Q/As from the “Native Meadows” Series

By Greg Sykes (greg@grsykes.com)

The Native Meadows series generated many inquiries and positive feedback from readers. Thank you! Here are some of the questions and answers:

Q: Does the word “meadow” only include sunny sites? My backyard has about two hours of partial sun due to high trees. Is there a native meadow for the shade?
A: Natural meadows are expansive and lack tall vegetation such as trees, so the plants growing here desire sun (preferably six or more hours of mid-day sun) or partial sun. Shaded spots, like what you describe, are "open woodlands." Plants selected here should favor shade but can be "bright shade" species instead of those that love dark areas.

Figure 1. Good native meadows attract more than insect pollenators and their predators. This male goldfinch (*Spinus tristis*) feeds on orange coneflowers growing on a median. Notice the seeds still sticking to the bird’s beak.

Q: Can meadow plants be used in sunny medians between the sidewalk and street?
A: Medians are often easements, so a utility company can rip them up at any time. Whatever is done on an easement should neither block access by utility workers nor interfere with the provided services. Furthermore, anticipate that plants could be stomped upon by people and "watered" by passing pets. Understanding the preconditions, tough native meadow species can be good median plants, especially along quiet roads where pollinators have a reduced chance of splattering against speeding vehicles.

Even within a tight space, the median can have limited biodiversity so that the different plants flower at staggered times of the year. Some excellent species (with bloom periods) include moss phlox (*Phlox subulata*, spring), woodland stonecrop (*Sedum ternatum*, spring), wild petunia (*Ruellia caroliniensis*, throughout summer), orange coneflower (*Rudbeckia fulgida*, mid-summer), New England aster (*Symphyotrichum novae-angliae*, late summer), and blue-stem goldenrod (*Solidago caesia*, late summer). Remember to add grasses, which characterize the mini-meadow! Purple Muhly (*Muhlenbergia capillaris*) and little bluestem (*Schizachyrium scoparium*) are good grass choices.

Some points to consider include:

- Select species that grow no higher than 2-3 feet tall—low enough to spot a toddler running down the sidewalk. Doing so keeps a clear line of sight between other vehicles and pedestrians.
- Reduce the chance of bites and stings from spiders and insects as people deliver or collect mail. Keep vegetation at least 1 foot away from the actual mailbox; growth touching the support post is all right.
- Please be polite and trim back any foliage and branches that protrude onto the sidewalk area, especially when the plant sports thorns.

Q: Would you explain why you do not recommend wood or bark mulch [from Part 1 of this series]? I used bark mulch on top of newspaper late in the fall. Then, in the spring, most of the newspaper was gone. If I am in a hurry, I use black plastic that kills any vegetation except English ivy. I have the same piece of black plastic that I reused for years.
A: Bark or especially wood-based mulches are not recommended for several reasons:

1) They take a long time—sometimes years—to decay.
2) The decomposing species tend to be undesirable, such as stinkhorn mushrooms (smell bad), artillery fungus (shoot spore packets up to approximately 30 feet away, leaving dark spots everywhere), and termites (not a species one wants to attract close to the house).
3) They offer no nutritional value to the soil. Wood is primarily cellulose, which is a sugar that the wood-eating organisms turn to water, carbon dioxide, and/or methane. Wood mulch releases insufficient amounts of phosphates, nitrogen compounds, or trace elements to nourish the soil.
4) The microbes metabolizing the wood draw essential elements from the soil since the cellulose lacks what is needed to survive. That means that wood mulch actually robs the soil of nutrients.

Figure 2. These two stinkhorn mushroom species, (A) common (*Phallus impudicus*) and (B) stinky squid (*Pseudocolus fusiformis*), are photographed growing out of old wood chips. Their smell attracts flies (inset) and other insects, which distribute the spores.

Temporary plastic tarps (kept for 3-4 months) can "cook" the shallow-rooted weeds beneath them, but need to be in place during summer months for maximum efficiency. The newspaper and heavy leaf mulch application to create new gardens over existing lawn is the preferred technique since it allows water to continue percolating into the ground, it feeds the soil, and there is nothing to remove later. An undesirable practice is laying down plastic, including plastic bags or tarp, and covering them with mulch or soil. The plastic obstructs the flow of water, nutrients, gas exchanges, and mobility of beneficial soil critters. Even the synthetic, “permeable” landscaping fabric frequently clogs. Furthermore, the plastic stays to pollute the environment. Weeds end up growing on the top mulch layers anyway, so people start a vicious cycle of plastic-mulch-plastic-mulch sandwiches.

Q: Is there a good resource where I can see if the plant I’d like to get is native?
A: An excellent Virginian website is the Digital Atlas of the Virginia Flora (http://vaplantatlas.org/). It shows a given species’ distribution down to the county level. This site works best when using the plant’s binomial or scientific name. The USDA’s plant database (https://plants.usda.gov/java/) is much like the Digital Atlas’ data though applied across the country, so it is a great resource to share with out-of-town friends and relatives, too! Depending on the map’s zoom level, it also shows the counties in which the plant occurs, though some states completely light up if the species occurs anywhere within state lines.

Keep your questions coming!

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