# PLANT MANAGEMENT

Native plants require little tending to and tolerate the conditions of a site without additional watering, fertilizer or pest treatment, once established, which can take up to three years. It is possible to significantly reduce maintenance by assessing the conditions of the site and creating a plan to minimize upkeep during the design phase of the project.

# Consider, for example:

- Large spaces in between plants are areas prone to weeds. Consider layering your landscape with groundcovers, perennials, grasses and shrubs to out-compete weeds and have a fuller landscape!
- Applying a 4" layer of mulch in the spring and fall during the first few years of establishment. Natural, hardwood mulch is recommended.
- Timing your planting with rainfall patterns, spring and fall are ideal for plant establishment and can reduce watering and weeding.
- When mowing, blow grass clippings away from the landscape feature, as they will seed and produce weeds throughout the landscape.
- Avoiding pesticides, fungicides and fertilizers, as these can negatively impact the microbial process in the soil that filters pollutants from stormwater runoff.





## Resources for Native Plants

Local nurseries and large retailers are shifting more towards supplying more native plants. The best way to increase supply is to increase demand! Request native plants at your local retailer.

# To find out more about native plants online, visit:

- Audubon Arkansas
- Arkansas Natural Heritage Commission
- Arkansas Native Plant Society
- USDA Natural Resources Conservation Service
- USDA Plant Database



Beaver Watershed Alliance is formed of a diverse stakeholder group representing agricultural, recreation, conservation, water utility, business, and private landowner perspectives who all work together for the benefit of Beaver Lake and its watershed.

To learn more about BWA, best management practices for water quality, or how you can become involved in voluntary watershed protection go to www.beaverwatershedalliance.org or contact BWA at 479-750-8007 or info@beaverwatershedalliance.org.

# Natural Infrastructure Design Ozark Native Plants



www.beaverwatershedalliance.org

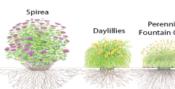
# **FACT SHEET**

# Putting ecology back into the landscape

Selecting the right plant for the right place can ensure that your landscape thrives. Why native plants? Plants that are adapted to our region are more resilient to our climate and can withstand the drought and rainfall patterns, are more resistant to disease, are beneficial to wildlife by providing food, cover and habitat, can save money and management time, as well as protect our most precious natural resource, water, by providing ecosystem services.



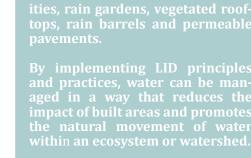
#### **Non-Natives**



#### Back to Our Roots

Native plant roots have an important role in our ecosystem and watershed. Historically, the Ozarks landscape consisted of tallgrass prairie, forests and glades of native plants with extensive root systems that allowed water to percolate into the ground/soils and recharge groundwater, added organic matter to the soil, and created pore space to clay soils.

#### possible and includes landscapes features such as bioretention facil



Sediment is the largest concern for the Beaver Lake watershed. Natural Infrastructure such as LID can help reduce erosion and offset hydrologic modifications caused by land use change to reduce erosion and sediment entering local waterways.

## Perennials or Forbes.

| Common Name                | Botanical Name                 | Soil Moisture | Height | Bloom Time   | Bloom Color   | Sun Requirements/Tolerates  | Attracts |
|----------------------------|--------------------------------|---------------|--------|--------------|---------------|---|----------|
| Arkansas Blue Star         | Amsonia hubrichtii             | Medium        | 4'     | April-May    | Blue          | Full sun to part shade, deer  | ×        |
| Aster - Bushy              | Aster dumosus                  | Medium        | 1-2'   | Aug-Oct      | Purple        | Full sun, Drought, Clay Soil  | ×        |
| Aster - Heath              | Symphyotrichum ericoides       | Dry to medium | 1-3'   | Aug-Oct      | White         | Full sun, Drought, Erosion, Clay Soil, Dry Soil, Rocky Soil                 | ×        |
| Aster - New England        | Aster novae-angliae            | Medium        | 3-6'   | Aug- Oct     | Purple        | Full sun, Clay Soil   | ×        |
| Black-eyed Susan           | Rudbeckia hirta                | Medium        | 2-3'   | June-Sep     | Yellow        | Full sun, Deer, Drought, Clay Soil  | WA       |
| Blue Sage                  | Salvia azurea                  | Dry to medium | 3-4'   | July-Oct     | Blue          | Full sun, Deer, Drought, Dry Soil, Rocky Soil                               | ¥        |
| Blue Vervain               | Verbena hastata                | Medium to wet | 3-6'   | Jul-Sep      | Blue          | Full sun, Wet Soil  | ¥        |
| Blue-eyed Grass            | Sisyrinchium angustifolium     | Medium        | 2'     | May-June     | Blue          | Full sun, Groundcover   |          |
| Boneset                    | Eupatorium perfoliatum         | Medium to Wet | 4-6'   | Jul-Sep      | White-Pink    | Full sun to part shade, Deer, Clay Soil, Wet Soil                           | ×        |
| Brown-eyed Susan           | Rudbeckia triloba              | Medium        | 3'     | July-Oct     | Yellow        | Full sun, Deer, Drought, Clay Soil  | ¥        |
| Butterfly milkweed         | Asclepias tuberosa             | Dry to medium | 1.5-3' | Jul-Aug      | Orange        | Full sun, Deer, Drought, Erosion, Dry Soil, Rocky Soil                      | ¥        |
| Catmint                    | Nepeta racemosa 'Walker's Low' | Dry to medium | 2-3'   | April-Sept   | Purple        | Full sun to part shade, Deer, Drought, Rocky Soil                           |          |
| Common Blue-eyed Grass     | Sisyrinchium albidum           | Medium        | 6"-1'  | May-Jun      | Blue          | Full sun, Groundcover   |          |
| Coral Bells/Alumroot       | Heuchera americana             | Medium        | 1-2'   | June-Aug     | Yellow-Red    | Full sun to part shade, Drought   |          |
| Culvers Root               | Veronicastrum virginicum       | Medium to wet | 3-4'   | May-August   | White/Purple  | Full sun, Wet Soil  | ×        |
| Dwarf Crested Iris         | Iris cristata                  | Medium        | 8"     | April        | Purple        | Full sun to part shade, Deer, Drought, Groundcover                          |          |
| Foxglove Beardtongue       | Penstemon digitalis            | Dry to medium | 2-3'   | April - June | White         | Full sun, Deer, Drought, Clay Soil, Dry Soil                                | W A      |
| Garden Phlox               | Phlox paniculata               | Medium        | 4'     | Jul-Sep      | Pink          | Full sun to part shade, Deer, Clay Soil, Black Walnut                       | W A      |
| Hyssop                     | Agastache rupestris            | Dry to medium | 1-2'   | July - Sept  | Orange-Pink   | Full sun to part shade, Deer, Drought                                       | ×        |
| Iris - Copper              | Iris fulva                     | Medium to wet | 2-3'   | May-June     | Copper        | Full sun to part shade, Deer, Clay Soil, Wet Soil                           | W A      |
| Ironweed                   | Vernonia arkansana             | Medium to wet | 4-6'   | Aug-Oct      | Pink-Purple   | Full sun, Deer, Wet Soil  |          |
| Joe Pye weed               | Eupatorium fistulosum          | Medium to Wet | To 6'  | July-Sept    | Pink-Purple   | Full sun to part shade, Deer, Wet Soil                                      | ¥        |
| Joe Pye weed 'Little Joe'  | Eutrochium dubium 'Little Joe' | Medium to Wet | 3-4'   | July-Sept    | Pink-Purple   | Full sun to part shade, Deer, Wet Soil                                      | ¥        |
| Lizards Tail               | Saururus cernuus               | Wet           | 1-2'   | June-Sept    | White         | Full sun to part shade, Heavy Shade, Wet Soil                               |          |
| Mist Flower, Wild Ageratum | Conoclinium coelestinum        | Medium        | 2-3'   | July-October | Blue/Purple   | Full sun to part shade  | ¥        |
| Obedient Plant             | Physostegia virginiana         | Medium        | 4'     | June-Sept    | Pink          | Full sun, Deer, Clay Soil   | Ą        |
| Prairie Blazing Star       | Liatris pycnostachya           | Dry to medium | 2-5'   | July-Oct     | Purple        | Full sun, Drought, Clay Soil, Dry Soil                                      | Ą        |
| Purple Coneflower          | Echinacea purpurea             | Dry to medium | 4'     | June-Aug     | Purple        | Full sun to part shade, Deer, Drought, Clay Soil, Rocky Soil                | W A      |
| Purple Poppy Mallow        | Callirhoe involucrata          | Dry to medium | 6"-1'  | May-June     | Purple        | Full sun, Drought, Dry Soil, Shallow-Rocky Soil                             |          |
| Purple Milkweed            | Asclepias purpurascens         | Dry to medium | 2-3'   | May-July     | Purple        | Full sun  | ×        |
| Rattlesnake Master         | Eryngium yuccifolium           | Dry to medium | 4'     | June-Sep     | Green-White   | Full sun, Drought, Erosion, Clay Soil, Rocky Soil                           |          |
| Robin's Plantain           | Erigeron pulchellus            | Dry to medium | 1'     | May-Jun      | Purple-Yellow | Full sun, Groundcover   | ×        |
| Rose Mallow                | Hibiscus laevis                | Medium to wet | 5'     | Aug-Sep      | Pink          | Full sun, Deer, Wet Soil  | ×        |
| Rough Goldenrod            | Solidago rugosa 'Fireworks'    | Medium to wet | 2-3'   | Sept-Oct     | Yellow        | Full sun, Deer, Clay Soil, Wet Soil   | ¥        |
| Royal Catchfly             | Silene regia                   | Dry to medium | 4'     | Jul-Aug      | Red           | Full sun to part shade, Drought, Rocky Soil                                 | Ą        |
| Spiderwort                 | Tradescantia virginica         | Medium        | 1-3'   | Apr-Jul      | Purplish blue | Part shade to full shade, Clay Soil, Black Walnut                           |          |
| Stiff Goldenrod            | Solidago rigida                | Medium        | 3-5'   | Aug-Sept     | Yellow        | Full sun, Deer, Clay Soil   | ×        |
| Stonecrop                  | Hylotelephium 'Herbstfreude'   | Dry to medium | 1-2'   | Sept-Oct     | Purple        | Full sun to part shade, Drought, Rocky Soil                                 | ¥        |
| Swamp Milkweed             | Asclepias incarnata            | Medium to wet | 4-5'   | Jul-Sep      | White Pink    | Full sun, Deer, Clay Soil, Wet Soil   | ×        |
| Threadleaf Coreopsis       | Coreopsis verticillata         | Dry to medium | 1-2'   | June-Sept    | Yellow        | Full sun, Deer, Drought, Rocky Soil   | ¥        |
| Turtlehead                 | Chelone glabra                 | Medium to wet | 2-3'   | Aug-Oct      | Cream         | Part shade, Erosion, Wet Soil   | ¥        |
| White False Indigo         | Baptisia alba                  | Dry to medium | 2-4'   | April-May    | Cream         | Full sun to part shade, Drought, Erosion, Dry Soil                          | ¥        |
| White Sage                 | Artemisia ludoviciana          | Dry to medium | 2-3'   | Aug-Sept     | White/Gray    | Full sun, Rabbit, Deer, Drought, Erosion, Dry Soil                          |          |
| Wild Bergamot/Beebalm      | Monarda fistulosa              | Dry to medium | 2-4'   | Jul-Sep      | Purple        | Full sun to part shade, Deer, Drought, Clay Soil, Rocky Soil, Black Walnut  | WA       |
| Wild Columbine             | Aquilegia canadensis           | Medium to dry | 2-3'   | Feb - July   | Red & yellow  | Full sun to part shade, Rabbit, Deer, Drought, Dry Soil                     | A        |
| Wild Ginger                | Asarum canadense               | Medium to wet | 6"-1'  | April-May    | Purple        | Part shade to full shade, Groundcover, Deer, Heavy Shade, Erosion, Wet Soil |          |
| Wild Strawberry            | Fragaria virginiana            | Medium        | 6"     | April-May    | White         | Full sun to part shade, Deer, Drought, Erosion, Groundcover                 | Ą        |
| Wild Sweet William         | Phlox divaricata               | Medium        | 1'     | Apr-May      | Blue          | Part shade to full shade, Deer, Drought, Clay Soil                          | WA       |

## Ferms Nonflowering vascular plants that possess true roots, stems, and complex leaves and that reproduce by spores.

| Common Name            | Botanical Name             | Planting Zone | Height | Bloom Time | Bloom Color | Sun Requirements/Tolerates  |  |
|------------------------|----------------------------|---------------|--------|------------|-------------|---|--|
| Christmas fern         | Polystichum acrostichoides | Dry to medium | 2'     |            |             | Part shade to full shade, Rabbit, Deer, Drought, Heavy Shade, Erosion, Rocky Soil |  |
| Cliff fern (Lady fern) | Woodsia obtusa             | Medium        | 1'     |            |             | Part shade to full shade,Rabbit, Heavy Shade                                      |  |
| Cinnamon Fern          | Osmunda cinnamomea         | Medium to wet | 2-3'   |            |             | Part shade to full shade, Rabbit, Heavy Shade                                     |  |
| Marginal Wood Fern     | Dryopteris marginalis      | Medium        | 2'     |            |             | Part shade to full shade,Rabbit, Heavy Shade                                      |  |
| Royal Fern             | Osmunda regalis            | Medium to wet | 2-3'   |            |             | Part shade to full shade, Rabbit, Heavy Shade                                     |  |
| Sensitive Fern         | Onoclea sensibilis         | Medium to wet | 3-4'   |            |             | Part shade to full shade, Rabbit, Heavy Shade, Clay Soil                          |  |

## GYASSCS Herbaceous plant with a grass-like morphology, also known as graminoid, refers to grasses, sedges and rushes.

| Common Name           | Botanical Name          | Planting Zone | Height | Bloom Time | Bloom Color   | Sun Requirements/Tolerates                                 | Attracts |
|-----------------------|-------------------------|---------------|--------|------------|---------------|--|----------|
| Beak-grain            | Diarrhena obovata       | Medium to wet | 2-3'   | June-Oct   | Green/yellow  | Part shade to full shade, Black Walnut                     |          |
| Common Bur Sedge      | Carex grayi             | Medium to wet | 3'     | May-Oct    | Green         | Full sun to part shade, Deer, Erosion, Wet Soil            |          |
| Common Fox Sedge      | Carex vulpinoidea       | Wet           | 3'     | May-July   | Green         | Full sun to part shade                                     |          |
| Common Rush           | Juncus effusus          | Medium to wet | 3'     | June-Aug   | Yellow-green  | Full sun, Erosion, Wet Soil                                |          |
| Common Tussock Sedge  | Carex stricta           | Medium to wet | 3'     | May-June   | Reddish Brown | Full sun to part shade, evergreen, erosion                 |          |
| Eastern Gama Grass    | Tripsacum dactyloides   | Medium        | 4-8'   | May-Sept   | Purple/Orange | Full sun to part shade, Black Walnut                       |          |
| Indian Grass          | Sorghastrum nutans      | Dry to medium | 3-5'   | Sept-Feb   | Light brown   | Full sun, Drought, Erosion, Rocky Soil, Black Walnut       | Ą        |
| Little Bluestem       | Schizachyrium scoparium | Dry to medium | 3'     | Aug-Feb    | Bronze        | Full sun, Deer, Drought, Erosion, Rocky Soil, Black Walnut |          |
| Prairie Dropseed      | Sporobolus heterolepis  | Dry to medium | 2-3'   | Aug-Oct    | Pink/brown    | Full sun, Deer, Drought, Erosion, Rocky Soil, Black Walnut | Ą        |
| Purple Muhly          | Muhlenbergia capillaris | Dry to medium | 2-3'   | Sept-Nov   | Pink          | Full sun to part shade, Drought, Black Walnut              |          |
| River-Oats            | Chasmanthium latifolium | Medium to wet | 2-5'   | Aug-Sept   | Green         | Full sun to part shade, Black Walnut                       |          |
| Side-oats Grama       | Bouteloua curtipendula  | Dry to medium | 2'     | July-Aug   | Purple bronze | Full sun, Drought, Erosion, Rocky Soil, Black Walnut       | Ą        |
| Southeastern Wild Rye | Elymus canadensis       | Dry to medium | 2-5'   | July-Sept  | Green         | Full sun, Drought, Erosion, Dry Soil, Black Walnut         | Ą        |
| Switchgrass           | Panicum virgatum        | Medium to wet | 3-6'   | July-Feb   | Pink tinged   | Full sun to part shade, Drought, Erosion, Black Walnut     | Ą        |
| Virginia Wild Rye     | Elymus virginicus       | Medium        | 2-4'   | June-Oct   | Green         | Full sun to part shade                                     | ¥        |

## Shrubs & Small Trees Woody plants with single or multiple stems above ground.

| Common Name                 | Botanical Name                  | Planting Zone | Height | Bloom Time   | Rloom Color  | Sun Requirements/Tolerates  | Attracts |
|-----------------------------|---------------------------------|---------------|--------|--------------|--------------|---|----------|
| Allegheny Serviceberry Tree |                                 | Medium        | 25'    | Apr-May      | White        | Full sun to part shade  | Attracts |
|                             |                                 |               | 12'    | · ·          |              |   | <u></u>  |
| American Cranberry Bush     | Viburnum trilobum               | Medium        |        | April-May    | White        | Full sun to part shade  | WA       |
| Arrowwood Viburnum          | Viburnum dentatum               | Medium        | 6-10'  | May-June     | White        | Full sun to part shade  | WA       |
| Beautyberry                 | Callicarpa americana            | Medium        | 3-6'   | June-August  | Purple       | Full sun to part shade, Clay Soil                                       | A        |
| Black Chokeberry            | Aronia melanocarpa              | Medium        | 3-6'   | May          | White        | Full sun to part shade  | A        |
| Blackhaw                    | Viburnum prunifolium            | Dry to medium | 12-15' | May-Jun      | Cream        | Full sun to part shade  | WA       |
| Buttonbush                  | Cephalanthus occidentalis       | Medium to wet | 5-12'  | Jun-Aug      | White        | Full sun to part shade, Erosion, Wet Soil                               | ¥        |
| Deciduous Holly             | Ilex decidua                    | Medium        | 7-15'  | May          | White        | Full sun to part shade, Clay Soil, Air Pollution                        | A        |
| False Indigo                | Baptisia australis              | Dry to medium | 3-4'   | May-June     | Purple Blue  | Full sun to part shade, Rabbit, Drought, Erosion, Clay Soil, Rocky Soil | ¥        |
| Fragrant Sumac              | Rhus aromatica                  | Dry to medium | 2-6'   | April        | Yellow       | Full sun to part shade, Rabbit, Drought, Erosion, Clay Soil, Rocky Soi  | WA       |
| Fringe Tree                 | Chionanthus virginicus          | Medium        | 12-20' | May-June     | White        | Full sun to part shade, Clay Soil                                       | Ą        |
| Inkberry                    | Illex glabra                    | Medium to wet | 4-5'   | Evergreen    | Green        | Full sun to part shade, Rabbit, Deer, Erosion, Wet Soil                 | A        |
| New Jersey Tea              | Ceanothus americanus            | Dry to medium | 3-4'   | May-July     | White        | Full sun to part shade, Drought, Rocky Soil                             | WA       |
| Northern Spicebush          | Lindera benzoin                 | Medium        | 6-12'  | March        | Green-yellow | Full sun to part shade, Deer, Drought, Heavy Shade, Clay Soil           | WA       |
| Ozark Witch Hazel           | Hamamelis virginiana            | Medium        | 15-20' | Oct-December | Yellow       | Full sun to part shade, Deer, Erosion, Clay Soil                        |          |
| Prairie Ninebark            | Physocarpus opulifolius         | Medium        | 8'     | May-June     | White        | Full sun to part shade, Drought, Erosion, Clay Soil, Rocky Soil         |          |
| Red Osier Dogwood           | Cornus stolonifera              | Medium to wet | 6-9'   | May-June     | White        | Full sun to part shade, Deer, Erosion, Clay Soil, Wet Soil              | WA       |
| River Birch Tree            | Betula nigra                    | Medium to wet | 50'    | Apr-May      | Brown/Green  | Full sun to part shade, Deer, Drought, Clay Soil, Wet Soil              |          |
| Rough-leaf Dogwood          | Cornus drummondii               | Medium to wet | 6-15'  | May-June     | Yellow-White | Full sun to part shade, Deer  |          |
| Smooth Sumac                | Rhus glabra                     | Dry to medium | 9-15'  | June         | Yellow-Green | Full sun to part shade, Rabbit, Drought, Erosion, Clay Soil, Rocky Soil | WA       |
| Sweet Pepperbush            | Clethra alnifolia               | Medium to wet | 3-8'   | July-Aug     | White        | Full sun to part shade, Heavy Shade, Erosion, Clay Soil, Wet Soil       | ¥        |
| Sweetspire                  | Itea virginica 'Henry's Garnet' | Medium to wet | 3-4'   | May-June     | White        | Full sun to part shade, Heavy Shade, Erosion, Clay Soil, Wet Soil       |          |
| Winterberry Holly           | Ilex verticillata               | Medium to wet | 4-10'  | June-July    | White        | Full sun to part shade, Erosion, Clay Soil, Wet Soil                    | A        |
| Yaupon                      | Ilex vomitoria                  | Medium to wet | 10-20' | Evergreen    | Evergreen    | Full sun to part shade  | A        |

## Cultivar vs Hybrid

A *cultivar* is a clone or seed strain selected for a particular trait or traits, without altering the genetic makeup of the plant. It is choosing a plant that has slightly different characteristics, i.e. shorter version of the original, and propagating it. "Nativars" are simply native cultivars.

A *hybrid* plant is created by crossing two species, which results in some characteristics of each parent and perhaps resulting in quite a different creation. Man-made hybrids are written with the genus name, then "x", then its given name enclosed with single quotes.

#### **Planting Zones** (Moisture Requirements)

**Dry Zones** (Xeric) will be the outer edges of rain gardens and bioswales, or the highest point in the landscape, where water drains quickly from.

**Medium Zones** (Mesic) will be the transitional areas between the wet and dry areas.

**Wet Zones** (Hydric) will be the lowest point in the landscape where water will pool for a short period of time (24-48 hours). Plants must be able to tolerate "wet feet" to be in this zone.