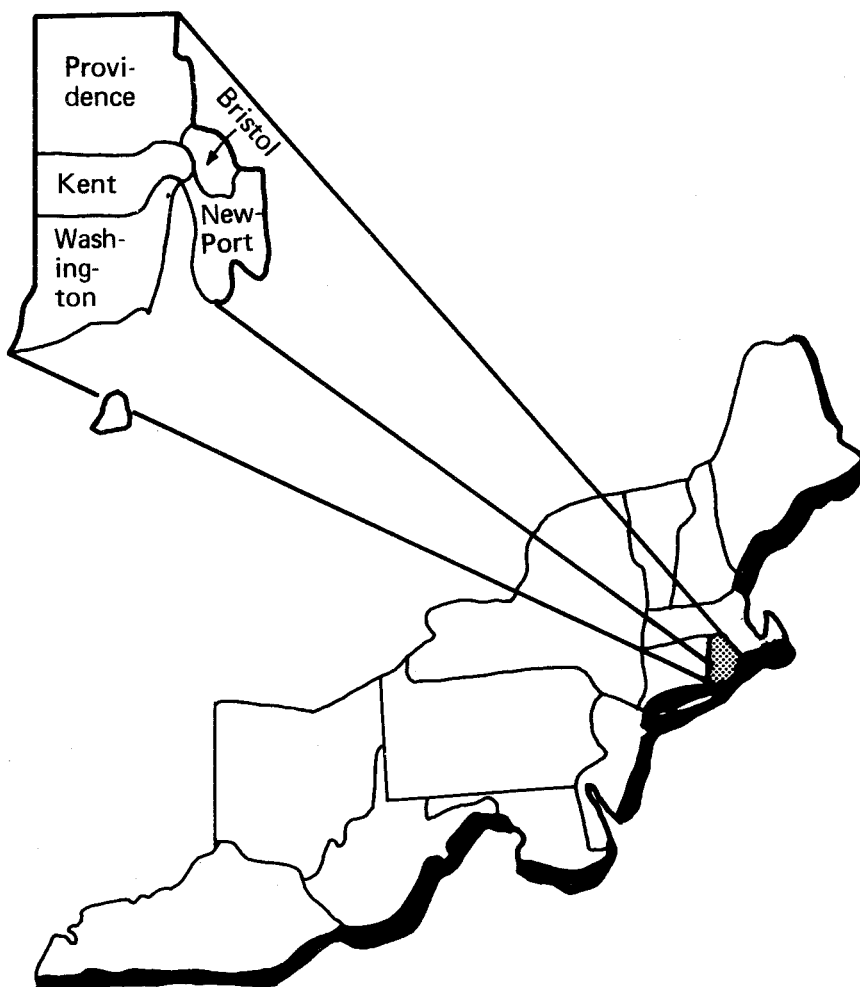


FOREST STATISTICS for RHODE ISLAND



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6816 MARKET STREET, UPPER DARBY, PA. 19082

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FOREST STATISTICS for RHODE ISLAND

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THE RHODE ISLAND RESURVEY

THIS REPORT contains data for the second inventory of the forest resources of Rhode Island. The inventory was completed in 1971 by the Northeastern Forest Experiment Station in cooperation with the Rhode Island Department of Natural Resources.

The first inventory of Rhode Island was completed in 1952. Because of many differences in standards and measurement techniques, the results of the current inventory are not directly comparable to the initial inventory. The trends in the resource, after the initial data have been adjusted to the resurvey standards, show these changes:

	1953	1972	Change
COMMERCIAL FOREST LAND (thousand acres):	430.5	395.3	-35.2
GROWING STOCK VOLUME (million cubic feet):			
Softwoods	21.8	75.0	53.2
Hardwoods	166.8	272.2	105.4
Total	188.6	347.2	158.6
SAWTIMBER VOLUME (million board feet):			
Softwoods	52.9	124.6	71.7
Hardwoods	228.1	352.1	124.0
Total	281.0	476.7	195.7

The inventory statistics reported here were obtained through a sampling procedure that utilizes recent aerial photography, the partial remeasurement of ground samples from the initial inventory, and the establishment of new ground-sample locations. In Rhode Island, this required the remeasurement of 86 plots, the interpretation of 2,088 points on aerial photographs into land-use and cubic-foot volume classes, and the location and establishment of 106 on-the-ground measurement locations as a subsample of the photo points. The data thus collected were summarized according to the Sampling with Partial Replacement (SPR) design, using the FINSYS computer system developed by the Northeastern Forest Experiment Station.

The inventory was designed to estimate resource data for the State as a whole. However, estimates for individual counties are also available, based on the photo-plot data for the county, expanded by the on-the-ground measurement subsample for the entire State. This procedure is based on the assumption that certain attributes of the ground plots are homogeneous across county boundaries. Therefore, the user of county data should recognize the limited and variable accuracy of the estimates for individual counties.

The reader may wish to consult other companion publications regarding this resurvey. THE FOREST RESOURCES OF SOUTHERN NEW ENGLAND (Resource Bulletin NE-36, 1974, by Neal P. Kingsley) provides an analysis and interpretation of the forest resource of this region along with an evaluation of the trends since the

first inventory. PRIMARY WOOD-PRODUCT INDUSTRIES OF SOUTHERN NEW ENGLAND, 1971 (Resource Bulletin NE-30, 1973 by James T. Bones) is a report on a complete canvass of the primary wood manufacturers and an analysis of the trends in industrial wood output since 1952. THE FOREST-LAND OWNERS OF SOUTHERN NEW ENGLAND (Resource Bulletin NE-41, 1976, by Neal P. Kingsley) is a report on a canvass of forest-land owners in the three Southern New England states, including an analysis of their ownership objectives, harvesting practices, and socioeconomic characteristics.

THE FOREST RESOURCE

Rhode Island has 395,300 acres of commercial forest land. This is 59 percent of the State's total land area, it reflects a decrease of 8 percent since 1953, the year of the last survey.¹

The distribution of commercial forest land by areas of major forest types has changed. The area of the white and red pine type has increased from 2 to 7 percent of the commercial forest land. The elm-ash-red maple type has also increased, from 18 to 29 percent of the commercial forest land, while the areas of the other hardwood types decreased.

As part of the survey, a canvass was made of the attitudes and objectives of the owners of privately-owned commercial forest land. A detailed questionnaire was sent to all owners of forest survey plot-locations that were classified as commercial forest land. Data from the questionnaire reveal that there are more than 14,000 owners of commercial forest land in the State. Of these, 91 percent are individuals, and they own 81 percent of the commercial forest land. About 6 percent of all forest-land owners are corporations; they own 12 percent of the forest land. The remaining 3 percent of the owners are partnerships, associations, undivided estates, and the like. The average owner in Rhode Island holds slightly more than 25 acres of commercial forest land. Only one in

every 25 owners has harvested timber from his land.

While the area of commercial forest land has decreased between surveys, the total net volume of growing stock has nearly doubled, and the volume of growing stock per acre of commercial forest land has indeed doubled. Current total net growing-stock volumes are 347.2 million cubic feet (up 84 percent) and 548.3 million board feet (up 95 percent). Current average volumes per acre are 878 cubic feet (up 100 percent) and 1,387 board feet (up 112 percent).

The softwood proportions of total net growing-stock volume have also increased between surveys. Softwoods currently represent 22 percent of the total net cubic-foot volume and 36 percent of the total board-foot volume. In 1953, the respective proportions were 12 and 19 percent.

Individual species currently account for approximately the same percentages of total growing stock volume that were reported in 1953. Of the softwoods, white pine continues to make up about two-thirds of all softwood volume; the remaining one-third consists of nearly equal volumes of red pine and pitch pine. Of the hardwoods, the leading species in cubic-foot volume are red maple (23 percent), northern red oak (18 percent), white oak (19 percent), and other oaks, mostly black and chestnut oak (32 percent). In board feet, the percentages of red maple, northern red oak, and white oak are slightly lower while the percentage of the other oaks is slightly higher.

Growth-and-removal data for the period between surveys show that, for all species combined, average annual net growth exceeded removals by ratios of more than 3 to 1 in cubic feet, and more than 2 to 1 in board feet. For softwoods, the growth-to-removal ratios were approximately 6 to 1 in cubic feet and 9 to 1 in board feet. For hardwoods the ratios were about 2 to 1 in both cubic feet and board feet.

Growing-stock volumes per acre of commercial forest land vary only slightly between counties. Providence County contains 40 percent of the forest land and 42 percent of the growing-stock volume, while Kent County, with 18 percent of the forest land, has 18 percent of the volume in the State.

¹Ferguson, R. H., and J. J. McGuire, 1957. The timber resources of Rhode Island. USDA For. Serv. Northeast. For. Exp. Stn. 38 p.

DEFINITION OF TERMS

Land Area Classes

Land area.—(a) Bureau of the Census. The area of dry land and land that is temporarily or partly covered by water, such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals that are less than $\frac{1}{8}$ statute mile in width; and lakes, reservoirs, and ponds that are less than 40 acres in area. (b) Forest Survey. The same as the Bureau of the Census, except that the minimum width of streams, etc. is 120 feet and the minimum size of lakes etc. is 1 acre.

Forest land.—Land that is at least 16.7 percent stocked (contains at least 7.5 square feet of basal area) by forest trees of any size, or that formerly had such tree cover and is not currently developed for nonforest use. (Forest trees are woody plants that have a well-developed stem and usually are more than 12 feet in height at maturity.) The minimum area for classification of forest land is 1 acre.

Commercial forest land.—Forest land that is producing or capable of producing crops of industrial wood (more than 20 cubic feet per acre per year) and is not withdrawn from timber utilization. (Industrial wood: all roundwood products, except fuelwood.)

Ownership Classes

Federal.—Lands (other than National Forests) that are administered by Federal agencies.

State.—Lands that are owned by the state or leased to a state for 50 years or more.

County and municipal.—Lands that are owned by counties and local public agencies or municipalities or leased to them for 50 years or more.

Forest industry.—Lands that are owned by companies or individuals operating wood-using plants.

Miscellaneous private.—Privately owned lands other than forest-industry and farmer-owned lands.

Farmer-owned.—Lands that are owned by farm operators, whether part of the farmstead or not. Excludes land leased by farm operators from non-farm owners.

Stand-Size Classes

Stand.—A growth of trees (see definitions under "Tree Classes") on a minimum of 1 acre of forest land that is at least 16.7 percent stocked by forest trees of any size.

Sawtimber stands.—Stands that are at least 16.7 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands.—Stands that are at least 16.7 percent stocked with growing-stock trees of which half or more of this stocking is in poletimber and/or sawtimber trees and in which poletimber stocking exceeds that of sawtimber.

Sapling-seedling stands.—Stands that are at least 16.7 percent stocked with growing-stock trees of which more than half of the stocking is sapling and/or seedlings.

Nonstocked areas.—Commercial forest land that is less than 16.7 percent stocked with growing-stock trees.

Tree Classes

Growing-stock trees.—Live trees of commercial species that are classified as sawtimber, poletimber, saplings, and seedlings; that is, all live trees of commercial species except rough and rotten trees.

Rotten trees.—Live trees of commercial species that do not contain at least one 12-foot sawlog or two nontiguous sawlogs, each 8 feet or longer, now or prospectively, and do not meet regional specifications for freedom from defect primarily because of rot; that is, when more than 50 percent of the cull volume in a tree is rotten.

Rough trees.—(a) The same as above, except that rough trees do not meet regional specifications for freedom from defect primarily because of roughness or poor form, and (b) all live trees that are of non-commercial species.

Forest Types

Forest type.—A classification of forest land based upon the species forming a plurality of basal area of live trees. The many local forest types in the Northeast were combined into the following major forest types:

White pine-red pine-hemlock.—Forests in which eastern white pine, red pine, or hemlock, singly or in combination, make up a plurality of the stocking. (Common associates include aspen, birch, and maple.)

Spruce-fir.—Forests in which spruce or true firs, singly or in combination, comprise a plurality of the stocking. (Common associates include white cedar, tamarack, maple, birch, and hemlock.)

Pitch pine-eastern redcedar.—Forests in which pitch pine or eastern redcedar, singly or in combination, make up a plurality of the stocking. (Common associates include oak and hickory.)

Oak-pine.—Forests in which oaks or hickory, singly or in combination, make up a plurality of the stocking, but in which pitch pine and/or eastern redcedar make up 25 to 50 percent of the stocking.

Oak-hickory.—Forests in which oaks or hickory, singly or in combination, make up a plurality of the stocking, except where pitch pine and/or eastern redcedar make up 25 or 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, and red maple.)

Elm-ash-red-maple.—Forests in which elm, ash, or red maple, singly or in combination, make up a plurality of the stocking. (Common associates include beech and sugar maple.)

Maple-beech-birch.—Forests in which sugar maple, beech, or yellow birch, singly or in combination, make up a plurality of the stocking. (Common associates include sweet birch, black cherry, hemlock, and white pine.)

Class of Timber

Sawtimber trees.—Live trees of commercial species, (a) that are of the following minimum diameters at breast height—softwoods 9.0 inches and hardwoods 11.0 inches, and (b) that contain at least one 12-foot or two noncontiguous 8-foot merchantable sawlogs and that meet regional specifications for freedom from defect.

Poletimber trees.—Live trees of commercial species that meet regional specifications of soundness and form, and are at least 5.0 inches dbh but are smaller than sawtimber size.

Saplings.—Live trees of commercial species that are 1.0 to 5.0 inches dbh and of good form and vigor.

Seedlings.—Live trees of commercial species that are less than 1.0 inch dbh and are expected to survive.

Timber Measurement and Volume

Growing-stock volume.—Net volume, in cubic feet, of live growing-stock trees that are 5.0 inches dbh and larger, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs. Net volume equals gross volume less deduction for rot and/or sweep and crook.

Sawtimber volume.—Net volume in board feet, International 1/4-inch rule, of merchantable sawlogs in live sawtimber trees. Net volume equals gross volume less deductions for rot, sweep, and other defects that affect use for lumber.

Annual Net Growth and Timber Removals

Average annual net growth of growing stock.—The change (resulting from natural causes) in volume of sound wood in sawtimber and poletimber trees during the period between surveys, divided by the length of the period. (Components of annual net growth of growing stock include the increment in net volume of trees present at the beginning of the period and surviving to its end, plus net volume of trees reaching poletimber size during the period, minus the net volume of trees that died during the period, minus the net volume of trees that became rough or rotten trees during the period, cull increment.)

Average annual growing-stock removals.—The net cubic-foot volume of growing-stock trees removed by harvesting or killed in logging, cultural operations such as timber-stand improvement, and land-clearing; or changes in land use during the period between surveys, converted to an annual basis.

Average annual net growth of sawtimber.—The change (resulting from natural causes) in net board-foot volume of sawtimber during the period between surveys, divided by the length of the period. (Components of annual net growth of sawtimber include the increment in net volume of sawtimber trees

present at the beginning of the period and surviving to its end, plus the net volume of trees reaching sawtimber size during the period, minus the net volume of sawtimber trees that died during the period, minus the net volume of sawtimber trees that became rough or rotten trees during the period between surveys, cull increment.)

Average annual sawtimber removals.—The net board-foot volume of sawtimber trees removed by harvesting or killed in logging, cultural operations such as timber-stand improvement, and land-clearing; or changes in land use during the period between surveys, converted to an annual basis.

Annual removals trend-level.—The estimated removals of growing stock or sawtimber for a specific year that are consistent with the trend of removals during the period between surveys and with the current inventory.

Logging residues.—The unused growing-stock volume of trees cut for products and the total growing-stock volume of trees destroyed in the course of logging but not removed for products.

Other removals.—The growing-stock volume of trees that were removed from the inventory and not used for products, in cultural operations (weeding, thinning, etc.), land-clearing, and reclassification of some commercial forest land as noncommercial forest land.

Plant byproducts.—Wood products such as slabs, edgings, and veneer cores that are obtained incidental to the production of timber products and are utilized in the manufacture of other timber products. (Bark is not included.)

Plant residues.—Wood material produced incidental to the production of timber products but not utilized.

Roundwood products.—Logs, bolts, or other round sections cut from growing stock or nongrowing stock for industrial or nonindustrial uses.

Timber products.—Roundwood products and plant byproducts from all sources.

Timber removals.—The growing-stock volume of trees removed from the inventory for roundwood products, plus logging residues and other removals.

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Table 1.--Area by land classes, Rhode Island, 1972

Land class	Area	
	<u>Thousand acres</u>	<u>Percent</u>
Forest land:		
Commercial	395.3	59
Productive-reserved	8.9	1
Total forest land	404.2	60
Nonforest land:		
Cropland <u>a/</u>	27.3	4
Pasture <u>a/</u>	4.7	1
Other <u>b/</u>	235.2	35
Total nonforest land	267.2	40
Total area <u>c/</u>	671.4	100

a/ Source: 1969 and 1964 Census of Agriculture. Total cropland includes cropland used for pasture. Pasture total based upon ratios developed from the 1964 Census report. Data extrapolated to 1972.

b/ Includes swampland, industrial and urban areas, other nonforest land, and 4,600 acres classed as water by Forest Survey standards, but defined by the Bureau of the Census as land.

c/ Source: United States Bureau of the Census, Areas of Rhode Island, 1960 (April 1970).

Table 2.--Area of commercial forest land, by ownership classes, Rhode Island, 1972

Ownership class	Area <u>a/</u>	
	<u>Thousand acres</u>	<u>Percent</u>
State	20.1	5
County and municipal	12.0	3
Total public	32.1	8
Farmer-owned	24.6	6
Miscellaneous private:		
Individual <u>b/</u>	295.9	75
Corporate	42.7	11
Total miscellaneous private	338.6	86
All ownerships	395.3	100

a/ Estimates of area in each private ownership class are based upon the forest-land ownership study by the NEFES. Public ownerships are from ownership records.

b/ Includes acreage owned by business partnerships and organizations such as churches, Boy Scouts of America, and associations.

Table 3.--Area of commercial forest land, by ownership,
stand-size, and stand-volume classes,
Rhode Island, 1972

(In thousands of acres)

Stand-size and stand-volume class	All ownerships	Other public	Farmer and other
BY STAND-SIZE CLASS			
Sawtimber	87.9	5.3	82.6
Poletimber	133.0	5.4	127.6
Sapling-seedling	168.3	21.4	146.9
Nonstocked areas	6.1	--	6.1
All classes	395.3	32.1	363.2
BY STAND-VOLUME-PER-ACRE CLASS ^{a/}			
Less than 1,500	266.2	21.4	244.8
1,500 to 5,000	104.0	10.7	93.3
More than 5,000	25.1	--	25.1
All classes	395.3	32.1	363.2

^{a/} In board feet, International 1/4-inch rule.

Table 4.--Area of commercial forest land, by stocking classes
based on selected stand components, Rhode Island, 1972

(In thousands of acres)

Stocking class a/ (percent)	Stocking classified in terms of--				
	All trees	Growing-stock trees			Rough and rotten trees
		Total	Desirable	Acceptable	
Overstocked:					
150	6.1	--	--	--	--
140 to 150	25.0	--	--	--	--
130 to 140	59.5	6.3	--	6.3	--
Total	90.6	6.3	--	6.3	--
Fully stocked:					
120 to 130	44.2	34.9	--	28.6	--
110 to 120	107.0	6.3	--	6.3	--
100 to 110	75.3	69.1	--	50.3	--
Total	226.5	110.3	--	85.2	--
Medium stocked:					
90 to 100	41.1	81.4	--	93.9	--
80 to 90	6.3	62.6	--	50.1	--
70 to 80	6.1	53.6	--	72.5	12.7
60 to 70	6.5	25.2	--	31.5	12.1
Total	60.0	222.8	--	248.0	24.8
Poorly stocked:					
50 to 60	18.2	6.1	--	6.1	25.3
40 to 50	--	25.1	--	25.1	55.8
30 to 40	--	6.1	--	6.1	43.7
20 to 30	--	12.6	--	12.5	69.0
10 to 20	--	--	31.5	--	129.0
Less than 10	--	6.0	363.8	6.0	47.7
Total	18.2	55.9	395.3	55.8	370.5
All classes	395.3	395.3	395.3	395.3	395.3

a/ Fully stocked stands are considered to contain 75 to 100 square feet of basal area per acre.

Table 5.--Area of commercial forest land, by ownership potential site productivity, and area-condition classes, Rhode Island, 1972

(In thousands of acres)

Growth-per-acre and area- condition class	All ownerships	Other public	Farmer and other
BY GROWTH-PER-ACRE CLASS ^{a/}			
120 to 165	18.6	--	18.6
85 to 120	35.1	--	35.1
50 to 85	119.5	--	119.5
Less than 50	222.1	32.1	190.0
All classes	395.3	32.1	363.2
BY AREA-CONDITION CLASS ^{b/}			
Class 10-40	--	--	--
Class 50	85.2	5.3	79.9
Class 60	254.2	16.0	238.2
Class 70	55.9	10.8	45.1
All classes	395.3	32.1	363.2

^{a/} In cubic feet.

^{b/} Class 10-40.--Areas medium to fully stocked with desirable trees.

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

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

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

Table 6.--Area of commercial forest land, by forest types, and ownership and stand-size classes, Rhode Island, 1972

(In thousands of acres)

Ownership and stand-size classes	White and red pine	Pitch pine-eastern redcedar	Oak-pine	Oak-hickory	Elm-ash-red maple	Maple-beech-birch	Aspen-birch	Total
BY OWNERSHIP CLASS								
Other public	--	--	5.3	16.0	10.8	--	--	32.1
Farmer and other	28.8	25.2	31.8	156.9	101.8	12.6	6.1	363.2
All ownerships	28.8	25.2	37.1	172.9	112.6	12.6	6.1	395.3
BY STAND-SIZE CLASS								
Sawtimber stands	18.8	--	6.3	31.4	31.4	--	--	87.9
Poletimber stands	3.6	--	6.3	85.2	31.6	6.3	--	133.0
Sapling-seedling stands <u>a/</u>	6.4	25.2	24.5	56.3	49.6	6.3	6.1	174.4
All stands	28.8	25.2	37.1	172.9	112.6	12.6	6.1	395.3

a/ Includes 6,100 acres of nonstocked areas in the elm-ash-red maple forest type.

Table 7.--Area of commercial forest land by local forest types and major forest types, Rhode Island, 1972

(In thousands of acres)

Forest type	Area	
	Local	Major
White and red pine:		
Red pine	6.3	
White pine	22.5	
Total		28.8
Pitch pine-eastern redcedar:		
Eastern redcedar	6.5	
Pitch pine	18.7	
Total		25.2
Oak-pine:		
White pine-red oak-white ash	6.3	
Eastern redcedar-hardwoods	12.4	
Other oak-pines	18.4	
Total		37.1
Oak-hickory:		
Post or bear oak	18.7	
Chestnut oak	6.3	
White oak-red oak-hickory	12.3	
White oak	75.2	
Northern red oak	35.1	
Mixed hardwoods	25.3	
Total		172.9
Elm-ash-red maple:		
Black ash-elm-red maple	112.6	
Total		112.6
Maple-beech-birch:		
Sugar maple-beech-yellow birch	6.3	
Black cherry	6.3	
Total		12.6
Aspen-birch:		
Aspen	6.1	
Total		6.1
All forest types	395.3	395.3

Table 8.--Area of noncommercial forest land, by forest types, Rhode Island, 1972

(In thousands of acres)

Forest type	All areas	Productive- reserved areas	Unproductive areas
Oak-pine	1.4	1.4	--
Oak-hickory	4.5	4.5	--
Elm-ash-red maple	3.0	3.0	--
All types	8.9	8.9	--

Table 9.--Number of trees on commercial forest land, by species groups, tree classes,
and diameter classes, Rhode Island, 1972

(In thousands of trees)

DBH class (inches)	Softwoods			Hardwoods		
	Growing- stock trees	Rough and rotten trees	Total	Growing- stock trees	Rough and rotten trees	Total
Saplings:						
1.0 to 2.9	12,226	6,671	18,897	44,324	46,944	91,268
3.0 to 4.9	6,159	1,713	7,872	29,103	15,744	44,847
Total	18,385	8,384	26,769	73,427	62,688	136,115
Poletimber:						
5.0 to 6.9	2,973	776	3,749	19,837	3,988	23,825
7.0 to 8.9	2,425	360	2,785	10,639	2,373	13,012
9.0 to 10.9	--	--	--	5,961	987	6,948
Total	5,398	1,136	6,534	36,437	7,348	43,785
Small sawtimber:						
9.0 to 10.9	1,281	86	1,367	--	--	--
11.0 to 12.9	586	--	586	2,853	637	3,490
13.0 to 14.9	347	--	347	1,356	236	1,592
Total	2,214	86	2,300	4,209	873	5,082
Large sawtimber:						
15.0 to 16.9	292	--	292	460	176	636
17.0 to 18.9	66	--	66	351	163	514
19.0 to 20.9	66	--	66	113	21	134
21.0 to 28.9	54	13	67	114	61	175
29.0 and larger	9	--	9	13	21	34
Total	487	13	500	1,051	442	1,493
All classes	26,484	9,619	36,103	115,124	71,351	186,475

Table 10.--Number of growing-stock trees on commercial forest land, by species and diameter classes, Rhode Island, 1972

(In thousands of trees)

Species	All classes	Diameter class (inches at breast height)									
		5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+
White pine	4,046	1,662	863	377	400	301	272	53	55	54	9
Red pine	1,389	117	678	532	62	--	--	--	--	--	--
Pitch pine	2,209	990	713	329	124	20	20	13	--	--	--
Other softwoods	455	204	171	43	--	26	--	--	11	--	--
Total softwoods	8,099	2,973	2,425	1,281	586	347	292	66	66	54	9
Select white oaks	7,707	2,347	2,976	1,283	517	438	70	68	--	8	--
Select red oaks	7,896	4,152	1,660	1,290	444	199	91	27	33	--	--
Other red oaks <u>a/</u>	11,721	5,136	2,774	1,887	1,223	371	157	79	33	48	13
Hickory	553	355	116	45	--	25	--	--	12	--	--
Soft maples	10,599	6,144	2,398	1,038	492	206	107	133	35	46	--
Yellow birch <u>b/</u>	1,309	654	431	93	63	21	18	29	--	--	--
Other hardwoods	1,912	1,049	284	325	114	96	17	15	--	12	--
Total hardwoods	41,697	19,837	10,639	5,961	2,853	1,356	460	351	113	114	13
All species	49,796	22,810	13,064	7,242	3,439	1,703	752	417	179	168	22

a/ Includes 1,169,000 other white oak trees.

b/ Includes 422,000 sweet birch trees.

Table 11.--Net volume of timber on commercial forest land,
by class of timber, softwoods and hardwoods,
Rhode Island, 1972

(In millions of cubic feet)

Class of timber	All species	Softwoods	Hardwoods
Sawtimber trees:			
Sawlog portion	122.1	43.4	78.7
Upper-stem portion	25.9	5.6	20.3
All sawtimber trees	148.0	49.0	99.0
Poletimber trees	199.2	26.0	173.2
All growing-stock trees	347.2	75.0	272.2
Rough trees	52.2	6.0	46.2
Rotten trees	7.3	.2	7.1
Total, all trees	406.7	81.2	325.5

Table 12.--Net volume of growing stock and sawtimber on commercial forest land, by ownership, stand-size classes, and forest types, softwoods and hardwoods, Rhode Island, 1972

Ownership, stand size, and forest type	Growing stock (million cubic feet)			Sawtimber (million board feet) ^{a/}		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
BY OWNERSHIP CLASSES						
Other public	17.9	3.0	14.9	27.8	4.3	23.5
Farmer and other	329.3	72.0	257.3	520.5	191.9	328.6
All ownerships	347.2	75.0	272.2	548.3	196.2	352.1
BY STAND-SIZE CLASSES						
Sawtimber stands	128.3	36.8	91.5	300.0	100.7	199.3
Poletimber stands	148.4	11.4	137.0	141.3	27.6	113.7
Sapling-seedling stands	70.1	26.8	43.3	105.6	67.9	37.7
Nonstocked areas	.4	--	.4	1.4	--	1.4
All stands	347.2	75.0	272.2	548.3	196.2	352.1
BY FOREST TYPES						
White and red pines	52.3	43.6	8.7	137.9	123.1	14.8
Pitch pine-eastern redcedar	9.6	6.7	2.9	10.8	9.3	1.5
Oak-pine	23.8	9.8	14.0	48.3	25.8	22.5
Oak-hickory	157.1	8.6	148.5	200.1	16.4	183.7
Elm-ash-red maple	92.1	5.9	86.2	138.6	19.1	119.5
Maple-beech-birch	10.3	--	10.3	7.1	--	7.1
Aspen-birch	2.0	.4	1.6	5.5	2.5	3.0
All types	347.2	75.0	272.2	548.3	196.2	352.1

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

Table 13.--Net volume of growing stock on commercial forest land, by species and diameter classes, Rhode Island, 1972

(In millions of cubic feet)

Species	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+
White pine	48.7	7.8	6.1	4.4	6.2	7.0	8.3	2.0	2.7	3.3	0.9
Red pine	11.8	.6	5.0	5.2	1.0	--	--	--	--	--	--
Pitch pine	11.4	1.8	3.1	2.9	1.9	.5	.6	.6	--	--	--
Other softwoods	3.1	.8	.8	.4	--	.5	--	--	.6	--	--
Total softwoods	75.0	11.0	15.0	12.9	9.1	8.0	8.9	2.6	3.3	3.3	.9
Select white oaks	50.1	7.5	15.3	10.0	6.2	7.2	1.6	1.9	--	.4	--
Select red oaks	49.9	14.7	9.5	11.1	6.2	3.8	2.3	.9	1.4	--	--
Other red oaks <u>a/</u>	87.8	17.5	16.4	16.4	16.9	7.5	4.2	2.9	1.4	3.0	1.6
Hickory	3.7	1.4	.8	.4	--	.5	--	--	.6	--	--
Soft maples	61.4	18.3	12.7	9.2	6.7	3.8	2.7	4.3	1.3	2.4	--
Yellow birch <u>b/</u>	7.0	1.7	2.2	.7	.8	.4	.4	.8	--	--	--
Other hardwoods	12.3	3.2	1.6	2.6	1.6	1.7	.4	.4	--	.8	--
Total hardwoods	272.2	64.3	58.5	50.4	38.4	24.9	11.6	11.2	4.7	6.6	1.6
All species	347.2	75.3	73.5	63.3	47.5	32.9	20.5	13.8	8.0	9.9	2.5

a/ Includes 6,400,000 cubic feet of other white oaks.

b/ Includes 1,800,000 cubic feet of sweet birch.

Table 14.--Net volume of sawtimber on commercial forest land, by species and diameter classes, Rhode Island, 1972

(In millions of board feet)^{a/}

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+
White pine	145.5	14.2	23.6	28.4	36.0	9.0	11.9	17.4	5.0
Red pine	20.9	17.1	3.8	--	--	--	--	--	--
Pitch pine	23.2	9.3	6.8	2.1	2.3	2.7	--	--	--
Other softwoods	6.6	1.5	--	2.3	--	--	2.8	--	--
Total softwoods	196.2	42.1	34.2	32.8	38.3	11.7	14.7	17.4	5.0
Select white oaks	60.3	--	19.8	25.9	5.7	7.2	--	1.7	--
Select red oaks	52.8	--	18.7	14.9	10.1	3.3	5.8	--	--
Other red oaks ^{b/}	135.9	--	54.4	29.4	16.3	11.6	5.9	12.0	6.3
Hickory	4.4	--	--	1.5	--	--	2.9	--	--
Soft maples	73.2	--	19.2	13.0	9.8	16.6	5.1	9.5	--
Yellow birch	8.4	--	2.6	1.3	1.4	3.1	--	--	--
Other hardwoods	17.1	--	4.6	6.1	1.4	1.8	--	3.2	--
Total hardwoods	352.1	--	119.3	92.1	44.7	43.6	19.7	26.4	6.3
All species	548.3	42.1	153.5	124.9	83.0	55.3	34.4	43.8	11.3

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

^{b/} Includes 2,900,000 board feet of other white oaks.

Table 15.--Net volume of sawtimber on commercial forest land, by species and quality classes, Rhode Island, 1972

(In millions of board feet)^{a/}

Species	All classes	Standard-lumber logs			
		Grade 1	Grade 2	Grade 3	Grade 4 ^{b/}
Softwoods:					
White pine	145.5	1.0	5.7	78.4	60.4
Red pine	20.9	--	--	15.7	5.2
Pitch pines	23.2	--	1.5	21.7	--
Other softwoods ^{c/}	6.6	--	--	--	--
Total softwoods	196.2	1.0	7.2	115.8	65.6
Hardwoods:					
Select white oaks	60.3	--	7.2	39.4	13.7
Select red oaks	52.8	3.1	3.6	35.7	10.4
Other red oaks	135.9	10.0	18.4	84.5	23.0
Hickory	4.4	1.7	1.3	.4	1.0
Soft maples	73.2	--	9.2	32.8	31.2
Yellow birch	8.4	1.1	1.5	5.3	.5
Other softwoods	17.1	2.1	.7	12.3	2.0
Total hardwoods	352.1	18.0	41.9	210.4	81.8

(In percent)

Hardwood quality	100	5	12	60	23
------------------	-----	---	----	----	----

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

^{b/} Grade 4 applies only to the pines. For hardwoods the volumes in this column are for construction logs.

^{c/} Species other than pine are not graded into standard-lumber grades.

Table 16.--Annual net growth, removals,^{a/} and mortality of growing stock and sawtimber on commercial forest land, by species, Rhode Island, 1971

Species	Growing stock			Sawtimber		
	Annual net growth	Annual timber removals	Annual mortality	Annual net growth	Annual timber removals	Annual mortality
	- - - - <u>Thousand cubic feet</u> - - - -			- - - - <u>Thousand board feet^{b/}</u> - - - -		
Softwoods:						
White pine	3,912	278	--	11,379	530	100
Red pine	940	60	--	1,653	77	--
Pitch pine	904	52	--	1,838	75	--
Other softwoods	244	10	--	530	18	--
Total softwoods	6,000	400	--	15,400	700	100
Hardwoods:						
Select white oaks	1,712	54	87	1,853	170	133
Select red oaks	2,010	917	87	3,459	1,637	372
Other red oaks ^{c/}	3,635	934	117	8,510	3,475	60
Hickory	-196	311	34	474	500	--
Soft maples	2,044	240	418	2,527	867	161
Yellow birch	180	18	61	315	56	--
Other hardwoods	-485	426	496	762	595	174
Total hardwoods	8,900	2,900	1,300	17,900	7,300	900
Total, all species	14,900	3,300	1,300	33,300	8,000	1,000

^{a/} Data for timber removals in this table are based on the trend from 1952 through 1971.

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

^{c/} Includes negligible amounts of other white oaks.

Table 17.--Annual net growth and removals of growing stock and sawtimber on commercial forest land, by ownership classes, softwoods and hardwoods, Rhode Island, 1971

Ownership	Annual net growth			Annual timber removals		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
GROWING STOCK						
Thousand cubic feet						
Public	728	241	487	175	16	159
Farmer and other	14,172	5,759	8,413	3,125	384	2,741
All ownerships	14,900	6,000	8,900	3,300	400	2,900
SAWTIMBER						
Thousand board feet ^{a/}						
Public	1,530	336	1,194	501	15	486
Farmer and other	31,770	15,064	16,706	7,499	685	6,814
All ownerships	33,300	15,400	17,900	8,000	700	7,300

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

Table 18.--Annual mortality of growing stock and sawtimber on commercial forest land, by ownership classes, causes, softwoods and hardwoods, Rhode Island, 1971

Ownership and cause	Growing stock (thousand cubic feet)			Sawtimber (thousand board feet) ^{a/}		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
BY OWNERSHIP CLASS						
Public	71	--	71	62	2	60
Farmer and other	1,229	--	1,229	938	98	840
All ownerships	1,300	--	1,300	1,000	100	900
BY CAUSE						
Disease	875	--	875	777	100	677
Weather	130	--	130	223	--	223
Suppression	20	--	20	--	--	--
Unknown	275	--	275	--	--	--
All causes	1,300	--	1,300	1,000	100	900

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

Table 19.--Components of average annual net growth of growing stock and sawtimber on commercial forest land, softwoods and hardwoods, Rhode Island, 1952-71

Components	All species	Softwoods	Hardwoods
GROWING STOCK <u>Thousand cubic feet</u>			
Growth on initial growing-stock inventory <u>a/</u>	5,575	1,166	4,409
Ingrowth--saplings that became poletimber	9,699	2,344	7,355
Gross growth	15,274	3,510	11,764
Cull increment	2,194	142	2,052
Annual mortality	980	68	912
Average annual net growth	12,100	3,300	8,800
SAWTIMBER <u>Thousand board feet</u> ^{b/}			
Growth on initial sawtimber inventory <u>a/</u>	6,716	1,741	4,975
Ingrowth--poletimber trees that became sawtimber	18,282	6,918	11,364
Gross growth	24,998	8,659	16,339
Cull increment	598	59	539
Annual mortality	900	200	700
Average annual net growth	23,500	8,400	15,100

a/ Including growth on trees that were cut.

b/ International 1/4-inch rule.

Table 20.--Sampling errors for major forest area and timber-volume classes in Rhode Island, 1972

Table No.	Item classification	Sampling error	Table No.	Item classification	Sampling error
FOREST AREA			TIMBER VOLUME		
		<u>Percent</u>			<u>Cubic feet</u> <u>Board feet</u>
1	Forest-land area:				<u>Percent</u>
	Commercial	3.1	11	Class of timber:	
	Total	3.0		Sawtimber trees	9 --
2	Ownership:			Poletimber trees	8 --
	Farmer owned	**		All growing stock	5.1 --
	Misc. private	6		Rough trees	14 --
	Farmer and misc. private	6		Rotten trees	19 --
				All live trees	5 --
3	Stand-size class:		12	Ownership:	
	Sawtimber stands	21		Other public	49 *
	Poletimber stands	17		Farmer and other	6 11
	Sapling-seedling stands	13	12	Stand-size class:	
	Nonstocked areas	**		Sawtimber stands	19 17
3	Stand-volume per acre			Poletimber stands	17 24
	(board feet):			Sapling-seedling	22 30
	Less than 1,500	9		Nonstocked areas	** **
	1,500 to 5,000	21	12	Forest type:	
	More than 5,000	47		White and red pine	42 39
5	Growth-per-acre class			Pitch pine-eastern redcedar	* *
	(cubic feet):			Oak-pine	* *
	120 to 165	*		Oak-hickory	17 25
	85 to 120	40		Elm-ash-red maple	25 29
	50 to 85	19		Maple-beech-birch	* *
	Less than 50	11		Aspen-birch	* *
5	Area-condition class:		13-14	Diameter classes (inches):	
	Class <u>50</u>	24		5.0- 6.9	11 --
	Class <u>60</u>	10		7.0- 8.9	11 --
	Class <u>70</u>	29		9.0-10.9 <u>a/</u>	10 34
6	Forest type:			11.0-12.9	12 14
	White and red pine	44		13.0-14.9	12 15
	Pitch pine-eastern redcedar	48		15.0-16.9	18 18
	Oak-pine	39		17.0-18.9	20 19
	Oak-hickory	14		19.0-20.9	36 33
	Elm-ash-red maple	21		21.0-28.9	27 25
	Maple-beech-birch	*		29.0 and larger	* *
	Aspen-birch	**			

Continued

Table 20.--Continued

Table No.	Item classification	Sampling error		Table No.	Item classification	Sampling error	
		<u>Cubic</u> <u>feet</u>	<u>Board</u> <u>feet</u>			<u>Cubic</u> <u>feet</u>	<u>Board</u> <u>feet</u>
		<u>Percent</u>				<u>Percent</u>	
13-14	Species:				GROWTH-REMOVAL		
	White pine	29	28				
	Red pine	*	*	17	Growth by:		
	Pitch pine	43	*		Softwoods	39	49
	Other softwoods	*	*		Hardwoods	12	17
	All softwoods	26	24		All species	12	21
	Select white oaks	19	27	17	Removals by:		
	Select red oaks	20	35		Softwoods	*	*
	Other oaks	15	21		Hardwoods	36	*
	Hickory	47	*		All species	33	*
	Soft maples	23	34		MORTALITY		
	Yellow birch	47	*				
	Other hardwoods	34	34	18	By species group:		
	All hardwoods	9	16		Softwoods	*	**
	All species	5.1	9.9		Hardwoods	24	*
					All species	23	45
				18	By cause:		
					Weather	*	*
					Suppression	**	--
					Disease	22	*
					Unknown	*	--

* Sampling errors of 50 to 99 percent.

** Sampling errors of 100 or more.

a/ Board-foot sampling error for this class is for softwoods only.

Table 21.--Output of timber products, by source of material, softwoods and hardwoods,
Rhode Island, 1971

Product and species group	Standard units	Total output		Output from roundwood		Output from plant byproducts	
		Number of units	Thousand cubic feet	Number of units	Thousand cubic feet	Number of units	Thousand cubic feet
Sawlogs:							
Softwood	M bd. ft. ^{a/}	964	162	964	162	--	--
Hardwood	M bd. ft. ^{a/}	2,655	445	2,655	445	--	--
Total	M bd. ft. ^{a/}	3,619	607	3,619	607	--	--
Pulpwood:							
Softwood	Std. cords ^{b/}	1,983	169	1,783	152	200	17
Hardwood	Std. cords ^{b/}	6,409	545	4,955	421	1,454	124
Total	Std. cords ^{b/}	8,392	714	6,738	573	1,654	141
Piling:							
Softwood	M linear ft.	--	--	--	--	--	--
Hardwood	M linear ft.	6	2	6	2	--	--
Total	M linear ft.	6	2	6	2	--	--
Posts (round and split):							
Softwood	M pieces	1	2	1	2	--	--
Hardwood	M pieces	--	--	--	--	--	--
Total	M pieces	1	2	1	2	--	--
Other:^{c/}							
Softwood	M cu. ft.	22	22	4	4	18	18
Hardwood	M cu. ft.	33	33	11	11	22	22
Total	M cu. ft.	55	55	15	15	40	40

Total industrial products:								
Softwood	M cu. ft.		355		320		35	
Hardwood	M cu. ft.		1,025		879		146	
Total		M cu. ft.	1,380		1,199		181	
Fuelwood:								
Softwood	Std. cords		1,080	87	747	60	333	27
Hardwood	Std. cords		10,910	873	10,474	838	436	35
Total		Std. cords	11,990	960	11,221	898	769	62
All products: ^{d/}								
Softwood	M cu. ft.		442		380			62
Hardwood	M cu. ft.		1,898		1,717			181
Total		M cu. ft.	2,340		2,097			243 ^{e/}

a/ International 1/4-inch rule.

b/ Rough wood basis, includes chips converted to equivalent standard cords.

c/ Includes dimension bolts, charcoalwood, and specialty items.

d/ Does not include 40,200 cubic feet of softwood and 8,800 cubic feet of hardwood residues used for agricultural bedding.

e/ Hardwood pulpwood from plant residues does not agree with Table 22 in Resource Bulletin NE-30, Primary Wood-Product Industries of Southern New England, 1971, because of different data sources.

Table 22.--Output of roundwood products, by source, softwoods and hardwoods, Rhode Island, 1971

(In thousands of cubic feet)

Product and species group	All sources	Growing-stock trees ^{a/}			Rough and rotten trees <u>a/</u>	Salvable dead trees <u>a/</u>	Other sources ^{b/}
		Total	Sawtimber	Poletimber			
PRINCIPAL INDUSTRIAL PRODUCTS							
Sawlogs:							
Softwood	162	141	136	5	--	1	20
Hardwood	445	427	406	21	2	--	16
Total	607	568	542	26	2	1	36
Pulpwood:							
Softwood	152	130	54	76	1	1	20
Hardwood	421	239	--	239	--	--	182
Total	573	369	54	315	1	1	202
MISCELLANEOUS INDUSTRIAL PRODUCTS							
Piling:							
Softwood	--	--	--	--	--	--	--
Hardwood	2	2	2	--	--	--	--
Total	2	2	2	--	--	--	--
Posts (round and split):							
Softwood	2	1	--	1	--	1	--
Hardwood	--	--	--	--	--	--	--
Total	2	1	--	1	--	1	--
Other:							
Softwood	4	2	--	2	--	2	--
Hardwood	11	7	5	2	2	--	2
Total	15	9	5	4	2	2	2

TOTAL INDUSTRIAL PRODUCTS

Softwood	320	274	190	84	1	5	40
Hardwood	879	675	413	262	4	--	200
Total	1,199	949	603	346	5	5	240

NONINDUSTRIAL PRODUCTS

Fuelwood:							
Softwood	60	22	--	22	--	34	4
Hardwood	838	550	359	191	144	29	115
Total	898	572	359	213	144	63	119

ALL PRODUCTS

Softwood	380	296	190	106	1	39	44
Hardwood	1,717	1,225	772	453	148	29	315
Total	2,097	1,521	962	559	149	68	359

a/ On commercial forest land.

b/ Includes trees less than 5.0 inches in diameter, tree tops and limbs from commercial forest areas, or any material from noncommercial forest land or nonforest land such as fence rows and suburban areas.

Table 23.--Timber removals from growing stock and sawtimber on commercial forest land, by items, softwoods and hardwoods, Rhode Island, 1971

Item	Growing stock			Sawtimber		
	All species	Soft-woods	Hard-woods	All species	Soft-woods	Hard-woods
	<u>Thousand cubic feet</u>			<u>Thousand board feet^{a/}</u>		
Roundwood products:						
Sawlogs	568	141	427	2,449	618	1,831
Pulpwood	369	130	239	197	197	--
Piling	2	--	2	9	--	9
Posts	1	1	--	--	--	--
Other	9	2	7	22	--	22
Fuelwood	572	22	550	1,616	--	1,616
All products	1,521	296	1,225	4,293	815	3,478
Logging residues	246	29	217	113	23	90
Other removals	1,736	88	1,648	2,450	54	2,396
Total removals	3,503	413	3,090	6,856	892	5,964

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

Table 24.--Volume of unused residues at sawmills, ^{a/} by type of residue for softwoods and hardwoods, Rhode Island, 1971

(In thousands of cubic feet)

Type of residue	Softwoods	Hardwoods	All species
Coarse ^{b/}	10.3	23.5	33.8
Fine ^{c/}	6.8	1.1	7.9
Total	17.1	24.6	41.7

^{a/} The sawmill industry was the only industry in Rhode Island with unused residues.

^{b/} Material, such as slabs and edgings.

^{c/} Material, such as sawdust and shavings.

Table 25.--Area by land classes and counties, Rhode Island, 1972

County	Total land area ^{a/}	Non- forest area	Forest-land area		
			Non- commercial ^{b/}	Commercial	Sampling error ^{c/}
-----Thousand acres-----Percent					
Bristol	15.9	11.0	0.5	4.4	45
Kent	110.4	38.5	1.0	70.9	7
Newport	73.6	45.9	--	27.7	14
Providence	265.9	104.7	4.4	156.8	5
Washington	205.6	67.1	3.0	135.5	6
Total	671.4	267.2	8.9	395.3	3

^{a/} Source: Areas of Rhode Island: 1960, Area Measurement Report, Bureau of the Census.

^{b/} Includes productive-reserved forest land only.

^{c/} In percent for commercial forest land, at the 68 percent probability level.

Table 26.--Area of commercial forest land, by ownership classes and counties, Rhode Island, 1972

(In thousands of acres)

County	Public-owned		Private-owned		Total
	State	County and municipal	Farmer- owned	Other private	
Bristol	--	0.1	0.4	3.9	4.4
Kent	--	1.4	2.4	67.1	70.9
Newport	--	.2	1.2	26.3	27.7
Providence	12.0	6.6	11.2	127.0	156.8
Washington	--	11.8	9.4	114.3	135.5
Total	12.0	20.1	24.6	338.6	395.3

Table 27.--Area of commercial forest land, by stand-size classes
and counties, Rhode Island, 1972

(In thousands of acres)

County	Sawtimber stands	Poletimber stands	Sapling- seedling stands	Non- stocked areas	Total
Bristol	1.1	1.1	2.1	0.1	4.4
Kent	15.1	23.8	31.0	1.0	70.9
Newport	4.6	7.8	14.3	1.0	27.7
Providence	37.9	59.1	58.0	1.8	156.8
Washington	29.2	41.2	62.9	2.2	135.5
Total	87.9	133.0	168.3	6.1	395.3

Table 28.--Area of commercial forest land, by forest types and counties, Rhode Island, 1972

(In thousands of acres)

County	White and red pine	Pitch pine- eastern redcedar	Oak- pine	Oak- hickory	Elm-ash- red maple	Maple- beech- birch	Aspen- birch	Total
Bristol	0.3	0.5	0.4	1.7	1.3	0.1	0.1	4.4
Kent	5.5	4.6	6.5	30.4	20.4	2.4	1.1	70.9
Newport	1.5	2.3	3.8	10.9	7.7	.5	1.0	27.7
Providence	12.2	8.6	13.8	73.2	42.5	4.8	1.7	156.8
Washington	9.3	9.2	12.6	56.7	40.7	4.8	2.2	135.5
Total	28.8	25.2	37.1	172.9	112.6	12.6	6.1	395.3

Table 29.--Net volume of growing stock and sawtimber on commercial forest land, by stand-size classes and counties, Rhode Island, 1972

County	Sawtimber stands	Poletimber stands	Other stands	Total	Sampling error of total
<u>-----Million cubic feet-----</u>					<u>Percent</u>
Bristol	1.6	1.1	0.8	3.5	40
Kent	21.9	26.8	13.0	61.7	15
Newport	6.9	8.5	4.9	20.3	25
Providence	55.9	66.7	25.6	148.2	9
Washington	42.0	45.3	26.2	113.5	11
Total	128.3	148.4	70.5	347.2	5
<u>-----Million board feet-----</u>					<u>Percent</u>
Bristol	3.7	1.0	1.2	5.9	*
Kent	51.2	26.0	20.1	97.3	28
Newport	16.1	8.9	7.2	32.2	*
Providence	130.7	64.9	37.2	232.8	18
Washington	98.3	40.5	41.3	180.1	20
Total	300.0	141.3	107.0	548.3	10

a/ International 1/4-inch rule.

Table 30.--Net volume of growing stock and sawtimber on commercial forest land, by forest types and counties, Rhode Island, 1972

County	White and red pine	Pitch pine- eastern redcedar	Oak- pine	Oak- hickory	Elm-ash- red maple	Maple- beech birch	Aspen- birch	Total
<u>Million cubic feet</u>								
Bristol	0.5	0.1	0.2	1.6	0.9	0.1	0.1	3.5
Kent	10.0	1.9	4.0	27.2	16.5	1.8	.3	61.7
Newport	3.0	.5	2.0	8.9	5.1	.5	.3	20.3
Providence	22.6	3.1	10.3	70.0	37.3	4.3	.6	148.2
Washington	16.2	4.0	7.3	49.4	32.3	3.6	.7	113.5
Total	52.3	9.6	23.8	157.1	92.1	10.3	2.0	347.2
<u>Million board feet^{a/}</u>								
Bristol	1.5	0.1	0.5	2.2	1.4	0.1	0.1	5.9
Kent	25.6	2.2	8.2	34.2	24.8	1.4	.9	97.3
Newport	7.5	.3	3.8	11.8	7.6	.3	.9	32.2
Providence	59.0	3.5	20.4	89.1	56.5	2.6	1.7	232.8
Washington	44.3	4.7	15.4	62.8	48.3	2.7	1.9	180.1
Total	137.9	10.8	48.3	200.1	138.6	7.1	5.5	548.3

a/ International 1/4-inch rule.

Table 31.--Net volume of growing stock on commercial forest land,
by species, tree classes, and counties, Rhode Island,
1972

(In millions of cubic feet)

County	Bristol	Kent	Newport	Provi- dence	Wash- ington	Total
BY SPECIES						
White pine	0.5	9.0	3.2	20.3	15.7	48.7
Red pine	.2	2.0	.7	5.1	3.8	11.8
Pitch pine	.1	2.1	.7	4.2	4.3	11.4
Other softwoods	<u>a/</u>	.6	.2	1.1	1.2	3.1
Total softwoods	.8	13.7	4.8	30.7	25.0	75.0
Select white oaks	.5	8.6	2.8	22.0	16.2	50.1
Select red oaks	.4	8.6	2.8	23.2	14.9	49.9
Other oaks	.8	15.8	4.9	37.5	28.8	87.8
Hickory	<u>a/</u>	.6	.3	1.6	1.2	3.7
Soft maples	.7	10.9	3.6	24.8	21.4	61.4
Yellow birch	.1	1.3	.3	3.2	2.1	7.0
Other hardwoods	.2	2.2	.8	5.2	3.9	12.3
Total hardwoods	2.7	48.0	15.5	117.5	88.5	272.2
All species	3.5	61.7	20.3	148.2	113.5	347.2
BY TREE CLASSES						
Sawtimber	1.6	26.2	8.6	62.9	48.7	148.0
Poletimber	1.9	35.5	11.7	85.3	64.8	199.2
All classes	3.5	61.7	20.3	148.2	113.5	347.2

a/ Less than 50,000 cubic feet.

Table 32.--Net volume of sawtimber on commercial forest land,
by species and counties, Rhode Island, 1972

(In millions of board feet)^{a/}

Species	Bristol	Kent	Newport	Provi- dence	Wash- ington	Total
White pine	1.5	26.7	9.8	60.4	47.1	145.5
Red pine	.3	3.5	1.1	9.2	6.8	20.9
Pitch pine	.2	4.2	1.0	9.2	8.6	23.2
Other softwoods	.1	1.3	.3	2.4	2.5	6.6
Total softwoods	2.1	35.7	12.2	81.2	65.0	196.2
Select white oaks	.6	10.3	3.2	26.9	19.3	60.3
Select red oaks	.6	9.4	2.9	23.5	16.4	52.8
Other oaks	1.4	24.0	7.9	57.7	44.9	135.9
Hickory	.1	.8	.2	1.9	1.4	4.4
Soft maples	.9	12.7	4.2	30.6	24.8	73.2
Yellow birch	.1	1.4	.5	3.7	2.7	8.4
Other hardwoods	.1	3.0	1.1	7.3	5.6	17.1
Total hardwoods	3.8	61.6	20.0	151.6	115.1	352.1
All species	5.9	97.3	32.2	232.8	180.1	548.3

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

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