TREES FOREVER
Planting a better tomorrow™

Recommended Shade Trees- Sparse to Moderate Shading

(Greater than 40 feet in height)

Tree Species (Common Name)	Scientific Name	Susceptibility to Storm Damage*	Tolerance to Flooding & Waterlogged Soils**	Hardiness Zone
American elm – cultivars	*Ulmus sp.*	intolerant	intermediate	3 to 9
American hophornbeam	*Ostrya virginiana*	tolerant	intolerant	3b to 9
Black Walnut	*Juglans nigra*	tolerant	intolerant	4 to 9
Blackgum	*Nyssa slyvatica*	tolerant	intolerant	4 to 9
Chinquapin Oak	*Quercus muehlenbergii*	tolerant	intolerant	5 to 7
Common Larch	*Larix decidua*	tolerant	tolerant	3 to 6
Cottonwood	*Populus deltoides*	intolerant	intermediate	3a to 9
English Oak	*Quercus robur*	intermediate	intolerant	4 to 8
Ginkgo	*Ginkgo biloba*	tolerant	intermediate	4 to 8
Hackberry	*Celtis occidentalis*	intolerant	intermediate	3 to 9
Honey Locust	*Gleditsia triacanthos*	intolerant	intermediate	4 to 9
Horse chestnut	*Aesculus hippocastanum*	intolerant	intolerant	4 to 7
Kentucky coffee tree	*Gymnocladus dioicus*	tolerant	intolerant	3b to 8
Northern Catalpa	*Catalpa speciosa*	tolerant	intolerant	4 to 8
Northern Pin Oak	*Quercus ellipsoidalis*	tolerant	intermediate	4 to 6
Pin Oak	*Quercus palustris*	tolerant	intermediate	4 to 8
Quaking Aspen	*Populus tremuloides*	intermediate	intermediate	1 to 6
Shagbark Hickory	*Carya ovata*	tolerant	intolerant	4 to 8
Swamp white oak	*Quercus bicolor*	tolerant	tolerant	4 to 8
Sweet Gum	*Liquidambar styraciflua*	tolerant	intermediate	5 to 9
Tulip tree	*Liriodendron tulipifera*	intermediate	intolerant	4 to 9
White oak	*Quercus alba*	tolerant	intolerant	3b to 9

~When selecting trees for a project, remember the diversity rule for community forests-
a single species should not make up more than 10% of a community's tree population,
and a genus such as Acer (includes maples) should make up no more than 20%
~To maximize energy savings, choose large sized shade trees (at maturity) and place them on the west and east sides of buildings.
~When replanting after a major disaster and the loss of much tree canopy, plant a mix of faster growing trees (high susceptibility to storm damage) and slower growing trees (low susceptibility to storm damage)
~All species of trees can become more susceptible to storm damage if not properly pruned. Good care and maintenance when trees are young is critical to develop a strong central leader and remove crossing branches.
~Not all species are appropriate for all situations - consider hardiness zone, soil type, shadiness of site, and proximity to buildings when selecting species.

Guidelines and Tips

* Information is from "Managing Storm-Damaged Trees", Iowa State University Publication SUL 6; for more information please see the full publication.

** Information is from "Understanding the Effects of Flooding on Trees", Iowa State University Publication SUL 1; for more information please see the full publication.

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Tree Species (Common Name)	Scientific Name	Susceptibility to Storm Damage*	Tolerance to Flooding & Waterlogged Soils**	Hardiness Zone
American linden / basswood	*Tilia americana*	intolerant	intolerant	3b to 8
Baldcypress	*Taxodium distichum*	tolerant	tolerant	4 to 11
Beech – American	*Fagus grandifolia*	intermediate	intolerant	4 to 9
Black Alder	*Alnus glutinosa*	intermediate	tolerant	4 to 7
Black Oak	*Quercus velutina*	intermediate	intolerant	3 to 9
Bur oak	*Quercus macrocarpa*	intermediate	intermediate	3 to 8
Littleleaf Linden	*Tilia cordata*	intolerant	intolerant	3b to 7
London planetree	*Platanus x acerifolia*	intermediate	intermediate	4 to 8
Northern Red oak	*Quercus rubra*	intermediate	intolerant	3b to 7
Ohio buckeye	*Aesculus glabra*	intermediate	tolerant	4 to 7
River birch	*Betula nigra*	intermediate	intermediate	3b to 9
Shingle Oak	*Quercus imbricaria*	tolerant	tolerant	4 to 8
Sugar maple	*Acer saccharum*	intermediate	intolerant	4 to 8
Sycamore	*Platanus occidentalis*	intermediate	intermediate	4 to 9
Willow	*Salix sp.*	intolerant	tolerant	2 to 8

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~When replanting after a major disaster and the loss of much tree canopy, plant a mix of faster growing trees (high susceptibility to storm damage) and slower growing trees (low susceptibility to storm damage)

~All species of trees can become more susceptible to storm damage if not properly pruned. Good care and maintenance when trees are young is critical to develop a strong central leader and remove crossing branches.

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Recommended Tree Species for *Branching Out* and *Power of Trees*

Shade Trees	Black Maple	*Acer nigrum*
	Red Maple	*Acer rubrum*
	Sugar Maple	*Acer saccharum*
	River Birch	*Betula nigra*
	White-barked Birch	*Betula populifolia*
	Hackberry	*Celtis occidentalis*
	Yellowwood	*Cladrastis kentuckea*
	Turkish Filbert	*Corylus Colurna*
	Ginkgo (male only)	*Ginkgo biloba*
	Thornless Honeylocust	*Gleditisia triacanthos*
	Kentucky Coffeetree	*Gymnocladus dioicus*
	Larch	*Larix decidua*
	Sweetgum	*Liquidambar styraciflua*
	Tuliptree	*Liriodendron tulipifera*
	Blackgum	*Nyssa slyvatica*
	American Hophornbeam	*Ostrya virginiana*
	London Planetree	*Platanus x acerfolia*
	White Oak	*Quercus alba*
	Swamp White Oak	*Quercus bicolor*
	Shingle Oak	*Quercus imbricaria*
	Bur Oak	*Quercus macrocarpa*
	Chinkapin Oak	*Quercus muehlenbergii*
	Pin Oak	*Quercus Palustris*
	Northern Red Oak	*Quercus rubra*
	Bald Cypress	*Taxodium distichum*
	Littleleaf Linden	*Tilia Cordata*
	American Linden	*Tilia americana*
	Silver Linden	*Tilia tomemtosa*
	American Elm	*Ulmas Americana*
Low-growing	Serviceberry	*Amelanchier spp.*
	American Hornbeam	*Carpinus caroliniana*
	Eastern Redbud	*Eastern Redbud*
	Pagoda Dogwood	*Cornus alternifolia*
	Witch hazel	*Hamamelis virginiana*
	Flowering Crab	*Malus spp.*
	American Plum	*Prunus americana*
	Japanese Tree Lilac	*Syringa reticulata*
	Blackhaw Viburnum	*Viburnum prunifolium*
Conifers	White Fir	*Abies concolor*
	Norway Spruce	*Picea abies*
	White Spruce/ Black Hills Spruce	*Picea glauca*
	Serbian Spruce	*Picea omorika*
	White Pine	*Pinus strobus*
	Arborvitae	*Thuja occidentalis*
	Eastern Hemlock	*Tsuga Canadensis*
	Eastern Red Cedar	*Juniperus virginiana*

Not all trees are appropriate for all sites; be sure to consider local site conditions such as your hardiness zone, soil moisture conditions, presence of overhead powerlines, light conditions, proximity to buildings, etc. when selecting species.

Branching Out and *Power of Trees* applicants need to select tree species from this list. If you would like to plant something not on the list, please work with a Trees Forever field coordinator to discuss other species and your project, and then include that conversation as part of your application.

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