

Priority Tree & Tall Shrub Species for Planting, Replacement & Reforestation in Northern NJ

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(Morris, Passaic, Bergen, Sussex,

Warren, Essex, Hudson)

Trees in Bold are highest priority to plant

UPLANDS or ROCKY SLOPES

White oak - *Quercus alba*Chestnut oak - *Quercus montana*

Pignut hickory - Carya glabra St

Mockernut hickory - Carya tomentosa

Shagbark hickory - Carya ovata St

Red hickory - Carya ovalis St

Bitternut hickory - Carya cordiformis St

White pine - Pinus strobus E, F

Pitch pine - Pinus rigida E, F

Black birch - Betula lenta AS

Sugar maple - Acer saccharum AS

Basswood - Tilia americana St

Black cherry - Prunus serotina St

Sassafras - Sassafras albidum F

Bigtooth Aspen - Populus grandidentata F

Common Hackberry - Celtis occidentalis St

Downy serviceberry - Amelanchier arborea U, AS

Allegheny serviceberry - Amelanchier laevis U, AS

Hop hornbeam - Ostrya virginiana U, AS

Flowering dogwood - Cornus florida U, AS

Witch hazel - Hamamelis virginiana S, AS

Chokecherry - Prunus virginiana

Winged Sumac - Rhus copallinum F

Blackhaw viburnum - Viburnum prunifolium S, AS

American hazelnut - Corylus americana S, AS

Trees
from
← either list →
can be planted
in sites with
moist soil,
not too
wet or dry

<u>KEY</u>

E = Evergreen
F = Full Sun
AS = Requires Some
Afternoon Shade
U = Understory Tree
S = Tall Shrub

St = Street Tolerant

or LOWLANDS

White oak - Quercus alba

Swamp white oak - Quercus bicolor St

Shagbark hickory - Carya ovata St

Bitternut hickory - Carya cordiformis St

Black gum - Nyssa sylvatica St

Grey birch - Betula populifolia St, F

Yellow birch - Betula alleghaniensis AS

Sugar maple - Acer saccharum AS

Red maple - Acer rubrum St

American elm - Ulmus americana

Slippery elm - Ulmus rubra

Basswood - Tilia americana St

Sycamore - Platanus occidentalis St

Tulip tree - Liriodendron tulipifera St

Serviceberry - Amelanchier canadensis U, AS

Pagoda dogwood - Cornus alternifolia U, AS

American hornbeam - Carpinus caroliniana U, AS

Black elderberry - Sambucus nigra S

Highbush blueberry - Vaccinium corymbosum S, AS

Winterberry holly - Ilex verticillata S, AS

Grey Dogwood - Cornus racemosa S, AS

Red-osier Dogwood - Cornus sericea S, AS

Silky Dogwood - Cornus amomum S, AS

Pussy Willow - Salix discolor S, F

Nannyberry - Viburnum lentago S, AS

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Ask your local nursery/garden center to carry these species!
And in small stock too!



Optimal Tree Attributes & Planting Considerations

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For: Suburban Yards, Shade Replacement Ordinances, Windbreaks, Woodlots, & Forests

We must plant the right trees in the right way to ensure we have a future forest¹

1. SELECT MULTIPLE SPECIES FROM THE ATTACHED LIST to:

- Plant in open areas to reforest (remove/reduce lawn)
- Replace removed or fallen trees
- Reforest in canopy gaps, under declining trees, or as part of a forest restoration
- 2. LOCAL ECOTYPE progeny from NJ or better yet, your county or ecoregion are best suited for your local landscapes.
- **3. SMALLER SIZES** include tubelings, 1 gal 7 gal size
 - container grown stock is preferred! (not rootbound)
 - Greater chance of survival and success vs. larger stock ^{2,3}
 - Grows faster than larger stock (e.g. B&B >2" caliper size)
 - Suffer less from transplant stock = fewer disease issues
 - Grows healthier, short term & long term
 - Most environmentally sustainable option
 - Most economic option
- 4. RESTORE DEGRADED SOILS before planting by mixing in composted leaf litter and/or organic garden soil.
- 5. PLANT DENSE STANDS of many saplings, not just one or two trees; use 3-10 ft spacing and 10-20 per each large tree lost.
 - This planting style is natural as trees live in communities
 - Their root systems interlock and protect from windthrow
- **6. PREVENT DEER DAMAGE** use physical barriers to stop buck rub and deer browse.
 - Best options allow air passage, are rigid, require infrequent upkeep, and 6 ft. tall
- 7. **LEAVE THE LEAVES** The best type of mulch! Fallen leaves have evolved with trees and ecosystems⁴ to:
 - Nourish soil life
 - Provide plant health naturally
 - Improve plant & climate resiliency
 - Support native biodiversity

Never volcano mulch!





← 1 YR. OLD **PIGNUT HICKORY SEEDLING IN A TREE TUBE** (OR **TUBELING**) **WHICH ALLOWS DEEP TAPROOT GROWTH.** THIS IS THE **IDEAL PLANTING SIZE & STOCK FOR HICKORIES**

6FT. CAGE, **PVC-COATED** WIRE MESH, **PROTECTING A BITTERNUT HICKORY SAPLING**

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- 1. Epiphan, J.N., S.N. Handel., and S.S.Mangiafico. 2025. Disturbance in the Forest of Moornstown National Historical Park: Influence of Gap Size on Tree Regeneration. Natural Resource Report NPS/MORR/NRR-2025. National Park Service, Fort Collins, Colorado.
- 2. Harris, J.R. and Bassuk, N.L., 1993. Tree planting fundamentals. Journal of Arboriculture, 19, p.67
- Tallamy, D.W., 2021. The Nature of Oaks: the rich ecology of our most essential native trees. Timber Press.
- 4. Epiphan, J. 2025. Why Leave the Leaves and How to Do it. Rutgers Fact Sheet FS1369: Why Leave the Leaves and How to Do it (Rutgers NJAES)

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, New Jersey Department of Agriculture, and Boards of County Commissioners. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.