

Historic, archived document

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

A99.9
F7622UF
C2



United States
Department of
Agriculture

Forest Service

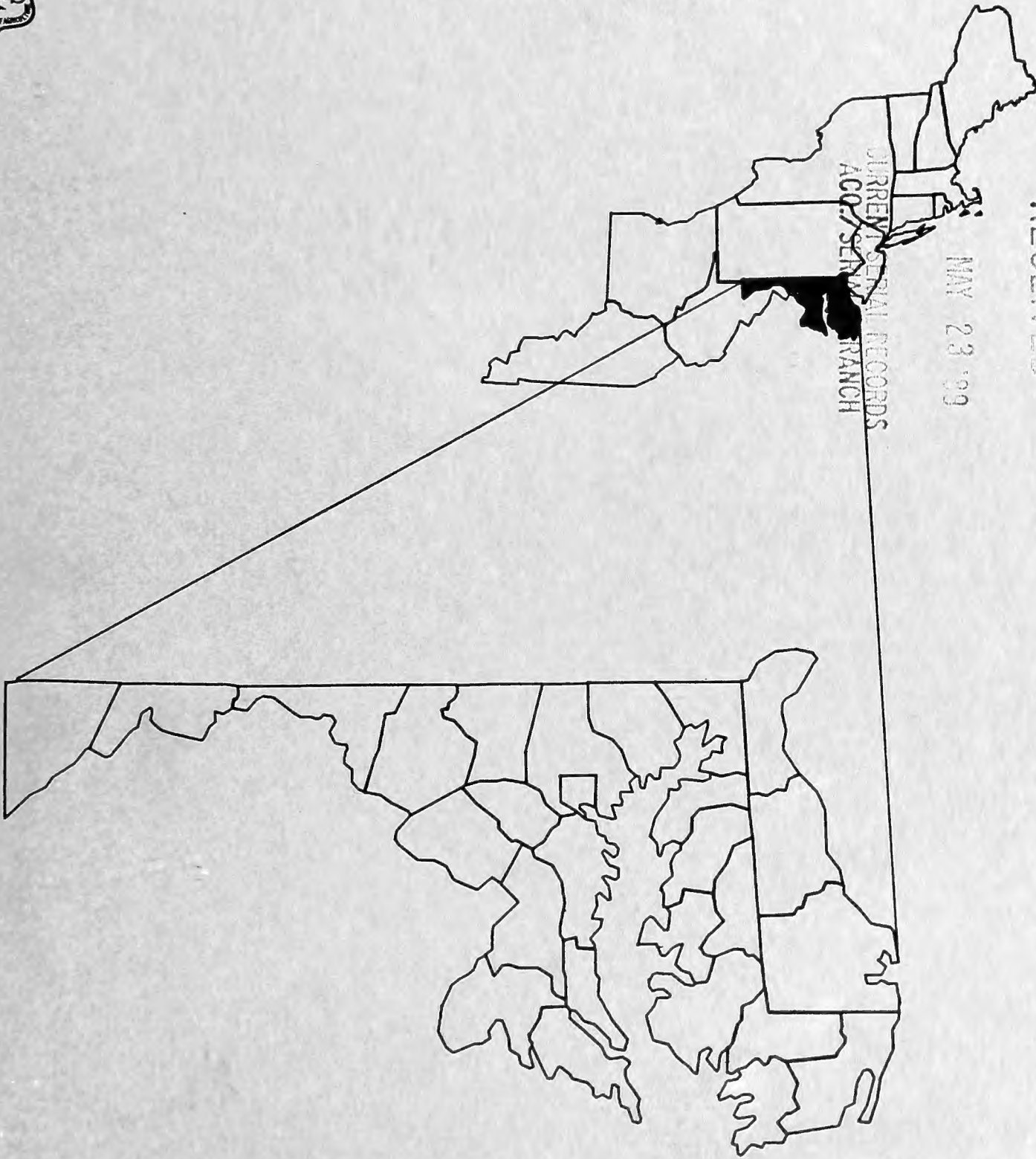
Northeastern Forest
Experiment Station

Resource Bulletin NE-110



Forest Wildlife Habitat Statistics for Maryland and Delaware - 1986

Robert T. Brooks
Dawn M. DiGiovanni



CURRENT SERIAL RECORDS
AG. SER. BRANCH

MAY 23 1999

USDA
NAT'L AGRIC. LIBRARY
RECEIVED

Abstract

This is a statistical report on the first forest wildlife habitat survey of Maryland and Delaware conducted in 1985-86 by the Forest Inventory and Analysis Unit, Northeastern Forest Experiment Station, U.S. Department of Agriculture, Broomall, Pennsylvania. Results are displayed in 118 tables covering forest area, ownership, land pattern, mast potential, standing dead and cavity trees, and understory woody-stemmed vegetation. Data are presented at county and/or unit and state levels of resolution.

Foreword

The reinventories of Maryland and Delaware are under the overall direction of John R. Peters, Project Leader of the Forest Inventory and Analysis Unit. Thomas W. Birch assisted in the development and administration of the operating plan. Charles T. Scott was responsible for the design of the inventory and sample selection. David J. Alerich supervised the interpretation of aerial photos and collection of data. He was assisted by Joseph G. Reddan. Members of the field staff were:

Lisa M. Arbucci
Theresa Arre
Vanessa Artman-Bailey
Michael J. Barton, Jr.
Barron E. Burch, III
Stephen M. Clark
Dawn M. DiGiovanni
Thomas V. Gabriel
David W. Guest
Roger L. Huber
Robert E. Ilgenfritz
Lawrence A. Ingerson
Judith T. Keyes
Ann K. Kessler
Wayne R. Kettlewood
Melanie Leavitt

Michael L. Longo
Frank Lopez
Anna M. Massey
Richard A. McCullough
Worthen D. Muzzey, Jr.
Wayne Noll
Glen A. Onusseit
Stephen C. Parrett
Jennifer L. Quinn
Joyce P. Sawicki
James E. Semp
Peter Smith
Jonathan W. Spencer
Tina J. Terrell
Robert Wells
Teresa L. Witzel

Thomas S. Frieswyk and Dawn M. DiGiovanni applied FINSYS (Forest INventory SYStem), a generalized data processing system, to the specific needs of the Maryland inventory and produced summary tables for the state and counties. Thomas W. Birch and Dawn M. DiGiovanni were instrumental in assuring that the area estimates were consistent with the two previous inventories. Rosemary K. Venit produced the graphics and was involved in rewriting parts of the FINSYS table generating routine.

Marie Pennestri was responsible for administrative and secretarial services. Dorelle Smith typed the text for this report.

The Forest Inventory and Analysis Unit would like to thank the landowners of Maryland and Delaware for their cooperation and assistance during this inventory.

Forest Wildlife Habitat Statistics for Maryland and Delaware--1986

The Authors

Robert T. Brooks, Research Wildlife Biologist,
Forest Inventory and Analysis Unit,
Northeastern Forest Experiment Station,
USDA Forest Service, Broomall, PA.

Dawn M. DiGiovanni, Forester, Forest Inventory
and Analysis Unit, Northeastern Forest
Experiment Station, USDA Forest Service,
Broomall, PA.

Manuscript received for publication September, 1988

Northeastern Forest Experiment Station
370 Reed Road, Broomall, PA 19008

Contents

Highlights	1
Introduction	2
Reliability of the Estimates	2
Definition of Terms	3
References	8
Trees, Shrubs, and Vines of the Northeast	9
Ecological Importance and Relative Distribution of Lesser Woody- Stemmed Species, Maryland and Delaware, 1986	15
Ecological Importance and Relative Distribution of Trees 5.0+ d.b.h. by Species, Maryland and Delaware, 1986	22
Metric Equivalents	26
Index to Tables	
Maryland	
State	27
Central Unit	27
Lower Eastern Shore Unit	28
Southern Unit	28
Western Unit	28
County	29
Delaware	
State	29
County	29

Highlights

- * Maryland, with 2.7 million acres of forest land, is 43 percent forested. Delaware, with nearly 400,000 acres of forest land, is 32 percent forested.
- * Ninety percent or more of each state's forest land is classified as timberland, formerly termed commercial forest land.
- * Each state has experienced a slight decrease in timberland area since its previous forest survey.
- * In Maryland, the Central Unit is the least heavily forested, when timberland is expressed as a percentage of total land area.
- * The timberland area of Kent and New Castle Counties, Delaware, when expressed as a percentage of total land area, is comparable to that of Maryland's Central Unit, and Sussex County, Delaware, is comparable to Maryland's Lower Eastern Shore Unit.
- * Landscape patterns are least diverse in Maryland's Lower Eastern Shore and most diverse in Central Maryland's Baltimore-Washington corridor.
- * Timberland is predominately a privately owned resource.
- * The area of sawtimber stands has increased since the surveys of the 1970's while the area of seedling and sapling stands has declined to only 10 percent (Maryland) to 18 percent (Delaware) of timberland area.
- * Oak/hickory is the dominant forest type group, occupying 42 percent (Delaware) to 60 percent (Maryland) of timberland area.
- * In Maryland, a majority of forest stands are fewer than 20 acres in size, and in Delaware, fewer than 50 acres.
- * White oak is the most common mast-producing tree species, followed by chestnut oak and northern red oak in Maryland and blackgum and southern red oak in Delaware.
- * Loblolly pine is the most common standing dead tree species.
- * Red maple is the most common tree species, including both live and dead stems, with an observed cavity.
- * Red maple is the most common understory woody-stemmed species, and blueberry is the most common shrub species.

Introduction

Under the authority of the McSweeney-McNary Forest Research Act of 1928 and subsequent acts, including the Renewable Resources Planning Act of 1974 and the Renewable Resources Research Act of 1978, the USDA Forest Service conducts periodic forest inventories of all states to provide up-to-date information on the forest resource of the Nation. The initial inventory of Maryland's resources was conducted in 1950. The second was completed in 1964, and the third inventory, which began in 1975, was completed in 1976. This report presents forest wildlife-habitat data from the fourth Maryland inventory completed in 1986, the first inventory for which such data were collected. The initial inventory of Delaware's resources was conducted in 1956. The second inventory was completed in 1971. This report presents forest resource data from the third inventory completed in 1986. These inventories were a cooperative effort of the Maryland Forest, Parks and Wildlife Service, Delaware Department of Agriculture, Forestry Section, the USDA Soil Conservation Service, and the Northeastern Forest Experiment Station.

The Forest Inventory and Analysis Unit of the Northeastern Forest Experiment Station conducted the inventory on all forest land, developed the resource tables, and prepared this report.

The sampling procedure used during the current resurvey included the use of aerial photography, the remeasurement of a sample of the ground plots established in earlier inventories, and the establishment of new ground plots. The data collected were summarized using the FINSYS computer system developed at the Northeastern Forest Experiment Station.

In Maryland, this procedure required the classification of 18,355 new points and the reclassification of 550 points on aerial photographs from the third inventory into land-use and cubic-foot volume classes: the establishment of 602 (342 forest and 260 nonforest) new ground plot locations as a subsample of the new photo points; and the remeasurement of 550 (296 forest and 254 nonforest) plots from earlier inventories. In all, 1,152 plots were measured for an average of 1 plot for every 5,465 acres.

In Delaware, 122 (80 forest and 42 nonforest) plots from the earlier inventories were remeasured, 3,670 new photo points were classified and 122 photo points from the second inventory were reclassified into land-use and cubic-foot volume classes, and 118 (66 forest and 52 nonforest) new ground plot locations were established as a subsample of the new photo points.

The resurvey of Maryland and Delaware's forest resources involved several associated studies and considerable analysis. Forest area, numbers of trees, timber volume, biomass, and growth statistics have been published (Frieswyk and Di-Giovanni 1989a,b). Reports discussing the states' private forest-land owners and its primary forest products industry are being prepared. Additional reports will contain detailed 1986 biomass statistics. Other information or additional summaries may be developed. **For information about these, contact the Forest Inventory and Analysis Unit, USDA Forest Service, 370 Reed Road, Broomall, PA 19008 (phone 215-690-3029).**

Reliability of the Estimates

The data in this report were based on a carefully designed sample of forest conditions throughout Maryland and Delaware. However, because the field crews did not measure every tree or every acre in these states, the data are estimates. The reliability of the estimating procedure can be judged by two important statistical measures: accuracy and precision. Among statisticians, accuracy refers to the success of estimating the true value; precision refers to the clustering of sample values about their own averages or to the variation among repeated samples. We are mainly interested in the accuracy of the inventory, but in most cases we can only measure its precision.

Although accuracy cannot be measured exactly, it can be checked. Preliminary tables are sent to other agencies and to outside experts familiar with the forest resources of Maryland and Delaware. If questions arise, the data are reviewed and reanalyzed to resolve the differences. Also, great care is taken to keep all sources of procedural error to a minimum by careful training of both field and office personnel, frequent in-

spection of field and office work, and application of the most reliable inventory methods.

Because of the care exercised in the inventory process, estimates of precision afford a reasonable measure of the inventory's adequacy. The precision of each estimate is described by its sampling error. Sampling errors are given with several tables in this report. The others are available upon request.

Briefly, here is an example of how the sampling error is used to indicate reliability: The estimate of timberland for Maryland is 2,424,000 acres. Its sampling error is 1.1 percent, or 26,664 acres. This means that if there are no errors in the procedure and we repeated the inventory in the same way, the odds are 2 to 1 (66 percent probability) that the estimate would be between 2,397,336 and 2,450,664 acres (2,424,000 + 26,664). Similarly, the odds are 19 to 1 (95 percent probability) that the estimate would be within 53,328 acres. It is worth noting that the state estimates have the smallest sampling errors and therefore are the most precise or reliable. County estimates are less reliable. In Maryland for example, the sampling error for timberland area at the state level is 1.1 percent; while the sampling error for Frederick County is 5.2 percent. In general, as the size of the estimate decreases in relation to the total, the sampling error, expressed as a percentage of the estimate, increases.

Definition of Terms

Agriculture/herbaceous land. Land with herbaceous plant cover, both grasses and/or forbs, including cropland, pasture land, and natural grass lands.

Aquatic Edge. An edge condition created when a terrestrial land use abuts a lake, pond, river, stream, or major wetland.

Bog/Marsh/Swamp. Land that has less than 10.0 percent stocking with live trees, and which characteristically supports low, generally herbaceous or shrubby vegetation, and which is intermittently covered with water during all seasons; includes tidal areas that are covered with salty or brackish water during high tides.

Browse. Forage resource; defined here as current twig growth of woody-stemmed plants occurring between 1 and 8 feet in height.

Browse-utilization class. Four levels of browse use; none, light (1-10 percent available), moderate (11-40 percent), and heavy (greater than 40 percent).

Cavity. A hollowed out space in a tree, either natural or faunal caused; frequently used as a nesting site or temporary refuge by many species of wildlife.

Commercial species. Tree species presently or prospectively suitable for industrial wood products. Excludes species of typically small size, poor form, or inferior quality, such as hawthorn and sumac.

Condition class. Classification of trees based on live or dead and condition of top of the tree (i.e., intact, broken, dead).

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

Cropland. Land that currently supports agricultural crops including silage and feed grains, bare farm fields resulting from cultivation of harvest, and maintained orchards.

Cull tree. A live tree predominantly rotten or of rough form (see growing-stock trees).

Cultural land. Land with human development as the major land cover; includes industrial, commercial, and residential land uses.

Diameter at breast height (d.b.h.). The diameter outside bark of a standing tree measured at 4-1/2 feet above the ground.

Distribution. Percentage of plots where a species occurs.

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

Federal lands. Lands (other than National Forests) administered by Federal agencies.

Forest industry lands. Lands owned by companies or individuals operating primary wood-using plants.

Forest land. Land at least 10 percent stocked with trees of any size or that formerly had such tree cover and is not currently developed for nonforest use. The minimum area for classification of forest land is 1 acre.

Forest type. A classification of forest land by species that form a plurality of live tree basal-area stocking.

Forest-type group. A combination of forest types that share closely associated species or site requirements. The many forest types in Maryland and Delaware were combined into the following major forest-type groups (the descriptions apply to forests in Maryland and Delaware).

a. *White/red pine*--forests in which white pine, hemlock, or red pine make up the plurality of the stocking, singly or in combination; common associates include maple, oak, and yellow-poplar.

b. *Spruce/fir*--forests in which red spruce, northern white-cedar, balsam fir, white spruce, black spruce, or tamarack, singly or in combination, make up a plurality of the stocking; common associates include paper birch, red maple, aspen, white pine, hemlock, and sugar maple.

c. *Loblolly/shortleaf pine group*--forests in which loblolly, shortleaf, or other southern yellow pines (except longleaf or slash pine), singly or in combination, make up a plurality of the stocking; common associates include oaks, red maple, and blackgum.

d. *Oak/pine*--forests in which northern red oak or white ash, singly or in combination, make up a plurality of the stocking but where pines or eastern redcedar contribute 25 to 50 percent of the stocking; Virginia and loblolly pine, southern red

oak, hickory, and blackgum are associates.

e. *Oak/hickory*--forests in which upland oaks, red maple (when associated with central hardwoods), or hawthorn, singly or in combination, make up a plurality of the stocking and in which white pine makes up less than 25 percent of the stocking; common associates include hard pine, ash, yellow-poplar, beech, blackgum, sugar maple, and red maple.

f. *Oak/gum/cypress*--bottomland forests in which wet-site oaks, sweetgum, or baldcypress, singly or in combination, make up a plurality of the stocking and in which pines make up less than 25 percent of the stocking; common associates include American elm, red maple, blackgum, and green ash.

g. *Elm/ash/red maple*--forests in which black ash, elm, red maple (when growing on wet sites), willow, or green ash, singly or in combination, make up a plurality of the stocking; common associates include bottomland oaks, blackgum, river birch, and silver maple.

h. *Northern hardwoods*--forests in which sugar maple, beech, yellow birch, red maple (when associated with northern hardwoods), pin cherry, or black cherry, singly or in combination, make up a plurality of the stocking; common associates include red maple, northern red oak, hemlock, white ash, and basswood.

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

Hardwoods. Dicotyledonous trees, usually broad-leaved and deciduous.

Harvested cropland. All land from which crops were harvested or hay was cut, and all land in orchards, citrus groves, vineyards, and nursery and greenhouse products.

Idle farmland. Former cropland or pasture that has not been tended within the last 2 years and that has less than 10.0 percent stocking with live trees (established seedlings or large trees), regardless of species.

Improved/maintained pasture. Land that is currently used and maintained for grazing (not including grazed cropland).

Importance value. Average of relative density and relative frequency of a species

Industrial and commercial land. Supply yards, parking lots, factories, etc.

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

Land use edge. A condition created by the juxtaposition of two differing land uses.

Mast. Seed produced by woody-stemmed, perennial plants, generally refers to soft (fruit) and hard (nuts) mast.

Mining and waste land. Surface mining, gravel pits, dumps.

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

National Forest lands. Federal lands legally designated as National Forests or purchase units and other lands administered as part of the National Forest System by the USDA Forest Service.

Noncommercial forest land. Productive-reserved, urban, and unproductive forest land.

Noncensus water. Streams/rivers between 120 feet and 1/8 mile in width, and bodies of water between 1 and 40 acres in size. The Bureau of the Census classifies such water as land.

Noncommercial species. Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

Nonforest land. Land that has never supported forests, or land formerly forested but not in non-forest use such as cropland, pasture, residential areas, and highways.

Nonstocked area. A stand-size class of forest land that is stocked with less than 10 percent of minimum full stocking with all live trees.

Other cropland. Includes cropland used for cover crops; legumes, soil-improvement grasses, but not harvested and not pastured; cropland on which all crops failed; cropland in summer fallow and idle cropland.

Other farmland. All nonforest land on a farm excluding cropland, pasture, and idle farmland; includes farm lanes, stock pens, and farmsteads.

Pasture land. Includes any pasture land other than cropland and woodland pasture. Can include lands which had applied lime fertilizer, seed, improved by irrigation, drainage, or control of weeds and brush.

Pastured cropland. Includes rotation pasture and grazing land that would have been used for crops without additional improvement.

Poletimber stands. A stand-size class of forest land that is stocked with at least 10 percent of minimum full stocking with all live trees with half or more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of poletimber exceeds that of sawtimber.

Poletimber trees. Live trees of commercial species meeting regional specifications of soundness and form and at least 5.0 inches in d.b.h., but smaller than sawtimber trees.

Productive-reserved forest land. Forest land sufficiently productive to qualify as timberland, but withdrawn from timber utilization through statute, administrative designation, or exclusive use for Christmas tree production.

Recreation site. Parks, campgrounds, playing fields, tracks, etc.

Relative density. Percentage of stems for a species.

Relative frequency. Percentage of plots where a species occurs. (Frequency of a species/total of frequencies of all species x 100)

Rights-of-way. Highways, pipelines, powerlines, canals.

Rotten trees. Live trees of commercial species that do not contain at least one 12-foot sawlog or two noncontiguous 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 rotten trees 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 of noncommercial species.

Saplings. Live trees 1.0 through 4.9 inches d.b.h.

Sapling-seedling stands. A stand-size class of forest land that is stocked with at least 10 percent of minimum full stocking with all live trees with half or more of such stocking in saplings or seedlings or both.

Sawtimber stands. A stand-size class of forest land that is stocked with at least 10 percent of minimum full stocking with all live trees with half or more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of sawtimber is at least equal to that of poletimber.

Sawtimber trees. Live trees of commercial species at least 9.0 inches d.b.h. for softwoods or 11.0 inches for hardwoods containing at least one 12-foot sawlog or two noncontiguous 8-foot sawlogs, and meeting regional specifications for freedom from defect.

Seedlings. Live trees less than 1.0 inch d.b.h. that are expected to survive.

Shrub. Woody-stemmed perennial plant, generally with no well-defined main stem and less than 12 feet in height at maturity; defined by species.

Shrub land. Land with shrub and/or tree cover and an obvious herbaceous understory; average canopy height of less than 25 feet and crown closure of less than 70 percent.

Single-family/custom house. House sheltering one family and immediately adjacent managed land.

Softwoods. Coniferous trees, usually evergreen and having needles or scalelike leaves.

Stand. A group of forest trees growing on forest land.

Stand area class. The area, contiguous to the plot, that is of the same overall stand size and major type group (hardwood, softwood, or uniform mixture of both).

Standing dead tree (snag). Woody stem more than 5.0 inches in diameter and 10 feet in height.

Stand-size class. A classification of forest land based on the size class (that is, seedlings, saplings, poletimber, or sawtimber) of all live trees in the area.

State lands. Lands owned by the State or leased to the State for 50 years or more.

Stocking. The degree of occupancy of land by trees, measured by basal area and/or number of trees in a stand compared to the basal area and/or number of trees required to fully use the growth potential of the land (or the stocking standard). In the Eastern United States this standard is 75 square feet of basal area per acre for trees 5.0 inches d.b.h. and larger, or its equivalent in numbers of trees per acre for seedlings and saplings.

Two categories of stocking are used:

All live trees--these are used to classify forest land, forest types, and stand size classes.

Growing-stock trees--these are used to classify stand-size classes.

Stripmine. Area devoid of vegetation due to current or recent general excavation.

Timberland. Forest land producing or capable of producing crops of industrial wood (more than 20 cubic feet per acre per year) and not withdrawn from timber utilization (previously termed commercial forest land).

Tract/multiple family. Multiple individual residential units or attached units (e.g., apartment buildings, condominiums) and immediately adjacent managed land.

Transportation right-of-way. Land associated with highways and railroads.

Trees. Woody plants that have well-developed stems and are usually more than 12 feet in height at maturity; defined by species.

Unproductive forest land. Forest land that is incapable of producing 20 cubic feet per acre per year of industrial wood under natural conditions, because of adverse site conditions.

Urban forest land. Noncommercial forest land within urban areas that is completely surrounded by urban development (not parks), whether commercial, industrial, or residential.

Utility right-of-way. Land associated with pipeline and electric transmission lines, identified only if vegetative cover differs from adjacent land use.

Windbreak/hedgerow. Linear areas, fewer than 120 feet in width, with predominantly tree and/or shrub vegetation.

References

Brooks, Robert T.; Sykes, Karen J. 1984. **Sampling land use edge from aerial photographs-line transects vs. circular pattern**. Res. Note NE-321. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 6 p.

Ferguson, Roland H. 1959. **The timber resources of Delaware**. Upper Darby, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1959. 30 p.

Ferguson, Roland H. 1967. **The timber resources of Maryland**. Res. Bull. NE-7. Upper Darby, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 93 p.

Ferguson, Roland H.; Mayer, Carl E. 1974. **The timber resources of Delaware**. Res. Bull. NE-32. Upper Darby, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 42 p.

Frieswyk, Thomas W.; DiGiovanni, Dawn M. 1989a. **Forest statistics for Maryland--1976 and 1986**. Res. Bull. NE-107. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 157 p.

Frieswyk, Thomas W.; DiGiovanni, Dawn M. 1989b. **Forest statistics for Delaware--1972 and 1986**. Res. Bull. NE-109. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 86 p.

Northeastern Forest Experiment Station. 1955. **The timber resource in Maryland**. Upper Darby, PA: U. S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 41 p.

Powell, Douglas S., Kingsley, Neal P. 1980. **The Forest resources of Maryland**. Res. Bull. NE-61. Upper Darby, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 103 p.

Trees, shrubs, and vines of the Northeast

TREES

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
fir sp	Abies	sp.
balsam fir	Abies	balsamea
Atlantic white-cedar	Chamaecyparis	thyoides
eastern redcedar	Juniperus	virginiana
larch (introduced)	Larix	sp.
tamarack (native)	L.	laricina
Norway spruce	Picea	abie
white spruce	P.	glauca
black spruce	P.	mariana
blue spruce	P.	pungen
red spruce	P.	rubens
jack pine	Pinus	banksiana
shortleaf pine	P.	echinata
Table Mountain pine	P.	pungens
red pine	P.	resinosa
pitch pine	P.	rigida
pond pine	P.	serotina
eastern white pine	P.	strobus
Scotch pine	P.	sylvestris
loblolly pine	P.	taeda
Virginia pine	P.	virginiana
Austrian pine	P.	nigra
Douglas fir	Pseudotsuga	menziesii
baldcypress	Taxodium	distichum
northern white-cedar	Thuja	occidentalis
eastern hemlock	Tsuga	canadensis
maple species	Acer	sp.
boxelder	A.	negundo
black maple	A.	nigrum
striped maple	A.	pensylvanicum
red maple	A.	rubrum
silver maple	A.	saccharinum
sugar maple	A.	saccharum
mountain maple	A.	spicatum
buckeye, horsechestnut	Aesculus	sp.
Ohio buckeye	A.	glabra
yellow buckeye	A.	octandra
ailanthus	Ailanthus	altissima
serviceberry	Amelanchier	sp.
pawpaw	Asimina	triloba
yellow birch	Betula	alleghaniensis
sweet birch	B.	lenta

Trees, shrubs, and vines of the Northeast (continued)

TREES (continued)

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
river birch	B.	nigra
paper birch	B.	papyrifera
gray birch	B.	populifolia
American hornbeam, musclewood	Carpinus	caroliniana
hickory	Carya	sp.
water hickory	C.	aquatica
bitternut hickory	C.	cordiformis
pignut hickory	C.	glabra
pecan	C.	illinoensis
shellbark hickory	C.	laciniosa
shagbark hickory	C.	ovata
mockernut hickory	C.	tomentosa
American chestnut	Castanea	dentata
catalpa	Catalpa	sp.
sugarberry	Celtis	laevigata
hackberry	C.	occidentalis
eastern redbud	Cercis	canadensis
yellowwood	Cladrastis	lutea
flowering dogwood	Cornus	florida
hawthorn	Crataegus	sp.
common persimmon	Diospyros	virginiana
American beech	Fagus	grandifolia
white ash	Fraxinus	americana
black ash	F.	nigra
green ash	F.	pennsylvanica
pumpkin ash	F.	profunda
blue ash	F.	quadrangulata
honeylocust	Gleditsia	triacanthos
Kentucky coffeetree	Gymnocladus	dioicus
American holly	Ilex	opaca
butternut	Juglans	cinerea
black walnut	J.	nigra
sweetgum	Liquidambar	styraciflua
yellow-poplar	Liriodendron	tulipifera
Osage-orange	Maclura	pomifera
magnolia	Magnolia	sp.
cucumbertree	M.	acuminata
sweetbay	M.	virginiana
apple sp.	Malus	sp.
mulberry	Morus	sp.
white mulberry	M.	alba
red mulberry	M.	rubra

Trees, shrubs, and vines of the Northeast (continued)

TREES (continued)

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
water tupelo	Nyssa	aquatica
blackgum	N.	sylvatica
swamp tupelo	N.	biflora
eastern hophornbeam, ironwood	Ostrya	virginiana
sourwood	Oxydendrum	arboreum
Paulownia, Empress tree	Paulownia	tomentosa
sycamore	Platanus	occidentalis
balsam poplar	Populus	balsamifera
eastern cottonwood	P.	deltoides
bigtooth aspen	P.	grandidentata
swamp cottonwood	P.	heterophylla
quaking aspen	P.	tremuloides
cherry, plum	Prunus	sp.
pin cherry	P.	pensylvanica
black cherry	P.	serotina
chokecherry	P.	virginiana
oak	Q.	sp.
white oak	Quercus	alba
swamp white oak	Q.	bicolor
scarlet oak	Q.	coccinea
northern pin oak	Q.	ellipsoidalis
southern red oak	Q.	falcata var. falcata
cherrybark oak, swamp red oak	Q.	falcata var. pagodaefolia
bear oak, scrub oak	Q.	ilicifolia
shingle oak	Q.	imbricaria
laurel oak	Q.	laurifolia
overcup oak	Q.	lyrata
bur oak	Q.	macrocarpa
blackjack oak	Q.	marilandica
swamp chestnut oak	Q.	michauxii
chinkapin oak	Q.	muehlenbergii
water oak	Q.	nigra
pin oak	Q.	palustris
willow oak	Q.	phellos
chestnut oak	Q.	prinus
northern red oak	Q.	rubra
Shumard oak	Q.	shumardii
post oak	Q.	stellata
black oak	Q.	velutina
black locust	Robinia	psuedoacacia
willow	Salix	sp.

Trees, shrubs, and vines of the Northeast (continued)

TREES

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
black willow	S.	nigra
sassafras	Sassafras	albidum
American mountain-ash	Sorbus	americana
European mountain-ash	S.	aucuparia
American basswood	Tilia	americana
white basswood	T.	heterophylla
elm	Ulmus	sp.
winged elm	U.	lata
American elm	U.	americana
slippery elm	U.	rubra
rock elm	U.	thomasii
unknown or not listed		

DECIDUOUS SHRUBS

alder	Alnus	sp.
Hercules club	Aralia	spinosa
chokeberry sp	Aronia	sp.
azalea	Azalea	sp.
barberry	Berberis	sp.
bittersweet	Celastrus	scandens
New Jersey tea	Cleanothus	americanus
fringetree	Chionanthus	virginicus
sweetfern	Comptonia	peregrina
alternate-leaved dogwood	Cornus	alternifolia
silky dogwood	C.	amomum (obliqua)
gray-stemmed/panicled dogwood	C.	racemosa (paniculata)
red-osier dogwood	C.	stolonifera
American hazelnut	Corylus	americana
beaked hazelnut	C.	cornuta (rostrata)
leatherwood	Dirca	palustris
autumn olive / Russian olive	Elaeagnus	angustifolia
huckleberry	Gaylussacia	sp.
witch-hazel	Hamamelis	virginiana
large-leaf holly	Ilex	montana (monticola)
winterberry holly	I.	verticillata
common spicebush	Lindera	benzoin
bush honeysuckle	Lonicera	sp.
mountain-holly	Nemopanthus	mucronatus
ninebark	Physocarpus	opulifolius
buckthorn	Rhamnus	sp.

Trees, shrubs, and vines of the Northeast (continued)

DECIDUOUS SHRUBS (continued)

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
winged sumac	Rhus	copallina
smooth sumac	R.	glabra
staghorn sumac	R.	typhina
poison sumac	R.	vernix
currant, gooseberry	Ribes	sp.
rose	Rosa	sp.
brier, bramble, dewberry	Rubus	sp.
American elderberry	Sambucus	canadensis
red-berried elderberry	S.	racemosa
spirea	Spirea	sp.
American bladdernut	Staphylea	trifolia
blueberry	Vaccinium	sp.
viburnum	Viburnum	sp.
maple-leaved viburnum	V.	acerifolium
hobblebush viburnum	V.	alnifolium
wild raisin, withe-rod	V.	cassinoides
arrowwood	V.	dentatum
nannyberry	V.	lentago
blackhaw	V.	prunifolium
highbush cranberry	V.	trilobum
common prickly-ash	Zanthoxylum	americanum
unknown or not listed		

EVERGREEN SHRUBS

common juniper	Juniperus	communis
Canada yew	Taxus	canadensis
bog rosemary	Andromeda	glaucophylla
sheep laurel	Kalmia	angustifolia
mountain laurel	K.	latifolia
Labrador tea	Ledum	groenlandicum
rhododendron	Rhododendron	sp.
sweetleaf	Symplocos	tinctoria
unknown or not listed		

DWARF SHRUBS

evergreen bearberry	Arctostaphylos	uva-ursi
striped pipsissewa	Chimaphila	maculata
pipsissewa	C.	cisatlantica
bunchberry	Cornus	canadensis
creeping snowberry	Gaultheria	hispidula

Trees, shrubs, and vines of the Northeast (continued)

DWARF SHRUBS (continued)

<i>Common Name</i>	<i>Genus</i>	<i>Species</i>
teaberry	G.	procumbens
partridgeberry	Mitchella	repens
American cranberry	Vaccinium	sp.
unknown or not listed		

VINES

hog peanut	Amphicarpa	bracteata
American bittersweet	Celastrus	scandens
clematis sp.	Clematis	sp.
vine honeysuckle	Lonicera	sp.
Virginia creeper	Parthenocissus	quinquefolia
poison ivy	Rhus	radicans
greenbrier	Smilax	sp.
grape	Vitis	sp.
unknown or not listed		

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹, Maryland

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Atlantic white-cedar	.02	.06	.04	.62
Common juniper	.04	.13	.08	1.38
Eastern redcedar	.04	.29	.16	3.06
Tamarack	.01	.02	.01	.16
Norway spruce	.03	.05	.04	.46
White spruce	.01	.02	.01	.16
Red spruce	.01	.08	.04	.77
Shortleaf pine	.01	.03	.02	.31
Table mountain pine	.01	.03	.02	.31
Red pine	.05	.10	.08	1.08
Pitch pine	.05	.25	.15	2.60
Pond pine	.07	.12	.09	1.23
Eastern white pine	.06	.32	.19	3.37
Scotch pine	.07	.17	.12	1.84
Loblolly pine	1.39	2.74	2.06	29.52
Virginia pine	.83	2.17	1.50	23.40
Austrian pine	.01	.02	.01	.16
Baldcypress	.01	.03	.02	.31
Eastern hemlock	.08	.29	.18	3.06
Boxelder	.11	.13	.12	1.38
Striped maple	.34	.30	.32	3.22
Red maple	6.38	7.24	6.81	78.14
Silver maple	.05	.09	.07	.92
Sugar maple	.67	.85	.76	9.18
Mountain maple	.08	.06	.07	.62
Ailanthus	.02	.09	.06	.92
Alder species	.82	.19	.50	1.99
Hercules club	.38	.56	.47	5.97
Serviceberry	.88	.88	.88	9.49
Evergreen bearberry ²	--	--	--	.31
Chokeberry species	.01	.02	.01	.16
Azalea species	1.96	.78	1.37	8.41
Common pawpaw	.98	.50	.74	5.36
Barberry	.02	.02	.02	.16
Birch species	.07	.02	.01	.16
Yellow birch	.07	.17	.12	1.84
Sweet birch	.48	.80	.64	8.57
River birch	.05	.19	.12	1.99
Gray birch	.01	.02	.01	.16
American hornbeam	.24	.70	.47	7.50
Hickory species	.72	2.95	1.84	31.81
Bitternut hickory	.03	.13	.08	1.38
Pignut hickory	.04	.22	.13	2.30

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹, Maryland (continued)

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Shagbark hickory	.02	.39	.20	4.13
Mockernut hickory	.03	.26	.15	2.76
American chestnut	.15	.27	.21	2.91
Catalpa	.01	.03	.02	.31
American bittersweet ²	--	--	--	.16
Hackberry	.10	.19	.15	1.99
Eastern redbud	.23	.22	.22	2.30
Fringetree	.02	.06	.04	.62
Clematis species ²	--	--	--	.92
Yellowwood	.01	.02	.01	.16
Flowering dogwood	1.67	2.21	1.94	23.86
Alternate-leaved dogwood	.02	.06	.04	.62
Silky dogwood	.05	.06	.05	.62
Panicled dogwood	.02	.02	.02	.16
Canadian bunchberry ²	--	--	--	.46
Hawthorn species	.34	.57	.45	6.12
American hazelnut	.04	.02	.03	.16
Common persimmon	.06	.43	.25	4.59
American beech	.76	2.24	1.50	24.16
White ash	.94	1.60	1.27	17.28
Black ash	.01	.02	.01	.16
Green ash	.04	.25	.14	2.60
Teaberry ²	--	--	--	6.43
Huckleberry	2.29	.53	1.41	5.66
Honeylocust	.01	.02	.01	.16
Witch-hazel	.72	.02	.69	7.04
American holly	1.39	2.54	1.96	27.38
Winterberry holly	.03	.03	.03	.31
Butternut	.02	.16	.09	1.69
Black walnut	.04	.47	.25	5.05
Sheep laurel	.01	.03	.02	.31
Mountain laurel	1.18	.78	.98	8.41
Common spicebush	1.83	1.12	1.48	12.08
Sweetgum	2.60	4.42	3.51	47.71
Yellow-poplar	.95	3.08	2.02	33.19
Bush honeysuckle	.10	.12	.11	1.23
Vine honeysuckle ²	--	--	--	37.16
Magnolia	.01	.03	.02	.31
Cumcumbertree	.12	.22	.17	2.30
Sweetbay	.32	.56	.44	5.97
Apple species	.02	.08	.05	.77
Partridgeberry ²	--	--	.00	14.38
Water tupelo	.14	.30	.22	3.22

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹, Maryland (continued)

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Black tupelo	1.93	4.39	3.16	47.41
Eastern hophornbeam	.32	.63	.47	6.73
Paulownia	.01	.10	.06	1.08
Virginia creeper ²	--	--	--	30.89
Ninebark	.01	.02	.02	.16
American sycamore	.03	.47	.25	5.05
Eastern cottonwood	.01	.02	.01	.16
Bigtooth aspen	.08	.34	.21	3.67
Quaking aspen	.01	.02	.02	.16
Cherry species	.03	.15	.09	1.53
Pin cherry	.12	.30	.21	3.22
Black cherry	2.72	3.37	3.05	36.40
Chokecherry	.06	.16	.11	1.69
White oak	1.38	4.66	3.02	50.31
Swamp white oak	.06	.43	.25	4.59
Scalet oak	.15	1.53	.84	16.52
Southern red oak	.62	2.84	1.73	30.59
Swamp red oak	.01	.10	.06	1.08
Scrub, bear oak	.15	.06	.10	.62
Shingle oak	.01	.02	.01	.16
Blackjack oak	.01	.02	.01	.16
Swamp chestnut oak	.10	.43	.26	4.59
Chinkapin oak	.01	.03	.02	.31
Water oak	.34	.74	.54	7.96
Pin oak	.05	.46	.25	4.90
Willow oak	.21	1.32	.77	14.23
Chestnut oak	.96	1.99	1.47	21.41
Northern red oak	.92	3.52	2.22	37.93
Post oak	.02	.16	.09	1.69
Black oak	.46	2.53	1.49	27.22
Buckthorn species	.03	.03	.03	.31
Rhododendron species	.38	.12	.25	1.23
Smooth sumac	.13	.17	.15	1.84
Staghorn sumac	.07	.15	.11	1.53
Poison Ivy ²	--	--	--	31.81
Currant species	.11	.12	.12	1.23
Black locust	.66	1.69	1.17	18.20
Rose species	3.77	.77	2.27	8.26
Rubus species	9.54	3.45	6.49	37.16
Willow species	.02	.06	.04	.62
Black willow	.02	.05	.04	.46
American elderberry	.12	.16	.14	1.69

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹, Maryland (continued)

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Red-berried alder	.01	.02	.02	.16
Sassafras	1.82	2.47	2.15	26.61
Greenbrier ²	--	--	--	53.22
American mountain ash	.01	.02	.01	.16
European mountain ash	.01	.02	.01	.16
Spirea species	.06	.03	.05	.31
American basswood	.03	.27	.15	2.91
Elm species	.18	.47	.33	5.05
American elm	.13	.39	.26	4.13
Slippery elm	.13	.30	.22	3.22
American bladdernut	.01	.02	.02	.16
Blueberry	16.14	4.11	10.12	44.35
Viburnum species	.55	.37	.46	3.98
Maple-leaved viburnum	1.24	.81	1.03	8.72
Hobblebush viburnum	.02	.06	.04	.62
Wild raisin	.01	.02	.01	.16
Arrowwood	1.45	1.07	1.26	11.47
Nannyberry	.00	.02	.01	.16
Blackhaw	.09	.10	.10	1.08
Highbush cranberry	.02	.02	.02	.16
Grape ²	--	--	--	14.99
Common prickly ash	.01	.02	.01	.16
Unknown vine ²	--	--	--	9.03
Unknown dwarf shrub ²	--	--	--	9.03
Unknown deciduous shrub	19.23	3.22	11.23	34.71
Unknown evergreen shrub	.01	.02	.01	.16
Unknown tree	.51	1.34	.92	14.38

¹Includes shrub and vine species and tree stems less than 5.0 inches d.b.h.

²Not included in calculations of importance value.

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹ , Delaware

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Atlantic white-cedar	.03	.10	.06	1.00
Eastern redcedar	.04	.28	.16	2.98
Pond pine	.02	.47	.25	4.96
Eastern white pine	.01	.10	.05	1.00
Loblolly pine	2.82	4.73	3.77	50.50
Virginia pine	.92	2.69	1.80	28.72
Eastern hemlock	.02	.10	.06	1.00
Boxelder	.20	.38	.29	3.97
Red maple	6.50	7.97	7.23	85.15
Silver maple	.04	.10	.07	1.00
Sugar maple	.02	.10	.06	1.00
Ailanthus	.01	.10	.05	1.00
Alder species	.05	.10	.07	1.00
Hercules club	.78	1.49	1.14	15.85
Serviceberry	.23	.47	.35	4.96
Chokeberry species	.04	.10	.07	1.00
Azalea species	1.49	1.67	1.58	17.53
Common pawpaw	.52	.10	.31	1.00
Barberry	.05	.10	.08	1.00
Sweet birch	.03	.10	.06	1.00
River birch	.01	.10	.05	1.00
American hornbeam	.04	.28	.16	2.98
Hickory species	.19	1.67	.93	17.83
Bitternut hickory	.01	.19	.10	1.99
Pignut hickory	.03	.19	.11	1.99
Clematis species ²	--	--	--	2.98
Sweetfern	.25	.10	.17	1.00
Flowering dogwood	.68	1.49	1.08	15.85
Silky dogwood	.37	.10	.24	1.00
Round-leaved dogwood	.12	.10	.11	1.00
Panicled dogwood	.07	.10	.08	1.00
American hazelnut	.02	.10	.06	1.00
Common persimmon	.19	.56	.38	5.95
American beech	.25	1.39	.82	14.86
White ash	.05	.38	.21	3.97
Green ash	.01	.28	.15	2.98
Teaberry ²	--	--	--	1.00
Witch-hazel	.05	.19	.12	1.99
American holly	2.51	4.08	3.30	43.57
Black walnut	.02	.38	.20	3.97
Sheep laurel	.20	.10	.15	1.00
Mountain laurel	.02	.10	.06	1.00
Common spicebush	1.06	.65	.86	6.94

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹ , Delaware (continued)

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Sweetgum	4.06	6.95	5.50	74.26
Yellow-poplar	.76	2.78	1.77	29.71
Vine honeysuckle ²	--	--	--	33.67
Magnolia	.02	.10	.06	1.00
Sweetbay	.83	.92	.88	9.91
Partridgeberry ²	--	--	--	23.77
Mulberry species	.01	.19	.10	1.99
Water tupelo	.17	.28	.23	2.98
Black tupelo	1.84	5.56	3.70	59.41
Virginia creeper ²	--	--	--	39.61
American sycamore	.01	.10	.05	1.00
Swamp cottonwood	.07	.10	.09	1.00
Pin cherry	.02	.10	.06	1.00
Black cherry	2.23	3.25	2.74	34.66
White oak	.82	5.38	3.10	57.43
Swamp white oak	.02	.28	.15	2.98
Scarlet oak	.22	1.58	.90	16.84
Southern red oak	.62	3.15	1.89	33.67
Blackjack oak	.03	.10	.06	1.00
Swamp chestnut oak	.06	.56	.31	5.95
Water oak	.82	2.41	1.62	25.75
Pin oak	.10	.75	.43	7.93
Willow oak	.20	2.97	1.58	31.69
Chestnut oak	.07	.47	.27	4.96
Northern red oak	.34	1.86	1.10	19.81
Post oak	.02	.28	.15	2.98
Black oak	.20	1.30	.75	13.87
Buckthorn species	.08	.19	.13	1.99
Smooth sumac	.38	.28	.33	2.98
Poison ivy ²	--	--	--	40.60
Currant species	.29	.19	.24	1.99
Black locust	.01	.19	.10	1.99
Rose species	.45	.38	.41	3.97
Rubus species	3.76	2.23	2.99	23.77
Willow species	.02	.10	.06	1.00
Black willow	.01	.10	.05	1.00
Sassafras	1.80	3.89	2.85	41.59
Greenbrier ²	--	--	--	82.18
American elm	.07	.38	.22	3.97
Slippery elm	.04	.19	.12	1.99
Blueberry	17.92	4.63	11.28	49.51
Viburnum species	.26	.38	.32	3.97
Maple-leaved viburnum	.80	.47	.63	4.96

Ecological Importance and Relative Distribution of Lesser Woody-Stemmed Species¹, Delaware (continued)

Species	Relative Density	Relative Frequency	Importance Value	Distribution
Arrowwood	2.36	2.60	2.48	27.73
Blackhaw	.05	.10	.07	1.00
Grape ²	--	--	--	17.83
Unknown vine ²	--	--	--	9.91
Unknown dwarf shrub ²	--	--	--	21.79
Unknown deciduous shrub	37.85	6.67	22.26	71.29
Unknown evergreen shrub	.02	.10	.06	1.00
Unknown tree	.77	2.23	1.50	23.77

¹Includes shrub and vine species and tree stems less than 5.0 inches d.b.h.

²Not included in calculations of importance value.

**Ecological Importance and Relative Distribution of Trees 5.0+ d.b.h.
by Species, Maryland**

Species	Relative Density	Relative Dominance	Relative Frequency	Importance Value	Distribution
Atlantic white-cedar	.02	.03	.08	.05	.46
Eastern redcedar	.18	.13	.31	.20	1.84
Tamarack	.04	.05	.03	.04	.16
Norway spruce	.11	.07	.08	.09	.46
Red spruce	.11	.07	.08	.09	.46
Shortleaf pine	.01	.01	.06	.03	.31
Table mountain pine	.03	.02	.06	.03	.31
Red pine	1.66	.78	.16	.86	.92
Pitch pine	.27	.21	.41	.29	2.45
Pond pine	.09	.08	.18	.12	1.08
Eastern white pine	.60	.50	.43	.51	2.60
Scotch pine	.12	.07	.18	.12	1.08
Loblolly pine	11.54	10.26	4.34	8.71	26.46
Virginia pine	7.05	5.57	3.49	5.37	21.26
Austrian pine	.01	.01	.03	.02	.16
Baldcypress	.04	.09	.06	.06	.31
Eastern hemlock	.49	.62	.46	.52	2.76
Boxelder	.16	.11	.16	.14	.92
Striped maple	.03	.02	.06	.03	.31
Red maple	13.18	11.51	9.87	11.52	60.25
Silver maple	.25	.42	.13	.26	.77
Sugar maple	1.53	1.44	1.26	1.41	7.65
Ailanthus	.04	.03	.11	.06	.62
Serviceberry	.14	.07	.23	.15	1.38
Yellow birch	.14	.12	.21	.15	1.23
Sweet birch	.81	.71	1.06	.86	5.43
River birch	.14	.18	.23	.18	1.38
Gray birch	.01	.01	.03	.02	.16
American hornbeam	.12	.53	.30	.30	3.22
Hickory species	2.46	2.28	3.81	2.85	23.25
Bitternut hickory	.02	.05	.16	.07	.92
Pignut hickory	.22	.23	.33	.26	1.99
Shagbark hickory	.36	.31	.66	.44	3.98
Mockernut hickory	.14	.14	.36	.21	2.15
American chestnut	.03	.02	.03	.02	.16
Catalpa	.00	.00	.03	.01	.16
Hackberry	.19	.16	.26	.20	1.53
Eastern redbud	.07	.04	.08	.08	.46
Flowering dogwood	.25	.08	.53	.28	3.22
Hawthorn species	.04	.02	.03	.03	.16
Common persimmon	.21	.12	.53	.20	3.22
American beech	2.56	3.06	3.18	2.93	19.42

**Ecological Importance and Relative Distribution of Trees 5.0+ d.b.h.
by Species, Maryland (continued)**

Species	Relative Density	Relative Dominance	Relative Frequency	Importance Value	Distribution
White ash	1.51	1.38	2.08	1.66	12.70
Black ash	.01	.01	.03	.02	.16
Green ash	.36	.31	.31	.32	1.84
American holly	1.49	.73	1.81	1.34	11.01
Butternut	.07	.07	.23	.12	1.38
Black walnut	.38	.44	.81	.54	4.90
Sweetgum	7.91	6.89	6.84	7.21	41.75
Yellow-poplar	4.90	8.46	5.09	6.15	31.04
Magnolia	.04	.02	.03	.03	.16
Cumcumbertree	.05	.05	.21	.10	1.23
Sweetbay	.21	.11	.31	.21	1.84
Apple species	.04	.02	.08	.05	.46
Water tupelo	.28	.28	.41	.32	2.45
Black tupelo	3.79	3.20	5.54	4.17	33.80
Eastern hophornbeam	.19	.09	.33	.20	1.99
Paulownia	.11	.08	.18	.12	1.08
American sycamore	.33	.75	.83	.64	5.05
Eastern cottonwood	.02	.02	.03	.02	.16
Bigtooth aspen	.52	.35	.51	.46	3.06
Quaking aspen	.02	.02	.03	.02	.16
Cherry species	.10	.08	.18	.12	1.08
Pin cherry	.18	.08	.18	.15	1.08
Black cherry	2.46	2.00	3.03	2.50	18.51
Chokecherry	.03	.02	.08	.04	.46
White oak	8.23	8.75	7.44	8.14	45.42
Swamp white oak	.28	.35	.66	.43	3.98
Scarlet oak	1.50	1.73	2.53	1.92	15.45
Southern red oak	2.17	2.88	3.96	3.00	24.16
Swamp red oak	.13	.10	.16	.13	.92
Shingle oak	.02	.01	.03	.02	.16
Swamp chestnut oak	.25	.43	.61	.43	3.67
Chinkapin oak	.03	.05	.06	.05	.31
Water oak	.74	.51	.93	.73	5.66
Pin oak	.21	.35	.73	.43	4.44
Willow oak	.72	.89	1.68	1.10	10.25
Chestnut oak	5.27	6.07	3.03	4.88	20.19
Northern red oak	3.81	6.00	5.34	5.05	32.57
Post oak	.11	.09	.26	.15	1.53
Black oak	2.31	3.75	3.76	3.27	22.94
Black locust	1.88	1.57	2.08	1.84	12.70
Willow species	.08	.05	.08	.07	.46
Black willow	.03	.03	.06	.04	.31
Sassafras	.73	.41	1.21	.78	7.34

**Ecological Importance and Relative Distribution of Trees 5.0+ d.b.h.
by Species, Maryland (continued)**

Species	Relative Density	Relative Dominance	Relative Frequency	Importance Value	Distribution
American mtn. ash	.01	.01	.03	.02	.16
American basswood	.32	.35	.46	.38	2.76
Elm species	.51	.33	.58	.47	3.52
American elm	.21	.20	.46	.29	2.76
Slippery elm	.17	.19	.36	.24	2.15
Unknown tree	.13	.12	.33	.19	1.99

**Ecological Importance and Relative Distribution of Trees 5.0+ d.b.h.
by Species, Delaware**

Species	Relative Density	Relative Dominance	Relative Frequency	Importance Value	Distribution
Pond pine	.37	.38	.72	.49	3.97
Eastern white pine	.02	.05	.18	.08	1.00
Loblolly pine	19.40	19.55	7.38	15.44	40.60
Virginia pine	5.48	4.97	4.32	4.93	23.77
Eastern hemlock	.03	.03	.18	.08	1.00
Boxelder	.23	.22	.36	.27	1.99
Red maple	21.72	18.37	11.34	17.14	62.38
Ailanthus	.17	.15	.18	.17	1.00
Sweet birch	.06	.11	.18	.12	1.00
River birch	.03	.03	.18	.08	1.00
American hornbeam	.33	.12	.54	.33	2.98
Hickory species	1.06	.77	2.70	1.51	14.86
Bitternut hickory	.26	.24	.36	.29	1.99
Pignut hickory	.06	.06	.36	.16	1.99
Flowering dogwood	.65	.28	1.44	.79	7.93
Common persimmon	.20	.13	.54	.29	2.98
American beech	1.23	1.43	1.80	1.49	9.91
White ash	.53	.60	.72	.62	3.97
Green ash	.65	.65	.54	.61	2.98
American holly	2.57	1.19	3.96	2.57	21.79
Black walnut	.15	.34	.54	.34	2.98
Sweetgum	12.50	12.07	11.16	11.91	61.39
Yellow-poplar	1.35	3.39	4.14	2.96	22.78
Mulberry species	.05	.08	.36	.16	1.99
Water tupelo	.19	.20	.36	.25	1.99
Black tupelo	5.89	4.77	7.74	6.13	42.58
American sycamore	.04	.15	.18	.13	1.00
Swamp cottonwood	.56	.32	.18	.35	1.00
Black cherry	2.94	3.06	2.52	2.84	13.87
White oak	8.24	9.97	8.64	8.95	7.53
Swamp white oak	.07	.22	.36	.22	1.99
Scarlet oak	1.42	1.45	1.74	2.34	12.88
Willow oak	2.21	3.40	4.86	3.49	26.74
Chestnut oak	.23	.55	.54	.44	2.98
Northern red oak	.90	1.78	3.06	1.91	16.84
Post oak	.21	.30	.54	.35	2.98
Black oak	.66	.77	1.98	1.14	10.90
Black locust	.17	.17	.36	.24	1.99
Black willow	.31	.25	.18	.25	1.00
Sassafras	.71	.48	1.80	1.00	9.91
American elm	.08	.07	.36	.17	1.99
Slippery elm	.03	.01	.18	.08	1.00
Unknown tree	.02	.02	.18	.07	1.00

Metric Equivalents

1 acre = 4,046.86 meters² or 0.404686 hectares

1,000 acres = 404.686 hectares

1,000,000 acres = 404,686 hectares

1 inch = 2.54 centimeters or 0.0254 meters

1 foot = 30.48 centimeters or 0.3048 meters

Breast height = 1.4 meters above ground level

1 mile = 1.609 kilometers

1 square foot = 929.03 centimeters² or 0.929
meters²

1 square foot per acre basal area =
0.229568 meters²/hectares

Maryland tables are divided into six major sections: (1) State, (2) Central Unit, (3) Lower Eastern Shore Unit, (4) Southern Unit, (5) Western Unit, and (6) County. Delaware tables are divided into two major sections: (1) State and (2) County.

MARYLAND

State Tables

1. Land area by county and land class, Maryland, 1986.
2. Index to land use edge by type of land use and county, Maryland, 1986.
3. Area of timberland by county and ownership class, Maryland, 1986.
4. Area of timberland by forest type, forest-type group, and stand-size class, Maryland, 1986.
5. Area of timberland by county and stand-area class, Maryland, 1986.
6. Number of live nut-and fruit-producing trees on timberland by species and diameter class, Maryland, 1986.
7. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Maryland, 1986.
8. Number of standing dead trees on timberland by species, condition class, and diameter class, Maryland, 1986.
9. Number of trees with observed cavities on timberland by species and condition class, Maryland, 1986.
10. Number of trees with observed cavities on timberland by species and presence of cavities, Maryland, 1986.
11. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Maryland, 1986.

12. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Maryland, 1986.
13. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Maryland, 1986.

Central Unit

14. Number of live nut- and fruit-producing trees on timberland by species and diameter class, Central Unit, Maryland, 1986.
15. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Central Unit, Maryland, 1986.
16. Number of standing dead trees on timberland by species, condition, and diameter class, Central Unit, Maryland, 1986.
17. Number of trees with observed cavities on timberland by species and condition class, Central Unit, Maryland, 1986.
18. Number of trees with observed cavities on timberland by species and presence of cavities, Central Unit, Maryland, 1986.
19. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Central Unit, Maryland, 1986.
20. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Central Unit, Maryland, 1986.
21. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Central Unit, Maryland, 1986.

Lower Eastern Shore Unit

22. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1986.
23. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Lower Eastern Shore Unit, Maryland, 1986.
24. Number of standing dead trees on timberland by species, condition, and diameter class, Lower Eastern Shore Unit, Maryland, 1986.
25. Number of trees with observed cavities on timberland by species and condition class, Lower Eastern Shore Unit, Maryland, 1986.
26. Number of trees with observed cavities on timberland by species and presence of cavities, Lower Eastern Shore Unit, Maryland, 1986.
27. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Lower Eastern Shore Unit, Maryland, 1986.
28. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Lower Eastern Shore Unit, Maryland, 1986.
29. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Lower Eastern Shore Unit, Maryland, 1986.

Southern Unit

30. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Southern Unit, Maryland, 1986.
31. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Southern Unit, Maryland, 1986.

32. Number of standing dead trees on timberland by species, condition class and diameter class, Southern Unit, Maryland, 1986.
33. Number of trees with observed cavities on timberland by species and condition class, Southern Unit, Maryland, 1986.
34. Number of trees with observed cavities on timberland by species and presence of cavities, Southern Unit, Maryland, 1986.
35. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Southern Unit, Maryland, 1986.
36. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Southern Unit, Maryland, 1986.
37. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Southern Unit, Maryland, 1986.

Western Unit

38. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Western Unit, Maryland, 1986.
39. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Western Unit, Maryland, 1986.
40. Number of standing dead trees on timberland by species, condition class, and diameter class, Western Unit, Maryland, 1986.
41. Number of trees with observed cavities on timberland by species and condition class, Western Unit, Maryland, 1986.
42. Number of trees with observed cavities on timberland by species and presence

of cavities, Western Unit, Maryland, 1986.

- 43. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Western Unit, Maryland, 1986.
- 44. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Western Unit, Maryland, 1986.
- 45. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Western Unit, Maryland, 1986.

County Tables

- 46. Number of live nut- and fruit- producing tree on timberland by species and diameter class, Allegany County, Maryland, 1986.
- 47. Number of standing dead trees on timberland by species, condition class, and diameter class, Allegany County, Maryland, 1986.
- 48. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Allegany County, Maryland, 1986.
- 49. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Anne Arundel/Howard Counties, Maryland, 1986.
- 50. Number of standing dead trees on timberland by species, condition, and diameter class, Anne Arundel/Howard Counties, Maryland, 1986.
- 51. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Anne Arundel/Howard Counties, Maryland, 1986.
- 52. Number of live nut- and fruit- producing trees on timberland by species and di-

ameter class, Baltimore County, Maryland, 1986.

- 53. Number of standing dead trees on timberland by species, condition class, and diameter class, Baltimore County, Maryland, 1986.
- 54. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Baltimore County, Maryland, 1986.
- 55. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Calvert County, Maryland, 1986.
- 56. Number of standing dead trees on timberland by species, condition class, and diameter class, Calvert County, Maryland, 1986.
- 57. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Calvert County, Maryland, 1986.
- 58. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Caroline/Talbot Counties, Maryland, 1986.
- 59. Number of standing dead trees on timberland by species, condition class, and diameter class, Caroline/Talbot Counties, Maryland, 1986.
- 60. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Caroline/Talbot Counties, Maryland, 1986.
- 61. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Carroll County, Maryland, 1986.
- 62. Number of standing dead trees on timberland by species, condition class, and diameter class, Carroll County, Maryland, 1986.

63. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Carroll County, Maryland, 1986.
64. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Cecil/Harford Counties, Maryland, 1986.
65. Number of standing dead trees on timberland by species, condition class, and diameter class, Cecil/Harford Counties, Maryland, 1986.
66. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Cecil/Harford Counties, Maryland, 1986.
67. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Charles County, Maryland, 1986.
68. Number of standing dead trees on timberland by species, condition class, and diameter class, Charles County, Maryland, 1986.
69. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Charles County, Maryland, 1986.
70. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Dorchester County, Maryland, 1986.
71. Number of standing dead trees on timberland by species, condition, and diameter class, Dorchester County, Maryland, 1986.
72. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Dorchester County, Maryland, 1986.
73. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Frederick County, Maryland, 1986.
74. Number of standing dead trees on timberland by species, condition class, and diameter class, Frederick County, Maryland, 1986.
75. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Frederick County, Maryland, 1986.
76. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Garrett County, Maryland, 1986.
77. Number of standing dead trees on timberland by species, condition class, and diameter class, Garrett County, Maryland, 1986.
78. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Garrett County, Maryland, 1986.
79. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Kent/Queen Annes Counties, Maryland, 1986.
80. Number of standing dead trees on timberland by species, condition class, and diameter class, Kent/Queen Annes Counties, Maryland, 1986.
81. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Kent/Queen Annes Counties, Maryland, 1986.
82. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Montgomery/Prince Georges Counties, Maryland, 1986.
83. Number of standing dead trees on timberland by species, condition class, and diameter class, Montgomery/Prince Georges Counties, Maryland, 1986.

84. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Montgomery/Prince Georges Counties, Maryland, 1986.
85. Number of live nut- and fruit- producing trees on timberland by species and diameter class, St. Marys County, Maryland, 1986.
86. Number of standing dead trees on timberland by species, condition class, and diameter class, St. Marys County, Maryland, 1986.
87. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, St. Marys County, Maryland, 1986.
88. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Somerset County, Maryland, 1986.
89. Number of standing dead trees on timberland by species, condition class, and diameter class, Somerset County, Maryland, 1986.
90. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Somerset County, Maryland, 1986.
91. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Washington County, Maryland, 1986.
92. Number of standing dead trees on timberland by species, condition class, and diameter class, Washington County, Maryland, 1986.
93. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Washington County, Maryland, 1986.
94. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Wicomico County, Maryland, 1986.
95. Number of standing dead trees on timberland by species, condition class, and diameter class, Wicomico County, Maryland, 1986.
96. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Wicomico County, Maryland, 1986.
97. Number of live nut- and fruit producing trees on timberland by species and diameter class, Worcester County, Maryland, 1986.
98. Number of standing dead trees on timberland by species, condition class, and diameter class, Worcester County, Maryland, 1986.
99. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Worcester County, Maryland, 1986.

Delaware Tables

State Tables

100. Land area by county and land class, Delaware, 1986.
101. Index to land use edge by type of land use and county, Delaware, 1986.
102. Area of timberland by county and ownership class, Delaware, 1986.
103. Area of timberland by forest type, forest-type group, and stand-size class, Delaware, 1986.
104. Area of timberland by county and stand-area class, Delaware, 1986.
105. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Delaware, 1986.

- 106. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Delaware, 1986.
- 107. Number of standing dead trees on timberland by species, condition class, and diameter class, Delaware, 1986.
- 108. Number of trees with observed cavities on timberland by species and condition class, Delaware, 1986.
- 109. Number of trees with observed cavities on timberland by species and presence of cavities, Delaware, 1986.
- 110. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Delaware, 1986.
- 111. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Delaware, 1986.
- 112. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Delaware, 1986.

County Tables

- 113. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Kent/New Castle Counties, Delaware, 1986.
- 114. Number of standing dead trees on timberland by species, condition class, and diameter class, Kent/New Castle Counties, Delaware, 1986.
- 115. Number of shrubs, seedlings, and saplings on timberland by species and browse-utilization class, Kent/New Castle Counties, Delaware, 1986.
- 116. Number of live nut- and fruit- producing trees on timberland by species and diameter class, Sussex County, Delaware, 1986.
- 117. Number of standing dead trees on timberland by species, condition class, and diameter class, Sussex County, Delaware, 1986.
- 118. Number of shrubs, seedlings, and saplings on timberland by species, browse-preference class, and browse-utilization class, Sussex County, Delaware, 1986.

MARYLAND STATE TABLES



LAND AREA BY LAND CLASS

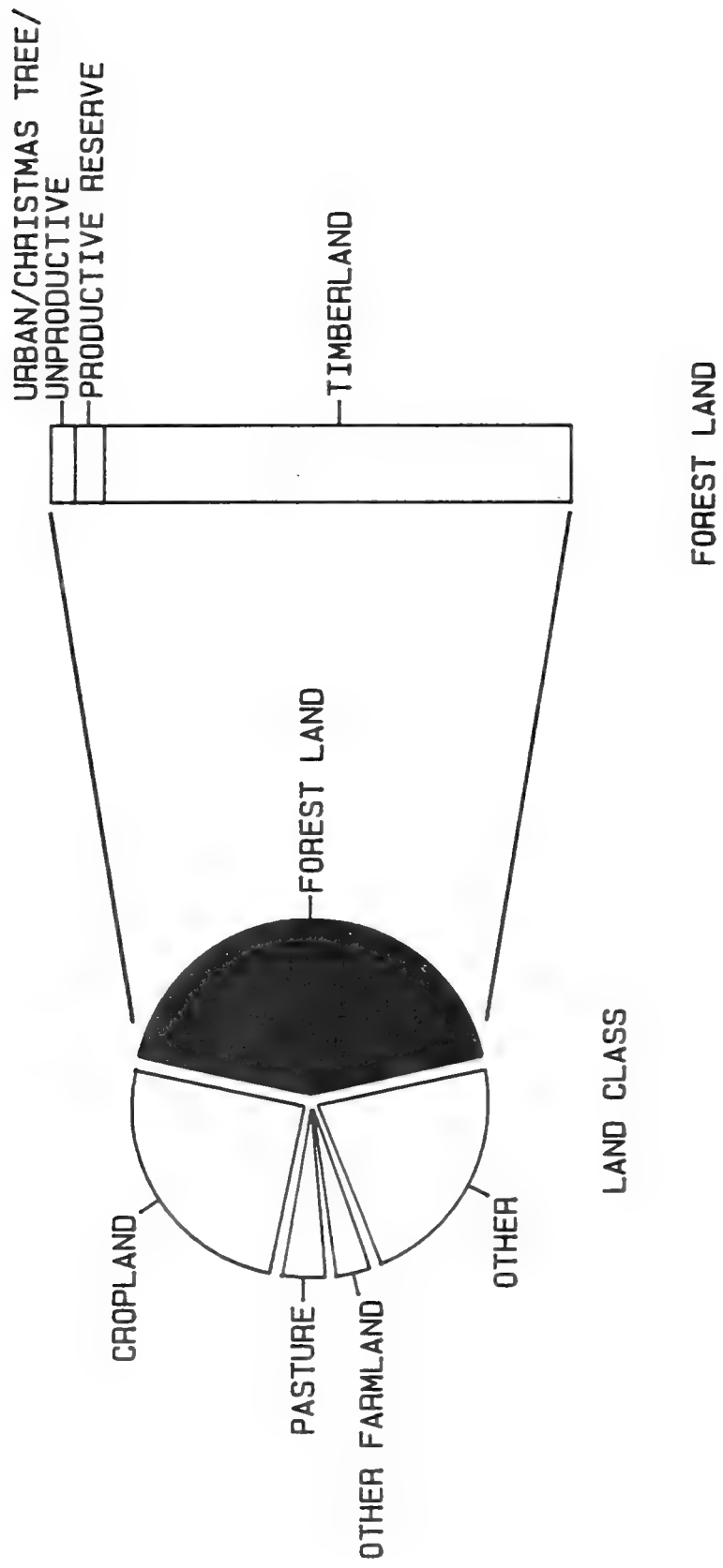


Table 1.--Land area by county and land class, Maryland, 1986
(In thousands of acres)

County	Land class											Total area ^b
	Timberland	Christmas tree plantation	Productive reserved	Unproductive	Urban	Cropland ^a	Pasture ^a	Other farmland	Other land			
Baltimore	104.9	.0	15.2	.0	25.3	59.3	21.8	19.2	188.2		433.9	
Carroll	70.7	.0	2.0	.0	.0	119.6	27.5	.0	69.5		289.3	
Frederick	116.8	.0	16.0	.0	4.2	149.7	55.1	36.0	46.3		424.1	
Washington	90.4	.0	19.8	12.9	5.1	85.0	33.7	.0	44.3		291.2	
Anne Arundel/Howard	147.9	.0	11.1	.0	30.9	56.6	17.4	8.9	155.6		428.4	
Caroline/Talbot	100.0	.0	1.5	.0	.0	201.4	6.4	.0	61.5		370.8	
Cecil/Harford	163.5	.0	15.7	.0	10.4	129.1	37.6	38.6	121.7		516.6	
Kent/Queen Annes	112.3	.0	2.1	.0	.0	241.5	9.4	50.8	.0		416.1	
Montgomery/Prince Georges	153.0	.0	48.2	.0	27.1	94.6	30.7	22.1	253.1		628.8	
Central Unit	1,059.5	.0	131.6	12.9	103.0	1,136.8	239.6	175.6	940.2		3,799.2	
Calvert	73.9	.0	1.2	.0	.0	23.8	4.8	6.0	26.8		136.5	
Charles	175.5	.0	1.2	.0	.0	38.6	7.7	2.8	63.2		289.0	
St. Marys	128.5	.0	2.0	.0	.0	46.3	7.9	16.3	37.4		238.4	
Southern Unit	377.9	.0	4.4	.0	.0	108.7	20.4	25.1	127.4		663.9	
Dorchester	141.1	.0	3.7	.0	.0	100.4	1.9	13.7	118.9		379.7	
Somerset	87.2	.0	.0	.0	.0	40.8	2.0	7.9	78.7		216.6	
Wicomico	104.6	.0	.0	.0	.0	78.9	2.6	6.4	50.1		242.6	
Worcester	156.1	.0	1.4	.0	.0	81.6	2.2	2.2	60.4		303.9	
Lower Eastern Shore Unit	489.0	.0	5.1	.0	.0	301.7	8.7	30.2	308.1		1,142.8	
Allegany	198.3	.0	9.2	4.0	.0	12.6	11.3	11.7	22.2		269.3	
Garrett	299.3	2.2	2.8	4.3	.0	42.0	29.2	13.9	26.7		420.4	
Western Unit	497.6	2.2	12.0	8.3	.0	54.6	40.5	25.6	48.9		689.7	
State total	2,424.0	2.2	152.9	21.2	103.0	1,602.0	309.0	256.7	1,424.5		6,295.5	

^a Source: 1982 Census of Agriculture.

^b Source: 1981 United States Department of Commerce, Bureau of Census.

Table 2.--Index to land use edge by type of land use and county, Maryland, 1986

(Edge hits^a per thousand acres)

	Allegany	Baltimore	Calvert	Carroll	Charles	Dorchester	Frederick	Garrett	St. Marys	Somerset	Washington
Forest -											
forest	39.1	25.8	38.6	18.1	35.4	12.7	22.0	25.8	37.1	15.6	19.3
shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
agricultural/ herbaceous	21.8	30.9	36.8	42.4	27.8	14.7	28.0	25.1	23.0	10.5	27.9
cultural	7.6	8.3	9.2	5.7	7.9	2.9	5.6	4.7	6.8	2.4	8.3
Shrub -											
agricultural/ herbaceous	.0	.0	.0	.0	.0	.0	0.4	.0	.0	.0	.0
cultural	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
Agricultural/herbaceous	4.0	7.4	5.4	11.3	5.5	2.7	8.6	4.3	5.8	2.5	8.0
cultural											
Hedgerow	2.2	3.9	2.2	10.1	3.9	1.5	12.4	3.8	4.0	1.4	10.1
Transportation											
right of way	30.9	39.9	28.1	33.4	27.0	13.6	33.6	20.7	22.7	10.9	38.0
Utility											
right of way	3.1	2.9	1.9	.9	3.3	.5	.6	2.1	3.0	.9	.3
Aquatic	3.8	9.2	10.1	6.4	8.3	16.7	4.1	3.0	8.2	7.7	3.2
All types	112.6	128.5	132.3	128.4	119.2	65.1	115.2	89.2	110.5	51.9	115.2
Number of edge plots	48	31	20	20	41	43	29	72	33	24	21
Number of edge hits	3,027	2,230	1,481	1,438	2,737	1,568	1,870	3,599	2,042	697	1,354

Table 2.--Continued

	(Edge hits ^a per thousand acres)										
	Wicomico	Worcester	Howard/ Anne Arundel	Talbot/ Caroline	Cecil/ Harford	Kent/ Queen Annes	Montgomery/ Prince George	All counties			
Forest -											
forest	20.4	18.0	25.1	26.7	17.4	16.8	18.5	24.3			
shrub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
agricultural/ herbaceous	20.0	17.3	27.0	31.4	36.4	30.6	29.1	26.2			
cultural	4.5	3.8	15.7	2.3	9.6	1.5	12.4	6.7			
Shrub -											
agricultural/ herbaceous	.0	.0	.0	.0	.0	.0	.0	.1			
cultural	.0	.0	.0	.0	.0	.0	.0	.1			
Agricultural/herbaceous											
cultural	5.0	4.7	8.2	5.1	7.5	4.2	5.3	5.6			
Hedgerow	1.5	1.6	3.0	6.1	5.8	6.5	4.9	4.4			
Transportation											
right of way	19.0	7.5	49.1	23.6	37.2	25.1	39.6	28.0			
Utility											
right of way	.3	1.7	1.5	1.7	1.1	.2	4.7	1.9			
Aquatic	6.8	7.9	6.7	9.5	6.1	8.9	4.2	7.0			
All types	77.5	72.5	134.1	106.4	121.2	93.9	118.6	104.0			
Number of edge plots	28	34	35	30	41	35	46	631			
Number of edge hits	1,215	1,380	2,628	1,787	2,782	1,840	3,055	36,730			

^a Edge condition on an aerial photograph sampled by a line transect (Brooks and Sykes 1984).

Table 3.--Area of timberland by county and ownership class^m, Maryland, 1986
(In thousands of acres)

County	Ownership class						All classes	
	National Forest	Other federal	State forest	Other state	County and municipal	Forest industry		Other private
Baltimore	.0	.0	.0	.7	12.9	.0	91.3	104.9
Carroll	.0	.0	.0	1.0	2.7	.0	67.0	70.7
Frederick	.0	.0	.0	1.1	8.8	.0	106.9	116.8
Washington	.0	.0	.0	11.1	1.4	.0	77.9	90.4
Anne Arundel/Howard	.0	9.6	.0	2.4	3.0	.0	156.8	147.9
Caroline/Talbot	.0	.0	.1	2.4	.0	3.7	93.8	100.0
Cecil/Harford	.0	5.2	3.6	2.7	.0	.0	152.0	163.5
Kent/Queen Annes	.0	.0	.0	4.7	.0	.0	107.6	112.3
Montgomery/Prince Georges	.0	4.5	.9	4.3	1.2	.0	142.1	153.0
Central Unit	.0	19.3	4.6	30.4	30.1	3.7	964.7	1,059.6
Calvert	.0	.1	.0	.6	.0	.0	73.2	73.9
Charles	.0	3.0	4.2	4.2	.0	7.3	156.8	175.5
St. Marys	.0	1.7	.0	.8	.0	.0	126.0	128.5
Southern Unit	.0	4.8	4.2	5.6	.0	7.3	347.8	377.9
Dorchester	.0	.0	.0	1.3	.0	36.0	103.8	141.1
Somerset	.0	.0	.0	1.5	.0	25.8	59.9	87.2
Wicomico	.0	.0	1.2	.5	.0	23.3	79.6	104.6
Worcester	.0	.0	13.3	.9	.0	27.5	114.4	156.1
Lower Eastern Shore Unit	.0	.0	14.5	4.2	.0	112.6	363.7	489.0
Alleghany	.0	.9	38.4	13.6	.9	.0	144.7	198.3
Garrett	.0	.0	69.5	3.2	1.6	6.9	218.1	299.3
Western Unit	.0	.9	107.9	16.8	2.5	6.9	361.2	497.6
State total	.0	25.0	131.3	56.6	32.6	130.6	2,047.9	2,424.0

^a Further refinement of the private ownership estimates will be available in the forthcoming publication - Forest Landowners of Maryland.

PERCENT TIMBERLAND BY FOREST TYPE GROUP

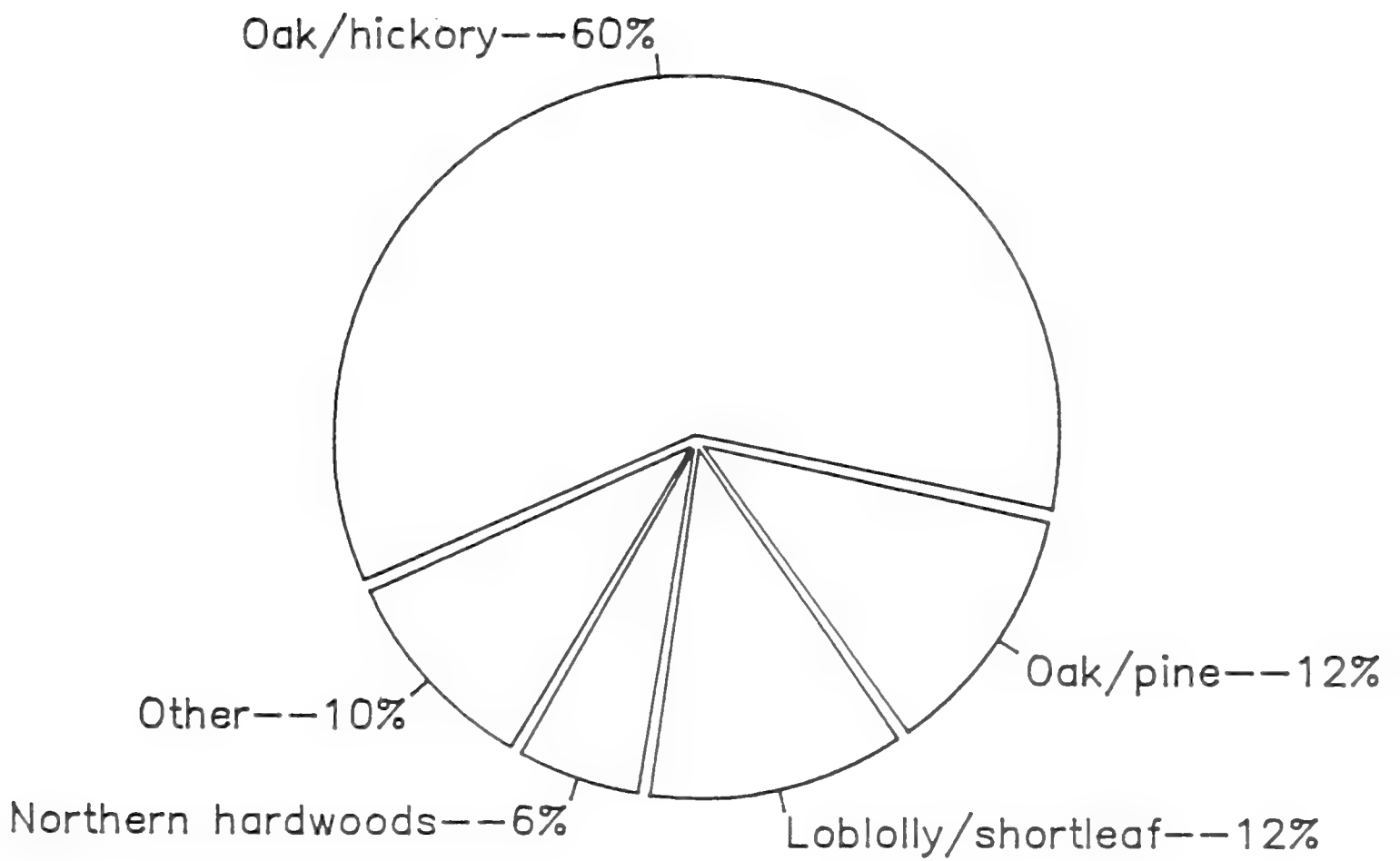


Table 4.--Area of timberland by forest type, forest-type group, and stand-size class, Maryland, 1986

(In thousands of acres)

Forest type	Stand-size class				All classes
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked	
Red pine	3.1	14.6	.0	.0	17.8
White pine	6.4	4.5	.0	.0	10.9
Hemlock	6.9	.0	3.9	.0	10.8
Scotch pine	.0	3.1	10.5	.0	13.6
White/red pine group	16.4	22.3	14.4	.0	53.1
Loblolly pine	128.1	41.3	17.5	.0	186.8
Virginia pine	65.5	22.6	22.0	.0	110.1
Loblolly/shortleaf group	193.6	63.9	39.4	.0	296.9
Wh. pine/no. red oak/wh. ash	9.5	2.4	.0	.0	11.9
Virginia pine/oak	78.6	5.2	11.7	.0	95.5
Loblolly pine/hardwood	122.1	17.6	24.7	.0	164.4
Other oak/pine	5.4	4.7	.0	.0	10.2
Oak/pine group	215.6	29.9	36.4	.0	281.9
Post, black, or bear oak	17.0	6.0	4.5	.0	27.6
Chestnut oak	59.9	3.4	.0	.0	63.3
White oak/red oak/hickory	83.2	24.8	9.5	.0	117.6
White oak	31.8	34.5	6.8	.0	73.1
Northern red oak	31.0	.0	.0	.0	31.0
Y. poplar/wh. oak/no. red oak	66.4	12.4	.0	.0	78.8
Black locust	.0	.0	9.8	.0	9.8
Sweetgum/yellow-poplar	66.6	16.8	15.1	.0	98.5
Yellow-poplar	116.4	.0	7.7	.0	124.1
Hawthorn reverting field	3.2	4.5	.0	.0	7.7
Scarlet oak	8.2	.0	4.1	.0	12.2
Sassafras/persimmon	.0	.0	2.8	.0	2.8
Red maple/central hardwoods	32.6	19.7	4.2	.0	56.5
Mixed central hardwoods	570.9	160.6	19.8	.0	751.3
Oak/hickory group	1,087.3	282.8	84.4	.0	1,454.4
Swamp chstnt oak/cherrybark oak	30.1	10.5	.0	.0	40.6
Sweetgum/nuttall oak/willow oak	40.1	14.0	10.0	.0	64.1
Bald cypress/white tupelo	3.0	.0	.0	.0	3.0
Sweetbay/swamp tupelo/red maple	7.1	2.9	2.5	.0	12.5
Oak/gum/cypress group	80.3	27.4	12.5	.0	120.2
Black ash/Amer. elm/red maple	29.5	.0	1.9	.0	31.4
Red maple(lowland)	8.8	.0	2.2	.0	10.9
Red maple(upland)	.0	.0	3.8	.0	3.8
River birch/sycamore	19.4	4.1	.0	.0	23.5
Willow	.0	2.1	.0	.0	2.1
Sycamore/pecan/American elm	4.6	.0	.0	.0	4.6

Table 4.--Continued

(In thousands of acres)

Forest type	Stand-size class				All classes
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked	
American elm/green ash	7.4	.0	.0	.0	7.4
Elm/ash/red maple group	69.6	6.2	7.9	.0	83.7
Sugar maple/beech/yellow birch	30.5	.0	7.3	.0	37.8
Black cherry	6.7	14.2	4.6	.0	25.6
Red maple/northern hardwoods	3.1	6.8	4.2	.0	14.1
Pin cherry/reverting field	.0	5.1	17.5	.0	22.6
Mixed northern hardwoods	20.7	10.3	2.6	.0	33.6
Northern hardwoods group	61.0	36.5	36.3	.0	133.8
All forest types	1,723.8	468.9	231.3	.0	2,424.0

Table 5.--Area of timberland by county and stand-area class, Maryland, 1986

(In thousands of acres)

County	Stand-area class						All classes
	1-9	10-19	20-49	50-99	100-499	500+	
Baltimore	12.0	49.4	33.3	10.3	.0	.0	104.9
Carroll	21.7	36.1	12.8	.0	.0	.0	70.7
Frederick	27.7	32.7	28.7	14.2	13.5	.0	116.8
Washington	12.6	18.6	40.8	11.3	7.2	.0	90.4
Anne Arundel/Howard	87.4	37.8	22.7	.0	.0	.0	147.9
Caroline/Talbot	31.2	24.2	30.9	13.8	.0	.0	100.0
Cecil/Harford	52.7	40.2	58.3	12.4	.0	.0	163.5
Kent/Queen Annes	36.4	36.8	24.9	6.9	7.2	.0	112.3
Montgomery/Prince Georges	82.6	38.8	19.4	8.4	3.8	.0	153.0
Central Unit	364.3	314.5	271.7	77.4	31.7	.0	1,059.6
Calvert	40.5	27.5	5.8	.0	.0	.0	73.9
Charles	64.5	48.7	50.6	10.0	.0	1.6	175.5
St. Marys	41.7	37.2	46.7	2.9	.0	.0	128.5
Southern Unit	146.7	113.5	103.2	12.9	.0	1.6	377.9
Dorchester	10.5	31.8	52.5	30.5	15.9	.0	141.1
Somerset	15.4	11.4	40.4	15.3	4.6	.0	87.2
Wicomico	9.7	27.8	36.0	28.5	2.5	.0	104.6
Worcester	35.1	44.3	26.0	18.7	27.9	4.2	156.1
Lower Eastern Shore Unit	70.8	115.2	154.9	93.0	50.9	4.2	489.0
Allegany	72.4	59.7	40.5	18.9	6.9	.0	198.3
Garrett	87.8	82.8	62.6	47.6	18.5	.0	299.3
Western Unit	160.2	142.5	103.0	66.5	25.3	.0	497.6
State total	741.9	685.7	632.8	249.8	108.0	5.8	2,424.0

TOP TEN NUT- AND FRUIT-PRODUCING TREES

Millions of trees

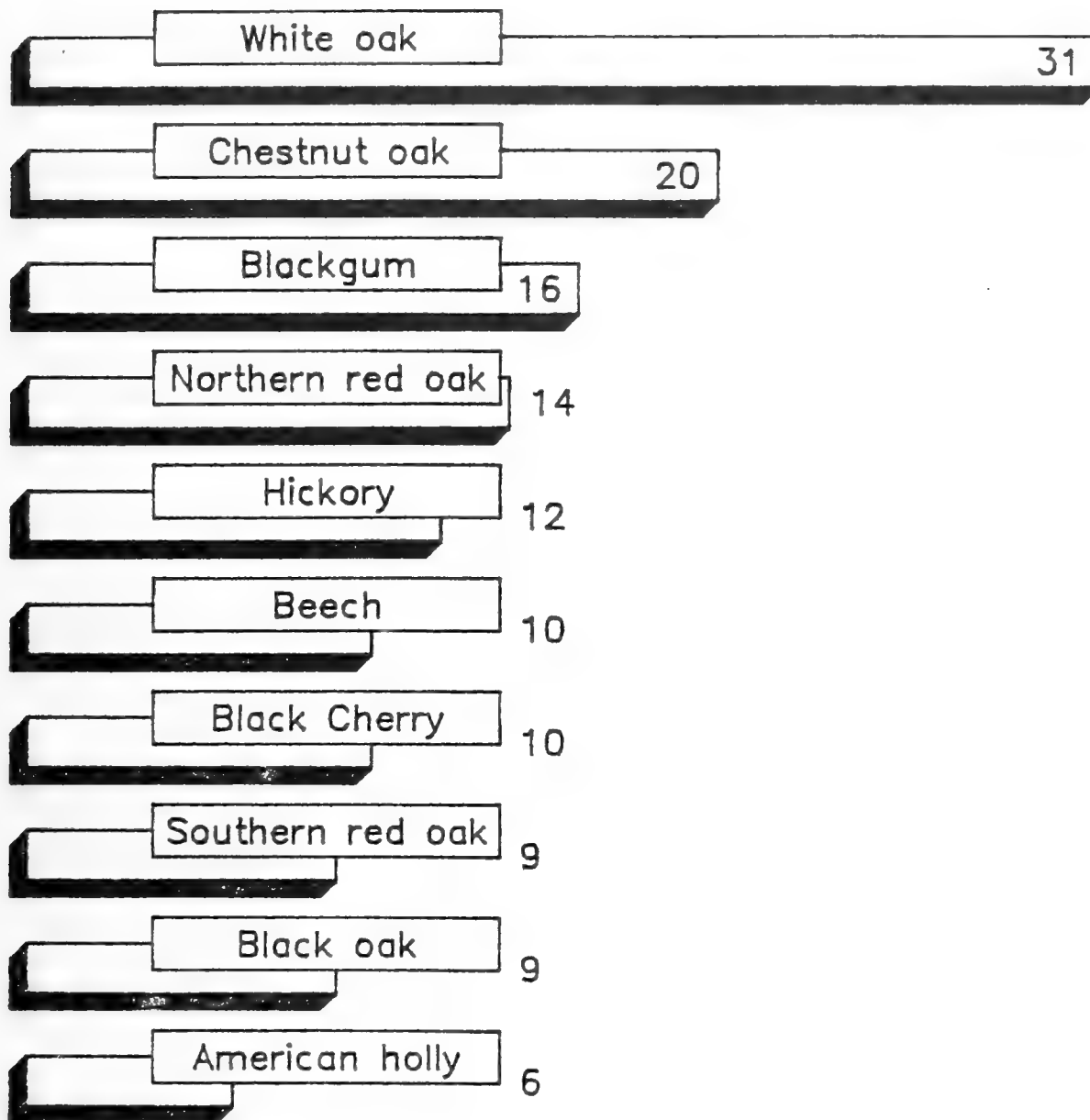


Table 6.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Maryland, 1986

Species	Diameter class (inches at breast height)														All classes	Sampling error (percent)							
	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+		
Eastern redcedar	243	191	173	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	644	44.7
Serviceberry	161	222	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	417	55.4
Hickory	4,361	3,012	1,798	1,066	643	448	341	85	75	0	0	0	0	0	0	0	0	0	0	0	0	11,837	11.7
American chestnut	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	100.0
Hackberry	238	240	83	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	689	53.6
Dogwood	1,038	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,065	35.0
Hawthorn	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	100.0
Persimmon	352	298	35	11	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	728	32.8
Beech	3,972	1,339	1,311	1,007	775	455	327	230	248	0	0	0	0	0	0	0	0	0	0	0	0	9,747	15.9
American holly	3,904	1,365	374	159	44	0	6	18	0	0	0	0	0	0	0	0	0	0	0	0	0	5,871	15.2
Butternut	79	66	9	15	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	35.9
Black walnut	241	308	460	175	166	112	15	13	25	0	0	0	0	0	0	0	0	0	0	0	0	1,516	25.0
Magnolia	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	100.0
Cucumber tree	41	45	15	15	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145	37.2
Sweetbay	565	306	16	30	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	933	44.3
Apple	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124	85.6
Blackgum	7,120	2,812	2,365	1,429	807	568	219	144	148	0	0	0	0	0	0	0	0	0	0	0	0	15,623	10.0
Eastern hophornbeam	416	193	28	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	643	46.6
Pin cherry	513	199	203	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	941	46.8
Black cherry	4,031	2,733	1,191	786	570	237	96	41	16	0	0	0	0	0	0	0	0	0	0	0	0	9,702	16.0
Chokecherry	46	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	63.6
White oak	9,972	7,656	5,776	3,085	1,905	1,287	718	370	573	0	0	0	0	0	0	0	0	0	0	0	0	31,444	8.7
Swamp white oak	276	272	164	60	166	66	20	18	31	0	0	0	0	0	0	0	0	0	0	0	0	1,076	29.5
Scarlet oak	1,793	1,148	790	988	455	224	161	63	110	0	0	0	0	0	0	0	0	0	0	0	0	5,736	20.2
Southern red oak	3,226	1,246	983	975	820	543	299	231	261	0	0	0	0	0	0	0	0	0	0	0	0	8,643	11.9
Cherrybark oak	40	188	71	27	15	19	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	370	65.8
Shingle oak	35	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	100.0
Swamp chestnut oak	170	229	126	180	39	35	64	57	93	0	0	0	0	0	0	0	0	0	0	0	0	1,003	31.9
Chinkapin oak	0	0	13	97	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	123	81.6
Water oak	1,248	756	318	170	119	65	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,696	22.4
Pin oak	175	232	148	73	66	69	12	33	60	0	0	0	0	0	0	0	0	0	0	0	0	867	26.5
Willow oak	855	511	658	387	284	165	62	97	57	0	0	0	0	0	0	0	0	0	0	0	0	3,087	18.3
Chestnut oak	4,774	5,170	3,673	2,109	1,802	962	610	267	410	0	0	0	0	0	0	0	0	0	0	0	0	19,816	10.8
Northern red oak	2,096	2,601	2,692	2,201	1,779	1,020	539	425	595	0	0	0	0	0	0	0	0	0	0	0	0	14,058	8.5

Table 6.-Continued

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)	
	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+					
Post oak	115	113	69	0	34	27	0	0	0	0	0	0	0	358	48.1
Black oak	1,908	1,742	1,105	942	774	622	544	455	400	0	0	0	85	8,577	13.0
Sassafras	1,549	569	77	99	83	72	0	0	0	0	0	0	0	2,450	24.0
Mountain ash	0	13	0	0	0	0	0	0	0	0	0	0	0	13	100.0
Basswood	272	185	264	61	101	84	12	15	23	0	0	0	0	1,018	40.8
Total, all species	56,258	36,008	25,072	16,299	11,520	7,112	4,080	2,585	3,162	520	162,617	3.8			
Sampling error (percent)	6.0	5.6	5.3	5.0	5.4	5.3	7.7	8.5	7.8	13.6	3.8				

Table 7.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Maryland, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type				Total stems
	Nuts	Other seeds	Berries	Other species	
Sawtimber:					
Shrubs	0	198,776	1,001,688	387,188	1,587,652
Saplings	85,461	260,943	216,938	1,990	565,332
Total sawtimber	85,461	459,719	1,218,626	389,178	2,152,984
Poletimber:					
Shrubs	2,198	50,765	294,510	97,949	445,423
Saplings	37,919	136,778	52,968	0	227,665
Total poletimber	40,117	187,543	347,478	97,949	673,089
Sapling/seedling:					
Shrubs	0	13,933	172,838	56,880	243,651
Saplings	12,759	93,041	23,372	1,604	130,775
Total sapling/seedling	12,759	106,975	196,209	58,484	374,427
Total, all classes	138,337	754,237	1,762,314	545,611	3,200,499

Table 8.--Number of standing dead trees on timberland by species, condition class, and diameter class, Maryland, 1986
(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
White/red pine	58	0	0	58	29	0	0	29	87	62.5
Loblolly pine	699	56	5	760	1,359	16	39	1,414	2,174	23.0
Virginia pine	655	15	0	670	489	28	0	517	1,187	26.7
Other yellow pines	118	0	0	118	243	0	0	243	361	60.7
Other softwoods	22	0	5	28	58	0	12	70	98	64.3
Total softwoods	1,552	71	11	1,634	2,179	44	51	2,274	3,908	16.9
Red maple	265	16	0	282	214	55	44	314	596	31.7
Sugar maple	0	0	0	0	29	7	0	36	36	60.5
Hickory	300	33	0	333	311	81	13	405	739	43.2
Beech	0	0	0	0	105	0	0	105	105	86.4
Sweetgum	86	0	0	86	333	44	32	409	494	34.6
Yellow-poplar	13	0	6	19	96	27	7	131	150	39.3
Blackgum	89	35	0	124	48	7	12	67	191	32.5
Ash-walnut-cherry	34	0	6	41	717	26	9	753	793	37.5
Select white oaks	439	18	20	478	1,100	29	42	1,171	1,649	20.8
Select red oaks	308	56	55	419	245	76	52	373	792	20.6
Other white oaks	333	127	28	488	653	45	32	730	1,218	33.1
Other red oaks	745	56	63	865	593	97	72	762	1,627	23.2
Black locust	247	7	15	270	718	110	51	879	1,148	21.9
Other commercial hardwoods	221	15	11	247	319	72	7	399	645	28.7
Non-commercial hardwoods	393	27	66	486	1,310	407	113	1,829	2,316	17.5
Total hardwoods	3,474	391	272	4,137	6,792	1,084	487	8,363	12,500	7.8
Total, all species	5,026	462	283	5,771	8,972	1,128	537	10,637	16,408	6.9
Sampling error (percent)	12.3	34.4	21.4	11.6	9.4	14.1	14.1	8.3	6.9	

Table 9.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class, Maryland, 1986

(In thousands of trees)

Species	Live				Dead				Total all trees	Sampling error (percent)
	No cull	Intact live top	Broken top	Dead top	Total live	Intact top	Broken top	Total dead		
White/red pine	14	0	0	0	14	0	15	15	29	70.7
Loblolly pine	354	0	0	0	354	20	139	159	513	25.8
Virginia pine	135	10	0	0	145	0	102	102	247	39.8
Other yellow pines	90	0	0	5	95	0	22	22	117	64.1
Other softwoods	121	25	0	0	146	0	12	12	158	51.0
Total softwoods	715	35	0	5	755	20	290	310	1,064	18.7
Red maple	3,834	1,295	171	30	5,331	56	82	139	5,469	9.6
Sugar maple	187	64	16	0	267	0	0	0	267	23.0
Hickory	501	18	0	0	519	0	51	51	569	24.2
Beech	910	185	18	21	1,135	0	15	15	1,149	20.9
Sweetgum	932	101	19	11	1,064	0	210	210	1,273	17.2
Yellow-poplar	735	195	15	13	958	112	62	173	1,132	22.0
Blackgum	1,020	143	9	0	1,172	35	45	80	1,252	18.2
Ash-walnut-cherry	861	395	13	0	1,269	0	339	339	1,608	24.2
Select white oaks	656	153	15	0	823	52	220	272	1,095	18.0
Select red oaks	491	60	0	0	552	94	207	301	853	18.2
Other white oaks	570	208	0	0	778	51	337	388	1,166	22.6
Other red oaks	876	163	0	11	1,051	109	333	442	1,493	14.4
Black locust	429	496	119	101	1,145	193	518	711	1,856	16.4
Other commercial hardwoods	1,322	181	33	0	1,537	29	82	112	1,648	21.5
Non-commercial hardwoods	969	412	29	48	1,458	240	1,182	1,423	2,881	19.7
Total hardwoods	14,293	4,071	457	236	19,057	972	3,684	4,656	23,713	5.5
Total, all species	15,008	4,106	457	240	19,811	992	3,974	4,966	24,777	5.4
Sampling error (percent)	6.5	10.8	22.0	45.2	5.5	23.6	13.2	11.9	5.4	

Table 10.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Maryland, 1986

Species	Live trees						Dead trees				Total all trees	Sampling error (percent)		
	One or more small		Multiple large or small		Total live		One or more large		Multiple large or small				Total dead	
White/red pine	14	0	0	0	14	0	0	0	0	15	29	70.7		
Loblolly pine	223	112	19	19	354	97	0	0	0	159	513	25.8		
Virginia pine	131	5	10	10	145	58	44	0	0	102	247	39.8		
Other yellow pines	76	7	11	11	95	0	0	0	0	22	117	64.1		
Other softwoods	106	40	0	0	146	0	0	0	0	12	158	51.0		
Total softwoods	550	164	40	40	755	155	44	44	110	310	1,064	18.7		
Red maple	2,304	2,253	773	773	5,331	82	11	11	45	139	5,469	9.6		
Sugar maple	101	153	13	13	267	0	0	0	0	0	267	23.0		
Hickory	206	187	125	125	519	13	0	0	37	51	569	24.2		
Beech	475	324	335	335	1,135	0	0	0	15	15	1,149	20.9		
Sweetgum	351	598	115	115	1,064	183	26	26	0	210	1,273	17.2		
Yellow-poplar	344	566	49	49	958	21	124	124	28	173	1,132	22.0		
Blackgum	409	678	84	84	1,172	50	8	8	22	80	1,252	18.2		
Ash-walnut-cherry	719	430	120	120	1,269	100	119	119	120	339	1,608	24.2		
Select white oaks	277	437	109	109	823	144	102	102	27	272	1,095	18.0		
Select red oaks	242	247	63	63	552	148	89	89	64	301	853	18.2		
Other white oaks	202	494	82	82	778	201	148	148	38	388	1,166	22.6		
Other red oaks	519	391	141	141	1,051	369	22	22	51	442	1,493	14.4		
Black locust	621	260	264	264	1,145	312	177	177	222	711	1,856	16.4		
Other commercial hardwoods	734	521	281	281	1,537	20	23	23	68	112	1,648	21.5		
Non-commercial hardwoods	844	434	179	179	1,458	393	602	602	428	1,423	2,881	19.7		
Total hardwoods	8,349	7,973	2,735	2,735	19,057	2,038	1,452	1,452	1,166	4,656	23,713	5.5		
Total, all species	8,899	8,137	2,775	2,775	19,811	2,193	1,496	1,496	1,277	4,966	24,777	5.4		
Sampling error (percent)	8.5	6.9	15.2	15.2	5.5	16.1	19.0	19.0	18.1	11.9	5.4			

PERCENT OF SEEDLINGS, SAPLINGS, AND SHRUBS BY STAND-SIZE

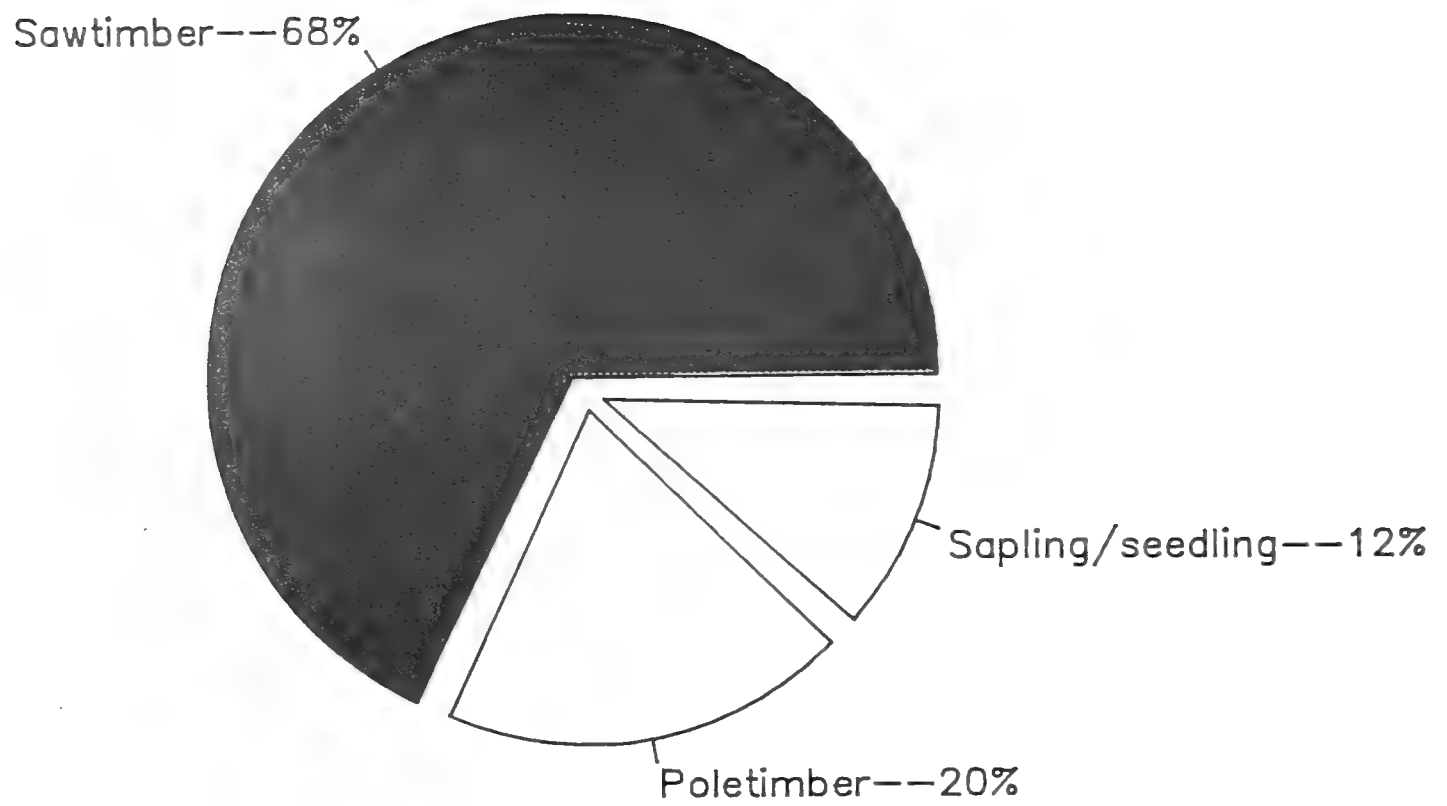


Table 11.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Maryland, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Loblolly pine	74	43	67	0	183	20.4
Other pine species	32	11	30	0	73	17.9
Other softwoods	20	7	6	0	33	21.1
Total coniferous species	127	61	102	0	290	13.9
Réd maple	921	329	336	0	1,586	8.0
Sugar maple	99	33	14	0	146	22.4
Other maple species	112	20	12	0	144	23.7
Alder species	17	4	0	0	22	31.9
Serviceberry	132	73	14	0	219	17.4
Azalea species	53	13	3	0	70	14.7
Common pawpaw	245	0	0	0	245	24.5
Birch species	111	15	17	0	143	27.1
Hickory species	113	40	8	0	161	12.4
Dogwood species	355	82	24	0	461	12.8
American beech	167	25	1	0	193	15.3
Ash species	159	46	43	0	248	17.9
Huckleberry	40	15	4	0	59	18.8
Witch-hazel	40	12	3	0	55	14.5
American holly	242	82	34	0	357	10.1
Laurel species	67	20	6	0	93	15.1
Common spicebush	121	11	2	0	135	13.5
Sweetgum	412	117	111	0	641	9.2
Yellow-poplar	178	26	41	0	245	24.4
Magnolia species	99	11	3	0	113	26.4
Tupelo species	365	123	50	0	538	11.8
Black cherry	482	172	46	0	701	13.5
Other cherry species	24	10	17	0	51	25.6
White oak	166	55	37	0	259	16.1
Chestnut oak	139	14	10	0	163	21.7
Other white oaks	30	5	2	0	37	39.0
Northern red oak	139	29	11	0	179	15.3
Other black oaks	252	87	44	0	383	12.4
Rhododendron species	18	1	0	0	19	39.4
Rose species	66	17	19	0	102	21.5
Rubus species	219	73	89	0	382	7.2
Sassafras	291	98	57	0	446	13.3
Blueberry	340	114	36	0	489	5.7
Elm species	68	12	2	0	82	24.9
Maple-leaved viburnum	61	7	3	0	72	15.2
Arrowwood	72	20	4	0	95	13.1
Other viburnum species	45	13	1	0	59	16.2
Other deciduous species	343	129	110	0	583	9.7
Total deciduous species	6,809	1,955	1,216	0	9,980	3.6
Unknown species	413	97	48	0	558	6.3
Total, all species	7,349	2,113	1,366	0	10,828	3.5
Sampling error (percent)	4.7	11.2	14.7	.0	3.5	

Table 12.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Maryland, 1986
(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Loblolly pine	0	0	97	56	19	11	1	0	0	183	
Other pine species	5	0	28	10	30	0	0	0	0	73	
Other softwoods	6	0	3	5	12	0	0	7	0	33	
Total coniferous species	11	0	128	72	61	11	1	7	0	290	
Red maple	2	0	257	214	925	98	45	45	0	1,586	
Sugar maple	11	0	0	0	95	0	0	40	0	146	
Other maple species	3	0	0	0	101	0	14	27	0	144	
Alder species	0	0	4	0	8	8	1	0	0	22	
Serviceberry	0	0	30	18	153	0	0	18	0	219	
Azalea species	0	0	1	6	58	2	2	1	0	70	
Common pawpaw	0	0	1	3	214	25	0	2	0	245	
Birch species	0	0	0	1	107	0	4	30	0	143	
Hickory species	0	0	6	11	136	1	2	6	0	161	
Dogwood species	1	0	19	41	385	3	0	12	0	461	
American beech	3	0	7	23	157	1	0	3	0	193	
Ash species	6	0	8	11	186	0	6	31	0	248	
Huckleberry	0	0	3	1	52	0	0	3	0	59	
Witch-hazel	0	0	0	2	48	0	0	5	0	55	
American holly	0	0	83	59	176	27	12	1	0	357	
Laurel species	2	0	2	6	76	3	1	2	0	93	
Common spicebush	0	0	1	7	115	1	9	3	0	135	
Sweetgum	0	0	145	155	255	61	24	1	0	641	
Yellow-poplar	0	0	23	12	201	0	6	2	0	245	
Magnolia species	0	0	4	36	61	9	3	0	0	113	
Tupelo species	1	0	64	127	312	24	10	1	0	538	
Black cherry	6	0	25	43	506	14	3	104	0	701	
Other cherry species	0	0	3	4	31	0	6	6	0	51	
White oak	0	0	46	33	168	9	0	3	0	259	
Chestnut oak	1	0	0	9	153	0	0	0	0	163	
Other white oaks	0	0	2	3	13	19	0	0	0	37	
Northern red oak	14	0	9	26	122	1	1	6	0	179	
Other black oaks	0	0	121	82	155	22	2	2	0	383	

Table 12.--Continued

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Rhododendron species	1	0	0	0	12	0	0	7	0	0	19
Rose species	8	0	7	2	74	1	5	3	0	0	102
Rubus species	13	0	23	26	257	7	20	37	0	0	382
Sassafras	19	0	35	31	350	1	2	8	0	0	446
Blueberry	0	0	97	103	237	45	7	0	0	0	489
Elm species	0	0	6	5	62	0	4	4	0	0	82
Maple-leaved viburnum	0	0	2	7	61	0	0	2	0	0	72
Arrowwood	0	0	9	11	63	4	4	4	0	0	95
Other viburnum species	1	0	1	7	43	1	4	1	0	0	59
Other deciduous species	4	0	48	65	412	5	19	30	0	0	583
Total deciduous species	94	0	1,094	1,192	6,542	393	216	449	0	0	9,980
Unknown species	1	0	80	111	284	56	17	8	0	0	558
Total, all species	107	0	1,302	1,374	6,887	460	234	464	0	0	10,828

Table 13.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	183	0	0	1	183	20.4
Other pine species	73	0	0	0	73	17.9
Other softwoods	33	0	0	0	33	21.1
Total coniferous species	289	0	0	1	290	13.9
Red maple	1,379	190	16	1	1,586	8.0
Sugar maple	105	35	6	0	146	22.4
Other maple species	132	10	0	2	144	23.7
Alder species	19	2	0	0	22	31.9
Serviceberry	195	21	2	1	219	17.4
Azalea species	63	5	2	0	70	14.7
Common pawpaw	221	24	0	0	245	24.5
Birch species	131	5	7	0	143	27.1
Hickory species	148	10	3	0	161	12.4
Dogwood species	429	17	15	0	461	12.8
American beech	176	15	2	1	193	15.3
Ash species	212	29	7	0	248	17.9
Huckleberry	52	7	0	0	59	18.8
Witch-hazel	46	6	2	1	55	14.5
American holly	343	4	10	1	357	10.1
Laurel species	91	1	1	0	93	15.1
Common spicebush	122	8	3	2	135	13.5
Sweetgum	601	36	0	4	641	9.2
Yellow-poplar	234	9	2	0	245	24.4
Magnolia species	102	10	0	0	113	26.4
Tupelo species	468	50	14	6	538	11.8
Black cherry	538	151	12	0	701	13.5
Other cherry species	48	1	0	2	51	25.6
White oak	226	13	4	16	259	16.1
Chestnut oak	143	12	7	1	163	21.7
Other white oaks	37	0	0	0	37	39.0
Northern red oak	151	22	6	0	179	15.3
Other black oaks	355	23	5	0	383	12.4
Rhododendron species	19	0	0	0	19	39.4
Rose species	97	5	1	0	102	21.5
Rubus species	359	20	2	0	382	7.2
Sassafras	359	71	16	0	446	13.3
Blueberry	383	88	14	5	489	5.7
Elm species	66	13	3	0	82	24.9
Maple-leaved viburnum	55	14	3	1	72	15.2
Arrowwood	85	7	3	0	95	13.1
Other viburnum species	48	8	3	0	59	16.2
Other deciduous species	476	99	4	4	583	9.7
Total deciduous species	8,719	1,040	174	47	9,980	3.6
Unknown species	442	91	20	6	558	6.3
Total, all species	9,450	1,131	194	54	10,828	3.5
Sampling error (percent)	3.6	9.4	12.7	36.0	3.5	

MARYLAND CENTRAL UNIT TABLES

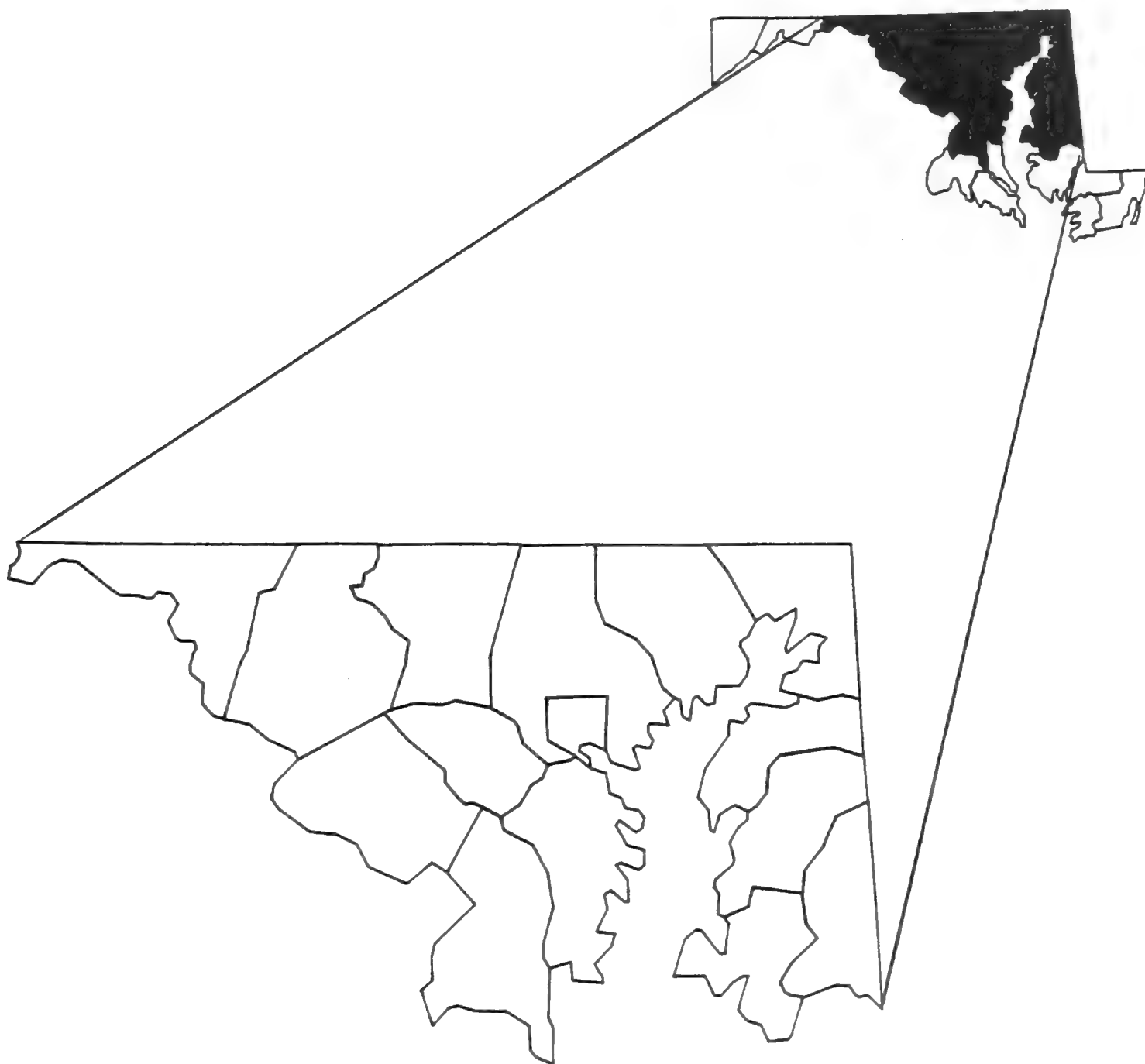


Table 14.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Central Unit, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)		
	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+						
Eastern redcedar	91	102	79	0	0	0	0	0	0	0	0	0	0	0	273	85.8
Serviceberry	68	0	0	0	0	0	0	0	0	0	0	0	0	0	68	65.0
Hickory	2,560	1,725	733	495	275	262	248	45	52	0	0	0	0	0	6,397	17.4
Hackberry	238	228	83	45	0	0	0	0	7	0	0	0	0	0	600	60.9
Dogwood	687	26	0	0	0	0	0	0	0	0	0	0	0	0	713	47.1
Persimmon	118	123	35	11	8	0	0	0	0	0	0	0	0	0	295	42.2
Beech	2,182	568	579	407	321	159	185	142	147	54	0	0	0	0	4,743	28.0
American holly	685	192	96	10	10	0	0	0	0	0	0	0	0	0	992	47.9
Butternut	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40	100.0
Black walnut	185	240	231	155	145	98	15	13	25	0	0	0	0	0	1,107	31.2
Cucumber tree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Sweetbay	124	94	0	0	0	0	0	0	0	0	0	0	0	0	218	67.2
Apple	111	0	0	0	0	0	0	0	0	0	0	0	0	0	111	94.9
Blackgum	3,564	1,080	1,066	686	328	265	72	64	66	11	0	0	0	0	7,203	15.6
Eastern hophornbeam	49	0	0	0	0	0	0	0	0	0	0	0	0	0	49	100.0
Pin cherry	187	141	118	0	10	0	0	0	0	0	0	0	0	0	457	50.1
Black cherry	2,127	1,726	369	338	272	101	64	22	11	0	0	0	0	0	5,029	23.7
Chokecherry	0	0	48	0	0	0	0	0	0	0	0	0	0	0	48	100.0
White oak	3,614	2,825	1,924	1,047	625	503	334	215	249	55	0	0	0	0	11,391	14.5
Swamp white oak	120	96	77	22	44	28	0	0	12	0	0	0	0	0	398	56.3
Scarlet oak	1,018	667	241	584	316	143	119	46	81	0	0	0	0	0	3,214	28.8
Southern red oak	1,618	344	181	245	187	101	41	95	151	13	0	0	0	0	2,975	26.5
Cherrybark oak	0	165	50	0	0	19	0	0	0	0	0	0	0	0	235	100.0
Shingle oak	35	17	0	0	0	0	0	0	0	0	0	0	0	0	52	100.0
Swamp chestnut oak	34	3	93	31	6	9	14	23	48	9	0	0	0	0	269	63.5
Chinkapin oak	0	0	0	97	0	0	0	0	0	0	0	0	0	0	97	100.0
Water oak	0	13	0	39	0	0	0	0	0	0	0	0	0	0	53	78.6
Pin oak	89	175	69	55	39	36	0	28	60	0	0	0	0	0	552	34.8
Willow oak	16	32	194	132	52	75	31	43	34	4	0	0	0	0	616	33.6
Chestnut oak	2,407	2,828	2,032	1,282	1,270	664	414	180	249	10	0	0	0	0	11,335	15.0
Northern red oak	356	1,033	1,120	857	867	448	290	201	289	45	0	0	0	0	5,507	14.6
Post oak	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14	100.0
Black oak	1,033	957	628	548	464	451	399	361	348	51	0	0	0	0	5,241	18.4
Sassafras	858	290	28	33	83	66	0	0	0	0	0	0	0	0	1,359	33.7
Total, all species	24,216	15,691	10,074	7,118	5,323	3,444	2,226	1,495	1,829	253	0	0	0	0	71,669	6.7
Sampling error (percent)	11.0	9.6	9.9	7.9	9.3	8.3	12.1	12.4	11.6	21.3	0	0	0	0	6.7	

Table 15.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Central Unit, Maryland, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type				Total stems
	Nuts	Other seeds	Berries	Other species	
Sawtimber:					
Shrubs	0	83,100	563,493	134,139	780,732
Saplings	34,361	98,574	108,301	1,245	242,480
Total sawtimber	34,361	181,674	671,794	135,383	1,023,212
Poletimber:					
Shrubs	0	16,247	132,965	28,586	177,799
Saplings	15,043	40,018	14,829	0	69,890
Total poletimber	15,043	56,265	147,794	28,586	247,689
Sapling/seedling:					
Shrubs	0	3,811	76,400	5,590	85,801
Saplings	865	31,718	6,562	0	39,145
Total sapling/seedling	865	35,529	82,962	5,590	124,945
Total, all classes	50,268	273,468	902,550	169,560	1,395,846

Table 16.--Number of standing dead trees on timberland by species, condition class, and diameter class, Central Unit, Maryland, 1986
(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (Inches at breast height)				Diameter class (Inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
White/red pine	29	0	0	29	0	0	0	0	29	100.0
Loblolly pine	19	34	0	53	244	0	0	244	297	40.9
Virginia pine	519	15	0	533	201	28	0	229	762	35.3
Other softwoods	0	0	5	5	0	0	12	12	17	100.0
Total softwoods	566	48	5	620	445	28	12	485	1,105	28.2
Red maple	54	0	0	54	136	15	0	150	204	61.5
Hickory	91	18	0	108	142	81	13	236	345	70.8
Sweetgum	18	0	0	18	195	10	9	215	233	49.6
Yellow-poplar	0	0	0	0	76	6	7	90	90	57.6
Blackgum	50	35	0	85	18	0	0	18	103	47.0
Ash-walnut-cherry	19	0	0	19	579	6	9	594	614	47.2
Select white oaks	202	0	20	222	514	6	9	529	751	32.1
Select red oaks	111	49	16	176	159	31	31	220	396	26.5
Other white oaks	261	119	13	393	289	9	10	308	702	41.3
Other red oaks	542	35	42	619	243	49	25	317	936	35.8
Black locust	147	0	0	147	351	69	42	462	609	35.1
Other commercial hardwoods	0	0	0	0	171	38	0	209	209	48.8
Non-commercial hardwoods	84	0	18	102	765	130	34	929	1,031	27.4
Total hardwoods	1,577	257	110	1,944	3,640	450	189	4,280	6,224	12.5
Total, all species	2,143	306	115	2,564	4,085	478	201	4,765	7,329	11.0
Sampling error (percent)	18.8	49.7	36.0	18.6	14.7	23.9	20.7	13.2	11.0	

Table 17.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class, Central Unit, Maryland, 1986

Species	(In thousands of trees)										Sampling error (percent)
	Live					Dead					
	No cull	Intact live top	Broken top	Dead top	Total live	Intact top	Broken top	Total dead	Total all trees		
White/red pine	14	0	0	0	14	0	0	0	14	100.0	
Loblolly pine	9	0	0	0	9	0	13	13	23	71.9	
Virginia pine	101	0	0	0	101	0	14	14	115	66.2	
Other yellow pines	67	0	0	0	67	0	0	0	67	100.0	
Other softwoods	71	0	0	0	71	0	12	12	83	86.8	
Total softwoods	263	0	0	0	263	0	40	40	303	41.8	
Red maple	1,528	532	118	0	2,178	0	28	28	2,206	15.9	
Sugar maple	13	17	0	0	30	0	0	0	30	71.2	
Hickory	218	9	0	0	226	0	24	24	250	39.3	
Beech	181	66	18	21	287	0	0	0	287	30.8	
Sweetgum	414	9	5	0	428	0	117	117	545	33.7	
Yellow-poplar	582	175	0	0	757	0	41	41	798	23.6	
Blackgum	439	93	0	0	532	35	0	35	567	29.4	
Ash-walnut-cherry	609	196	13	0	818	0	332	332	1,150	31.9	
Select white oaks	333	9	0	0	343	52	124	177	519	28.7	
Select red oaks	257	17	0	0	274	21	118	140	414	30.4	
Other white oaks	183	15	0	0	199	8	102	109	308	27.5	
Other red oaks	307	44	0	0	351	95	106	200	552	23.7	
Black locust	276	159	15	12	461	56	277	333	794	27.8	
Other commercial hardwoods	605	96	18	0	719	0	28	28	747	35.9	
Non-commercial hardwoods	415	32	29	48	524	95	539	634	1,159	31.3	
Total hardwoods	6,361	1,470	216	80	8,128	363	1,836	2,199	10,327	8.8	
Total, all species	6,625	1,470	216	80	8,391	363	1,876	2,238	10,630	8.7	
Sampling error (percent)	10.2	18.0	31.9	66.5	9.0	37.7	22.2	19.5	8.7		

Table 18.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Central Unit, Maryland, 1986

(In thousands of trees)

Species	Live trees			Dead trees			Total all trees	Sampling error (percent)
	One or more small	One or more large	Multiple large or small	Total live	One or more small	One or more large		
White/red pine	14	0	0	14	0	0	14	100.0
Loblolly pine	9	0	0	9	13	0	23	71.9
Virginia pine	101	0	0	101	14	0	115	66.2
Other yellow pines	67	0	0	67	0	0	67	100.0
Other softwoods	71	0	0	71	0	12	83	86.8
Total softwoods	263	0	0	263	28	12	303	41.8
Red maple	1,151	802	224	2,178	19	0	2,206	15.9
Sugar maple	13	17	0	30	0	0	30	71.2
Hickory	138	64	24	226	0	0	250	39.3
Beech	150	74	63	287	0	0	287	30.8
Sweetgum	81	341	5	428	100	18	545	33.7
Yellow-poplar	289	428	40	757	21	12	798	23.6
Blackgum	193	269	69	532	35	0	567	29.4
Ash-walnut-cherry	551	258	9	818	100	119	1,150	31.9
Select white oaks	147	119	77	343	82	74	519	28.7
Select red oaks	151	95	28	274	71	30	414	30.4
Other white oaks	57	112	30	199	35	40	308	27.5
Other red oaks	184	123	44	351	174	0	552	23.7
Black locust	260	131	71	461	173	46	794	27.8
Other commercial hardwoods	471	202	45	719	0	8	747	35.9
Non-commercial hardwoods	360	164	0	524	157	265	1,159	31.3
Total hardwoods	4,199	3,199	729	8,128	967	611	10,327	8.8
Total, all species	4,463	3,199	729	8,391	995	611	10,630	8.7
Sampling error (percent)	13.2	11.1	18.2	9.0	25.2	31.2	19.5	8.7

Table 19.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Central Unit, Maryland, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Loblolly pine	1	2	0	0	3	66.2
Other pine species	6	3	15	0	24	31.7
Other softwoods	3	4	1	0	8	38.8
Total coniferous species	11	9	16	0	35	24.4
Red maple	343	72	61	0	477	14.1
Sugar maple	0	3	0	0	3	73.1
Other maple species	23	1	11	0	36	45.7
Alder species	10	1	0	0	11	44.5
Serviceberry	24	15	0	0	40	33.7
Azalea species	30	4	0	0	34	20.7
Common pawpaw	81	0	0	0	81	49.4
Birch species	60	2	1	0	62	54.3
Hickory species	74	23	1	0	98	18.1
Dogwood species	222	22	2	0	246	15.2
American beech	87	13	0	0	101	25.4
Ash species	69	9	21	0	100	22.8
Huckleberry	11	0	0	0	11	40.8
Witch-hazel	6	0	0	0	6	51.5
American holly	36	27	1	0	64	32.7
Laurel species	35	11	3	0	49	22.0
Common spicebush	98	11	2	0	111	15.6
Sweetgum	170	50	38	0	258	17.2
Yellow-poplar	129	25	13	0	167	33.4
Magnolia species	30	2	0	0	32	59.3
Tupelo species	238	74	2	0	314	16.8
Black cherry	276	91	23	0	390	22.1
Other cherry species	17	4	13	0	35	33.8
White oak	67	10	8	0	86	24.7
Chestnut oak	103	8	0	0	111	30.3
Other white oaks	16	1	0	0	17	75.4
Northern red oak	42	5	0	0	48	28.1
Other black oaks	90	17	5	0	113	20.4
Rhododendron species	1	0	0	0	1	100.0
Rose species	62	15	17	0	94	23.2
Rubus species	134	35	49	0	218	10.4
Sassafras	125	22	13	0	160	16.9
Blueberry	121	35	0	0	157	12.8
Elm species	52	5	2	0	59	31.8
Maple-leaved viburnum	26	4	0	0	30	27.4
Arrowwood	54	11	3	0	67	16.3
Other viburnum species	36	9	0	0	45	19.5
Other deciduous species	115	50	23	0	188	18.3
Total deciduous species	3,115	690	315	0	4,120	6.6
Unknown species	141	27	5	0	174	11.6
Total, all species	3,267	727	336	0	4,330	6.4
Sampling error (percent)	7.9	22.6	24.4	.0	6.4	

Table 20.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Central Unit, Maryland, 1986

(In millions of stems)

Species	Forest-type group										All groups	
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch			
Loblolly pine	0	0	0	1	2	0	0	0	0	0	0	3
Other pine species	3	0	12	0	9	0	0	0	0	0	0	24
Other softwoods	0	0	1	2	5	0	0	0	0	0	0	8
Total coniferous species	3	0	13	3	17	0	0	0	0	0	0	35
Red maple	0	0	68	69	300	11	21	8	0	0	0	477
Sugar maple	0	0	0	0	3	0	0	0	0	0	0	3
Other maple species	0	0	0	0	12	0	14	10	0	0	0	36
Alder species	0	0	0	0	6	4	1	0	0	0	0	11
Serviceberry	0	0	2	6	32	0	0	0	0	0	0	40
Azalea species	0	0	0	1	31	1	1	0	0	0	0	34
Common pawpaw	0	0	0	0	79	0	0	2	0	0	0	81
Birch species	0	0	0	1	56	0	4	0	0	0	0	62
Hickory species	0	0	3	5	88	0	1	1	0	0	0	98
Dogwood species	1	0	13	19	212	0	0	1	0	0	0	246
American beech	0	0	2	5	93	0	0	0	0	0	0	101
Ash species	0	0	0	5	89	0	4	3	0	0	0	100
Huckleberry	0	0	0	1	10	0	0	0	0	0	0	11
Witch-hazel	0	0	0	0	6	0	0	0	0	0	0	6
American holly	0	0	11	9	42	0	1	1	0	0	0	64
Laurel species	0	0	1	4	44	0	0	0	0	0	0	49
Common spicebush	0	0	0	6	98	0	5	2	0	0	0	111
Sweetgum	0	0	34	55	141	10	18	1	0	0	0	258
Yellow-poplar	0	0	0	5	160	0	0	2	0	0	0	167
Magnolia species	0	0	0	5	27	0	0	0	0	0	0	32
Tupelo species	1	0	30	53	220	3	7	0	0	0	0	314
Black cherry	0	0	16	39	309	0	3	22	0	0	0	390
Other cherry species	0	0	1	3	22	0	6	3	0	0	0	35
White oak	0	0	22	14	47	3	0	0	0	0	0	86
Chestnut oak	0	0	0	2	109	0	0	0	0	0	0	111
Other white oaks	0	0	1	0	4	13	0	0	0	0	0	17
Northern red oak	0	0	3	9	35	0	0	0	0	0	0	48
Other black oaks	0	0	16	37	60	0	1	0	0	0	0	113

Table 20.--Continued

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Rhododendron species	0	0	0	0	1	0	0	0	0	0	1
Rose species	8	0	5	1	72	0	5	3	0	0	94
Rubus species	7	0	15	11	158	0	13	14	0	0	218
Sassafras	0	0	2	20	131	0	0	7	0	0	160
Blueberry	0	0	17	26	104	7	1	0	0	0	157
Elm species	0	0	0	5	50	0	1	2	0	0	59
Maple-leaved viburnum	0	0	1	3	26	0	0	0	0	0	30
Arrowwood	0	0	4	7	53	1	2	1	0	0	67
Other viburnum species	0	0	0	6	36	0	2	0	0	0	45
Other deciduous species	0	0	1	14	162	0	6	5	0	0	188
Total deciduous species	16	0	267	449	3,128	53	117	89	0	0	4,120
Unknown species	0	0	8	20	129	10	5	0	0	0	174
Total, all species	19	0	289	473	3,273	63	123	89	0	0	4,330

Table 21.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Central Unit, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	3	0	0	0	3	66.2
Other pine species	24	0	0	0	24	31.7
Other softwoods	8	0	0	0	8	38.8
Total coniferous species	35	0	0	0	35	24.4
Red maple	416	61	0	0	477	14.1
Sugar maple	3	0	0	0	3	73.1
Other maple species	29	6	0	0	36	45.7
Alder species	11	0	0	0	11	44.5
Serviceberry	37	2	0	0	40	33.7
Azalea species	30	4	0	0	34	20.7
Common pawpaw	66	15	0	0	81	49.4
Birch species	62	0	0	0	62	54.3
Hickory species	88	7	2	0	98	18.1
Dogwood species	223	13	10	0	246	15.2
American beech	95	3	2	0	101	25.4
Ash species	90	7	2	0	100	22.8
Huckleberry	11	0	0	0	11	40.8
Witch-hazel	5	0	0	1	6	51.5
American holly	63	1	0	0	64	32.7
Laurel species	48	1	0	0	49	22.0
Common spicebush	99	7	3	2	111	15.6
Sweetgum	246	13	0	0	258	17.2
Yellow-poplar	156	9	2	0	167	33.4
Magnolia species	28	4	0	0	32	59.3
Tupelo species	263	38	12	1	314	16.8
Black cherry	325	61	3	0	390	22.1
Other cherry species	35	0	0	0	35	33.8
White oak	64	7	0	16	86	24.7
Chestnut oak	101	5	4	1	111	30.3
Other white oaks	17	0	0	0	17	75.4
Northern red oak	43	3	2	0	48	28.1
Other black oaks	110	3	0	0	113	20.4
Rhododendron species	1	0	0	0	1	100.0
Rose species	90	3	1	0	94	23.2
Rubus species	209	7	1	0	218	10.4
Sassafras	139	20	1	0	160	16.9
Blueberry	128	23	2	3	157	12.8
Elm species	47	10	1	0	59	31.8
Maple-leaved viburnum	19	10	1	0	30	27.4
Arrowwood	60	5	1	0	67	16.3
Other viburnum species	36	7	2	0	45	19.5
Other deciduous species	163	24	1	0	188	18.3
Total deciduous species	3,660	380	56	24	4,120	6.6
Unknown species	134	31	5	4	174	11.6
Total, all species	3,829	411	61	28	4,330	6.4
Sampling error (percent)	6.5	17.7	23.6	62.1	6.4	

MARYLAND
LOWER EASTERN SHORE
UNIT TABLES

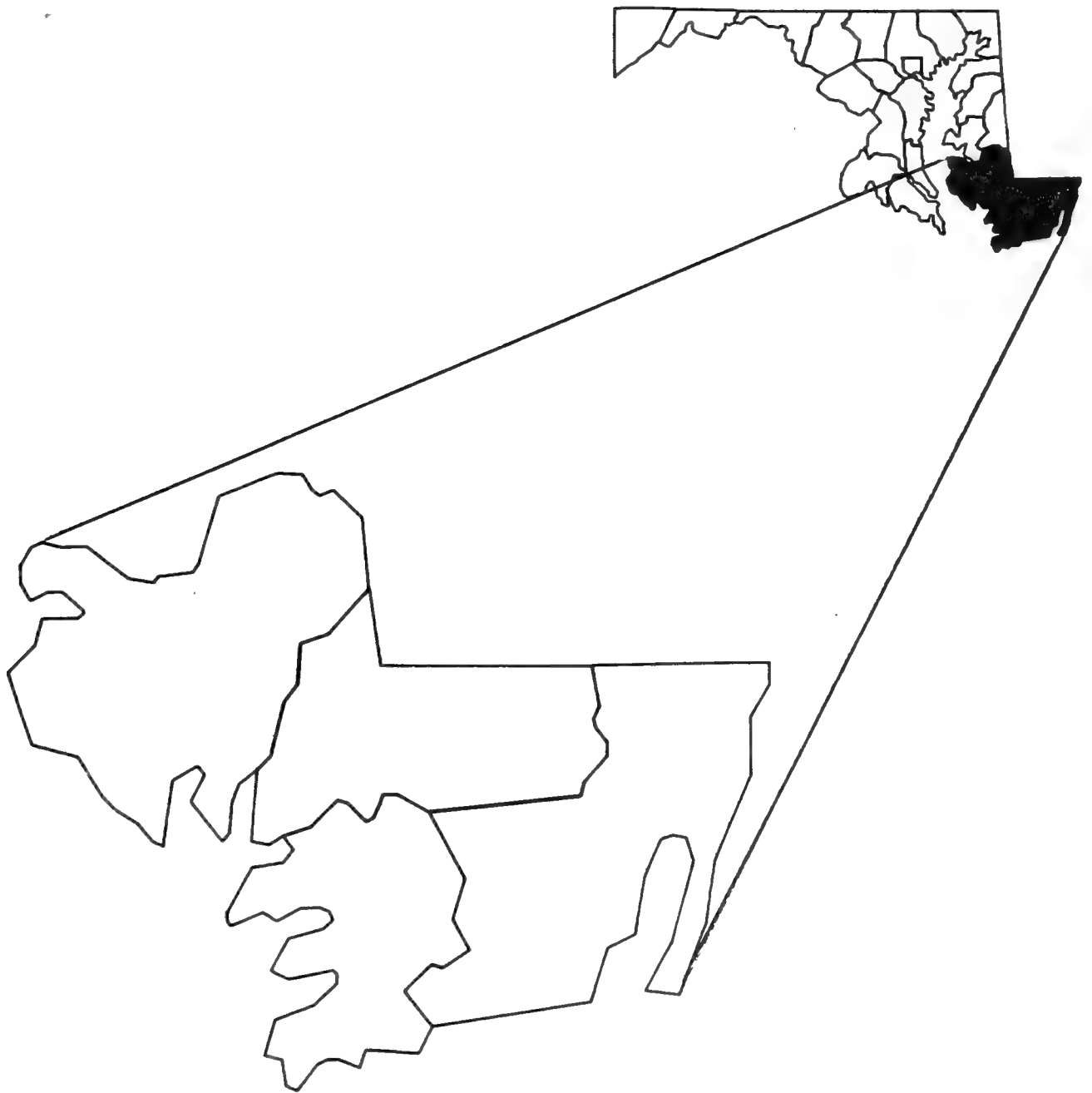


Table 22.--Number of live nut- and fruit-producing trees on timberland by species and diameter class,
Lower Eastern Shore Unit, Maryland, 1986

(In thousands of trees)

Species	Diameter class (Inches at breast height)														All classes	Sampling error (percent)
	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+						
Serviceberry	0	41	21	0	0	0	0	0	0	0	0	0	0	0	62	100.0
Hickory	492	140	85	21	0	0	0	0	0	0	0	0	0	0	737	71.8
Dogwood	175	0	0	0	0	0	0	0	0	0	0	0	0	0	175	66.5
Persimmon	53	38	0	0	8	0	0	0	0	0	0	0	0	0	99	74.7
Beech	154	61	251	125	86	35	0	11	5	0	0	0	0	0	727	46.5
American holly	2,276	789	147	137	27	0	6	18	0	0	0	0	0	0	3,401	18.8
Butternut	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17	100.0
Black walnut	0	0	75	0	0	0	0	0	0	0	0	0	0	0	75	100.0
Magnolia	142	0	0	0	0	0	0	0	0	0	0	0	0	0	142	100.0
Sweetbay	384	212	16	30	16	0	0	0	0	0	0	0	0	0	659	58.3
Blackgum	1,985	1,246	938	628	262	154	90	73	55	0	0	0	0	0	5,431	18.0
Black cherry	242	57	15	9	9	4	9	0	0	0	0	0	0	0	346	81.7
White oak	1,831	712	1,015	833	412	265	92	36	23	10	0	0	0	0	5,230	24.3
Swamp white oak	119	78	65	15	40	27	0	7	7	3	0	0	0	0	363	34.0
Scarlet oak	10	17	40	24	0	7	0	0	0	0	0	0	0	0	97	45.7
Southern red oak	575	483	408	407	248	230	116	22	26	7	0	0	0	0	2,521	15.2
Cherrybark oak	0	0	16	8	15	0	9	0	0	0	0	0	0	0	49	70.7
Swamp chestnut oak	136	226	33	116	33	26	23	35	39	0	0	0	0	0	668	40.2
Water oak	1,149	742	305	131	119	65	19	0	0	0	0	0	0	0	2,532	23.4
Pin oak	5	0	25	9	0	0	0	4	0	0	0	0	0	0	44	62.6
Willow oak	261	114	100	94	75	38	17	36	21	3	0	0	0	0	758	24.1
Northern red oak	19	9	25	12	14	15	0	0	7	0	0	0	0	0	101	43.6
Post oak	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19	100.0
Black oak	95	20	41	19	38	15	0	0	0	0	0	0	0	0	228	47.6
Sassafras	187	0	0	14	0	0	0	0	0	0	0	0	0	0	200	49.9
Total, all species	10,292	5,002	3,640	2,631	1,405	882	383	242	183	24	24,684	8.5				
Sampling error (percent)	12.3	12.2	12.4	14.3	12.7	15.4	19.2	24.2	25.7	55.6	8.5					

Table 23.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Lower Eastern Shore Unit, Maryland, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type			Total stems	
	Nuts	Other seeds	Berries		Other species
Sawtimber:					
Shrubs	0	19,239	138,386	212,625	370,250
Saplings	12,601	59,514	37,175	0	109,290
Total sawtimber	12,601	78,753	175,561	212,625	479,540
Poletimber:					
Shrubs	0	9,957	60,861	62,690	133,507
Saplings	3,585	62,652	17,705	0	83,942
Total poletimber	3,585	72,609	78,566	62,690	217,450
Sapling/seedling:					
Shrubs	0	3,584	50,772	46,531	100,886
Saplings	1,634	32,135	3,890	0	37,658
Total sapling/seedling	1,634	35,718	54,661	46,531	138,545
Total, all classes	17,820	187,080	308,789	321,845	835,534

Table 24.--Number of standing dead trees on timberland by species, condition class, and diameter class, Lower Eastern Shore Unit, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Intact top					Broken top						
	Diameter class (inches at breast height)					Diameter class (inches at breast height)						
	5.0-10.9	11.0-14.9	15+	Total		5.0-10.9	11.0-14.9	15+	Total			
Loblolly pine	640	16	5	661	1,012	16	18	1,046	1,708	28.1		
Other yellow pines	118	0	0	118	0	0	0	0	118	100.0		
Other softwoods	0	0	0	0	58	0	0	58	58	100.0		
Total softwoods	757	16	5	779	1,070	16	18	1,105	1,884	27.6		
Red maple	168	16	0	184	49	17	24	89	273	49.6		
Sweetgum	0	0	0	0	108	10	8	126	126	53.2		
Blackgum	0	0	0	0	0	0	12	12	12	100.0		
Select white oaks	81	18	0	99	428	23	27	478	577	30.6		
Other red oaks	132	7	15	155	261	35	33	330	485	32.7		
Other commercial hardwoods	0	0	0	0	33	0	0	33	33	100.0		
Non-commercial hardwoods	49	27	48	124	267	248	64	579	703	25.7		
Total hardwoods	430	69	63	562	1,146	333	169	1,647	2,210	14.3		
Total, all species	1,187	86	68	1,341	2,216	349	187	2,752	4,093	14.0		
Sampling error (percent)	29.1	44.5	40.1	25.9	18.6	26.0	26.8	16.1	14.0			

Table 25.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class,
Lower Eastern Shore Unit, Maryland, 1986

(In thousands of trees)

Species	Live			Dead			Total all trees	Sampling error (percent)
	No cull	Intact live top	Broken top	Dead top	Intact top	Broken top		
Loblolly pine	315	0	0	0	20	110	445	29.0
Other softwoods	27	0	0	0	0	0	27	72.3
Total softwoods	343	0	0	0	20	110	473	27.7
Red maple	1,113	343	53	30	56	27	1,623	17.1
Hickory	28	0	0	0	0	0	28	76.7
Beech	60	21	0	0	0	0	82	64.1
Sweetgum	353	73	0	0	0	77	504	21.3
Yellow-poplar	26	8	0	0	0	0	34	49.3
Blackgum	355	45	9	0	0	8	418	30.2
Ash-walnut-cherry	43	49	0	0	0	0	92	76.5
Select white oaks	137	10	0	0	0	76	223	39.3
Select red oaks	21	0	0	0	0	0	21	60.0
Other red oaks	294	88	0	11	8	203	605	25.8
Other commercial hardwoods	195	33	0	0	0	0	228	62.7
Non-commercial hardwoods	35	67	0	0	21	325	448	24.6
Total hardwoods	2,662	738	62	41	85	717	4,306	11.1
Total, all species	3,005	738	62	41	105	827	4,779	10.1
Sampling error (percent)	14.5	32.8	54.1	58.4	51.1	22.2	21.7	10.1

Table 26.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Lower Eastern Shore Unit, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Live trees					Dead trees						
	One or more small	One or more large	Multiple large or small	Total live	One or more small	One or more large	Multiple large or small	Total dead	Total all trees	Sampling error (percent)		
Loblolly pine	195	100	19	315	84	0	47	130	445	29.0		
Other softwoods	17	11	0	27	0	0	0	0	27	72.3		
Total softwoods	212	111	19	343	84	0	47	130	473	27.7		
Red maple	440	803	296	1,540	63	4	16	83	1,623	17.1		
Hickory	20	8	0	28	0	0	0	0	28	76.7		
Beech	60	11	11	82	0	0	0	0	82	64.1		
Sweetgum	167	200	59	426	69	8	0	77	504	21.3		
Yellow-poplar	0	34	0	34	0	0	0	0	34	49.3		
Blackgum	68	331	10	410	0	8	0	8	418	30.2		
Ash-walnut-cherry	43	22	27	92	0	0	0	0	92	76.5		
Select white oaks	26	109	12	147	47	28	0	76	223	39.3		
Select red oaks	12	0	9	21	0	0	0	0	21	60.0		
Other red oaks	202	147	44	393	188	15	8	211	605	25.8		
Other commercial hardwoods	14	171	43	228	0	0	0	0	228	62.7		
Non-commercial hardwoods	21	81	0	102	125	109	111	346	448	24.6		
Total hardwoods	1,074	1,917	512	3,503	492	174	136	802	4,306	11.1		
Total, all species	1,286	2,028	532	3,846	576	174	183	933	4,779	10.1		
Sampling error (percent)	19.6	16.6	47.2	11.7	28.6	24.3	26.4	21.7	10.1			

Table 27.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Lower Eastern Shore Unit, Maryland, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Loblolly pine	53	40	62	0	155	21.8
Other pine species	0	0	3	0	3	87.3
Other softwoods	2	0	1	0	3	45.7
Total coniferous species	56	40	65	0	161	21.1
Red maple	131	125	201	0	459	15.3
Alder species	3	3	0	0	6	71.5
Serviceberry	7	3	3	0	13	43.7
Azalea species	13	5	2	0	20	25.4
Hickory species	2	0	0	0	2	81.6
Dogwood species	7	10	0	0	17	65.2
American beech	3	0	0	0	3	59.6
Ash species	2	0	0	0	2	73.8
American holly	93	41	25	0	159	15.2
Laurel species	2	1	0	0	3	52.2
Common spicebush	2	0	0	0	2	71.8
Sweetgum	132	48	55	0	235	13.4
Yellow-poplar	3	0	6	0	9	74.0
Magnolia species	49	5	3	0	57	35.3
Tupelo species	71	31	36	0	139	22.4
Black cherry	10	2	2	0	14	35.9
Other cherry species	2	0	0	0	2	100.0
White oak	7	13	3	0	22	39.6
Other white oaks	5	4	2	0	10	44.1
Northern red oak	0	0	0	0	0	100.0
Other black oaks	57	29	16	0	102	21.3
Rose species	2	0	1	0	4	47.6
Rubus species	7	2	19	0	28	25.5
Sassafras	19	3	19	0	41	22.7
Blueberry	119	52	25	0	196	7.1
Elm species	0	6	0	0	6	100.0
Maple-leaved viburnum	1	0	0	0	1	100.0
Arrowwood	3	4	1	0	8	33.7
Other viburnum species	1	1	0	0	1	70.9
Other deciduous species	27	8	22	0	56	15.7
Total deciduous species	781	398	442	0	1,621	7.2
Unknown species	221	57	35	0	314	8.3
Total, all species	1,058	496	542	0	2,096	6.5
Sampling error (percent)	9.6	18.6	24.1	.0	6.5	

Table 28.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Lower Eastern Shore Unit, Maryland, 1986

Species	(In millions of stems)											All groups
	Forest-type group											
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch			
Loblolly pine	0	0	80	52	14	9	1	0	0	0	0	155
Other pine species	0	0	3	0	0	0	0	0	0	0	0	3
Other softwoods	0	0	1	3	0	0	0	0	0	0	0	3
Total coniferous species	0	0	83	55	14	9	1	0	0	0	0	161
Red maple	0	0	140	117	113	69	20	0	0	0	0	459
Alder species	0	0	3	0	0	3	0	0	0	0	0	6
Serviceberry	0	0	8	0	5	0	0	0	0	0	0	13
Azalea species	0	0	1	5	12	1	1	0	0	0	0	20
Hickory species	0	0	0	2	0	0	0	0	0	0	0	2
Dogwood species	0	0	0	6	11	0	0	0	0	0	0	17
American beech	0	0	2	1	1	0	0	0	0	0	0	3
Ash species	0	0	2	0	0	0	1	0	0	0	0	2
American holly	0	0	54	26	53	20	6	0	0	0	0	159
Laurel species	0	0	1	0	2	1	0	0	0	0	0	3
Common spicebush	0	0	1	0	0	0	1	0	0	0	0	2
Sweetgum	0	0	70	67	50	42	5	0	0	0	0	235
Yellow-poplar	0	0	0	2	1	0	6	0	0	0	0	9
Magnolia species	0	0	4	31	16	3	3	0	0	0	0	57
Tupelo species	0	0	29	63	27	19	2	0	0	0	0	139
Black cherry	0	0	7	3	4	0	0	0	0	0	0	14
Other cherry species	0	0	2	0	0	0	0	0	0	0	0	2
White oak	0	0	2	8	5	6	0	0	0	0	0	22
Other white oaks	0	0	1	2	4	4	0	0	0	0	0	10
Northern red oak	0	0	0	0	0	0	0	0	0	0	0	0
Other black oaks	0	0	33	35	27	5	1	0	0	0	0	102
Rose species	0	0	1	1	0	1	1	0	0	0	0	4
Rubus species	0	0	3	7	9	4	6	0	0	0	0	28
Sassafras	0	0	15	7	16	1	2	0	0	0	0	41
Blueberry	0	0	54	46	59	31	6	0	0	0	0	196
Elm species	0	0	6	0	0	0	0	0	0	0	0	6
Maple-leaved viburnum	0	0	0	1	0	0	0	0	0	0	0	1
Arrowwood	0	0	2	2	5	1	0	0	0	0	0	8
Other viburnum species	0	0	0	0	1	0	1	0	0	0	0	1
Other deciduous species	0	0	14	9	26	5	2	0	0	0	0	56
Total deciduous species	0	0	455	440	446	217	63	0	0	0	0	1,621
Unknown species	0	0	64	76	120	42	11	0	0	0	0	314
Total, all species	0	0	602	571	580	267	76	0	0	0	0	2,096

Table 29.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Lower Eastern Shore Unit, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	155	0	0	1	155	21.8
Other pine species	3	0	0	0	3	87.3
Other softwoods	3	0	0	0	3	45.7
Total coniferous species	161	0	0	1	161	21.1
Red maple	411	44	2	1	459	15.3
Alder species	4	2	0	0	6	71.5
Serviceberry	13	0	0	0	13	43.7
Azalea species	17	1	2	0	20	25.4
Hickory species	2	0	0	0	2	81.6
Dogwood species	12	0	5	0	17	65.2
American beech	3	0	0	0	3	59.6
Ash species	2	0	0	0	2	73.8
American holly	146	2	10	1	159	15.2
Laurel species	3	0	0	0	3	52.2
Common spicebush	2	0	0	0	2	71.8
Sweetgum	211	20	0	4	235	13.4
Yellow-poplar	9	0	0	0	9	74.0
Magnolia species	50	7	0	0	57	35.3
Tupelo species	124	10	0	4	139	22.4
Black cherry	12	1	1	0	14	35.9
Other cherry species	0	0	0	2	2	100.0
White oak	17	2	3	0	22	39.6
Other white oaks	10	0	0	0	10	44.1
Northern red oak	0	0	0	0	0	100.0
Other black oaks	88	10	3	0	102	21.3
Rose species	3	1	0	0	4	47.6
Rubus species	25	3	0	0	28	25.5
Sassafras	33	4	4	0	41	22.7
Blueberry	131	52	11	2	196	7.1
Elm species	4	2	0	0	6	100.0
Maple-leaved viburnum	0	1	0	0	1	100.0
Arrowwood	7	1	0	0	8	33.7
Other viburnum species	1	0	0	0	1	70.9
Other deciduous species	52	3	1	1	56	15.7
Total deciduous species	1,396	167	43	15	1,621	7.2
Unknown species	242	58	12	2	314	8.3
Total, all species	1,798	225	55	17	2,096	6.5
Sampling error (percent)	6.7	14.0	23.0	42.9	6.5	

MARYLAND SOUTHERN UNIT TABLES

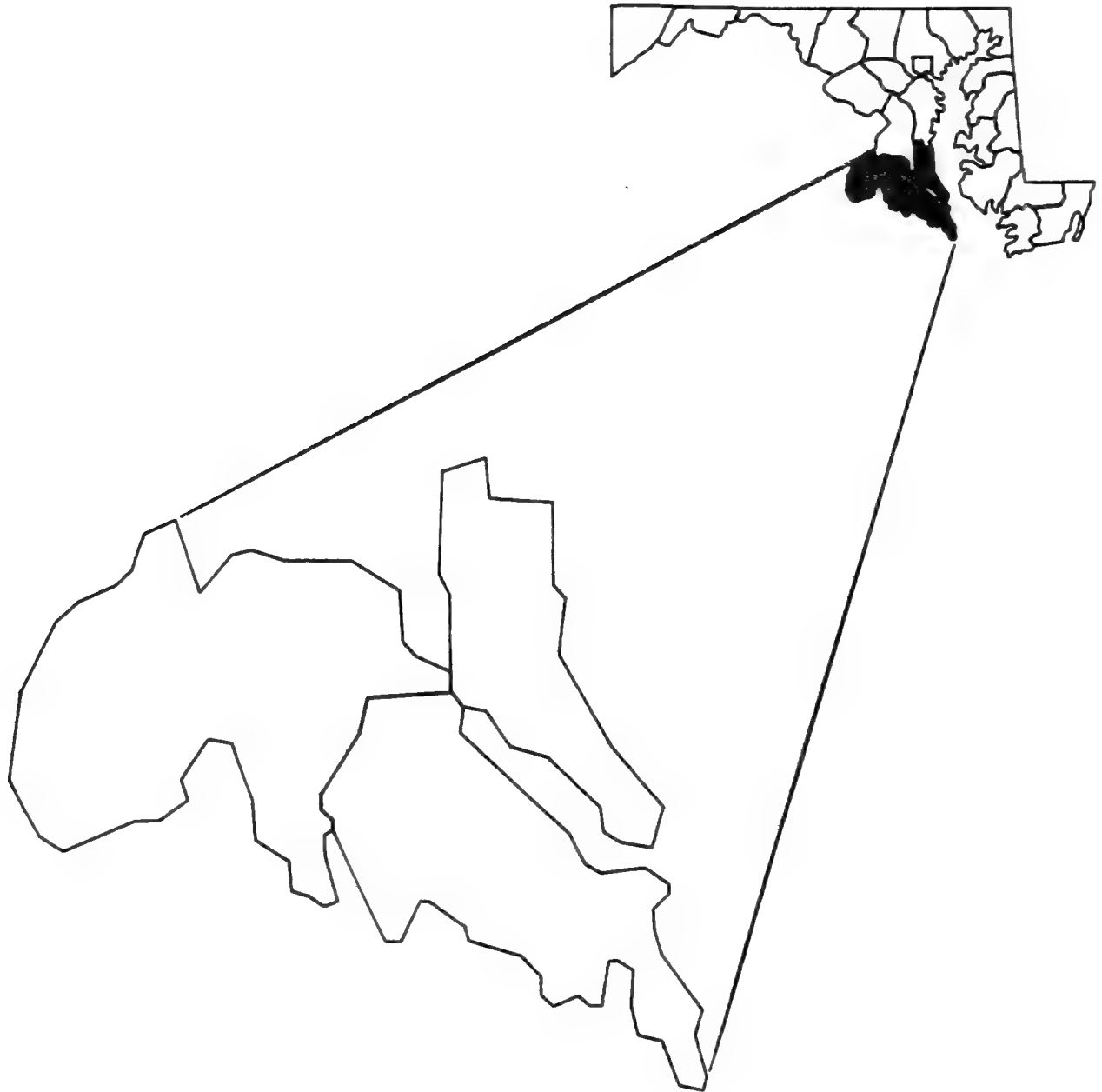


Table 31.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Southern Unit, Maryland, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type				Total stems
	Nuts	Other seeds	Berries	Other species	
Sawtimber:					
Shrubs	0	25,669	167,555	30,229	223,454
Saplings	28,486	60,769	47,094	0	136,348
Total sawtimber	28,486	86,438	214,650	30,229	359,802
Poletimber:					
Shrubs	0	1,025	24,481	3,143	28,650
Saplings	6,221	9,527	2,848	0	18,596
Total poletimber	6,221	10,552	27,329	3,143	47,246
Sapling/seedling:					
Shrubs	0	369	16,165	4,077	20,611
Saplings	1,477	7,857	2,707	0	12,041
Total sapling/seedling	1,477	8,226	18,871	4,077	32,652
Total, all classes	36,184	105,216	260,851	37,449	439,700

Table 32.--Number of standing dead trees on timberland by species, condition class, and diameter class, Southern Unit, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	40	6	0	46	103	0	21	123	169	44.1
Virginia pine	122	0	0	122	248	0	0	248	370	44.2
Other softwoods	7	0	0	7	0	0	0	0	7	100.0
Total softwoods	169	6	0	175	351	0	21	371	547	33.8
Red maple	0	0	0	0	0	7	7	14	14	70.7
Hickory	84	15	0	100	11	0	0	11	111	65.7
Sweetgum	68	0	0	68	30	23	15	67	135	78.9
Yellow-poplar	13	0	6	19	20	21	0	41	60	46.9
Blackgum	13	0	0	13	15	7	0	22	35	60.2
Ash-walnut-cherry	0	0	6	6	0	6	0	6	13	100.0
Select white oaks	13	0	0	13	26	0	5	31	44	52.1
Select red oaks	0	0	5	5	43	26	15	84	89	57.4
Other white oaks	0	0	0	0	0	22	0	22	22	100.0
Other red oaks	13	6	6	25	58	13	14	85	111	44.0
Black locust	56	0	0	56	36	0	0	36	93	56.8
Other commercial hardwoods	0	0	0	0	13	27	7	48	48	64.5
Non-commercial hardwoods	0	0	0	0	20	6	0	26	26	57.7
Total hardwoods	260	21	23	305	273	159	63	495	800	21.0
Total, all species	429	27	23	480	624	159	84	867	1,347	17.1
Sampling error (percent)	30.3	64.3	59.8	27.0	26.6	30.2	32.4	20.3	17.1	

Table 33.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class, Southern Unit, Maryland, 1986

(In thousands of trees)

Species	Live				Dead			Total all trees	Sampling error (percent)
	No cull	Intact live top	Broken top	Dead top	Total Live	Intact top	Broken top		
Loblolly pine	30	0	0	0	30	0	15	45	53.7
Virginia pine	34	0	0	0	34	0	48	82	56.5
Other softwoods	0	18	0	0	18	0	0	18	100.0
Total softwoods	64	18	0	0	82	0	63	144	39.6
Red maple	782	101	0	0	884	0	14	897	26.6
Hickory	53	0	0	0	53	0	0	53	44.4
Beech	652	83	0	0	735	0	0	735	29.2
Sweetgum	165	19	14	11	209	0	15	224	23.8
Yellow-poplar	127	12	15	13	167	112	21	300	54.1
Blackgum	96	0	0	0	96	0	22	118	35.1
Ash-walnut-cherry	39	61	0	0	101	0	0	101	56.7
Select white oaks	53	83	0	0	136	0	5	142	47.2
Select red oaks	62	0	0	0	62	0	33	96	56.1
Other white oaks	34	0	0	0	34	0	22	56	79.9
Other red oaks	210	6	0	0	215	6	24	246	25.0
Black locust	27	0	0	0	27	15	0	42	73.4
Other commercial hardwoods	266	0	0	0	266	0	48	314	34.0
Non-commercial hardwoods	389	0	0	0	389	0	6	395	45.1
Total hardwoods	2,956	366	29	24	3,375	133	211	3,719	13.7
Total, all species	3,020	383	29	24	3,457	133	273	3,863	13.3
Sampling error (percent)	15.0	23.5	70.8	70.8	13.5	80.5	30.0	33.4	13.3

Table 34.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Southern Unit, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Live trees					Dead trees						
	One or more small	One or more large	Multiple large or small	Total live	One or more small	One or more large	Multiple large or small	Total dead	Total all trees			
Loblolly pine	19	11	0	30	0	0	15	15	45	53.7		
Virginia pine	29	5	0	34	4	44	0	48	82	56.5		
Other softwoods	18	0	0	18	0	0	0	0	18	100.0		
Total softwoods	66	16	0	82	4	44	15	63	144	39.6		
Red maple	580	205	98	884	0	7	7	14	897	26.6		
Hickory	26	27	0	53	0	0	0	0	53	44.4		
Beech	264	226	245	735	0	0	0	0	735	29.2		
Sweetgum	102	56	50	209	15	0	0	15	224	23.8		
Yellow-poplar	54	104	8	167	0	112	21	133	300	54.1		
Blackgum	75	21	0	96	15	0	7	22	118	35.1		
Ash-walnut-cherry	15	41	44	101	0	0	0	0	101	56.7		
Select white oaks	74	56	6	136	0	0	5	5	142	47.2		
Select red oaks	2	60	0	62	33	0	0	33	96	56.1		
Other white oaks	22	6	6	34	0	22	0	22	56	79.9		
Other red oaks	110	65	40	215	7	6	17	31	246	25.0		
Black locust	0	0	27	27	0	15	0	15	42	73.4		
Other commercial hardwoods	150	53	64	266	20	0	27	48	314	34.0		
Non-commercial hardwoods	301	88	0	389	0	6	0	6	395	45.1		
Total hardwoods	1,777	1,009	589	3,375	91	167	85	343	3,719	13.7		
Total, all species	1,843	1,025	589	3,457	95	211	100	406	3,863	13.3		
Sampling error (percent)	18.3	19.4	22.6	13.5	61.5	55.6	40.3	33.4	13.3			

PERCENT OF SEEDLINGS, SAPLINGS, AND SHRUBS BY STAND-SIZE, SOUTHERN UNIT

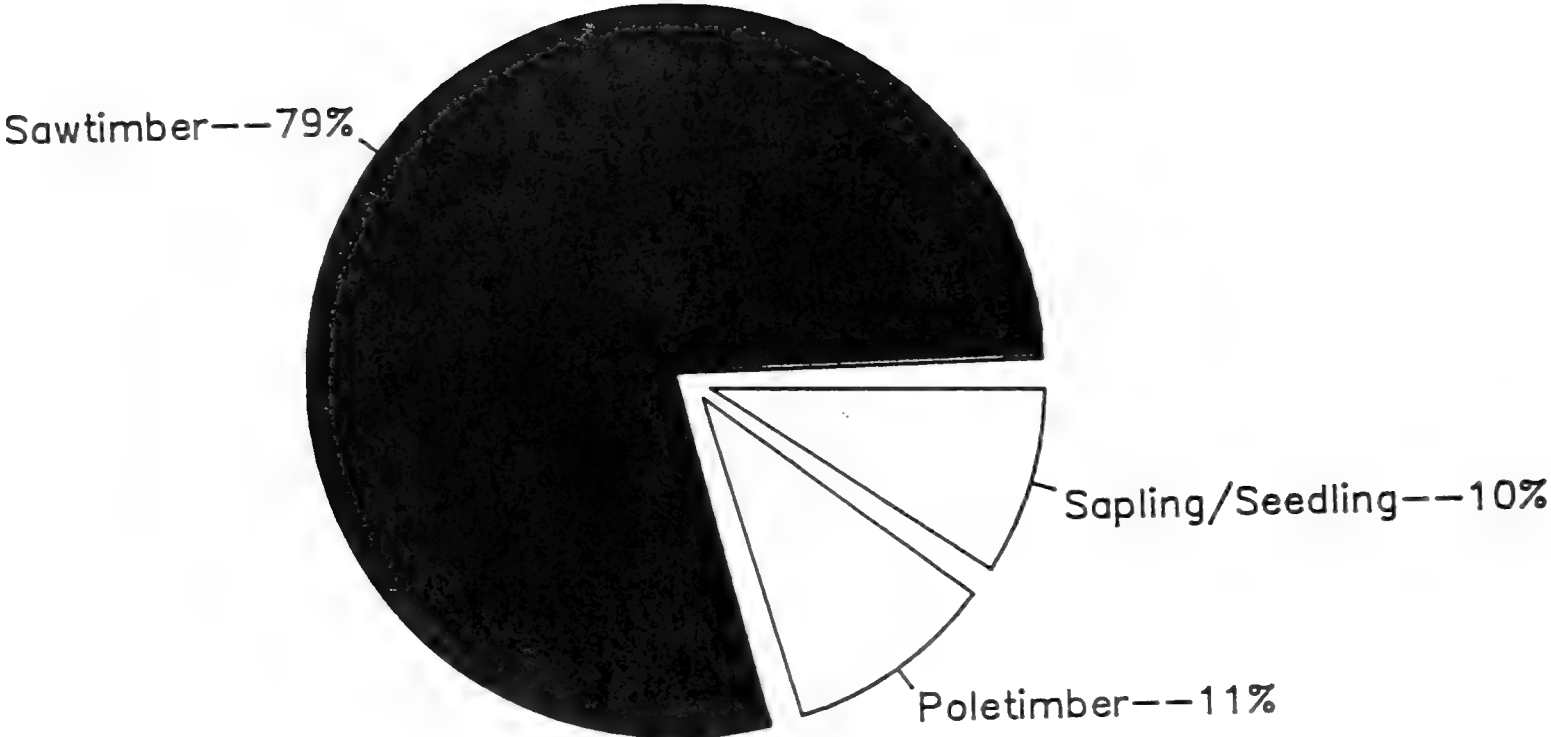


Table 35.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Southern Unit, Maryland, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Loblolly pine	19	1	4	0	25	63.6
Other pine species	19	4	9	0	31	29.7
Other softwoods	2	1	1	0	3	44.9
Total coniferous species	40	6	14	0	60	31.0
Red maple	191	19	39	0	248	15.4
Alder species	5	0	0	0	5	49.1
Common pawpaw	164	0	0	0	164	27.2
Birch species	2	0	0	0	2	71.3
Hickory species	23	5	0	0	29	23.2
Dogwood species	78	39	6	0	123	32.4
American beech	68	10	1	0	78	18.2
Ash species	1	0	0	0	1	73.3
American holly	113	14	7	0	134	12.6
Laurel species	21	0	0	0	21	27.6
Common spicebush	18	0	0	0	18	26.5
Sweetgum	110	19	18	0	147	15.1
Yellow-poplar	39	1	21	0	62	32.5
Magnolia species	12	3	0	0	15	66.0
Tupelo species	39	7	13	0	58	24.0
Black cherry	21	14	1	0	36	38.2
Other cherry species	5	3	0	0	7	44.2
White oak	26	4	2	0	32	24.6
Chestnut oak	6	0	1	0	7	58.8
Other white oaks	10	0	0	0	10	48.8
Northern red oak	23	2	0	0	25	48.9
Other black oaks	66	17	20	0	103	24.8
Rhododendron species	0	1	0	0	1	100.0
Rose species	1	1	0	0	1	71.9
Rubus species	24	3	5	0	33	17.5
Sassafras	28	6	2	0	36	35.7
Blueberry	75	12	7	0	94	11.5
Elm species	1	0	0	0	1	71.0
Maple-leaved viburnum	27	2	0	0	29	21.3
Arrowwood	11	2	1	0	14	30.3
Other viburnum species	5	1	1	0	7	37.1
Other deciduous species	80	3	10	0	93	16.1
Total deciduous species	1,293	187	156	0	1,637	6.5
Unknown species	32	3	3	0	39	21.7
Total, all species	1,366	196	173	0	1,735	6.3
Sampling error (percent)	8.0	37.2	40.0	.0	6.3	

Table 36.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Southern Unit, Maryland, 1986

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Loblolly pine	0	0	17	3	2	2	0	0	0	0	25
Other pine species	0	0	10	5	16	0	0	0	0	0	31
Other softwoods	0	0	1	0	2	0	0	0	0	0	3
Total coniferous species	0	0	28	8	21	2	0	0	0	0	60
Red maple	0	0	48	25	153	19	4	0	0	0	248
Alder species	0	0	2	0	3	0	0	0	0	0	5
Common pawpaw	0	0	1	3	135	25	0	0	0	0	164
Birch species	0	0	0	0	2	0	0	0	0	0	2
Hickory species	0	0	1	4	22	1	1	0	0	0	29
Dogwood species	0	0	6	13	100	3	0	0	0	0	123
American beech	0	0	3	17	57	1	0	0	0	0	78
Ash species	0	0	0	0	0	0	1	0	0	0	1
American holly	0	0	19	23	81	7	5	0	0	0	134
Laurel species	0	0	0	1	16	3	1	0	0	0	21
Common spicebush	0	0	0	1	15	1	1	0	0	0	18
Sweetgum	0	0	41	33	63	9	1	0	0	0	147
Yellow-poplar	0	0	23	5	33	0	0	0	0	0	62
Magnolia species	0	0	0	0	10	5	0	0	0	0	15
Tupelo species	0	0	5	11	38	3	2	0	0	0	58
Black cherry	0	0	1	1	20	14	0	0	0	0	36
Other cherry species	0	0	0	2	5	0	0	0	0	0	7
White oak	0	0	3	9	19	0	0	0	0	0	32
Chestnut oak	0	0	0	0	7	0	0	0	0	0	7
Other white oaks	0	0	0	1	6	3	0	0	0	0	10
Northern red oak	0	0	1	9	13	1	1	0	0	0	25
Other black oaks	0	0	35	9	41	16	0	0	0	0	103
Rhododendron species	0	0	0	0	1	0	0	0	0	0	1
Rose species	0	0	1	0	0	0	0	0	0	0	1
Rubus species	0	0	5	6	19	2	1	0	0	0	33
Sassafras	0	0	15	4	16	0	0	0	0	0	36
Blueberry	0	0	18	24	46	6	0	0	0	0	94
Elm species	0	0	0	0	1	0	0	0	0	0	1

Table 36.--Continued

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Maple-leaved viburnum	0	0	2	2	25	0	0	0	0	0	29
Arrowwood	0	0	3	3	4	2	1	0	0	0	14
Other viburnum species	0	0	1	0	3	1	1	0	0	0	7
Other deciduous species	0	0	16	7	61	0	8	0	0	0	93
Total deciduous species	0	0	251	216	1,019	124	28	0	0	0	1,637
Unknown species	0	0	6	10	19	3	1	0	0	0	39
Total, all species	0	0	285	234	1,059	129	29	0	0	0	1,735

Table 37.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Southern Unit, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	25	0	0	0	25	63.6
Other pine species	31	0	0	0	31	29.7
Other softwoods	3	0	0	0	3	44.9
Total coniferous species	60	0	0	0	60	31.0
Red maple	245	4	0	0	248	15.4
Alder species	5	0	0	0	5	49.1
Common pawpaw	155	9	0	0	164	27.2
Birch species	2	0	0	0	2	71.3
Hickory species	27	2	0	0	29	23.2
Dogwood species	123	1	0	0	123	32.4
American beech	69	9	0	1	78	18.2
Ash species	1	0	0	0	1	73.3
American holly	134	0	0	0	134	12.6
Laurel species	21	0	0	0	21	27.6
Common spicebush	18	0	0	0	18	26.5
Sweetgum	144	3	0	0	147	15.1
Yellow-poplar	62	0	0	0	62	32.5
Magnolia species	15	0	0	0	15	66.0
Tupelo species	57	1	0	0	58	24.0
Black cherry	17	19	0	0	36	38.2
Other cherry species	7	1	0	0	7	44.2
White oak	32	0	0	0	32	24.6
Chestnut oak	7	0	0	0	7	58.8
Other white oaks	10	0	0	0	10	48.8
Northern red oak	22	3	0	0	25	48.9
Other black oaks	99	3	0	0	103	24.8
Rhododendron species	1	0	0	0	1	100.0
Rose species	1	0	0	0	1	71.9
Rubus species	32	1	0	0	33	17.5
Sassafras	23	13	0	0	36	35.7
Blueberry	86	8	0	0	94	11.5
Elm species	1	0	0	0	1	71.0
Maple-leaved viburnum	29	0	0	0	29	21.3
Arrowwood	14	0	0	0	14	30.3
Other viburnum species	7	0	1	0	7	37.1
Other deciduous species	93	0	0	0	93	16.1
Total deciduous species	1,559	76	1	1	1,637	6.5
Unknown species	38	1	0	0	39	21.7
Total, all species	1,657	77	1	1	1,735	6.3
Sampling error (percent)	6.7	25.0	100.0	100.0	6.3	

MARYLAND WESTERN UNIT TABLES

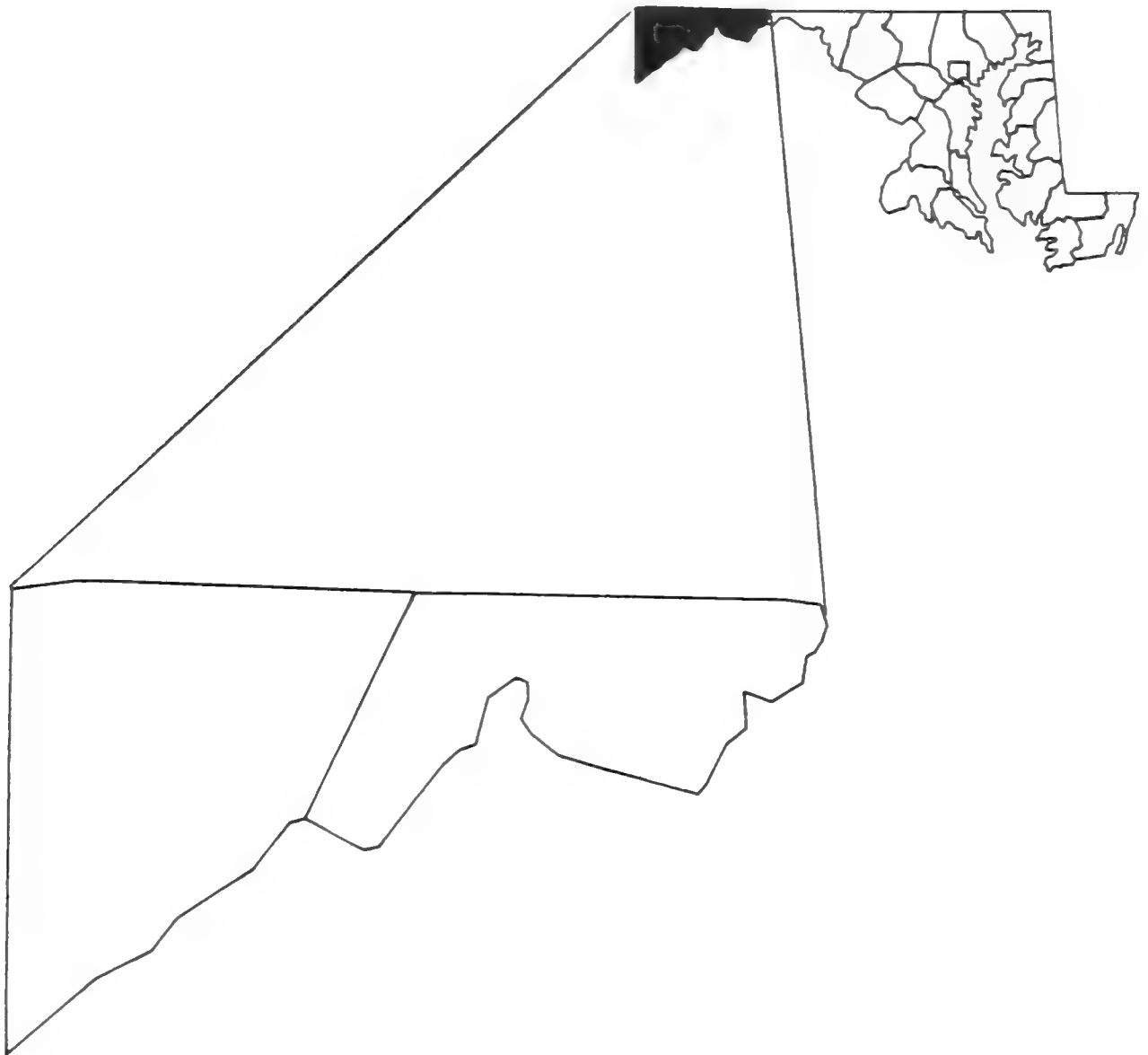


Table 38.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Western Unit, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)								
	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+	
Serviceberry	92	181	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286	76.2
Hickory	1,077	860	572	313	207	101	65	7	0	0	0	0	0	0	0	0	0	0	0	0	3,208	16.4
American chestnut	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	100.0
Hackberry	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	65.7
Dogwood	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	100.0
Hawthorn	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	100.0
Beech	437	254	107	74	67	22	19	6	5	0	0	0	0	0	0	0	0	0	0	0	992	51.4
Butternut	39	49	9	15	16	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	143	40.1
Black walnut	56	42	84	15	21	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227	54.1
Cucumber tree	41	45	15	15	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	39.9
Apple	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	100.0
Blackgum	487	48	76	7	29	19	30	6	0	0	0	0	0	0	0	0	0	0	0	0	703	35.0
Eastern hophornbeam	204	165	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389	71.3
Pin cherry	27	0	30	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	59.3
Black cherry	1,505	906	730	406	265	114	12	13	0	0	0	0	0	0	0	0	0	0	0	0	3,952	23.9
Chokecherry	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	77.8
White oak	3,528	3,278	1,980	698	386	355	189	68	188	15	15	68	21	10,692	15.6							
Scarlet oak	731	443	435	288	86	39	35	15	29	0	0	0	0	2,103	32.7							
Chinkapin oak	0	0	13	0	0	0	7	0	7	0	0	0	0	26	100.0							
Chestnut oak	1,854	2,261	1,556	784	508	268	160	58	144	0	0	0	0	7,619	15.9							
Northern red oak	1,635	1,382	1,465	1,307	850	512	214	190	270	0	0	0	0	7,887	11.0							
Black oak	211	616	388	291	200	127	112	79	47	0	0	0	0	2,104	21.9							
Sassafras	329	279	49	53	0	0	0	0	0	0	0	0	0	710	47.9							
Mountain ash	0	13	0	0	0	0	0	0	0	0	0	0	0	13	100.0							
Basswood	272	185	251	61	101	84	12	15	23	0	0	0	0	1,006	41.3							
Total, all species	12,761	11,008	7,787	4,395	2,753	1,665	854	465	741	143	465	143	42,572	6.5								
Sampling error (percent)	10.1	10.2	8.9	8.6	9.2	9.8	12.9	16.3	13.7	22.3	6.5											

Table 39.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Western Unit, Maryland, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type				Total stems
	Nuts	Other seeds	Berries	Other species	
Sawtimber:					
Shrubs	0	70,767	132,253	10,196	213,217
Saplings	10,013	42,086	24,369	745	77,213
Total sawtimber	10,013	112,854	156,621	10,941	290,430
Poletimber:					
Shrubs	2,198	23,536	76,203	3,530	105,467
Saplings	13,070	24,581	17,585	0	55,237
Total poletimber	15,268	48,117	93,789	3,530	160,704
Sapling/seedling:					
Shrubs	0	6,170	29,501	682	36,353
Saplings	8,783	21,331	10,213	1,604	41,931
Total sapling/seedling	8,783	27,501	39,714	2,286	78,285
Total, all classes	34,065	188,472	290,124	16,757	529,419

Table 40.--Number of standing dead trees on timberland by species, condition class, and diameter class, Western Unit, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
White/red pine	29	0	0	29	29	0	0	29	59	79.1
Virginia pine	15	0	0	15	40	0	0	40	55	75.5
Other yellow pines	0	0	0	0	243	0	0	243	243	76.0
Other softwoods	15	0	0	15	0	0	0	0	15	100.0
Total softwoods	59	0	0	59	313	0	0	313	372	51.6
Red maple	44	0	0	44	29	17	14	61	105	36.5
Sugar maple	0	0	0	0	29	7	0	36	36	60.5
Hickory	125	0	0	125	158	0	0	158	283	67.9
Beech	0	0	0	0	105	0	0	105	105	86.4
Blackgum	26	0	0	26	15	0	0	15	41	73.4
Ash-walnut-cherry	15	0	0	15	138	14	0	152	167	38.7
Select white oaks	143	0	0	143	133	0	0	133	276	59.8
Select red oaks	197	7	35	238	43	19	6	69	307	37.0
Other white oaks	72	7	15	95	363	15	22	400	494	56.5
Other red oaks	59	7	0	66	29	0	0	29	95	51.5
Black locust	44	7	15	67	330	41	9	380	447	27.4
Other commercial hardwoods	221	15	11	247	102	6	0	109	356	41.6
Non-commercial hardwoods	260	0	0	260	258	22	15	295	555	40.8
Total hardwoods	1,207	43	76	1,326	1,733	142	66	1,941	3,267	14.3
Total, all species	1,266	43	76	1,385	2,047	142	66	2,254	3,639	13.4
Sampling error (percent)	22.8	47.1	41.6	21.2	18.7	29.7	43.4	17.0	13.4	

Table 41.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class.
Western Unit, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Live					Dead						
	No cull	Intact live top	Broken top	Dead top	Total live	Intact top	Broken top	Total dead	Total all trees			
White/red pine	0	0	0	0	0	0	15	15	15	15	100.0	
Virginia pine	0	10	0	0	10	0	40	40	50	50	82.8	
Other yellow pines	23	0	0	5	28	0	22	22	50	50	66.6	
Other softwoods	22	7	0	0	29	0	0	0	29	29	77.9	
Total softwoods	45	17	0	5	67	0	77	77	144	144	40.3	
Red maple	410	319	0	0	729	0	14	14	743	743	20.0	
Sugar maple	174	47	16	0	237	0	0	0	237	237	24.3	
Hickory	202	9	0	0	211	0	27	27	238	238	38.2	
Beech	17	14	0	0	31	0	15	15	45	45	65.3	
Blackgum	129	5	0	0	134	0	15	15	149	149	52.6	
Ash-walnut-cherry	170	89	0	0	259	0	7	7	266	266	34.7	
Select white oaks	131	51	15	0	196	0	15	15	211	211	31.4	
Select red oaks	151	43	0	0	194	72	55	128	322	322	22.3	
Other white oaks	353	192	0	0	545	43	214	257	802	802	30.6	
Other red oaks	66	25	0	0	91	0	0	0	91	91	29.8	
Black locust	125	337	104	90	657	122	241	363	1,020	1,020	20.4	
Other commercial hardwoods	255	53	16	0	323	29	6	36	359	359	41.0	
Non-commercial hardwoods	129	313	0	0	442	124	312	436	878	878	43.8	
Total hardwoods	2,313	1,497	150	90	4,050	391	921	1,312	5,362	5,362	11.8	
Total, all species	2,358	1,515	150	94	4,117	391	998	1,389	5,506	5,506	11.5	
Sampling error (percent)	13.6	16.4	41.1	95.3	11.0	37.6	24.9	22.4	11.5	11.5		

Table 42.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Western Unit, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Live trees					Dead trees						
	One or more small	One or more large	Multiple large or small	Total live	One or more small	One or more large	Multiple large or small	Total dead				
White/red pine	0	0	0	0	0	0	15	15	15	15	100.0	
Virginia pine	0	0	10	10	40	0	0	40	40	50	82.8	
Other yellow pines	9	7	11	28	0	0	22	22	22	50	66.6	
Other softwoods	0	29	0	29	0	0	0	0	0	29	77.9	
Total softwoods	9	37	21	67	40	0	37	77	77	144	40.3	
Red maple	133	442	155	729	0	0	14	14	14	743	20.0	
Sugar maple	88	136	13	237	0	0	0	0	0	237	24.3	
Hickory	22	88	101	211	13	0	13	27	27	238	38.2	
Beech	0	14	17	31	0	0	15	15	15	45	65.3	
Blackgum	72	57	5	134	0	0	15	15	15	149	52.6	
Ash-walnut-cherry	111	109	39	259	0	0	7	7	7	266	34.7	
Select white oaks	29	153	14	196	15	0	0	15	15	211	31.4	
Select red oaks	76	92	27	194	43	59	26	128	128	322	22.3	
Other white oaks	123	376	46	545	166	87	3	257	257	802	30.6	
Other red oaks	22	57	12	91	0	0	0	0	0	91	29.8	
Black locust	361	129	166	657	139	117	108	363	363	1,020	20.4	
Other commercial hardwoods	99	95	129	323	0	15	21	36	36	359	41.0	
Non-commercial hardwoods	162	100	179	442	110	222	104	436	436	878	43.8	
Total hardwoods	1,298	1,849	903	4,050	487	499	326	1,312	1,312	5,362	11.8	
Total, all species	1,307	1,885	924	4,117	527	499	363	1,389	1,389	5,506	11.5	
Sampling error (percent)	15.9	10.6	30.4	11.0	33.7	34.1	36.1	22.4	22.4	11.5		

Table 43.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Western Unit, Maryland, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Other pine species	7	5	3	0	16	31.7
Other softwoods	13	1	4	0	18	32.3
Total coniferous species	20	6	7	0	34	21.9
Red maple	255	113	34	0	402	18.0
Sugar maple	99	29	14	0	143	22.8
Other maple species	89	18	1	0	109	27.6
Serviceberry	101	54	11	0	167	21.2
Azalea species	10	4	1	0	15	35.1
Birch species	49	14	16	0	79	24.4
Hickory species	14	11	7	0	32	19.5
Dogwood species	48	12	15	0	75	25.6
American beech	9	2	0	0	11	34.6
Ash species	87	37	21	0	145	26.4
Huckleberry	29	15	4	0	48	21.1
Witch-hazel	34	12	3	0	49	14.9
Laurel species	9	7	2	0	19	34.2
Common spicebush	3	0	0	0	3	58.4
Yellow-poplar	7	0	0	0	7	67.0
Magnolia species	7	1	0	0	9	61.3
Tupelo species	17	11	0	0	28	33.0
Black cherry	175	66	20	0	261	14.3
Other cherry species	0	3	3	0	7	61.5
White oak	66	28	25	0	119	28.5
Chestnut oak	30	6	9	0	45	22.2
Northern red oak	73	21	11	0	105	19.3
Other black oaks	39	24	3	0	65	37.7
Rhododendron species	17	1	0	0	17	43.0
Rose species	2	1	0	0	3	50.7
Rubus species	53	34	16	0	103	11.8
Sassafras	119	67	23	0	209	24.0
Blueberry	25	14	3	0	43	18.4
Elm species	14	1	0	0	15	32.4
Maple-leaved viburnum	8	2	3	0	13	30.8
Arrowwood	3	2	0	0	5	54.3
Other viburnum species	2	2	1	0	5	44.4
Other deciduous species	122	68	55	0	245	17.0
Total deciduous species	1,620	679	303	0	2,602	6.9
Unknown species	18	9	4	0	31	24.9
Total, all species	1,658	694	315	0	2,667	6.8
Sampling error (percent)	10.9	17.9	34.5	.0	6.8	

Table 4/4.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Western Unit, Maryland, 1986

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Other pine species	3	0	3	5	4	0	0	0	0	0	16
Other softwoods	6	0	0	0	5	0	0	7	0	0	18
Total coniferous species	9	0	3	5	10	0	0	7	0	0	34
Red maple	2	0	0	3	360	0	0	37	0	0	402
Sugar maple	11	0	0	0	92	0	0	40	0	0	143
Other maple species	3	0	0	0	89	0	0	17	0	0	109
Serviceberry	0	0	19	13	117	0	0	18	0	0	167
Azalea species	0	0	0	0	15	0	0	1	0	0	15
Birch species	0	0	0	0	49	0	0	30	0	0	79
Hickory species	0	0	3	0	25	0	0	5	0	0	32
Dogwood species	0	0	0	3	62	0	0	11	0	0	75
American beech	3	0	0	0	6	0	0	2	0	0	11
Ash species	6	0	7	7	97	0	1	28	0	0	145
Huckleberry	0	0	3	0	42	0	0	3	0	0	48
Witch-hazel	0	0	0	2	41	0	0	5	0	0	49
Laurel species	2	0	0	0	14	0	0	2	0	0	19
Common spicebush	0	0	0	0	1	0	1	1	0	0	3
Yellow-poplar	0	0	0	0	7	0	0	0	0	0	7
Magnolia species	0	0	0	0	8	0	1	0	0	0	9
Tupelo species	0	0	0	0	27	0	0	1	0	0	28
Black cherry	6	0	0	0	172	0	0	82	0	0	261
Other cherry species	0	0	0	0	3	0	0	3	0	0	7
White oak	0	0	18	1	97	0	0	3	0	0	119
Chestnut oak	1	0	0	7	37	0	0	0	0	0	45
Northern red oak	14	0	6	7	73	0	0	6	0	0	105
Other black oaks	0	0	37	0	26	0	0	2	0	0	65
Rhododendron species	1	0	0	0	10	0	0	7	0	0	17
Rose species	0	0	0	0	2	0	0	0	0	0	3
Rubus species	6	0	0	2	72	0	0	23	0	0	103
Sassafras	19	0	2	0	187	0	0	1	0	0	209
Blueberry	0	0	8	7	28	0	0	0	0	0	43
Elm species	0	0	0	0	11	0	2	2	0	0	15

Table 44.--Continued

(In millions of stems)

Species	Forest-type group										All groups
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Maple-leaved viburnum	0	0	0	1	10	0	0	2	0	0	13
Arrowwood	0	0	0	0	1	0	0	4	0	0	5
Other viburnum species	1	0	0	1	3	0	0	1	0	0	5
Other deciduous species	4	0	17	34	162	0	2	25	0	0	245
Total deciduous species	78	0	121	87	1,949	0	7	360	0	0	2,602
Unknown species	1	0	2	4	16	0	0	8	0	0	31
Total, all species	88	0	126	97	1,974	0	7	374	0	0	2,667

Table 45.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Western Unit, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	16	0	0	0	16	31.7
Other softwoods	18	0	0	0	18	32.3
Total coniferous species	34	0	0	0	34	21.9
Red maple	308	81	14	0	402	18.0
Sugar maple	102	35	6	0	143	22.8
Other maple species	103	3	0	2	109	27.6
Serviceberry	145	19	2	1	167	21.2
Azalea species	15	0	0	0	15	35.1
Birch species	67	5	7	0	79	24.4
Hickory species	31	1	1	0	32	19.5
Dogwood species	71	4	0	0	75	25.6
American beech	8	3	0	0	11	34.6
Ash species	118	21	5	0	145	26.4
Huckleberry	41	7	0	0	48	21.1
Witch-hazel	41	6	2	0	49	14.9
Laurel species	18	0	1	0	19	34.2
Common spicebush	3	1	0	0	3	58.4
Yellow-poplar	7	0	0	0	7	67.0
Magnolia species	9	0	0	0	9	61.3
Tupelo species	25	0	1	1	28	33.0
Black cherry	184	69	7	0	261	14.3
Other cherry species	7	0	0	0	7	61.5
White oak	113	4	1	0	119	28.5
Chestnut oak	34	7	3	0	45	22.2
Northern red oak	86	16	4	0	105	19.3
Other black oaks	57	7	2	0	65	37.7
Rhododendron species	17	0	0	0	17	43.0
Rose species	2	1	0	0	3	50.7
Rubus species	92	10	1	0	103	11.8
Sassafras	164	34	12	0	209	24.0
Blueberry	37	5	1	0	43	18.4
Elm species	14	0	1	0	15	32.4
Maple-leaved viburnum	7	3	2	1	13	30.8
Arrowwood	3	1	1	0	5	54.3
Other viburnum species	5	1	0	0	5	44.4
Other deciduous species	169	73	2	2	245	17.0
Total deciduous species	2,104	416	75	7	2,602	6.9
Unknown species	28	1	2	0	31	24.9
Total, all species	2,166	417	76	7	2,667	6.8
Sampling error (percent)	7.9	16.5	19.9	42.3	6.8	

MARYLAND COUNTY TABLES

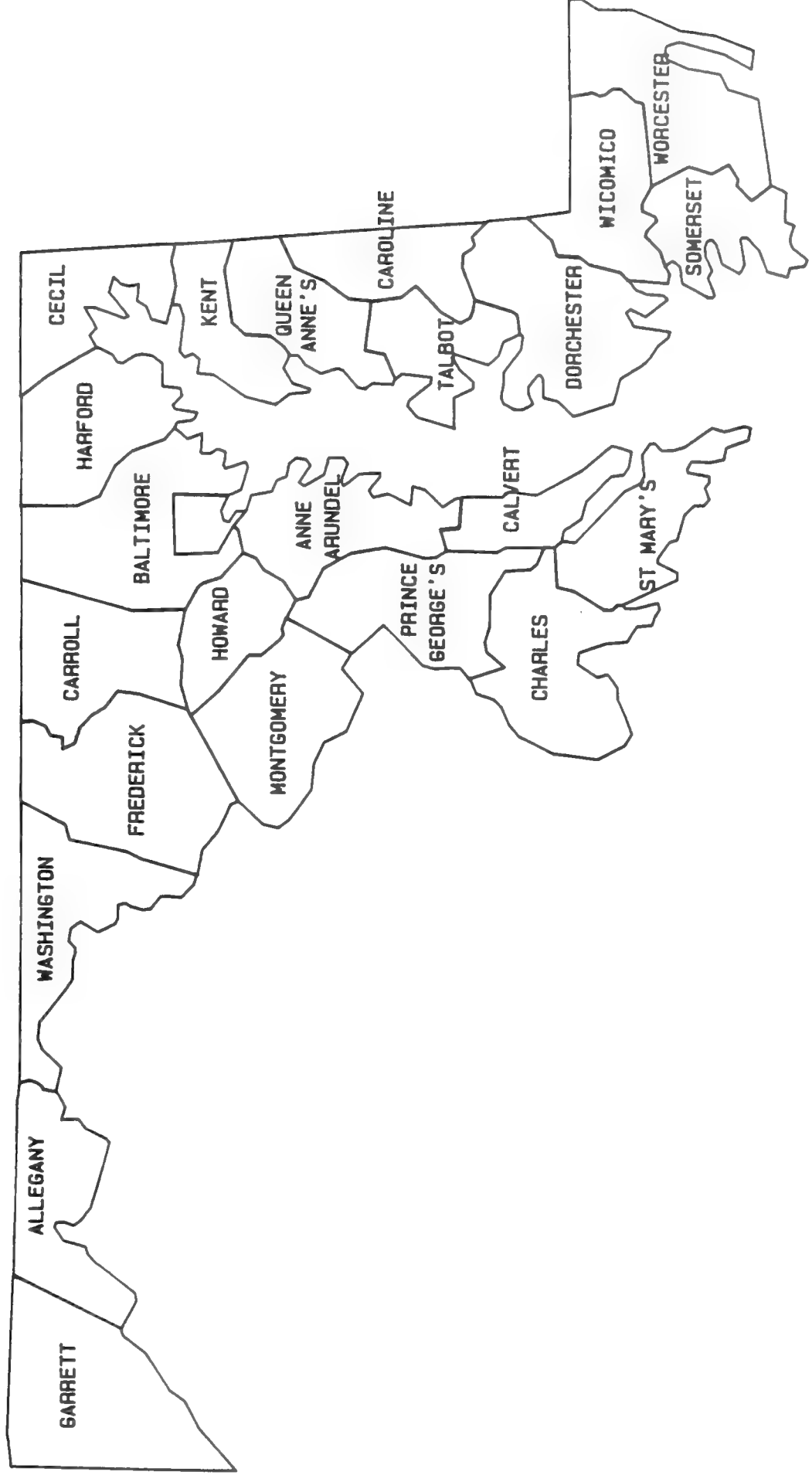


Table 46.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Allegany County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)							
	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+		
Hickory	486		523		225		103		80		49		31		0		0		0		1,497	18.8
Hackberry	0		0		0		63		0		0		0		0		13		0		76	65.7
Dogwood	10		0		0		0		0		0		0		0		0		0		10	100.0
Beech	0		0		0		0		0		0		11		0		0		0		11	100.0
Butternut	9		49		9		15		16		0		0		7		7		0		113	47.2
Black walnut	56		42		84		15		21		8		0		0		0		0		227	54.1
Apple	13		0		0		0		0		0		0		0		0		0		13	100.0
Blackgum	223		32		76		7		14		12		23		0		0		0		387	42.6
Eastern hophornbeam	40		40		0		0		0		0		0		0		0		0		81	83.8
Pin cherry	10		0		30		0		15		0		0		0		0		0		55	71.1
Black cherry	337		175		47		44		31		24		0		0		0		0		658	39.1
White oak	2,070		1,778		753		290		141		143		103		24		47		2		5,352	23.1
Scarlet oak	40		54		109		59		36		18		11		6		10		0		345	54.6
Chinkapin oak	0		0		13		0		0		0		7		0		7		0		26	100.0
Chestnut oak	863		1,054		539		297		217		128		73		15		39		2		3,229	23.2
Northern red oak	738		522		576		279		239		166		80		46		115		26		2,786	14.7
Black oak	36		434		237		179		147		78		76		15		19		23		1,243	30.3
Sassafras	186		237		49		44		0		0		0		0		0		0		516	62.5
Basswood	159		75		13		36		20		7		0		0		0		0		309	68.3
Total, all species	5,278		5,017		2,763		1,429		976		633		413		114		257		54		16,934	9.4
Sampling error (percent)	13.8		14.5		13.0		14.8		15.9		16.3		17.6		28.4		22.6		30.3		9.4	

Table 47.--Number of standing dead trees on timberland by species, condition class, and diameter class, Allegany County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
White/red pine	0	0	0	0	15	0	0	15	15	100.0
Virginia pine	15	0	0	15	40	0	0	40	55	75.5
Total softwoods	15	0	0	15	55	0	0	55	70	60.6
Red maple	0	0	0	0	15	17	0	32	32	67.5
Sugar maple	0	0	0	0	15	7	0	21	21	75.4
Hickory	54	0	0	54	107	0	0	107	161	92.3
Blackgum	26	0	0	26	0	0	0	0	26	100.0
Ash-walnut-cherry	0	0	0	0	56	7	0	63	63	59.6
Select white oaks	0	0	0	0	29	0	0	29	29	67.2
Select red oaks	97	7	35	138	43	19	0	62	201	47.7
Other white oaks	28	0	0	28	42	0	11	53	81	38.5
Other red oaks	0	7	0	7	0	0	0	0	7	100.0
Black locust	0	0	0	0	181	7	0	188	188	45.6
Other commercial hardwoods	15	15	11	41	15	0	0	15	55	46.0
Non-commercial hardwoods	124	0	0	124	27	22	0	49	173	71.4
Total hardwoods	343	28	46	418	531	79	11	622	1,039	23.2
Total, all species	358	28	46	432	586	79	11	677	1,109	21.9
Sampling error (percent)	41.9	61.5	56.0	36.6	21.5	43.4	100.0	19.1	21.9	

Table 48.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Allegany County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	9	0	0	0	9	43.1
Other softwoods	3	0	0	0	3	86.9
Total coniferous species	13	0	0	0	13	37.2
Red maple	51	22	2	0	75	28.8
Sugar maple	47	6	0	0	52	27.4
Other maple species	13	1	0	0	15	42.8
Serviceberry	60	4	0	1	65	30.6
Azalea species	4	0	0	0	4	63.7
Birch species	5	2	3	0	10	56.9
Hickory species	17	0	1	0	18	22.4
Dogwood species	58	2	0	0	59	30.9
Ash species	66	11	3	0	80	29.6
Huckleberry	10	4	0	0	14	30.7
Witch-hazel	7	1	0	0	9	31.5
Common spicebush	3	1	0	0	3	58.4
Yellow-poplar	2	0	0	0	2	100.0
Magnolia species	1	0	0	0	1	100.0
Tupelo species	7	0	0	0	7	41.2
Black cherry	17	6	4	0	27	33.1
Other cherry species	1	0	0	0	1	71.9
White oak	31	1	0	0	33	40.8
Chestnut oak	18	6	0	0	24	29.6
Northern red oak	37	10	0	0	47	25.5
Other black oaks	46	4	2	0	53	45.6
Rose species	0	1	0	0	1	72.1
Rubus species	23	5	0	0	27	22.8
Sassafras	42	12	3	0	57	36.8
Blueberry	27	4	0	0	31	20.9
Elm species	10	0	1	0	11	35.3
Maple-leaved viburnum	3	1	1	1	5	37.2
Other viburnum species	2	0	0	0	2	63.7
Other deciduous species	73	24	2	0	99	23.4
Total deciduous species	684	129	22	1	836	9.5
Unknown species	6	1	1	0	8	32.9
Total, all species	702	130	23	1	857	9.4
Sampling error (percent)	11.0	19.2	30.8	68.0	9.4	

Table 49.--Number of live nut- and fruit-producing trees on timberland by species and diameter class,
Anne Arundel/Howard Counties, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)	
	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+					
Hickory	175	173	82	4	23	0	24	0	23	0	0	0	0	504	51.9
Dogwood	304	0	0	0	0	0	0	0	0	0	0	0	0	304	93.3
Persimmon	52	96	21	0	0	0	0	0	0	0	0	0	0	169	65.3
Beech	198	102	150	102	31	10	44	39	9	6	693	46.1	0	120	100.0
American holly	0	120	0	0	0	0	0	0	0	0	0	0	0	80	60.7
Black walnut	0	0	0	0	32	23	0	13	12	0	0	0	0	105	100.0
Apple	105	0	0	0	0	0	0	0	0	0	0	0	0	559	37.5
Blackgum	162	31	201	25	94	15	10	10	10	0	0	0	0	53	80.4
Pin cherry	0	21	21	0	10	0	0	0	0	0	0	0	0	950	37.1
Black cherry	331	304	88	144	73	0	10	0	0	0	0	0	0	988	54.5
White oak	228	401	186	46	0	24	40	52	9	2	75	77.1	0	772	66.0
Swamp white oak	0	0	21	15	38	0	0	0	0	0	0	0	0	950	61.1
Scarlet oak	233	302	34	81	62	25	35	0	0	0	0	0	0	235	100.0
Southern red oak	688	50	61	71	26	0	10	10	33	0	0	0	0	105	67.7
Cherrybark oak	0	165	50	0	0	19	0	0	0	0	0	0	0	113	68.3
Pin oak	0	39	0	31	0	10	0	0	26	0	0	0	0	865	50.3
Willow oak	0	0	73	0	15	0	25	0	0	0	0	0	0	229	67.1
Chestnut oak	487	155	93	10	19	51	17	0	26	7	452	54.3	0	429	85.8
Northern red oak	0	79	89	0	0	41	0	10	10	0	0	0	0	0	0
Black oak	42	95	39	90	39	49	43	16	39	0	0	0	0	0	0
Sassafras	310	98	0	0	10	10	0	0	0	0	0	0	0	0	0
Total, all species	3,317	2,231	1,210	618	473	277	260	149	198	15	8,750	18.6	0	0	0
Sampling error (percent)	27.4	21.6	29.7	22.5	33.4	27.4	29.1	34.4	24.1	51.6	18.6	0	0	0	0

Table 50.--Number of standing dead trees on timberland by species, condition class, and diameter class,
Anne Arundel/Howard Counties, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0- 10.9	11.0- 14.9	15+ 15+	Total	5.0- 10.9	11.0- 14.9	15+ 15+	Total		
Loblolly pine	0	10	0	10	0	0	0	0	10	100.0
Virginia pine	111	0	0	111	0	0	0	0	111	100.0
Total softwoods	111	10	0	120	0	0	0	0	120	92.3
Red maple	19	0	0	19	19	0	0	19	39	100.0
Hickory	0	0	0	0	0	10	0	10	10	100.0
Sweetgum	0	0	0	0	89	10	0	100	100	88.9
Yellow-poplar	0	0	0	0	21	0	0	21	21	100.0
Ash-walnut-cherry	19	0	0	19	121	0	0	121	140	87.2
Select white oaks	0	0	0	0	42	0	0	42	42	100.0
Other red oaks	135	19	0	154	94	21	18	133	287	75.7
Black locust	0	0	0	0	42	31	21	95	95	88.4
Other commercial hardwoods	0	0	0	0	63	0	0	63	63	100.0
Non-commercial hardwoods	41	0	0	41	161	0	0	161	201	72.1
Total hardwoods	215	19	0	234	653	73	39	765	999	24.3
Total, all species	325	29	0	354	653	73	39	765	1,120	26.7
Sampling error (percent)	42.9	58.4	.0	42.5	29.1	60.6	46.0	25.4	26.7	

Table 51.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Anne Arundel/Howard Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	1	0	0	0	1	100.0
Other pine species	9	0	0	0	9	48.6
Total coniferous species	10	0	0	0	10	44.9
Red maple	24	0	0	0	24	45.4
Other maple species	9	0	0	0	9	83.6
Alder species	4	0	0	0	4	71.6
Serviceberry	2	0	0	0	2	70.7
Azalea species	0	0	0	0	0	100.0
Common pawpaw	1	0	0	0	1	100.0
Birch species	2	0	0	0	2	78.0
Hickory species	6	0	0	0	6	60.2
Dogwood species	29	0	0	0	29	41.2
American beech	10	0	0	0	10	80.4
Ash species	9	0	0	0	9	83.5
American holly	15	0	0	0	15	83.2
Laurel species	3	0	0	0	3	88.4
Common spicebush	8	0	0	0	8	57.8
Sweetgum	58	0	0	0	58	40.3
Yellow-poplar	3	0	0	0	3	71.9
Tupelo species	31	0	3	0	34	46.6
Black cherry	30	0	0	0	30	43.0
Other cherry species	8	0	0	0	8	77.7
White oak	10	0	0	0	10	40.4
Chestnut oak	2	0	0	0	2	70.7
Northern red oak	1	0	0	0	1	76.5
Other black oaks	22	1	0	0	23	34.5
Rhododendron species	1	0	0	0	1	100.0
Rose species	5	0	0	0	5	61.8
Rubus species	24	0	0	0	24	27.7
Sassafras	12	0	0	0	12	51.2
Blueberry	25	0	0	0	25	36.8
Elm species	1	0	0	0	1	100.0
Maple-leaved viburnum	2	0	0	0	2	66.8
Arrowwood	12	0	0	0	12	36.7
Other viburnum species	3	0	0	0	3	71.2
Other deciduous species	25	0	0	0	25	40.7
Total deciduous species	400	1	3	0	404	12.8
Unknown species	20	0	0	0	20	48.9
Total, all species	431	1	3	0	435	13.3
Sampling error (percent)	13.4	100.0	100.0	.0	13.3	

Table 52.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Baltimore County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)	
	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+						
Serviceberry	39	0	0	0	0	0	0	0	0	0	0	0	0	0	39	100.0
Hickory	597	121	64	27	20	0	0	0	0	0	0	0	0	0	830	55.6
Beech	167	100	29	21	26	14	23	0	0	7	0	0	0	0	387	73.0
Black walnut	21	11	0	5	23	0	0	0	0	0	0	0	0	0	61	72.5
Blackgum	280	66	35	86	0	0	0	0	0	0	0	0	0	0	467	72.8
Pin cherry	46	31	49	0	0	0	0	0	0	0	0	0	0	0	127	100.0
Black cherry	109	30	78	36	18	11	21	0	0	0	0	0	0	0	303	43.2
White oak	378	0	167	93	56	20	28	0	0	45	23	0	0	0	809	69.6
Scarlet oak	586	193	14	109	47	0	40	16	0	33	0	0	0	0	1,039	65.7
Pin oak	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Chestnut oak	43	132	133	78	123	49	77	17	0	31	3	0	0	0	687	57.7
Northern red oak	36	14	14	51	109	31	36	0	0	29	7	0	0	0	327	36.1
Post oak	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14	100.0
Black oak	189	14	43	14	44	68	55	85	0	55	12	0	0	0	579	28.5
Sassafras	0	0	28	0	0	0	0	0	0	0	0	0	0	0	28	100.0
Total, all species	2,508	711	655	521	465	208	281	117	201	45	5,713	31.5				
Sampling error (percent)	49.5	34.4	27.4	42.2	34.1	25.2	30.2	47.7	36.3	54.5	31.5					

Table 53.--Number of standing dead trees on timberland by species, condition class, and diameter class, Baltimore County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
White/red pine	29	0	0	29	0	0	0	0	29	100.0
Virginia pine	120	7	0	127	57	0	0	57	184	71.5
Total softwoods	149	7	0	156	57	0	0	57	213	60.8
Ash-walnut-cherry	0	0	0	0	123	0	0	123	123	100.0
Select red oaks	0	0	0	0	0	0	7	7	7	100.0
Other white oaks	14	0	8	22	14	0	0	14	36	50.2
Other red oaks	0	0	0	0	0	0	7	7	7	100.0
Non-commercial hardwoods	0	0	0	0	14	26	12	53	53	77.8
Total hardwoods	14	0	8	22	151	26	26	203	225	60.6
Total, all species	163	7	8	178	208	26	26	260	438	39.3
Sampling error (percent)	68.1	100.0	100.0	62.7	67.4	100.0	52.7	53.8	39.3	

Table 54.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Baltimore County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	1	0	0	0	1	100.0
Total coniferous species	1	0	0	0	1	100.0
Red maple	32	22	0	0	54	43.6
Serviceberry	10	0	0	0	10	100.0
Azalea species	4	0	0	0	4	52.0
Hickory species	23	2	1	0	25	42.2
Dogwood species	33	7	7	0	46	25.0
American beech	6	0	0	0	6	57.2
Ash species	1	0	0	0	1	100.0
Witch-hazel	1	0	0	0	1	100.0
Laurel species	4	0	0	0	4	54.8
Common spicebush	9	1	3	2	15	40.3
Sweetgum	2	0	0	0	2	100.0
Yellow-poplar	18	9	0	0	26	51.6
Tupelo species	43	21	0	0	64	52.2
Black cherry	64	11	3	0	78	59.4
White oak	6	0	0	0	6	74.1
Chestnut oak	8	0	1	0	9	82.3
Northern red oak	6	1	0	0	7	92.1
Other black oaks	5	0	0	0	5	58.5
Rose species	7	1	0	0	8	54.0
Rubus species	24	1	0	0	25	27.0
Sassafras	23	10	1	0	34	40.3
Blueberry	9	3	1	0	13	39.3
Elm species	10	0	1	0	12	62.1
Maple-leaved viburnum	9	4	0	0	13	44.0
Arrowwood	7	0	0	0	7	42.4
Other viburnum species	2	2	0	0	4	62.0
Other deciduous species	9	1	0	0	11	41.6
Total deciduous species	377	93	17	2	489	29.2
Unknown species	1	0	0	0	1	100.0
Total, all species	378	93	17	2	491	29.1
Sampling error (percent)	27.7	51.1	50.2	100.0	29.1	

Table 55.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Calvert County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)	
	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+						
Eastern redcedar	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6	100.0
Hickory	105	87	28	33	63	20	15	12	0	0	0	0	0	0	364	38.0
Dogwood	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60	51.5
Persimmon	109	60	0	0	0	0	0	0	0	0	0	0	0	0	169	100.0
Beech	177	138	143	98	64	71	64	10	47	0	0	0	0	0	813	28.0
American holly	255	0	7	0	0	0	0	0	0	0	0	0	0	0	262	94.9
Black walnut	0	0	24	0	0	6	0	0	0	0	0	0	0	0	30	100.0
Blackgum	276	0	13	0	14	19	8	0	10	0	0	0	0	0	341	42.8
Pin cherry	7	0	7	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Black cherry	0	0	19	20	23	0	0	0	0	0	0	0	0	0	63	75.7
White oak	65	61	37	90	59	12	3	0	26	3	0	0	0	0	355	33.0
Swamp white oak	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10	100.0
Scarlet oak	12	10	0	24	16	0	0	2	0	0	0	0	0	0	67	40.0
Southern red oak	69	79	57	50	34	20	20	18	27	0	0	0	0	0	375	42.5
Chestnut oak	129	22	56	42	18	20	15	13	17	0	0	0	0	0	334	52.9
Northern red oak	22	0	24	6	25	12	23	13	20	2	0	0	0	0	149	44.4
Black oak	79	46	12	65	25	5	21	8	0	0	0	0	0	0	262	30.0
Sassafras	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37	70.3
Total, all species	1,413	502	429	435	342	185	171	77	148	8	3,711	13.5				
Sampling error (percent)	21.4	30.8	28.1	19.1	21.3	26.8	25.5	25.1	28.7	54.6	13.5					

Table 56.--Number of standing dead trees on timberland by species, condition class, and diameter class, Calvert County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	0	0	0	0	12	0	0	12	12	100.0
Virginia pine	10	0	0	10	143	0	0	143	153	72.9
Total softwoods	10	0	0	10	155	0	0	155	165	67.9
Hickory	12	0	0	12	0	0	0	0	12	100.0
Yellow-poplar	0	0	6	6	7	21	0	28	34	64.6
Select white oaks	0	0	0	0	12	0	0	12	12	100.0
Select red oaks	0	0	5	5	32	0	0	32	36	100.0
Other red oaks	0	6	6	12	58	6	0	64	77	59.1
Black locust	26	0	0	26	0	0	0	0	26	100.0
Non-commercial hardwoods	0	0	0	0	20	6	0	26	26	57.7
Total hardwoods	38	6	17	61	129	33	0	162	224	26.9
Total, all species	48	6	17	71	285	33	0	318	389	34.1
Sampling error (percent)	35.1	100.0	73.2	34.6	45.5	66.0	.0	40.6	34.1	

Table 57.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Calvert County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	1	0	0	0	1	100.0
Other pine species	1	0	0	0	1	81.3
Total coniferous species	1	0	0	0	1	60.9
Red maple	27	0	0	0	27	26.5
Alder species	1	0	0	0	1	71.2
Common pawpaw	81	9	0	0	90	35.8
Birch species	1	0	0	0	1	100.0
Hickory species	10	0	0	0	10	36.5
Dogwood species	25	0	0	0	25	32.8
American beech	14	1	0	1	16	28.0
Ash species	0	0	0	0	0	100.0
American holly	31	0	0	0	31	29.2
Laurel species	9	0	0	0	9	32.0
Common spicebush	8	0	0	0	8	33.6
Sweetgum	10	0	0	0	10	53.0
Yellow-poplar	4	0	0	0	4	44.1
Tupelo species	6	1	0	0	7	40.4
Black cherry	3	0	0	0	3	50.1
Other cherry species	1	1	0	0	2	61.3
White oak	6	0	0	0	6	51.6
Chestnut oak	1	0	0	0	1	100.0
Northern red oak	1	0	0	0	1	86.3
Other black oaks	7	0	0	0	7	52.4
Rubus species	5	0	0	0	5	35.3
Sassafras	6	4	0	0	10	47.0
Blueberry	8	1	0	0	9	27.9
Elm species	1	0	0	0	1	100.0
Maple-leaved viburnum	9	0	0	0	9	37.0
Arrowwood	1	0	0	0	1	100.0
Other deciduous species	9	0	0	0	9	33.2
Total deciduous species	287	16	0	1	303	13.0
Unknown species	1	0	0	0	1	100.0
Total, all species	289	16	0	1	305	12.9
Sampling error (percent)	13.5	57.6	.0	100.0	12.9	

Table 58.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Caroline/Talbot Counties, Maryland, 1986

Species	(In thousands of trees)														All classes	Sampling error (percent)	
	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+							
Eastern redcedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100.0
Hickory	106	39	39	97	23	28	41	0	0	0	0	0	0	0	0	374	59.1
Hackberry	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	100.0
Dogwood	192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192	82.0
Persimmon	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	100.0
Beech	1,202	154	56	74	74	34	36	0	0	0	0	0	0	0	0	1,658	71.3
American holly	665	72	96	10	10	0	0	0	0	0	0	0	0	0	0	852	53.9
Black walnut	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10	100.0
Sweetbay	121	82	0	0	0	0	0	0	0	0	0	0	0	0	0	203	72.0
Blackgum	438	222	383	228	35	53	30	22	0	0	0	0	0	0	0	1,412	42.4
Black cherry	62	26	0	0	0	0	0	0	0	0	0	0	0	0	0	88	65.9
White oak	538	736	423	263	133	103	79	25	8	0	0	0	0	0	0	2,312	33.1
Swamp white oak	96	72	0	6	0	28	0	0	0	0	0	0	0	0	0	203	100.0
Scarlet oak	199	16	103	33	0	26	0	0	11	0	0	0	0	0	0	388	67.4
Southern red oak	528	181	73	81	87	93	0	41	57	13	0	0	0	0	0	1,154	37.2
Swamp chestnut oak	16	3	49	0	2	0	0	0	0	0	0	0	0	0	0	71	90.6
Water oak	0	13	0	39	0	0	0	0	0	0	0	0	0	0	0	53	78.6
Willow oak	16	32	56	79	19	0	6	18	6	1	0	0	0	0	0	234	67.6
Northern red oak	157	198	117	147	67	22	7	6	0	1	0	0	0	0	0	723	38.3
Black oak	314	122	0	28	28	0	57	10	8	9	0	0	0	0	0	577	62.7
Sassafras	215	13	0	0	0	0	0	0	0	0	0	0	0	0	0	229	56.3
Total, all species	4,867	1,984	1,396	1,087	489	389	256	124	120	26	10,736	19.9					

Sampling error (percent)

29.3 25.0 26.1 20.4 25.1 24.1 53.1 36.4 35.2 84.0 19.9

Table 59.--Number of standing dead trees on timberland by species, condition class, and diameter class, Caroline/Talbot Counties, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	7	18	0	25	145	0	0	145	169	59.5
Virginia pine	30	0	0	30	89	7	0	96	125	60.4
Total softwoods	36	18	0	54	234	7	0	240	295	52.8
Hickory	0	0	0	0	0	71	0	71	71	100.0
Sweetgum	0	0	0	0	32	0	0	32	32	100.0
Blackgum	13	0	0	13	0	0	0	0	13	100.0
Select white oaks	0	0	20	20	290	0	0	290	310	57.6
Select red oaks	0	0	0	0	32	0	0	32	32	65.7
Other red oaks	218	0	0	218	0	0	0	0	218	94.0
Other commercial hardwoods	0	0	0	0	91	0	0	91	91	81.9
Non-commercial hardwoods	0	0	0	0	16	0	0	16	16	100.0
Total hardwoods	232	0	20	252	461	71	0	532	784	38.2
Total, all species	268	18	20	307	695	77	0	772	1,079	28.9
Sampling error (percent)	76.3	100.0	100.0	66.2	36.2	91.7	.0	35.7	28.9	

Table 60.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Caroline/Talbot Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	2	0	0	0	2	83.9
Other pine species	5	0	0	0	5	71.2
Other softwoods	1	0	0	0	1	100.0
Total coniferous species	9	0	0	0	9	53.2
Red maple	33	4	0	0	37	42.2
Serviceberry	10	0	0	0	10	47.2
Azalea species	6	1	0	0	7	42.9
Common pawpaw	1	0	0	0	1	100.0
Hickory species	2	0	0	0	2	54.0
Dogwood species	13	0	0	0	13	75.6
American beech	9	0	0	0	9	69.0
American holly	27	1	0	0	28	49.3
Laurel species	6	0	0	0	6	70.8
Common spicebush	5	0	0	0	5	68.8
Sweetgum	47	0	0	0	47	28.6
Yellow-poplar	4	0	0	0	4	61.7
Magnolia species	6	4	0	0	10	45.3
Tupelo species	20	1	7	0	27	36.6
Black cherry	16	0	0	0	16	40.0
White oak	11	0	0	0	11	51.3
Northern red oak	5	0	0	0	5	85.4
Other black oaks	9	0	0	0	9	51.5
Rubus species	9	1	0	0	9	33.6
Sassafras	10	0	0	0	10	49.0
Blueberry	9	2	1	3	15	42.9
Elm species	2	0	0	0	3	50.3
Arrowwood	6	1	0	0	7	42.8
Other viburnum species	0	0	0	0	0	100.0
Other deciduous species	7	1	0	0	8	45.7
Total deciduous species	276	16	8	3	303	15.7
Unknown species	46	24	4	4	78	18.7
Total, all species	331	39	12	7	389	13.8
Sampling error (percent)	14.0	22.3	67.1	100.0	13.8	

Table 61.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Carroll County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)
	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+				
Hickory	359	247	2	21	58	28	13	0	1	0	0	0	730	37.8
Dogwood	63	0	0	0	0	0	0	0	0	0	0	0	63	100.0
Beech	0	0	44	0	17	0	0	0	0	0	0	0	61	100.0
Black walnut	0	102	0	0	0	27	0	0	0	0	0	0	129	67.1
Blackgum	126	16	26	8	4	7	0	0	0	0	0	0	187	23.4
Black cherry	288	688	11	1	47	0	0	0	0	0	0	0	1,035	78.4
White oak	249	182	74	5	7	49	1	5	28	0	0	0	602	73.5
Swamp white oak	0	0	32	0	0	0	0	0	0	0	0	0	32	100.0
Scarlet oak	0	0	14	106	37	18	1	9	36	0	0	0	221	49.9
Pin oak	32	32	0	0	0	0	0	0	4	0	0	0	67	93.8
Chestnut oak	53	317	370	171	67	69	19	33	56	0	0	0	1,154	40.3
Northern red oak	2	100	167	134	74	9	47	25	30	0	0	0	587	51.2
Black oak	336	525	150	155	183	197	54	138	83	17	0	0	1,838	39.9
Sassafras	2	32	0	0	0	0	0	0	0	0	0	0	33	94.9
Total, all species	1,510	2,240	889	601	494	405	135	210	239	17	0	0	6,740	29.5
Sampling error (percent)	45.4	44.2	42.7	41.7	22.4	26.1	37.7	49.5	39.7	90.6	29.5			

Table 62.--Number of standing dead trees on timberland by species, condition class, and diameter class, Carroll County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Red maple	0	0	0	0	0	5	0	5	5	100.0
Hickory	0	8	0	8	0	0	13	13	22	72.4
Ash-walnut-cherry	0	0	0	0	0	6	0	6	6	100.0
Select white oaks	14	0	0	14	0	0	0	0	14	100.0
Select red oaks	35	13	0	49	48	0	0	48	97	70.7
Other white oaks	102	0	0	102	55	0	0	55	158	90.0
Other red oaks	28	7	7	42	34	28	0	62	104	44.4
Other commercial hardwoods	0	0	0	0	0	28	0	28	28	76.0
Non-commercial hardwoods	0	0	0	0	55	0	0	55	55	100.0
Total hardwoods	179	29	7	215	193	67	13	274	489	37.0
Total, all species	179	29	7	215	193	67	13	274	489	37.0
Sampling error (percent)	58.3	60.1	100.0	52.7	49.8	58.0	100.0	40.7	37.0	

Table 63.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Carroll County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Red maple	40	0	0	0	40	50.5
Serviceberry	3	0	0	0	3	79.6
Azalea species	3	0	0	0	3	100.0
Common pawpaw	1	0	0	0	1	100.0
Hickory species	13	1	1	0	16	35.0
Dogwood species	25	0	2	0	27	41.7
American beech	2	0	0	0	2	100.0
Ash species	4	0	0	0	4	58.2
Witch-hazel	1	0	0	0	1	100.0
Laurel species	3	0	0	0	3	74.3
Common spicebush	14	0	0	0	14	43.6
Tupelo species	16	0	1	0	18	41.1
Black cherry	110	0	1	0	111	57.4
Other cherry species	1	0	0	0	1	100.0
White oak	9	1	0	0	10	50.7
Chestnut oak	17	0	0	0	17	46.3
Northern red oak	10	0	0	0	10	93.4
Other black oaks	12	0	0	0	12	51.9
Rose species	15	0	0	0	15	40.0
Rubus species	30	0	0	0	30	36.2
Sassafras	2	0	0	0	2	73.2
Blueberry	10	2	0	0	12	41.7
Maple-leaved viburnum	2	0	0	0	2	100.0
Arrowwood	7	0	0	0	7	49.8
Other viburnum species	4	0	1	0	5	63.5
Other deciduous species	23	0	0	0	23	37.6
Total deciduous species	376	4	6	0	386	24.4
Unknown species	0	0	0	0	0	100.0
Total, all species	376	4	6	0	386	24.3
Sampling error (percent)	25.2	46.6	70.8	0	24.3	

Table 64.--Number of live nut- and fruit-producing trees on timberland by species and diameter class,
Cecil/Harford Counties, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)											All classes	Sampling error (percent)		
	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+					
Eastern redcedar	15	0	7	0	0	0	0	0	0	0	0	0	0	22	100.0
Hickory	241	37	137	117	35	79	30	21	3	0	0	0	0	701	43.8
Dogwood	78	0	0	0	0	0	0	0	0	0	0	0	0	78	60.7
Persimmon	18	15	0	11	0	0	0	0	0	0	0	0	0	45	58.7
Beech	368	33	0	69	62	25	47	69	23	10	0	0	0	706	37.0
Black walnut	164	0	0	0	33	18	15	0	0	0	0	0	0	229	65.6
Sweetbay	3	0	0	0	0	0	0	0	0	0	0	0	0	3	49.9
Blackgum	361	133	81	81	9	0	0	0	0	0	0	0	0	665	34.6
Black cherry	306	171	42	65	11	46	0	11	0	0	0	0	0	653	48.3
Chokecherry	0	0	48	0	0	0	0	0	0	0	0	0	0	48	100.0
White oak	233	365	217	146	128	80	27	35	53	9	1,294	38.4	0	83	84.1
Swamp white oak	24	24	24	0	0	0	0	0	12	0	0	0	0	83	84.1
Scarlet oak	0	54	76	81	74	9	29	11	0	0	0	0	0	335	48.9
Southern red oak	0	18	0	9	9	0	17	0	18	0	0	0	0	72	77.4
Swamp chestnut oak	0	0	0	0	4	0	0	0	1	0	0	0	0	5	49.9
Pin oak	24	18	0	0	0	7	0	7	8	0	0	0	0	65	59.2
Willow oak	0	0	0	0	0	27	0	0	0	0	0	0	0	27	100.0
Chestnut oak	73	37	118	176	198	99	77	27	17	0	824	62.5	0	492	31.3
Northern red oak	0	15	36	85	68	82	80	27	94	5	559	34.6	0	176	56.3
Black oak	55	86	108	54	110	29	83	7	26	0	0	0	0	0	0
Sassafras	60	0	0	0	73	43	0	0	0	0	0	0	0	0	0
Total, all species	2,024	1,007	895	895	815	545	404	217	255	24	7,081	15.5	0	0	0
Sampling error (percent)	23.8	29.5	23.8	20.3	24.9	21.6	29.2	24.2	32.4	50.1	15.5	0	0	0	0

Table 65.--Number of standing dead trees on timberland by species, condition class, and diameter class, Cecil/Harford Counties, Maryland, 1986

Species	(In thousands of trees)						Total all trees	Sampling error (percent)	
	Intact top			Broken top					
	Diameter class (inches at breast height)			Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total	
Virginia pine	133	7	0	141	0	0	0	141	100.0
Total softwoods	133	7	0	141	0	0	0	141	100.0
Red maple	0	0	0	0	0	9	0	9	100.0
Hickory	0	9	0	9	0	0	0	9	100.0
Sweetgum	18	0	0	18	18	0	0	18	100.0
Yellow-poplar	0	0	0	0	0	0	7	7	100.0
Blackgum	36	0	0	36	18	0	0	18	55.8
Select white oaks	67	0	0	67	35	0	0	35	60.1
Select red oaks	0	36	0	36	50	0	17	67	61.0
Other white oaks	92	119	6	217	92	9	0	101	75.1
Other red oaks	18	9	24	51	18	0	0	18	75.8
Black locust	30	0	0	30	0	0	0	0	100.0
Non-commercial hardwoods	0	0	0	0	33	9	0	42	59.6
Total hardwoods	261	173	29	464	264	27	24	316	40.5
Total, all species	395	181	29	605	264	27	24	316	36.9
Sampling error (percent)	45.5	79.8	81.0	49.6	38.7	51.9	53.9	33.3	36.9

Table 66.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Cecil/Harford Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	5	0	0	0	5	71.8
Other softwoods	2	0	0	0	2	70.7
Total coniferous species	7	0	0	0	7	56.4
Red maple	99	4	0	0	103	35.8
Sugar maple	1	0	0	0	1	100.0
Azalea species	8	3	0	0	11	33.4
Common pawpaw	41	15	0	0	56	69.3
Birch species	37	0	0	0	37	74.9
Hickory species	16	2	0	0	18	32.6
Dogwood species	43	3	0	0	46	44.9
American beech	43	3	2	0	48	45.3
Ash species	27	6	2	0	35	32.1
Laurel species	9	1	0	0	10	38.6
Common spicebush	22	3	1	0	26	28.6
Sweetgum	35	1	0	0	35	45.3
Yellow-poplar	41	0	2	0	43	45.0
Tupelo species	85	11	0	1	96	34.7
Black cherry	53	25	0	0	78	25.1
White oak	12	6	0	0	18	49.6
Chestnut oak	26	0	4	1	31	71.3
Other white oaks	4	0	0	0	4	68.5
Northern red oak	9	0	2	0	12	31.7
Other black oaks	27	2	0	0	29	59.9
Rose species	17	0	1	0	18	38.3
Rubus species	51	5	1	0	57	21.9
Sassafras	51	6	0	0	57	28.8
Blueberry	14	6	0	0	20	36.6
Elm species	6	0	0	0	6	82.2
Maple-leaved viburnum	2	6	0	0	8	56.9
Arrowwood	13	1	0	0	14	47.3
Other viburnum species	25	5	1	0	31	24.0
Other deciduous species	28	6	0	0	33	30.5
Total deciduous species	847	119	16	2	983	14.7
Unknown species	8	0	0	0	8	49.0
Total, all species	862	119	16	2	998	14.5
Sampling error (percent)	16.0	27.0	36.5	70.7	14.5	

Table 65.--Number of standing dead trees on timberland by species, condition class, and diameter class, Cecil/Harford Counties, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Virginia pine	133	7	0	141	0	0	0	0	141	100.0
Total softwoods	133	7	0	141	0	0	0	0	141	100.0
Red maple	0	0	0	0	0	9	0	9	9	100.0
Hickory	0	9	0	9	0	0	0	0	9	100.0
Sweetgum	18	0	0	18	18	0	0	18	35	100.0
Yellow-poplar	0	0	0	0	0	0	7	7	7	100.0
Blackgum	36	0	0	36	18	0	0	18	54	55.8
Select white oaks	67	0	0	67	35	0	0	35	103	60.1
Select red oaks	0	36	0	36	50	0	17	67	103	61.0
Other white oaks	92	119	6	217	92	9	0	101	318	75.1
Other red oaks	18	9	24	51	18	0	0	18	69	75.8
Black locust	30	0	0	30	0	0	0	0	30	100.0
Non-commercial hardwoods	0	0	0	0	33	9	0	42	42	59.6
Total hardwoods	261	173	29	464	264	27	24	316	780	40.5
Total, all species	395	181	29	605	264	27	24	316	921	36.9
Sampling error (percent)	45.5	79.8	81.0	49.6	38.7	51.9	53.9	33.3	36.9	

Table 66.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Cecil/Harford Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	5	0	0	0	5	71.8
Other softwoods	2	0	0	0	2	70.7
Total coniferous species	7	0	0	0	7	56.4
Red maple	99	4	0	0	103	35.8
Sugar maple	1	0	0	0	1	100.0
Azalea species	8	3	0	0	11	33.4
Common pawpaw	41	15	0	0	56	69.3
Birch species	37	0	0	0	37	74.9
Hickory species	16	2	0	0	18	32.6
Dogwood species	43	3	0	0	46	44.9
American beech	43	3	2	0	48	45.3
Ash species	27	6	2	0	35	32.1
Laurel species	9	1	0	0	10	38.6
Common spicebush	22	3	1	0	26	28.6
Sweetgum	35	1	0	0	35	45.3
Yellow-poplar	41	0	2	0	43	45.0
Tupelo species	85	11	0	1	96	34.7
Black cherry	53	25	0	0	78	25.1
White oak	12	6	0	0	18	49.6
Chestnut oak	26	0	4	1	31	71.3
Other white oaks	4	0	0	0	4	68.5
Northern red oak	9	0	2	0	12	31.7
Other black oaks	27	2	0	0	29	59.9
Rose species	17	0	1	0	18	38.3
Rubus species	51	5	1	0	57	21.9
Sassafras	51	6	0	0	57	28.8
Blueberry	14	6	0	0	20	36.6
Elm species	6	0	0	0	6	82.2
Maple-leaved viburnum	2	6	0	0	8	56.9
Arrowwood	13	1	0	0	14	47.3
Other viburnum species	25	5	1	0	31	24.0
Other deciduous species	28	6	0	0	33	30.5
Total deciduous species	847	119	16	2	983	14.7
Unknown species	8	0	0	0	8	49.0
Total, all species	862	119	16	2	998	14.5
Sampling error (percent)	16.0	27.0	36.5	70.7	14.5	

Table 67.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Charles County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)		
	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+						
Eastern redcedar	152	88	94	30	0	0	0	0	0	0	0	0	0	0	365	45.8
Hickory	115	118	215	165	43	34	0	14	13	0	0	0	0	0	720	42.4
Persimmon	20	63	0	0	0	16	0	0	0	0	0	0	0	0	99	67.7
Beech	676	223	185	238	154	81	36	35	32	11	1,670	23.4	0	0	405	36.7
American holly	157	180	69	0	0	0	0	0	0	0	0	0	0	0	45	100.0
Black walnut	0	0	45	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Sweetbay	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Blackgum	570	204	195	44	101	53	0	0	11	0	0	0	0	0	1,178	24.1
Eastern hophornbeam	0	29	15	0	0	0	0	0	0	0	0	0	0	0	43	75.0
Black cherry	123	18	47	6	0	7	0	0	0	0	0	0	0	0	201	58.9
White oak	403	513	480	255	157	67	58	28	44	10	2,017	20.4	0	0	306	61.4
Swamp white oak	28	98	22	24	81	11	20	10	11	0	0	0	0	0	69	51.5
Scarlet oak	0	10	21	19	0	23	6	0	0	0	0	0	0	0	21	22.7
Southern red oak	457	229	171	113	215	99	69	80	31	0	0	0	0	0	39	84.3
Swamp chestnut oak	0	0	0	33	0	0	6	0	0	0	0	0	0	0	105	44.2
Pin oak	18	13	20	3	27	22	3	0	0	0	0	0	0	0	1,255	35.7
Willow oak	453	344	175	110	122	23	7	17	0	4	1,255	35.7	0	0	217	55.2
Northern red oak	15	123	15	14	22	14	0	7	0	0	0	0	0	0	194	75.9
Post oak	36	113	38	0	6	0	0	0	0	0	0	0	0	0	403	60.2
Black oak	265	79	13	13	16	0	13	6	0	0	0	0	0	0	28	71.0
Sassafras	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total, all species	3,528	2,435	1,818	1,068	943	451	220	197	149	49	10,859	9.2	0	0	0	0
Sampling error (percent)	21.3	16.1	14.4	17.0	17.3	17.3	22.1	30.1	24.0	39.7	9.2	0	0	0	0	0

Table 68.--Number of standing dead trees on timberland by species, condition class, and diameter class, Charles County, Maryland, 1986

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	15	0	0	15	44	0	15	59	73	82.2
Virginia pine	48	0	0	48	15	0	0	15	63	66.6
Other softwoods	7	0	0	7	0	0	0	0	7	100.0
Total softwoods	70	0	0	70	59	0	15	74	144	53.5
Red maple	0	0	0	0	0	0	7	7	7	100.0
Sweetgum	68	0	0	68	30	7	15	51	120	88.3
Blackgum	0	0	0	0	15	7	0	22	22	75.3
Select white oaks	0	0	0	0	14	0	0	14	14	100.0
Select red oaks	0	0	0	0	0	26	15	41	41	82.5
Other red oaks	0	0	0	0	0	7	14	21	21	56.5
Black locust	30	0	0	30	36	0	0	36	66	68.7
Other commercial hardwoods	0	0	0	0	0	27	7	35	35	80.1
Total hardwoods	98	0	0	98	95	75	57	228	326	39.3
Total, all species	168	0	0	168	154	75	73	301	470	26.3
Sampling error (percent)	49.7	.0	.0	49.7	37.2	44.5	35.8	27.9	26.3	

Table 69.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Charles County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	16	0	0	0	16	94.6
Other pine species	22	0	0	0	22	32.3
Other softwoods	2	0	0	0	2	58.0
Total coniferous species	40	0	0	0	40	41.7
Red maple	164	0	0	0	164	21.5
Alder species	1	0	0	0	1	100.0
Common pawpaw	64	0	0	0	64	47.3
Birch species	1	0	0	0	1	100.0
Hickory species	8	2	0	0	11	42.5
Dogwood species	78	1	0	0	78	49.3
American beech	35	8	0	0	43	28.4
American holly	56	0	0	0	56	18.9
Laurel species	3	0	0	0	3	78.0
Common spicebush	9	0	0	0	9	43.6
Sweetgum	92	3	0	0	95	20.7
Yellow-poplar	48	0	0	0	48	40.7
Magnolia species	12	0	0	0	12	79.4
Tupelo species	30	0	0	0	30	40.0
Black cherry	11	19	0	0	30	45.7
Other cherry species	1	0	0	0	1	100.0
White oak	17	0	0	0	17	40.0
Chestnut oak	3	0	0	0	3	100.0
Other white oaks	7	0	0	0	7	55.0
Northern red oak	18	3	0	0	21	58.3
Other black oaks	65	3	0	0	68	34.4
Rhododendron species	1	0	0	0	1	100.0
Rose species	1	0	0	0	1	100.0
Rubus species	19	1	0	0	20	22.9
Sassafras	15	9	0	0	24	49.0
Blueberry	38	7	0	0	45	18.4
Elm species	1	0	0	0	1	100.0
Maple-leaved viburnum	1	0	0	0	1	70.8
Arrowwood	8	0	0	0	8	33.9
Other viburnum species	7	0	1	0	7	37.1
Other deciduous species	48	0	0	0	48	24.8
Total deciduous species	861	55	1	0	918	9.7
Unknown species	28	1	0	0	29	27.1
Total, all species	929	56	1	0	986	9.3
Sampling error (percent)	10.0	29.1	100.0	.0	9.3	

Table 70.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Dorchester County, Maryland, 1986

Species	(In thousands of trees)													All classes	Sampling error (percent)	
	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+						
Hickory	492	120	85	16	0	0	0	0	0	0	0	0	0	0	713	74.2
Dogwood	101	0	0	0	0	0	0	0	0	0	0	0	0	0	101	100.0
Persimmon	33	38	0	0	0	0	0	0	0	0	0	0	0	0	71	100.0
Beech	0	0	0	19	0	0	0	0	0	0	0	0	0	0	19	100.0
American holly	191	179	3	2	0	0	0	0	0	0	0	0	0	0	375	48.5
Sweetbay	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16	100.0
Blackgum	637	422	253	129	35	2	8	0	0	0	0	0	0	0	1,489	29.4
Black cherry	195	57	0	9	9	0	9	0	0	0	0	0	0	0	280	100.0
White oak	1,260	226	326	230	144	61	35	18	6	0	0	0	0	0	2,306	46.7
Swamp white oak	33	49	0	15	19	27	0	7	7	0	0	0	0	0	158	57.4
Scarlet oak	0	3	40	0	0	0	0	0	0	0	0	0	0	0	44	67.9
Southern red oak	129	161	126	93	80	87	60	7	22	7	773	28.8	0	0	0	0
Cherrybark oak	0	0	16	8	15	0	9	0	0	0	0	0	0	0	49	70.7
Swamp chestnut oak	118	168	19	94	19	13	9	25	28	0	0	0	0	0	493	51.3
Water oak	129	87	123	22	35	0	9	0	0	0	0	0	0	0	405	60.8
Pin oak	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9	100.0
Willow oak	247	91	51	83	57	11	17	7	21	3	589	29.4	0	0	0	0
Post oak	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19	100.0
Black oak	74	0	0	9	7	15	0	0	0	0	0	0	0	0	106	73.8
Sassafras	67	0	0	0	0	0	0	0	0	0	0	0	0	0	67	100.0
Total, all species	3,724	1,603	1,063	741	421	216	156	65	85	10	8,083	16.1				
Sampling error (percent)	26.6	18.6	20.8	20.8	21.1	37.7	32.8	48.3	38.6	76.6	16.1					

Table 71.--Number of standing dead trees on timberland by species, condition class, and diameter class, and diameter class, Dorchester County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)		Diameter class (inches at breast height)		Diameter class (inches at breast height)		Diameter class (inches at breast height)			
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	429	8	0	437	759	16	11	787	1,224	35.6
Total softwoods	429	8	0	437	759	16	11	787	1,224	35.6
Red maple	86	16	0	102	0	17	5	22	124	81.5
Sweetgum	0	0	0	0	63	0	0	63	63	76.5
Select white oaks	31	8	0	39	109	23	0	132	171	41.9
Other red oaks	16	7	15	39	16	0	11	27	66	45.7
Non-commercial hardwoods	29	16	31	76	31	32	8	71	147	58.9
Total hardwoods	162	48	46	257	219	71	24	314	571	27.3
Total, all species	591	56	46	693	978	87	35	1,101	1,795	25.0
Sampling error (percent)	30.4	60.6	52.0	26.3	34.7	35.4	48.2	30.6	25.0	

Table 72.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Dorchester County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	52	0	0	1	53	41.8
Other pine species	2	0	0	0	2	100.0
Other softwoods	1	0	0	0	1	70.9
Total coniferous species	55	0	0	1	56	39.6
Red maple	87	6	1	1	96	33.8
Alder species	4	2	0	0	6	71.5
Serviceberry	1	0	0	0	1	100.0
Azalea species	1	0	0	0	1	100.0
Dogwood species	10	0	0	0	10	93.8
American beech	2	0	0	0	2	100.0
American holly	26	0	5	1	32	29.0
Laurel species	1	0	0	0	1	100.0
Sweetgum	36	4	0	4	43	31.7
Magnolia species	8	2	0	0	10	39.0
Tupelo species	50	4	0	4	57	39.6
Black cherry	8	0	0	0	8	57.2
Other cherry species	0	0	0	2	2	100.0
White oak	9	0	0	0	9	77.6
Other white oaks	7	0	0	0	7	61.9
Other black oaks	10	2	0	0	12	35.0
Rose species	1	1	0	0	1	70.9
Rubus species	7	0	0	0	7	38.0
Sassafras	6	0	0	0	6	53.4
Blueberry	30	11	5	1	47	16.7
Arrowwood	1	0	0	0	1	100.0
Other viburnum species	1	0	0	0	1	100.0
Other deciduous species	11	0	1	1	13	33.1
Total deciduous species	319	31	11	14	376	13.7
Unknown species	43	7	2	1	54	18.9
Total, all species	418	38	14	16	486	11.6
Sampling error (percent)	12.8	28.1	38.0	46.4	11.6	

Table 73.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Frederick County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)		
	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+						
Serviceberry	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29	71.2
Hickory	589	354	201	35	37	20	0	0	0	0	0	0	0	7	1,243	49.2
Hackberry	0	0	0	8	0	0	0	0	0	0	0	0	0	7	14	100.0
Dogwood	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14	100.0
Beech	25	67	0	32	19	13	0	0	0	0	0	0	8	5	170	18.3
Black walnut	0	23	184	12	24	23	0	0	0	0	0	0	13	0	279	73.0
Blackgum	665	36	13	30	8	44	0	0	0	0	0	0	0	0	805	42.3
Eastern hophornbeam	49	0	0	0	0	0	0	0	0	0	0	0	0	0	49	100.0
Pin cherry	33	0	47	0	0	0	0	0	0	0	0	0	0	0	80	71.9
Black cherry	441	346	0	26	57	27	15	10	0	0	0	0	0	0	922	57.6
White oak	203	233	143	80	27	0	39	20	15	0	0	0	0	2	763	43.9
Scarlet oak	0	0	0	72	64	37	0	0	0	0	0	0	0	0	173	52.5
Pin oak	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	100.0
Chestnut oak	986	1,255	959	552	368	182	129	60	67	0	0	0	0	0	4,559	24.5
Northern red oak	25	169	449	153	276	35	82	47	56	0	0	0	0	7	1,299	31.0
Black oak	0	0	0	26	0	34	0	11	24	0	0	0	0	0	95	47.6
Sassafras	173	0	0	23	0	0	0	0	0	0	0	0	0	0	196	88.9
Total, all species	3,253	2,484	1,026	1,048	881	414	266	156	198	14	10,710	17.4				
Sampling error (percent)	25.6	19.0	29.5	19.2	21.8	23.9	31.6	35.1	30.2	60.1	17.4					

Table 74.--Number of standing dead trees on timberland by species, condition class, and diameter class, Frederick County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Red maple	16	0	0	16	0	0	0	0	16	100.0
Yellow-poplar	0	0	0	0	43	0	0	43	43	100.0
Ash-walnut-cherry	0	0	0	0	211	0	0	211	211	100.0
Select white oaks	0	0	0	0	49	0	0	49	49	74.5
Select red oaks	16	0	0	16	16	7	7	31	47	54.4
Other white oaks	33	0	0	33	49	0	0	49	81	40.6
Other red oaks	125	0	11	136	0	0	0	0	136	90.8
Black locust	0	0	0	0	0	0	8	8	8	100.0
Other commercial hardwoods	0	0	0	0	16	0	0	16	16	100.0
Non-commercial hardwoods	16	0	0	16	63	23	0	87	103	57.9
Total hardwoods	206	0	11	217	448	30	15	493	711	38.9
Total, all species	206	0	11	217	448	30	15	493	711	38.9
Sampling error (percent)	57.4	.0	100.0	53.2	53.7	80.1	70.8	51.1	38.9	

Table 75.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Frederick County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	3	0	0	0	3	100.0
Other softwoods	2	0	0	0	2	100.0
Total coniferous species	4	0	0	0	4	72.3
Red maple	41	21	0	0	63	35.5
Other maple species	17	0	0	0	17	69.5
Alder species	1	0	0	0	1	100.0
Serviceberry	9	0	0	0	9	63.4
Azalea species	6	0	0	0	6	59.0
Birch species	2	0	0	0	2	75.9
Hickory species	9	1	0	0	9	35.5
Dogwood species	18	0	0	0	18	55.7
American beech	6	0	0	0	6	61.3
Ash species	34	0	0	0	34	46.4
Huckleberry	5	0	0	0	5	51.1
Witch-hazel	2	0	0	1	3	78.5
Laurel species	12	0	0	0	12	48.6
Common spicebush	21	0	0	0	21	37.2
Yellow-poplar	2	0	0	0	2	100.0
Tupelo species	9	2	0	0	11	50.3
Black cherry	25	2	0	0	27	40.1
Other cherry species	6	0	0	0	6	71.4
White oak	1	0	0	0	1	100.0
Chestnut oak	41	5	0	0	45	50.8
Northern red oak	4	2	0	0	6	49.1
Other black oaks	1	0	0	0	1	100.0
Rose species	10	1	0	0	11	72.7
Rubus species	29	0	0	0	29	28.1
Sassafras	22	3	0	0	25	52.1
Blueberry	17	1	0	0	18	28.1
Elm species	21	5	0	0	26	59.0
Arrowwood	1	0	0	0	1	100.0
Other viburnum species	1	0	0	0	1	71.7
Other deciduous species	16	1	0	0	17	48.0
Total deciduous species	390	44	0	1	435	14.4
Unknown species	1	0	0	0	1	100.0
Total, all species	395	44	0	1	440	14.4
Sampling error (percent)	15.5	70.9	.0	100.0	14.4	

Table 76.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Garrett County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)											All classes	Sampling error (percent)		
	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+					
Serviceberry	92	181	13	0	0	0	0	0	0	0	0	0	0	286	76.2
Hickory	591	337	347	211	127	52	34	7	5	0	0	0	0	1,711	25.9
American chestnut	82	0	0	0	0	0	0	0	0	0	0	0	0	82	100.0
Hawthorn	84	0	0	0	0	0	0	0	0	0	0	0	0	84	100.0
Beech	437	254	107	74	67	22	8	6	5	0	0	0	0	981	52.0
Butternut	30	0	0	0	0	0	0	0	0	0	0	0	0	30	70.7
Cucumber tree	41	45	15	15	0	15	0	0	0	0	0	0	0	130	39.9
Blackgum	264	16	0	0	15	7	6	6	0	0	0	0	0	315	57.9
Eastern hophornbeam	164	124	13	6	0	0	0	0	0	0	0	0	0	307	87.3
Pin cherry	17	0	0	0	0	0	0	0	0	0	0	0	0	17	100.0
Black cherry	1,168	731	683	362	235	90	12	13	0	0	0	0	0	3,294	27.5
Chokecherry	46	0	0	0	0	0	0	0	0	0	0	0	0	46	77.8
White oak	1,458	1,501	1,226	408	245	212	86	44	142	18	0	0	0	5,340	21.1
Scarlet oak	691	389	326	229	50	22	24	8	19	0	0	0	0	1,758	37.6
Chestnut oak	991	1,207	1,016	487	291	139	87	43	105	23	0	0	0	4,389	21.8
Northern red oak	896	860	889	1,028	611	346	134	144	155	36	0	0	0	5,101	15.0
Black oak	175	182	151	112	53	49	36	64	28	11	0	0	0	861	31.0
Sassafras	142	43	0	8	0	0	0	0	0	0	0	0	0	194	56.0
Mountain ash	0	13	0	0	0	0	0	0	0	0	0	0	0	13	100.0
Basswood	113	110	238	26	81	77	12	15	23	0	0	0	0	696	51.4
Total, all species	7,483	5,991	5,024	2,965	1,777	1,032	441	352	483	89	25,638	8.8			
Sampling error (percent)	14.3	14.2	11.7	10.6	11.3	12.2	18.8	19.6	17.2	30.7	8.8				

Table 77.--Number of standing dead trees on timberland by species, condition class, and diameter class, Garrett County, Maryland, 1986
(In thousands of trees)

Species	Intact top			Broken top			Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)			Diameter class (inches at breast height)				
	5.0- 10.9	11.0- 14.9	15+ Total	5.0- 10.9	11.0- 14.9	15+ Total		
White/red pine	29	0	29	15	0	15	44	100.0
Other yellow pines	0	0	0	243	0	243	243	76.0
Other softwoods	15	0	15	0	0	0	15	100.0
Total softwoods	44	0	44	258	0	258	302	61.9
Red maple	44	0	44	15	0	14	72	43.3
Sugar maple	0	0	0	15	0	15	15	100.0
Hickory	71	0	71	50	0	50	121	100.0
Beech	0	0	0	105	0	105	105	86.4
Blackgum	0	0	0	15	0	15	15	100.0
Ash-walnut-cherry	15	0	15	82	7	89	104	50.6
Select white oaks	143	0	143	103	0	103	247	66.5
Select red oaks	100	0	100	0	0	6	106	57.6
Other white oaks	44	7	66	321	15	347	413	67.2
Other red oaks	59	0	59	29	0	29	88	54.9
Black locust	44	7	67	149	34	192	259	33.7
Other commercial hardwoods	206	0	206	88	6	94	300	48.6
Non-commercial hardwoods	137	0	137	231	0	246	382	49.6
Total hardwoods	864	15	908	1,202	63	1,319	2,227	17.9
Total, all species	908	15	952	1,461	63	1,578	2,530	16.8
Sampling error (percent)	27.1	70.7	60.9	24.7	38.6	48.2	22.9	16.8

Table 78.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Garrett County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	6	0	0	0	6	45.9
Other softwoods	14	0	0	0	14	34.2
Total coniferous species	21	0	0	0	21	26.9
Red maple	256	59	12	0	327	21.2
Sugar maple	55	29	6	0	91	32.4
Other maple species	89	2	0	2	93	31.3
Serviceberry	86	15	1	0	102	28.6
Azalea species	12	0	0	0	12	41.5
Birch species	62	3	4	0	69	26.6
Hickory species	13	1	0	0	14	34.0
Dogwood species	14	2	0	0	16	36.9
American beech	8	3	0	0	11	34.6
Ash species	52	10	2	0	64	46.3
Huckleberry	31	3	0	0	34	27.0
Witch-hazel	33	4	1	0	39	16.8
Laurel species	18	0	1	0	19	34.2
Yellow-poplar	5	0	0	0	5	85.8
Magnolia species	8	0	0	0	8	66.2
Tupelo species	18	0	1	1	21	42.2
Black cherry	167	63	4	0	233	15.5
Other cherry species	6	0	0	0	6	72.3
White oak	82	3	1	0	86	36.2
Chestnut oak	16	1	3	0	20	33.5
Northern red oak	49	6	4	0	59	28.0
Other black oaks	10	2	0	0	13	41.8
Rhododendron species	17	0	0	0	17	43.0
Rose species	1	0	0	0	1	70.8
Rubus species	69	5	1	0	75	13.7
Sassafras	122	22	9	0	152	30.0
Blueberry	11	1	1	0	12	37.5
Elm species	4	0	0	0	4	73.1
Maple-leaved viburnum	4	2	1	0	7	46.9
Arrowwood	3	1	1	0	5	54.3
Other viburnum species	2	1	0	0	3	61.8
Other deciduous species	95	48	0	2	146	23.7
Total deciduous species	1,421	287	53	6	1,766	9.2
Unknown species	22	0	1	0	23	31.8
Total, all species	1,464	287	53	6	1,810	9.0
Sampling error (percent)	10.3	22.3	25.2	49.5	9.0	

Table 79.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Kent/Queen Annes Counties, Maryland, 1986

Species	(In thousands of trees)													All classes	Sampling error (percent)	
	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+						
Hickory	107	142	38	25	18	20	39	0	0	0	0	0	0	0	389	43.8
Dogwood	0	26	0	0	0	0	0	0	0	0	0	0	0	0	26	100.0
Persimmon	12	12	12	0	0	0	0	0	0	0	0	0	0	0	37	100.0
Beech	0	77	125	56	19	36	6	7	46	23	394	45.9	0	0	19	100.0
American holly	19	0	0	0	0	0	0	0	0	0	0	0	0	0	24	100.0
Black walnut	0	0	12	6	0	6	0	0	0	0	0	0	0	0	12	100.0
Sweetbay	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12	100.0
Blackgum	801	408	171	156	98	56	23	23	16	0	1,752	29.1	0	0	85	53.9
Black cherry	0	13	45	0	6	0	10	0	11	0	42	23.0	0	0	6	100.0
White oak	584	302	351	176	157	137	63	35	0	0	0	0	0	0	1,851	23.0
Swamp white oak	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6	100.0
Scarlet oak	0	0	0	5	0	5	0	10	0	0	0	0	0	0	20	70.8
Southern red oak	294	78	0	21	24	0	6	14	6	0	443	46.8	0	0	38	83.2
Swamp chestnut oak	0	0	0	31	0	0	0	0	7	0	0	0	0	0	26	58.6
Pin oak	0	0	13	7	7	0	0	0	0	0	0	0	0	0	167	56.7
Willow oak	0	0	65	44	18	24	0	8	3	4	167	56.7	0	0	399	59.1
Northern red oak	42	121	26	108	36	25	9	15	11	4	196	56.9	0	0	188	63.2
Black oak	36	61	44	13	0	22	13	8	0	0	0	0	0	0	0	0
Sassafras	29	147	0	0	0	12	0	0	0	0	0	0	0	0	0	0
Total, all species	1,925	1,400	905	646	389	343	169	121	142	34	6,074	14.2	0	0	0	0
Sampling error (percent)	23.9	19.9	31.1	24.6	19.9	19.7	26.0	32.8	31.1	41.4	14.2					

Table 80.--Number of standing dead trees on timberland by species, condition class, and diameter class, Kent/Queen Annes Counties, Maryland, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Intact top					Broken top						
	Diameter class (inches at breast height)					Diameter class (inches at breast height)						
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total	Total trees			
Loblolly pine	12	6	0	18	41	0	0	41	60	56.4		
Virginia pine	0	0	0	0	2	0	0	2	2	49.9		
Other softwoods	0	0	5	5	0	0	12	12	17	100.0		
Total softwoods	12	6	5	24	43	0	12	55	79	45.7		
Red maple	0	0	0	0	116	0	0	116	116	100.0		
Yellow-poplar	0	0	0	0	12	6	0	18	18	100.0		
Ash-walnut-cherry	0	0	0	0	107	0	9	116	116	82.3		
Select white oaks	0	0	0	0	17	6	0	23	23	78.2		
Select red oaks	0	0	0	0	12	0	0	12	12	100.0		
Non-commercial hardwoods	27	0	18	45	177	36	22	235	279	41.1		
Total hardwoods	27	0	18	45	441	48	31	521	565	39.7		
Total, all species	39	6	23	69	485	48	43	576	644	35.1		
Sampling error (percent)	72.8	100.0	67.3	57.4	45.0	48.4	46.4	37.4	35.1			

Table 81.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Kent/Queen Annes Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other pine species	1	0	0	0	1	49.9
Total coniferous species	1	0	0	0	1	49.9
Red maple	43	4	0	0	47	46.3
Serviceberry	1	1	0	0	2	100.0
Azalea species	3	0	0	0	3	51.8
Common pawpaw	8	0	0	0	8	66.8
Hickory species	1	2	0	0	3	83.5
Dogwood species	13	4	1	0	17	39.6
American beech	5	0	0	0	5	42.3
Ash species	1	0	0	0	1	100.0
American holly	3	0	0	0	3	80.6
Common spicebush	5	1	0	0	6	42.1
Sweetgum	50	0	0	0	50	34.2
Yellow-poplar	1	0	0	0	1	100.0
Magnolia species	3	0	0	0	3	100.0
Tupelo species	6	1	1	0	7	40.3
Black cherry	4	0	0	0	4	39.5
White oak	6	0	0	16	22	73.9
Other white oaks	1	0	0	0	1	100.0
Northern red oak	1	0	0	0	1	84.2
Other black oaks	11	0	0	0	11	48.2
Rose species	1	0	0	0	1	100.0
Rubus species	10	1	0	0	11	29.0
Sassafras	1	0	0	0	1	100.0
Blueberry	9	1	0	1	11	53.4
Elm species	1	5	0	0	6	63.0
Arrowwood	4	3	1	0	8	36.7
Other viburnum species	0	0	1	0	1	100.0
Other deciduous species	3	1	1	0	6	36.3
Total deciduous species	193	24	5	17	239	17.1
Unknown species	40	7	1	0	49	15.1
Total, all species	234	31	6	17	289	15.0
Sampling error (percent)	17.3	31.9	40.6	96.4	15.0	

Table 82.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Montgomery/Prince Georges Counties, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)											All classes	Sampling error (percent)
	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+			
Hickory	286	495	150	115	57	43	101	9	18	0	1,275	43.5	
Hackberry	115	77	83	35	0	0	0	0	0	0	310	100.0	
Dogwood	35	0	0	0	0	0	0	0	0	0	35	70.7	
Persimmon	36	0	0	0	8	0	0	0	0	0	43	84.1	
Beech	200	35	115	52	63	27	14	17	14	10	548	44.8	
Black walnut	0	75	0	39	8	0	0	0	0	0	122	100.0	
Blackgum	568	148	77	63	79	90	9	0	39	0	1,074	51.0	
Pin cherry	108	89	0	0	0	0	0	0	0	0	197	89.6	
Black cherry	124	148	87	67	60	17	8	0	0	0	511	41.4	
White oak	1,201	375	239	151	26	68	46	42	49	13	2,211	38.9	
Scarlet oak	0	84	0	62	22	0	13	0	0	0	181	54.6	
Southern red oak	107	15	47	63	41	8	8	31	37	0	356	64.0	
Shingle oak	35	17	0	0	0	0	0	0	0	0	52	100.0	
Swamp chestnut oak	18	0	43	0	0	9	14	23	39	9	155	100.0	
Pin oak	0	86	56	18	33	19	0	21	22	0	255	62.7	
Willow oak	0	0	0	9	0	24	0	17	25	0	75	63.1	
Chestnut oak	125	18	18	0	0	0	0	11	30	0	201	81.4	
Northern red oak	0	18	73	41	88	20	0	0	16	22	277	37.3	
Black oak	18	53	109	50	60	0	21	74	91	12	488	42.0	
Sassafras	49	0	0	0	0	0	0	0	0	0	49	73.2	
Total, all species	3,025	1,735	1,097	764	544	325	233	245	381	66	8,417	17.5	
Sampling error (percent)	29.4	25.6	19.0	21.6	25.0	20.6	42.6	32.2	28.7	46.8	17.5		

Table 83.--Number of standing dead trees on timberland by species, condition class, and diameter class, Montgomery/Prince Georges Counties, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	0	0	0	0	58	0	0	58	58	100.0
Virginia pine	0	0	0	0	53	21	0	74	74	54.6
Total softwoods	0	0	0	0	111	21	0	132	132	62.1
Red maple	18	0	0	18	0	0	0	0	18	100.0
Sweetgum	0	0	0	0	57	0	9	65	65	86.0
Ash-walnut-cherry	0	0	0	0	18	0	0	18	18	100.0
Select white oaks	18	0	0	18	61	0	9	70	88	69.7
Select red oaks	0	0	0	0	0	23	0	23	23	100.0
Other red oaks	18	0	0	18	97	0	0	97	115	46.0
Black locust	36	0	0	36	167	18	13	198	234	56.0
Non-commercial hardwoods	0	0	0	0	18	0	0	18	18	100.0
Total hardwoods	89	0	0	89	417	41	31	489	578	27.4
Total, all species	89	0	0	89	529	62	31	622	711	24.4
Sampling error (percent)	45.0	0	0	45.0	31.7	49.7	52.4	26.8	24.4	

Table 84.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Montgomery/Prince Georges Counties, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other softwoods	2	0	0	0	2	71.1
Total coniferous species	2	0	0	0	2	71.1
Red maple	73	0	0	0	73	19.3
Alder species	5	0	0	0	5	71.3
Common pawpaw	13	0	0	0	13	66.9
Birch species	1	0	0	0	1	100.0
Hickory species	13	0	0	0	13	69.5
Dogwood species	35	0	0	0	35	38.5
American beech	14	0	0	0	14	43.6
Ash species	6	0	0	0	6	100.0
American holly	18	0	0	0	18	51.4
Laurel species	5	0	0	0	5	69.2
Common spicebush	8	1	0	0	9	49.8
Sweetgum	54	12	0	0	66	39.7
Yellow-poplar	84	0	0	0	84	60.0
Magnolia species	1	0	0	0	1	100.0
Tupelo species	51	3	0	0	54	18.5
Black cherry	18	21	0	0	39	56.0
Other cherry species	19	0	0	0	19	45.8
White oak	7	0	0	0	7	52.6
Chestnut oak	2	0	0	0	2	100.0
Other white oaks	13	0	0	0	13	100.0
Northern red oak	3	0	0	0	3	74.7
Other black oaks	19	0	0	0	19	38.2
Rose species	29	1	0	0	30	56.0
Rubus species	23	0	0	0	23	28.8
Sassafras	13	0	0	0	13	39.3
Blueberry	26	4	0	0	31	27.7
Elm species	2	0	0	0	2	100.0
Maple-leaved viburnum	2	0	0	0	2	100.0
Arrowwood	11	1	0	0	11	37.0
Other deciduous species	31	0	0	0	31	27.7
Total deciduous species	601	44	0	0	645	16.8
Unknown species	13	0	0	0	13	26.2
Total, all species	616	44	0	0	660	16.6
Sampling error (percent)	16.1	55.4	.0	.0	16.6	

Table 85.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, St. Marys County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)											All classes	Sampling error (percent)								
	5.0-		7.0-		9.0-		11.0-		13.0-		15.0-			17.0-		19.0-		21.0-		29.0+	
	6.9	5.0-	8.9	7.0-	10.9	9.0-	12.9	11.0-	14.9	13.0-	16.9			15.0-	18.9	17.0-	20.9	19.0-	21.0-		
Hickory	11	82	165	40	55	30	12	8	4	3	410	28.8									
Hackberry	0	13	0	0	0	0	0	0	0	0	13	100.0									
Dogwood	106	0	0	0	0	0	0	0	0	0	106	100.0									
Persimmon	53	14	0	0	0	0	0	0	0	0	66	84.4									
Beech	347	95	45	65	83	87	23	27	12	17	803	32.0									
American holly	531	204	56	13	6	0	0	0	0	0	811	34.1									
Black walnut	0	25	0	6	0	0	0	0	0	0	32	100.0									
Sweetbay	41	0	0	0	0	0	0	0	0	0	41	100.0									
Blackgum	236	234	77	65	73	57	19	0	6	0	767	24.8									
Eastern hophornbeam	163	0	0	0	0	0	0	0	0	0	163	61.3									
Pin cherry	291	58	48	0	0	0	0	0	0	0	397	93.9									
Black cherry	33	27	11	6	0	11	11	6	6	0	111	56.6									
White oak	530	266	340	161	265	84	42	23	43	3	1,759	21.9									
Scarlet oak	22	11	54	49	36	11	0	0	0	0	185	40.4									
Southern red oak	507	112	167	161	136	92	52	16	26	19	1,288	29.6									
Cherrybark oak	40	23	5	19	0	0	0	0	0	0	87	62.0									
Swamp chestnut oak	0	0	0	0	0	0	20	0	6	0	26	59.4									
Water oak	98	0	13	0	0	0	0	0	0	0	111	100.0									
Pin oak	64	44	34	5	0	11	8	0	0	0	165	68.9									
Willow oak	126	21	189	51	35	28	6	0	2	0	458	44.5									
Chestnut oak	384	59	29	0	6	11	21	16	0	2	529	74.9									
Northern red oak	49	55	44	6	0	18	11	13	0	0	195	55.0									
Post oak	80	0	11	0	28	12	0	0	0	0	131	65.9									
Black oak	225	24	23	6	30	25	0	0	6	0	339	38.6									
Sassafras	110	0	0	0	0	6	0	0	0	0	116	83.6									
Basswood	0	0	13	0	0	0	0	0	0	0	13	100.0									
Total, all species	4,048	1,370	1,325	651	753	485	226	108	112	44	9,122	10.5									

Sampling error (percent)

17.1 17.7 14.2 17.9 17.3 15.3 23.0 28.0 28.8 50.7 10.5

Table 86.--Number of standing dead trees on timberland by species, condition class, and diameter class, St. Marys County, Maryland, 1986

(In thousands of trees)

Species	Intact top			Broken top			Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)			Diameter class (inches at breast height)				
	5.0-10.9	11.0-14.9	15+	5.0-10.9	11.0-14.9	15+		
			Total			Total		
Loblolly pine	25	6	0	31	47	6	83	50.4
Virginia pine	64	0	0	64	90	0	154	72.5
Total softwoods	89	6	0	95	137	6	237	52.8
Red maple	0	0	0	0	7	0	7	100.0
Hickory	72	15	0	88	11	0	99	72.7
Sweetgum	0	0	0	0	16	0	16	100.0
Yellow-poplar	13	0	0	13	0	0	25	67.5
Blackgum	13	0	0	13	0	0	13	100.0
Ash-walnut-cherry	0	0	6	6	6	0	13	100.0
Select white oaks	13	0	0	13	0	5	18	75.9
Select red oaks	0	0	0	0	11	0	11	100.0
Other white oaks	0	0	0	0	22	0	22	100.0
Other red oaks	13	0	0	13	0	0	13	100.0
Other commercial hardwoods	0	0	0	0	13	0	13	100.0
Total hardwoods	123	15	6	145	49	5	250	36.2
Total, all species	213	21	6	240	185	11	488	29.1
Sampling error (percent)	46.2	77.7	100.0	40.0	46.3	70.7	34.4	29.1

Table 87.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, St. Marys County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	8	0	0	0	8	52.4
Other pine species	9	0	0	0	9	69.3
Other softwoods	1	0	0	0	1	71.0
Total coniferous species	18	0	0	0	18	43.3
Red maple	53	4	0	0	57	22.3
Alder species	3	0	0	0	3	72.6
Common pawpaw	10	0	0	0	10	57.6
Hickory species	8	0	0	0	8	40.4
Dogwood species	20	0	0	0	20	32.8
American beech	19	0	0	0	19	30.1
Ash species	1	0	0	0	1	100.0
American holly	48	0	0	0	48	20.2
Laurel species	9	0	0	0	9	50.3
Common spicebush	1	0	0	0	1	71.6
Sweetgum	43	0	0	0	43	21.2
Yellow-poplar	10	0	0	0	10	47.7
Magnolia species	3	0	0	0	3	81.3
Tupelo species	21	1	0	0	21	31.8
Black cherry	3	0	0	0	3	56.1
Other cherry species	5	0	0	0	5	64.7
White oak	9	0	0	0	9	28.5
Chestnut oak	2	0	0	0	2	77.2
Other white oaks	3	0	0	0	3	100.0
Northern red oak	3	0	0	0	3	51.7
Other black oaks	27	0	0	0	27	32.7
Rose species	1	0	0	0	1	100.0
Rubus species	7	0	0	0	7	39.8
Sassafras	1	0	0	0	1	61.4
Blueberry	39	1	0	0	40	16.3
Maple-leaved viburnum	19	0	0	0	19	27.3
Arrowwood	5	0	0	0	5	60.8
Other deciduous species	36	0	0	0	36	23.7
Total deciduous species	411	5	0	0	416	10.1
Unknown species	9	0	0	0	9	33.4
Total, all species	439	5	0	0	443	10.0
Sampling error (percent)	10.3	88.9	.0	.0	10.0	

Table 88.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Somerset County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)											All classes	Sampling error (percent)	
	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+				
Serviceberry	0	41	21	0	0	0	0	0	0	0	0	0	62	100.0
Beech	140	26	14	30	5	0	0	0	11	5	0	0	230	70.4
American holly	245	46	32	0	0	0	0	0	0	0	0	0	323	66.3
Blackgum	426	387	167	83	51	81	8	32	19	19	0	0	1,253	36.9
White oak	149	159	290	281	71	55	15	8	8	8	0	0	1,036	44.0
Swamp white oak	66	0	23	0	21	0	0	0	0	0	0	3	113	56.4
Scarlet oak	0	0	0	13	0	0	0	0	0	0	0	0	13	100.0
Southern red oak	128	102	30	128	59	105	23	5	5	0	0	0	581	28.3
Swamp chestnut oak	0	0	0	11	0	0	0	0	0	11	0	0	21	100.0
Water oak	83	114	59	0	5	0	10	0	0	0	0	0	271	56.5
Pin oak	0	0	0	0	0	0	0	4	0	0	0	0	4	100.0
Willow oak	0	23	0	11	0	16	0	0	0	0	0	0	50	81.4
Northern red oak	0	0	25	0	0	0	0	0	0	0	0	0	25	100.0
Black oak	21	0	21	0	11	0	0	0	0	0	0	0	52	54.5
Total, all species	1,258	899	680	556	223	258	57	60	42	42	3	4,037	23.4	

Sampling error (percent)	24.6	36.8	34.1	45.7	39.5	25.4	44.9	48.0	58.7	100.0	23.4
--------------------------	------	------	------	------	------	------	------	------	------	-------	------

Table 89.--Number of standing dead trees on timberland by species, condition class, and diameter class, Somerset County, Maryland, 1986

(In thousands of trees)

Species	Intact top			Broken top			Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)			Diameter class (inches at breast height)				
	5.0-10.9	11.0-14.9	15+	5.0-10.9	11.0-14.9	15+		
Loblolly pine	194	0	0	116	0	0	310	53.3
Other yellow pines	118	0	0	0	0	0	118	100.0
Total softwoods	312	0	0	116	0	0	428	63.1
Red maple	0	0	0	0	0	8	8	100.0
Select white oaks	0	0	0	110	0	10	120	100.0
Other red oaks	57	0	0	0	18	12	88	73.8
Other commercial hardwoods	0	0	0	33	0	0	33	100.0
Non-commercial hardwoods	0	11	0	64	62	17	154	50.4
Total hardwoods	57	11	0	207	81	47	404	37.7
Total, all species	370	11	0	381	81	47	832	33.2
Sampling error (percent)	72.9	100.0	.0	46.2	68.6	61.6	42.9	33.2

Table 90.--Number of seedlings, saplings, and shrubs on timberland by species
and browse-utilization class, Somerset County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	50	0	0	0	50	44.9
Other softwoods	1	0	0	0	1	100.0
Total coniferous species	51	0	0	0	51	44.4
Red maple	150	11	0	0	162	28.9
Azalea species	1	0	0	0	1	78.0
American beech	0	0	0	0	0	100.0
Ash species	1	0	0	0	1	100.0
American holly	24	2	0	0	26	44.8
Sweetgum	51	4	0	0	54	27.9
Magnolia species	3	0	0	0	3	100.0
Tupelo species	38	0	0	0	38	50.9
Black cherry	2	0	1	0	3	31.1
White oak	1	1	0	0	2	61.5
Other white oaks	2	0	0	0	2	80.8
Other black oaks	13	0	0	0	13	66.4
Rose species	1	0	0	0	1	100.0
Rubus species	7	3	0	0	10	47.3
Sassafras	6	0	0	0	6	47.0
Blueberry	33	5	1	0	39	16.9
Maple-leaved viburnum	0	1	0	0	1	100.0
Arrowwood	1	0	0	0	1	100.0
Other deciduous species	11	0	0	0	11	31.7
Total deciduous species	344	27	2	0	373	17.9
Unknown species	46	9	0	0	55	12.3
Total, all species	441	36	2	0	480	17.9
Sampling error (percent)	18.0	40.6	70.9	.0	17.9	

Table 91.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Washington County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)		
	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+							
Eastern redcedar	76	102	71	0	0	0	0	0	0	0	0	0	0	0	0	250	93.3
Hickory	99	116	20	54	3	44	0	0	15	0	0	0	0	0	0	350	40.4
Hackberry	121	150	0	3	0	0	0	0	0	0	0	0	0	0	0	274	70.4
Beech	20	0	60	0	10	0	15	10	10	10	0	0	0	0	0	125	100.0
Butternut	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	100.0
Black walnut	0	29	35	92	15	0	0	0	0	0	0	0	0	0	0	171	96.6
Cucumber tree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	100.0
Apple	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	100.0
Blackgum	161	20	79	10	0	0	0	0	0	0	0	0	0	11	281	48.8	
Black cherry	465	0	17	0	0	0	0	0	0	0	0	0	0	0	483	91.2	
White oak	0	229	123	87	91	21	10	0	0	0	0	0	0	0	561	40.7	
Scarlet oak	0	17	0	34	11	23	0	0	0	0	0	0	0	0	85	70.9	
Chinkapin oak	0	0	0	97	0	0	0	0	0	0	0	0	0	0	97	100.0	
Chestnut oak	641	914	342	295	494	214	94	32	32	20	0	0	0	0	3,045	29.4	
Northern red oak	93	319	148	138	149	184	29	70	70	43	0	0	0	0	1,175	36.7	
Black oak	44	0	134	118	0	52	74	13	13	22	0	0	0	0	457	63.1	
Sassafras	20	0	0	10	0	0	0	0	0	0	0	0	0	0	30	68.6	
Total, all species	1,786	1,807	1,032	937	773	538	222	155	96	11	7,447	13.7					
Sampling error (percent)	32.4	21.3	18.7	12.7	32.7	26.1	35.7	31.8	46.5	100.0	13.7						

Table 92.--Number of standing dead trees on timberland by species, condition class, and diameter class, Washington County, Maryland, 1986

Species	(In thousands of trees)						Total all trees	Sampling error (percent)
	Intact top			Broken top				
	Diameter class (inches at breast height)		Total	Diameter class (inches at breast height)		Total		
	5.0-10.9	11.0-14.9		15+	5.0-10.9		11.0-14.9	15+
Virginia pine	125	0	0	0	0	0	125 100.0	
Total softwoods	125	0	0	0	0	0	125 100.0	
Hickory	91	0	0	142	0	0	233 100.0	
Blackgum	0	35	0	0	0	0	35 100.0	
Select white oaks	103	0	0	20	0	0	123 100.0	
Select red oaks	59	0	16	0	0	0	75 32.7	
Other white oaks	20	0	0	79	0	10	109 69.8	
Black locust	81	0	0	142	20	0	243 59.0	
Other commercial hardwoods	0	0	0	0	10	0	10 100.0	
Non-commercial hardwoods	0	0	0	228	35	0	264 71.7	
Total hardwoods	354	35	16	611	65	10	1,092 36.1	
Total, all species	479	35	16	611	65	10	1,217 30.1	
Sampling error (percent)	35.7	100.0	100.0	48.8	58.8	100.0	46.6 30.1	

Table 93.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Washington County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Other softwoods	1	0	0	0	1	100.0
Total coniferous species	1	0	0	0	1	100.0
Red maple	31	5	0	0	36	72.4
Sugar maple	2	0	0	0	2	100.0
Other maple species	3	6	0	0	9	84.8
Alder species	1	0	0	0	1	100.0
Serviceberry	2	1	0	0	3	100.0
Birch species	19	0	0	0	19	100.0
Hickory species	5	0	0	0	5	88.1
Dogwood species	14	0	0	0	14	82.8
Ash species	9	1	0	0	10	64.9
Huckleberry	6	0	0	0	6	63.0
Witch-hazel	2	0	0	0	2	100.0
Laurel species	5	0	0	0	5	75.7
Common spicebush	6	1	0	0	8	96.3
Yellow-poplar	3	0	0	0	3	100.0
Magnolia species	18	0	0	0	18	100.0
Tupelo species	2	0	0	0	2	63.5
Black cherry	4	2	0	0	6	60.2
White oak	1	0	0	0	1	100.0
Chestnut oak	6	0	0	0	6	51.8
Northern red oak	3	0	0	0	3	75.6
Other black oaks	3	0	0	0	3	100.0
Rose species	5	1	0	0	6	57.5
Rubus species	10	0	0	0	10	47.5
Sassafras	5	0	0	0	5	46.4
Blueberry	9	3	0	0	13	51.4
Elm species	3	0	0	0	3	100.0
Maple-leaved viburnum	2	0	1	0	3	68.5
Other deciduous species	20	14	0	0	34	78.9
Total deciduous species	200	35	1	0	236	20.7
Unknown species	5	0	0	0	5	81.0
Total, all species	206	35	1	0	242	20.5
Sampling error (percent)	19.9	45.0	100.0	.0	20.5	

Table 94.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Wicomico County, Maryland, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)	
	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+					
Hickory	0	0	0	4	0	0	0	0	0	0	0	0	0	4	100.0
Dogwood	54	0	0	0	0	0	0	0	0	0	0	0	0	54	100.0
Beech	13	13	87	12	44	0	0	0	0	0	0	0	0	169	65.2
American holly	799	390	56	27	6	0	6	0	0	0	0	0	0	1,286	32.4
Butternut	0	17	0	0	0	0	0	0	0	0	0	0	0	17	100.0
Blackgum	452	322	133	78	91	34	12	12	12	0	0	0	0	1,135	25.5
Black cherry	0	0	15	0	0	4	0	0	0	0	0	0	0	19	100.0
White oak	52	115	98	81	40	26	22	10	9	0	0	0	0	453	34.6
Scarlet oak	10	13	0	11	0	7	0	0	0	0	0	0	0	41	74.8
Southern red oak	144	71	87	78	62	16	9	0	0	0	0	0	0	467	31.2
Swamp chestnut oak	13	0	0	11	0	0	14	0	0	0	0	0	0	39	88.5
Water oak	743	444	68	39	60	0	0	0	0	0	0	0	0	1,355	36.1
Willow oak	13	0	48	0	18	0	0	0	5	0	0	0	0	85	41.8
Northern red oak	19	9	0	12	4	15	0	0	0	0	0	0	0	59	58.7
Sassafras	39	0	0	14	0	0	0	0	0	0	0	0	0	53	63.8
Total, all species	2,352	1,394	592	368	326	103	63	27	9	0	0	0	0	5,236	16.1

Sampling error

(percent)	20.4	24.5	23.8	18.8	23.1	36.6	41.6	60.2	70.8	.0	16.1
-----------	------	------	------	------	------	------	------	------	------	----	------

Table 95.--Number of standing dead trees on timberland by species, condition class, and diameter class, and diameter class, Wicomico County, Maryland, 1986

(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)		Total		Diameter class (inches at breast height)		Total			
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	0	0	0	0	15	0	0	15	15	100.0
Total softwoods	0	0	0	0	15	0	0	15	15	100.0
Red maple	0	0	0	0	49	0	10	59	59	62.7
Sweetgum	0	0	0	0	0	0	8	8	8	100.0
Select white oaks	30	0	0	30	74	0	7	81	111	63.9
Other red oaks	58	0	0	58	229	17	0	245	303	46.2
Non-commercial hardwoods	0	0	17	17	151	76	9	237	253	46.1
Total hardwoods	88	0	17	105	503	92	35	630	735	23.9
Total, all species	88	0	17	105	517	92	35	645	750	23.6
Sampling error (percent)	70.5	.0	71.4	59.1	26.3	36.5	44.7	24.5	23.6	

Table 96.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Wicomico County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	25	0	0	0	25	41.1
Other pine species	0	0	0	0	0	100.0
Total coniferous species	25	0	0	0	25	40.6
Red maple	54	3	1	0	57	33.4
Serviceberry	6	0	0	0	6	70.7
Azalea species	2	0	0	0	2	59.9
American holly	38	0	5	0	43	20.5
Laurel species	1	0	0	0	1	100.0
Sweetgum	61	2	0	0	63	25.7
Yellow-poplar	1	0	0	0	1	100.0
Magnolia species	6	5	0	0	11	48.6
Tupelo species	14	2	0	0	16	37.6
Black cherry	2	1	0	0	2	52.0
White oak	2	0	3	0	5	70.1
Other black oaks	28	1	0	0	29	34.6
Rubus species	4	0	0	0	4	46.1
Sassafras	10	1	2	0	13	38.4
Blueberry	31	10	1	0	42	12.3
Arrowwood	1	0	0	0	1	100.0
Other deciduous species	7	2	0	0	10	29.4
Total deciduous species	267	26	13	0	306	12.0
Unknown species	81	17	3	0	100	18.3
Total, all species	372	43	15	0	431	11.7
Sampling error (percent)	11.6	19.0	50.0	.0	11.7	

Table 97.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Worcester County, Maryland, 1986

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)								
	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+			
Hickory	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	100.0
Dogwood	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	100.0
Persimmon	20	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	76.5
Beech	0	21	151	63	37	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308	89.2
American holly	1,041	174	55	107	21	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	1,417	27.8
Black walnut	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	100.0
Magnolia	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	100.0
Sweetbay	368	212	16	30	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	642	59.7
Blackgum	470	115	384	337	85	37	61	29	35	0	0	0	0	0	0	0	0	0	0	0	0	1,554	44.1
Black cherry	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	71.5
White oak	370	211	302	241	157	123	21	0	0	0	0	0	0	0	0	0	0	0	0	10	1,435	33.2	
Swamp white oak	20	29	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	59.3
Southern red oak	173	149	165	107	46	22	24	10	4	0	0	0	0	0	0	0	0	0	0	0	0	700	31.5
Swamp chestnut oak	5	58	14	0	14	13	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	114	69.8
Water oak	194	96	56	69	20	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	32.7
Pin oak	5	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	84.4
Willow oak	0	0	0	0	0	10	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	33	58.3
Northern red oak	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	68.0
Black oak	0	20	20	10	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	100.0
Sassafras	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	82.1
Total, all species	2,958	1,106	1,305	967	435	305	106	89	47	10	7,329	14.5											
Sampling error (percent)	18.1	21.7	21.9	23.0	23.5	25.5	35.7	40.9	46.8	100.0	14.5												

Table 98.--Number of standing dead trees on timberland by species, condition class, and diameter class, Worcester County, Maryland, 1986
(In thousands of trees)

Species	Intact top			Broken top			Total all trees	Sampling error (percent)	
	Diameter class (inches at breast height)			Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	5.0-10.9	11.0-14.9	15+			
			Total			Total			
Loblolly pine	17	8	5	30	122	0	129	159	69.4
Other softwoods	0	0	0	0	58	0	58	58	100.0
Total softwoods	17	8	5	30	180	0	187	217	38.7
Red maple	82	0	0	82	0	0	0	82	100.0
Sweetgum	0	0	0	0	45	10	55	55	83.9
Blackgum	0	0	0	0	0	0	12	12	100.0
Select white oaks	20	10	0	30	135	0	145	175	46.6
Other red oaks	0	0	0	0	17	0	27	27	72.8
Non-commercial hardwoods	20	0	0	20	20	79	129	149	49.5
Total hardwoods	122	10	0	132	217	88	367	499	29.5
Total, all species	139	18	5	162	397	88	555	717	18.8
Sampling error (percent)	73.6	71.0	100.0	67.9	30.2	62.6	25.1	18.8	

Table 99.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Worcester County, Maryland, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	28	0	0	0	28	26.9
Other softwoods	1	0	0	0	1	74.3
Total coniferous species	29	0	0	0	29	25.6
Red maple	119	24	0	0	143	25.5
Serviceberry	6	0	0	0	6	61.3
Azalea species	13	1	2	0	15	30.4
Hickory species	2	0	0	0	2	81.6
Dogwood species	2	0	5	0	6	76.2
American beech	1	0	0	0	1	74.4
Ash species	2	0	0	0	2	100.0
American holly	58	0	0	0	58	29.2
Laurel species	2	0	0	0	2	70.8
Common spicebush	2	0	0	0	2	71.8
Sweetgum	64	10	0	0	75	23.9
Yellow-poplar	8	0	0	0	8	82.1
Magnolia species	33	0	0	0	33	56.8
Tupelo species	22	5	0	0	27	24.0
Black cherry	0	0	0	0	0	100.0
White oak	4	1	0	0	5	44.8
Other white oaks	2	0	0	0	2	71.0
Northern red oak	0	0	0	0	0	100.0
Other black oaks	37	8	3	0	48	34.8
Rose species	1	0	0	0	1	73.4
Rubus species	7	0	0	0	7	62.7
Sassafras	11	3	2	0	16	41.0
Blueberry	37	26	4	1	68	11.7
Elm species	4	2	0	0	6	100.0
Arrowwood	5	1	0	0	6	40.6
Other viburnum species	1	0	0	0	1	100.0
Other deciduous species	23	0	0	0	23	27.4
Total deciduous species	465	82	17	1	565	12.5
Unknown species	71	25	7	1	105	13.4
Total, all species	566	107	24	1	699	10.5
Sampling error (percent)	10.6	22.6	35.2	71.4	10.5	

DELAWARE STATE TABLES



Table 100.--Land area by county and land class, Delaware, 1986

Land class	Sussex	Kent/ New Castle	All counties
Timberland	217.6	158.8	376.4
Noncommercial forest land:			
Productive reserved	.2	2.7	2.9
Unproductive	3.8	3.0	6.8
Urban	.0	3.4	3.4
Total forest	221.6	167.9	389.5
Nonforest land:			
Cropland ^a	258.2	250.5	508.7
Pasture ^a	12.7	12.2	24.9
Other farmland	23.6	43.3	66.9
Other land	86.7	160.0	246.7
Total nonforest	381.2	466.0	847.2
Total land area ^b	602.8	633.9	1,236.7

^a Source: 1982 Census of Agriculture.

^b Source: 1981 United States Department of Commerce, Bureau of Census.

Table 101.--Index to land use edge by type of land use and county, Delaware, 1986

(Edge hits^a per thousand acres)

	Sussex	Kent/ New Castle	All counties
Forest -			
forest	23.1	12.8	17.7
shrub	0.0	0.0	0.0
agricultural/ herbaceous	26.2	27.9	27.1
cultural	4.7	5.0	4.9
Shrub -			
agricultural/ herbaceous	.0	.0	.0
cultural	.0	.0	.0
Agricultural/herbaceous			
cultural	5.8	6.5	6.2
Hedgerow	3.0	4.8	4.0
Transportation			
right of way	23.8	30.7	27.4
Utility			
right of way	0.9	0.9	0.9
Aquatic	11.3	12.4	11.9
All types	98.8	101.2	100.1
Number of edge plots	56	62	118
Number of edge hits	3,097	3,517	6,611

^a Edge condition on an aerial photograph sampled by a line transect (Brooks and Sykes 1984).

Table 102.--Area of timberland by county and ownership class, Delaware, 1986

(In thousands of acres)

County	Ownership class							All classes			
	National Forest	Other federal	State forest	Other state	County and municipal	Forest industry	Miscellaneous private corporations other				
Sussex	.0	.0	4.7	2.6	.0	31.1	36.8	122.2	24.1	10.1	231.6
Kent/New Castle	.0	.0	1.6	4.6	.0	.0	34.9	92.4	8.6	2.7	144.8
State total	.0	.0	6.3	7.2	.0	31.1	71.7	214.6	32.7	12.8	376.4

Table 103.--Area of timberland by forest type, forest-type group, and stand-size class, Delaware, 1986

(In thousands of acres)

Forest type	Stand-size class				All classes
	Sawtimber	Poletimber	Sapling and		
			seedling	Nonstocked	
Loblolly pine	40.5	10.1	24.5	.0	75.1
Virginia pine	5.9	.0	.0	.0	5.9
Loblolly/shortleaf group	46.4	10.1	24.5	.0	81.0
Virginia pine/oak	3.9	6.9	5.1	.0	15.9
Loblolly pine/hardwood	38.3	3.9	2.2	.0	44.4
Oak/pine group	42.2	10.8	7.4	.0	60.3
White oak	13.5	9.9	.0	.0	23.4
Northern red oak	2.7	.0	3.9	.0	6.5
Y. poplar/wh. oak/no. red oak	3.0	.0	.0	.0	3.0
Sweetgum/yellow-poplar	5.0	.0	10.2	.0	15.2
Yellow-poplar	5.9	.0	.0	.0	5.9
Scarlet oak	6.9	3.9	3.8	.0	14.6
Red maple/central hardwoods	2.7	3.0	.0	.0	5.6
Mixed central hardwoods	52.6	18.4	11.8	.0	82.8
Oak/hickory group	92.3	35.1	29.6	.0	157.1
Swamp chstnt oak/cherrybark oak	5.0	.0	.0	.0	5.0
Sweetgum/nuttall oak/willow oak	27.2	9.9	.0	.0	37.0
Sweetbay/swamp tupelo/red maple	6.9	3.9	5.0	.0	15.8
Oak/gum/cypress group	39.1	13.8	5.0	.0	57.9
Black ash/Amer. elm/red maple	.0	.0	2.2	.0	2.2
Red maple(lowland)	5.0	.0	.0	.0	5.0
American elm/green ash	3.0	.0	.0	.0	3.0
Elm/ash/red maple group	8.0	.0	2.2	.0	10.3
Black cherry	6.9	.0	.0	.0	6.9
Mixed northern hardwoods	3.0	.0	.0	.0	3.0
Northern hardwoods group	9.8	.0	.0	.0	9.8
All forest types	237.9	69.7	68.8	.0	376.4

Table 104.--Area of timberland by county and stand-area class, Delaware, 1986

(In thousands of acres)

County	Stand-area class						All classes
	1-9	10-19	20-49	50-99	100-499	500+	
Sussex	30.6	75.8	98.5	17.8	8.8	.0	231.6
Kent/New Castle	32.3	25.8	51.2	23.1	12.5	.0	144.8
State Total	62.9	101.7	149.7	40.8	21.3	.0	376.4

Table 105.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Delaware, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)										All classes	Sampling error (percent)	
	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+			
Hickory	460	153	130	32	58	12	0	0	0	13	0	858	39.6
Dogwood	347	42	17	0	0	0	0	0	0	0	0	405	40.4
Persimmon	17	72	35	0	0	0	0	0	0	0	0	124	59.0
Beech	393	146	74	46	19	36	7	7	7	27	9	766	40.9
American holly	1,219	227	152	12	0	0	0	0	0	0	0	1,610	29.5
Black walnut	0	17	0	44	0	0	10	6	13	13	0	91	79.6
Mulberry	0	0	19	0	0	8	0	0	0	0	0	27	75.8
Blackgum	1,655	829	691	328	203	50	26	17	6	6	0	3,806	22.1
Black cherry	544	419	392	217	153	33	57	8	16	16	0	1,839	35.0
White oak	1,684	1,076	817	622	340	242	140	111	119	119	9	5,161	16.4
Swamp white oak	0	17	0	0	13	0	0	0	0	0	8	39	80.7
Scarlet oak	172	272	233	122	58	8	9	8	0	0	3	886	59.7
Southern red oak	467	526	366	337	299	113	92	31	15	15	0	2,246	27.5
Blackjack oak	99	0	0	0	0	0	0	0	0	0	0	99	100.0
Swamp chestnut oak	0	18	0	0	0	0	0	0	19	19	12	50	51.9
Water oak	835	258	71	37	57	29	37	0	0	0	0	1,323	27.9
Pin oak	55	34	0	7	16	23	27	13	0	0	0	177	47.5
Willow oak	295	131	277	285	177	88	44	33	39	39	11	1,381	26.3
Chestnut oak	67	0	0	0	0	12	18	16	27	27	0	141	69.7
Northern red oak	45	66	165	94	86	12	46	0	40	40	9	564	35.0
Post oak	0	0	65	55	0	0	9	0	0	0	0	129	84.0
Black oak	37	153	101	65	29	9	0	0	17	17	0	412	40.8
Sassafras	182	160	51	43	8	0	0	0	0	0	0	443	43.4
Total, all species	8,575	4,616	3,657	2,348	1,516	677	524	253	352	352	63	22,580	8.5
Sampling error (percent)	11.4	12.6	13.4	13.3	13.3	16.2	16.9	21.6	20.5	20.5	35.2	8.5	

Table 106.--Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type, Delaware, 1986

(In thousands of stems)

Stand-size class and type of stem	Mast type				Total stems
	Nuts	Other seeds	Berries	Other species	
Sawtimber:					
Shrubs	681	15,244	116,120	138,650	270,695
Saplings	5,834	45,031	59,576	0	110,442
Total sawtimber	6,515	60,275	175,696	138,650	381,137
Poletimber:					
Shrubs	0	7,118	31,992	45,198	84,308
Saplings	7,385	36,012	8,707	0	52,103
Total poletimber	7,385	43,130	40,698	45,198	136,411
Sapling/seedling:					
Shrubs	0	4,549	51,003	38,069	93,622
Saplings	4,707	44,956	4,133	0	53,796
Total sapling/seedling	4,707	49,506	55,136	38,069	147,418
Total, all classes	18,608	152,911	271,530	221,917	664,967

Table 107.--Number of standing dead trees on timberland by species, condition class, and diameter class, Delaware, 1986
(In thousands of trees)

Species	Intact top				Broken top				Total all trees	Sampling error (percent)
	Diameter class (inches at breast height)				Diameter class (inches at breast height)					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total		
Loblolly pine	198	0	12	210	301	24	0	325	535	46.2
Virginia pine	407	0	0	407	214	7	0	222	629	41.9
Other softwoods	17	0	0	17	0	0	0	0	17	100.0
Total softwoods	622	0	12	634	515	32	0	547	1,181	30.4
Red maple	17	0	0	17	69	0	8	78	95	47.3
Sweetgum	17	0	0	17	95	0	0	95	112	76.1
Yellow-poplar	0	0	0	0	0	16	0	16	16	100.0
Blackgum	0	0	14	14	36	0	0	36	50	74.4
Ash-walnut-cherry	0	0	0	0	274	25	0	299	299	59.6
Select white oaks	115	46	24	186	103	0	0	103	288	42.2
Select red oaks	100	17	0	117	34	25	0	59	176	57.2
Other white oaks	0	0	0	0	73	0	0	73	73	100.0
Other red oaks	108	22	22	153	287	38	10	335	488	47.5
Other commercial hardwoods	17	0	0	17	101	0	0	101	118	76.1
Non-commercial hardwoods	228	24	9	261	1,177	78	0	1,256	1,517	29.2
Total hardwoods	602	109	70	782	2,249	183	18	2,450	3,232	18.5
Total, all species	1,224	109	83	1,416	2,764	215	18	2,997	4,413	16.2
Sampling error (percent)	27.3	43.4	42.9	25.0	19.3	32.9	69.9	18.2	16.2	

Table 108.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class, Delaware, 1986

(In thousands of trees)

Species	Live				Dead			Total all trees	Sampling error (percent)
	No cull	Intact live top	Broken top	Dead top	Total live	Intact top	Broken top		
Loblolly pine	45	0	0	0	45	0	95	140	43.0
Virginia pine	0	0	0	0	0	0	7	7	100.0
Total softwoods	45	0	0	0	45	0	103	147	41.1
Red maple	812	301	8	17	1,139	0	44	1,183	23.1
Beech	17	17	0	0	34	0	0	34	59.1
Sweetgum	439	0	0	0	439	0	0	439	29.0
Yellow-poplar	16	0	0	0	16	0	16	32	59.1
Blackgum	293	157	0	0	450	14	36	500	40.6
Ash-walnut-cherry	151	5	0	17	173	0	199	371	52.5
Select white oaks	321	9	0	0	331	28	17	375	35.7
Select red oaks	31	0	0	0	31	0	34	65	55.9
Other white oaks	29	0	0	0	29	0	0	29	71.6
Other red oaks	207	0	12	0	220	25	35	280	28.6
Other commercial hardwoods	201	13	0	0	214	0	34	248	43.7
Non-commercial hardwoods	36	35	26	0	97	28	490	616	33.7
Total hardwoods	2,555	537	47	34	3,173	96	905	4,173	14.2
Total, all species	2,600	537	47	34	3,218	96	1,007	4,321	13.9
Sampling error (percent)	15.6	31.7	64.2	59.7	15.1	40.8	28.5	26.1	13.9

Table 109.--Number of trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Delaware, 1986
(In thousands of trees)

Species	Live trees						Dead trees						Total all trees	Sampling error (percent)	
	One or more small		One or more large or small		Multiple large or small		One or more large		One or more large or small		Multiple large or small				Total dead trees
Loblolly pine	21	24	0	45	37	12	46	95	140	43.0					
Virginia pine	0	0	0	0	7	0	0	7	7	100.0					
Total softwoods	21	24	0	45	44	12	46	103	147	41.1					
Red maple	659	431	48	1,139	0	19	25	44	1,183	23.1					
Beech	7	19	7	34	0	0	0	0	34	59.1					
Sweetgum	138	279	23	439	0	0	0	0	439	29.0					
Yellow-poplar	8	8	0	16	16	0	0	16	32	59.1					
Blackgum	108	292	49	450	17	14	19	50	500	40.6					
Ash-walnut-cherry	57	93	22	173	199	0	0	199	371	52.5					
Select white oaks	255	48	27	331	29	0	15	45	375	35.7					
Select red oaks	17	15	0	31	34	0	0	34	65	55.9					
Other white oaks	17	12	0	29	0	0	0	0	29	71.6					
Other red oaks	108	99	12	220	35	25	0	61	280	28.6					
Other commercial hardwoods	156	29	29	214	0	34	0	34	248	43.7					
Non-commercial hardwoods	36	61	0	97	319	199	0	519	616	33.7					
Total hardwoods	1,567	1,387	218	3,173	649	292	60	1,000	4,173	14.2					
Total, all species	1,588	1,412	218	3,218	693	304	106	1,103	4,321	13.9					
Sampling error (percent)	16.8	21.9	28.2	15.1	33.5	55.8	38.0	26.1	13.9						

Table 110.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Delaware, 1986

(In millions of stems)

Species	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Loblolly pine	7	11	57	0	75	28.2
Other pine species	11	4	3	0	18	43.8
Other softwoods	1	1	0	0	3	48.8
Total coniferous species	19	16	60	0	96	24.2
Red maple	105	76	143	0	324	18.3
Sugar maple	0	1	0	0	1	100.0
Other maple species	11	0	2	0	13	60.7
Alder species	1	0	0	0	1	100.0
Serviceberry	6	7	0	0	13	48.5
Azalea species	11	7	2	0	20	26.6
Common pawpaw	29	0	0	0	29	100.0
Hickory species	4	1	4	0	10	38.7
Dogwood species	31	2	5	0	39	36.1
American beech	9	0	3	0	12	36.6
Ash species	1	0	0	0	1	100.0
Witch-hazel	1	0	1	0	1	74.3
American holly	94	26	17	0	138	21.1
Laurel species	3	0	0	0	3	74.9
Common spicebush	11	0	0	0	11	41.6
Sweetgum	86	47	65	0	199	20.9
Yellow-poplar	17	0	21	0	37	43.8
Magnolia species	41	4	2	0	47	59.1
Tupelo species	46	19	34	0	99	21.1
Black cherry	44	2	70	0	115	50.0
Other cherry species	0	0	1	0	1	100.0
White oak	11	2	8	0	21	26.3
Chestnut oak	3	0	0	0	3	48.8
Other white oaks	3	1	0	0	4	69.6
Northern red oak	5	1	2	0	8	56.9
Other black oaks	43	14	28	0	84	25.8
Rose species	2	0	3	0	5	67.4
Rubus species	13	3	18	0	35	22.9
Sassafras	17	13	67	0	97	27.3
Blueberry	49	23	19	0	91	13.2
Elm species	5	1	0	0	6	61.4
Maple-leaved viburnum	5	0	0	0	5	48.6
Arrowwood	26	5	4	0	34	19.1
Other viburnum species	5	0	0	0	5	52.5
Other deciduous species	18	2	18	0	38	22.0
Total deciduous species	756	257	537	0	1,549	10.2
Unknown species	133	43	28	0	205	10.2
Total, all species	908	316	625	0	1,850	9.0
Sampling error (percent)	12.1	24.9	27.3	.0	9.0	

Table 111.--Number of seedlings, saplings, and shrubs on timberland by species and forest-type group, Delaware, 1986

Species	Forest-type group										All groups	
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch			
Loblolly pine	0	0	45	9	21	0	0	0	0	0	0	75
Other pine species	0	0	7	1	10	0	0	0	0	0	0	18
Other softwoods	0	0	0	0	1	1	0	1	0	0	0	3
Total coniferous species	0	0	51	10	32	1	0	1	0	0	0	96
Red maple	0	0	99	68	104	48	5	0	0	0	0	324
Sugar maple	0	0	0	0	0	1	0	0	0	0	0	1
Other maple species	0	0	0	0	5	0	2	5	0	0	0	13
Alder species	0	0	0	0	0	1	0	0	0	0	0	1
Serviceberry	0	0	2	4	6	0	0	0	0	0	0	13
Azalea species	0	0	2	1	12	5	0	0	0	0	0	20
Common pawpaw	0	0	0	0	29	0	0	0	0	0	0	29
Hickory species	0	0	1	4	5	0	1	0	0	0	0	10
Dogwood species	0	0	2	2	31	3	0	0	0	0	0	39
American beech	0	0	1	0	11	0	0	0	0	0	0	12
Ash species	0	0	0	0	1	0	0	0	0	0	0	1
Witch-hazel	0	0	0	0	1	1	0	0	0	0	0	1
American holly	0	0	11	56	51	14	3	3	0	0	0	138
Laurel species	0	0	0	1	2	0	0	0	0	0	0	3
Common spicebush	0	0	0	0	5	0	3	3	0	0	0	11
Sweetgum	0	0	37	47	61	53	1	0	0	0	0	199
Yellow-poplar	0	0	5	3	27	3	0	0	0	0	0	37
Magnolia species	0	0	3	10	29	4	0	1	0	0	0	47
Tupelo species	0	0	26	6	45	22	0	0	0	0	0	99
Black cherry	0	0	11	4	86	2	6	7	0	0	0	115
Other cherry species	0	0	0	0	1	0	0	0	0	0	0	1
White oak	0	0	3	1	15	3	0	0	0	0	0	21
Chestnut oak	0	0	0	0	3	0	0	0	0	0	0	3
Other white oaks	0	0	1	0	3	1	0	0	0	0	0	4
Northern red oak	0	0	0	4	4	0	0	0	0	0	0	8
Other black oaks	0	0	22	32	30	0	0	0	0	0	0	84
Rose species	0	0	0	0	5	0	0	1	0	0	0	5
Rubus species	0	0	12	4	14	1	1	3	0	0	0	35

Table 111.--Continued

Species	(In millions of stems)											All Groups
	Forest-type group											
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch			
Sassafras	0	0	23	28	30	13	2	1	0			97
Blueberry	0	0	14	15	47	15	0	0	0			91
Elm species	0	0	0	1	5	0	0	0	0			6
Maple-leaved viburnum	0	0	2	0	3	0	0	0	0			5
Arrowwood	0	0	6	5	16	5	0	1	0			34
Other viburnum species	0	0	0	0	4	1	0	0	0			5
Other deciduous species	0	0	19	3	15	0	1	1	0			38
Total deciduous species	0	0	301	298	705	196	25	25	0			1,549
Unknown species	0	0	43	39	86	35	1	0	0			205
Total, all species	0	0	395	347	824	232	26	25	0			1,850

Table 112.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Delaware, 1986

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	75	0	0	0	75	28.2
Other pine species	18	0	0	0	18	43.8
Other softwoods	3	0	0	0	3	48.8
Total coniferous species	96	0	0	0	96	24.2
Red maple	309	7	7	1	324	18.3
Sugar maple	1	0	0	0	1	100.0
Other maple species	2	7	4	0	13	60.7
Alder species	1	0	0	0	1	100.0
Serviceberry	11	2	0	0	13	48.5
Azalea species	18	1	1	0	20	26.6
Common pawpaw	29	0	0	0	29	100.0
Hickory species	10	0	1	0	10	38.7
Dogwood species	30	3	3	1	39	36.1
American beech	9	1	1	0	12	36.6
Ash species	1	0	0	0	1	100.0
Witch-hazel	1	0	0	0	1	74.3
American holly	138	0	0	0	138	21.1
Laurel species	3	0	0	0	3	74.9
Common spicebush	9	2	1	0	11	41.6
Sweetgum	194	3	1	1	199	20.9
Yellow-poplar	36	0	1	0	37	43.8
Magnolia species	47	0	0	0	47	59.1
Tupelo species	88	11	1	0	99	21.1
Black cherry	104	6	4	1	115	50.0
Other cherry species	1	0	0	0	1	100.0
White oak	18	3	0	0	21	26.3
Chestnut oak	2	1	0	0	3	48.8
Other white oaks	4	0	0	0	4	69.6
Northern red oak	7	1	0	0	8	56.9
Other black oaks	72	11	1	0	84	25.8
Rose species	5	0	0	0	5	67.4
Rubus species	35	0	0	0	35	22.9
Sassafras	89	5	2	2	97	27.3
Blueberry	69	16	5	1	91	13.2
Elm species	6	0	0	0	6	61.4
Maple-leaved viburnum	4	0	1	0	5	48.6
Arrowwood	26	2	4	1	34	19.1
Other viburnum species	4	0	1	0	5	52.5
Other deciduous species	32	6	1	0	38	22.0
Total deciduous species	1,413	87	41	8	1,549	10.2
Unknown species	171	21	11	1	205	10.2
Total, all species	1,680	108	52	10	1,850	9.0
Sampling error (percent)	9.8	14.5	21.6	49.6	9.0	

DELAWARE COUNTY TABLES

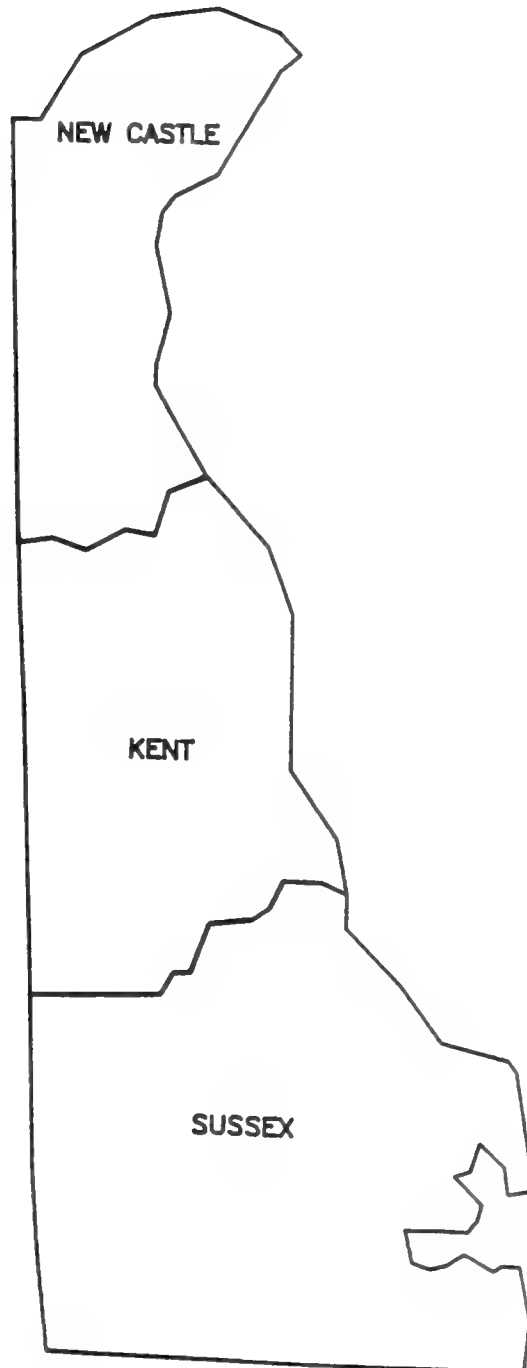


Table 113.--Number of live nut- and fruit-producing trees on timberland by species and diameter class,
Kent/New Castle Counties, Delaware, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)													All classes	Sampling error (percent)
	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+					
Hickory	32	134	20	7	25	0	0	0	0	13	0	232	43.8		
Dogwood	135	17	17	0	0	0	0	0	0	0	0	168	64.6		
Persimmon	17	72	35	0	0	0	0	0	0	0	0	124	59.0		
Beech	136	71	55	46	19	36	7	7	27	9	415	49.1			
American holly	231	17	0	0	0	0	0	0	0	0	247	69.0			
Black walnut	0	17	0	44	0	10	6	13	0	91	79.6				
Mulberry	0	0	0	0	0	8	0	0	0	8	100.0				
Blackgum	850	293	297	101	46	38	26	8	6	1,665	18.8				
Black cherry	282	155	198	168	89	33	26	8	16	975	44.9				
White oak	688	721	511	435	229	170	140	103	87	3,095	20.0				
Swamp white oak	0	17	0	0	13	0	0	0	0	39	80.7				
Scarlet oak	51	172	214	112	39	8	0	8	0	608	81.6				
Southern red oak	207	147	175	70	57	38	23	0	0	717	55.4				
Blackjack oak	99	0	0	0	0	0	0	0	0	99	100.0				
Swamp chestnut oak	0	0	0	0	0	0	0	0	19	19	70.3				
Pin oak	17	15	0	7	16	23	27	13	0	120	51.5				
Willow oak	219	106	204	181	122	76	35	33	29	11	1,017	31.9			
Chestnut oak	67	0	0	0	0	12	18	16	27	0	141	69.7			
Northern red oak	45	17	119	94	74	0	33	0	40	6	429	42.6			
Black oak	0	0	30	39	17	0	0	0	8	0	94	53.7			
Sassafras	101	123	51	17	8	0	0	0	0	0	300	60.1			
Total, all species	3,177	2,095	1,926	1,323	755	443	346	204	287	47	10,605	10.2			
Sampling error (percent)	14.8	17.0	16.9	15.2	15.3	18.9	20.3	23.5	22.6	38.3	10.2				

Table 115.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Kent/New Castle Counties, Delaware, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	9	0	0	0	9	86.0
Other softwoods	3	0	0	0	3	48.8
Total coniferous species	12	0	0	0	12	67.8
Red maple	67	1	5	1	73	28.2
Sugar maple	1	0	0	0	1	100.0
Other maple species	2	7	4	0	13	60.7
Serviceberry	11	0	0	0	11	54.4
Azalea species	11	1	1	0	13	30.2
Common pawpaw	29	0	0	0	29	100.0
Hickory species	5	0	1	0	5	61.0
Dogwood species	22	1	3	1	28	45.7
American beech	5	1	1	0	7	49.1
Ash species	1	0	0	0	1	100.0
Witch-hazel	1	0	0	0	1	100.0
American holly	30	0	0	0	30	33.8
Laurel species	2	0	0	0	2	100.0
Common spicebush	9	2	1	0	11	41.6
Sweetgum	50	3	1	1	55	20.1
Yellow-poplar	20	0	1	0	21	45.2
Magnolia species	5	0	0	0	5	46.5
Tupelo species	37	9	1	0	47	24.4
Black cherry	20	5	4	1	30	37.5
White oak	7	3	0	0	10	42.4
Chestnut oak	2	1	0	0	3	48.8
Other white oaks	4	0	0	0	4	69.6
Northern red oak	1	1	0	0	2	57.2
Other black oaks	8	2	1	0	11	43.5
Rose species	5	0	0	0	5	67.4
Rubus species	15	0	0	0	15	26.5
Sassafras	19	5	2	2	27	41.5
Blueberry	29	9	3	1	42	19.7
Elm species	6	0	0	0	6	61.4
Maple-leaved viburnum	4	0	1	0	5	48.6
Arrowwood	19	1	3	1	25	22.5
Other viburnum species	4	0	1	0	5	52.5
Other deciduous species	10	1	1	0	12	29.1
Total deciduous species	459	54	35	8	556	11.0
Unknown species	57	9	9	0	75	17.3
Total, all species	528	63	43	8	643	10.0
Sampling error (percent)	11.4	20.9	25.1	55.7	10.0	

Table 116.--Number of live nut- and fruit-producing trees on timberland by species and diameter class, Sussex County, Delaware, 1986

(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	Sampling error (percent)	
	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+					
Hickory	428	18	110	25	33	12	0	0	0	0	0	0	0	626	51.8
Dogwood	212	25	0	0	0	0	0	0	0	0	0	0	0	237	51.7
Beech	257	75	19	0	0	0	0	0	0	0	0	0	0	351	67.8
American holly	988	210	152	12	0	0	0	0	0	0	0	0	0	1,362	32.5
Mulberry	0	0	19	0	0	0	0	0	0	0	0	0	0	19	100.0
Blackgum	805	536	395	227	157	12	0	0	0	0	0	0	0	2,141	36.5
Black cherry	262	264	194	49	64	0	31	0	0	0	0	0	0	864	54.5
White oak	996	355	307	187	110	72	0	7	31	0	0	0	0	2,066	27.9
Scarlet oak	121	100	19	9	19	0	9	0	0	0	0	0	0	278	66.0
Southern red oak	260	378	191	267	242	75	69	31	15	0	0	0	0	1,529	30.9
Swamp chestnut oak	0	18	0	0	0	0	0	0	0	12	0	0	0	31	72.1
Water oak	835	258	71	37	57	29	37	0	0	0	0	0	0	1,323	27.9
Pin oak	38	19	0	0	0	0	0	0	0	0	0	0	0	57	100.0
Willow oak	76	24	73	104	55	12	9	0	9	0	0	0	0	364	44.6
Northern red oak	0	49	45	0	12	12	13	0	0	3	0	0	0	135	55.5
Post oak	0	0	65	55	0	0	9	0	0	0	0	0	0	129	84.0
Black oak	37	153	71	26	12	9	0	0	9	0	0	0	0	318	50.4
Sassafras	81	37	0	26	0	0	0	0	0	0	0	0	0	144	46.5
Total, all species	5,397	2,521	1,731	1,025	761	234	178	48	65	15	11,975	13.2			
Sampling error (percent)	15.8	18.1	21.3	23.2	21.8	30.2	30.4	54.1	48.7	82.3	13.2				

Table 117.--Number of standing dead trees on timberland by species, condition class, and diameter class, Sussex County, Delaware, 1986

Species	(In thousands of trees)										Total all trees	Sampling error (percent)
	Intact top					Broken top						
	Diameter class (inches at breast height)		Total	Diameter class (inches at breast height)		Total	Diameter class (inches at breast height)		Total	Total trees		
	5.0-10.9	11.0-14.9		15+	5.0-10.9		11.0-14.9	15+			5.0-10.9	11.0-14.9
Loblolly pine	107	0	12	267	24	0	291	411	55.8			
Virginia pine	304	0	0	123	0	0	123	427	52.1			
Total softwoods	411	0	12	389	24	0	414	838	37.2			
Red maple	0	0	0	19	0	0	19	19	100.0			
Sweetgum	0	0	0	78	0	0	78	78	100.0			
Blackgum	0	0	14	19	0	0	19	33	100.0			
Ash-walnut-cherry	0	0	0	190	0	0	190	190	88.1			
Select white oaks	100	31	24	0	0	0	0	156	53.2			
Other red oaks	76	22	0	246	22	0	268	367	61.8			
Non-commercial hardwoods	160	24	0	821	78	0	899	1,084	38.7			
Total hardwoods	337	78	39	1,373	100	0	1,473	1,927	26.6			
Total, all species	749	78	51	1,763	125	0	1,887	2,764	22.3			
Sampling error (percent)	40.4	54.1	59.8	26.2	47.6	.0	24.8	22.3				

Table 118.--Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class, Sussex County, Delaware, 1986

(In millions of stems)

Species	Browse-utilization class				All classes	Sampling error (percent)
	None	Light	Moderate	Heavy		
Loblolly pine	65	0	0	0	65	29.8
Other pine species	18	0	0	0	18	43.8
Total coniferous species	83	0	0	0	83	25.9
Red maple	243	6	2	0	251	22.2
Alder species	1	0	0	0	1	100.0
Serviceberry	0	2	0	0	2	100.0
Azalea species	7	0	0	0	7	51.3
Hickory species	5	0	0	0	5	44.3
Dogwood species	8	2	0	0	10	48.5
American beech	5	0	0	0	5	53.7
Witch-hazel	1	0	0	0	1	100.0
American holly	108	0	0	0	108	25.2
Laurel species	1	0	0	0	1	100.0
Sweetgum	143	0	0	0	143	27.9
Yellow-poplar	16	0	0	0	16	81.6
Magnolia species	42	0	0	0	42	65.5
Tupelo species	50	2	0	0	52	33.4
Black cherry	84	1	0	0	85	66.4
Other cherry species	1	0	0	0	1	100.0
White oak	11	0	0	0	11	31.1
Northern red oak	6	0	0	0	6	73.4
Other black oaks	65	9	0	0	73	28.8
Rubus species	20	0	0	0	20	35.1
Sassafras	70	0	0	0	70	34.4
Blueberry	40	6	3	0	49	17.8
Arrowwood	7	1	1	0	9	36.0
Other deciduous species	22	5	0	0	27	28.9
Total deciduous species	955	33	6	0	994	14.7
Unknown species	114	11	3	1	129	12.6
Total, all species	1,152	45	9	1	1,207	12.8
Sampling error (percent)	13.3	18.7	31.9	100.0	12.8	

Brooks, Robert T.; DiGiovanni, Dawn M. 1989. **Forest wildlife habitat statistics for Maryland and Delaware--1986**. Res. Bull. NE-110. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 171 p.

A statistical report on the forest wildlife habitat survey of Maryland and Delaware (1986). Findings are displayed in 118 tables covering forest area, landscape pattern, mast potential, standing dead and cavity trees, and understory woody-stemmed vegetation. Data are presented at county and/or unit and state levels of resolution.

Keywords: Forest habitat survey, inventory, area, landscape pattern, snap, mast, browse.

Headquarters of the Northeastern Forest Experiment Station is in Broomall, Pennsylvania. Field laboratories are maintained at:

Amherst, Massachusetts, in cooperation with the University of Massachusetts

Berea, Kentucky, in cooperation with Berea College

Burlington, Vermont, in cooperation with the University of Vermont

Delaware, Ohio

Durham, New Hampshire, in cooperation with the University of New Hampshire

Hamden, Connecticut, in cooperation with Yale University

Morgantown, West Virginia, in cooperation with West Virginia University

Orono, Maine, in cooperation with the University of Maine

Parsons, West Virginia

Princeton, West Virginia

Syracuse, New York, in cooperation with the State University of New York, College of Environmental Sciences and Forestry at Syracuse University

University Park, Pennsylvania, in cooperation with The Pennsylvania State University

Warren, Pennsylvania

Persons of any race, color, national origin, sex, age, religion, or with any handicapping condition are welcome to use and enjoy all facilities, programs, and services of the USDA. Discrimination in any form is strictly against agency policy, and should be reported to the Secretary of Agriculture, Washington, DC 20250.