



## 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	<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
Common Larch	<i>Larix decidua</i>	tolerant	tolerant	3 to 6
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

~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.