



# Native Plants in Your Gardens & Yard

## Advantages, Ideas, & Planning

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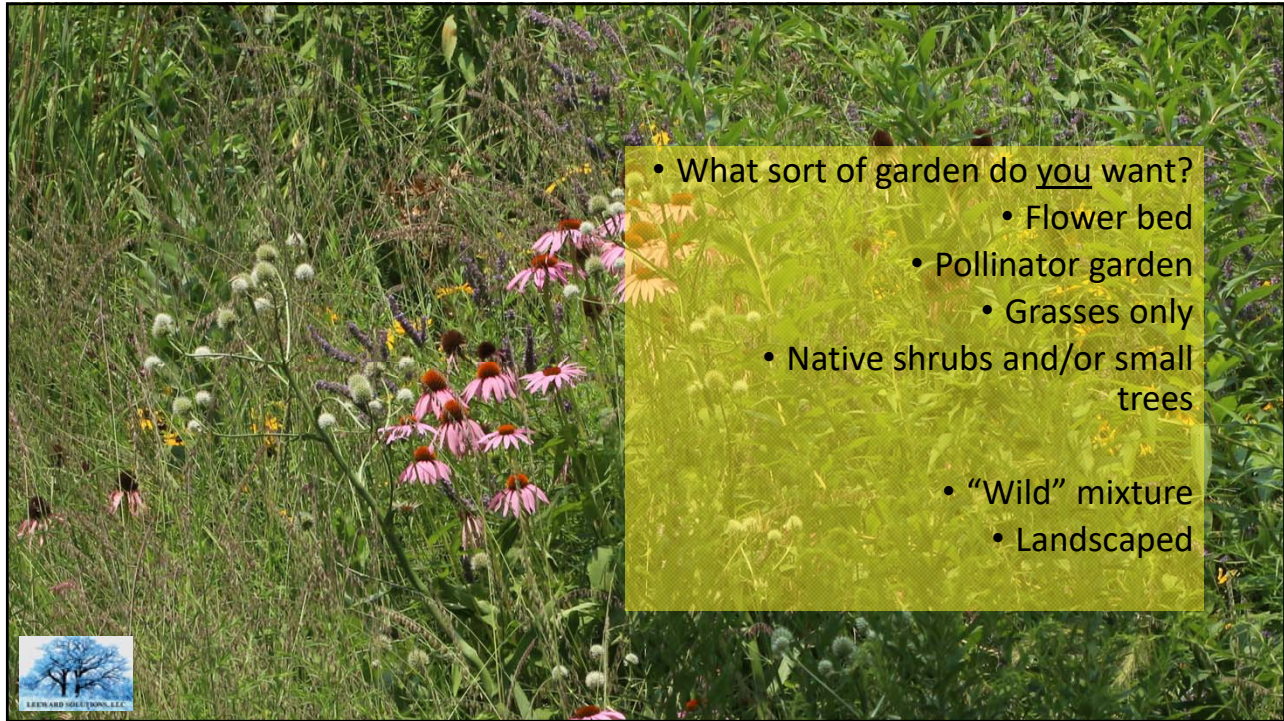



## Design Questions: The Starter Medium

- What is the available area like?
  - Soils: disturbed, hydric, upland
  - Light: full sun, shade, time of day, slope position
  - Rainfall: local variations
  - Moisture (groundwater, shallow aquifer)
  - Existing plant community
  - Drift of lawn chemicals, unwanted seeds

BACKGROUND: Hydric soil profile with gley color, iron oxide.





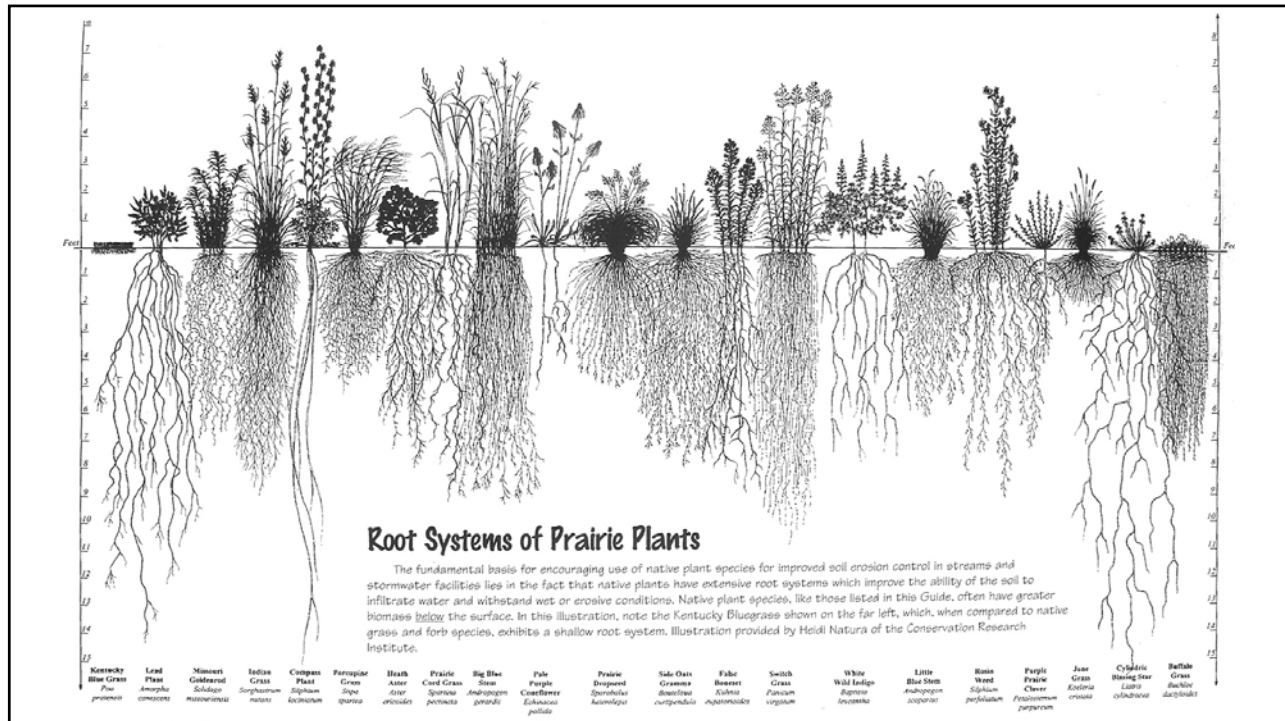
- What is the size of the project?
  - Budget
  - Land area
  - Complexity of work
- These aren't separate, as each one affects the others.
- There are many other questions for thought, too.



## Why Garden with Natives at All?

- Aren't hybrids & nonnatives & cultivars as good or better?
- Wide selection of deep-rooted perennial species:
  - Deep-soil cycling of nutrients
  - Topsoil regeneration
  - Strong resistance to erosion
  - Better penetration of rain & snowmelt into the ground
  - Natural resistance to native pest species, some resistance to introduced diseases & pests





- Native plants are ecologically sensible choices.
  - Best for native insect species, including those that control pest species  
*Three kinds of crab spider, on purple coneflower, coreopsis, & milkweed*



- Enhanced biodiversity for many animals: amphibians, birds, insects, mammals
- Good support for existing native species, such as old-growth oak trees



## Getting Started

- Two approaches to seeding:
  1. Scatter seed.
    - Time with rain or snowfall to cause penetration of seed & protect from wildlife
    - Relatively high seeding rate to compensation for germination failures & other losses
  2. Work with live plants
    - Seed stratification: alternating cold & warm, necessary for many species to germinate
    - Indoor planting & growing: growing media, sunlight or equivalent, planter trays
    - Transplanting
    - Maintenance: watering



## Tooling Up

- Minimum equipment & resources needed
  - Brains: your own, a consultant, books on the topic
  - Seed sources
  - A means of controlling existing plant communities, if mostly exotic:
    - hand weeding with removal of seeds,
    - black plastic film,
    - Mowing to prevent/reduce bolting of weeds
    - herbicides as last resort
  - A way of disturbing the soil surface: gas tiller, harrow
  - Soil amendments: compost, wood chips, biodegradable mulch covering



- Basic garden tools: gloves, garden rake, wheelbarrow, hoe, weed trimmer, spade, etc.
- Specialized tools:
  - growing/starting trays,
  - soil knife,
  - harvesting hook (sickle),
  - three-pronged weeder,
  - Parsnip Predator



## Woods & Edges

- Shade to partial shade
- Dry to wet soil
- Bloom times from early April to early autumn (central Iowa)
- Plant heights from short to tall
  
- Special situations

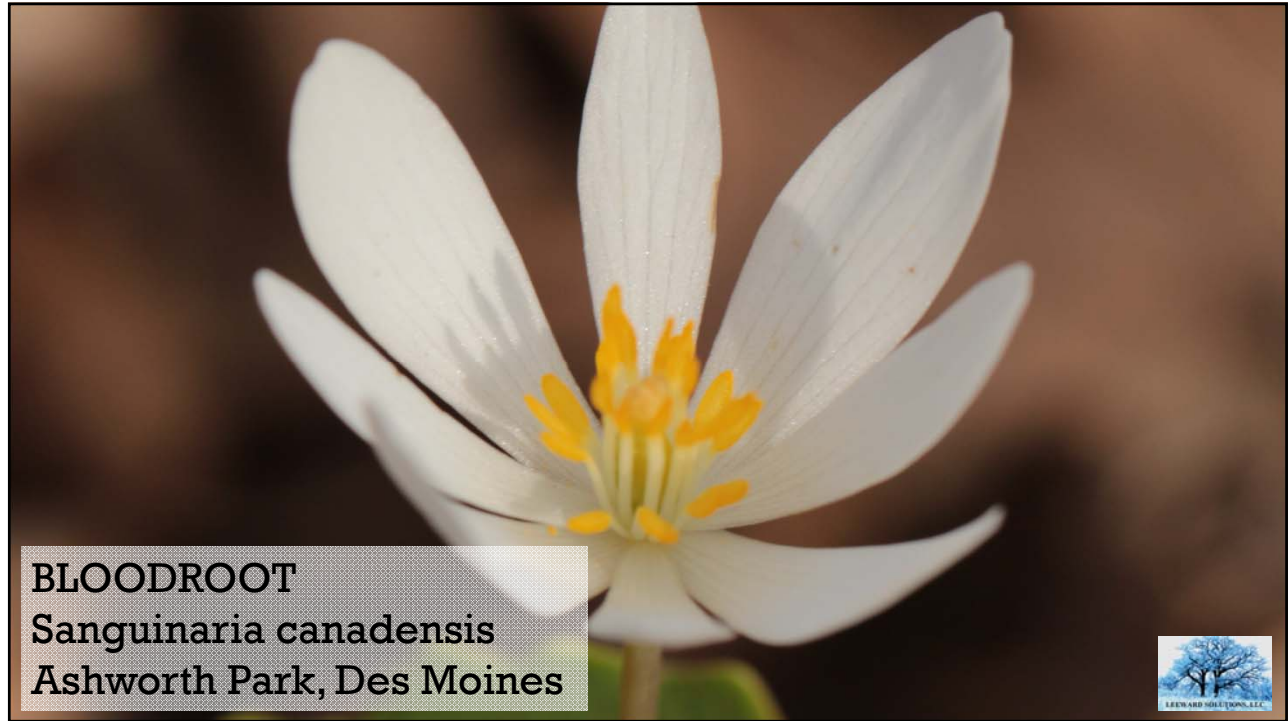


**SPRING BEAUTY**  
*Claytonia virginiana*  
Ashworth Park, Des Moines



**PENNSYLVANIA SEDGE**  
*Carex pensylvanica*  
Early spring bloom, 6-8" tall





**BLOODROOT**  
*Sanguinaria canadensis*  
Ashworth Park, Des Moines



**WHITE TROUTLILY**  
*Erythronium albidum*  
Ashworth Park, Des Moines





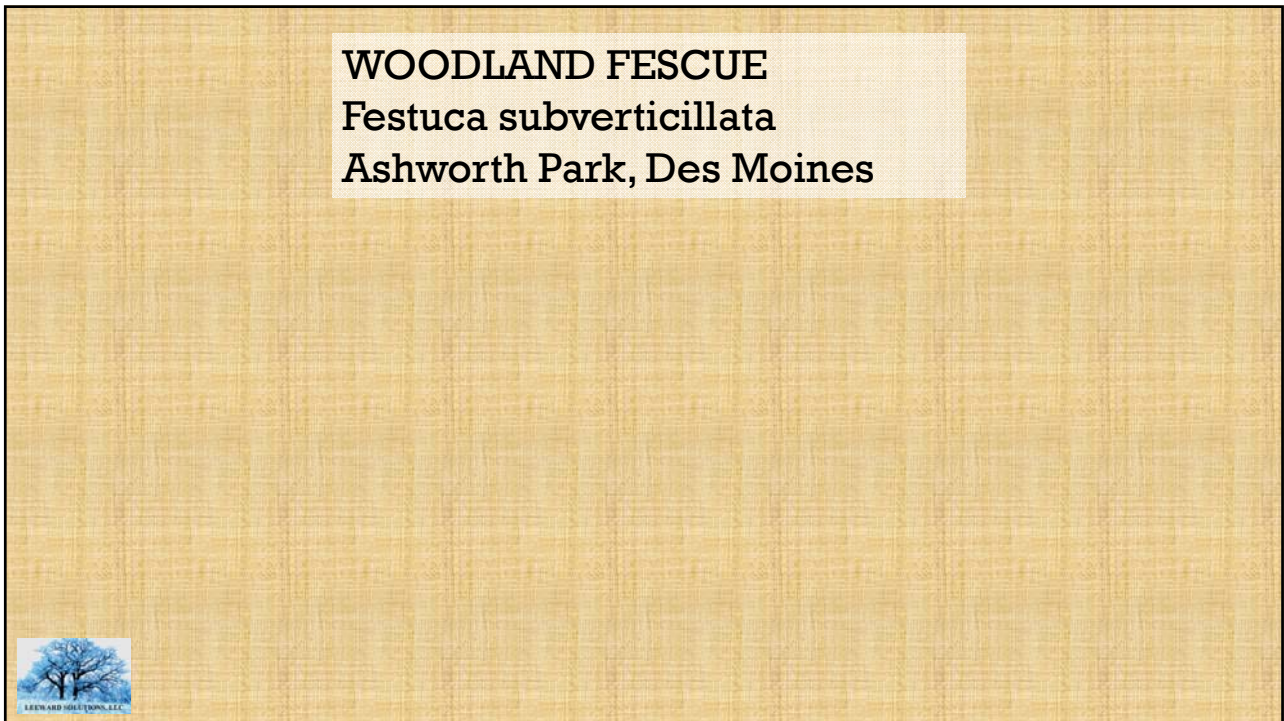


**SWEET CICELY, ANISE-SEED**  
*Osmorhiza claytoni*  
Ashworth Park, Des Moines



**HISPID BUTTERCUP**  
*Ranunculus hispidus*  
Ashworth Park, Des Moines





**VIRGINIA WILD RYE**  
*Elymus virginicus*  
Ashworth Park, Des Moines



**VIRGINIA BLUEBELLS**  
*Mertensia virginiana*  
Ashworth Park, Des Moines





**WOODLAND BLUE ASTER**  
*Symphotrichum cordifolium*  
Ashworth Park, Des Moines



**ELM-LEAVED GOLDENROD**  
*Solidago ulmifolia*  
Ashworth Park, Des Moines





**WILD GINGER**  
*Asarum canadense*  
Ashworth Park, Des Moines



**SPRENGEL'S SEDGE**  
*Carex sprengelii*  
Ashworth Park, Des Moines



## Prairies

- Full sun to partial sun
- Dry to wet soil
- Bloom times from May to mid-autumn (central Iowa)
- Plant heights from short to tall
  - Mid-height and tallgrass prairies
  - Short species often present in understory
- Special situations





**BIG BLUESTEM**  
*Andropogon gerardi*  
Prairies, 6-12 ft. tall



**LITTLE BLUESTEM**  
*Schizachyrium scoparium*







**TALL DROPSEED**  
*Sporobolus asper*



**FLOWERING SPURGE**  
*Euphorbia corollata*  
Scott County





ORANGE or BUTTERFLY  
MILKWEED  
*Asclepias tuberosa*



GRAY-HEADED CONEFLOWER  
*Ratibida pinnata*



**BLACK-EYED SUSAN**  
**Rudbeckia hirta**



**PRAIRIE COREOPSIS**  
**Coreopsis palmata**



**PRAIRIE OR WILD PETUNIA**  
***Ruellia humilis***



**SCRIBNER'S PANIC GRASS**  
***Dichanthelium oligosanthes***  
***scribnerianum***



**SWITCHGRASS**  
**Panicum virgatum**



**SIDEOATS GRAMA**  
**Bouteloua curtipendula**



**INDIANGRASS**  
***Sorghastrum nutans***  
**6-10 ft. tall**



**PRAIRIE COREOPSIS**  
***Coreopsis palmata***



## Raingardens & Wetlands

- Full sun to partial sun
- Damp to very wet soil, standing water
- Bloom times from May to mid-autumn (central Iowa)
- Plant heights from short to tall
  
- Special situations



**ROSE or SWAMP MILKWEED**  
*Asclepias incarnata*  
*Pollinator favorite*



**WHITE TURTLEHEAD**  
***Chelone glabra***



**CANADA ANEMONE**  
***Anemone canadensis***





**WILD BLUE FLAG**  
*Iris virginica shrevei*



**BUTTONBUSH**  
*Cephalanthus occidentalis*



**SWAMP WHITE OAK**  
**Quercus bicolor**



**MARSH MARIGOLD**  
**Caltha palustris**



**FRINGED LOOSESTRIFE**  
***Lysimachia ciliata***



**INFLATED LONGBEAK SEDGE**  
***Carex vesicaria***



**PORCUPINE SEDGE**  
**Carex hystericina**



**FOX SEDGE**  
**Carex vulpinoidea**



**SOFTSTEM BULRUSH**  
**Schoenoplectus tabernaemontani**



**RIVER BULRUSH**  
**Schoenoplectus fluviatilis**



## Savannahs

- Underappreciated “transitional” ecosystem
  - Prairie with scattered trees & shrubs
- Full sun to partial sun
- Moist to wet soil
- Bloom times from May to mid-autumn (central Iowa)
- Plant heights from short to tall to very tall (some shrubs, trees)
  - Mid-height and tallgrass prairies
  - Short species often present in understory
- Special situations



## BUR or MOSSYCUP OAK *Quercus macrocarpa*



**BUCKBRUSH or CORALBERRY**  
***Symphoricarpos orbiculatus***



**SMOOTH SOLOMON'S-SEAL**  
***Polygonatum biflorum***



**PRAIRIE RAGWORT**  
***Packera plattensis***



**WILD PLUM**  
***Prunus americana***





**PRAIRIE CRABAPPLE**  
**Malus ioensis**



**ARKANSAS ROSE**  
**Rosa arkansana**



**DOWNY HAWTHORN**  
**Crataegus mollis**  
**Greenbelt Park, Clive**



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**DOWNY HAWTHORN**  
***Crataegus mollis***  
**Greenbelt Park, Clive**



## Print Resources

- On the shelf at Beaverdale Books:
  - Carl Kurtz, *A Practical Guide to Prairie Reconstruction*. An excellent resource for larger-scale projects, with good information that is adaptable to residential gardens.
  - Speichert and Speichert, *Timber Press Pocket Guide to Water Garden Plants*. **NOTE:** Not all the plants in this volume are native, and some that are native also are cultivars or nativars. Use with caution for native gardening.
  - Darke, *Timber Press Pocket Guide to Ornamental Grasses*. **NOTE:** Many grasses in this book are nonnative, and some already are serious invasive species, such as the plume grasses or *Miscanthus*. Use with caution for native gardening.

- Recommended books on native gardening:
  - Rainier & West, *Planting in a Post-Wild World: Designing Plant Communities for Resilient Landscapes*.
  - Xerces Society, *Attracting Native Pollinators: Protecting North America's Bees and Butterflies*.
  - Steiner, *Prairie-Style Gardens: Capturing the Essence of the American Prairie Where You Live*.
  - Adelman & Schwartz, *The Midwestern Native Garden: Native Alternatives to Nonnative Flowers and Plants*.
  - Holm, *Pollinators of Native Plants: Attract, Observe, and Identify Pollinators and Beneficial Insects with Native Plants*.
  - Steiner & Domm, *Rain Gardens: Sustainable Landscaping for a Beautiful Yard and a Healthy World*.

- Related reading – plant identification:
  - Newcomb, *Newcomb's Wildflower Guide*.
  - Petrides & Peterson, *A Field Guide to Eastern Trees*.
  - Ladd, *Tallgrass Prairie Wildflowers*.
  - Runkel & Roosa, *Wildflowers of the Tallgrass Prairie*, 2<sup>nd</sup> ed. (photography by Thomas Rosburg).
  - Runkel & Bull, *Wildflowers of Iowa Woodlands*, 2<sup>nd</sup> ed. (photography by Thomas Rosburg).
  - Runkel & Roosa, *Wildflowers and Other Plants of Iowa Wetlands*, 2<sup>nd</sup> ed. (photography by Thomas Rosburg).
  - Czarapata, *Invasive Plants of the Upper Midwest*.
  - Cobb & Lowe, *Peterson Field Guide to Ferns*.
- More technical botanical works are available, if you're adept at new vocabulary and very fine detail.