



Recommended Shade Trees- Dense 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 linden / basswood	<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
Bur oak	<i>Quercus macrocarpa</i>	intermediate	intermediate	3 to 8
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 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.