



RECOMMENDED SPECIES: DENSE SHADE TREES

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

~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 the 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 building when selecting species.

SPARSE TO MODERATE SHADE

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

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