/} In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilizations standards used in the two surveys. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

Table 34.--Net volume^{1/} of growing stock and cull timber by diameter class, species group, and Survey Unit, South Carolina, 1936, 1947, and 1958 (continued)--Northern Coastal Plain

Species group	Year	All classes	Diameter class (In inches)						
			6	8	10	12	14	16-18	20+
SAWTIMBER (In million board feet)									
Softwood	1936	8,341	--	--	1,051	1,443	1,469	2,322	2,056
	1947	8,613	--	--	1,140	1,473	1,845	2,554	1,601
	1958	7,041	--	--	1,096	1,350	1,259	2,074	1,262
Hardwood	1936	6,534	--	--	--	987	1,059	1,931	2,557
	1947	7,040	--	--	--	1,198	1,288	2,244	2,310
	1958	5,773	--	--	--	988	1,126	1,745	1,914
GROWING STOCK (In million cubic feet)									
Softwood	1936	2,000	99	185	267	338	309	441	361
	1947	2,096	104	201	291	343	387	488	282
	1958	1,880	169	237	278	314	264	395	223
Hardwood	1936	1,824	74	147	202	242	254	410	495
	1947	2,069	122	174	245	295	310	477	446
	1958	1,824	130	198	249	238	270	370	369
CULL TIMBER (In million cubic feet)									
Softwood	1936	48	3	7	6	7	5	6	14
	1947	65	2	5	10	10	9	11	18
	1958	149	3	12	42	35	21	19	17
Hardwood	1936	404	41	67	63	52	42	59	80
	1947	484	38	70	75	64	51	76	110
	1958	643	40	70	88	112	90	112	131
ALL TIMBER (In million cubic feet)									
Softwood	1936	2,048	102	192	273	345	314	447	375
	1947	2,161	106	206	301	353	396	499	300
	1958	2,029	172	249	320	349	285	414	240
Hardwood	1936	2,228	115	214	265	294	296	469	575
	1947	2,553	160	244	320	359	361	553	556
	1958	2,467	170	268	337	350	360	482	500

^{1/} In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards used in the two surveys. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

Table 34.--Net volume^{1/} of growing stock and cull timber by diameter class, species group, and Survey Unit, South Carolina, 1936, 1947, and 1958 (continued)--Piedmont

Species group	Year	All classes	Diameter class (In inches)						
			6	8	10	12	14	16-18	20+
SAWTIMBER (In million board feet)									
Softwood	1936	3,725	--	--	933	852	697	763	480
	1947	4,209	--	--	1,259	1,116	728	746	360
	1958	3,896	--	--	1,167	918	638	727	446
Hardwood	1936	2,171	--	--	--	375	403	663	730
	1947	2,436	--	--	--	519	543	769	605
	1958	2,743	--	--	--	660	587	858	638
GROWING STOCK (In million cubic feet)									
Softwood	1936	1,198	186	216	229	191	145	148	83
	1947	1,520	299	300	309	251	151	147	63
	1958	1,446	293	307	287	206	133	142	78
Hardwood	1936	727	77	82	89	95	95	144	145
	1947	950	129	130	142	132	127	168	122
	1958	1,089	141	160	168	167	137	187	129
CULL TIMBER (In million cubic feet)									
Softwood	1936	43	6	9	8	7	5	5	3
	1947	78	9	10	20	15	10	8	6
	1958	133	15	17	38	28	16	11	8
Hardwood	1936	168	25	34	29	20	18	20	22
	1947	257	40	51	45	31	27	26	37
	1958	378	50	58	60	67	44	49	50
ALL TIMBER (In million cubic feet)									
Softwood	1936	1,241	192	225	237	198	150	153	86
	1947	1,598	308	310	329	266	161	155	69
	1958	1,579	308	324	325	234	149	153	86
Hardwood	1936	895	102	116	118	115	113	164	167
	1947	1,207	169	181	187	163	154	194	159
	1958	1,467	191	218	228	234	181	236	179

^{1/} In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards used in the two surveys. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

Table 35.--Thirty-year volume and growth outlook^{1/} in South Carolina

Kind of timber	Softwood			Hardwood			Total		
	1958	1988	Change	1958	1988	Change	1958	1988	Change
SAWTIMBER (In million bd. ft.)									
Small sawtimber									
Net inventory	8,548	8,792	+244	4,810	6,267	+1,457	13,358	15,059	+1,701
Net growth	551	719	+168	132	223	+91	683	942	+259
Large sawtimber									
Net inventory	6,089	2,954	-3,135	7,159	6,412	-747	13,248	9,366	-3,882
Net growth	343	179	-164	266	294	+28	609	473	-136
Total									
Net inventory	14,637	11,746	-2,891	11,969	12,679	+710	26,606	24,425	-2,181
Net growth	894	898	+4	398	517	+119	1,292	1,415	+123
ALL TIMBER (In million cu. ft.)									
Growing stock									
Net inventory	4,331	4,297	-34	4,044	4,835	+791	8,375	9,132	+757
Net growth	265	331	+66	116	169	+53	381	500	+119
Cull trees									
Net inventory	355	350	-5	1,420	1,674	+254	1,775	2,024	+249
Net growth	31	28	-3	25	58	+33	56	86	+30
Total									
Net inventory	4,686	4,647	-39	5,464	6,509	+1,045	10,150	11,156	+1,006
Net growth	296	359	+63	141	227	+86	437	586	+149

^{1/} Based on projection of average annual change between 1936 and 1958.

Table 36.--County area by class, South Carolina, 1958

County	Total area ^{1/}	Nonforest area		Forest land		Percent
		Land	Water	Non- commercial	Commercial	
	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Thousand acres	
Abbeville	325.8	120.2	2.8	0.4	202.4	62.7
Aiken	707.2	219.4	10.3	0.9	476.6	68.4
Allendale	267.5	105.2	1.8	--	160.5	60.4
Anderson	497.3	296.7	8.2	(2/)	192.4	39.3
Bamberg	252.8	123.6	0.7	0.2	128.3	50.9
Barnwell	353.9	161.8	1.0	0.2	190.9	54.1
Beaufort	498.6	246.2	89.4	1.5	161.5	39.5
Berkeley	788.5	120.1	94.0	1.1	573.3	82.5
Calhoun	248.9	117.6	10.6	--	120.7	50.7
Charleston	661.8	255.8	87.1	2.7	316.2	55.0
Cherokee	252.8	108.3	1.4	1.6	141.5	56.3
Chester	377.0	112.8	4.7	0.4	259.1	69.6
Chesterfield	508.2	184.5	1.1	7.0	315.6	62.2
Clarendon	444.2	166.1	66.3	--	211.8	56.0
Colleton	678.4	191.7	14.0	0.3	472.4	71.1
Darlington	349.4	180.4	2.6	(2/)	166.4	47.8
Dillon	260.5	118.1	0.2	0.8	141.4	54.3
Dorchester	364.2	96.4	0.5	1.0	266.3	73.2
Edgefield	309.7	94.1	2.8	0.2	212.6	69.3
Fairfield	453.1	71.7	8.0	(2/)	373.4	83.9
Florence	515.2	226.2	1.1	--	287.9	56.0
Georgetown	552.3	132.9	43.0	(2/)	376.4	73.9
Greenville	508.8	223.5	9.3	24.2	251.8	50.4
Greenwood	293.1	109.2	8.0	1.0	174.9	61.3
Hampton	359.7	97.4	0.6	--	261.7	72.9
Horry	739.8	253.6	2.6	0.3	483.3	65.6
Jasper	374.4	100.8	13.6	--	260.0	72.1
Kershaw	510.1	141.1	10.7	(2/)	358.3	71.7
Lancaster	325.1	105.6	4.6	0.3	214.6	67.0
Laurens	460.8	176.0	13.3	0.1	271.4	60.6
Lee	261.8	154.5	0.2	2.8	104.3	39.9
Lexington	496.0	171.8	45.7	--	278.5	61.8
McCormick	257.9	54.3	22.0	(2/)	181.6	77.0
Marion	312.3	87.1	1.6	--	223.6	72.0
Marlboro	309.7	147.2	2.4	--	160.1	52.1
Newberry	410.2	125.7	10.6	0.5	273.4	68.4
Oconee	428.8	127.2	1.8	8.4	291.4	68.2
Orangeburg	716.8	368.8	11.0	1.5	335.5	47.5
Pickens	321.3	108.1	1.6	5.3	206.3	64.5
Richland	485.1	133.7	11.3	1.4	338.7	71.5
Saluda	288.0	96.0	11.4	--	180.6	65.3
Spartanburg	532.5	309.5	0.9	7.1	215.0	40.4
Sumter	441.6	218.6	5.2	1.0	216.8	49.7
Union	329.6	76.6	0.9	0.4	251.7	76.6
Williamsburg	598.4	195.2	1.1	--	402.1	67.3
York	446.1	174.9	11.2	8.3	251.7	57.9
State total	19,875.2	7,206.2	653.2	80.9	11,934.9	62.1

^{1/} Gross area from Bureau of the Census, 1950.^{2/} Less than 50 acres.

Table 37.--Ownership of commercial forest land by county, South Carolina, 1958

(In thousand acres)

County	Total commercial	National forest	Public Other public	Total	Private
Abbeville	202.4	19.9	1.2	21.1	181.3
Aiken	476.6	--	57.9	57.9	418.7
Allendale	160.5	--	3.6	3.6	156.9
Anderson	192.4	--	5.7	5.7	186.7
Bamberg	128.3	--	(1/)	(1/)	128.3
Barnwell	190.9	--	94.3	94.3	96.6
Beaufort	161.5	--	2.1	2.1	159.4
Berkeley	573.3	182.0	26.2	208.2	365.1
Calhoun	120.7	--	1.2	1.2	119.5
Charleston	316.2	55.3	4.4	59.7	256.5
Cherokee	141.5	--	0.1	0.1	141.4
Chester	259.1	11.5	0.4	11.9	247.2
Chesterfield	315.6	--	90.1	90.1	225.5
Clarendon	211.8	--	6.1	6.1	205.7
Colleton	472.4	--	1.5	1.5	470.9
Darlington	166.4	--	0.8	0.8	165.6
Dillon	141.4	--	--	--	141.4
Dorchester	266.3	--	0.3	0.3	266.0
Edgefield	212.6	27.6	0.2	27.8	184.8
Fairfield	373.4	12.1	0.1	12.2	361.2
Florence	287.9	--	0.4	0.4	287.5
Georgetown	376.4	--	(1/)	(1/)	376.4
Greenville	251.8	--	0.7	0.7	251.1
Greenwood	174.9	10.2	1.3	11.5	163.4
Hampton	261.7	--	5.3	5.3	256.4
Horry	483.3	--	3.0	3.0	480.3
Jasper	260.0	--	0.2	0.2	259.8
Kershaw	358.3	--	6.4	6.4	351.9
Lancaster	214.6	--	0.1	0.1	214.5
Laurens	271.4	19.9	1.7	21.6	249.8
Lee	104.3	--	(1/)	(1/)	104.3
Lexington	278.5	--	1.0	1.0	277.5
McCormick	181.6	44.4	27.5	71.9	109.7
Marion	223.6	--	(1/)	(1/)	223.6
Marlboro	160.1	--	0.1	0.1	160.0
Newberry	273.4	53.6	0.2	53.8	219.6
Oconee	291.4	69.2	9.7	78.9	212.5
Orangeburg	335.5	--	4.6	4.6	330.9
Pickens	206.3	--	8.5	8.5	197.8
Richland	338.7	--	53.4	53.4	285.3
Saluda	180.6	4.2	0.1	4.3	176.3
Spartanburg	215.0	--	2.7	2.7	212.3
Sumter	216.8	--	41.1	41.1	175.7
Union	251.7	56.4	0.1	56.5	195.2
Williamsburg	402.1	--	(1/)	(1/)	402.1
York	251.7	--	3.8	3.8	247.9
State total	11,934.9	566.3	468.1	1,034.4	10,900.5

1/ Less than 50 acres.

Table 38.--Net volume^{1/} of sawtimber by county and species group, South Carolina, 1958

(In million board-feet)

County	Softwood	Hardwood	Total	County	Softwood	Hardwood	Total
Abbeville	210.1	166.4	376.5	Hampton	282.7	358.4	641.1
Aiken	394.5	204.8	599.3	Horry	723.1	582.0	1,305.1
Allendale	221.0	198.8	419.8	Jasper	346.8	306.8	653.6
Anderson	118.5	171.1	289.6	Kershaw	341.2	221.7	562.9
Bamberg	142.6	232.6	375.2	Lancaster	130.9	73.7	204.6
Barnwell	91.7	187.9	279.6	Laurens	257.1	182.2	439.3
Beaufort	161.2	219.0	380.2	Lee	70.4	153.6	224.0
Berkeley	1,197.8	708.8	1,906.6	Lexington	242.7	105.8	348.5
Calhoun	183.3	204.8	388.1	McCormick	250.1	98.4	348.5
Charleston	578.2	265.4	843.6	Marion	330.4	464.2	794.6
Cherokee	107.2	113.6	220.8	Marlboro	212.7	291.6	504.3
Chester	154.4	165.9	320.3	Newberry	647.7	62.1	709.8
Chesterfield	197.9	214.5	412.4	Oconee	364.3	250.4	614.7
Clarendon	301.1	430.9	732.0	Orangeburg	414.3	456.1	870.4
Colleton	807.5	787.6	1,595.1	Pickens	135.3	271.2	406.5
Darlington	290.7	214.4	505.1	Richland	350.6	503.3	853.9
Dillon	263.5	180.6	444.1	Saluda	186.5	128.0	314.5
Dorchester	559.1	438.6	997.7	Spartanburg	112.9	80.3	193.2
Edgefield	323.1	120.0	443.1	Sumter	398.2	532.0	930.2
Fairfield	363.1	186.0	549.1	Union	250.6	287.6	538.2
Florence	706.7	418.4	1,125.1	Williamsburg	613.5	666.1	1,279.6
Georgetown	796.5	516.7	1,313.2	York	92.3	207.4	299.7
Greenville	95.5	348.1	443.6				
Greenwood	368.7	164.4	533.1	State total	15,388.2	13,142.2	28,530.4

^{1/} Log scale, International 1/4-inch rule.

Table 39.--Net volume^{1/} of growing stock and cull timber by pulping species group and county,
 South Carolina, 1958
 (In thousand cords)

County	Growing stock				Cull timber				Total all timber
	Softwood	Soft hardwood	Hard hardwood	Total	Softwood	Soft hardwood	Hard hardwood	Total	
Abbeville	1,059	450	502	2,011	37	156	104	297	2,308
Aiken	1,872	589	359	2,820	46	333	175	554	3,374
Allendale	668	437	353	1,458	64	128	86	278	1,736
Anderson	816	366	459	1,641	33	39	57	129	1,770
Bamberg	465	673	297	1,435	17	129	92	238	1,673
Barnwell	378	480	412	1,270	14	187	124	325	1,595
Beaufort	632	462	416	1,510	49	159	231	439	1,949
Berkeley	4,304	1,531	1,322	7,157	81	424	378	883	8,040
Calhoun	671	679	211	1,561	26	98	90	214	1,775
Charleston	2,238	741	505	3,484	72	180	266	518	4,002
Cherokee	727	244	375	1,346	54	42	71	167	1,513
Chester	949	464	508	1,921	36	66	101	203	2,124
Chesterfield	889	653	287	1,829	82	191	159	432	2,261
Clarendon	897	1,101	653	2,651	74	174	90	338	2,989
Colleton	2,730	2,171	1,297	6,198	28	285	197	510	6,708
Darlington	901	735	308	1,944	5	171	69	245	2,189
Dillon	913	685	246	1,844	30	79	39	148	1,992
Dorchester	1,783	1,058	594	3,435	47	336	242	625	4,060
Edgefield	1,716	434	316	2,466	4	64	90	158	2,624
Fairfield	1,840	560	487	2,887	97	92	92	281	3,168
Florence	2,191	1,223	545	3,959	58	358	97	513	4,472
Georgetown	2,838	1,406	867	5,111	24	205	123	352	5,463
Greenville	594	611	973	2,178	69	126	242	437	2,615
Greenwood	1,373	427	350	2,150	71	69	82	222	2,372
Hampton	952	975	638	2,565	57	266	132	455	3,020
Horry	2,439	1,920	793	5,152	139	510	270	919	6,071
Jasper	1,192	696	578	2,466	40	113	123	276	2,742
Kershaw	1,766	728	380	2,874	64	145	150	359	3,233
Lancaster	846	135	327	1,308	73	136	107	316	1,624
Laurens	1,200	507	413	2,120	17	140	119	276	2,396
Lee	268	527	134	929	16	89	35	140	1,069
Lexington	1,012	353	282	1,647	27	102	126	255	1,902
McCormick	1,253	205	281	1,739	14	11	55	80	1,819
Marion	1,094	1,466	576	3,136	20	269	142	431	3,567
Marlboro	708	987	439	2,134	12	119	38	169	2,303
Newberry	2,877	435	255	3,567	114	42	75	231	3,798
Oconee	1,352	142	1,320	2,814	41	66	295	402	3,216
Orangeburg	1,341	1,392	910	3,643	67	355	182	604	4,247
Pickens	637	355	1,083	2,075	57	81	309	447	2,522
Richland	1,307	1,306	664	3,277	63	227	196	486	3,763
Saluda	1,055	294	331	1,680	51	40	69	160	1,840
Spartanburg	1,040	227	434	1,701	44	36	132	212	1,913
Sumter	1,356	1,359	461	3,176	68	167	82	317	3,493
Union	1,255	769	536	2,560	34	134	163	331	2,891
Williamsburg	2,006	1,340	1,059	4,405	50	417	383	850	5,255
York	820	525	538	1,883	38	82	139	259	2,142
State total	61,220	34,823	25,074	121,117	2,224	7,638	6,619	16,481	137,598

^{1/} Sound wood and bark.