

Asian Longhorned Beetle Reforestation Project Adjacent Tree Replanting

A brief guide to the
tree species available
for replanting

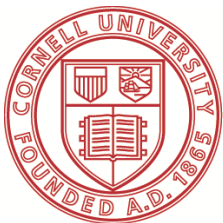


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Tree Species Catalogue for Replanting

Catalogue Highlights:

- Large Selection of host-free species of trees for replanting
- Benefits and characteristics of each specific tree species
- Visual directory included



Cornell University
Cooperative Extension
Nassau County

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Asian Longhorned Beetle (ALB) Reforestation Project, Long Island, NY

What is the ALB Reforestation Project?

Cornell Cooperative Extension of Nassau County (CCE-NC) in collaboration with several federal and state agencies, is working under a grant funded by the US Forest Service to replace trees lost to the ALB outbreak. Our mission is to aid in the eradication process by planting non-host tree species, assist in the reforestation of Long Island by implementing the practice of silviculture (the theory and practice of controlling forest establishment through the analyzation of data and application of strategic management plans), and educate and inform the public about urban and community forestry through outreach programming.



Why is the ALB Reforestation Project Necessary?

The ALB was brought here from Asia—the first case reported in 1996. This is an invasive insect with no natural predators that is decimating the tree population on Long Island. Since its first appearance, more than 6,000 trees have been cut down and removed in the hopes of eradicating the beetle completely. Once a tree is infested, there is no cure and it must be taken down. The removal of so many trees has greatly impacted the health and vitality of the urban forest of Long Island. The urban forestry department at CCE-NC is one of the organizations working to stop and reverse the damage done by these invasive insects. One goal of the ALB Reforestation project is to increase the diversity of tree species while increasing the number of trees overall. Replanting with a diverse range of species is important as it creates long term stability of the urban forest of Long Island. It also decreases the probability of pest and disease vulnerability while providing a multitude of benefits to the environment. The work being done on the ALB reforestation project will have an impact for years to come— it's not just about immediate results.



i-Tree

www.itreetools.org

The Benefits of Trees

The Urban Forestry Department at Cornell Cooperative Extension– Nassau County utilizes a free online program called i-Tree to analyze and assess the benefits of the trees used for replanting. This system allows the ALB reforestation team to select an ideal tree species and planting spot for each individual replanting location. Using this information and knowledge of urban forests, trees, and silviculture, our urban forester can help property owners maximize the benefits gained from the planting of new trees as well as educate on the benefits provided to the environment.

This online program is available online and is FREE to use. You can check out the website anytime and see what a new tree can do for you!

American basswood *Tilia americana*

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Attributes

Light Level	Full– partial sun
Soil Drainage	Moderate
Mature Height	60'- 70'
Mature Width	45'- 55'
Flowers	Small, white, found in clusters
Wildlife Value	Fruits are eaten by birds and small mammals; browsed by deer; buds are eaten also. Provides cavity nesting sites for various wildlife species. Prolific nectar producer for honeybees that results in choice grade of honey.
Description	Highly valuable to ecosystems; leaves high in nitrogen and upon decay help enrich soil, produces ample shade, very hardy

American beech *Fagus grandifolia*



Attributes

Light Level	Full sun to shade
Soil Drainage	Poor– moderate
Mature Height	50'- 70'
Mature Width	Up to 60'
Flowers	None
Wildlife Value	Produces nuts (hard mast) for deer, blue jays, squirrels, and other wildlife
Description	Smooth bark, retains dead leaves through winter (aesthetics), high wildlife value. Nuts are edible.

American hophornbeam *Ostrya virginiana* Page 7



Attributes

Light Level	Full to partial sun
Soil Drainage	Well drained– moderate
Mature Height	30'- 50'
Mature Width	15'- 30'
Flowers	None
Wildlife Value	Produces small nuts feeding rabbits, deer, squirrels, and songbirds
Description	AKA ironwood, retains leaves through the winter, textured bark, best firewood on East coast. Fruit clusters resemble hops used in beer production

American sweetgum *Liquidambar styraciflua*

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Attributes

Light Level	Full to partial sun
Soil Drainage	All types; loves acidic
Mature Height	60'- 80'
Mature Width	40'- 60'
Flowers	None
Wildlife Value	Provides food for finches, chickadees, woodpeckers, sparrows, wrens, ducks, & squirrels
Description	Unbeatable fall colors, star-shaped leaves, textured bark, spiny ball shaped fruit, extremely hardy; no maintenance once established. Great historic & medicinal value.

Baldcypress *Taxodium distichum*



Attributes

Light Level	Full sun
Soil Drainage	Very poor– poor
Mature Height	50'- 70'
Mature Width	15'- 25'
Flowers	Very subtle purplish cones
Wildlife Value	Cone seeds eaten by squirrels, waterfowl; provides unique water habitat in certain areas; nesting location for larger bird species
Description	A deciduous conifer with flat leaf blades and grey-brown bark; large trunk; valuable timber

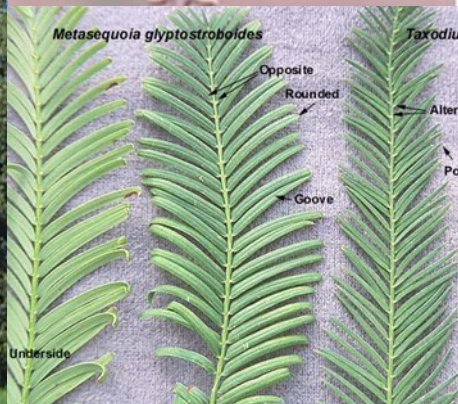
Bur oak *Quercus macrocarpa*



Attributes

Light Level	Full sun
Soil Drainage	Moderate
Mature Height	70'- 80'
Mature Width	70'- 80'
Flowers	None
Wildlife Value	Acorns eaten by various birds and mammals; browsed by deer. Provides nesting sites for raptors and squirrels.
Description	Very hardy and virtually maintenance free, bark is uniquely textured

Dawn redwood *Metasequoia glyptostroboides*



Attributes

Light Level	Full sun
Soil Drainage	Moderate
Mature Height	65'- 85'
Mature Width	25'- 40'
Flowers	None
Wildlife Value	Provides winter cover for birds, small mammals, and deer
Description	Soft feathery leaves, red to dark brown bark; once established, virtually care and maintenance free; extremely fast growing

Eastern red cedar *Juniperus virginiana*

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Attributes

Light Level	Full sun
Soil Drainage	Very tolerant
Mature Height	40'- 50'
Mature Width	8'- 15'
Flowers	Subtle tan, cone-like buds
Wildlife Value	Provides food and habitat for various birds and mammals. Winter food and shelter for white tail deer.
Description	Incredibly hardy; maintenance free, salt tolerant; mature trees have beautiful red bark, produces great shade

Ginkgo *Ginkgo biloba*

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Attributes

Light Level	Full sun
Soil Drainage	Poor– moderate
Mature Height	40'- 80'
Mature Width	30'- 40'
Flowers	None
Wildlife Value	Non-native; no value
Description	Old enough to have seen dinosaurs, dioecious (male and female separate trees), incredible yellow fall color, leaves are fan-shaped, very unique aesthetically

Honeylocust *Gleditsia triacanthos*



Attributes

Light Level	Full sun
Soil Drainage	Poor– moderate
Mature Height	50'- 60'
Mature Width	50'- 60'
Flowers	Subtle yellow/white clusters
Wildlife Value	Bean pods are eaten by deer, squirrel, rabbits, opossums, and raccoons. Tender shoots and bark are utilized as food source for winter months. The vegetation provides habitats for mammals and birds. The flowers are incredibly attractive to pollinating insects.
Description	Very hardy; virtually maintenance free, good for firewood, small leaves for easy clean-up

Japanese zelkova *Zelkova serrata*



Attributes

Light Level	Full sun
Soil Drainage	Poor– moderate
Mature Height	50'- 70'
Mature Width	40'- 50'
Flowers	Very small clusters
Wildlife Value	Doesn't attract wildlife; non-native
Description	Hardy, low maintenance, easy leaf clean up

Kentucky coffee tree *Gymnocladus dioica* Page 16



Attributes

Light Level Full sun

Soil Drainage Moderate

Mature Height 55'- 75'

Mature Width 40'- 50'

Flowers Small white clusters

Wildlife Value None known

Description Unique; hardy tree once established

Pin oak *Quercus palustris*



Attributes

Light Level	Full sun
Soil Drainage	Moderate– acidic
Mature Height	55'- 75'
Mature Width	40'- 55'
Flowers	None
Wildlife Value	Hard mast produced feeds game species, squirrels, and various wildlife. Provides habitat for birds and mammals.
Description	Beneficial to the ecosystem, beautiful fall colors

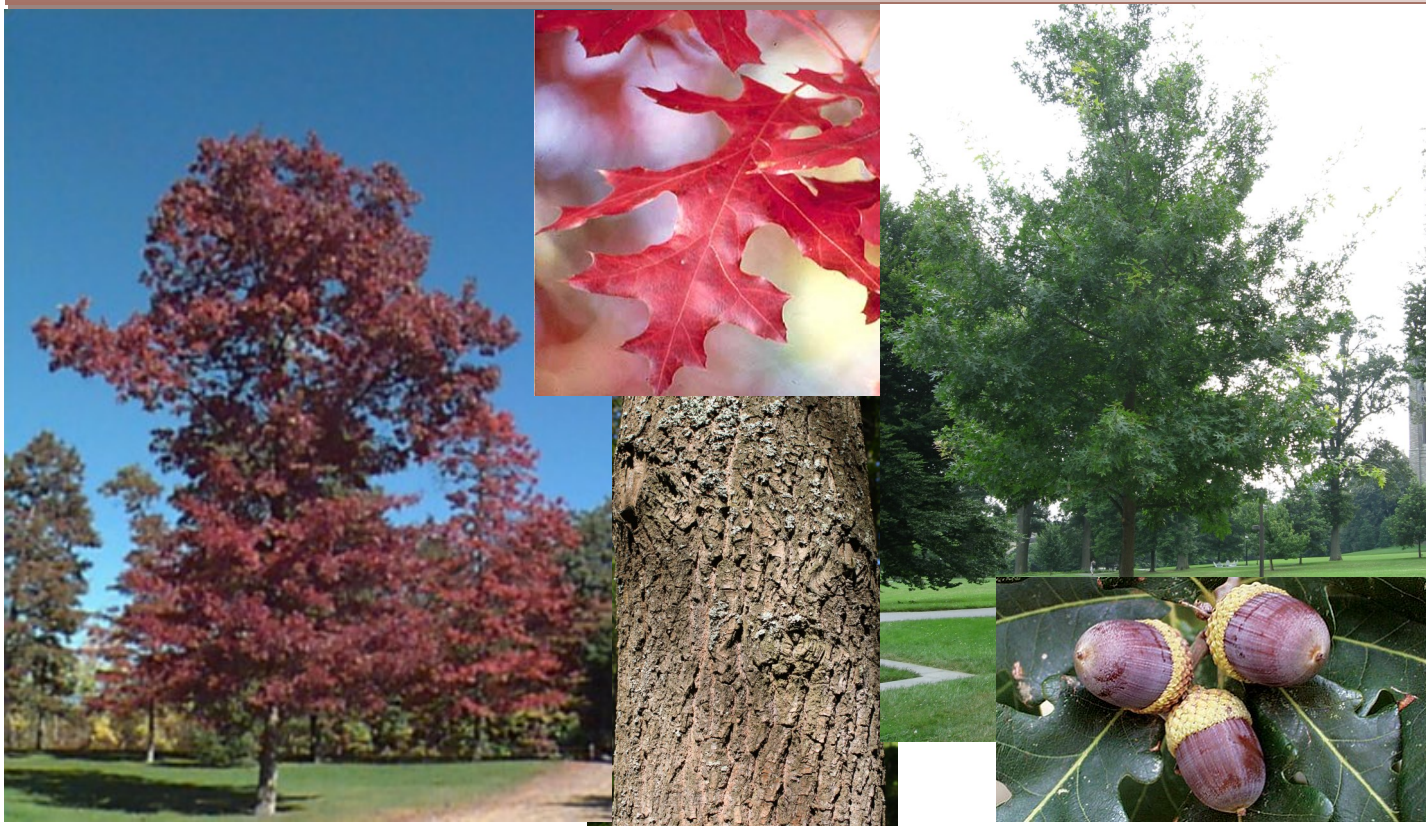
Red oak *Quercus rubra*



Attributes

Light Level	Full sun
Soil Drainage	Moderate
Mature Height	60'- 80'
Mature Width	40'- 65'
Flowers	None
Wildlife Value	Provides cover and nesting sites for wide variety of birds and mammals. Deer and rabbits browse leaves and young seedlings; acorns are eaten by many birds and mammals.
Description	One of the most valuable trees on East coast, high wildlife and timber value, virtually maintenance free, tolerant to disturbances

Scarlet oak *Quercus coccinea*



Attributes

Light Level	Full sun
Soil Drainage	Well drained
Mature Height	75' maximum
Mature Width	45' maximum
Flowers	None
Wildlife Value	Provides good cover and nesting sites for a wide variety of birds and mammals; deer and rabbits browse leaves and young seedlings, acorns are food source for various wildlife
Description	Red fall color, virtually maintenance free, drought and disturbance tolerable

Serbian spruce *Picea omorika*

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Marlin



Attributes

Light Level	Full sun
Soil Drainage	Well drained
Mature Height	50'- 60'
Mature Width	20'- 25'
Flowers	None
Wildlife Value	Provides habitat coverage for wildlife
Description	Tolerates urban conditions except salt

Swamp white oak *Quercus bicolor*

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Attributes

Light Level	Full to partial sun
Soil Drainage	Moderate
Mature Height	60'- 80'
Mature Width	50'- 80'
Flowers	None
Wildlife Value	Hard mast (acorns) producing is valuable food source for deer, ducks, squirrel, and various bird species. Provides habitat.
Description	Extremely hardy, tolerant to most disturbances, good for wildlife

Tulip tree *Liriodendron tulipifera*



Attributes

Light Level	Full sun
Soil Drainage	Moderate; all types
Mature Height	80'- 100'
Mature Width	40'- 50'
Flowers	Large yellow/white/green, tulip shaped; found at top of tree
Wildlife Value	Flowers yield large quantities of nectar for hummingbirds & bees; young trees are food for deer and rabbits; seeds eaten by various birds and mammals. Provides habitat
Description	One of the tallest hardwoods, oval shaped with aromatic stems. Blooms in May and June. Yellow fall colors

Tupelo/blackgum *Nyssa sylvatica*

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Attributes

Light Level	Full sun to shade
Soil Drainage	Well drained– moderate
Mature Height	30'- 50'
Mature Width	20'- 30'
Flowers	None
Wildlife Value	Songbirds use fruit as food source, deer browse the twigs, foliage, and sprouts; provides cavity and nesting sites for wildlife
Description	Attractive autumn colors, very hardy; little to no maintenance once established

White pine *Pinus strobus*

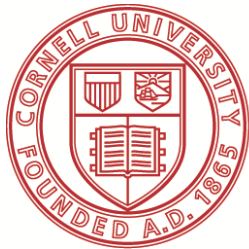


Attributes

Light Level	Full sun
Soil Drainage	Moist, well drained, acidic soil
Mature Height	Up to 60'
Mature Width	Up to 20'
Flowers	Male, yellow and clustered; female, pink
Wildlife Value	Provides food and habitat; songbirds and small mammals eat seeds; hares, deer and rabbits browse foliage; bark is eaten by various mammals. Nesting location for bald eagles just below crown; provides cavity nesting sites.
Description	Open canopy and feathery needles; fast growing and long lived



To visit our website, go to www.ccenassau.org/albreforestation
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**CCE-NC ALB reforestation
Project**

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