

Meadow Establishment



Benefits of Meadows

A healthy meadow ecosystem serves several critical functions for wildlife, water quality protection, and park users. These areas of native grasses and wildflowers:

- Help with stormwater management and infiltration. They reduce flooding and erosion by slowing the flow of stormwater, allowing for absorption and groundwater recharge. Deep root systems hold the soil in place and filter pollutants from runoff before it can enter local stream systems.
- Supply vital habitat for native pollinator and wildlife species. Replacing grass with native wildflower and grass species adds food, cover, and habitat for countless species.
- Provide aesthetic and recreational value. Meadows add color and variety to the landscape while creating opportunities for visitors to view wildlife.
- Reduce costs for maintenance. Reducing mowing to once per year in meadow restoration areas saves costs on fuel, time, and equipment maintenance.

Considerations

- Steps in establishing a meadow
 - The “how” depends on current conditions and desired results. Transitioning from grass/lawn to meadow can be simple and effective.

- The existing vegetation must be killed. The simplest method is through use of a glyphosate herbicide (Roundup). Typically, two applications of herbicide spaced 2-3 weeks apart will do the trick.
 - The area should be seeded with a mix appropriate for the site with a no-till drill or other drill seeder in spring or fall.
- Invasive species
 - Common meadow invasives: bull thistle, crown-vetch, jimsonweed, Canada thistle, mile-a-minute, tall fescue, multiflora rose, Japanese hops, Japanese bindweed
 - This will need to be monitored each year.
- Public perception
 - Sometimes the public sees naturalized areas and thinks park staff have stopped maintaining them. Or they wonder why the grass is dead when the site is being prepared for seeding.
 - Signage and educational outreach can help park users to understand the reasons for the changes to the park and the benefits they will bring about.

Maintenance

A meadow will take a few years to get fully established. During the first year, native perennials will focus mostly on extensive root growth. In the second year, they will continue with root growth, but will also begin more aboveground growth. In the third year, there will be more color as the species become established.

- Mowing will be needed once per year to keep the area as meadow habitat. This should occur in late winter/early spring, which will leave habitat over winter but allow for new growth in spring.
- Managing invasive species/"weeds"
 - This will be critical to the success of the project and will require vigilance each year.
 - The first few years will be most important as the meadow is getting established. Fast-growing invasive species can easily overtake slow-growing native perennials if they are not managed. These will be the most maintenance-intensive years.
 - Treatment:
 - In the first year, vegetation should be cut with a flail mower to 6-8" whenever it reaches 12" in height to prevent fast-growing weeds from taking over.
 - In the following years, invasives can be hand-pulled or spot-sprayed as they emerge.

Common Meadow Species

black-eyed susan, purple coneflower, beardtongues, blazing star, milkweeds, bergamot, coreopsis, asters, goldenrods, mountainmints, bluestems, sideoats grama, bottlebrush grass

*For more guidance on meadow establishment, contact Kate Ebel, Senior Environmental Scientist at Wildlands Conservancy: kebel@wildlandspa.org or 610-965-4397 x137.