Meadow Making—Caveat Emptor

David Longland

According to the popular press, planting a meadow is as easy as opening a can. Nothing could be further from the truth.

Over the last seven years, we at the New England Wild Flower Society have been confronted with a fair mix of public curiosity and disappointment about the “meadow myth,” the popular perception that growing a field of wildflowers is cheaper and easier than growing a lawn. Having experimented with meadow installation and maintenance at Garden in the Woods since 1983, we are in a position to draw a few conclusions about the variability of the actual meadow-making process. It is true that “wildflower” meadow gardens can be ecologically and aesthetically sound alternatives to manicured lawns, if it’s done right.

“If” can be such a big little word, especially here, because this “if” is usually omitted, ignored, suppressed, or forgotten in too many promotions for creating a meadow. This particular “if” involves four essential conditions for the successful establishment of a wildflower meadow:

1. If you choose appropriate perennial species for the site. This means plants that are adaptable to present and future site conditions; plants that are unlikely to impact adversely on the ecological diversity and relationships of the organisms surrounding or within the area; and plants that have complementary ornamental traits like seasonal color, height of bloom, fruit, and foliage.

2. If you prepare the site properly. This involves taking into account, first, the competitiveness and resilience of surrounding native vegetation (deciding whether it needs to be cleared out completely, sequentially, or selectively, and leaving plenty of lead time for planting or seeding); second, the physical and chemical properties of the soil; third, the slope of the site and its potential for erosion; fourth, whether or not to use a cover crop to prepare or stabilize the soil.

3. If you use the best possible combination of methods and schedules to introduce and establish new plant species in the meadow area. Often an integrated approach produces the most cost-effective returns.

4. If you expect that the process of establishing a mature wildflower meadow will probably take from three to five years, depending on financial resources, the size of the site, climate, and unforeseen factors, such as seed viability.

A so-called mature meadow is by no means static, but is a continually evolving composition—a natural work of art. And herein lies much of the potential charm of the meadow, for plants will flourish, recede, and migrate over time, in response to one another as well as to myriad environmental conditions. This unpredictability, however, is also the reason for management, for without some maintenance regime, the meadow will eventually change into a different kind of plant community, such as a woodland or a shrubland.
Mowing

The unwanted invasion of trees and shrubs can best be prevented by mowing once a year in the late fall. Mowing can be done at one or more additional times during the growing season to favor or discourage the reproductive advance of certain aggressive species.

At Garden in the Woods in Framingham, Massachusetts, a meadow garden was first established as an experiment in 1984. The meadow is a quarter of an acre in extent, essentially a sunny hole in the woods. The site is slightly sloping—with a fairly rich, loamy soil. Some thirty-five species of native forbs and grasses were planted, and we have monitored their development for the last seven years. A few substantive conclusions can now be drawn:

1. The most aggressive of the planted species has been Canada anemone \( (Anemone canadensis) \). Other aggressive invaders came from surrounding areas and have included goatsbeard \( (Aruncus dioicus) \), Canada goldenrod \( (Solidago canadensis) \), and occasionally the notorious purple loosestrife \( (Lythrum salicaria) \). Plants such as these need to be removed every year.

2. The most desirable perennial species are those that can hold their own in competi-
tion with other species. So far the following species have performed best:

- Blazing star (*Liatris pycnostachya*)
- Purple coneflower (*Echinacea purpurea*)
- Wild bergamot (*Monarda fistulosa*)
- Turk's cap lily (*Lilium superbum*)
- Canada lily (*Lilium canadense*)
- Perennial coneflower (*Rudbeckia fulgida*)
- New England aster (*Aster novae-angliae*)
- Ironweed (*Vernonia noveboracensis*)
- Cup plant (*Silphium perfoliatum*)
- Little bluestem grass (*Schizachyrium scoparium*)
- Northern dropseed grass (*Sporobolus heterolepis*)

In the upper, drier margin of the meadow area, the following species have performed best:

- Butterfly weed (*Asclepias tuberosa*)
- Native lupine (*Lupinus perennis*)
- Blue false indigo (*Baptisia australis*)
- Little bluestem grass (*Schizachyrium scoparium*)

All in all, establishing a meadow can be an entertaining ecological project, or a labor-intensive disappointment. It all depends on the big IF.

David Longland is Director of the New England Wild Flower Society.