Recommended Tree Planting List for the ALB Quarantine Zone and Surrounding Areas

New Jersey Forest Service November 2004

Plant Name	<u>Notes</u>
Gray Dogwood (Cornus racemosa)	Small tree that grows 10-15' tall; Suitable for planting under overhead electric lines; Tolerates drought and salt; Adaptable to varying soil moisture and sun exposure; Requires little maintenance once established; Tree form cultivars are recommended over multi-stem varieties for street plantings; Recommended cultivars include Cuyahoga and Ottawa
[†] Crabapple (Malus spp.)	Generally a small tree growing 15-25' tall; Suitable for small planting spaces with overhead electric lines; Adaptable to many soil types but grows best in moist, well-drained soils; Fruits and flowers develop best in full sun; Tree form plants are recommended for street plantings; Numerous cultivars exist that vary in foliage color, fruit and flower production, and resistance to diseases; Some recommended cultivars include Adirondack, Centurion, Harvest Gold (tolerant of aerial salt), Prairifire, Purple Prince, Snowdrift, and Sugar Tyme
† Hawthorn (Crataegus spp.)	Small tree that grows 15-35' tall; Suitable for small planting spaces with overhead electric lines; Tolerates a wide range of urban conditions; Tree form cultivars are recommended over multi-stem varieties for street plantings; Recommended reduced-thorn cultivars include Thornless Cockspur Hawthorn (<i>C. crus-galli var. inermi</i>) and Crimson Cloud English Hawthorn (<i>C. laevigata</i> 'Superba'); Species with thorns include Vaughn Hawthorn (<i>C. 'Vaughn'</i>) and Washington Hawthorn (<i>C. phaenopyrum</i>)
Serviceberry (Amelanchier sp.)	Small tree that grows 20-30' tall; Suitable for small planting spaces with overhead electric lines; Prefers well-drained, moist, acid soils of medium texture; Tree form cultivars are recommended over multi-stem varieties for street plantings; Recommended cultivars include Robin Hill, Autumn Brilliance, Spring Glory, and Reflection
†Eastern Redbud (Cercis canadensis)	Small tree that grows 20-30' in height; Suitable for planting under overhead electric lines; Adaptable to a wide range of site conditions including varying soil pH, sun exposure, and soil moisture except excessive lack of water or excessive moisture; Tree form cultivars are recommended over multi-stem varieties for street plantings; Recommended cultivars include Royal White, Dwarf White (grows 8-10' tall), Northland Strain, and Forest Pansy

^{*} May not be suitable for planting along streets

[†] Fall Dig Hazard; May not be available from October -December

<u>Plant Name</u>	Notes
†Ornamental Cherry (Prunus spp.)	Height varies with species but in general the heights range from 20-35'; Most species are hearty and produce attractive flowers; May be sensitive to pollution; Recommended cultivars include Columnar Sargent Cherry (<i>P. sargentii</i> 'Columnaris'), Kwanzan Oriental Cherry (<i>P. serrulata</i> 'Sekiyama'), Shubert Chokecherry (<i>P. virginia</i> 'Shubert'), and Accolade Flowering Cherry (<i>P.</i> 'Accolade')
†Kousa Dogwood (Cornus kousa)	Small tree that grows 20-30' tall; Suitable for planting under overhead electric lines; Prefers rich, acid, well-drained soil; Highly resistant to diseases; Tree form cultivars are recommended over multi-stem varieties for street plantings; Recommended cultivars include Milky Way, Satomi, and Samaritan; Fruitless cultivars include Celestial and Constellation
Japanese Tree Lilac (Syringa reticulata)	Small tree that grows 20-30' in height; Suitable for small planting spaces with overhead electric lines; Prefers full sun and well-drained soil; Transplants readily; Recommended cultivars include Ivory silk, Regent, and Summer Snow
*White Fringetree (Chionanthus virginicus)	Small tree that grows 12-20' tall; Wide spreading branching habit makes this tree unsuitable for small, narrow planting spaces; Grows best in moist, fertile, acid soils but is adaptable to various site conditions; Prefers full sun
American Arborvitae cultivars (Thuja occidentalis)	Height varies with cultivars, but in general do not exceed heights of 30'; Suitable for small planting spaces with overhead electric lines; Grows best in moist, well-drained, marshy loam soils, but will survive in limestone soils; Prefers full sun; Tolerates compaction, heat, and drought; Susceptible to deer browsing; Recommended cultivars include Emerald, Nigra, and Pyramidalis
Chinese Juniper cultivars (Juniperus chinensis)	Height varies with cultivars, but in general do not exceed heights of 30'; Suitable for small planting spaces with overhead electric lines; Grows best in moist, well-drained soils but tolerates dry soil and varying soil pH; Resistant to salt; Prefers full sun; Do not plant near crabapples, hawthorns, or serviceberries because junipers may serve as an alternate host for rust diseases; Recommended cultivars include Robusta Green and Spartan
*Flowering Dogwood (Cornus florida)	Medium tree that grows 20-40' tall; Prefers sites with partial shade and moist soils; Adequate width space required for wide branching form

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Eastern Redcedar cultivars (Juniperus virginiana)	Height varies with cultivars, but in general do not exceed heights of 30'; Suitable for small planting spaces with overhead electric lines; Grows best in moist, well-drained soils but tolerates poor soils and varying soil pH; Prefers full sun; Do not plant near crabapples, hawthorns, or serviceberries because junipers may serve as an alternate host for rust diseases; Some cultivars include Emerald Sentinel and Manhattan Blue
*Magnolia (Magnolia spp.)	Height varies with species but in general reaches 20-40' in height; Tree form plants are recommended for street plantings; Adequate width space required for wide branching form; Some species are sensitive to spring frost; Trees valued for their attractive flowers and foliage; Some recommended cultivars include Galaxy Magnolia (<i>M. liliiflora</i> x <i>M. sprengeri</i>), Oyama Magnolia (<i>M. siebodii</i>), Yulan Magnolia (<i>M. denudata</i>), and Saucer Magnolia (<i>M. x soulangiana</i>)
†European Hornbeam (Carpinus betulus)	Medium tree that grows 35-40' tall; Adaptable to a wide range of site conditions including varying soil moisture, soil pH, and sun exposure; Tolerates urban conditions including pollution; Fastigiata is a recommended cultivar due to its upward branching and compact crown form
†Callery Pear (Pyrus calleryana)	Height varies with cultivars, but in general grows 30-45' tall; Tolerates urban conditions including pollution, drought and variable soil conditions; Recommended cultivars include Aristocrat, Autumn Blaze, Capital, Chanticleer, and Redspire; Bradford is <i>not</i> recommended due to structural instability; Dwarf varieties that grow 15-20' in height are better suited for planting under electric lines, including Westwood (<i>P. fauriei</i>), Southworth (<i>P. betulaefolia</i>), and Whitehouse
†Goldenraintree (Koelreuteria paniculata)	Medium tree that grows 30-40' tall; Adaptable to a wide range of soils; Tolerates urban stresses including drought, heat, wind, and air pollution; Prefers full sun; Transplants well
*American Yellowwood (Cladrastis kentukea)	Medium tree that grows 30-50' tall; Suitable for large planting spaces with no overhead interference; Grows best in well drained, alkaline soil; Prefers full sun; Sensitive to drought, compaction, canker, and <i>Verticillium</i> wilt
Swiss Stone Pine (Pinus cembra)	Medium tree that grows 30-40' in height but can reach 70'; Suitable for planting spaces with no overhead interference; Prefers well-drained, loamy soil with slight acidity; Grows best in open areas with full sun
Carolina Silverbell (Halesia tetraptera)	Medium tree that grows 30-40' tall; Prefers moist, well-drained, slightly acidic soils; Grows best in partial shade but will survive in full sun; Resistant to most serious pests; Various cultivars exist that offer variation in foliage and flower color

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†American Hophornbeam (Ostrya virginiana)	Medium tree that grows 30-40' tall; Grows best in moist, well-drained soils and full to partial sun; Sensitive to salt and other urban stresses
*†Amur Corktree (Phelllodendron amurense)	Medium tree that grows 35-45' tall; Tolerates a wide range of soil conditions and drought; Does well in city plantings where there is adequate space for root growth; Fruitless male trees are available
Stewartia (Stewartia spp.)	Medium tree that grows 20-40' tall; May be difficult to transplant; Prefers moist, acidic soils; Grows best in full sun and partial shade during the hottest part of the day; Does not tolerate drought; Known for its fall color, flowers, and flaky bark; Recommended species include Japanese Stewartia (<i>Stewartia pseudocamellia</i>) and Korean Stewartia (<i>Stewartia korena</i>)
†Katsuratree (Cercidiphyllum japonicum)	Tall tree that grows 40-60' tall; May be difficult to transplant; Grows best in rich, moist, and well-drained soils; Prefers full sun; Adaptable to varying soil pH; Ample watering recommended after transplanting to insure establishment; A dwarf cultivar, Heronswood Globe, grows 15' tall and is suitable for planting in small planting spaces with overhead electric lines
† Oak (Quercus spp.)	Height varies with species, but in general, oaks are large trees that require large spaces to grow; Heights can vary from 40-80'; Species that tolerate urban conditions include Sawtooth Oak (<i>Q. acutissima</i>), Swamp White Oak (<i>Q. bicolor</i>), Shingle Oak (<i>Q. imbricaria</i>), Bur Oak (<i>Q. macrocarpa</i>), Pin Oak (<i>Q. palustris</i>), Willow Oak (<i>Q. phellos</i>), English Oak (<i>Q. robur</i>), Northern Red Oak (<i>Q. rubra</i>), and Shumard Oak (<i>Q. shumardii</i>)
Turkish Filbert (Corylus colurna)	Tall tree that grows 45-60' tall; Suitable for large spaces with no overhead interference; Tolerates a wide range of site conditions; Low maintenance once established; Prefers full sun and does best when watered for the first year after planting
Serbian Spruce (Picea omorika)	Tall tree that grows 50-60' in height but can reach 100'; Suitable for planting spaces with no overhead interference; Prefers deep, moist, well-drained soil and semi-shade but will adapt to full sun; May tolerate air pollution
†Silver Linden (Tilia tomentosa)	Tall tree that grows 50-70' tall; Wide branching crown makes this tree best suited for large planting spaces; Tolerates heat, drought, and pollution; Adaptable to varying soil pH, soil compaction, and varying sun exposure; Transplants readily; Grows best on deep, fertile soils; Recommended cultivars include Green Mountain and Sterling
Littleleaf Linden (Tilia cordata)	Tall tree that grows 50-80' tall; Suitable for large spaces with no overhead interference; Grows best on deep, fertile soils; Adaptable to varying soil pH, soil compaction, and varying sun exposure; Somewhat sensitive to drought and salt; Transplants readily; Recommended cultivars include Chancellor, Corinthian, Fairview, Glenleven, and Greenspire

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Plant Name	Notes
Ginkgo (Ginkgo biloba)	Tall tree that grows 50-80' tall; Suitable for spaces with no overhead interference; Very tolerant of pollution and other urban stresses; Tolerates a wide range of soils; A fruitless variety, or male clone, is recommended due to strong fruit odor; Recommended cultivars include Autumn Gold, Lakeview, Magyar, and Princeton Sentry
†Japanese Zelkova (Zelkova serrata)	Tall tree that grows 50-80' tall; Suitable for spaces with no overhead interference; Prefers moist, deep soil; Tolerant to pollution; Adaptable to varying soil pH; Transplants readily; Once established, very drought and wind tolerant; Recommended cultivars include Green Vase and Village Green
Upright White Pine (Pinus strobus Fastigiata)	Tall tree that grows 50-80' in height and can reach 150'; Suitable for large, narrow planting spaces due to its upright form; Prefers moist, well-drained soils but will tolerate a range of moisture levels; Intolerant of air pollutants and salts; Susceptible to white pine weevil damage
Honeylocust (Gleditsia triacanthos)	Tall tree that grows 60-70' tall; Suitable for large spaces with no overhead interference; Tolerates salt, heat, drought, compaction and other urban conditions; Transplants readily; Grows best in full sun; Thornless and reduced-fruiting varieties include Moraine, Shademaster, and Skyline
*Kentucky Coffeetree (Gymnocladus dioicus)	Tall tree that grows 60-75' tall; Suitable for large spaces with no overhead interference; Tolerates urban conditions including salt and drought; Requires full sun; Male trees are free of fruit pods
Leyland Cypress (x Cupressocyparis leylandii)	Tall tree that grows 60-70' in height and can reach 100'; Suitable for planting spaces with no overhead interference; Adaptable to wide range of soil but does not tolerate poor drainage; Tolerates salt; Grows best in full sun; Numerous cultivars exist that vary in foliage color, branching pattern, growth rate, and height growth
†American Sweetgum (Liquidambar styraciflua)	Tall tree that grows 60-75' tall; Suitable for large planting spaces with no overhead interference; Must provide adequate space for root establishment and growth; Grows best in moist, slightly acid soil and full sun; Many cultivars exist that offer variation in foliage color and plant form; A fruitless cultivar, 'Rotundiloba' may be better suited in areas where fruit litter is undesirable
†Baldcypress (Taxodium distichum)	A tall deciduous conifer that grows 60-80' in height; Suitable for large spaces with no overhead interference; Grows best on deep, moist, sandy loam soils but is adaptable to various soil moisture conditions; Prefers acid soil and full sun; Relatively free of diseases and insects; Cultivars well suited for narrow spaces include Shawnee Brave and Prairie Sentinel

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Plant Name	<u>Notes</u>
Dawn Redwood (Metasequoia glyptostroboides)	A tall deciduous conifer that grows 65-85' tall; Grows fast; Suitable for large spaces with no overhead interference; Resistant to air pollution; Transplants readily; Prefers full sun and acid soils
* [†] Tulip Tree (Liriodendron tulipifera)	Tall, fast growing tree that reaches 90-120' in height; Grows best in a large open space with no overhead interference; Prefers full sun and well-drained, moist soils
*†Blackgum/Tupelo (Nyssa sylvatica)	Tall tree that grows 60-70' tall; Suitable for large planting spaces with no overhead interference; Grows in well-drained and poorly drained soil but prefers acid soil with full sun; Sensitive to compaction; Tolerates some salt; Does best when watered for the first year after planting; Brilliant fall color
†Mountain Silverbell (Halesia monticola)	Tall tree that grows 60-80' tall; Similar to <i>H. tetraptera</i> , but has larger flowers and fruit; The variety <i>vestita</i> has a tendency to maintain a central leader, making the tree suitable for street planting sites with no overhead interference
*† Beech (Fagus spp.)	Tall, large tree that grows 50-60' tall; Suitable for large planting spaces with no overhead interference; Prefers moist, well-drained, acidic soil; Does not tolerate wet or compacted sites; Grows best in full sun but will survive in shady areas; American beech (<i>F. grandifolia</i>) has no cultivars but is an impressive tree when planted in large areas like parks; European beech (<i>F. sylvatica</i>) has many cultivars including 'Asplenifolia' (fern-like leaves), 'Atropunicea' (purple leaf), 'Pendula' (weeping branches), and 'Rotundifolia'

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DO NOT PLANT THESE HOST TREES ATTACKED BY ALB

MAPLE (Acer spp.)

HORSECHESTNUT (Aesculus spp.)

WILLOW (Salix spp.)

ELM (*Ulmus spp.*)

BIRCH (Betula spp.)

MIMOSA (Albizia julibrissin)

HACKBERRY (Celtis spp.)

ASH (Fraxinus spp.)

SYCAMORE / PLANETREE (*Platanus spp.*)

MOUNTAIN ASH (Sorbus spp.)

POPLAR (*Populus spp.*)

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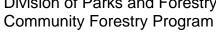
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References

Dirr, Michael A. 1998 (5th ed.). Manual of Woody Landscape Plants – Their Identification, Ornamental Characteristics, Culture, Propagation and Uses. Gerhold, Henry D. (ed.), Wandell, Willet N. (ed.), and Norman L. Lacasse. 1993. Street Tree Fact Sheets. Penn State College of Agricultural Sciences. Martine, Christopher T. 2003(5th ed.). Trees Of New Jersey and the Mid-Atlantic State. New Jersey Forest Service Forest Resource Education Center. Sawyer, Alan. 2003 May 8 revision. Annotated Categorization of ALB Hosts. USDA – APHIS – PPO, Otis Plant Protection Laboratory.