

TOP KEYSTONE PLANTS FOR BIRDS IN THE NORTH CAROLINA PIEDMONT

These top keystone genera host the insect biomass that is essential for the ecosystem to function. Trees and large shrubs are the most important because of their greater leaf volume. Doug Tallamy, who developed the concept, has written that landscapes without a few species from these genera will have "failed food webs, even if the diversity of other plants is very high." In addition, caterpillars are one of the primary food sources needed for songbirds to raise their nestlings. Please see our website for more information about all the recommended plants for the Piedmont at <https://newhopebirdalliance.org/bird-friendly-certification/native-plants/>. Some of the other recommended plants listed there must be planted in addition to some keystone plants to provide all the necessary vegetative layers and provide plants that provide blooms for pollen and nectar throughout growing season. The source for finding keystone genera and lepidoptera numbers for our area is the National Wildlife Federation's Native Plant Finder at: <https://nativeplantfinder.nwf.org/>

Genus name	Common names of some of the species of that genus that are native to the Piedmont of NC	# of lepidoptera hosted by genus	Recommended for new plantings
Trees			
<i>Quercus</i>	native Oaks (White, Willow, Red, Overcup, Scarlet, Shumard)	488	R
<i>Prunus</i>	Black cherry	362	R
<i>Salix</i>	Black willow	279	R
<i>Betula</i>	River birch	299	R
<i>Acer</i>	Maples (Red, Southern Sugar, Chalk)	254	R
<i>Malus</i>	Flowering crabapple	245	R
<i>Carya</i>	Hickories	242	R
<i>Pinus</i>	Pines (Shortleaf, Virginia, Longleaf)	232	R
<i>Alnus</i>	Tag Alder	168	R
<i>Ulmus</i>	Winged Elm	171	
<i>Crataegus</i>	Hawthorns	138	R
<i>Juglans</i>	Black walnut	136	
<i>Fraxinus</i>	Ash	121	
<i>Fagus</i>	American beech	124	R
<i>Corylus</i>	American hazelnut	104	R
<i>Cornus</i>	native Dogwoods (Flowering, Silky)	101	R
<i>Amelanchier</i>	Serviceberries (Eastern, Downy)	94	R
<i>Ostrya</i>	American Hop-hornbeam	82	R
<i>Carpinus</i>	Ironwood	71	R
<i>Diospyros</i>	American persimmon, Common persimmon	55	R
<i>Celtis</i>	Hackberry and dwarf Hackberry	47	R
<i>Ilex</i>	American Holly	44	R
Shrubs			
<i>Prunus</i>	native Plums (Wild, Chickasaw)	362	R
<i>Vaccinium</i>	native Blueberries (Sparkleberry, Smooth highbush, Deerberry)	237	R
<i>Rubus</i>	Blackberry	140	R
<i>Rosa</i>	native Roses (Carolina/Pasture, Swamp)	105	R
<i>Viburnum</i>	Viburnums (Blackhaw, Southern arrowwood, Maple-leaf, Possumhaw, Downy arrowwood)	99	R
<i>Hamamelis</i>	Common witch hazel	68	R
<i>Rhododendron</i>	native Azaleas (Sweet, Flame, Swamp, Pinxterflower)	53	R
<i>Rhus</i>	Sumacs (Smooth, Shining)	53	R
<i>Ilex</i>	native Hollies (American, Winterberry, Inkberry, Deciduous)	44	R
Perennial Flowers			
<i>Solidago</i>	Goldenrods (Rough, Wreath)	102	R
<i>Helianthus</i>	native Sunflowers (Appalachian, Woodland, Swamp)	64	R
Vines			
<i>Vitis</i>	native Grapes (Muscadine, Fox)	67	R