

# North Carolina Tree Seedling Catalog

2022 - 2023

CONIFERS | HARDWOODS | NATIVE | CHRISTMAS | UNDERSTORY

## Bareroot & Containers including

### LOBLOLLY

3<sup>RD</sup> CYCLE | CMP | ADVANCED GENETICS

### LONGLEAF

CONTAINERIZED | 1.5 GENERATION

### WHITE PINE

IMPROVED

### RED AND WHITE OAK SPECIES

TIMBER | WILDLIFE

### EXOTIC AND NATIVE FIRS AND SPRUCES

DISEASE RESISTANT | MULTIPLE SPECIES

### HEMLOCK

RESTORATION | EASTERN/CAROLINA



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Species featured on cover:  
red spruce, oak, loblolly pine

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## A Message from the Commissioner



**Steve Troxler, Commissioner of N.C.  
Department of Agriculture & Consumer Services**

*“The N.C. Forest Service tree seedling and nursery program has been growing native seedlings for landowners since 1954, providing a high quality renewable resource and economic value to the state. In 2020, the forest products industry contributed about \$32.8 billion annually to the state’s economy and provided around 138,100 full-time and part-time jobs for North Carolinians.*

*The nursery program produces millions of seedlings of generally more than 40 different species of conifer and hardwood trees every year. These affordable tree seedlings are helping to keep North Carolina beautiful, growing and economically viable.”*

Parajuli, Rajan and Robert Bardon. Economic Contribution of the Forest Sector in North Carolina, 2020. N.C. State University AG-844.

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# Species List & Information

\* Indicates genetic improvement or geographic seed source.  
Additional information is contained for each product.





Indicates species that are friendly to beneficial pollinating insects.

Type	Common Name	Scientific Name	Species List & Information	Page
Conifers	Firs			
	Canaan Fir	<i>Abies balsamea</i> <i>var. phanerolepis</i>	Closely related to Fraser and Balsamfirs, the Canaan fir originates in the Canaan Valley of West Virginia and is a popular Christmas tree species. It has an excellent shape and appearance. Some sources indicate that it tolerates wetter conditions than Fraser fir.	13
	Fraser Fir*	<i>Abies fraseri</i>	Small tree, 30-40 feet in height; does well at higher elevations. The major Christmas Tree species in NC.	13
	Momi Fir	<i>Abies firma</i>	A coarse-needled fir native to Japan. The Latin name firma refers to the stiff, prickly needles. This tree is aromatic and resistant to many insects and diseases. In NC, this tree is often used as grafting rootstock due to its ability to grow in some areas not suitable for other firs.	13
	Nordmann Fir	<i>Abies nordmanniana</i> <i>var. nordmanniana</i>	One of a group of closely related firs ranging from the Caucasus Region of Europe and Turkey. A well formed tree, excellent for Christmas tree production. Often indicated as having some resistance to phytophthora and other diseases.	13
	Trojan Fir	<i>Abies nordmanniana</i> <i>var. equi-trojani</i>	One of a group of closely related firs ranging from the Caucasus Region of Europe and Turkey. This specific tree is from an isolated population in Turkey and is becoming a popular Christmas tree species. Often indicated as having some resistance to phytophthora and other diseases.	13
	Turkish Fir	<i>Abies nordmanniana</i> <i>var. bornmuelleriana</i>	One of a group of closely related firs ranging from the Caucasus Region of Europe and Turkey. This tree is from Northern Turkey just south of the Black Sea and is becoming a popular Christmas tree species. This tree is often indicated as having some resistance to phytophthora and other diseases.	13




Type	Common Name	Scientific Name	Species List & Information	Page
Conifers	Hemlocks			
	Carolina Hemlock	<i>Tsuga caroliniana</i>	A tree of high, rocky slopes and ridges. It has a pyramid shaped crown and is often cultivated.	13
	Eastern Hemlock	<i>Tsuga canadensis</i>	Attains a height of 60-80 feet with a pyramid shaped crown. Most common on moist, rich soils in the mountains. Often used as a hedge.	13
	Pines			
	Eastern White Pine*	<i>Pinus strobus</i>	Large tree, reaching up to 100+ feet tall. Prefers cool, humid climate. Competes best on well drained, sandy soils of low to medium quality where hardwoods fail to compete. Does poorly in heavy clays. Birds eat seeds. Christmas tree species.	12
	Loblolly Pine*	<i>Pinus taeda</i>	Large tree, 90-110 feet in height. A native of moist, well drained soils. This is the most commonly planted timber tree in the Southeastern U.S. Genetically improved families are commonly available.	12, 13
	Longleaf Pine*	<i>Pinus palustris</i>	Large tree, 80-100 feet in height. Prefers sandy, dry soils. Often used for pine straw production and historically for naval stores. A well formed tree. Best suited to sandy Coastal Plain sites.	13
	Shortleaf Pine*	<i>Pinus echinata</i>	Large tree, up to 100+ feet tall with the largest natural range of Southern yellow pine species; prefers full sun. Grows best on deep, well drained, fine, sandy loam soil. Large root system does well on less fertile Piedmont soil. Grows well in mixed stands.	12, 13
Virginia Pine*	<i>Pinus virginiana</i>	Medium sized tree, up to 70 feet tall; prefers full sun, clay soils. Generally does poorly in very sandy soils unless they receive adequate moisture and nutrition. Seeds eaten by wildlife. Christmas tree species.	12, 13	

Type	Common Name	Scientific Name	Species List & Information	Page
Conifers	Spruces			
	Red Spruce	<i>Picea rubens</i>	This is the native spruce of the Eastern United States. It is a medium sized tree and grows to a height of 60-80 feet and a diameter of up to 2 feet. It is closely associated with Fraser fir in the Southern United States. Populations have been threatened by various forest health problems. It grows naturally at elevations above 3500 feet in the Southern Appalachians.	13
	Colorado Blue Spruce	<i>Picea pungens</i>	A thick, pyramid shaped tree native to the intermountain west. The shape along with the beautiful bluish white color make this tree an attractive Christmas or landscape tree.	13
	Norway Spruce	<i>Picea abies</i>	A fast growing tree of cooler climates. This attractive spruce has pendulous branches when mature. It does best in cooler climates and is suitable for both Christmas tree production and ornamental plantings.	13
	Misc. Conifers			
	Atlantic White Cedar	<i>Chamaecyparis thyoides</i>	Small to medium sized columnar evergreen tree 40-60 feet in height. Shallow rooted; scale like leaves. Prefers sunny wet Coastal Plain sites.	13
	Baldcypress**	<i>Taxodium distichum</i>	Medium sized pyramidal tree 60-80 feet tall, capable of reaching 100-150 feet in wild. Deciduous; prefers full sun, wet acidic soils, flooding. Drought tolerance high; develops "knees" from roots.	12, 14
Eastern Red Cedar	<i>Juniperus virginiana</i>	Medium sized tree reaching up to 60 feet tall. Tolerates a wide variety of soils from wet swamp land to rocky outcrops; grows best on deep, moist well drained alluvial sites. Also grows well on deep upland soils like abandoned farmland. Birds eat seeds.	12, 13	







\*\*See hardwood pricing on page 12, 14 for Baldcypress prices and amounts.





Type	Common Name	Scientific Name	Species Information	Page
Hardwoods	Dogwoods			
	Flowering Dogwood 	<i>Cornus florida</i>	Small tree, 30-40 feet tall. Slow to moderate growth. Prefers partial shade and moist, well drained soils. Berries eaten by many animal species are poisonous to humans.	14
	Silky Dogwood 	<i>Cornus amomum</i>	Thicket forming medium shrub, 6-10 feet tall; yellowish-white flowers are used by pollinators. Widely used in wetlands and riparian restoration.	14
	Hickories and Walnuts			
	Black Walnut*	<i>Juglans nigra</i>	Medium to large sized tree, 100-120 feet tall. Slow to moderate growth rate. Prefers full sun; moist, well drained soils. Edible nuts. Drought tolerant. Large taproot. Valued furniture wood.	15
	Mockernut Hickory	<i>Carya tomentosa</i>	Slow growing, medium sized tree of uplands, up to 100 ft tall. Produces nuts for many species of wildlife. Develops taproot with few laterals, windfirm. Used for firewood.	14
	Pignut Hickory	<i>Carya glabra</i>	Slow growing, medium sized tree of uplands, grows to 90 feet tall. Hard shelled nuts eaten by squirrels and large rodents. Wood used for firewood and tool handles.	14
	Red Hickory	<i>Carya ovalis</i>	Medium to large sized hickory with rough textured bark. The fruit is valued by wildlife. This species most often has seven leaflets per leaf and often has a reddish color on the leaf stem. It is present over much of the state and often is confused with pignut hickory.	14
	Oaks			
	Chestnut Oak	<i>Quercus montana</i>	Medium sized tree, 65-80 feet tall; slow early growth rate; prefers full sun and a range of upland soil types; produces acorns in fall that are favored by small and large animals.	14
	Live Oak	<i>Quercus virginiana</i>	Medium sized evergreen tree, 30-50 feet tall with a variety of forms. Slow to moderate growth rate; wide crown. Long-lived. Prefers full sun and most dry sandy to moist soils. Acorns favored by many mammals.	14


Type	Common Name	Scientific Name	Species Information	Page
Hardwoods	Northern Red Oak	<i>Quercus rubra</i>	An excellent timber tree, well formed, reaches a height of 60-90 feet. This species does well on Piedmont and Mountain sites. This species produces a large acorn and has good wildlife value. Does well on deep soils of north and east facing slopes but tolerates other conditions.	14
	Overcup Oak	<i>Quercus lyrata</i>	An oak of the swamps. This oak tolerates wetter conditions and is in the white oak group. It may reach a height of 40-60 feet. Although it naturally grows in wetter conditions, it does well planted on other sites. It has an acorn almost fully enclosed by the acorn cap. Good for wildlife.	14
	Sand Laurel Oak	<i>Quercus hemisphaerica</i>	Medium to large sized, semi-evergreen oak of the southern Coastal Plain. It is also known as Darlington oak. Although not a prime timber species, it is a great addition for acorn production. This tree does well on sandy lands. It is a coastal species and is often found on longleaf pine lands.	14
	Scarlet Oak	<i>Quercus coccinea</i>	Native to the Mountains, Piedmont and Coastal Plain. Scarlet oak is a dry site, upland oak that may attain a height of 60-80 feet. Often found in association with other upland oaks such as white oak. This tree is in the red oak group and has a medium sized to large acorn with good wildlife value.	14
	Shumard Oak	<i>Quercus shumardii</i>	A large red oak with an excellent form. This tree is prized for both timber production and the large acorns it produces. Shumard oak is often mixed in with quality bottomland hardwoods such as cherrybark oak and swamp chestnut oak. It is also a common landscape specimen.	14
	Swamp Chestnut Oak	<i>Quercus michauxii</i>	A large oak of bottomland sites. This tree is an excellent timber species and is also an attractive shade tree. It is found in bottomlands throughout the Piedmont and Coastal Plain. It may attain a height of 60-80 feet. It has one of the largest acorns and has good wildlife value. A good shade tree as well.	14

Type	Common Name	Scientific Name	Species Information	Page
Hardwoods	Water Oak	<i>Quercus nigra</i>	Medium to large sized tree in the red oak group. This tree is most at home in bottomland conditions but may move into upland areas as well. A poor quality timber species, this tree is a good mast producer with a small acorn eaten by a variety of wildlife. It occurs over most of the state from the Coastal Plain up to the Foothills.	15
	White Oak*	<i>Quercus alba</i>	Large tree, 80-100 feet tall. Prefers full sun, moist well drained soils with clay. Moderate growth rate. Long-lived. Produces acorns in fall favored by small and large animals.	15
	Willow Oak*	<i>Quercus phellos</i>	Medium to large sized tree, 60-120 feet tall; moderate to rapid growth rate. Prefers full sun, moist wet to well drained bottomland soils. Produces acorns in fall favored by small and large animals.	15
	Misc. Hardwoods			
	Black Cherry 	<i>Prunus serotina</i>	Medium sized tree, 50-80 feet tall. Rapid growth rate; prefers full sun and many soil types; upland species. Produces white flowers in early spring; reddish black edible berries in summer that attract birds. Wood used for furniture, flooring.	14
	Black Locust 	<i>Robinia pseudoacacia</i>	Small to medium sized tree with rapid juvenile growth, legume with root nodules and bacteria, which fix atmospheric nitrogen in the soil. Has pea shaped seed pod, prefers moist limestone soils in NC mountains.	14
	Chinese Chestnut	<i>Castanea mollissima</i>	A disease resistant chestnut native to China. This chestnut has often been used for fruit production and is typically planted for that reason. A small to medium tree with a rounded crown. The spiny fruit can be messy if planted close to an area with foot traffic.	14
	Crabapple 	<i>Malus coronaria</i>	One of our two native crabapples. This small tree has showy flowers in the spring, excellent wildlife value, and is pollinator-friendly. This tree is most common in the mountain area.	14



Type	Common Name	Scientific Name	Species Information	Page
Hardwoods	Eastern Redbud 	<i>Cercis canadensis</i>	Small tree, 15-20 feet tall; short-lived; multistemmed. Flowers best in full sun but will grow in partial shade. Not on wet sites or coarse sands.	15
	Persimmon 	<i>Diospyros virginiana</i>	Slow to moderate growing small to medium tree, 30-50 feet to 80 feet tall on best sites; older trees develop deep taproot; flowers attract bees; fruit edible and attracts birds.	15
	Red Maple*	<i>Acer rubrum</i>	Medium tree, 60-90 feet tall; rapid growth rate; shade tolerant; one of first species to show autumn color; adaptable to many sites including wet sites; prolific sprouter; one of the most widely planted species; birds eat seeds.	14
	River Birch	<i>Betula nigra</i>	Medium to large sized tree, 50-80 feet tall. Typically occurring on wet sites; short-lived. Crown is light, multiple stems frequent; transplants easily. Only spring-fruiting birch.	14
	Southern Catalpa 	<i>Catalpa bignonioides</i>	A small, showy, pollinator-friendly tree with large leaves. This is an excellent wildlife tree which will attract numerous insects when flowering. The foliage is food for the larvae of the catalpa sphinx moth and excellent fish bait.	14
	Southern Crabapple 	<i>Malus angustifolia</i>	One of our two native crabapples. This small tree has showy flowers in the spring and attractive fruit in the fall. It is great for wildlife plantings and is pollinator-friendly.	14
	Southern Magnolia	<i>Magnolia grandiflora</i>	Medium to large sized tree with large, showy flowers evident in late spring. This tree is commonly planted as a landscape addition but is also good for pollinators. The seeds are food for a variety of songbirds.	14
	Sugarberry 	<i>Celtis laevigata</i>	Medium sized tree, 60-80 feet tall, grows best on moist floodplains but tolerates drier sites, produces soft mast eaten by a wide variety of wildlife and birds, used for riparian and wetlands restoration.	15
	Sweetbay Magnolia 	<i>Magnolia virginiana</i>	Medium sized tree, native to the Coastal Plain. It is tardily deciduous with smooth white bark and an attractive flower. The flower is very fragrant and great for pollinators. Suitable for landscape or wildlife plantings. The seeds are food for a variety of birds.	14

Type	Common Name	Scientific Name	Species Information	Page
Hardwoods	Sweetgum	<i>Liquidambar styraciflua</i>	Medium to large tree, 60-100 feet tall. Moderate to rapid growth. Prefers full sun to partial shade, dry to moist soil. Prolific sprouter from roots. Highly adaptable. Birds eat seeds.	15
	Sycamore*	<i>Platanus occidentalis</i>	Large tree, 80-120+ feet tall. Prefers full sun to partial shade, moist, well drained, alluvial soils. Wide spreading crown. White mottled bark.	15
	Black Gums			
	Water Tupelo 	<i>Nyssa aquatica</i>	A medium to large tree that can reach 50-100 ft. This tupelo inhabits the deepest swamps and is a long-lived tree. It is very site specific and is best suited to wet sites. Water tupelo is used for veneer, wooden crating as well as other uses and is an excellent bee forage. Its fruit is valuable to many species of wildlife.	15
	The Mulberries			
	Mulberry 	<i>Morus spp.</i>	Mulberry of unknown origin collected from the wild. They may be either red or white mulberry. Excellent fruit producers with good wildlife value. The fruit are soft and can be messy. Do not plant in an area where falling fruit may be a problem.	14
	Other			
	Crepe Myrtle 	<i>Lagerstroemia spp.</i>	An attractive, commonly planted, nonnative border tree or roadside planting with flowers which may be white, pink or purple. May attain heights of 40 feet or more if not pruned. It is primarily planted for the flowers although the multicolored peeling bark is also attractive in winter.	14
Yellow Poplar 	<i>Liriodendron tulipifera</i>	One of the tallest trees in NC. This tree has been known to attain heights over 100 feet. It is a fast growing tree good for timber production. The large flower on this tree is a good source of nectar for pollinators and is good bee forage. This tree does best on sites with deep soils and good moisture availability. It is found across the state.	15	

Type	Common Name	Scientific Name	Species Information	Page
Native Grasses				
Herbaceous Plants and Grasses	Wiregrass	<i>Aristida stricta</i>	The quintessential understory component of many of the longleaf pine forests of the southeastern Coastal Plain. This plant provides the opportunity to carry fire promoting a diverse ecosystem of plants. It also provides good cover for ground nesting birds and other wildlife.	16
	Indian Grass	<i>Sorghastrum nutans</i>	A native forest grassland plant adapted to deep, moist sites. It has excellent wildlife value as food and cover. A tall species with a large, cylindrical seedhead. One of the major components of our forested grasslands along with the bluestems.	16
	Little Bluestem	<i>Schizachyrium scoparium</i>	An excellent native forest grassland plant that tolerates a wide range of conditions and is suitable for sites statewide. This species was common on native grassland sites across North Carolina. This is a good food and cover plant for many bird species and other wildlife.	16
	Big Bluestem	<i>Andropogon gerardi</i>	Another native grassland plant common on sites in our state historically. It tolerates poor sites and does best on deeper, fertile soils. It provides many of the same benefits as other native grasses including wildlife food and cover. This species is also a preferred native forage for cattle.	16
	Longleaf Savannah Mix 	<i>Multiple species</i>	A mixture of native seed adapted to the longleaf pine ecosystem. This mixture contains both grasses and other herbaceous plants. A great addition to wiregrass when trying to establish native groundcover in longleaf pine stands.	16

# Bareroot Conifers

Product Name	Product Code	Seedling Quantity and Cost per Unit						
		10	50	250	500	1,000+	500,000+	1,000,000+
<b>Baldcypress</b>	<b>063</b>	See Baldcypress on Page 14 for pricing						
<b>Eastern Red Cedar</b>	<b>058</b>	\$15	\$25	—	\$140	—	—	—
<b>Loblolly Pine, Improved</b>		Loblolly Pine prices are per thousand						
<b>Coastal: Control Mass Pollinated†</b>	<b>007</b>	—	—	—	—	\$145	\$145	\$145
<b>Piedmont: Control Mass Pollinated†</b>	<b>008</b>	—	—	—	—	\$145	\$145	\$145
<b>Coastal: 3rd Cycle Premium Family</b>	<b>040</b>	—	\$25	—	—	\$72	\$69	\$67
<b>Piedmont: 3rd Cycle Premium Family</b>	<b>041</b>	—	\$25	—	—	\$72	\$69	\$67
<b>Shortleaf Pine, Improved</b>	<b>032</b>	—	\$25	—	\$37.50	—	—	—
<b>Virginia Pine, Improved</b>	<b>037</b>	—	\$25	—	\$43	—	—	—
<b>Eastern White Pine, Improved</b>								
Standard Density, 2 year	<b>046</b>	—	\$25	—	\$65	—	—	—
Standard Density, 3 year	<b>048</b>	—	\$25	\$47.50	—	—	—	—

All prices are current through 6/30/2023. †Call for availability



**Check out our seedling store online!**

Scan the QR code with your phone's camera to be directed to our online store. Discover tree species, current inventory and place an order.

# Containerized Conifers

Product Name	Product Code	Seedling Quantity and Cost/Unit					
		10	25	50	100	334	500
<b>Atlantic White Cedar</b>	<b>053</b>	—	—	\$25	—	\$85	—
<b>Canaan Fir</b>							
1-0 Plug	<b>407</b>	—	—	\$25	\$45	—	\$200
Plug +1	<b>414</b>	\$22	\$29.50	\$55	\$100	—	—
<b>Colorado Blue Spruce</b> , 1-0 Plug	<b>440</b>	—	—	\$25	\$45	—	\$200
<b>Carolina Hemlock</b> , Treated	<b>430</b>	\$15	—	\$25	\$85	—	—
<b>Eastern Hemlock</b> , Treated	<b>431</b>	\$15	—	\$25	\$85	—	—
<b>Eastern Red Cedar</b> , 1-0 Plug	<b>364</b>	—	—	\$25	—	\$85	—
<b>Fraser Fir</b> , Improved**							
Premium Family, 1-0 Plugs 3" & Greater	<b>412</b>	—	—	\$25	\$45	—	\$190
Premium Family, Plug +1 year	<b>405</b>	\$20	\$27.50	\$47.50	\$85	—	—
Premium Family, Plug +2 year	<b>406</b>	\$25	\$37.50	\$62.50	\$110	—	—
<b>Momi Fir</b> , 1-0 Plug	<b>419</b>	—	—	\$25	\$45	—	\$200
<b>Loblolly Pine</b> , Improved							
<b>Coastal</b> : Control Mass Pollinated†	<b>009</b>	—	—	—	—	\$80	—
<b>Piedmont</b> : Control Mass Pollinated†	<b>010</b>	—	—	—	—	\$80	—
<b>Coastal</b> : 3rd Cycle Premium Family	<b>011</b>	—	—	\$25	—	\$60	—
<b>Piedmont</b> : 3rd Cycle Premium Family	<b>012</b>	—	—	\$25	—	\$60	—
<b>Longleaf Pine</b>							
<b>Coastal</b> : Improved	<b>025</b>	—	—	\$25	—	\$70	—
<b>Piedmont</b> : Improved	<b>940</b>	—	—	\$25	—	\$70	—
<b>Coastal</b> : Unimproved	<b>024</b>	—	—	\$25	—	\$70	—
<b>Nordmann Fir</b>							
1-0 Plug	<b>408</b>	—	—	\$25	\$45	—	\$200
Plug +1	<b>417</b>	\$22	\$29.50	\$55	\$100	—	—
<b>Norway Spruce</b> , 1-0 Plug	<b>442</b>	—	—	\$25	\$45	—	\$200
<b>Red Spruce</b> , 1-0 Plug	<b>441</b>	—	—	\$25	\$45	—	\$200
<b>Shortleaf Pine</b> , Improved	<b>033</b>	—	—	\$25	—	\$60	—
<b>Trojan Fir</b>							
1-0 Plug	<b>409</b>	—	—	\$25	\$45	—	\$200
Plug +1	<b>418</b>	\$22	\$29.50	\$55	\$100	—	—
<b>Turkish Fir</b>							
1-0 Plug	<b>402</b>	—	—	\$25	\$45	—	\$200
Plug +1 year	<b>403</b>	\$22	\$29.50	\$55	\$100	—	—
Plug +2 year	<b>401</b>			\$70	\$125	—	—
<b>Virginia Pine</b> , Improved	<b>038</b>	—	—	\$25	—	\$80	—

† Call for availability

\*\* Fraser Fir can only be picked up at the Linville River Nursery.

# Hardwoods

<p>Hardwood products are sold in unit quantities of 10, 100 or 1000. Different hardwoods may not be combined within the same unit.</p> <p>** All hardwood quantities greater than 100 are packaged in bags of 100 and shipping charges apply per bag/unit of 100.</p>		Seedling Quantities and Cost/Unit			
		10	100**	1,000+	
		\$25	\$60	\$375	
Product Name	Product Code	Uses			
		Timber	Wildlife	Wetlands	Habitat Restoration
Birch, River	145	—	W	WET	H
Baldcypress	063	T	—	WET	H
Catalpa, Southern	117	—	W	—	—
Cherry, Black	107	T	W	—	—
Chestnut, Chinese	119	—	—	—	—
Crabapple	194	—	W	—	H
Crabapple, Southern	196	—	W	—	H
Dogwood, Flowering	149	—	W	—	—
Dogwood, Silky	150	—	W	WET	H
Hickory, Mockernut	173	T	W	—	—
Hickory, Pignut	177	T	W	—	—
Hickory, Red	174	T	W	—	—
Locust, Black	111	—	W	—	H
Magnolia, Southern	135	—	W	WET	H
Magnolia, Sweetbay	136	—	W	WET	H
Maple, Red - Piedmont	140	T	W	WET	H
Mulberry	191	T	—	WET	—
Myrtle, Crepe	198	—	W	WET	H
Myrtle, Southern Wax	153	—	W	WET	H
Oak, Chestnut Oak	204	T	W	—	—
Oak, Live	212	T	W	—	—
Oak, Northern Red - Mountain	208	T	W	—	—
Oak, Overcup	209	T	W	WET	—
Oak, Sand Laurel - Coastal	213	—	W	—	H
Oak, Scarlet	214	T	W	—	H
Oak, Shumard	217	T	W	WET	H
Oak, Swamp Chestnut	219	T	W	—	H

Product Name	Product Code	Uses			
		Timber	Wildlife	Wetlands	Habitat Restoration
Oak, Water	220	—	W	WET	H
Oak, White - Coastal	223	T	W	—	H
Oak, White - Mountain	225	T	W	—	H
Oak, White - Piedmont	224	T	W	—	H
Oak, Willow	229	T	W	WET	—
Persimmon	137	—	W	WET	—
Poplar, Yellow - Mountain	170	T	W	—	—
Poplar, Yellow - Piedmont	169	T	W	—	—
Redbud, Eastern	188	—	W	—	H
Sugarberry	154	—	W	WET	H
Sweetgum	157	T	W	WET	—
Sycamore - Coastal	165	T	—	WET	—
Sycamore - Piedmont	166	T	—	WET	—
Tupelo, Water	104	T	W	WET	—
Walnut, Black - East	113	T	W	—	—
Walnut, Black - West	114	T	W	—	—

## Christmas Tree Sampler

Product Name	Product Code	Seedling Quantity and Cost/Unit
		5 Trees of each Species - 25 total seedlings
Fraser Fir, Canaan Fir, Hemlock, Norway Spruce and Colorado Blue Spruce	410	\$30

# Containerized Understory Grasses & Herbaceous Plants

Product Name	Product Code	Seedling Quantity and Cost Per Unit
Wiregrass	380	All Grasses and Herbaceous Plants are \$70 per box or unit of 334.
Indian Grass	387	
Little Bluestem	388	
Big Bluestem	397	
Longleaf Savannah Mix	399	

All prices are current through 6/30/2023.

These grasses and herbaceous plants are typically found in the understory of longleaf pine, piedmont prairie, other grassland and savannah ecosystems. Many of these species evolved to carry low intensity fires across these ecosystems. We recommend these species for ecosystem restoration, wildlife habitat and silvopasture.

## Genetics & Other Information

### Genetically Improved Seedlings

The N.C. Forest Service offers genetically improved and naturally occurring selections of several species. These selections are those that, through selective breeding, have improved growth. Characteristics may include better volume growth, form, disease resistance, straightness and other traits. The N.C. Forest Service maintains orchards of several species and collects seed from them for seedling production. All improved selections are grown as single family seedlots.

### Loblolly Pine Genetics and Performance

Loblolly pine has been the most widely improved species in the Southeast. Much of this work has occurred in North Carolina, and the N.C. Forest Service has been involved in this effort. Today, the best loblolly pine genetics are available to anyone.

**Premium Family** Premium Family Seedlings are grown from the best families in our third cycle seed orchards. These selections offer the highest growth potential from open pollinated seed.

**Controlled Mass Pollination** Seedlings are produced by crossing known male pollen with known mother trees using control mass pollination (CMP) methods. CMP seedlings offer the most growth potential, disease resistance and form characteristic improvements of any of our products and are designed specifically for North Carolina forests. With CMP seedlings, you can expect earlier thinning, quicker final rotations and increased revenue potential.



## Performance Rating System (PRS)

### Loblolly Pine Performance Rating System

- Consumer friendly system to show the genetic potential of improved loblolly pine
- Developed by N.C. State University Tree Improvement Cooperative
- Performance in four genetic traits are compared to unimproved loblolly pine:
  - Deployment area: geographic area suitable for planting of the family
  - Productivity: a numeric rating of the potential timber volume gain of the family
  - Rust: an alphabetic rating from A to E with A being the most resistant to fusiform rust
  - Straightness: alphabetic rating from A to E with A having the most straightness compared to wild trees
- All of our loblolly pine products carry PRS ratings
- More detailed information is available on our website

## Containerized Conifers

Containerized seedlings offer several advantages.

- By planting an intact root plug, the root system of the seedlings are not disturbed, enhancing survival and growth.
- Fall planting of containers gives advanced root growth that leads to additional seedling growth the following spring.
- Ease of planting.

All containerized seedlings of the following species must be delivered or picked up before December 31 unless formal arrangements have been made: atlantic white cedar, loblolly pine, longleaf pine, shortleaf pine, and native grass/understory species.

## Containerized Fir

All of these products are grown in containers from the best seedlots available. Fraser fir are improved seedlings from our own orchards. All seedlings are grown in a mix of peat, vermiculite and perlite. Only well water is used for irrigation. All products are grown in our greenhouse or on raised benches.

## Treated Seedlings

All pine seedlings are treated for insect resistance and animal browse. Hemlock seedlings are treated for insect resistance.

# Wetlands Indicator Designation

National Wetlands Plant List Indicator		Probability of Occurrence in Wetland
OBL	Obligate Wetland Species	Always in a wetland (>99%)
FACW	Facultative Wetland Species	Usually in a wetland (67%- 99%)
FAC	Facultative Species	Sometimes in a wetland (34%- 66%)
FACU	Facultative Upland Species	Seldom in a wetland (1%- 33%)
UPL	Upland Species	Never found in a wetland (<1%)

	Species	Wetland Indicator
<b>Conifers</b>	Pines	
	Loblolly Pine	FAC
	Misc. Conifers	
	Atlantic White Cedar	OBL
	Baldcypress	OBL
<b>Hardwoods</b>	Dogwoods	
	Silky Dogwood	FACW
	Hickories and Walnuts (none)	
	Oaks	
	Overcup Oak	OBL
	Pin Oak	FACW
	Swamp Chestnut Oak	FACW
	Willow Oak	FACW
	Misc. Hardwoods	
	Buttonbush	OBL
	Persimmon	FAC
	Red Maple	FAC
	River Birch	FACW
	Southern Wax Myrtle	FAC
	Sugarberry	FACW
	Sweetgum	FAC
	Sycamore	FACW
Water Tupelo	OBL	
<b>Herbaceous Plants and Grasses</b>	Wiregrass	FAC
	Big Bluestem	FAC

Includes offered species with indicators of FAC or wetter. This list corresponds with the latest version of the National Wetlands Plant List from the U.S. Army Corps of Engineers (Atlantic and Gulf Coastal Plain).

# How To Order

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Orders are taken beginning the first business day in July.  
All orders are first come, first served.

## By Phone or Mail Contact

Order form available at the end of catalog

**Seedling Coordinator**

**N.C. Forest Service**

**762 Claridge Nursery Road**

**Goldsboro, NC 27530**

**1-888-NC-TREES (1-888-628-7337)**

**Fax: 919-731-7993**

**Email: [seedlingcoordinator@ncagr.gov](mailto:seedlingcoordinator@ncagr.gov)**

## Buy Online

[www.buynctrees.com](http://www.buynctrees.com)

## At Your County Office

[www.ncforestservice.gov/contacts](http://www.ncforestservice.gov/contacts)

## Payment Options

Check, Money Order, Mastercard, Visa

## Order Details

Inability to fill any portion of your order and/or meet your scheduled ship date will be indicated on your order confirmation. Adverse weather conditions may impact seedling availability as well as lifting, packing and shipping schedules.

Commercial nursery and out-of-state sales can only be made if a surplus has been declared (usually around mid-December). The customer is responsible for delivery arrangement for “out-of-state” orders.

**Bareroot seedling distribution** will begin the first week in December and continue thru mid-April, pending weather conditions.

**Containerized seedling distribution** will begin mid-September. Containerized seedlings can provide additional growth if planted in the fall. Special deliveries to NCFS distribution centers are available prior to December for commercial quantities.

Replacements or adjustments to orders must be made within 10 days of pickup or delivery. Inspect your seedlings at the pickup site. No refunds or credits will be given for seedlings not picked up. Bareroot seedlings not picked up by May 1 will be destroyed.

## Visit NCFS Online

- **Current seedling availability:** [www.ncforestservice.gov](http://www.ncforestservice.gov)
- **For planting and forest management information contact your county ranger:** [www.ncforestservice.gov/contacts](http://www.ncforestservice.gov/contacts)
- **Seedling orders:** [www.buynctrees.com](http://www.buynctrees.com)

## Cancellation & Refunds

All seedling order cancellations must be received in writing by the Seedling Coordinator. Allow at least 6-8 weeks for processing refunds. Overpayments of \$5.00 or less will not be refunded unless requested. No cancellations for bareroot seedlings after Dec. 1. No cancellations for containerized seedlings after Sept. 1.

## Shipping Information

Replacements or adjustments to orders must be made within 10 days of pickup or delivery. Inspect your seedlings at delivery or pickup site. No refunds or credits will be given for seedlings not picked up. Bareroot seedlings not picked up by May 1 will be destroyed.

Distribution Center Charges / Nursery Pickup		
<b>Distribution Center Shipping Fee</b>	<b>See inside back cover for a list of all Distribution Center locations.</b>	<b>\$8/unit</b>
<b>N.C. Forest Service Nursery Locations</b>	<b>Claridge Nursery</b>	<b>No shipping charge</b>
	<b>Linville River Nursery</b>	<b>No shipping charge</b>
Seedlings can be shipped December through mid-April to the NCFS distribution center serving your county. Allow four weeks for deliveries.		

UPS Shipping Costs		
<b>Conifers</b>	<b>Per unit of 10, 25, or 50 seedlings</b>	<b>\$16/unit</b>
	<b>Per unit of 250, 334, 500 or 1000 seedlings</b>	<b>\$29/unit</b>
<b>Hardwoods</b>	<b>Per unit of 10 seedlings</b>	<b>\$16/unit</b>
	<b>Per unit of 100 seedlings</b> <i>(*All hardwood quantities greater than 100 are packaged in bags of 100, and shipping charges apply per bag/unit of 100.)</i>	<b>\$29/unit</b>
*Call for out-of-state UPS rates. UPS rates cannot be guaranteed due to possible fuel surcharges. Orders shipped out once per week. Orders may be shipped December through March.		





# Distribution Centers

## Nurseries

### **Claridge Nursery<sup>Δ</sup>**

919-731-7988  
762 Claridge Nursery Rd.  
Goldsboro, NC 27530-7965

### **Linville River Nursery<sup>Δ</sup>**

828-733-5236  
6321 Linville Falls Hwy  
Newland, NC 28657-9048  
*Counties served:*  
Avery, Mitchell, Watauga, Yancey

## Centers

### **Asheville<sup>Δ</sup>**

828-667-5211  
220 Sardis Road, Asheville, NC 28806-8504  
*Counties served:*  
Buncombe, Henderson, Madison, McDowell, Polk, Transylvania

### **Edenton<sup>Δ</sup>**

252-331-4781  
1705 Virginia Road, Edenton, NC 27932  
*Counties served:*  
Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Hyde, Martin, Pasquotank, Perquimans, Tyrrell, Washington + Dare Bomb Range

### **Fayetteville**

910-437-2620  
221 Airport Rd., Fayetteville, NC 28306-9202  
*Counties served:*  
Cumberland, Harnett, Hoke, Johnston, Robeson, Sampson

### **Hillsborough**

919-732-8105  
3314 NC Hwy 86 South  
Hillsborough, NC 27278-8711  
*Counties served:* Alamance, Caswell, Durham, Granville, Orange, Person, Vance, Wake

### **Lenoir<sup>Δ</sup>**

828-757-5611  
1543 Wilkesboro Blvd. NE, Lenoir, NC 28645-8215  
*Counties served:*  
Alexander, Alleghany, Ashe, Burke, Caldwell, Wilkes

### **Lexington<sup>Δ</sup>**

336-956-2111  
304 Old Hargrave Rd., Lexington, NC 27295-7594  
*Counties served:*  
Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Rowan, Stokes, Surry, Yadkin

### **Mount Holly<sup>Δ</sup>**

704-827-7576  
1933 Mountain Island Hwy  
Mount Holly, NC 28120-9476  
*Counties served:*  
Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rutherford, Union

### **New Bern<sup>Δ</sup>**

252-514-4764  
3810 M.L. King Jr. Blvd.  
New Bern, NC 28562-2236  
*Counties served:*  
Beaufort, Carteret, Craven, Jones, Lenoir, Onslow, Pamlico, Pitt

### **Rockingham<sup>Δ</sup>**

910-997-9220  
1163 N. US Hwy #1, Rockingham, NC 28379-8513  
*Counties served:*  
Anson, Chatham, Lee, Montgomery, Moore, Richmond, Scotland, Stanly

### **Rocky Mount**

252-442-1626  
737 Smokey Road, Rocky Mount, NC 27804-2002  
*Counties served:*  
Edgecombe, Franklin, Greene, Halifax, Nash, Northampton, Warren, Wayne, Wilson

### **Sylva<sup>Δ</sup>**

828-586-4007  
133 Glenn Cabe Rd., Sylva, NC 28779-7392  
*Counties served:*  
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain

### **Whiteville<sup>Δ</sup>**

910-642-5093  
1413 Chadbourn Hwy, Whiteville, NC 28472-2053  
*Counties served:*  
Bladen, Brunswick, Columbus, Duplin, New Hanover, Pender

<sup>Δ</sup> Indicates refrigerated storage available

# A Carolina Christmas ...

Deep in the mountains of North Carolina, above 5000 feet, a series of islands exists. In recent years, some have referred to these as "sky islands." These islands are inhabited by trees as well as other plants and animals and are often associated with more northerly climates. On these islands, a Carolina Christmas occurs year around. Specifically, the forests on these islands are dominated by two tree species often decorated during the Christmas season. One species is the Fraser fir (*Abies fraseri*) which is well known as, arguably, the premier Christmas tree species in the country. The other species, somewhat lesser known in recent years, is the red spruce (*Picea rubens*). While the red spruce may also be used as a Christmas tree, it was originally more well known for the qualities of its wood. Spruce was the wood of choice for many musical instruments such as violins.

Throughout the late 1800s and early 1900s, these spruce-fir forests of the Southern Appalachians were reached by the lumbermen moving through the area. Many forests were cutover and subsequently burned over by wildfire. Moving into the mid- to late 1900s, other forces affected the survival and regeneration of these forests. These forces included the introduction of the balsam wooly adelgid, a nonnative forest insect infesting the fir, as well as climate change and other environmental factors that have led to a substantial decrease in the acreage of these forests.

The N.C. Forest Service Nursery and Tree Improvement program actively breeds several species of forest trees, including Fraser fir and red spruce, for use as Christmas trees. Breeding involves identifying trees that produce the most superior Christmas trees and crossing them with other superior trees. Our Nursery and Tree Improvement program is a feeder for the Christmas tree industry in our state, and we couldn't be prouder, especially this year.

Every year, a different national forest is selected to provide a tree to appear on the west lawn of the U.S. Capitol building for the holiday season. National Forests in North Carolina has been chosen as the provider of this year's Capitol Christmas tree. This is an opportunity to showcase the amazing landscape and natural resources we get to live within and benefit from everyday in North Carolina.

The N.C. Forest Service is proud to produce and sell both Fraser fir and red spruce seedlings.

**More information about purchasing these seedlings can be found on page 13.**

[buynctrees.com](http://buynctrees.com)  
1-888-NC-TREES  
[ncforestservice.gov](http://ncforestservice.gov)



[f](#) [t](#) [v](#) @ncforestservice #NCTrees

The N.C. Forest Service is a division of the N.C. Department of Agriculture and Consumer Services.  
Steve Troxler, Commissioner.

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