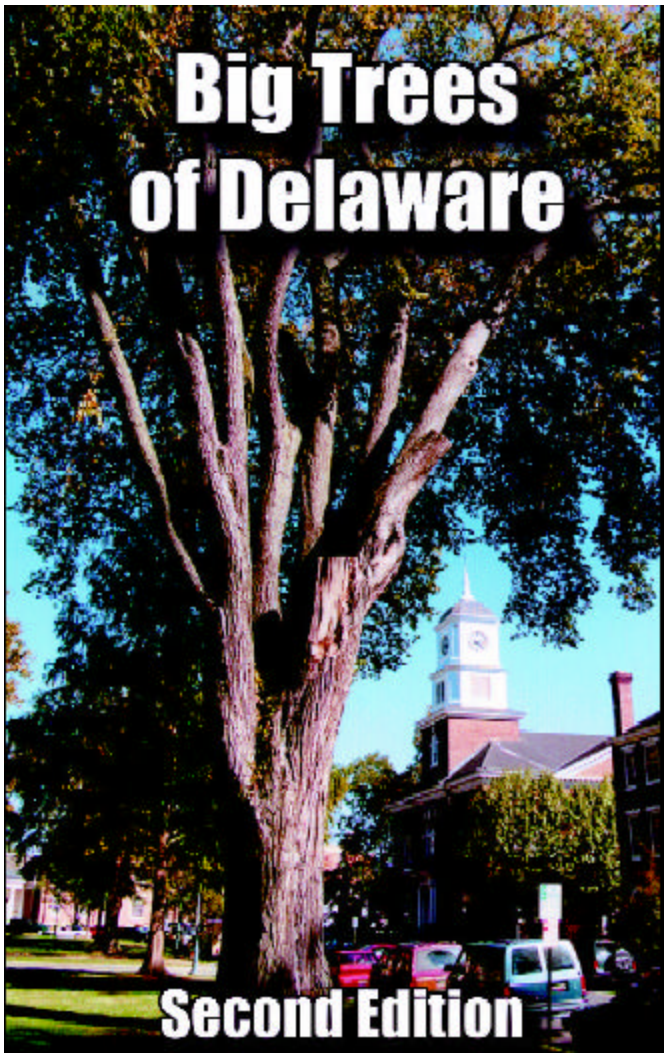

Big Trees
of Delaware
Second Edition

BIG TREES of DELAWARE

A Record of Delaware Champions

The DDA Forest Service is proud to present the second edition of *Big Trees of Delaware*. Over the years, people have organized lists of trees for various purposes. Some lists included historical trees, some were of notable trees in association with natural areas, and some were of Delaware's Big Tree Champions. The first Big Tree list was recorded in William Taber's book titled *Delaware Trees* in 1939. In 1960 Walter Gabel started a list that included white oaks recognized to have been growing at the time of William Penn's tenure in this area. Charles E. Mohr, a naturalist with the Delaware Department of Natural Resources and Environmental Control, published a list of 100 notable trees in 1973. This list combined historical and big tree specimens. The DDA Forest Service published its first edition of *Big Trees of Delaware* in 1995. We hope you enjoy this second edition and we encourage you to continue searching for big trees.

WHAT MAKES A BIG TREE?

What literally covers the State of Delaware from its arc to the Mason-Dixon? Trees! Trees of all kinds—from Ash to Zelkova. The elite specimens of many of these tree species are listed in this publication. For instance, one can find the record of Delaware's tallest tree, a yellow-poplar at Winterthur Gardens, Wilmington that is 187 feet high, and a pawpaw that is a mere 27 feet tall. Yet each is listed and officially recognized as a Big Tree. While the pawpaw is not nearly as impressive in stature as the yellow-poplar, it is still the largest of its species reported in Delaware thus far; hence, it is a champion. Three measurements are needed to determine a tree's score. They are (1) the circumference, (2) the height, and (3) the average crown spread.

1. Circumference—Also known as CBH (Circumference at Breast Height), this measurement is made in inches at a point on the tree trunk 4-1/2 feet above the ground. If the tree is growing on a slope, the 4-1/2 feet is determined from the uphill side of the tree. The tree must have a single trunk for a least 4-1/2 feet to be considered a single tree. Trees that are forked below 4-1/2 feet are considered two trees. If there is abnormal swelling at the measurement point, the measurement should be taken at a point lower on the trunk where the measurement will reflect the normal size of the tree. If the circumference is measured at a point other than 4-1/2 feet, this height should be noted. For instance, a tree might be recorded as 75 inches at 3-1/2 feet. The key is to measure the circumference as near 4-1/2 feet above the ground as possible and yet show the normal size of the tree. If you do not have a diameter tape to measure the circumference, use a nonstretching rope or cord to get around the tree, and mark it. Then lay the rope flat and measure the length with a yard stick in inches. **One point is given for each inch of circumference.**

2. Height—The height is measured from the ground line to the highest point on the tree. Again, if the tree is growing on a slope, the ground line is determined from the uphill side. This is the hardest measurement to make for a person without a height instrument, such as an Abney level or a clinometer. However, one can get a fairly good measurement by using a straight stick. Hold the stick

vertically (plumb), and be certain that the length of the stick above your hand equals the distance from your hand to your eye (usually about 24–25"). This creates a right-angled triangle. Now move away from the tree, on level ground, while sighting over the base of your hand to the base of the tree and stop when the top of the stick is level with the top of the tree. (Do not move your head up and down, just your eye.) Now the distance from you to the tree is equal to the height of the tree. **One point is given for each foot of height.**

3. Average Crown Spread—To determine this, two measurements are taken at the outer edges (drip line) of the spreading crown. Measurements are recorded in feet at the widest point of crown spread and at the narrowest point. These two measurements are added together and divided by two to get the average crown spread. **One-fourth of a point is given for each one foot of average crown spread (or one point for each four feet of spread).**

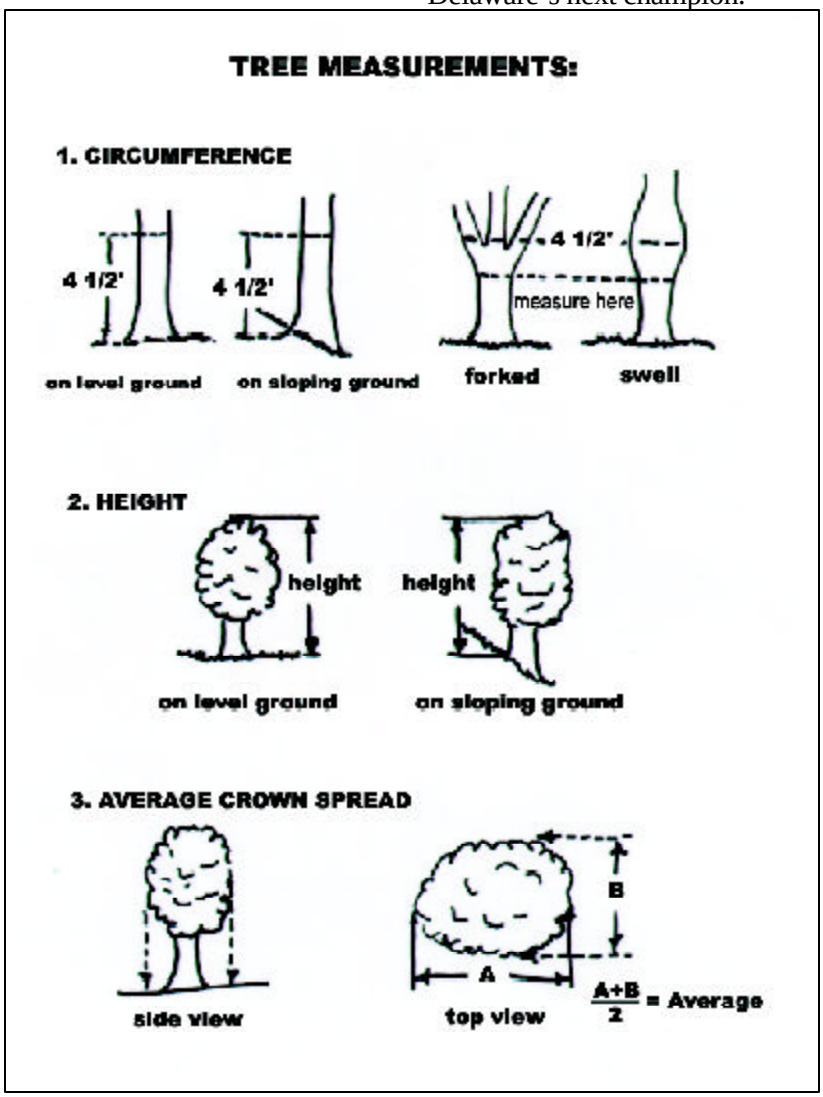
Add the points from each measurement and a total point value is determined. A co-champion tree is named if it is within five points of the champion. If you have difficulty in measuring a Big Tree nominee, measure it to the best of your ability and send the results to: Delaware Department of Agriculture Forest Service, 2320 S. DuPont Highway, Dover Delaware 19901 (302-698-4500 or 1-800-282-8685). Include a notation that the measurements need verification. Three other items are necessary to complete a Big Tree nomination: the landowner's name and address, the nominator's name and address, and the exact location of the tree. With these facts, your tree could appear in the next revision of *Big Trees of Delaware.*

As a point of interest, the largest tree in Delaware is a southern red oak, located northeast of Millsboro on the north side of Banks Road. It is a huge tree that is over 22 feet in circumference and 124 feet tall, and totals 420 points. But Big Trees can be interesting not only because of size, but also for things like unique species, appearance, age and historical significance. One intriguing species is the dawn redwood which was thought to be extinct, but was discovered in China and introduced to Delaware at Winterthur Gardens.

Listed in this book are species of trees that are native to Delaware or introduced species that have been growing in Delaware for 150

years or more. There are, however, some species for which we have not found champions, such as swamp white oak. Who knows—perhaps your discovery might be tomorrow's champion!

Visiting a Big Tree can be an exhilarating experience, but it should also be an enjoyable experience for everyone involved, including the tree's owner. To ensure enjoyment, please remember to respect the rights and wishes of the owner. Ask permission to view the tree. Good luck and hopefully you will find Delaware's next champion.



ESTIMATING TREE AGE

Many people are fascinated with guessing the age of the trees that have a special place in their lives. There is no easy way to determine a tree's age, short of cutting the tree down and counting the annual rings, but the International Society of Arboriculture has developed the following formula.

First, determine the tree diameter in inches measured at 4-1/2 feet above ground level (on steep slopes, measure from uphill side). Remember, the diameter is equal to the circumference divided by 3.14. Using the following table, determine the factor for the species of interest, and multiply that factor by the diameter in inches:

factor X diameter (in inches) = approximate tree age

Species or variety	Factor	Species or variety	Factor
Green Ash	4	Silver Maple	3
White Ash	5	Sugar Maple	5-1/2
American Beech	6	Black Oak	4
European Beech	4	Pin Oak	3
River Birch	3-1/2	Northern Red Oak	4
White Birch	5	Scarlet Oak	4
Yellow Buckeye	5	Shingle Oak	6
Black Cherry	5	Shumard Oak	3
Kentucky Coffeetree	3	White Oak	5
Shagbark Hickory	7-1/2	Bradford Pear	3
Horsechestnut	8	Austrian Pine	4-1/2
American Elm	4	Red Pine	5-1/2
Douglas-fir	5	White Pine	5
White Fir	7-1/2	Blue Spruce	4-1/2
Little Leaf Linden	3	Norway Spruce	5
Black Maple	5	Sweetgum	4
Hedge Maple	4	American Sycamore	4
Norway Maple	4-1/2	Yellow-poplar	3
Red Maple	4-1/2	Black Walnut	4-1/2

THE BENEFITS OF TREES

Who can put a value on an old shade tree? Too many times when we use the term "value" we automatically think of dollars and cents. But let's hold the dollar value for a later time and concentrate on another "value." Let's change the word "value" to "benefits" and ask the question, "What are the benefits we derive from that shade tree?" The real benefits from trees are often taken for granted, or maybe only the most obvious come to mind. If we consider some of the most important benefits, perhaps we will develop a greater appreciation of trees.

1. Shade (or cooling effect).
Cities tend to be warmer than the surrounding countryside by an average of 0.5–1.5 degrees Celsius. Trees and shrubs, wisely used, can help combat this warming effect in at least two important ways. The first involves how the tree deals with the direct rays of the sun (solar radiation). In the summer, the leaves in the tree's crown reflect and absorb solar radiation, thus creating a cooling effect on hot days. Conversely, in the winter, the leaves are gone from the tree and more solar radiation comes through to the ground where we appreciate it on those cold winter days.

The second is the release of water into the atmosphere through transpiration. Research has shown that a single isolated tree can transpire approximately 88 gallons of water per day, providing there is sufficient soil moisture available. This can be compared to the cooling activity equivalent to five window-mounted air conditioners.

2. Wind Reduction and Wind Breaks.
The benefits of using trees to alter wind patterns have been recognized for many years. One has only to think back to the shelter belts that were planted during the dust bowl days to recall trees' effectiveness as windbreaks. But how many of us have stopped to consider how conifers (such as pine trees) planted on a slope can impede the cold air that would normally flow to a low lying frost pocket? And let us not forget how we can use trees, which are not required to be taken down every summer, to serve as natural snow fences. Also, a few dense trees planted in the right place can actually reduce winter heating bills because they block the passage of air through the house, thus reducing heat loss.

3. Noise Abatement.
Since sound is absorbed by the leaves, twigs, and branches of trees and shrubs, there is a definite reduction of noise when plants are used properly.

4. Pollution Abatement.
Aside from the familiar carbon dioxide-oxygen exchange, it appears that trees definitely help give us cleaner, purer air. There is no denying the filtration value of leaves —just look closely at the leaves of a tree on a hot summer day and notice the dust and dirt that has collected. It has been shown that when the autumn leaves have fallen, they begin to function as a soil filter. This concept is not fully understood, but research is continuing to provide more answers. Yet one thing is certain—trees contribute to clean air.

5. Wildlife Habitat.
It is easy to understand the value here. Trees provide the two essentials for wildlife: food and cover. Depending on the amount, type, and spacing of the trees, you can attract almost any kind of wildlife to your home—from songbirds to deer. Yet, stop and think, how few species of wildlife you would attract without trees and shrubs.

6. Natural Beauty.
Take a moment to consider the aesthetic qualities of trees. Trees can make any house much more visually appealing. Architecturally, plants are used to cut harsh lines, for traffic control, and for special effects around the home, and what about the imaginary kingdoms they spark in the minds of children?

On a broader spectrum, trees provide breath-taking panoramas in our wilderness areas and create a rainbow of colors in our hardwood forests each fall. The world would be a much more mundane place without them.

TREE CARE TIPS

Trees face a number of environmental stresses: pollution, drought, mechanical damage from construction and maintenance practices, insects and disease, acid rain, and fire. Therefore, it is important that we properly care for trees to keep them healthy. Following a few simple tree care practices can do wonders for your trees.

TREE CARE TIPS (cont.)

TREE ROOTS

The most commonly neglected part of the tree is the root system. The majority of a tree's roots are located within the top 12 to 18 inches of soil. Additionally, a tree's roots may spread up to three times as far from the trunk as the crown of the tree. Let's refer to this as "the root zone." There are several precautions we should take in the root zone to protect the health of the roots, and thus, the tree.

1. Do not cut or remove soil in the root zone. This will expose tree roots, damaging them by drying them out or sun burn.

2. Do not add more than 2 inches of fill dirt in the root zone. This will limit gas and water exchange in the soil, effectively smothering tree roots.

3. Roots grow in a radial pattern outward from the tree's trunk. Never trench across this radial root pattern, as a devastating number of feeder roots will be severed. If trenching is required for utilities or other reasons, attempt to route trenches away from the root zone. If this is not possible, consider boring under the root zone rather than trenching through it. Remember, the majority of feeder roots occupy the top 12 to 18 inches of soil.

4. Avoid vehicle traffic and/or parking in the root zone. Additionally, limit pedestrian traffic if possible. These cause soil compaction, which is extremely detrimental to tree roots.

5. Use caution when applying fertilizers or pesticides in the root zone. For instance, many *Weed and Feed* products designed for turf can be very harmful to trees when applied in the root zone.

MULCHING

Mulching is an important part of tree care, as it serves three primary functions:

1. Mulch helps control environmental stress by cooling and stabilizing soil temperature and holding moisture in the soil.

2. Mulching helps prevent mechanical damage to trees from weed trimmers and lawnmowers by eliminating the need to mow adjacent to the trunk of the tree.

3. Mulch reduces competition to trees from surrounding turf and weeds.

Ideally, mulch should be placed 2 to 4 inches thick over the entire root zone. If this is not possible, mulch as far out from the trunk as practical. Keep mulch 1 to 2 inches away from the trunk of the tree, as contact with the trunk may promote decay. Do not place mulch greater than 4 inches thick, as this will interfere with gas exchange in the soil.

PRUNING

Pruning may be necessary or desirable to remove dead, diseased, or insect-infested branches, or to improve tree structure, enhance vigor, or maintain safety. Pruning of mature trees should be performed by professional arborists. However, there are a few rules of thumb to remember:

1. No branch should be removed without a reason.

2. When removing an entire branch, make the cut just outside the branch collar.

3. Avoid major pruning immediately after the spring growth flush.

4. Minor pruning when the tree is young may prevent the need for major pruning years later.

5. Remove dead or damaged limbs, and limbs that rub or cross one another.

6. NEVER top a tree! This practice is detrimental to the health of the tree.

SELECTING AN ARBORIST

The DDA Forest Service recommends selecting an International Society of Arboriculture (ISA) Certified Arborist. ISA sponsors the Certified Arborist Program for three reasons:

• to improve the technical competency of personnel in the tree care industry.

• to create incentives for individuals in the tree care industry to continue their professional development.

• to provide the public and those in government with a means to identify those professionals who have demonstrated, through a professionally developed exam and education program, that they have a thorough knowledge of tree care practices.

Also be sure the selected arborist is licensed and insured, and don't be afraid to ask for references.

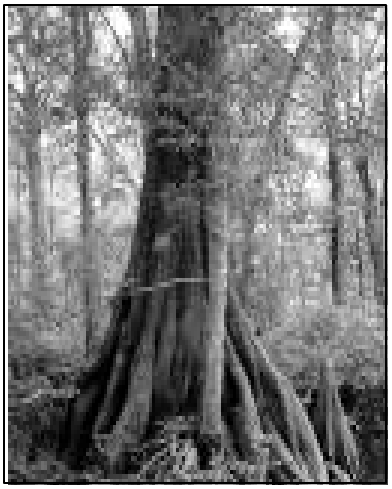
Atlantic White-cedar

Not a true cedar, this conifer is usually found immediately adjacent to streams, particularly in southern Delaware. Its wood is very light, soft, mildly fragrant, durable, and easy to work, and is often used for boats, shingles, decoys, and posts. It is no longer common in many areas due to the drainage and channelization of many streams.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
ATLANTIC WHITE-CEDAR *Chamaecyparis thyoides*	89	73	28	169	SW of Milford, west of intersection of Johnson Branch Rd. and Shawnee Rd.
ATLANTIC WHITE-CEDAR *Chamaecyparis thyoides*	85	72	32	165	322 W. State St., Millsboro
ATLANTIC WHITE-CEDAR *Chamaecyparis thyoides*	79	46	28	132	Naticoke Wildlife Area, Phillips Landing Rd., Bethel

Baldcypress

The only native deciduous conifer in Delaware, baldcypress is found in swamps and ponds in southern Delaware. Its unique broadly flared trunks and root-like knees (believed to help the tree breathe in flooded areas) help to identify this tree. The wood is very light and durable and is often used for shingles and boats. One of the northern-most natural stands of baldcypress in the United States is located at Trussum Pond near Laurel.



COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BALDCYPRESS *Taxodium distichum*	233	98	43	342	Cubalo Park, Millsboro
BALDCYPRESS *Taxodium distichum*	244	84	57	342	Delaware Avenue, Laurel
BALDCYPRESS *Taxodium distichum*	218	98	73	334	James Branch, 2 miles east of Laurel

Cedar

No true cedars are native to Delaware. These species are evergreens and most are native to the western United States. Most of these species have wood that is light and very durable and is often used for shingles and siding. The word cedar is translated from the word "Osootah" of the Onondaga Indians, and means "feathery leaf."

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
ATLAS CEDAR *Cedrus libani*	132	73	84	226	Rockwood Park, Wilmington
CEDAR OF LEBANON *Cedrus atlantica*	136	60	35	209	Brandywine & Wilmington Cemetery, 701 Delaware Ave., Wilmington
INCENSE-CEDAR *Libocedrus decurrens*	141	93	33	242	Armstrong Rd., Middletown
NORTHERN WHITE CEDAR *Thuja occidentalis*	63	69	15	136	Brandywine & Wilmington Cemetery, 701 Delaware Ave., Wilmington
NORTHERN WHITE CEDAR *Thuja occidentalis*	65	65	15	134	Rt. 300, South of Clayton

Fir

No fir species are native to Delaware, although some of these conifers are often used for Christmas trees. Firs are an important timber species in the western United States, producing wood used for lumber, plywood, and paper.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BALSAM FIR *Abies balsamea*	100	67	40	177	Ross Mansion, Ross Station Rd., Seaford
BALSAM FIR *Abies balsamea*	85	64	30	156	Ross Mansion, Ross Station Rd., Seaford
DOUGLAS-FIR *Pseudotsuga menziesii*	111	85	69	213	Belmont Hall, DuPont Hwy., Smyrna
FRASER FIR *Abies fraserI*	125	69	38	204	4353 Summit Bridge Rd., Middletown
NORDMANN FIR *Abies nordmanniana*	157	90	41	257	Buena Vista, DuPont Hwy., New Castle
NORDMANN FIR *Abies nordmanniana*	112	72	40	194	Ross Mansion, Ross Station Rd., Seaford
PACIFIC SILVER FIR *Abies amabilis*	90	66	26	162	Ross Mansion, Ross Station Rd., Seaford
WHITE FIR *Abies concolor*	80	71	26	158	12 Kings Highway, Dover

Hemlock

Only native to northern New Castle County, this slow-growing conifer is a favorite ornamental for many landscapers. Its wood is not prized but can be used for lumber and paper pulp. Commonly found on moist sites due to its preference for shade, hemlock does adapt well to other soil types and responds well to pruning. Unfortunately, many hemlocks are now under attack by the exotic hemlock wooly adelgid, a tiny insect that feeds on the tree's sap, eventually killing the tree.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
EASTERN HEMLOCK *Tsuga canadensis*	142	82	60	239	Rockwood Park, Wilmington
EASTERN HEMLOCK *Tsuga canadensis*	120	85	25	211	Christ Church, State and Water Streets, Dover
EASTERN HEMLOCK *Tsuga canadensis*	104	86	60	205	Wilmington & Brandywine Cemetery, 701 Delaware Ave., Wilmington

Juniper *(Eastern Redcedar)*

Eastern redcedar is Delaware's only native juniper, and not a true cedar at all. It is found in open areas, hedgerows, and along forest edges. Its red and white wood is lightweight, aromatic, and very durable and is often used to line closets and chests. The tree, while slow-growing, is used for windbreaks, and its small blue berries are a favorite of many birds.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
EASTERN REDCEDAR *Juniperus virginiana*	112	65	50	190	Sandbox Rd. & Coverfield Ln., Harrington
EASTERN REDCEDAR *Juniperus virginiana*	109	68	44	188	Route 82, Yorklyn
EASTERN REDCEDAR *Juniperus virginiana*	114	61	30	183	S. Side of Stockley Rd., east of DuPont Hwy., Stockley

Larch

Not native to Delaware, the larch is a deciduous conifer (like the baldcypress) found in colder climates (American larch is also known as tamarack). Larch is occasionally used in Delaware as an ornamental.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN LARCH *Larix laricina*	108	85	68	210	Buena Vista, DuPont Hwy., New Castle
AMERICAN LARCH *Larix laricina*	89	67	43	167	Belmont Hall, Smyrna
EUROPEAN LARCH *Larix decidua*	97	79	65	192	Brandywine Park, Wilmington
EUROPEAN LARCH *Larix decidua*	95	78	63	188	Rockwood Park, Shipley Rd., Wilmington
EUROPEAN LARCH *Larix decidua*	88	90	33	186	Christ Episcopal Church, Water St., Dover

Pine

Pine, specifically loblolly pine, is the most important commercial timber species in Delaware. Most of Delaware's native pine species are found in southern Delaware, although white pine is commonly planted throughout the state. Pine seeds are a food source for many wildlife species, such as squirrels. The southern yellow pines (loblolly, shortleaf, pond, & Virginia) are used for lumber, paper pulp, and poles. White pine lumber is very light and is often used in cabinets, windows, and trim.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AUSTRIAN PINE *Pinus nigra*	71	79	60	165	Bellevue State Park, Wilmington
AUSTRIAN PINE *Pinus nigra*	50	42	19	97	Hagley Museum & Library, Wilmington
EASTERN WHITE PINE *Pinus strobus*	130	115	80	265	Wilmington & Brandywine Cemetery, 701 Delaware Ave., Wilmington
EASTERN WHITE PINE *Pinus strobus*	128	118	60	261	544 Way Rd., Hockessin
EASTERN WHITE PINE *Pinus strobus*	107	79	47	198	1082 Old Lancaster Pike, Hockessin

Pine *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
HIMALAYAN PINE *Pinus wallichina*	165	80	38	255	Winterthur, Wilmington
LOBLOLLY PINE *Pinus taeda*	146	115	50	274	Blue Heron Estates, east of Peterkins Rd., north of Millsboro
LOBLOLLY PINE *Pinus taeda*	116	85	73	219	Trap Pond State Park, Laurel
LOBLOLLY PINE *Pinus taeda*	101	96	70	215	Trap Pond State Park, Laurel
PITCH PINE *Pinus rigida*	43	67	21	115	Trap Pond State Park, Laurel
PITCH PINE *Pinus rigida*	42	61	20	108	Trap Pond State Park, Laurel
SHORTLEAF PINE *Pinus echinata*	61	83	35	153	South of Saw Mill Rd., east of Trap Pond Rd., SW of Georgetown
VIRGINIA PINE *Pinus virginiana*	89	80	42	180	East of Trap Pond Rd., north of Hardscrabble Rd., near Jones Crossroads
VIRGINIA PINE *Pinus virginiana*	71	81	32	160	Bailey Tract, Redden State Forest

Redwood/Sequoia

Coastal redwood and giant sequoia are only native to the extreme western United States, dawn redwood is native to Asia and was once thought extinct. However, these conifers can be found in urban areas and estates throughout Delaware. Their wood is very light and easy to work and is used for shingles and outdoor furniture. In their native areas, they can reach immense sizes. For instance, the national champion Giant Sequoia scores 1,300 points.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
DAWN REDWOOD *Metasequoia glyptostroboides*	179	99	33	285	Winterthur, Wilmington
DAWN REDWOOD *Metasequoia glyptostroboides*	157	80	51	250	212 Clayton Ave., Clayton
DAWN REDWOOD *Metasequoia glyptostroboides*	118	95	48	225	1351 Naamans Rd., Wilmington
GIANT SEQUOIA *Sequoiadendron giganteum*	145	69	39	224	Buck Road, next to rear entrance of Hagley Museum & Library, Wilmington

Spruce

No spruce species are native to Delaware although some species are widely planted as ornamentals, wind breaks, and Christmas trees. Spruce native to the United States are found in colder climates and the West Coast. The wood is used for lumber and paper pulp.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
COLORADO BLUE SPRUCE *Picea pungens*	71	60	22	137	Wilmington Country Club, 4825 Kennett Pike, Wilmington
NORWAY SPRUCE *Picea abies*	103	89	45	203	577 Southwood Road, Hockessin
NORWAY SPRUCE *Picea abies*	99	95	33	202	Hagley Muesum & Library, Wilmington
NORWAY SPRUCE *Picea abies*	93	101	28	201	Winterthur, Wilmington

Yew

Not native to Delaware, yew seldom reaches heights over 20 feet. However, it is often planted in urban areas and around homes as it forms a natural hedge and is easily pruned. Due to its small size, yew's wood has virtually no commercial value. Its leaves are poisonous to some animals.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
ENGLISH YEW *Taxus baccata*	162	53	55	229	Christ Episcopal Church, Water St., Dover
ENGLISH YEW *Taxus baccata*	124	45	70	187	Belmont Hall, DuPont Hwy., Smyrna

Ash

Traditionally found along stream banks and wetlands within Delaware, ash is a valuable timber species. Its wood (particularly white ash) is strong and durable and is commonly used for furniture, baseball bats, and handles. Ash is a hardy tree and some species are widely planted in cities and towns. Ash contains a compound leaf (5 to 9 leaflets) and is one of the few Delaware trees that has an opposite branching pattern.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
GREEN ASH *Fraxinus pennsylvanica*	146	135	87	303	Hagley Museum & Library, Wilmington
GREEN ASH *Fraxinus pennsylvanica*	180	89	101	294	12 Mill Wright Rd., Newark
GREEN ASH *Fraxinus pennsylvanica*	147	118	58	279	Hagley Museum & Library, Wilmington
WHITE ASH *Fraxinus americana*	165	156	86	343	Hagley Museum & Library, Wilmington
WHITE ASH *Fraxinus americana*	180	129	127	341	Brandywine Park, Wilmington
WHITE ASH *Fraxinus americana*	158	138	75	315	Brandywine Park, Wilmington

Basswood

More common in northern Delaware, basswood prefers deep, rich soils; however, this species is commonly planted in urban areas. The wood is soft and very lightweight and is preferred by most carvers. Native Americans use the wood for arrows. Its fruit is a small (about ½ inch) bony nut preferred by many animals.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN BASSWOOD *Tilia americana*	199	106	70	323	19 Wrangler Rd., Newark
AMERICAN BASSWOOD *Tilia americana*	133	101	58	249	5620 Kennett Pike, Centreville
AMERICAN BASSWOOD *Tilia americana*	139	90	46	238	5620 Kennett Pike, Centreville
EUROPEAN LINDEN *Tilia vulgaris*	155	104	34	267	15 Ashley Place, Wilmington
EUROPEAN LINDEN *Tilia vulgaris*	142	90	55	246	1082 Old Lancaster Pike, Hockessin
LITTLELEAF LINDEN *Tilia cordata*	179	85	61	279	Ross Mansion, Seaford

Beech

Although found throughout Delaware, beech is more common in the north. It is easily identified by its smooth, gray bark. Beech nuts are a favorite of wildlife; however, its wood is not valuable and is often used for pallets, railroad ties, and inexpensive furniture. Its leaves contain very prominent, parallel veins which turn copper-colored in the fall and often persist on the tree after the leaves of most other species fall.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN BEECH *Fagus grandifolia*	226	98	124	355	Buena Vista, DuPont Hwy., New Castle
AMERICAN BEECH *Fagus grandifolia*	156	114	80	290	Wooded lot behind Cedar Chase Apt., Wilmington
AMERICAN BEECH *Fagus grandifolia*	148	93	85	262	618 Silverside Rd., Wilmington
COPPER BEECH *Fagus sylvatica* var *atropunicea*	217	67	85	305	St. Francis Renewal Center, Wilmington
COPPER BEECH *Fagus sylvatica* var *atropunicea*	200	75	88	297	Rt. 82, Yorklyn
COPPER BEECH *Fagus sylvatica* var *atropunicea*	185	68	83	274	St. Francis Renewal Center, Wilmington

Birch

Birches in Delaware are usually found along streams and ponds, and their curling bark helps to identify them. Its wood is valuable, often used for furniture and flooring. Its small nut-like fruit is a favorite of wildlife. Several species of birch are often planted in urban areas due to the species' hardiness.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK BIRCH *Betula lenta*	57	52	25	115	Winterhur, Wilmington
RIVER BIRCH *Betula nigra*	135	81	74	235	City of Dover Park, Kings Highway
RIVER BIRCH *Betula nigra*	91	79	54	184	Paradise Alley Road, SE of Felton
YELLOW BIRCH *Betula alleghaniensis*	50	58	47	120	Holy Cross Church 631 S. State St., Dover

Blackgum

Blackgum, a member of the tupelo family, is one of the last trees to leaf in the spring and one of the first to lose its leaves in the fall. Its dark blue fruit (called a drupe) is preferred by many birds and other wildlife. Its white bark helps to identify the tree as it is usually divided into rectangles by black fissures. Its wood does not season well and therefore is not very valuable. The tree has gained popularity in urban areas as it is quite hardy and the leaves turn fiery-red in the fall.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACKGUM *Nyssa sylvatica*	149	114	69	280	Coverdale Farm, Wilmington
BLACKGUM *Nyssa sylvatica*	150	103	88	275	Rockwood Park, Wilmington
BLACKGUM *Nyssa sylvatica*	105	100	84	226	St. John's Holy Church, Gibbs Chapel Rd. & Fords Corner Rd., NW of Hartley

Buckeye

Not native to Delaware, the buckeye has little commercial value; however, it has ornamental value due to its showy flowers and vibrant fall colors. The fruit is a favorite of wildlife. Its leaves are usually arranged in a palm-shape, usually consisting of five leaflets.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
DUPONT BUCKEYE *Aesculus* x *duPontii*	134	79	53	226	Hagley Museum & Library, Wilmington
OHIO BUCKEYE *Aesculus glabra*	112	85	48	209	1082 Old Lancaster Pike, Hockessin
HORSECHESTNUT *Aesculus hippocastanum*	128	79	32	215	Brandywine & Wilmington Cemetery, 701 Delaware Ave., Wilmington
HORSECHESTNUT *Aesculus hippocastanum*	135	64	35	208	Wilmington Country Club, 4825 Kennett Pike, Wilmington
RED BUCKEYE *Aesculus pavia*	72	52	44	135	Bellevue State Park, Wilmington
SWEET BUCKEYE *Aesculus octrandra*	124	100	66	241	Hagley Museum & Library, Wilmington

Catalpa

Also known as the cigar tree due to its long seed pods, the catalpa has large heart-shaped leaves and showy white flowers. While not native to Delaware, it can be found in yards and other urban areas throughout the state. The wood is brittle but quite durable and is sometimes used for carving.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
NORTHERN CATALPA *Catalpa speciosa*	136	85	50	234	Holy Cross Church 631 S. State St., Dover
NORTHERN CATALPA *Catalpa speciosa*	144	61	44	216	5 Elizabeth St., Milford
SOUTHERN CATALPA *Catalpa bignonioides*	97	53	32	158	Hagley Museum & Library, Wilmington

Cherry

Common throughout the state, this tree is often found in abandoned fields, hedgerows, and immediately after timber harvests. Its fruit is a food staple for many bird species throughout Delaware. Its wood is highly valued for furniture and cabinets. Additionally, many cherry hybrids are planted in our urban areas.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK CHERRY *Prunus serotina*	228	80	29	315	Wilmington Country Club, 4825 Kennett Pike
BLACK CHERRY *Prunus serotina*	180	88	60	283	113 Third St., Wyoming
BLACK CHERRY *Prunus serotina*	178	76	72	272	Blackbird State Forest, Tybout Tract, Smyrna
PIN CHERRY *Prunus pennsylvanica*	156	73	79	249	99 Chandler, Newark
SWEET CHERRY *Prunus avium*	138	78	55	230	14 Milltown Rd, Wilmington
SWEET CHERRY *Prunus avium*	126	78	48	216	613 Andover Rd., Wilmington
SWEET CHERRY *Prunus avium*	102	75	48	189	Hagley Museum & Library, Wilmington

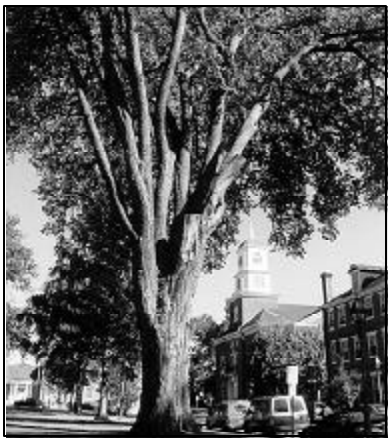
Dogwood

Common in both forests and urban areas, the dogwood is known for its beautiful white bracts found around flowers in the shape of a cross. Unfortunately, a fungus (anthracnose) has recently impacted dogwoods throughout Delaware. Its wood is very hard and was once used for tool handles. Dogwood also produces red berries which are a favorite of many birds.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
FLOWERING DOGWOOD *Cornus florida*	61	26	32	95	4010 Valley Green Road, Greenville
FLOWERING DOGWOOD *Cornus florida*	56	26	25	88	221 Atlantic St., Milton
FLOWERING DOGWOOD *Cornus florida*	39	25	45	75	Hagley Museum & Library, Wilmington
GIANT DOGWOOD *Cornus controversa*	74	43	32	125	Winterthur, Wilmington

Elm

Once an important species, the American elm has virtually disappeared from the area due to Dutch Elm disease. Found on moist, rich soils in the forest, its wood is not very valuable. Elms are a favorite landscape species due to their popular umbrella-like shape.



COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN ELM *Ulmus americana*	204	136	117	369	The Green, Dover
AMERICAN ELM *Ulmus americana*	163	96	106	286	1191 Boyds Corner Road, Middletown
AMERICAN ELM *Ulmus americana*	152	102	96	278	Rockwood Park, Wilmington
CHINESE ELM *Ulmus parvifolia*	88	88	54	189	Brandywine Park, Wilmington
ROCK ELM *Ulmus thomasii*	140	67	22	213	2335 McCoy Road, Bear
SLIPPERY ELM *Ulmus rubra*	93	91	28	191	Hagley Museum & Library, Wilmington
SLIPPERY ELM *Ulmus rubra*	82	92	53	187	2401 East Mall, Wilmington

Ginkgo

The gingko is the oldest tree species and a link between conifers and pre-historic plants. While not native to the United States, it is often planted in parks, gardens, and along streets as it is very hardy and resistant to most diseases and insects. Male specimens are better suited for landscaping because the fruit produced by female trees emits an offensive odor. It is easily identified during the growing season by its fan-shaped leaves which turn a brilliant yellow in the fall.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
GINKGO *Ginkgo biloba*	196	107	68	320	18 Court St., The Green, Dover
GINKGO *Ginkgo biloba*	197	80	84	298	6 Clayton Ave., Lewes
GINKGO *Ginkgo biloba*	150	103	35	262	12 Manor Lane, Claymont

Hackberry

Scattered throughout the state, the hackberry prefers moist soils but survives well on poor, sandy soils. Its wood is not valuable but its fruit (a small berry) is eaten by many birds and animals. Hackberry leaves are extremely variable, but the tree can be identified by cork-like ridges and warts on its bark.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
HACKBERRY *Celtis occidentalis*	138	60	79	218	Pilot Town Rd., Lewes
HACKBERRY *Celtis occidentalis*	97	70	75	186	Cubalo Park, Millsboro
HACKBERRY *Celtis occidentalis*	63	110	48	185	Brandywine Park, 1021 W. 18 St., Wilmington

Hickory

The hickory is best known for its hard, durable wood (although it rots rapidly when in contact with the soil). Four hickory species are common in Delaware; most prefer rich, deep soils. Its wood is commonly used for tool handles and is excellent for fuel. Hickory nuts are a favorite staple for wildlife. Hickories are identifiable due to their compound leaves.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BITTERNUT HICKORY *Carya cordiformis*	94	123	83	238	Brandywine Park, 1021 W. 18 St., Wilmington
BITTERNUT HICKORY *Carya cordiformis*	95	106	55	215	Hagley Museum & Library, Wilmington
BITTERNUT HICKORY *Carya cordiformis*	98	87	36	194	Wilmington and Brandywine Cemetary
MOCKERNUT HICKORY *Carya tomentosa*	92	89	95	205	Brandywine Park, 1021 W. 18 St., Wilmington
MOCKERNUT HICKORY *Carya tomentosa*	79	106	50	198	Dover Air Force Base
MOCKERNUT HICKORY *Carya tomentosa*	67	115	49	194	Dover Air Force Base

Hickory *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
PECAN *Carya illinoensis*	152	140	119	322	304 Federal St., Milton
PECAN *Carya illinoensis*	174	94	93	291	Farm field, east side of Speck Rd., 3 miles north of Seaford
PECAN *Carya illinoensis*	134	115	120	279	2 Causey Dr., Milford
PIGNUT HICKORY *Carya glabra*	101	130	53	244	Dover Air Force Base
PIGNUT HICKORY *Carya glabra*	106	118	53	237	Dover Air Force Base
PIGNUT HICKORY *Carya glabra*	103	94	66	214	Brandywine Park, 1021 W. 18 St., Wilmington
SAND HICKORY *Carya pallida*	66	118	49	196	Dover Air Force Base
SHAGBARK HICKORY *Carya ovata*	151	83	63	250	Armstong Road, Middletown
SHAGBARK HICKORY *Carya ovata*	108	115	60	238	Commerce & Main Sts., Kenton
SHAGBARK HICKORY *Carya ovata*	87	118	57	219	Rt. 82, east of Delaware Nature Society, Ashland
SHELLBARK HICKORY *Carya laciniosa*	109	116	83	246	Brandywine Park, 1021 W. 18 St., Wilmington
SMALL FRUITED HICKORY *Carya microcarpa*	75	87	37	171	Dover Air Force Base

Holly

The state tree of Delaware, the American holly is easily identified by its dark green, thorny leaves and smooth bark. Its wood is cream-colored and is often used for inlay and pianos. Holly has male and female trees with the female trees producing red berries which are a favorite food for many birds. Delaware was a leading exporter of holly Christmas wreaths in the 1930s when it was named the state tree.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN HOLLY *Ilex opaca*	103	59	33	170	302 Clinton Street, Delaware City
AMERICAN HOLLY *Ilex opaca*	96	41	46	149	191 Deakyneville Rd., Townsend
AMERICAN HOLLY *Ilex opaca*	69	65	30	142	South of Lake Forest High School, SE of Felton

American Hornbeam

American hornbean, also known as blue beech or musclewood, is a small tree that seldom exceeds 30 feet in height. Its wood is not valuable and is seldom used for any purpose other than firewood. Its fruit is a small, egg-shaped nut. Its distinguishing characteristic is its smooth, blue-gray bark that often appears twisted and contoured like muscles.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN HORNBEAM *Carpinus caroliniana*	56	38	40	104	23 N. State St., Dover
AMERICAN HORNBEAM *Carpinus caroliniana*	39	51	47	102	Brandywine Park, 1021 W. 18 St., Wilmington
AMERICAN HORNBEAM *Carpinus caroliniana*	33	28	25	67	Hagley Museum & Library, Wilmington

Ironwood

Also known as hophornbeam, this small attractive tree is often used as an ornamental. The wood is very hard and tough, yet has little commercial value. The succulent buds of the ironwood are an important winter food source for many birds and mammals and its fruit, which consists of a cluster of small nuts, resembles hops.

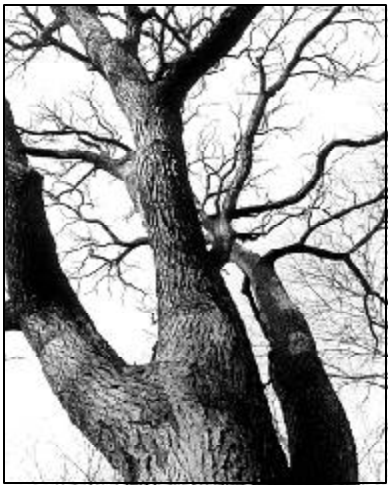
COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
IRONWOOD or **AMERICAN HOP-HORNBEAM** *Ostrya virginiana*	68	36	42	115	1709 Green Lane, Wilmington

Kentucky Coffeetree

A common ornamental tree within parks and gardens, the Kentucky coffeetree is not native to Delaware. It has compound leaves and its name likely originates from its seeds which resemble coffee beans. Its wood is not valuable and has few uses.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
KENTUCKY COFFEETREE *Gymnocladus dioica*	131	101	59	247	South State and East Water Sts., Dover
KENTUCKY COFFEETREE *Gymnocladus dioica*	104	96	60	215	NW corner of The Green, Dover

Locust



Neither honeylocust nor black locust are native to Delaware, although black locust is now common in northern Delaware. Both species grow rapidly in abandoned fields, hedgerows, and other open areas. Locust wood, particularly black locust, is very durable and is often used for fenceposts. Both species have compound leaves and produces seeds within pods. Locusts contain thorns on their trunks and branches, although thornless honeylocust varieties are now planted in urban areas.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK LOCUST *Robinia pseudoacacia*	126	114	62	256	Brandywine Park, 1021 W. 18 St., Wilmington
BLACK LOCUST *Robinia pseudoacacia*	143	90	22	239	Winterthur, Wilmington
BLACK LOCUST *Robinia pseudoacacia*	102	109	39	221	Hagley Museum & Library, Wilmington
HONEYLOCUST *Gleditsia triacanthos*	86	81	66	184	Brandywine Park, 1021 W. 18 St., Wilmington
HONEYLOCUST *Gleditsia triacanthos*	98	65	41	173	Brandywine Park, 1021 W. 18 St., Wilmington

Magnolia

Several species of magnolia are planted in Delaware, although only sweetbay magnolia, commonly found in southern Delaware, is native. Found on moist sites, magnolia is not a valuable timber species. However, magnolias are popular landscape trees as they have very fragrant, white flowers. Birds and rodents feed on their small, bright red seeds.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BIGLEAF MAGNOLIA *Magnolia macrophylla*	86	57	63	159	Rockwood Park, Wilmington
CUCUMBER MAGNOLIA *Magnolia acuminata*	168	118	100	311	640 S. State Street, Dover
CUCUMBER MAGNOLIA *Magnolia acuminata*	185	82	73	285	Ferris School, Wilmington
CUCUMBER MAGNOLIA *Magnolia acuminata*	163	94	65	273	Wilmington Country Club, 4825 Kennett Pike, Wilmington

Magnolia *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
SAUCER MAGNOLIA *Magnolia soulangeana*	57	31	30	96	Hagley Museum & Library, Wilmington
SOUTHERN MAGNOLIA *Magnolia grandiflora*	107	52	48	171	Buena Vista, DuPont Hwy., New Castle
SOUTHERN MAGNOLIA *Magnolia grandiflora*	88	56	42	155	3200 Philadelphia Pike, Claymont
SWEET BAY MAGNOLIA *Magnolia virginiana*	118	60	40	188	410 S. Walnut St., Milford
SWEET BAY MAGNOLIA *Magnolia virginiana*	90	36	40	136	Bacon Road, Laurel
SWEET BAY MAGNOLIA *Magnolia virginiana*	41	60	27	108	South of Saw Mill Rd., east of Trap Pond Rd., SW of Georgetown
UMBRELLA MAGNOLIA *Magnolia tripetala*	67	46	28	120	Hagley Museum & Library, Wilmington

Maple

Several species of maple are found in Delaware although only red maple is common (in fact, it is the *most* common tree in Delaware). Since maples are hardy and adapt easily to most environments, they are widely planted in urban areas. Their wood, particularly sugar maple, is used for furniture and hardwood flooring. Maples produce brilliant fall foliage and are one of the few species that have an opposite branching pattern.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BOXELDER *Acer negundo*	136	97	84	254	507 State St., Dover
BOXELDER *Acer negundo*	128	45	50	186	Hagley Museum & Library, Wilmington
NORWAY MAPLE *Acer platanoides*	175	68	76	262	5620 Kennett Pike, Wilmington
RED MAPLE *Acer rubrum*	250	85	90	358	Rt. 82, East of Delaware Nature Society, Ashland
RED MAPLE *Acer rubrum*	218	97	74	333	544 Way Rd., Hockessin
RED MAPLE *Acer rubrum*	195	70	71	282	24 Southern Blvd., Wyoming

Maple *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
SILVER MAPLE *Acer saccharinum*	267	61	94	352	1275 Casho Mill Road, Newark
SILVER MAPLE *Acer saccharinum*	262	64	60	341	Rt. 9, Port Penn Church
SILVER MAPLE *Acer saccharinum*	246	75	55	335	Governors Ave. and Webbs Lane, Dover
SUGAR MAPLE *Acer saccharum*	148	119	77	286	Hagley Museum & Library, Wilmington
SUGAR MAPLE *Acer saccharum*	156	92	82	269	1082 Old Lancaster Pike, Hockessin
SUGAR MAPLE *Acer saccharum*	174	62	32	244	1203 Greenbank Road, Wilmington

Mulberry

Both red mulberry and white mulberry are found in Delaware, but only red mulberry is native. Not abundant in Delaware, its black fruit is a favorite of many birds. Typically a small tree, its wood is not commercially valuable.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
RED MULBERRY *Morus rubra*	210	47	64	273	2158 Lighthouse Rd., Smyrna
WHITE MULBERRY *Morus alba*	157	45	65	218	2308 W. 11 St., Wilmington
WHITE MULBERRY *Morus alba*	156	44	57	214	Viola

Red Oak

Red oaks are some of the most common trees in Delaware as several red oak species are native to our state. Certain species, such as pin and willow oaks, are commonly planted in urban areas due to their hardiness. The buds and fruit (acorns) are a vital food source for many wildlife species. Red oak lumber (which is reddish in color) is very important as it is used for furniture, pallets, structural lumber, and planking.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK OAK *Quercus velutina*	208	141	54	363	Wilmington & Brandywine Cemetery, 701 Delaware Ave., Wilmington
BLACK OAK *Quercus velutina*	178	107	105	311	801 W. 20th Street, Wilmington
BLACK OAK *Quercus velutina*	167	120	91	310	705.5 Woodsdale Rd., Wilmington
BLACKJACK OAK *Quercus marilandica*	38	80	19	123	Hagley Museum & Library, Wilmington

Red Oak *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
LAUREL OAK *Quercus laurifolia*	135	88	104	249	Rockford Park, Wilmington
LAUREL OAK *Quercus laurifolia*	128	84	64	228	2605 Newport Gap Pike, Wilmington
NORTHERN RED OAK *Quercus rubra*	202	85	75	306	6613 Carpenter Bridge Road, Frederica
NORTHERN RED OAK *Quercus rubra*	173	113	77	305	1310 Little Baltimore Rd., Hockessin
NORTHERN RED OAK *Quercus rubra*	123	108	43	242	Pleasant Hills, Rising Sun
PIN OAK *Quercus palustris*	128	132	57	274	Dover Air Force Base
PIN OAK *Quercus palustris*	141	108	98	274	12 Courtney Rd., Wilmington
PIN OAK *Quercus palustris*	144	104	55	262	Wilmington and Brandywine Cemetary
SCARLET OAK *Quercus coccinea*	170	101	73	289	NE side of Odessa, NW of Appoquinimink Creek
SCARLET OAK *Quercus coccinea*	149	106	99	280	Route 82, Yorklyn
SCARLET OAK *Quercus coccinea*	163	96	35	268	Route 8, Dover

Red Oak *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
SHINGLE OAK *Quercus imbricaria*	76	74	50	163	Delaware State University, 1200 N. DuPont Hwy., Dover
SOUTHERN RED OAK *Quercus falcata*	268	104	110	420	North side of Banks Rd., 1/4 mile east of Rt. 24, NE of Millsboro
SOUTHERN RED OAK *Quercus falcata*	240	105	53	358	East, Rt. 13 & Rt. 14, Harrington
SOUTHERN RED OAK *Quercus falcata*	161	125	83	307	700 Woodsdale Dr., Wilmington
WATER OAK *Quercus nigra*	85	56	45	152	South of Saw Mill Rd., east of Trap Pond Rd., SW of Georgetown
WILLOW OAK *Quercus phellos*	228	115	83	364	1625 Williamsville Road, Houston
WILLOW OAK *Quercus phellos*	173	88	90	283	17 Fairfield Rd., Claymont
WILLOW OAK *Quercus phellos*	151	105	90	279	North of Brandywine Court Condominiums, Dover

White Oak

White oaks are common throughout our state as several white oak species are native to the area. White oak acorns are larger and sweeter than those of red oak, and therefore are preferred by most wildlife species. The wood, which is stronger and more durable than red oak, is very important as it is used for a variety of purposes including furniture, lumber, and barrels.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BUR OAK *Quercus macrocarpa*	107	86	62	209	Bellevue State Park
BUR OAK *Quercus macrocarpa*	92	83	36	184	Hagley Museum & Library, Wilmington
CHESTNUT OAK *Quercus prinus*	171	63	90	257	56 Oakmont Dr., Wilmington
CHESTNUT OAK *Quercus prinus*	125	93	55	232	Judge Morris Estate, Newark
CHESTNUT OAK *Quercus prinus*	114	104	39	228	Brandywine Park, 1021 W. 18 St., Wilmington

White Oak *(cont.)*

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
POST OAK *Quercus stellata*	90	75	54	179	Redden Lodge
POST OAK *Quercus stellata*	61	57	31	126	South of Saw Mill Rd., east of Trap Pond Rd., SW of Georgetown
SWAMP CHESTNUT OAK *Quercus michauxii*	206	99	110	333	Eagles Nest Landing Rd., Smynra
SWAMP CHESTNUT OAK *Quercus michauxii*	91	111	56	215	Dover Air Force Base
WHITE OAK *Quercus alba*	265	95	115	389	Chambers Rock Rd., Newark
WHITE OAK *Quercus alba*	242	80	116	351	Meeting House and Benge Rds., Hockessin
WHITE OAK *Quercus alba*	231	90	109	348	1217 Wilson Road, Wilmington

Osage Orange

While not native to Delaware, osage orange is often found in hedgerows as it was once planted to establish natural fences due to its stout branches and thorns. It also produces large, 4-6" diameter fruit which resembles an orange and contains several nut-like seeds. Its wood is very heavy and hard and was often used for fence posts and wheels. Native Americans used the wood to construct bows, hence its nickname, bow-wood.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
OSAGE ORANGE *Maclura pomifera*	284	81	86	387	Hagley Museum & Library, Wilmington
OSAGE ORANGE *Maclura pomifera*	201	80	78	301	669 Southwood Road, Hockessin
OSAGE ORANGE *Maclura pomifera*	196	75	48	283	Buena Vista, DuPont Hwy., New Castle

Paulownia

Also called the princess or empress tree, the paulownia is a medium-sized ornamental introduced from Asia. Easily recognized in the spring by its beautiful lavender flowers, its soft, straight wood is prized by some Asian cultures for carving jewelry boxes, shoes, and religious artifacts (trees are often stolen due to their high value). The tree prefers open areas such as along roads and abandoned fields as it does not tolerate shade.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
PAULOWNIA *Paulownia tomentosa*	231	50	50	294	Belmont Hall, Smyrna
PAULOWNIA *Paulownia tomentosa*	198	65	73	281	Limestone Road at the State Line, Hockessin
PAULOWNIA *Paulownia tomentosa*	146	70	50	229	White Clay Creek State Park, Newark

Pawpaw

Pawpaw is usually found in small clusters in wet areas along stream banks or wetlands. It is sometimes called false banana because its fruit is 1-2" in diameter and 3-5" long and turns from green to brown when ripe. The fruit is edible and can be found in some markets. This tree seldom reaches 40' tall and its wood has virtually no commercial value.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
PAWPAW *Asimina triloba*	25	27	11	65	Winterthur, Wilmington
PAWPAW *Asimina triloba*	20	35	23	61	Hagley Museum & Library, Wilmington

Persimmon

Persimmons are found throughout the state but usually in open areas or along the forest edge as they are shade intolerant. Like the holly, persimmon trees are either male or female, with the female producing a 1-2" diameter seeded fruit which sweetens when ripe. The fruit is a staple of many animals. Its wood is hard and polishes easy and is used by craftsmen for carving and golf clubs.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
PERSIMMON *Diospyros virginiana*	113	62	50	187	221 Oak Rd., Seaford
PERSIMMON *Diospyros virginiana*	95	67	51	175	235 Pine Valley Rd., Dover

Poplar

True poplars (which include aspens) are found in Delaware although most are not native. Virtually all poplars are found in open areas as they are not tolerant of shade. They grow rapidly, and for a tree, are quite short-lived. The wood is lightweight and soft and is used for paper pulp, crates, and boxes. Unlike many species, their seeds ripen in late spring. Due to their fast growth, these species are often planted to establish shade but are not recommended due to their relatively short lifespan.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
EASTERN COTTONWOOD *Populus deltoides*	113	133	52	259	Brandywine Park, 1021 W. 18 St., Wilmington
EASTERN COTTONWOOD *Populus deltoides*	112	95	59	222	Buena Vista, DuPont Hwy., New Castle
WHITE POPLAR *Populus alba*	132	120	120	282	Kitts Hummock Road, Dover
WHITE POPLAR *Populus alba*	88	77	42	176	Christ Episcopal Church, Water Street, Dover

Redbud

Only native in extreme northern Delaware, this small tree is commonly planted in urban areas due to its abundant pink flowers. A common landscape tree, the redbud produces a fragrant flower in the spring of each year. Redbud has little commercial or wildlife value; however, the flower is a delicacy often eaten in soups or salads.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
REDBUD *Cercis canadensis*	60	42	27	109	Hagley Museum & Library, Wilmington
REDBUD *Cercis canadensis*	54	32	42	97	1125 Old Lancaster Pike, Hockessin

Sassafras

Common throughout Delaware, this tree is usually found on sandy soils and does not thrive in shade. The wood is an orangish-brown and is quite light and durable although not very important since these trees seldom reach sizes suitable for lumber production. It is easily recognized by its green twigs, multiple-shaped leaves (including mitten shapes), and spicy aroma. Sassafras roots are often used to make tea and its berries are eaten by many animals and birds.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
SASSAFRAS *Sassafras albidum*	147	59	50	219	Wilmington & Brandywine Cemetery, Wilmington
SASSAFRAS *Sassafras albidum*	79	70	44	160	2401 East Mall, Wilmington
SASSAFRAS *Sassafras albidum*	79	65	40	154	902 Bayview Road, Rehoboth

Sweetgum

Common throughout the state, sweetgum prefers wetter sites but will grow on many soils. Its wood is very difficult to split and dry due to its interlocking grain. Therefore, it is now used for relatively low-valued products such as pallets, paper pulp, and railroad ties, although it can be veneered, and was used to make peach baskets and ice cream spoons in the past. Sweetgum is easy to identify by its five-pointed, star-shaped leaf and its "gumballs" which contain winged seeds.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
SWEETGUM *Liquidambar styraciflua*	126	79	92	228	Wilmington & Brandywine Cemetery, 701 Delaware Ave., Wilmington
SWEETGUM *Liquidambar styraciflua*	101	85	49	198	South of Saw Mill Rd., west of Bryans Store Rd., SW of Georgetown
SWEETGUM *Liquidambar styraciflua*	98	72	47	182	210 Center St., Harrington

Sycamore

A native of Delaware, the sycamore grows rapidly and is found along streams and rivers although it is often planted on drier sites in urban areas. It is easily identified by its bark which has a white and green splotched appearance. Although not native, the London plane is also planted in Delaware. Its bark contains darker white and green colors. Sycamore wood is not very strong or durable but is used for some furniture, cutting boards, and paper pulp.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
AMERICAN SYCAMORE *Platanus occidentalis*	296	82	98	403	West side of Hickman Rd., north of Scotts Store Rd., west of Greenwood
AMERICAN SYCAMORE *Platanus occidentalis*	214	130	135	378	Valley Garden Park, Greenville
AMERICAN SYCAMORE *Platanus occidentalis*	228	115	100	368	Rt. 10, Sandtown
LONDON PLANE *Platanus acerifolia*	217	95	93	330	Winterthur, Wilmington
LONDON PLANE *Platanus acerifolia*	194	86	74	299	East of Boyds Corner, Rt. 301, Middletown

Walnut

Walnut is a prized commercial tree as its durable, easily-worked wood is used for veneer, furniture, and gunstocks. Butternut (white walnut) is planted in Delaware although it is not commercially important. Walnuts are not commonly used in urban areas as the tree produces toxins that are harmful to other plants.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK WALNUT *Juglans nigra*	187	105	94	316	Holy Cross Church, State St., Dover
BLACK WALNUT *Juglans nigra*	132	110	33	250	Winterthur, Wilmington
BLACK WALNUT *Juglans nigra*	154	76	60	245	1518 Gilpin Ave., Wilmington
BUTTERNUT *Juglans cinerea*	132	69	84	222	Intersection of Rt. 36 & Rt. 113, Milford
BUTTERNUT *Juglans cinerea*	58	60	54	132	Hagley Museum & Library, Wilmington
ENGLISH WALNUT *Juglans regia*	157	95	60	267	39 S. Main St., Camden
ENGLISH WALNUT *Juglans regia*	99	41	60	155	North of Bacons Rd., on Bistate Blvd., south of Laurel

Willow

Only black willow is native to Delaware although weeping willow is often planted in urban areas. Willows prefer wet sites, such as along streams and ponds, and consequently their roots often help to stabilize the soil along these water bodies. Its wood is light, soft, and not durable but does not split when drying. It was once used for wood packages and toys.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
BLACK WILLOW *Salix nigra*	26	20	17	50	Hagley Museum & Library, Wilmington
WEEPING WILLOW *Salix babylonica*	281	85	105	392	101 Layton Ave., Wyoming

Yellow-poplar

Actually a member of the magnolia family, the yellow-poplar is a very valuable commercial and ornamental tree. The tree is resistant to most diseases and insects and its wood is used for a variety of products. The tree has also gained popularity as a landscape specimen due to its resistance to pests and rapid growth. Yellow-poplar prefers deep, rich soils and it is one of the tallest tree species in Delaware. Its leaves, which turn bright yellow in the fall, are shaped like a tulip flower, hence its nickname, tulip-poplar.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
YELLOW-POPLAR *Liriodendron tulipifera*	207	187	63	410	Winterthur, Wilmington
YELLOW-POPLAR *Liriodendron tulipifera*	240	146	36	395	Jct. Rt. 141 and Rising Sun Lane, Wilmington
YELLOW-POPLAR *Liriodendron tulipifera*	223	151	60	389	Winterthur, Wilmington

Zelkova

While not native to the area, the large vase-shaped crown of the zelkova makes it an ideal street tree and it is found along many city streets in Delaware. Sometimes called Chinese elm, zelkova has been planted in many urban areas once occupied by the American elm.

COMMON NAME *SCIENTIFIC NAME*	**CBH (IN.)**	**HGT (FT.)**	**CROWN SPREAD (FT.)**	**TOTAL POINTS**	**LOCATION**
ZELKOVA *Zelkova serrata*	301	80	100	406	C.P. Schutt, Greenville

DDA Forest Service
Programs and Services

The mission of the DDA Forest Service is to *conserve, protect, and enhance the forest and its resources for the public through education, management, demonstration, promotion, and providing technical services in a timely and efficient manner.*

To achieve our mission, the DDA Forest Service maintains offices in all three counties, and our professionals provide a wide variety of services through several state and federally funded programs. These services are grouped into three program areas—Forest Conservation, Forest Protection, and Forestry Education. While the responsibilities and services of these programs overlap, they are each unique and help us achieve our objectives.

The **Forest Conservation Program** helps Delawareans to better manage their forest resources. It includes the following services:

- Forest management assistance to Delaware landowners
- Reforestation assistance including low-cost tree seedlings
- Community forestry technical assistance and grants for cities and towns
- Marketing forest products

The **Forest Protection Program** helps homeowners and landowners monitor, maintain, and when possible, improve the health of Delaware's forests through several services:

- Wildland fire prevention and suppression
- Enforcement of forest protection laws such as the Seed Tree Law and the Erosion and Sedimentation Law
- Forest pests—diagnosis and treatment recommendations

Through our **Forestry Education Program**, the DDA Forest Service educates Delawareans about the importance of our forests:

- Management of three state forests—Blackbird, Redden, and Taber—totalling more than 15,000 acres

DDA Forest Service: Programs and Services

- Education and information programs to increase public knowledge of forestry issues.

We hope you will either visit one of our offices, give us a call, or send us an e-mail at:

austin@dda.state.de.us

to learn more about our services or if you wish to meet with a forester about your forests. The DDA Forest Service is committed to our customer pledge—*delivering quality services in a timely and professional manner with courtesy and integrity*.

DDA Forest Service

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Taber State Forest Headquarters

Taber State Forest
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DELAWARE
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

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The U.S. Forest Service State and Private Forestry (S&PF) Program provided the funding to publish this document through its Urban and Community Forestry program. Grants from the S&PF program represent over twenty-five percent of the DDA Forest Service's budget, and many of Delaware's forestry programs would not be possible without U.S. Forest Service support. The Delaware Department of Agriculture (DDA) Forest Service thanks the U.S. Forest Service for this support and their continuing assistance.

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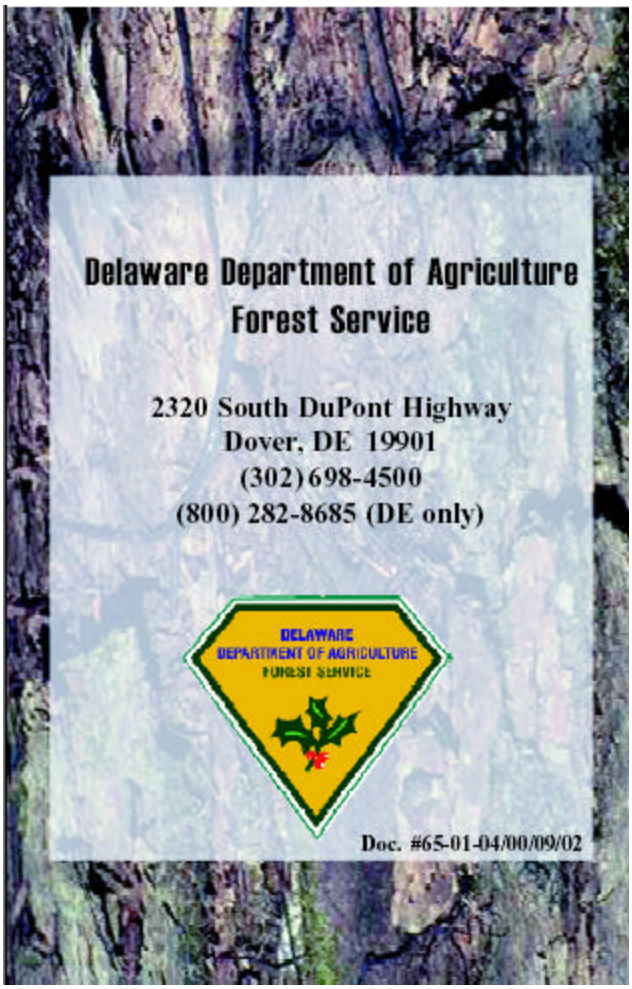

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Doc. #65-01-04/00/09/02