

Ash Tree Replacement Guide

Family	#	Common Name	Scientific Name	Use				Fall Color	Flower
				Street	Shade	Screen	Specimen		
Maple	1	Ash-leaved Maple; Boxelder	Acer negundo			X		Yellow-green/Brown	White, Spring bloom, not showy
	2	Black Maple	Acer nigrum		X	X		Yellow	Greenish Yellow, Spring bloom, not showy
	3	Freeman Maple (Autumn Blaze)	Acer x freemanii	X	X	X	X	Orange-red	Inflorescence; Spring bloom, not showy
	4	Freeman Maple (Celebration)	Acer x freemanii	X	X	X	X	Red and Yellow	Inflorescence; Spring bloom, not showy
	5	Freeman Maple (Marmo)	Acer x freemanii	X	X	X	X	Scarlet/Burgundy	Inflorescence; Spring bloom, not showy
	6	Hedge Maple	Acer campestre	X	X	X	X	Yellow/Yellow-green	Green, Spring bloom, not showy
	7	Manchurian Maple	Acer mandschuricum				X	Rose-red to Red	Green, Spring bloom, not showy
	8	Miyabei Maple	Acer miyabei	X				Pale yellow	Greenish Yellow, Spring bloom, not showy
	9	<a href="#">Red Maple (Autumn Radiance)</a> <i>Photo by: The Dow Gardens Archive, Dow Gardens, Bugwood.org</i>	Acer rubrum		X	X	X	Orange-red	Red, Spring & Winter bloom
	10	<a href="#">Red Maple (Autumn Flame)</a> <i>Photo by: The Dow Gardens Archive, Dow Gardens, Bugwood.org</i>	Acer rubrum		X	X	X	Green-Yellow to Yellow to Red	Red, Spring & Winter bloom
	11	Shantung Maple	Acer truncatum	X				Yellow, Orange	Greenish Yellow, Spring bloom, not showy
	12	<a href="#">Silver Maple</a> <i>Photo by: Bill Cook, Michigan State University, Bugwood.org</i>	Acer saccharinum		X			Yellow	Red, Spring bloom
	13	<a href="#">Sugar Maple</a> <i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Acer saccharum		X	X		Orange, Red, Yellow	Greenish Yellow, Spring bloom, not showy
	14	<a href="#">Superform Norway Maple</a> <i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Acer platanoides Superform	X	X	X		Yellow	Greenish Yellow, Spring bloom, not showy
	15	<a href="#">Sycamore Maple</a> <i>Photo by: Petr Kapitola, State Phytosanitary Administration, Bugwood.org</i>	Acer pseudoplatanus		X			None	Greenish Yellow, Spring bloom, not showy
	16	Trident Maple	Acer buergeranum	X	X		X	Burgundy/Red	Yellow, showy Spring bloom

Comprehensive Plant Characteristics and Cultivation Requirements								
Fruit	Insect/ Disease Prone	Drought Tolerance	Salt Tolerance	Light	pH Preference	Easy to Transplant	Native/ Introduced	Wildlife Value
Samara; Brown	Moderate	High	Moderate	Some shade to full sun	4 to 7	Yes	Native	Minimal
Samara; Brown	Mild	Moderate	Poor	Shade to full sun	4 to 7	Yes	Native	
Samara; Brown	Mild	High	Moderate	Some shade to full sun	4 to 7	Yes	Native	
Samara; Brown	Mild	High	Moderate	Some shade to full sun	4 to 7	Yes	Native	
Samara; Brown	Mild	High	Moderate	Some shade to full sun	4 to 7	Yes	Native	
Samara; Brown and Green	Minor	High	Moderate	Some shade to full sun	4 to 7	Yes	Introduced	Minimal
Samara; Brown and Green	Minor			Some shade to full sun	5 to 6.5	Moderate	Introduced	
Samara; Brown and Green	Minor	High	Poor	Full sun	4 to 7	Yes	Introduced	
Samara; Red	Mild	Moderate	Poor	Some shade to full sun	4 to 6.5	Yes	Native	
Samara; Red	Mild	Moderate	Poor	Some shade to full sun	4 to 6.5	Yes	Native	
Samara; Brown	Minor	High		Some shade to full sun	4 to 7	Yes	Introduced	
Samara; Brown and Green	Mild	High	Moderate	Some shade to full sun	4 to 7	Yes	Native	Minimal
Samara; Brown	Mild	Moderate	Poor	Shade to full sun	3.5 to 7	Yes	Native	Moderate
Samara; Brown and Green	Moderate	Moderate	Moderate	Some shade to full sun	4 to 7	Moderate	Introduced	Minimal
Samara; Green	Minor	Moderate	Moderate	Some shade to full sun	4 to 7	Moderate	Introduced	Minimal
Samara; Red	Minor	Moderate	Moderate	Some shade to full sun	4 to 6.5	Yes	Introduced	Minimal

Ash Tree Replacement Guide

Family	#	Common Name	Scientific Name	Use			Fall Color	Flower	
				Street	Shade	Screen			
Buckeye		<a href="#">Horse-chestnut</a>							
	17	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Aesculus hippocastanum	X	X	X	X	Yellow	White, Spring bloom
		<a href="#">Ohio Buckeye</a>							
	18	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Aesculus glabra		X			Yellow to Red-brown	Yellow, Spring bloom
	19	Red Horse-chestnut	Aesculus x carnea	X	X	X	X	No change	Pink or Red, Spring bloom
Birch	20	Yellow Buckeye	Aesculus octandra		X			Orange	Cream yellow, Spring bloom, not showy
		<a href="#">Black Alder</a>							
	21	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Alnus glutinosa		X	X	X	No change	Purple or Red, Spring bloom, not showy
	22	Paper Birch	Betula papyrifera				X	Yellow	Brown or Green, Spring bloom
	23	River Birch	Betula nigra	X	X	X	X	Yellow	Brown, Spring and Winter bloom, not showy
Hornbeam	24	American Hornbeam	Carpinus caroliniana		X	X	X	Orange, Red, and Yellow	Orange or Yellow, Spring bloom, not showy
		<a href="#">Upright European Hornbeam</a>							
	25	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Carpinus betulus 'Fastigiata'		X	X	X	Yellow	White, Spring bloom, not showy
Hickory	26	Bitternut Hickory	Carya cordiformis		X			Yellow to Golden	Catkins, not showy
	27	Mockernut Hickory	Carya tomentosa		X		X	Golden yellow	Catkins, not showy
	28	Pignut Hickory	Carya glabra		X		X	Yellow	Catkins, not showy
	29	Shagbark Hickory	Carya ovata		X		X	Yellow to Golden	Catkins, not showy
	30	Shellbark Hickory	Carya laciniosa		X		X	Yellow to golden-brown	Catkins, not showy
Hackberry		<a href="#">Common Hackberry</a>							
	31	<i>Photo by: Joseph O'Brien, USDA Forest Service, Bugwood.org</i>	Celtis occidentalis	X	X			Yellow	Green, not showy
	32	Sugar Hackberry	Celtis laevigata	X	X			Yellow	Green, not showy
		<a href="#">Katsuratree</a>							
	33	<i>Photo by: The Dow Gardens Archive, Dow Gardens, Bugwood.org</i>	Cercidiphyllum japonicum	X	X		X	Yellow	Green, not showy
	34	Yellowwood	Cladrastis kentuckea		X		X	Copper, Yellow	White, Fragrant, Summer bloom
	35	Turkish Filbert	Corylus colurna				X	Yellow	Catkins, not showy
	36	Hardy Rubber Tree	Eucommia ulmoides	X	X	X	X	No change	Brown, not showy

Comprehensive Plant Characteristics and Management Guide								
Fruit	Insect/ Disease Prone	Drought Tolerance	Salt Tolerance	Light	pH Preference	Easy to Transplant	Native/ Introduced	Wildlife Value
Capsule; Light Brown	Minor	Moderate	Moderate	Full sun	3.5 to 7	Moderate	Introduced	High
Capsule; Light Brown	Minor	Moderate	Poor	Some shade to full sun	4.5 to 7.5	Moderate	Native	High
Capsule; Light Brown	Minor	Moderate	Moderate	Full sun	3.5 to 7	Moderate	Introduced	High
Capsule; Light Brown	Minor	Moderate	Moderate	Some shade to full sun	4.5 to 7	Moderate	Native	High
Nutlet; Brown	Minor	Moderate	Moderate	Some shade to full sun	4.5 to 7	Yes	Introduced	Minimal
Nutlet; Brown	Mild	Moderate	Moderate	Some shade to full sun	3.5 to 6.5	Yes	Native	Moderate
Nutlet; Brown	Minor	Moderate	Moderate	Some shade to full sun	3.5 to 6.5	Yes	Native	Minimal
Nutlet; Brown	Minor	Moderate	Poor	Shade to full sun	3.5 to 6.5	No	Native	Moderate
Nutlet; Brown	Minor	High	Poor	Some shade to full sun	3.5 to 6.5	Yes	Introduced	Moderate
Nut; Brown	Mild	Moderate	Poor	Some shade to full sun	3.5 to 7	No	Native	High
Nut; Brown	Mild	Moderate	Poor	Some shade to full sun	3.5 to 7	No	Native	High
Nut; Brown	Mild	High	Poor	Some shade to full sun	3.5 to 7	No	Native	Moderate
Nut; Brown	Mild	High	Poor	Some shade to full sun	3.5 to 7	No	Native	High
Nut; Brown	Mild	Moderate	Poor	Some shade to full sun	3.5 to 7	No	Native	High
Drupe; Black, Purple and Red	Mild	High	Moderate	Some shade to full sun	3.5 to 7.5	Yes	Native	High
Drupe; Black or Red	Minor	High	Moderate	Some shade to full sun	3.5 to 7.5	Yes	Native	High
Pod; Brown	Minor	Moderate	Moderate	Some shade to full sun	3.5 to 7	Moderate	Introduced	Minimal
Pod; Brown	Minor	Moderate	Poor	Some shade to full sun	4.5 to 7	Yes	Native	Minimal
Nut; Brown	Minor	High	Poor	Some shade to full sun	3.5 to 7.5	Moderate	Introduced	Moderate
Capsule; Brown	Minor	High	Moderate	Full sun	3.5 to 7.5	Yes	Introduced	Minimal



## Ash Tree Replacement Guide

Family	#	Common Name	Scientific Name	Use			Specimen	Fall Color	Flower
				Street	Shade	Screen			
Beech		<a href="#">American Beech</a>							
	37	<i>Photo by: The Dow Gardens Archive, Dow Gardens, Bugwood.org</i>	Fagus grandifolia		X	X	X	Copper, Yellow	Brown, Spring bloom, not showy
	38	European Beech	Fagus sylvatica		X	X	X	Copper	Brown, Spring bloom, not showy
	39	Ginkgo (Male only)	Ginkgo biloba	X			X	Yellow	Green, Spring bloom, not showy
		<a href="#">Thornless Honeylocust</a>							
	40	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Gleditsia triacanthos v. inermis	X	X		X	Copper, Yellow	Yellow, Fragrant, Spring bloom, not showy
		<a href="#">Kentucky Coffee Tree</a>							
	41	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Gymnocladus dioicus		X		X	Yellow	White, Fragrant, Spring bloom, not showy
		<a href="#">Black Walnut</a>							
	42	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Juglans nigra				X	No change	Catkins, not showy
		<a href="#">Sweet Gum</a>							
	43	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Liquidambar styraciflua	X	X		X	Orange, Purple, Red, Yellow	Green or Yellow, Spring bloom, not showy
		<a href="#">Tulip Poplar</a>							
44	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Liriodendron tulipifera		X			Golden yellow	Yellow, Fragrant, Spring bloom	
45	Amur Maackia	Maackia amurensis		X		X	No change	White, Summer bloom	
46	Osage-orange	Maclura pomifera				X	Yellow	White, Spring bloom, not showy	
		<a href="#">Cucumber Magnolia (Cucumbertree)</a>							
47	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Magnolia acuminata		X		X	Brown/Yellow	Yellow, Fragrant, Spring bloom, not showy	
		<a href="#">Dawn Redwood</a>							
48	<i>Photo by: Richard Carter, Valdosta State University, Bugwood.org</i>	Metasequoia glyptostroboides			X	X	Orange, Yellow	Inconspicuous, not showy	
		<a href="#">Black Gum</a>							
49	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Nyssa sylvatica	X	X		X	Orange, Red	White, Spring bloom, not showy	
		<a href="#">American Hophornbeam</a>							
50	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Ostrya virginiana		X	X	X	Yellow	Brown or Green, Summer bloom	
51	Amur Corktree	Phellodendron amurense	X	X		X	Copper, Yellow	Green/White, Spring bloom not showy	
		<a href="#">Sycamore</a>							
52	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Platanus occidentalis	X	X	X		Yellow	Red, Spring bloom, not showy	

Comprehensive Plant Characteristics and Environmental Tolerance								
Fruit	Insect/ Disease Prone	Drought Tolerance	Salt Tolerance	Light	pH Preference	Easy to Transplant	Native/ Introduced	Wildlife Value
3 winged nut; Brown	Minor	Moderate	Poor	Shade to full sun	3.6 to 6.5	Moderate	Native	Moderate
Triangular nut; Brown	Minor	Moderate	Poor	Some shade to full sun	3.6 to 6.5	Moderate	Introduced	Moderate
On male specimen, none	Minor	High	Moderate	Some shade to full sun	3.5 to 7	Yes	Introduced	Minimal
Pod; Brown/Purple	Moderate	High	Moderate	Some shade to full sun	4.5 to 7.5	Yes	Native	Minimal
Pod; Reddish-brown	Minor	High	Poor	Full sun	4.5 to 7.5	Yes	Native	Minimal
Nut; Green to Black	Moderate	High	Moderate	Full sun	3.5 to 7.5		Native	Moderate
Capsule; Green and Brown	Mild	Moderate	Moderate	Some shade to full sun	3.5 to 6.5	Yes	Native	Moderate
Cone-shaped; Brown/Yellow	Mild	Moderate	Poor	Full sun	3.5 to 7	Yes	Native	Moderate
Pod; Brown	Minor	High	Poor	Full sun	4.5 to 7.5	Yes	Introduced	Minimal
Syncarp of drupes; Yellow-green	Minor	High	Moderate	Full sun	4.5 to 7.5	Yes	Native	Moderate
Aggregate of follicles; Red	Minor	Moderate	Poor	Some shade to full sun	3.5 to 7	No	Native	Moderate
Cones; Brown	Minor	Moderate	Poor	Full sun	3.5 to 7	Yes	Introduced	Minimal
Drupes; Dark blue	Mild	High	Moderate	Some shade to full sun	3.5 to 7	No	Native	High
Nutlet; Green to brown	Mild	High	Poor	Shade to full sun	3.5 to 7	Yes	Native	Moderate
Drupes; Black	Minor	High	Moderate	Full sun	3.5 to 7.5	Yes	Introduced	High
Syncarp of achenes; Light brown	Moderate	High	Moderate	Full sun	3.5 to 7.5	Yes	Native	Minimal

## Ash Tree Replacement Guide

Family	#	Common Name	Scientific Name	Use			Fall Color	Flower
				Street	Shade	Screen		
Cherry	53	London Plane Tree	Platanus x acerifolia	X	X		Yellow	Red, Spring bloom, not showy
		<a href="#">Black Cherry</a>						
	54	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Prunus serotina		X		Yellow	White, Fragrant, Spring bloom
	55	Sargent Cherry	Prunus sargentii	X	X		Copper, Orange, Red, Yellow	Pink, Spring bloom
	56	Golden-larch	Pseudolarix amabilis (kaempferi)				Yellow	Yellow, Spring bloom, not showy
Oak		<a href="#">Callery Pear</a>						
	57	<i>Photo by: The Dow Gardens Archive, Dow Gardens, Bugwood.org</i>	Pyrus calleryana	X	X	X	Red, Purple, Orange	White, Spring bloom
		<a href="#">Bur Oak</a>						
	58	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Quercus macrocarpa	X	X		Copper, Yellow	Catkins, not showy
	59	Chinkapin Oak	Quercus muehlenbergii		X		Yellow	Catkins, not showy
		<a href="#">English Oak</a>						
	60	<i>Photo by: Haruta Ovidiu, University of Oradea, Bugwood.org</i>	Quercus robur	X	X		Copper	Catkins, not showy
	61	Northern Pin Oak	Quercus ellipsoidalis				Red	Catkins, not showy
		<a href="#">Northern Red Oak</a>						
	62	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Quercus rubra (borealis)	X	X		Red	Catkins, not showy
		<a href="#">Pin Oak</a>						
	63	<i>Photo by: Chris Evans, River to River CWMA, Bugwood.org</i>	Quercus palustris		X	X	Copper, Red	Catkins, not showy
		<a href="#">Sawtooth Oak</a>						
	64	<i>Photo by: USDA NRCS Archive, USDA NRCS, Bugwood.org</i>	Quercus acutissima	X	X		Yellow	Catkins, not showy
		<a href="#">Scarlet Oak</a>						
	65	<i>Photo by: Chris Evans, River to River CWMA, Bugwood.org</i>	Quercus coccinea	X	X		Red	Catkins, not showy
	66	Schumard Oak	Quercus shumardii	X	X		Orange, Red	Catkins, not showy
		<a href="#">Shingle Oak</a>						
	67	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Quercus imbricaria	X	X		Red, Yellow	Catkins, not showy
		<a href="#">Swamp White Oak</a>						
	68	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Quercus bicolor		X		Copper, Red, Yellow	Catkins, not showy
		<a href="#">White Oak</a>						

Comprehensive Plant Characteristics and Management Guide								
Fruit	Insect/ Disease Prone	Drought Tolerance	Salt Tolerance	Light	pH Preference	Easy to Transplant	Native/ Introduced	Wildlife Value
Syncarp of achenes; Light brown	Moderate	High	Moderate	Full sun	3.5 to 7.5	Yes	Introduced	Minimal
Drupe; Purple-red	Minor	High	Moderate	Some shade to full sun	3.5 to 7.5	Yes	Native	High
Drupe; Black, Purple, or Red	Minor	High	Moderate	Full sun	3.5 to 7	Yes	Introduced	Moderate
Cones; Purple immature, Golden-brown mature	Minor	Moderate		Full sun	3.5 to 6.5	Yes	Introduced	Minimal
Pome; Brown/Tan	Mild	High	Moderate	Full sun	3.5 to 7	Yes	Introduced	High
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 7.5	No	Native	Moderate
Acorn; Brown	Moderate	High	Poor	Full sun	3.5 to 7	Moderate	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 7	Moderate	Introduced	Moderate
Acorn; Brown	Moderate	Moderate	Moderate	Full sun	3.5 to 6.5	Moderate	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 7	Yes	Native	Moderate
Acorn; Brown	Moderate	Moderate	Poor	Full sun	3.5 to 6	Yes	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 6.5	Yes	Introduced	Moderate
Acorn; Brown	Moderate	Moderate	Moderate	Full sun	3.5 to 6.5	Moderate	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 7	Yes	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 7.5	Moderate	Native	Moderate
Acorn; Brown	Moderate	Moderate	Poor	Some shade to full sun	3.5 to 7.5	Moderate	Native	Moderate



## Ash Tree Replacement Guide

Family	#	Common Name	Scientific Name	Street	Shade	Use Screen	Specimen	Fall Color	Flower
Linden	69	<i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Quercus alba		X		X	Red	Catkins, not showy
	70	Willow Oak	Quercus phellos	X	X			Yellow	Catkins, not showy
	71	<a href="#">Black Locust</a> <i>Photo by: Richard Old, XID Services, Inc., Bugwood.org</i>	Robinia pseudoacacia		X			Yellow	White, Fragrant, Spring bloom
	72	Japanese Pagoda Tree	Sophora japonica	X	X		X	Yellow	White/Yellow, Summer Bloom
	73	Bald Cypress	Taxodium distichum	X	X	X	X	Copper, Yellow	Inconspicuous, not showy
	74	<a href="#">American Linden</a> <i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Tilia americana		X	X	X	Yellow	Green/Yellow, Fragrant, Summer bloom
	75	Crimean Linden	Tilia x euchlora		X		X	Yellow	Yellow, Fragrant, Summer bloom
	76	<a href="#">Littleleaf Linden</a> <i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Tilia cordata		X		X	Yellow	Yellow, Fragrant, Summer bloom
	77	<a href="#">Silver Linden</a> <i>Photo by: Richard Webb, Self-employed horticulturist, Bugwood.org</i>	Tilia tomentosa		X	X	X	Yellow	Yellow, Fragrant, Summer bloom
	78	'Commendation' Elm	Ulmus carpinifolia 'Commendation'	X	X			Yellow	Inconspicuous, not showy
Elm	79	'Frontier' Elm	Ulmus parvifolia 'Frontier'	X	X			Red	Green, Fall bloom, not showy
	80	'New Horizon' Elm	Ulmus carpinifolia 'New Horizon'	X	X			Yellow	Inconspicuous, not showy
	81	Accolade Elm	Ulmus japonica x wilsoniana 'Morton'	X	X			Yellow	Red, Spring bloom
	82	Japanese Zelkova	Zelkova serrata	X	X			Copper, Orange, Red, Yellow	Inconspicuous, not showy
Disease - <b>Minor:</b> specimen has few potential issues that are of little concern. <b>Mild:</b> specimen has multiple issues of concern, but are generally not detrimental to long term health. <b>Moderate:</b> multiple issues of concern, some may be detrimental to long term health.									
Tolerance - <b>Poor:</b> very low tolerance, avoid planting specimen in these conditions. <b>Moderate:</b> specimen can withstand the condition temporarily, but will show adverse effects. <b>Good:</b> specimen can adequately handle the conditions, but may show some adverse effects. <b>High:</b> specimen can handle the conditions without any signs of adverse effects.						Wildlife Value - <b>Minimal:</b> specimen does not attract much, if any, wildlife. <b>Moderate:</b> specimen attracts some wildlife. <b>High:</b> specimen attracts many types of wildlife.			

Comprehensive Plant Characteristics and Management Guide								
Fruit	Insect/ Disease Prone	Drought Tolerance	Salt Tolerance	Light	pH Preference	Easy to Transplant	Native/ Introduced	Wildlife Value
Acorn; Brown	Moderate	Moderate	Moderate	Some shade to full sun	3.5 to 7.5	Moderate	Native	Moderate
Acorn; Brown	Moderate	High	Moderate	Full sun	3.5 to 6.5	Yes	Native	Moderate
Pod; Black/Red	Minor	High	Moderate	Some shade to full sun	4.5 to 7.5	Yes	Native	High
Pod; Brown/Yellow	Mild	High	Moderate	Full sun	4.5 to 7.5	Yes	Introduced	Minimal
Cones; Brown/Green	Minor	High	Moderate	Full sun	3.5 to 7	Yes	Native	Moderate
Nutlet; Tan	Minor	Moderate	Poor	Some shade to full sun	4.5 to 7.5	Yes	Native	Minimal
Nutlet; Tan	Mild	Moderate	Poor	Some shade to full sun	4.5 to 7.5	Yes	Introduced	Minimal
Nutlet; Tan	Mild	Moderate	Poor	Some shade to full sun	4.5 to 7.5	Yes	Introduced	Minimal
Nutlet; Tan	Minor	Moderate	Poor	Some shade to full sun	4.5 to 7.5	Yes	Introduced	Minimal
One-winged Samara; Green-yellow	Mild	Good	Moderate	Some shade to full sun	4 to 7	Yes	Introduced	Minimal
Samara; Brown	Minor	High	Moderate	Some shade to full sun	3.5 to 7.5	Yes	Introduced	Minimal
One-winged Samara; Green-yellow	Mild	Good	Moderate	Some shade to full sun	4 to 7	Yes	Introduced	Minimal
One-winged Samara; Green-yellow	Minor	Good	Moderate	Full sun	6 to 7.5	Yes	Introduced	Minimal
Drupe	Minor	High	Moderate	Full sun	3.5 to 7	Yes	Introduced	Minimal