United States Department of Agriculture

Monarch Habitat Information Sheet

Missouri Information Sheet IS-MO-643Monarch

Natural Resources Conservation Service (NRCS) Missouri Conservation Practice 643
November 2015

Designing Monarch Butterfly Habitat

PLANTING SPECIFICATIONS:

Timing

Planting a wildflower mix containing milkweeds will provide habitat for larval monarchs as well as adult monarchs during migration. These seedings will be completed in late fall and winter to expose seed to cold, moist soil conditions necessary for seed germination. See the Missouri NRCS Native Forb Information Sheet (IS-MO643Native Forb) for details on planting dates.

Planting Depth and Methods

Proper planting depth for native forbs is approximately 2.5 times the seed thickness using a no-till drill. See the Missouri NRCS Native Forb Information Sheet (IS-MO643Native Forb) for details on planting depths and methods.

Seeding Rate

Sixty percent of the total number of forbs must come from the Preferred Forbs for Monarchs list (Table 1) at the rate of 5 PLS pounds/acre (pollinator) with a minimum of 9 species, with annuals and biennials not to exceed 10% of the mix. No single species shall exceed 15% or less than 1% of the mix. Additionally, a minimum of three species blooming in each season (spring, summer, and fall) is required (see Table 2). A minimum of 3% of the mix will be comprised of milkweed seed. Milkweeds are the only larval food source for the monarch butterfly. Two thirds of this milkweed seed should be common milkweed (*Asclepias syriaca*). Common milkweed is native to this region, is readily established, and is one of the most widely available milkweed species. The remaining third of the milkweed seeds should be butterfly milkweed (*Asclepias tuberosa*) on well drained upland soils or swamp milkweed (*Asclepias incarnata*) on richer, less well drained soils. Additional forbs and milkweed species may be used from Table 2, depending on availability, site conditions, and necessity to meet the requirements of the plantings listed above.

MANAGEMENT

See the Missouri NRCS Native Forb Information Sheet (IS-MO643Native Forb) for details on management of new plantings and existing monarch habitat. Monarch habitat may be managed by one or a combination of the following methods: *Prescribed Fire, Mechanical Disturbance,* or *Spraying.*

Recommended frequency of management for all methods:

Management actions shall occur prior to arrival of most of the migrating monarchs (*May 15th*) or after most adults begin the fall migration (*October 1st*) when most monarchs have departed from the upper Midwest states for their fall migration.

Managing the entire patch at once can severely impact monarchs as this will remove all available habitat for a period of time. Therefore, where feasible, management activities should not occur on more than 1/3 of the monarch habitat each year over a three year period.

Prescribed Burning

Monarch habitat may be managed through periodic burning. Prescribed burns can allow germination of seed bearing annuals, increase plant species diversity, control unwanted woody vegetation, and open up the stand for native pollinator nest sites.

Recommended Timing

Avoid burns after May 15th to avoid disturbing monarch larvae or eggs present on site.
Early or late in the day is preferred.
Fall (October-Early November) burns favor monarch and pollinator habitat.
See NRCS Practice Standard 338 – Prescribed Burning for additional recommendations.

Mechanical Disturbance includes mowing or light disking.

Recommended Timing:

Fall mechanical disturbance (October – early November) is preferred when nectaring flowers have died back or are dormant. Disturbance at this time will also minimize disruption to nesting bumble bees and other beneficial insects.

Recommendations applicable to both methods:
Reduce speed to 8 mph or less to allow wildlife time to escape.
Use a flushing bar where possible to move wildlife out of the path of machinery.
Avoid disturbance at night when nesting and roosting birds are less likely to flush.

1. Light Disking/Harrowing

Light disking or harrowing (2-4" deep) of existing stands can increase the amount of open ground and encourage a diverse plant community of annuals and perennials including common milkweed.

2. Mowing:

Mowing should be done in conjunction with another management practice such as burning, disking, or spraying and not as a stand-alone practice.

Use a rotary or flail mower to evenly distribute grass clippings. Do not swath, as the windrows will smother seeding. Clippings should be baled and removed to accommodate forb germination. Mow no lower than 8-12 inches to minimize mortality and leave adequate residual cover.

Spraying

Use approved herbicides as necessary to control noxious weeds and undesirable plants during the establishment period. A grass selective herbicide treatment may be needed to deter encroachment of non-native cool-season grasses. Avoid using broad spectrum herbicides.

MONITORING

Monitor your planting after management actions are completed to determine whether the planting is maximizing benefits for monarchs. The "Monarch Breeding Habitat Assessment Tool" (http://monarchjointventure.org/our-work/monarch-breeding-habitat-assessment-tool) developed by the University of Minnesota Monarch Lab in partnership with the Monarch Joint Venture, is an excellent tool for assessing the results of post-establishment management actions.

For additional information go to go to monarch watch and journey north. Native milkweed plants are an essential feature of monarch breeding habitat. Estimate the abundance and diversity of milkweeds on site. Five hundred or more milkweed plants per acre (in widely dispersed clumps) comprised of 3 or more species are considered good monarch habitat, however more plants support more monarchs. The planting should also continue to support a variety of nectar plants that bloom throughout the growing season.

Contact your local Natural Resources Conservation Service or Missouri Department of Conservation office for recommendations on managing or upgrading existing cover.

TABLE 1 – APPROVED FORBS FOR MONARCHS - species selection will only be made from appropriate habitat type based on planting site evaluation.

Common Name	Scientific Name	Habitat Type *
FORBS		
Leadplant	*Amorpha canescens*	S, DP, MP, G
Purple milkweed	*Asclepias purpurascens*	S
Swamp/Marsh milkweed	*Asclepias incarnata*	WP
Common milkweed	*Asclepias syriaca*	DP, MP, WP
Butterfly milkweed	*Asclepias tuberosa*	S, DP, MP, G
Milkweed, Whorled	*Asclepias verticillata*	S, DP, MP, G
Sunflower, Tickseed	*Bidens aristosa*	MP
Finger/Prairie coreopsis	*Coreopsis palmata*	S, DP, MP, G
Tickseed/Tall coreopsis	*Coreopsis tripteris*	S, DP, MP, WP, G
White prairie clover	*Dalea candida*	S, DP, MP, G
Coneflower, Pale purple	*Echinacea pallida*	S, DP, MP, G
Purple coneflower	*Echinacea purpurea*	S, MP, WP, G
Rattlesnake master	*Eryngium yuccifolium*	S, DP, MP, G
Boneset	*Eupatorium perfoliatum*	WP
Woodland sunflower	*Helianthus strumosus*	S
Ox-eye/false sunflower	*Heliopsis helianthoides*	S, DP, MP, G
Rough blazing star	*Liatris aspera*	S, DP, G
Prairie Blazing star	*Liatris pycnostachya*	DP, MP, WP, G
Eastern Blazing Star	*Liatris scariosa*	S, DP, MP
Blue lobelia	*Lobelia siphilitica*	WP
Wild Bergamot	*Monarda fistulosa*	S, DP, MP, WP, G
Obedient plant	*Physostegia virginiana*	S, MP, WP, G
Black-eyed Susan **(B)**	*Rudbeckia hirta*	S, DP, MP, G
Rosinweed	*Silphium integrifolium*	S, DP, MP, WP, G
Compass Plant	*Silphium laciniatum*	DP, MP, WP, G
Cup plant	*Silphium perfoliatum*	WP
Gray goldenrod	*Solidago nemoralis*	S, DP, MP, G
Rigid/Stiff goldenrod	*Solidago rigida*	S, DP, MP, WP, G
Showy goldenrod	*Solidago speciosa*	S, DP, MP
Sky blue aster	*Symphyotrichum oolentangiense*	S, DP
Smooth aster	*Symphyotrichum laevis*	S
New England aster	*Symphyotrichum novae-angliae*	WP
Vervain, Hoary	*Verbena stricta*	DP, MP
Missouri Ironweed	*Vernonia missurica*	MP, WP
Culver's root	*Veronicastrum virginicum*	S, MP, WP

*** S = Oak Savanna, DP = Dry Prairie, MP = Mesic Prairie, WP = Wet Prairie,**
G = Glade
B = Biennial

TABLE 2 – AVAILABLE FORBS - species selection will only be made for the appropriate habitat type based on a planting site evaluation.

Common Name	Scientific Name	Habitat Type *	Flower Information **	General Information ***
Alum root	*Heuchera richardsonii*	DP, MP, G	1,2 - Sp - Su	Calyx is mainly green, may have cream colored tips.
Anemone, Meadow	*Anemone canadensis*	WP	1 - LS – Su, showy	
Aster, Aromatic	*Symphyotrichum oblongifolius*	DP, MP, G	2 - LSu – F, showy	POL, Fragrant, prefers drier sites.
Aster, New England	*Symphyotrichum novae-angliae*	WP	2 - LSu – F, showy	POL, Prefers wetter sites, leaves clasp the stem,
Aster, Southern Prairie	*Aster paludosus*	DP, S, MP	2,3 – LSu - EF	
Aster, Purple daisy	*Symphyotrichum patens*	S, DP, MP, G	2 - LSu - F	POL
Aster, Silky	*Symphyotrichum sericeum*	DP, G	2 - LSu – F, showy	POL
Aster, Skyblue	*Symphyotrichum oolentangiense*	S, DP MP	2 - LSu – F, showy	POL,
Aster, Smooth	*Symphyotrichum laevis*	S, DP, MP	2 - LSu – F, showy	POL
Aster, White upland	*Solidago ptarmicoides*	S, MP, DP, G	2,3 – LSu - EF	
Aster, Willowleaf	*Symphyotrichum praealtum*	WP	2,3 - LSu – F,	POL, Pale lavender color, likes moist areas,
Barbara's button	*Marshallia caespitosa*	DP, MP, WP	1 - LS - ESu	Foliage green through winter.
Bean, Small Fuzzy	*Strophostyles leiosperma*	DP, MP, S	2,3 – ESu - MF	
Beardtongue	*Penstemon digitalis*	DP, MP, WP, G	1 - LS – MSu, showy	POL,
Beardtongue, Prairie	*Penstemon tubaeflorus*	S, DP, MP	1 - LS – MSu, showy	POL
Beardtongue, Purple	*Penstemon cobaea*	S, DP, G	1,2 - LS – ESu, showy	POL,
Beggar tick **(A)**	*Bidens frondosa*	WP	2 - Su, showy	Food,
Beggar's lice	*Desmodium canescens*	S, DP, MP, G	1,2 - LS – Su, showy	Legume, food.
Bergamot, Wild	*Monarda fistulosa*	S, DP, MP, WP, G	2,3 - LS – EF, showy	POL, mint
Bergamot, Savanna	*Monarda bradburiana*	S, DP, G	2,3 - LS – EF, showy	POL, mint
Black-eyed Susan **(B)**	*Rudbeckia hirta*	S, DP, MP, G	2,3 - LS – F, showy	Food,
Black-eyed Susan, Missouri	*Rudbeckia missouriensis*	DP, G	2,3 - ESu – F, showy	Food, blooms for a long period.
Blazing Star, Eastern	*Liatris scariosa*	S, DP, MP	2,3 LSu-EF	POL, blooms during monarch migration.
Blazing star, Prairie	*Liatris pycnostachya*	DP, MP, WP, G	2,3 - MSu – F, showy	POL, blooms during monarch migration.
Blazing star, Glade/Narrow-leaved	*Liatris mucronata*	S, DP, G	2,3 - MSu – F, showy	POL, blooms during monarch migration.
Blazing star, Rough	*Liatris aspera*	S, DP, G	2,3 - MSu – F, showy	POL, blooms during monarch migration.
Blazing star, Squarrosa	*Liatris squarrosa*	S, DP	2,3 - MSu – EF, showy	POL, blooms during monarch migration.
Blazing star, Squarrulosa	*Liatris squarrulosa*	S, DP, MP, G	2,3 MSu – EF, showy	POL, blooms during monarch migration.

Common Name	Scientific Name	Habitat Type *	Flower Information **	General Information ***
Blue lobelia	*Lobelia siphilitica*	WP	2,3 MSu – F, showy	POL
Blue-eyed grass	*Sisyrinchium campestre*	DP	1,2 - LS - ESu	Resembles grass
Boneset	*Eupatorium perfoliatum*	WP	2,3 - MSu - F	POL
Brown-eyed Susan	*Rudbeckia triloba*	S, WP	2,3 - Su – F, showy	Food
Bunchflower	*Melanthium virginicum*	MP, WP, S (Wet)	2 – ESu - LSu	
Cardinal flower	*Lobelia cardinalis*	WP	2,3 - MSu – EF, vivid red, showy	POL
Catchfly, Royal	*Silene regia*	S, DP, MP	1,2,3 - LS – F, showy	Blooms for a long period. Flowers 2nd year.
Clover, Purple prairie	*Dalea purpurea*	S, DP, MP, G	1,2 - LS – Su, showy	POL, legume
Clover, White prairie	*Dalea candida*	S, DP, MP, G	1,2 - LS – Su, showy	POL, legume.
Compass Plant	*Silphium laciniatum*	DP, MP, WP, G	1,2 - LS – Su, showy	POL, food,
Coneflower, Gray-head	*Ratibida pinnata*	S, DP, MP, G	1,2,3 - LS – F, showy	POL, food, robust perennial. Extensive root system reduces erosion.
Coneflower, Ozark glade	*Echinacea simulata*	S, DP, MP, G	1,2 - LS – MSu, showy	POL
Coneflower, Pale purple	*Echinacea pallida*	S, DP, MP, G	1,2 - LS – MSu, showy	POL
Coneflower, Prairie	*Ratibida columnifera*	DP, MP, G	1,2,3 - LS – EF, showy	Ray flowers sometimes marked with dark red. Weak perennial on good soil.
Coneflower, Purple	*Echinacea purpurea*	S, MP, WP, G	1,2,3 - LS – F, showy	POL, prolific bloomer, flowers over a long period.
Coneflower, Black-eyed Susan, Sweet	*Rudbeckia subtomentosa*	MP, WP	2 - Su, showy	Food,
Coneflower, Yellow	*Echinacea paradoxa*	S, DP, G	1,2 - LS – ESu, showy	POL
Coreopsis, Lanceleaf	*Coreopsis lanceolata*	DP, MP, G	1,2 - LS – MSu, showy	POL, food,
Coreopsis, Finger/Prairie	*Coreopsis palmata*	S, DP, MP, G	1,2 - LS – MSu, showy	Food
Coreopsis, Plains **(A)**	*Coreopsis tinctoria*	DP, G	1,2 - Sp – ESu, showy	Food,
Coreopsis, Tickseed/Tall	*Coreopsis tripteris*	S, DP, MP, WP, G	1,2 - LS – MSu	Food
Coreposis, Big flower	*Coreopsis grandiflora*	DP, MP	1,2 - LS – MSu, showy	Food
Culver's root	*Veronicastrum virginicum*	S, MP, WP	2 - Su, showy	POL, Whorled leaves.
Cup plant	*Silphium perfoliatum*	WP	2,3 - Su – F, showy	POL
Curly cup gum plant	*Grindelia squarrosa*	S, DP, MP, G	2,3 - Su - F	
Dragonhead, Narrow-leaved false	*Physostegia angustifolia*	S, DP, MP	2,3 – LSu - EF	
Flag, Blue	*Iris virginica shrevei*	WP	1,2 - LS – MSu, showy	Forms large colonies
Flag, Copper	*Iris fulva*	MP, WP	1 - Sp, showy	
Flax, Yellow	*Linum medium*	DP, MP	1,2 – LS - LSu	
Foxglove, Fascicled false	*Agalinas fasciculata*	DP, MP	2,3 – MSu - EF	
Gaura, Large-flowered	*Gaura longiflora*	DP, MP, WP, S	2,3 – MSu - EF	

Common Name	Scientific Name	Habitat Type *	Flower Information **	General Information ***
Goat's rue	*Tephrosia virginiana*	S, DP, MP, G	1,2 - LS – MSu, showy	Legume, may have pink/cream flowers.
Golden alexander	*Zizia aurea*	S, DP, MP, WP, G	1,2 - LS - ESu	Blooms for a long period in the spring.
Goldenrod, Gray	*Solidago nemoralis*	S, DP, MP, G	2,3 - LSu - F	POL
Goldenrod, Riddell's	*Oligoneuron riddellii*	WP	2,3 - LSu – F, showy	POL
Goldenrod, Rigid/Stiff	*Oligoneuron rigida*	S, DP, MP, G	2,3 - LSu – F, showy	POL
Goldenrod, Savanna	*Solidago petiolaris*	S, DP, G	2,3 - LSu – F, showy	POL, likes partial shade.
Goldenrod, Showy	*Solidago speciosa*	S, DP, MP	2,3 - LSu – EF, showy	POL
Hyacinth , Prairie	*Camassia angusta*	MP, WP	1,2 - Sp – ESu, showy	Plant dormant by early summer.
Hyacinth, Wild	*Camassia scilloides*	S, DP, MP, G	1,2 – Sp - ESu	
Illinois bundle flower	*Desmanthus illinoensis*	MP, WP, G	1,2 - LS - MSu	Legume
Indian paintbrush **(A)**	*Castilleja coccinea*	DP, MP, WP, G	1,2 - Sp – Su, showy	Can be summer seeding on poor sites with established grass
Indigo, Blue wild	*Baptisia australis*	S, DP, MP, WP, G	1,2 - Sp –Esu, showy	POL, legume
Indigo, Cream wild	*Baptisia bracteata*	S, DP, MP, G	1 - Sp – LS, showy	POL, Legume
Indigo, White wild	*Baptisia alba*	S, DP, MP, WP, G	1,2 - LS – MSu, showy	POL, Legume
Ironweed, Missouri	*Vernonia missurica*	MP, WP	2,3 - MSu - F	POL
Ironweed, Giant	*Vernonia gigantea*	S (Wet), WP	2,3 – MSu - EF	
Ironweed, Yellow	*Verbesina alternifolia*	S, BF, WP	2,3 – LSu - MF	
Leadplant	*Amorpha canescens*	S, DP, MP, G	1,2 - LS – Su, showy	POL, legume, somewhat woody
Lespedeza , Slender	*Lespedeza virginica*	S, DP, MP, G	1,2,3 - LS - EF	Legume, food,
Lespedeza hairy	*Lespedeza hirta*	S, DP, MP, G	2,3 - LSu – F	Legume, food
Lespedeza, Postrate	*Lespedeza procumbens*	DP, G	2,3 – LSu - MF	
Lespedeza, Roundhead	*Lespedeza capitata*	S, DP, MP, G	2,3 - MSu - F	Legume, food, bloom may be greenish/cream colored
Lespedeza, Violet	*Lespedeza violacea*	S	2,3 – MSu - MF	
Lousewort/Wood betony	*Pedicularis canadensis*	S, DP, MP, G	1 - LS	
Milkweed, Butterfly	*Asclepias tuberosa*	S, DP, MP, G	1,2 - LS – Su, showy	POL,
Milkweed, Common	*Asclepias syriaca*	DP, MP	1,2 – LS - LSu	
Milkweed, Marsh/Swamp	*Asclepias incarnata*	WP	3 - F, showy	POL, milky sap,
Milkweed, Purple	*Asclepias purpurascens*	S, DP, MP	1,2 - LS –MSu, showy	POL, milky sap
Milkweed, Spider	*Asclepias viridis*	DP, MP	1,2 – LS - ESu	
Tall Green Milkweed	*Asclepias hirtella*	S, DP, MP, WP, G	2 - Su	
Milkweed, Whorled	*Asclepias verticillata*	S, DP, MP, G	1,2,3 – LS - EF	
Hairy Mountain Mint	*Pycnanthemum pilosum*	S, DP, MP, WP, G	MSu-F	POL, mint
Mountain mint, Virginia/Common	*Pycnanthemum virginianum*	WP	2 - Su	POL, mint
Mountain mint , Slender	*Pycnanthemum tenuifolium*	S, DP, MP, WP, G	1,2 - LS – Su	POL, Mint, spreads slowly.

Common Name	Scientific Name	Habitat Type *	Flower Information **	General Information ***
New Jersey tea	*Ceanothus americanus*	S, DP, MP, G	1,2,3 - LS – F, showy	POL, Somewhat woody.
Obedient plant	*Physostegia virginiana*	S, MP, WP, G	2,3 - MSu – EF, showy	POL, Mint, spreads slowly.
Pea, Partridge **(A)**	*Chamaecrista fasciculata*	S, DP, MP, G	2,3 - Su – F, showy	POL, legume, food.
Pea, Sensitive	*Chamaecrista nictitans*	S	2,3 – MSu - EF	
Petunia, Wild	*Ruellia humilis*	DP, MP, G	1,2,3 - LS - EF	Short
Poppy mallow, Fringed	*Callirhoe digitata*	DP, MP	1,2 - MS – LSu, showy	Spindly plant, slender, leafless stems.
Poppy mallow, Purple	*Callirhoe involucrata*	DP, G	1,2 - MS – MSu, showy	
Prairie cinquefoil	*Drymocallis arguta*	DP, MP, G	1,2 - LS - Su	
Prairie dock	*Silphium terebinthinaceum*	S, DP, MP, WP, G	2,3 - Su - F	POL
Prairie parsley	*Polytaenia nuttallii*	DP, MP, WP	1,2 - LS - ESu	
Primrose, Evening	*Oenothera biennis*	MP	2,3 – ESu -MF	
Primrose, Missouri	*Oenothera missouriensis*	DP,G	1,2 - LS – MSu, showy	POL
Quinine, Wild	*Parthenium integrifolium*	S, DP, MP, G	1,2 - LS - Su	
Rattlebox	*Crotalaria sagittalis*	DP, G	1,2,3 - LS - EF	
Rattlesnake master	*Eryngium yuccifolium*	S, DP, MP, G	2 - Su	POL, Unique plant
Rose, Pasture	*Rosa carolina*	DP, MP, S	1 – LS	
Rose, Prairie	*Rosa setigera*	MP	1 - Sp, showy	POL, Food
Rosinweed	*Silphium integrifolium*	S, DP, MP, WP, G	2,3 - Su – F, showy	POL, food,
Sage, Pitchers	*Salvia azurea*	DP, MP, G	2.3 - Su – F, showy	
Scurfy pea	*Pediomelum tenuiflorum*	DP, MP, WP, G	1,2 - LS – MSu	Legume, food
Seed box	*Ludwigia alternifolia*	WP	2 – ESu - LSu	
Senna, Maryland	*Senna marilandica*	S, MP, WP	2 - MSu – LSu	POL, legume, food.
Sensitive briar	*Mimosa nuttalli*	S, DP, MP, G	1,2 - LS – Su, showy	Legume
Shooting star	*Dodecatheon meadia*	S, DP, G	1 - LS, showy	Plant goes dormant by July 1st.
Skullcap, Downy	*Scutellaria incana*	S (S. MO), MP	2,3 – MSu - EF	
Snakeroot, Sampson's	*Orbexilum pedunculatum*	S, MP, WP	1,2 - LS – MSu	Legume
Spanish needles **(A)**	*Palafoxia callosa*	S, DP, G	2,3 - LSu – F, showy	Tolerates mowing/pruning.
Spiderwort, Ohio	*Tradescantia ohiensis*	S, DP, MP, WP	1,2,3 - LS – F, showy	POL,
Spurge, Flowering	*Euphorbia corollata*	S, DP, MP, G	1,2,3 - LS – F	Milky sap
Sunflower, Ashy	*Helianthus mollis*	DP, MP, G	2,3 - MSu – F, showy	POL, food,
Sunflower, Ox-eye/false	*Heliopsis helianthoides*	S, DP, MP, G	1,2,3 - LS – F, showy	Food, blooms over a long period.
Sunflower, Sawtooth	*Helianthus grosseserratus*	DP, MP, WP, G	2,3 - MSu – F, showy	POL, food.
Sunflower, Tickseed	*Bidens aristosa*	MP	2 – MSu - LSu	
Sunflower, Western	*Helianthus occidentalis*	DP, MP, G	2,3 - MSu – F, showy	POL, food, good wildlife structure.
Sunflower, Willowleaf	*Helianthus salicifolius*	WP, MP, DP	3 – EF - MF	
Sunflower, Wingstem	*Verbesina helianthoides*	S, DP, MP	2,3 - LS - Su	
Sunflower, Woodland	*Helianthus strumosus*	S	2,3 - MSu – F	POL, food

Common Name	Scientific Name	Habitat Type *	Flower Information **	General Information ***
Tick trefoil, Showy	*Desmodium canadense*	S, DP, MP, WP, G	2 - MSu – LSu, showy	Legume, food,
Verbena, Rose	*Glandularia canadensis*	S, DP, G	1,2 – LS - LSu	
Vervain, Blue	*Verbena hastata*	WP	2,3 - ESu - MF	POL,
Vervain, Hoary	*Verbena stricta*	DP, MP	1,2,3 – LS - EF	
Vetch, Canada milk	*Astragalus Canadensis*	MP	1,2 – LS - LSu	
White wingstem	*Verbesina virginica*	S, BF	2,3 – LSu - MF	
Yarrow	*Achillea millefolium*	DP, MP	1,2,3 - LS - F	

Under the "Common Name" column, A = Annual, B = Biennial, otherwise the plant is a perennial.

*** S = Oak Savanna, DP = Dry Prairie, MP = Mesic Prairie, WP = Wet Prairie, G = Glade, BF = Bottomland Forest**

****Blooming dates: In general, Sp = Spring (1) = April/May; LS = May; Su = Summer (2) = June—August; ESu = June; MSu = July; LSu = August; F = Fall (3) = September—early November; EF = September; MF = October; LF = late October—early November**

*****POL – important pollinators, native for food = important for wildlife**

White flowers **blue/purple flowers** **green flowers** **red/orange flowers** **yellow flowers** **pink/violet flowers**