

**John S. Ayton**  
**State Forest Tree Nursery**  
3424 Gallagher Road  
Preston, MD 21655

# 2019 Seedling Catalog

JOHN S. AYTON STATE FOREST TREE NURSERY



**410-673-2467**  
**800-TREESMD (873-3763)**

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Larry Hogan, Governor | Mark Belton, Secretary

## JOHN S. AYTON STATE FOREST TREE NURSERY

Dear Friends,

This year's catalog features 49 species, with a few different choices from last year! Our seedling crop is growing very well and we have more than 3 million seedlings available.

Our online catalog continues to be very successful. Communicating electronically allows us to save on postage and provide you with order confirmations, planting instructions, shipping notices and receipts quickly and efficiently. Our phone number is also available if you would like to speak to us directly. Both are listed on the front cover.

We will continue to sell hardwood seedlings in units of 25 per species so you may mix and match to suit your needs. Hardwood can be ordered in units of 25, 50, 75, 100+ etc. Conifers can still be ordered in any multiple of 50 per species. Their smaller size and uniformity makes them much easier to handle and package.

Whether you are a new customer or have been buying seedlings from us for many years, we truly appreciate and thank you for your business. We strive to provide you with high quality seedlings and excellent service at competitive prices.

Sincerely,  
**Richard Garrett**  
Nursery Manager

P.S. If you are not sure which species are right for you, please call your local forestry office. They can answer questions about site conditions, species selection and financial incentives that you may qualify for. Telephone numbers for local foresters are enclosed.

## TREE PLANTING INCENTIVE PROGRAMS

### STATE

#### **Woodland Incentive Program (WIP):**

Provides reimbursement up to 65 percent of the cost of tree planting, timber stand improvement and other management activities.

#### **Enhanced Woodland Incentive Program (Enhanced WIP):**

Landowners with 5 or more acres of forest (after planting) in southern and central regions qualify for 100 percent cost reimbursement up to \$3,000/acre of tree planting.

#### **Reforestation/Timber Stand Improvement Tax Deduction (TAXMOD):**

Allows owners or lessees with between 3 to 1000 acres of commercial forest land to deduct double the direct costs associated with certified reforestation and timber stand improvement from their adjusted gross income for Maryland income tax purposes.

#### **Forest Conservation And Management Program (FCMA):**

Provides participating landowners with a tax incentive by freezing current assessments or by applying a reduced assessment at the woodland agricultural use rate. Landowners with 5 or more acres enter into an agreement to adhere to a forest stewardship plan for a minimum of 15 years. Landowners may increase their forest acreage in the program by planting trees.

### FEDERAL

#### **Conservation Reserve Enhancement Program (CREP):**

Pays bonus land rental rates and reimburses installation costs for creating forest or grass buffers along watercourses. Landowners with croplands or marginal pastureland by streams or on erodible soils are eligible for 10-15 year contracts. Permanent purchased easements for sign-up are also available.

#### **Public Law 96-451**

This incentive permits up to \$10,000 of capitalized reforestation costs each year to be eligible for a 10 percent investment tax credit (subtracted from federal taxes owed a 7-year amortization—subtracted from gross income to compute adjusted gross income).

#### **U.S. Fish and Wildlife Service (USFWS):**

Free seedlings will be given to qualified private landowners who plant riparian areas and sign a habitat restoration agreement.

## NURSERY STOCK USAGE

- 1.All seedlings purchased shall be planted for conservation, lumber and/or cut Christmas tree purposes.
- 2.A planting report shall be furnished when requested by the Maryland Department of Natural Resources.
- 3.The plantings shall be protected as far as possible from fire, grazing and trespass.
- 4.Trees may not be offered for sale with roots attached for removal from the land as live or ornamental trees.

Seedlings purchased from the State Nursery cannot be used for landscaping or ornamental purposes. The Forest Service, however, fully recognizes the benefits that trees provide in terms of beautification, privacy screening and enhancing architectural design. We encourage homeowners and businesses to patronize their local private nursery, garden center or landscape contractor. These professionals can assist you in choosing the proper trees, shrubs, flowers and maintenance supplies to meet your landscaping needs.

## FOREST SERVICE OFFICES

Allegany County	301-777-2027
Anne Arundel County	410-360-8421
Baltimore County	410-665-5820
Calvert County	410-535-1303
Caroline County	410-479-1623
Carroll County	410-848-9290
Cecil County	410-287-5777
Charles County	301-934-2543
Dorchester County	410-228-1861
Frederick County	301-473-8417
Garrett County	301-334-3296
Harford County	410-836-4564



Howard County	410-442-2080
Kent County	410-778-4439
Montgomery County	301-854-6060
Prince George's County	410-535-1303
Queen Anne's County	410-819-4120
Somerset County	410-651-2004
St. Mary's County	301-880-2747
Talbot County	410-479-1623
Washington County	301-791-4733
Wicomico County	410-543-1950
Worcester County	443-235-1636

## MARYLAND DEPARTMENT OF NATURAL RESOURCES

Forest Service  
Tawes State Office Building  
580 Taylor Avenue, E-1  
Annapolis, MD 21401

410-260-8531 | Toll free in Maryland: 877-620-8DNR ext. 8531 | [dnr.maryland.gov](http://dnr.maryland.gov)

### DISCLAIMER

While we would like to be able to guarantee our seedling stock against the ravages of nature and human intervention, we simply cannot. We will however, prepare, package and ship healthy seedlings with the utmost care. When the seedlings leave our nursery they become the responsibility of the carrier and then the customer. If they arrive damaged due to obvious misuse, please report it to the carrier immediately. We can assume no responsibility after the seedlings leave our nursery.

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin or physical or mental disability.

This document is available in alternative format upon request from a qualified individual with a disability.



## DECIDUOUS TREES

25-75 order in units of 25 per species | 100+ order in units of 100 per species

Common Name	Scientific Name	Watershed Protection	Forest Products	Buffer Planting	Soil Protection	Wildlife Habitat	Windbreak Protection	Pollinator Favorite	Pricing 25-75	Pricing 100-900	Pricing 1,000+	Species Description
<b>Green Ash</b> 1 yr, 12-24”	<i>Fraxinus pennsylvanica</i>	X	X	X	X	X			1.00	.60	.28	A large tree that commonly grows to 70 feet tall, green ash is planted for watershed protection and shade. More suitable to wet sites than white ash. <b>Maryland native.</b>
<b>Baldcypress</b> 1 yr, 12-36”	<i>Taxodium distichum</i>	X	X	X		X			1.00	.60	.28	A large deciduous tree with tapered trunk that often reaches 130 feet tall. Commonly found in river swamps, wet stream banks and wet depressions. <b>Maryland native.</b>
<b>American Beech</b> 1 yr, 6-12”	<i>Fagus grandifolia</i>	X	X			X			1.25	1.00	----	A very shade tolerant tree that is very slow growing, American beech produces nuts that are a valuable wildlife food. <b>Maryland native.</b>
<b>River Birch</b> 1 yr, 12-18”	<i>Betula nigra</i>	X	X	X	X				1.00	.60	.28	Attractive, multi-stemmed tree that may grow up to 80 feet, River birch is excellent on wet sites. <b>Maryland native.</b>
<b>Black Cherry</b> 1 yr, 10-20”	<i>Prunus serotina</i>	X	X	X	X	X		X	1.00	.60	.28	A large tree that may reach 100 feet. Black cherry provides valuable timber, wildlife food and habitat. <b>Maryland native.</b>
<b>Siberian Crabapple</b> 1 yr, 8-16”	<i>Malus baccata</i>	X			X	X		X	1.00	.60	.28	A small flowering tree valued for wildlife food and shelter. Produces a small fruit the size of a marble. Excellent for birds.
<b>Southern Crabapple</b> 1 yr, 10-20”	<i>Malus angustifolia</i>	X			X	X		X	1.00	.60	.28	A small flowering tree valued for wildlife food and shelter. Produces a fruit the size of a ping pong ball. Excellent food for small mammals and deer. <b>Maryland native.</b>
<b>Common Hackberry</b> 1yr, 10-20”	<i>Celtis occidentalis</i>	X		X	X	X			1.00	.60	.28	A large tree that will grow in full sun or partial shade. Prefers rich moist sites and will grow along stream banks. Produces a small fruit that birds feed on. <b>Maryland native.</b>
<b>Washington Hawthorn</b> 1 yr 8-16”	<i>Crataegus phaenopyrum</i>	X		X	X	X	X	X	1.00	.60	.28	A small tree growing 25 to 35 feet that can be used for screening and hedges. Washington Hawthorn has thorns and produces orange to red colored berries that persist into winter providing food for birds. <b>Maryland native.</b>
<b>Black Locust</b> 1 yr, 10-20”	<i>Robinia pseudoacacia</i>	X	X		X			X	1.00	.60	.11	A medium sized tree usually 40 to 60 feet tall. Reaches best development in the Appalachian region. Locust is able to reintroduce nitrogen to the soil and is widely used to reclaim underproductive sites. <b>Maryland native.</b>
<b>Silver Maple</b> 1 yr, 18-24”	<i>Acer saccharinum</i>	X	X	X	X				1.00	.60	.28	A fast growing tree often found near waterways that matures at 100 feet. Valuable as a wildlife tree, it is also used for pulp and lumber. <b>Maryland native.</b>
<b>Black Oak</b> 1 yr, 8-16”	<i>Quercus velutina</i>	X	X	X	X	X			1.00	.65	.29	A large tree growing up to 90 feet tall, it is used for timber, fuel wood, wildlife food and cover. It prefers moist well-drained soils. <b>Maryland native.</b>
<b>Chestnut Oak</b> 1 yr, 10-24”	<i>Quercus prinus</i>	X	X	X	X	X			1.00	.65	.29	Commonly reaches 60 to 80 feet at maturity and grows better on dry and poor sites than other oaks. Acorn is a favorite of deer, turkey and squirrels. <b>Maryland Native.</b>
<b>Northern Red Oak</b> 1 yr, 10-24”	<i>Quercus rubra</i>	X	X	X	X	X			1.00	.65	.29	60 to 80 feet with a trunk diameter of more than 3 feet and prefers upland well-drained soils. It is valued for timber, fuel wood, wildlife food and cover. <b>Maryland native.</b>
<b>Pin Oak</b> 1 yr, 10-20”	<i>Quercus palustris</i>	X	X	X	X	X			1.00	.65	.29	Maturing at 80 feet tall, pin oak is planted for wildlife food and cover. Its compact crown makes it a good shade tree also. Normally found on moist soils. <b>Maryland native.</b>

## DECIDUOUS TREES

25-75 order in units of 25 per species | 100+ order in units of 100 per species

Common Name	Scientific Name	Watershed protection	Forest Products	Buffer Planting	Soil Protection	Wildlife Habitat	Windbreak Protection	Pollinator Favorite	Pricing 25-75	Pricing 100-900	Pricing 1,000+	Species Description
<b>Southern Red Oak</b> 1 yr, 8-16"	<i>Quercus falcata</i>	X	X	X	X	X			1.00	.65	.29	Grows 90 feet tall on moist well drained soils. It is valued for timber, fuel wood, wildlife food and cover. Commonly found in the eastern and southern parts of the state. <b>Maryland native.</b>
<b>Sawtooth Oak</b> 1 yr, 12-24"	<i>Quercus acutissima</i>	X		X	X	X			1.00	.65	.29	50 feet tall at maturity and prefers well-drained soil. Produces acorns very early in life and has frequent seed crops. Retains the dried leaves on the tree through much of the winter providing cover to wildlife.
<b>Gobbler Sawtooth Oak</b> 2 yr, 12-24"	<i>Quercus acutissima</i>	X		X	X	X			1.00	.65	.29	A Sawtooth oak variety selected for a smaller acorn size. Best used for waterfowl impoundment banks and wild turkey food plots.
<b>Swamp White Oak</b> 1yr, 12-24"	<i>Quercus bicolor</i>	X		X	X	X			1.00	.65	.29	A medium sized tree averaging 50 to 80 feet tall, tolerates poorly drained sites. The acorns are eaten by a wide variety of wildlife. <b>Maryland native.</b>
<b>Willow Oak</b> 1 yr, 8-16"	<i>Quercus phellos</i>	X		X	X	X			1.00	.65	.29	Growing to 100 feet, willow oak is a good choice for bottomlands and wetter sites. <b>Maryland native.</b>
<b>Persimmon</b> 1 yr, 12-24"	<i>Diospyros virginiana</i>	X		X	X	X		X	1.00	.60	.28	A slow growing tree usually 20 to 60 feet tall. Produces fruit that is a valued wildlife food. <b>Maryland native.</b>
<b>American Plum</b> 1 yr, 12-24"	<i>Prunus americana</i>	X		X		X		X	1.00	.60	.28	A small tree growing from 10 to 30 feet tall, American plum produces fruit an inch in diameter which is a valuable wildlife food source. <b>Maryland native.</b>
<b>Yellow Poplar</b> 1 yr, 12-24"	<i>Liriodendron tulipifera</i>		X	X			X	X	1.00	.75	.30	Yellow poplar is valuable for lumber and veneer. It grows best on moist, well-drained sites and can reach 120 feet at maturity. <b>Maryland native.</b>
<b>Redbud</b> 1 yr, 10-24"	<i>Cercis canadensis</i>	X			X	X		X	1.00	.60	.28	A small tree 25 to 35 feet tall, commonly found on abandoned farmlands, cleared woodlands, road banks and in forest under stories. Noted for its pink blossoms. The tree is valued for wildlife food and cover. <b>Maryland native.</b>
<b>Sweetgum</b> 1 yr, 10-20"	<i>Liquidambar styraciflua</i>	X	X	X	X	X			1.00	.60	.28	Sweetgum may grow in excess of 100 feet tall and is adaptable to a wide variety of sites. <b>Maryland native.</b>
<b>Sycamore</b> 1 yr, 12-24"	<i>Platanus occidentalis</i>	X		X	X	X		X	1.00	.60	.28	Sycamore grows to 120 feet tall and is commonly found on moist lowland soils. It is used for watershed protection since it can be planted on wet sites. <b>Maryland native.</b>
<b>Black Walnut</b> 1 yr, 12-36"	<i>Juglans nigra</i>	X	X	X	X	X			1.00	.65	.29	A large tree growing 80 to 120 feet tall, it is valued for fine furniture construction, gun stocks and cabinetry. The nuts are enjoyed by wildlife and humans. <b>Maryland native.</b>

## DECIDUOUS SHRUBS

25-75 order in units of 25 per species | 100+ order in units of 100 per species

Common Name	Scientific Name	Watershed protection	Forest Products	Buffer Planting	Soil Protection	Wildlife Habitat	Windbreak Protection	Pollinator Favorite	Pricing 25-75	Pricing 100-900	Pricing 1,000+	Species Description
<b>Hazel Alder</b> 1 yr, 8-16"	<i>Alnus serrulata</i>	X		X		X		X	1.00	.60	.28	A shrub to small tree, it grows in clumps in wet areas and along the banks of ponds and rivers. It usually grows 10 to 20 feet tall. <b>Maryland native.</b>
<b>Beach Plum</b> 1 yr, 12-24"	<i>Prunus maritima</i>	X			X	X		X	1.00	.75	.30	A fruit producing shrub, reaching 4-7 feet tall coastal and 16-18 feet inland, Beach Plum will tolerate droughty sites. The plums are 1/2 to 3/4 inches in diameter and are eaten by man and wildlife alike. <b>Maryland native.</b>
<b>Beautyberry</b> 1 yr, 12-24"	<i>Callicarpa americana</i>	X			X	X		X	1.00	.60	.28	Beautyberry grows 5-8 feet tall and almost as wide. Clusters of purple berries form on the stems in the fall. It will tolerate light shade. <b>Maryland native.</b>
<b>Buttonbush</b> 1 yr, 10-20"	<i>Cephalanthus occidentalis</i>	X		X	X	X		X	1.00	.60	.28	A deciduous shrub that is commonly found on moist to wet sites, buttonbush is usually 3-8 feet tall. The seed is consumed by small birds & ducks. Buttonbush must be planted at the water's edge. <b>Maryland native.</b>
<b>Black Chokeberry</b> 1 yr, 10-20"	<i>Aronia melanocarpa</i>	X		X		X		X	1.00	.75	.30	A shrub that grows to 3 feet, black chokeberry tolerates some shade. It prefers moist sites but will grow on drier sites as well. The fruit is readily eaten by birds and is valuable for other wildlife as well. <b>Maryland native.</b>
<b>Gray Dogwood</b> 1 yr, 10-20"	<i>Cornus racemosa</i>	X		X	X	X			1.00	.60	.28	Gray dogwood is a shrub that provides food and shelter for wildlife and grows 8 to 12 feet tall. It is better suited to drier sites. The fruit is readily eaten by birds and is valuable for other wildlife as well. <b>Maryland native</b>
<b>Hazelnut</b> 1 yr, 10-20"	<i>Corylus americana</i>	X	X		X			X	1.00	.65	.30	A thicket producing shrub that is adaptable to a wide variety of sites. It grows to 10 feet and produces nuts eaten by many wildlife species. <b>Maryland native.</b>
<b>Indigobush</b> 1 yr, 12-20"	<i>Amorpha fruticosa</i>			X		X			1.00	.60	.11	A deciduous shrub that grows 12 to 18 feet tall. Excellent food and cover for quail, birds and other wildlife. <b>Maryland native.</b>
<b>Bicolor Lespedeza</b> 1 yr, 12-24"	<i>Lespedeza bicolor</i>					X			1.00	.60	.11	A shrub reaching 4-8 feet tall, bicolor lespedeza is planted primarily for wildlife food and cover. It grows on moderately dry to moist soils and will tolerate some shade.
<b>Common Ninebark</b> 1 yr, 10-20"	<i>Physocarpus opulifolius</i>	X		X	X				1.00	.60	.28	A shrub growing to 10 feet tall, ninebark is best suited to planting in full sunlight. <b>Maryland native.</b>
<b>Serviceberry</b> 1 yr 6-12"	<i>Amelanchier canadensis</i>	X		X		X		X	1.00	.60	.30	A small shrub tree 20 to 30 feet tall. Usually found in the forest understory. Also known as Shadbush. The fruit is very attractive to birds. <b>Maryland native.</b>
<b>Spicebush</b> 1 yr, 8-18"	<i>Lindera benzoin</i>	X				X		X	1.00	.75	----	A multi stemmed shrub that grows to 15 feet, spicebush produces shiny red berries in the fall that are eaten by birds. Best suited to moist sites. <b>Maryland native.</b>
<b>Winterberry</b> 1 yr 6-10"	<i>Ilex verticillata</i>	X		X	X	X			1.00	.60	.30	A shrub growing to 10 feet, winterberry will tolerate wet swampy sites. Red berries remain on female plants into the winter. <b>Maryland native.</b>

## CONIFERS

Order in units of 50 per species

Common Name	Scientific Name	Watershed protection	Forest Products	Buffer Planting	Soil Protection	Wildlife Habitat	Windbreak Protection	Pollinator Favorite	Pricing 50-200	Pricing 250-950	Pricing 1,000+	Species Description
<b>Eastern Red Cedar</b> 2 yr, 8-16”	<i>Juniperus virginiana</i>	X	X	X	X	X	X		.75	.50	.15	A columnar shaped evergreen that is excellent for windbreaks and erosion control. Tolerates drought and infertile sites and is useful for wildlife food and cover. <b>Maryland native.</b>
<b>Douglas Fir</b> 2 yr, 8-14”	<i>Pseudotsuga menziesii</i>	X			X		X		.50	.30	.15	Western U.S. species commonly used for Christmas trees and windbreaks. Lincoln, New Mexico seed source.
<b>Loblolly Pine</b> 1st Generation 1 yr, 8-12”	<i>Pinus taeda</i>	X	X	X	X	X			.50	.25	.07	Generally 80 to 100 feet tall with a 24-inch diameter. Usually has a tall straight trunk free of branches on lower portions of the tree. Very important timber tree for construction framing. Also widely used for pulpwood. Grows on moist sandy soils and invades abandoned fields. <b>Maryland native.</b>
<b>Loblolly Pine</b> 2nd Generation 1 yr, 8-12”	<i>Pinus taeda</i>	X	X	X	X	X			.75	.30	.08	Same as above with a 10 to 15 percent increase in growth during its lifespan over 1st generation. <b>Maryland native.</b>
<b>Pitch/Lob Hybrid</b> 1 yr, 6-10”	<i>Pinus rigida x taeda</i>	X	X	X	X	X			.75	.50	.10	Combines the cold hardiness and vigor of Pitch Pine with the size and moisture tolerance of Loblolly Pine.
<b>Shortleaf Pine</b> 1 yr, 6-10”	<i>Pinus echinata</i>	X	X		X	X			.50	.30	.08	Shortleaf pine grows best on sandy loam to sandy soils with good drainage. It typically grows 60 to 90 feet at maturity. <b>Maryland native.</b>
<b>Virginia Pine</b> 1 yr, 5-10”	<i>Pinus virginiana</i>	X	X		X				.50	.30	.08	Grows in thick stands on dry or sterile soil. Retains lower branches when open grown and is commonly used for pulpwood. Grows 30 to 40 feet tall, with an 18-inch diameter. <b>Maryland native.</b>
<b>White Pine</b> 2 yr, 6-12”	<i>Pinus strobus</i>	X	X	X	X	X	X		.50	.30	.12	This tree averages 80 to 100 feet at maturity. It has a tall straight stem up to 4 feet in diameter with branches commonly in whorls. They are usually planted for visual, noise and wind screens and favor fertile well-drained soils. <b>Maryland native.</b>
<b>Norway Spruce</b> 2 yr, 10-20”	<i>Picea abies</i>	X	X	X	X	X	X		.75	.50	.15	Grows to 80 feet tall with drooping branches. Pyramidal shaped with a conical crown. Favors moist soils and is commonly planted as a visual or wind screen.

### Fertilization

We do not recommend fertilizing seedlings until they have survived the first growing season, since in the first year water is more likely to be a limiting factor than soil fertility. Fertilizing a plant will generally result in a flush of top growth on the seedling. While you want to encourage growth remember that the root system needs to grow so it can supply water and nutrients to the top. If you produce a lot of top growth and then enter a dry period the root system may not be able to keep up with the water demand from all of the foliage.

Regardless, you should soil test your field to determine if soil fertility or pH is low before applying fertilizer. In most cases the best thing you can do for your seedlings is to control weed growth since this removes weeds as competitors for water and nutrients.

### Fall Planting

Every year we get calls asking about fall planting. While fall planting can be successful, several conditions need to be met. The site should be protected from cold winterwinds so the seedlings will not dry out and the site should not be subjected to repeated freezing and thawing to prevent frost heaving. Generally sandy soils are better suited to fall planting than clay soils. The severity of the winter will ultimately determine the fate of any fall planting since long periods of cold and dry weather will kill seedlings. Remember that you won't know what the winter will be like until you have spent your time and money planting your trees. In any event, fall planting is best suited to the Eastern Shore and southern Maryland.