What is a meadow garden?

- Many different definitions
- Open area consisting of grasses and non-woody plants
- Grassy spaces are not mowed or maintained like a lawn

A Prairie Meadow Garden:

- Focus on a base of native grasses
- Add native flowers as accent plants

The central grasslands of North America

- Tallgrass Prairie-eastern area
- Mixed-grass Prairie-middle
- Shortgrass Prairie-western edge
  - Grazing, fire-suppression, cultivation and introduction of aggressive, weedy alien plant species have modified the ecology of this area

- Buffalo River State Park-Clay County Minnesota-Bluestem Prairie Preserve

Why plant a meadow garden?

- Re-introduce vegetation that once thrived in the plains
- Use of native plants may mean lower maintenance than a traditional lawn
- Attract birds, insects and other wildlife
- Fun to watch the changes that occur all year-including winter

Site Selection

- Mimic natural prairie environment:
  - Full sun (minimum of 6 hours)
  - Minimal tree competition
  - Drainage-may vary within the site

- If inside city limits, check codes for lawn maintenance or weed ordinances.
Site Preparation - Remove existing vegetation

- Smother with dark tarp, plastic or boards for 1-2 months OR
- Turn and cultivate the soil every few weeks for a full growing season before establishing the bed OR
- Use a non-selective herbicide to kill existing vegetation; till or use a slit seeder to direct seed into stubble

Plant Selection

- Match plants to your site
- Prairies were historically 60-80% grasses and 20-40% flowering plants. BUT there was a greater diversity of flowers vs. grasses.
- Spring, summer and fall blooming
- Short, medium and tall plants
- Quick germinating annuals with slower establishing perennials

Where/How to get your plants

- Start from seed
  - Less expensive
  - Might be more challenging
  - Slower to establish
- Order plants
  - More expensive
  - May be less variety of plants available
  - Quicker to establish

Sources for native seeds and plants that I've used

- Prairie Restorations, Inc - prairieresto.com
- Prairie Moon Nursery - prairiemoon.com
- Morning Sky Greenery - morningskygreenery.com

Other sources of seeds and plants

- Find friends or neighbors who will share seed or divide plants
- Once your meadow is established, you can collect seed and divide your own plants for increase
- Don't remove plant material from state or federal parks
- Get landowner permission to dig plants or gather seed from private property

Establishing the garden

Seeding

- Spring after frost but before heat of summer
  - OR
- Dormant seeding in fall from mid-Oct until snowfall

Plants

- As soon as you can get out in the spring
- Water well the first year
First year after planting

- Weeds can be a problem—especially the first year or two
- Keep meadow mowed to prevent flower production on weeds and encourage deeper rooting on perennial plants
- If pulling weeds, be careful not to remove desirable plants
- Can use herbicides but take care not to hit desirable plants

Not everything is a weed!

- Some ‘weeds’ can stay like the Heliopsis (right)
- Remove dandelions, thistles, tree seedlings, goldenrod, bindweed, knotweed

Trimmers and weed wackers are useful in cutting down prairie meadows.

Maintenance After Establishment—Mowing vs. Burning

- Mow in spring after seeds from plants have dropped
- Burning—check your local ordinances

Meadow Garden in the NDSU Horticulture Demonstration Research Plots

John Greenlee—Grass ecologist, meadow designer

2011 initial planting:

- Bouteloua curtipendula—Side oats Grama
- B. gracilis—Blue Grama, Eyelash grass
- Koeleria macrantha—June Grass
- Schizachyrium scoparium—Little Bluestem
- Sporobolus heterolepis—Prairie Dropseed
- Stipa viridula—Green Needlegrass
- Helictotrichon sempervirens—Blue Oat Grass (NOT a native prairie grass)
- Echinacea angustifolia—the only wildflower put in that year
Added in 2012:

• Aster laevis - Smooth Aster
• Dalea purpurea - Purple Prairie Clover
• Echinacea angustifolia
• E. purpurea
• Iris versicolor - Blue Flag Iris
• Liatris pycnostachya - Tall Blazing Star

Added in 2014 and 2015:

• Monarda fistulosa - Wild Bergamot
• Verbena hastata - Blue or Swamp Vervain
• V. stricta - Hoary Vervain
• Zizia aurea - Golden Alexander

Volunteers:

• Gaillardia - Blanket Flower
• Rudbeckia - Black-Eyed Susan
• Heliopsis - False Sunflower

NDSU Meadow Garden:

• 19 different species of flowers
• 7 species of grasses
• Verbena hastata (Swamp Vervain) aggressive in 2014
• Aster laevis (Smooth Aster) my current challenge
• Need to encourage grasses to be more dominant aspect of the meadow

Meadow garden final thoughts:

• Remember - this is not a ‘no maintenance’ garden and it may take a few years to reach its full potential
• Might not be good for gardeners who like an organized look
• Have fun watching it change from month to month and year to year
• Don’t expect it to remain the same from year to year