

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

(Middlesex, Somerset, Hunterdon, Union,
Mercer, Monmouth)

UPLANDS or ROCKY SLOPES

- White oak - *Quercus alba*
- Chestnut oak - *Quercus montana*
- Pignut hickory - *Carya glabra* St
- Mockernut hickory - *Carya tomentosa*
- Red hickory - *Carya ovalis* St
- Shagbark hickory - *Carya ovata* St
- White pine - *Pinus strobus* ^{E, F}
- Pitch pine - *Pinus rigida* ^{E, F}
- American holly - *Ilex opaca* ^E
- Black birch - *Betula lenta* ^{AS}
- Persimmon - *Diospyros virginiana*
- Basswood - *Tilia americana* St
- Black cherry - *Prunus serotina* St
- Sassafras - *Sassafras albidum*
- Bigtooth aspen - *Populus grandidentata* ^F
- Common Hackberry - *Celtis occidentalis*
- Downy serviceberry - *Amelanchier arborea* ^{U, AS}
- Flowering dogwood - *Cornus florida* ^{U, AS}
- Hop hornbeam - *Ostrya virginiana* ^{U, AS}
- Witch hazel - *Hamamelis virginiana* ^{S, AS}
- Blackhaw viburnum - *Viburnum prunifolium* ^{S, AS}
- Winged Sumac - *Rhus copallina* ^F
- American hazelnut - *Corylus americana* ^{S, AS}

Trees in Bold
are highest
priority to
plant

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

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

KEY

- E = Evergreen
- F = Full Sun
- AS = Requires
Afternoon Shade
- U = Understory Tree
- S = Shrub
- St = Street Tolerant

VALLEYS 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
- Red maple - *Acer rubrum* St
- American elm - *Ulmus americana*
- Basswood - *Tilia americana* St
- Tulip tree - *Liriodendron tulipifera* St
- Sycamore - *Platanus occidentalis* St
- River birch - *Betula nigra* (single stem)
- Grey birch - *Betula populifolia* St
- American hornbeam - *Carpinus caroliniana* ^{U, AS}
- Pagoda dogwood - *Cornus alternifolia* ^{U, AS}
- American bladdernut - *Staphylea trifolia* ^{U, AS}
- Sweetbay magnolia - *Magnolia virginiana* ^F
- Highbush blueberry - *Vaccinium corymbosum* ^{S, AS}
- Black elderberry - *Sambucus nigra* ^S
- Possumhaw - *Viburnum nudum* var. *nudum* ^{S, AS}
- Winterberry holly - *Ilex verticillata* ^{S, AS}
- Inkberry holly - *Ilex glabra* ^{S, AS, E}
- Silky Dogwood - *Cornus amomum* ^{S, AS}
- Pussy Willow - *Salix discolor* ^{S, F}
- Groundsel bush - *Baccharis halimifolia* ^{S, F}

Optimal Tree Attributes & Planting Considerations

For: Suburban Yards, Shade Tree 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

EPIPHAN 2023

11/2025

1. Epiphan, J.N., S.N. Handel., and S.S. Mangiafico. 2025. Disturbance in the Forest of Morristown 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
3. 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)