

## Appendix 1 - Native Riparian Tree/Shrub Plant Selection

Common/ Scientific Name	Region	Hardi ness Zone	Soil pH	Flood Tolerance	Height(ft)	Shade Tolerance	Wildlife Value	Economic Value
Red maple <i>Acer rubrum</i>	P, R, A	3a	4.5-6.5	tolerant	75-100	tolerant	food source-fruits and young shoots	used in furniture, flooring and grown as an ornamental
+Silver maple <i>A. saccharinum</i>	P, R, A	3b	5.5-6.5	tolerant	75-100	intermediate	food source - seeds and young twigs	
Sugar maple <i>A. saccharum</i>	R, A	3a	6.0-7.5	intolerant	75-100	very tolerant	food source-seeds and twigs	important lumber source and maple sugar source
Shadbush <i>Amelanchier arborea (laevis)</i>	P, R, A	4,5,6		tolerant	15-20	very tolerant	food source-fruit	
*Pawpaw <i>Asimina triloba</i>	P, R, A	5b	6.0-8.0	intolerant	20-35	tolerant	food source-fruit	
*Yellow birch <i>Betula alleghaniensis</i>	P, R, A			tolerant	60-70	tolerant	moderate value to wildlife - seeds	important source of hardwood lumber
Black (Sweet) birch <i>B. lenta</i>	R, A	3b	4.5-5.0	intolerant	50-75	intermediate	food source - catkins, buds, seeds, and twigs	lumber and fuel source
+Hornbeam <i>Carpinus caroliniana</i>	P, R, A	2	6.0-7.5	intolerant	35-50	very tolerant	minimal value, food source seeds, buds, catkins and twigs	
*Bitternut hickory <i>Carya cordiformis</i>	P, R, A	4a	5.6-8.0	intermediate	75-100	intermediate	bitter nuts not favored as much as other hickories	high value for fuel
Shagbark hickory <i>C. ovata</i>	P, R, A	4a	6.0-6.5	intolerant	75-100	intermediate	food source-twigs and nuts	one of the best commercial hickories-lumber source
Redbud <i>Cercis canadensis</i>	P, R	5a	6.0-8.0	intolerant	20-35	tolerant	minimal food source-seeds	grown as an ornamental
Hackberry <i>Celtis occidentalis</i>	P, R	3a	6.5-8.0	intermediate	75-100	intermediate	food source-fruits and twigs	little importance as timber producer
Flowering dogwood <i>Cornus florida</i>	R, A	5b	5.5-6.5	very intolerant	35-50		food source-fruit	Only dogwood important for its wood
Persimmon <i>Diospyros virginiana</i>	P	5a	6.0-6.5	intermediate	50-75	intolerant	food source-fruit	yields an inferior grade of lumber

+ Short Lived

Trees < 100 years   Shrubs < 20 years

\* May be hard to find in a nursery.

Common/ Scientific Name	Region	Hardi ness Zone	Soil pH	Flood Tolerance	Height(ft)	Shade Tolerance	Wildlife Value	Economic Value
American beech <i>Fagus grandifolia</i>	P, R, A	3b	5.5-6.5	very intolerant	75-100	very tolerant	food source-fruit	wood not durable, but used in some furniture
White ash <i>Fraxinus americana</i>	P, R, A	3b	6.0-7.5	intermediate	75-100	tolerant	food source-fruit	wood used for many purposes
*Black ash <i>F. nigra</i>	R, A	2	4.5-6.5	very tolerant	50-75	intolerant	food source-fruit	wood used for baskets, furniture
Red ash <i>F. pennsylvanica</i>	P, R	2	6.0-7.5	tolerant	50-75	intolerant	minimal food source-twigs and fruits	important lumber tree
Honey-locust <i>Gleditsia triacanthos</i>	R, A	4b	6.0-7.5	intermediate	50-75	intolerant	food source - seeds and pods	not widely used as lumber source a thornless variety used for street and shade tree
*Kentucky coffee-tree <i>Gymnocladus dioica</i>	A	5a	6.5-7.5	intermediate	75-100	intolerant	low appeal to wildlife	wood used for various purposes, though not abundant
Black walnut <i>Juglans nigra</i>	P, R	4b	6.5-8.0	intermediate	75-100	intolerant	food source-twigs and nuts	very important lumber tree
Sweet-gum <i>Liquidambar styraciflua</i>	P	6	6.0-6.5	tolerant	75-100	intolerant	low value to wildlife	wood used as veneer in furniture
Tuliptree <i>Liriodendron tulipifera</i>	P, R, A	5a	6.0-6.5	intermediate	75-100	intermediate	food source-fruits	very valuable hardwood species
Sweet-bay magnolia <i>Magnolia virginiana</i>	P	6a	5.0-6.5	very tolerant	12-20	tolerant	food source-seeds	grown as an ornamental
Black-gum <i>Nyssa sylvatica</i>	P, R, A	5a	6.0-6.5	intermediate	50-75	intolerant	food source-fruits and twigs	lumber source
*+Hop-hornbeam <i>Ostrya virginiana</i>	P, R	5a	6.0-8.0	very intolerant	35-50	very tolerant	food source-seeds	
Eastern white pine <i>Pinus strobus</i>	P, R, A	3b	4.5-6.5	intolerant	75-100	intermediate	high value food source - needles and seeds	formerly a very valuable timber species - grown as an ornamental
Sycamore <i>Platanus occidentalis</i>	P, R, A	4a	6.5-8.0	intermediate	75-100	intermediate	moderate value for cover and food source - fruits	very limited commercial value

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*Eastern cottonwood <i>Populus deltoides</i>	P, A	3b	6.5-7.5	tolerant	75-100	intolerant	food source-seeds, twigs, buds	softwood used mostly for paper pulp
*Large-toothed aspen <i>P. grandidentata</i>	P, R, A	3a	5.0-6.5	intolerant	50-75	very intolerant	food source-seeds	wood is very valuable
Wild black cherry <i>Prunus serotina</i>	P, R, A	3b	6.0-7.5	very intolerant	50-75	intolerant	food source-fruits and twigs	excellent lumber tree
White oak <i>Quercus alba</i>	P, R, A	4a	6.0-7.5	intolerant	75-100	intermediate	food source-acorns and twigs	important lumber tree
Swamp white oak <i>Q. bicolor</i>	P, R	4a	6.0-6.5	tolerant	75-100	intermediate	food source-acorns and twigs	lumber occasionally used in general construction
*Chestnut oak <i>Q. montana</i>	P, R	5a	6.0-6.5	intolerant	50-75	intermediate	food source-acorns and twigs	lumber used for various uses
Pin oak <i>Q. palustris</i>	P, R, A	5a	5.5-6.5	tolerant	50-75	intolerant	food source-acorns and twigs	lumber often sold as white oak
*Willow oak <i>Q. phellos</i>	P	5,6	<6.0	tolerant	75-100	intermediate	food source-acorns and twigs	important lumber source
Northern red oak <i>Q. rubra</i>	P, R, A	5,6		intermediate	75-100	intermediate	medium value for nesting, food source	only willow of any commercial value
*Sandbar willow <i>Salix exigua</i>	P, R, A			very tolerant	15-20	very intolerant	food source-fruits and twigs	
+Black willow <i>S. nigra</i>	P, R, A	3a	7.5-8.0	very tolerant	35-50	very intolerant	food source-buds, fruit, and twigs	excellent for wicker baskets and furniture
Sassafras <i>Sassafras albidum</i>	P, R, A	5b	6.0-6.5	very intolerant	35-50	intolerant	food source-twigs and fruits	poor quality wood used occasionally
*American basswood <i>Tilia americana</i>	P, R, A	3a	6.5-7.5	intolerant	75-100	tolerant	food source-twigs and seeds	important timber tree and for paper pulp
Canada hemlock <i>Tsuga canadensis</i>	P, R, A	3b	4.5-6.5	intolerant	75-100	very tolerant	food source - seeds, twigs, needles and bark	poor quality wood used occasionally for pulp
*Red (Slippery) elm <i>Ulmus rubra</i>	P, R, A			tolerant	50-80	intermediate	food source - seeds and twigs	wood inferior to American Elm but used for furniture and paneling

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SMALL TREES/ SHRUBS	Region	Hardi ness Zone	Soil pH	Flood Tolerance	Height(ft)	Shade Tolerance	Wildlife Value	Economic Value
*Smooth alder <i>Alnus serrulata</i>	P, R, A	5a	5.5-7.5	very tolerant	12-20	very intolerant	food source-fruit	
Serviceberry <i>Amelanchier canadensis</i>	P, R, A	3a	6.0-6.5	intolerant	5-25	very tolerant	food source-fruit, twigs, and leaves	grown as an ornamental
Red chokeberry <i>Aronia arbutifolia</i>	P, R, A	4b	5.0-6.5	very tolerant	6-12	intermediate	very low wildlife value	
Black chokeberry <i>A. melanocarpa</i>	P, R, A	3a	5.0-6.5	very tolerant	3-6	intermediate	food source-seeds and twigs	
*Groundsel-bush <i>Baccharis halimifolia</i>	P	4a	7.0-8.5	very tolerant	6-12	very intolerant	little value to wildlife	
Buttonbush <i>Cephalanthus occidentalis</i>	P, R, A	4a	6.0-8.5	very tolerant	6-12	very intolerant	food source-fruit	
Fringe tree <i>Chionanthus virginicus</i>	P	5b	4.5-6.5	intolerant	20-35	very tolerant	food source-fruit	grown as an ornamental
Summersweet <i>Clethra alnifolia</i>	P	4a	4.5-6.5	very tolerant	6-12	tolerant	food source-fruits and twigs	grown as an ornamental
Silky dogwood <i>Cornus amomum</i>	P, R, A	4a	6.0-7.5	very tolerant	6-12	intolerant	food source-fruits	
Grey dogwood <i>C. racemosa</i>	P, R, A	3a	6.0-8.5	intermediate	6-12	tolerant		
Red-osier dogwood <i>C. sericea</i>	P, R, A	2	6.0-8.5	very tolerant	6-12	very intolerant	food source-fruits, buds, and twigs	
*Amer. hazelnut <i>Corylus americana</i>	P, R, A	3a	6.0-7.5	intolerant	6-12	tolerant	food source-nuts	
*Black huckleberry <i>Gaylussacia baccata</i>	P, R, A		< 6.0	intolerant	1-3		food source - fruits	
Witchhazel <i>Hamamelis virginiana</i>	P, R, A	5a	6.0-6.5	intolerant	20-35	very tolerant	low value to wildlife; leaves toxic to some animals	

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Inkberry <i>Ilex glabra</i>	P	4a	4.5-6.0	very tolerant	6-12	tolerant	high value for food source - fruits	
Winterberry <i>I. verticillata</i>	P, R, A	3b	4.5-6.0	very tolerant	6-12	intermediate	intermediate wildlife value	
Mountain laurel <i>Kalmia latifolia</i>	P, R, A	5a	4.5-6.0	intolerant	12-20	very tolerant	high value as food esp. for winter browse for deer	
Common spicebush <i>Lindera benzoin</i>	P, R, A	5a	4.5-6.5	intermediate	6-12	very tolerant	low value as food source - fruits	
Bayberry <i>Myrica pennsylvanica</i>	P, R	4b	5.0-6.5	very tolerant	6-12	intolerant	food source - fruits	
*Ninebark <i>Physocarpus opulifolius</i>	P, R, A	2	6.0-8.5	very tolerant	6-12	intolerant	food source-fruit	
Rosebay rhododendron <i>Rhododendron maximum</i>	P, R, A	3b	4.5-6.0	tolerant	20-35	intolerant	food source-buds and twigs (winter browse)	
*Swamp azalea <i>R. viscosum</i>	P	4a	4.0-6.0	very tolerant	6-12	intermediate		
Staghorn sumac <i>Rhus typhina</i>	P, R, A	3a	6.0-7.0	intolerant	35-50	very tolerant	food source-fruit	
*Swamp rose <i>Rosa palustris</i>	P, R, A		5.5 - 8.0	very tolerant	4-10		food source-fruit	
American elder <i>Sambucus canadensis</i>	P, R, A	3a	6.1-7.5	very tolerant	6-12	very tolerant	food source-fruit	
Meadowsweet <i>Spiraea latifolia</i>	P, A	3a	6.5-7.5	very tolerant	3-6	intermediate	food source-fruit and twigs	
Highbush blueberry <i>Vaccinium corymbosum</i>	P	4b	3.5-6.0	very tolerant	6-12	tolerant	food source-fruit	commercial food crop

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*Wither-rod <i>Viburnum cassinoides</i>	P, R, A	2	5.0-6.5	very tolerant	6-12	tolerant	food source - fruit	
Southern arrowwood <i>V. dentatum</i>	P	3a	5.0-6.5	tolerant	6-12	tolerant	food source-fruit	
Nannyberry <i>V. lentago</i>	P, A	2	6.0-7.5	intolerant	20-35	intermediate	food source - fruit & twigs	
Blackhaw <i>V. prunifolium</i>	P, R, A	3b	6.5-8.0	very intolerant	20-35	intolerant	food source - fruit	
*Northern arrowwood <i>V. regonitum</i>	P, R, A			tolerant	6-12	tolerant	food source - fruit	
Highbush cranberry <i>V. trilobum</i>	R	2	6.5-7.5	tolerant	6-12	very tolerant	food source - fruit	

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