Keystone Plants

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This time of year, many gardeners are planning their gardens for next season. Many opt for native plants as they better support local wildlife. However, not all native plants impact the environment equally. Dr. Doug Tallamy's research indicates that a mere 14% of native plants support 90% of butterfly and moth species. Additionally, 96% of terrestrial birds rely on insects supported by these plants, making them vital to bird populations. These native plants are called Keystone plants.

Keystone plants are native species that play a crucial role in maintaining the health and stability of ecosystems. They are named for the keystone in an arch, which holds the structure together; similarly, these plants support a wide variety of other organisms, including insects, birds, and mammals. Keystone plants provide essential resources, such as food, shelter, and habitat for numerous species throughout their life cycles, and are significant for pollinators and wildlife.

While most trees are keystone plants (oaks, maples, pines, and hickories), various wildflowers, such as asters, sunflowers, and goldenrods, as well as blueberries and willows, are keystone plants. They are not only crucial for local ecosystems but also contribute to biodiversity and ecological stability. By planting keystone species in gardens and landscapes, gardeners can significantly enhance the local food web and support declining populations of pollinators and birds.

Scientific Name	Common Name		
Vaccinium corymbosum, Vaccinium pallidum, Vaccinium stamineum	Northern Highbush Blueberry, Blue Ridge Blueberry, Deerberry	217	14
Solix humilis	Prairie willow	289	14
Solidago caesia var. caesia, Solidago gigantea, Solidago juncea, Solidago nemoralis, Solidago odora, Solidago pinetorum, Solidago puberula, Solidago rugosa	Blue-stemmed Goldenrod, Giant Goldenrod, Early Goldenrod, Gray Goldenrod, Sweet Goldenrod, Pineywoods Goldenrod, Downy Goldenrod, Rough-stemmed or Wrinkle-leaf Goldenrod	104	42
Symphyotrichum concolor, Symphyotrichum cordifolium, Symphyotrichum grandiflorum, Symphyotrichum novae-angliae, Symphyotrichum novi-belgii	Eastern Silvery Aster, Heart-leaved Aster or Blue Wood Aster, Large-flowered Aster, New England Aster, New York Aster	100	33
Helianthus angustifolius, Helianthus decapetalus, Helianthus divaricatus, Helianthus tuberosus	Narrow-leaved Sunflower, Ten-petaled Sunflower, Woodland Sunflower, Jerusalem Artichoke	66	50
Rudbeckia fulgida, Rudbeckia hirta, Rudbeckia laciniata	Orange Coneflower, Black-eyed Susan, Cut-leaf Cornflower	20	29
Heterotheca subaxillaris	Camphorweed		24
Grindelia squarrosa	Curlycup gumweed		31
Chrysopsis mariana	Maryland golden aster	5	20
Coreopsis lanceolata, Coreopsis tripteris, Coreopsis verticillata	Lanceleaf coreopsis, Tall Coreopsis, Threadleaf Coreopsis	7	22
Bidens cernua	Nodding Beggar-ticks		15
Verbesina alternifolia	Wingstem	20	17

The table lists plants native to our area from the Eastern Temperate Forest Region Keystone Plant List. It shows how many butterfly/moth larvae and specialist bee species each plant genus supports. Adding these plants to your garden will contribute to a more sustainable, resilient environment.

References:

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