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Wellhead Protection Plan

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Pocket Field Guide to Kentucky's Wildflowers and Native Grasses



Bee Balm,

What is a wildflower?

Native wildflowers are defined as being herbaceous flowering plants, excluding sedges and grasses. A native species is one that was growing in Kentucky prior to European settlement and has adapted to certain habitats in response to specific climatic, geologic, and topographic variables.

In order to make it easier for the amateur to identify and select plants for garden planning purposes, only the showy wildflowers were selected to be in this guide. In addition, to further narrow the list, (as this guide is not intended to be used as a reference book for professionals), the wildflowers selected were listed by various nurseries as readily available live plants in the Louisville, Kentucky area. By selecting native plants that flourish in the Louisville/Jefferson County area, native plants that do not thrive in this environment were omitted.

Many wildflowers have the word "weed" as a part of their name, but are not considered to be a pest to the wildflower/wildlife enthusiast. For example, ironweed, a very showy, native wildflower is considered a weed by agriculturalists, because livestock will not eat it, and the plant may become invasive in plowed or otherwise disturbed fields. However, for the wildflower/wildlife enthusiast, the plant is showy, fairly easy to cultivate, and therefore a desirable wildflower.

Conserving wildflowers

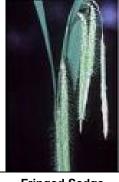
Collecting wildflowers from their native habitat is harmful by eliminating plants from their natural habitat, where the population falls below the minimum required to sustain the plant. With the introduction of nonnative species, which are less edible, wild animals eat or trample the wildflowers until the population is diminished to where it can not continue to survive in its natural



The Ginseng plant has become very rare in Eastern Kentucky due to over collecting and replacement by invasive non-native plants that are less nutritious for wildlife.



Frank's Sedge <u>Carex frankii</u> Attraction –Butterfly, Moth Comment:2'-2.5', Wildlife



Fringed Sedge
<u>Carex crinita</u>

Attraction –Butterfly, Moth
Comment:2'-5', Wildlife



Hop-like Sedge <u>Carex Iupuliformis</u> Attraction –Butterfly, Moth Comment:2'-3', Wildlife



Sallow Sedge
<u>Carex Iurida</u>

Attraction –Butterfly, Moth
Comment:2'-5', Wildlife



Sideoats Gamma
<u>Bouteloua curtipendula</u>

Attraction –Butterfly, Moth
Comment:1'-1.5', Wildlife



Soft or Common Rush
<u>Juncus effusus</u>
Attraction –Butterfly, Moth
Comment:1'-1.5', Wildlife



Switchgrass
<u>Panicum Virgatum</u>

Attraction –Butterfly, Moth
Comment:3'-5', Wildlife



Virginia Wild Rye <u>Elymus virginicus</u> Attraction –Butterfly, Moth Comment:2'-4', Wildlife



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Dark Green Bulrush
<u>Scirpus atrovirens</u>

Attraction – Butterfly, Moth
Comment: 3'-5', Wildlife



Grass

Tripsacum dactyloides

Attraction -- Butterfly, Moth
Comment:6'-8', Wildlife



Giant Plume Grass <u>Saccharum giganteum</u> Attraction -- Butterfly, Moth <u>Comment: 10+</u>



Indian Grass, Woolgrass Sorghastrum nutans Attraction -- Butterfly, Moth Comment: 5'-6'. Wildlife



June Grass <u>Koeleria cristata</u> Attraction -- Butterfly, Moth Comment:2'+, Wildlife



Melic Grass
<u>Melica nitens</u>

Attraction -- Butterfly, Moth
Comment:2'+, Wildlife



Prairie Dropseed
Sporobolus heterolepsis
Attraction -- Butterfly, Moth
Comment: 2'-3', Wildlife



River Oats

<u>Chasmanthium latifolium</u>

Attraction -- Butterfly, Moth
Comment: 2'-3', Wildlife



Fox Sedge
<u>Carex vulpinoidea</u>

Attraction -- Butterfly, Moth
Comment: 2'-3', Wildlife

habitat. This also increases the likelihood that the area will be invaded by a non-native plant.

In addition, there is no assurance that moving a plant from its natural environment will enable it to survive in other areas. For example, most orchids have a special relationship with fungi in the soil. When these plants are dug up and removed from their native soil, and transplanted into a different soil, the fungi does not exist that enable the plant to survive. Other plants may have exacting soil, acidic, basic, or other requirements that a different area may not meet. For example, azaleas and native rhododendrons require a sandy, well-drained, acid soil. These plants will not live in the limestone regions unless the soil environment is modified to meet their needs.

Lastly, by adding wildflowers or other plants collected from the wild to your yard, you can bring in diseases, fungi, and other pathogens that could harm other plants in your landscape.

Purchase native plants from a reputable nursery or greenhouse that grows their own plants from seed. Or, you may order the seed and grow the plants from seed yourself. Either way, you can make sure that the native plant you wish to use has not been improperly collected, and will not add unwanted elements to your yard.



There are many nurseries in Kentucky that specialize in native plants.

Taxonomy

For the amateur, taxonomy of plants can be a nightmare of unfamiliar Latin names that almost, but not quite, make sense. Taxonomically, plants are named according to genus and species, with specific variations within the species defined. For the amateur, determining the correct taxonomic classification can be confusing and frustrating.

In general, common names vary from region to region and are not accurate. For this reason, it is always wise to order plants and/or seeds by their taxonomic name, i.e. the genus and species.

Many guides are available that show garden designs, with the various plants used in the design listed by genus and species. Page $\bf 3$

When comparing the genus and species of the plants used in the pre-designed gardens, it is likely that the plants listed will not be readily available to someone living outside the particular region for which the garden was designed.

However, in designing your own garden, you can use the design presented, and research the taxonomic classification and the plant's particular characteristics, substituting plants available in your region that have the same genus, if not the same species. Be sure to note the characteristics of the plants you are using as substitutes, so that they more closely match the original design. You can always ask your local Cooperative Extension Agent or university for more help.

Sources of Information

A variety of sources were used to determine the types of native flowering plants to list in this selection, to confirm plant characteristics, and to check taxonomic classification. First, to select the plants to be spotlighted, the listings from several "local" companies, (as well as state and local agencies), of native plants available for sale as live plants were used. This provided a base for the general guide.



Daisy Fleabane, a common KY wildflower. Photo by Ken Thomas.

There are many companies in Kentucky that sell native plants to the general public, as live plants or as seed. Some of the companies will deliver live plants, or the customer may visit the green house and choose live plants from the nursery for use in native plant gardens. Other areas of the state and other states also have companies that specialize in the sale of native plants, either as seeds or live plants, which specialize in plants for that particular region. The plants listed here are readily available as live plants to the population of Louisville, Kentucky and the

rain gardens, or in dramatic groupings, are the native grasses found in Kentucky. These plants are being crowded out by many invasive plants or grasses, or are being eaten by the wildlife to endangerment because these plants are more nutritious and filling than the invasive species.

Many of the grasses are used in native meadow or prairie seed mixes, but may also be used as decorative plots in the homeowner's lawn, or as single plants or groupings to add variety to a native plant garden. There are many nurseries specializing in native wildflowers or plants, while others may be ordered in bulk in meadow mixes. Most of the grasses are also native to other states.



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Kentucky Bluegrass, Bermuda Grass, Orchard Grass, Redtop Grass, and Timothy Grass). Native ragweed is one native plant which is highly allergic.

Will Native Plants Attract Pests?

Unsecured garbage is the main attraction for most pests, such as rodents and raccoons. Native landscaping is not. Native plants will attract butterflies and dragonflies, birds, bats, frogs and salamanders, as well as insects that provide shelter and food for the wildlife. In return, the wildlife will help control pesky bugs such as mosquitoes. Canada Geese, considered to be a pest in some areas, prefer short turf grass to taller native grasses.



Kentucky's Native Grasses

Although it may be hard to imagine, Kentucky was once covered by about 3 million acres of native grasslands. The native grasses were critical in supporting the large and diverse wildlife populations present in pre-settlement days. However, with the arrival of Europeans came an intensification and modernization of agriculture that has now resulted in a landscape dominated by fescue. Research has shown that fescue provides very poor habitat for wildlife, and creates problems for livestock as well. Eradication of fescue in 'wild' areas and restoration of native grasses is beneficial for both wildlife enthusiasts and farmers alike.

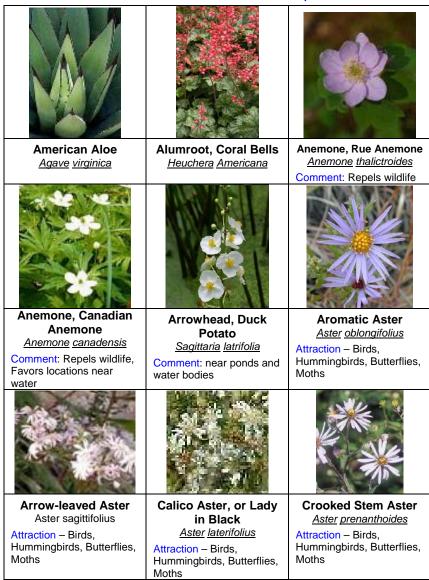
Prairie grasses, native to Kentucky and other temperate-climate states, grew densely and tall, sometimes so thick that pioneer children would become lost forever in the undulating sea of grass that in good years topped a horse's withers.

In addition to providing food for wildlife, other decorative or useful plants to use in the native plantings, including meadows,

surrounding area. They may also be available in other states, or other regions of Kentucky.

This pocket guide is designed to help the homeowner select native plants for use in a home garden, and is not a guide for other professionals.

Pocket Guide to Some Common Kentucky Wildflowers



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Golden Aster <u>Chrysopsis mariana</u> Attraction – Birds, Butterflies, Moths



New England Aster <u>Aster novae-angliae</u> Attraction – Birds, Hummingbirds, Butterflies, Moths



Short's Aster <u>Aster shortii</u> Attraction – Birds, Hummingbirds, Butterflies, Moths



Silky Aster <u>Aster sericeus</u> Attraction -- - Birds, Butterflies, Moths



Aster azureus

Attraction – Birds,
Butterflies, Moths



Stokes Aster

<u>Aster laevis</u>

Attraction -- Birds,

Smooth Blue Aster,



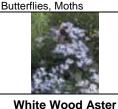
Stiff Aster

<u>Aster linarifolius, lonactus</u>

linarifolius



Swamp Aster <u>Aster puniceus</u> Attraction – Birds, Butterflies, Moths



Aster divaricata, Eurybia divaricata

Attraction -- Birds,
Butterflies, Moths



Willow Aster
<u>Aster praealtus</u>

Attraction – Birds,
Hummingbirds, Butterflies,



White Baneberry
Acrtaea pachypoda
Comment: White berries
slightly toxic



Foxglove
Beardtongue
Penstemon digitalis
Attraction -- Birds,
Hummingbirds, Butterflies,
Moths

Frequently Asked Questions:

Seeding vs. Transplants - Sowing seeds is less expensive than landscaping with transplants. However, native plants grow slowly from seed, often not blooming until the third year. The first few years are spent growing long, extensive root systems. Weeds grow quickly, so don't be discouraged.

Transplants grow more quickly than seeds, often blooming in the first year. Make sure your transplants come from a reputable nursery and not from the wild. Keep your costs down by buying the smallest plants available, but remember to be patient. Larger plants will bloom more quickly, as a rule.



Questions to Ask When Buying Native Plants

- Are the native plants locally grown or shipped in? Native plants that are locally grown are best suited to the regional climatic conditions
- 2. Have the seeds been propagated in a nursery or collected from the wild? Seeds from the wild need to be protected so that we do not deplete our natural areas.
- 3. Will the native plants grow best in sun, shade, or a combination? Survey your plot carefully.
- 4. What soil type is required? Is it sandy, loamy, wet or dry?
- 5. Which native plants grow well together? Call your local nature center or Heritage Program Office to find out about plant communities.
- 6. How long will it take seeds to germinate or plants to mature? The key to growing native plants is patience.

Will Native Plants Aggravate Allergies? - Many native flowers, such as asters, goldenrods, and milkweeds, are insect-pollinated, not wind-pollinated, and do not cause allergies. It is the pollen in the air that triggers allergic reactions. The plants responsible for many pollen allergens are not native to the Midwest, (e.g.

Moths



Wild Pink

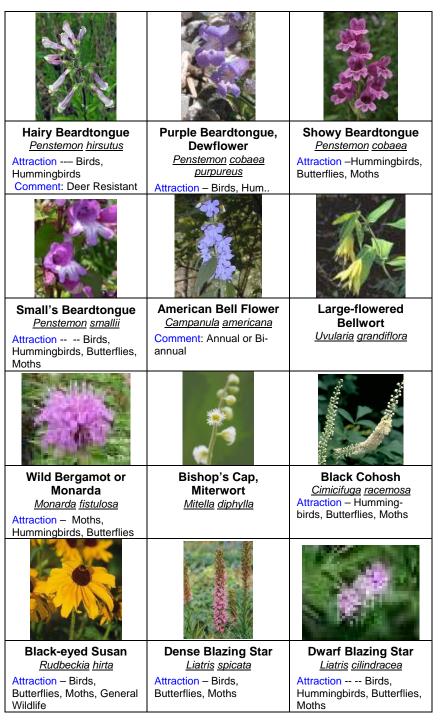
Silene caroliniana

Attraction - Moths,

Butterflies, Hummingbirds

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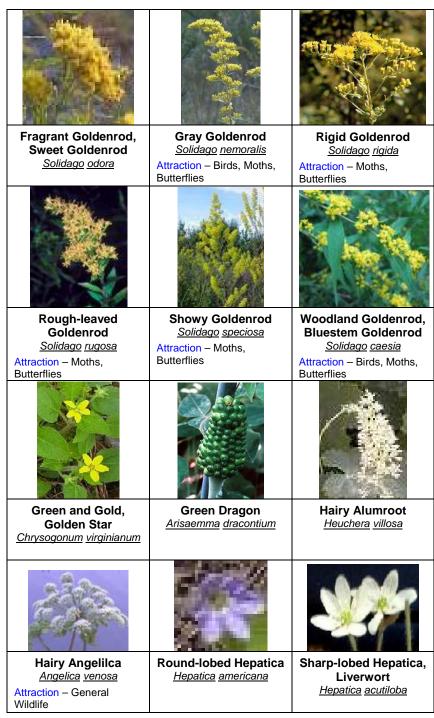








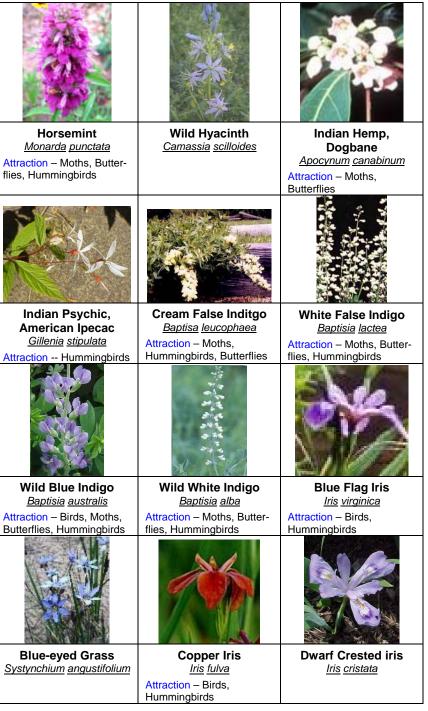
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