Native Meadows: Part 1

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When most people think of pre-Columbian terrestrial habitats in what becomes Northern Virginia, old growth deciduous forests and wetlands come to mind. Add to this list "native meadows." These meadows were not the vast expanses of the Great Plains. Wildfires were often the forces keeping the area devoid from tall trees. When trees eventually reforested the plot and covered the ground with too much shade for the meadow plants to survive, another clearing event might happen elsewhere, the meadow seeds there germinate, and the cycle renews. Within Fairfax County parklands, regenerative controlled burns are away from populated locations and limited to large areas, such as Ellanor C. Lawrence and Huntley Meadows Parks.

Homeowners can apply the native meadow concept to residential gardens, of course without setting fire to the property! Native meadows can be the perfect solution for places where trees should not grow, such as next to the house or along underground utility easements. Following Mother Nature's example, a meadow may be planted as temporary groundcover while the nearby trees mature; this approach is currently applied to Rabbit Branch Park. The meadow needs extended direct sunlight, preferably with an intense, noonday exposure. Soil conditions can range from wet to dry and plant species need to be selected accordingly. Unlike old growth forest plants, which need undisturbed soil and complex subterranean microbial communities. meadow plants often thrive in recently turned ground. Some plants, like the



Figure 1. This Virginia native meadow garden in Fairfax, growing over sewer easements, features red cardinal flowers (Lobelia cardinalis), boneset (Eupatorium perfoliatum), crimson-eyed rose-mallow (Hibiscus moscheutos), pink turtleheads (Chelone obliqua), and green-headed or cutleaf coneflower (Rudbeckia laciniata).

short-lived black-eyed Susan (*Rudbeckia hirta*), might dominate a new meadow while other species, such as purple milkweed (*Asclepias purpurascens*), flourish after establishing for several years. Since the different plant root structures vary from deep taproots to fibrous surface roots, they form an effective complex that helps to retain the soil and prevent erosion.

Native meadow gardens are easy to install. First, plan the garden. It can be anything from geometrical and formal to one that emulates a natural environment, depicted in Figure 1. Delineate the area where the meadow will be; anything outside of it is manicured lawn, a garden path, or some other feature. Remove all unwanted woody plants in the plot; leave the lawn. Avoid churning or otherwise disturbing the soil short of clearing unwanted vegetation. Mow, then cover the area with newsprint or paper bags. Weigh the

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paper down with six inches of leaf mulch or compost. Whereas this thickness is too much for a normal garden, it will kill most plants underneath it while lightly fertilizing the soil. Do not use wood or bark-based mulch. Periodically water this new garden, pulling any lawn or other unwanted plants sprouting through the leaves. After four to six months, once the mulch settles and decays, begin planting the meadow. Usually potted plants work better than scattering seeds. Some Mid-Atlantic native plant suppliers are found on this vendor directory. Additional native plant sellers are on the list available here: http://www.gardenlist.com/Natives.html. These lists are for informational purposes and not an endorsement. Cautions:

- Not all plants native to the United States are native to Virginia. For example, the California poppy (*Eschscholzia californica*) is a predominantly West Coast native that sports brilliantly orange flowers. It is not biologically recognized by D.C. area organisms, fairs poorly here, and yet this poppy is often included in "U.S. native" seed mixes.
- Mail order companies might have words like "American" and "Meadow" in their name but sell seed mixes containing European and Asian species. People who want a true Virginia meadow should check and confirm the native range of the listed species in all seed mixes. Enter the species name at https://plants.usda.gov/java/nameSearch and a map displays a North American plant's native range or places invaded by an exotic weed.

In Part 2, we will consider some species to populate the native meadow.

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