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FOREST SURVEY RELEASE NO. 10

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THE DISTRIBUTION OF COMMERCIAL FOREST TREES
IN VIRGINIA

by

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A FOREST SURVEY PROGRESS REPORT

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PREFACE

Through the McSweeney-McNary Act of 1928, Congress authorized the Secretary of Agriculture to conduct a comprehensive survey of the forest resources of the United States. The Forest Survey was organized by the Forest Service to carry out the provisions of the Act, and each of the 12 Regional Forest Experiment Stations is responsible for the work in its territory. In the Middle Atlantic States the Forest Survey is an activity of the Appalachian Forest Experiment Station, Asheville, North Carolina.

The work of the Survey is divided into 5 major phases:

1. Inventory. Determination of the extent, location, and condition of forest lands, and the quantity, species, and quality of timber on these lands.
2. Growth. Determination of the current rate of timber growth.
3. Drain. Determination of the amount of industrial and domestic wood used, and the total loss resulting from fire, insects, disease, suppression, and other causes.
4. Requirements. Determination of the current and probable future requirements for forest products by all classes of consumers.
5. Policies and plans. Analysis of the relation of these findings to one another and to other economic factors as a basis for public and private policies and plans of forest land use and management.

This progress report presents information on one part of the inventory phase of the Survey and deals specifically with the geographic distribution of the more important commercial forest trees in Virginia.

The report is made possible through the assistance received from the personnel of the Work Projects Administration. Particular credit is due Mr. T. A. Lindsey of the Work Projects staff. The preparation of the maps from the basic field data was official project 165-2-32-94.

CONTENTS

	Page
CONSTRUCTION OF MAPS	1
THE FORESTS OF VIRGINIA	2
Species	2
Forest types	3
Forest conditions	3
DISTRIBUTION MAPS OF COMMERCIAL FOREST TREES	4
Ash, 16" d.b.h. and larger	5
Basswood, 16" d.b.h. and larger	6
Beech, 16" d.b.h. and larger	7
Birch, 16" d.b.h. and larger	8
Black locust, 6" d.b.h. and larger	9
Black tupelo, 10" d.b.h. and larger	10
Black tupelo, 16" d.b.h. and larger	11
Chestnut, 10" d.b.h. and larger	12
Chestnut, 16" d.b.h. and larger	13
Cypress, 16" d.b.h. and larger	14
Hemlock, 16" d.b.h. and larger	15
Hickory, 16" d.b.h. and larger	16
Maple, red, 16" d.b.h. and larger	17
Maple, sugar, 16" d.b.h. and larger	18
Oak, chestnut, 16" d.b.h. and larger	19
Oak, northern red, 16" d.b.h. and larger	20
Oak, post, 16" d.b.h. and larger	21
Oak, red, 16" d.b.h. and larger	22
Oak, white, 16" d.b.h. and larger	23
Pine, loblolly	24
Pine, shortleaf	25
Pine, Virginia	26
Pine, white, 16" d.b.h. and larger	27
Redcedar, 6" d.b.h. and larger	28
Sweetgum, 10" d.b.h. and larger	29
Sweetgum, 16" d.b.h. and larger	30
Yellowpoplar, 10" d.b.h. and larger	31
Yellowpoplar, 16" d.b.h. and larger	32

A detailed description of the forest resource and industries will be contained in forthcoming unit reports for the Coastal Plain, Piedmont, and Mountain areas of Virginia.

THE DISTRIBUTION OF COMMERCIAL FOREST TREES IN VIRGINIA

The geographic distribution of forest tree species and sizes is important to wood-using industries, particularly when their effort is directed toward the production of war materials. Both established plants and prospective industries must know the location of species and sizes suitable to their needs if they are to concentrate wood procurement activities effectively.

Maps included in this report are designed to show the occurrence of selected commercial species and sizes so as to roughly locate areas of concentration. For example, in Virginia, sugar maple sixteen inches or larger in diameter is confined to the mountains and is found in some concentration in only two small areas, one in the adjacent Buchanan and Dickenson Counties, the other in Highland County. Industries equipped with similar information for a number of timber species may lessen considerably the time and cost of wide reconnaissance for their timber supply.

CONSTRUCTION OF MAPS

The procedure used by the Forest Survey is to establish one-quarter-acre sample plots at intervals of one-eighth mile along parallel compass lines, which are spaced at ten-mile intervals and extend across the five units into which the State is divided (fig. 1). The maps included here are based upon data recorded for over 31,000 such plots established in 1940. On each plot, representing approximately 800 acres, the required information

FIGURE 1—APPROXIMATE LOCATION OF SURVEY LINES IN VIRGINIA

included a brief description of the stand, and a tally of the species, number, and sizes of all trees one inch and larger in diameter at breast height.

This procedure provides an accurate description of each forest plot, and a dependable measure of commercial concentration over large areas, but ignores many local concentrations which, by nature of the sampling technique, could not be studied. Consequently, the maps are not reliable for locating timber on small ownerships.

On each map, the total volume in sound trees is shown by diameter class for each Survey unit, and for the State. The volume of under-sawlog-size material (softwoods 5.0-9.9 inches and hardwoods 5.0-13.0 inches in diameter) is shown in cords, and the volume of saw timber in board feet as measured by the International $\frac{1}{4}$ -inch rule, a close approximation to green lumber tally.

On the maps showing the distribution of loblolly, shortleaf, and Virginia pines, each dot represents a plot upon which the indicated species predominates. For example, on the map (page 24) for loblolly pine, each dot locates a plot in the loblolly pine type, in which loblolly pine is the predominant species. Other species may occur, but not in sufficient number to influence the type classification.

Maps for species other than loblolly, shortleaf, and Virginia pines show the occurrence of specified minimum sizes of the designated species. Each dot on the map for white pine (page 27), for example, represents a plot on which there was at least one sound white pine 16.0 inches or larger in diameter. Since the minimum size is not constant for all species, each map bears its own legend showing the class of material plotted on it.

THE FORESTS OF VIRGINIA

Species

Excluding 235,900 acres of public forest area reserved from cutting, and 184,400 acres of non-commercial land incapable of producing merchantable timber, the forests of Virginia occupy over 14 million acres, 56 percent of the total land area. Loblolly pine is the most abundant species, aggregating over seven billion board feet of merchantable volume, 29 percent of the total for all species, and dominating the forest area over much of the Coastal Plain. Shortleaf pine, second in abundance, occurs throughout the State, but predominates only in the Piedmont. Even here, to the north and west it gives way to the less desirable but more aggressive Virginia pine, the third ranking softwood.

Over most of the area a great variety of hardwoods are mixed with the pines, and constitute nearly half of the total board-foot volume. Sweetgum and black tupelo, with 76 percent of their volume in the Coastal Plain, are second only to the widely distributed oaks which comprise nearly six billion board feet, and yellowpoplar, two billion board feet. In sound chestnut, confined to the mountains and foothills, there are

three-quarters of a billion feet of saw timber, and an additional six million cords of non-sawtimber material.

Forest Types

The hardwood types, extending over 8.2 million acres, 57 percent of the total forest area, are concentrated in the northern Piedmont and mountains, where they dominate respectively 62 and 77 percent of the forest. The upland hardwood type, covering a wide variety of hardwood species in mixture, occupies nearly seven million acres, or about 46 percent of the total forest area. While nearly half of this is in the mountain units, the type is found throughout the State. Even in the predominantly pine Coastal Plain, it extends over 23 percent of the forest, and is secondary only to the loblolly pine type. The bottomland hardwood type, found chiefly in the swamps and river bottoms of the Coastal Plain, and the cove and northern hardwoods of the mountains and foothills comprise the remaining 1.5 million acres of hardwood forest.

Among the pine types, extending over 6.2 million acres, the loblolly pine, confined to the Coastal Plain, and the shortleaf and Virginia pine types, concentrated in the Piedmont, each occupy about two million acres. The less extensive white pine and hemlock types of the mountains occupy only 236,100 acres.

Forest Conditions

Although less than three percent of the forest area is characterized by old-growth timber, over seven million acres bear sawlog-size stands ranging in volume from an average of 1,300 board feet per acre for the shortleaf pine type in the northern mountains to over 5,500 board feet per acre for the comparatively dense loblolly pine stands of the Coastal Plain. Over three million acres, 42 percent, of this total is in the upland hardwood type, averaging 2,440 board feet per acre.

Of the 6.6 million acres in the under-sawlog-size stands, 53 percent is in the upland hardwood type, and nearly 16 percent in the Virginia pine type. The Coastal Plain contains the lowest proportionate area, 33 percent, in these young stands. Only 703,900 acres were classified as reproduction, more than half of which is located in the Piedmont. No areas were classified as clearcut, but the stocking over much of the area is very low, probably not averaging over 45-50 percent of the volume desirable under reasonable forest productivity.

DISTRIBUTION MAPS OF COMMERCIAL FOREST TREES

<u>Map</u>	<u>Tree species included</u>
Ash	Ash
Basswood	Basswood
Beech	Beech
Birch	Black, yellow, and river birch
Black locust	Black locust
Black tupelo	Black and water tupelo
Chestnut	Chestnut
Cypress	Baldcypress and pondcypress
Hemlock	Hemlock
Hickory	Bitternut, water, shagbark, mockernut, and pignut hickory
Maple, red	Red maple, silver maple, and box elder
Maple, sugar	Sugar maple
Oak, chestnut	Chestnut oak
Oak, northern red	Northern red oak
Oak, post	Post oak and overcup oak
Oak, red	Black, scarlet, pin, water, willow, and southern red oak
Oak, white	White oak, and swamp chestnut oak
Pine, loblolly	Loblolly pine
Pine, shortleaf	Shortleaf, pitch, and table mountain pine
Pine, Virginia	Virginia pine
Pine, white	White pine
Redcedar	Eastern redcedar
Sweetgum	Sweetgum
Yellowpoplar	Yellowpoplar

**DISTRIBUTION OF ASH
IN VIRGINIA**

Each dot represents $\frac{1}{4}$ -acre plot
containing at least one sound ash tree
16 inches d.b.h. or larger.

VOLUME OF ASH - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8 inches	215.5	164.9	90.1	32.8	41.8	545.1
10-12	209.2	157.9	77.4	30.6	44.8	519.9
14-18 million board feet	63.1	28.9	14.6	10.8	9.4	125.8
20 & over	28.7	10.1	1.1	3.2	7.3	50.4
Total bd ft.	91.8	39.0	15.7	14.0	15.7	176.2

DISTRIBUTION OF ASH IN VIRGINIA

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VOLUME OF ASH - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Inches						
6-8	215.5	164.9	90.1	32.8	41.8	545.1
10-12	209.2	157.9	77.4	30.6	44.8	519.9
Million board feet						
14-18	63.1	28.9	14.6	10.8	9.4	125.8
20 & over	28.7	10.1	1.1	3.2	7.3	50.4
Total bbf ft.	91.8	39.0	15.7	14.0	15.7	176.2

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	1	2	3	4	5	
Inches						
6-8	215.5	164.9	90.1	32.8	41.8	545.1
10-12	209.2	157.9	77.4	30.6	44.8	519.9
Million board feet						
14-18	63.1	28.9	14.6	10.8	9.4	125.8
20 & over	28.7	10.1	1.1	3.2	7.3	50.4
Total bbf ft.	91.8	39.0	15.7	14.0	15.7	176.2

DISTRIBUTION OF BASSWOOD IN VIRGINIA

Each dot represents a 1/2-acre plot
containing at least one sound basswood
tree 16 inches dbh or larger.

VOLUME OF BASSWOOD - 1940

Class	1	2	3	4	5	TOTAL
INCHES						
6-8	—	—	—	35.4	76.7	112.1
10-12	—	—	—	63.4	81.6	145.0
14-18	—	—	—	16.2	24.0	40.2
19-24	—	—	—	—	9.6	9.6
25-30	—	—	—	—	25.8	25.8
31 and over	—	—	—	—	—	—
Total	—	—	—	—	—	68.1

DISTRIBUTION OF BEECH IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound beech
tree 16 inches d.b.h. or larger.

VOLUME OF BEECH—1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Includes						
6-8	136.1	43.3	43.6	—	—	223.0
10-12	265.7	58.3	67.2	—	—	391.2
14-18	116.7	27.1	18.3	—	—	162.1
20 & over	106.9	10.5	6.2	—	—	123.6
Total b.b.h.	223.6	37.6	24.5	—	—	285.7

Each dot represents a 1/4-acre plot containing at least one sound birch tree 16 inches d.b.h. or larger.

VOLUME OF BIRCH - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Incises	—	—	—	39.7	62.8	95.5
6-8	—	—	—	—	—	—
10-12	—	—	—	43.6	79.5	123.1
	—	—	—	Million board feet		—
14-18	—	—	—	7.2	15.6	22.8
20 & over	—	—	—	4.0	10.5	14.5
Total p.d. ft.	—	—	—	11.2	26.1	37.3

DISTRIBUTION OF BLACK LOCUST IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound black
locust tree 6 inches dbh. or larger

VOLUME OF BLACK LOCUST - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
inches	Thousand cords					
6-8	—	—	—	247.1	268.4	515.5
10-12	—	—	—	166.8	199.7	366.5
14-18	—	—	—	—	—	—
20 & over	—	—	—	—	—	—
Total bd. ft.	—	—	—	—	—	—

DISTRIBUTION OF BLACK TUPELO IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least two sound black tupelo
trees 10 inches d.b.h. or larger.

VOLUME OF BLACK TUPELO—1940

Diameter Class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Indices	Thousand cords					
6-8	652.9	231.9	105.9	21.1	31.4	1,043.2
10-12	1,550.7	258.3	139.5	47.8	52.9	1,649.8
	Million board feet					
14-16	366.0	35.8	25.7	27.8	49.3	504.6
20 & over	282.2	11.2	6.1	7.4	36.1	343.0
Total bd. ft.	648.2	470	318	35.2	85.4	847.6

DISTRIBUTION OF BLACK TUPELO IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound black tupelo
tree 16 inches d.b.h. or larger.

VOLUME OF BLACK TUPELO - 1940

Diameter class Inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	652.9	231.9	105.9	21.1	31.4	1,043.2
10-12	1,150.7	258.9	139.5	47.8	52.9	1,649.8
14-18	365.0	34.9	25.7	27.8	49.3	504.6
20 & over	282.2	11.2	6.1	7.4	36.1	343.0
Total bd. ft.	648.2	47.0	31.8	35.2	65.4	847.6

DISTRIBUTION OF CHESTNUT IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least two sound or call
chestnut trees 10 inches d.b.h. or larger.

VOLUME OF CHESTNUT - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	—	—	88.1	150.8	286.2	508.6
10-12	—	—	166.5	301.2	460.0	919.6
14-18	—	—	—	—	100.7	276.1
20 & over	—	—	—	—	107.5	274.1
Total bd ft.	—	—	—	—	208.2	550.2
						758.4

DISTRIBUTION OF CHESTNUT IN VIRGINIA

Each dot represents a 1/8-acre plot
containing at least one sound or cull
chestnut tree 16 inches d.b.h. or larger.

VOLUME OF CHESTNUT - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	—	88.1	160.8	286.2	508.6	1,043.7
10-12	—	166.5	301.2	460.0	919.6	1,847.3
14-16	—	—	—	100.7	276.1	376.8
20 Bover	—	—	—	107.5	274.1	381.6
Total bbl. ft.	—	—	—	208.2	550.2	758.4

Each dot represents a $\frac{1}{4}$ -acre plot containing at least one sound cypress tree 16 inches d.b.h. or larger.

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Inches			Thousands			
6-8	1002	—	—	—	—	1002
			Million board feet			
10-12	55.9	—	—	—	—	55.9
14-18	88.3	—	—	—	—	88.3
20 & over	57.7	—	—	—	—	57.7
Total bd. ft.	201.9	—	—	—	—	201.9

DISTRIBUTION OF HEMLOCK IN VIRGINIA

Each dot represents a $\frac{1}{4}$ -acre plot
containing at least one sound hemlock
tree 16 inches dbh. or larger.

VOLUME OF HEMLOCK—1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	—	—	6.2	3.4	30.0	65.4
10-12	—	—	—	2.1	11.4	19.5
14-18	—	—	—	1.6	3.3	41.8
20 & over	—	—	—	0.9	2.1	62.2
Total bd ft	—	—	—	4.6	7.1	113.6
						123.5
						249.0

Each dot represents a $\frac{1}{4}$ -acre plot containing of least one sound hickory tree 16 inches d.b.h. or larger.

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Medals	339.3	330.7	351.9	228.8	319.4	1,570.1
8-16	433.3	452.6	482.3	293.3	455.5	2,117.6
			Million board feet			
14-18	92.3	99.4	83.3	36.9	110.8	424.7
20-28	52.9	43.5	28.4	23.1	63.3	211.2
Total bd. ft.	1,425.2	1,429.9	1,111.7	652.0	1,747.0	6,355.9

Each dot represents a $\frac{1}{4}$ -acre plot containing at least one sound red maple tree 16 inches d.b.h. or larger.

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Includes			Thousands cords			
6-8	386.5	292.7	145.0	76.3	16.1	1,065.8
10-12	449.0	506.4	151.7	48.3	118.4	1,073.8
			Million board feet			
14-18	145.3	54.3	22.1	8.0	25.9	255.6
20 & over	76.6	17.0	3.0	3.1	23.5	137.2
Total	221.9	71.3	37.1	11.1	51.4	392.8

DISTRIBUTION OF SUGAR MAPLE IN VIRGINIA

Each dot represents a $\frac{1}{4}$ -acre plot
containing at least one sound sugar maple
tree 16 inches d.b.h. or larger.

VOLUME OF SUGAR MAPLE - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	2	3	4	5		
6-8	—	0.8	0.9	21.3	57.6	80.6
10-12	—	1.6	1.1	25.5	50.7	78.9
14-18	—	—	—	10.0	29.2	39.2
20 & over	—	—	—	24.7	32.6	57.3
Total d.b.h.	—	—	—	34.7	61.8	96.5

DISTRIBUTION OF CHESTNUT OAK IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound chestnut oak
tree 16 inches d.b.h. or larger.

VOLUME OF CHESTNUT OAK - 1940

Diameter inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	6.5	427.7	503.2	846.4	356.9	2,142.7
10-12	41.3	562.6	600.0	966.9	496.5	2,669.3
14-18	6.8	67.8	114.6	224.2	162.5	575.9
20 & over	6.9	69.3	101.5	179.4	236.6	597.7
Total bd ft.	15.7	137.1	216.1	403.6	401.1	1,173.6

DISTRIBUTION OF NORTHERN RED OAK IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound northern
red oak tree 16 inches d.b.h. or larger

VOLUME OF NORTHERN RED OAK - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	118.5	152.2	161.7	186.8	134.9	754.1
10-12	144.8	172.0	209.7	292.9	252.4	1,071.8
14-18	48.6	70.2	92.1	111.1	96.6	418.6
20 & over	103.6	125.4	150.0	141.6	124.9	645.5
Total bd. ft.	152.2	195.6	242.1	252.7	221.5	1,064.1

Each dot represents a $\frac{1}{4}$ -acre plot containing at least one sound past oak tree 16 inches d.b.h. or larger.

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Inches			Thousands			
6-8	206.0	185.3	12.6	15.7	6.9	541.0
10-12	243.3	243.6	168.4	18.0	12.4	691.9
			Million barrels (gal)			
14-16	23.1	31.0	14.8	2.3	2.8	74.0
18-20	12.3	17.5	1.9	1.7	0.6	34.0
Total prod. ft.	35.4	48.5	16.7	4.0	3.4	108.0

DISTRIBUTION OF RED OAK IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound red oak
tree 10 inches d.b.h. or larger.

VOLUME OF RED OAK - 1940

Climatic class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Acres						
6-8	1,878	1,015.2	802.2	757.3	490.1	4,252.6
10-12	1,383.2	1,263.2	852.8	715.7	719.7	4,834.6
Million board feet						
14-18	244.3	233.2	175.5	159.7	204.7	1,007.4
20 Over	202.0	159.2	128.6	72.2	105.4	667.4
Total bd ft.	446.3	392.4	304.1	231.9	310.1	1,674.8

DISTRIBUTION OF WHITE OAK IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound white oak
tree 16 inches d.b.h. or larger.

VOLUME OF WHITE OAK - 1940

Diameter Class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
10-12	1,370.4	1,054.7	1,129.9	394.0	252.5	4,201.5
14-19	1,674.1	1,218.2	1,670.6	519.5	292.0	5,374.4
20 & over	222.1	208.7	245.3	175.6	116.8	968.7
Total bd. ft.	140.9	219.8	165.3	184.1	219.8	933.9
	363.0	428.5	414.8	359.7	338.6	1,502.6

DISTRIBUTION OF LOBLOLLY PINE IN VIRGINIA

Each dot represents a $\frac{1}{4}$ -acre plot
of the loblolly pine type.

VOLUME OF LOBLOLLY PINE - 1940

Diameter Class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	6,986.1	307.5	14.2	—	—	7,307.8
10-12	2,747.6	100.9	7.6	—	—	2,856.1
14-18	3,125.7	91.2	3.5	—	—	3,220.4
20 & over	962.6	14.4	2.4	—	—	979.4
Total bd. ft.	6,835.9	206.5	13.5	—	—	7,055.9

DISTRIBUTION OF SHORTLEAF PINE IN VIRGINIA

Each dot represents a 1/4-acre plot
of the Shortleaf pine type.

VOLUME OF SHORTLEAF PINE - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	1,107.7	4,142.1	1,282.0	624.5	282.8	7,439.1
	Thousand cords					
10-12	277.7	901.9	205.9	148.1	108.6	1,643.2
14-18	150.4	453.1	93.7	98.8	101.6	899.6
20 & over	21.9	84.1	12.2	16.2	36.3	170.7
Total b & f	450.0	1,441.1	312.8	263.1	246.5	2,713.5

DISTRIBUTION OF VIRGINIA PINE IN VIRGINIA

Each dot represents a $\frac{1}{4}$ -acre plot
of the Virginia pine type.

VOLUME OF VIRGINIA PINE - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	1,072	2,377.0	1,965.3	491.9	127.9	6,069.3
10-12	203.6	445.9	340.6	76.4	27.9	1,094.4
14-18	137.8	153.9	111.3	21.1	5.2	429.3
20 & over	11.1	4.3	2.4	—	—	17.8
Total bd ft.	352.5	604.1	454.3	97.5	33.1	1,541.5

DISTRIBUTION OF WHITE PINE IN VIRGINIA

Each dot represents a ¼-acre plot
containing at least one sound white pine
tree 16 inches d.b.h. or larger.

VOLUME OF WHITE PINE - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	—	73.8	42.0	75.9	113.2	304.9
10-12	—	13.5	12.3	42.8	49.3	117.9
14-18	—	12.3	17.9	79.1	52.4	161.7
20 & over	—	16.0	13.6	48.9	55.8	134.3
Total bd ft	—	41.8	43.6	170.8	157.5	413.9

DISTRIBUTION OF REDCEDAR IN VIRGINIA

Each dot represents a ¼-acre plot
containing at least one sound redb cedar
tree 6 inches dbh. or larger.

VOLUME OF REDCEDAR - 1940

Diameter class inches	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
6-8	47.4	90.4	53.8	26.9	43.7	262.2
10-12	6.4	11.7	6.2	3.7	4.2	32.2
14-18	3.3	1.4	—	0.8	2.7	8.2
20 & over	0.8	—	—	—	—	0.8
Total bd ft.	10.5	13.1	6.2	4.5	6.9	41.2

DISTRIBUTION OF SWEETGUM IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least two sound sweetgum
trees 10 inches d.b.h. or larger.

VOLUME OF SWEETGUM - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Inches:	Thousand cords					
6-8	1,576.8	526.3	205.1	—	—	2,310.0
10-12	1949.1	564.3	243.0	—	—	2,756.4
	Million board feet					
14-18	544.6	136.9	46.6	—	—	728.1
20 & over	233.3	48.3	11.5	—	—	293.1
Total bd ft.	777.9	185.2	28.1	—	—	1,021.2

Each dot represents a $\frac{1}{4}$ -acre plot containing of least one sound sweetgum tree 16 inches d.b.h or larger.

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
Intakes			Thousands cords			
0 - 2	1,578.6	526.3	205.1	—	—	2,310.0
3 - 10	1,349.1	564.3	243.0	—	—	2,756.4
			Million board feet			
14 - 16	544.6	136.9	46.6	—	—	728.1
17 - 20	777.9	483.1	11.5	—	—	1,272.5
Total bbl	20.8 over	23.3	48.3	58.1	—	1,091.2

Each dot represents a $\frac{1}{4}$ -acre plot containing at least two sound yellowpoplar trees 10 inches d.b.h. or larger.

Diameter EGGS	VIRGINIA SURVEY UNIT				TOTAL
	1	2	3	4	
inches			Thousand cords		
6 - 8	710.2	994.6	630.1	89.5	370.9
10 - 12	926.4	1,130.4	730.6	135.9	427.1
			Million board feet		
14 - 18	317.6	406.6	231.6	56.2	139.4
20 and over	212.1	231.3	152.7	41.9	110.5
Total bd. ft.	529.7	637.9	364.3	96.1	249.9

DISTRIBUTION OF YELLOWPOPLAR IN VIRGINIA

Each dot represents a 1/4-acre plot
containing at least one sound yellowpoplar
tree 16 inches d.b.h. or larger.

VOLUME OF YELLOWPOPLAR - 1940

Diameter class	VIRGINIA SURVEY UNIT					TOTAL
	1	2	3	4	5	
INCHES	Thousand cords					
6-8	710.2	994.6	630.1	89.5	370.9	2,795.3
10-12	926.4	1,130.4	730.6	135.9	427.1	3,350.4
	Million board feet					
14-18	317.6	406.6	231.6	56.2	139.4	1,151.4
20 & over	212.1	231.3	132.7	41.9	110.5	728.5
Total bd ft.	529.7	637.9	364.3	98.1	249.9	1,879.9