

Wildflowers and Native Plants

Wildflowers and native plants can be a unique and interesting addition to the home landscape. The terms wildflower and native plant are often used synonymously; however, in many cases they are not the same. Wildflowers are described as flowering herbaceous plants (forbs) that grow with little or no human assistance. They can be native or introduced. Native plants in the Great Plains are generally described as those found growing in a defined area prior to the arrival of European settlers. Native plants may be grasses, forbs, shrubs or trees. Wildflowers and native plants also may be classified as annuals, biennials or perennials.

Wildflowers can be used as landscape plants, as fresh cut flowers, in dried floral arrangements, to attract butterflies and for planting in mini-meadows or prairies. They also may be used in low maintenance areas and in sites requiring drought-tolerant plants. However, some native species may be less drought tolerant than nonnative species.

A wildflower planting in the home landscape may vary from a single plant in the flower garden to multiple plantings in large areas. Start with a small wildflower planting and expand it as time permits. A site that will not grow other plants and weeds or has some type of soil problem, will probably not be ideal for wildflowers. Sun-loving wildflowers require sunny sites and shade-loving wildflowers require shady sites. The site and



Butterfly Milkweed is a common perennial wildflower

the wildflowers used there should be compatible.

Plant material can be obtained through various sources including local nurseries, mail order companies, wildflower societies and other organizations. It can be collected from wild or cultivated plants, but caution should be used when collecting plants or seed from native sites. Wildflowers growing in natural areas often do not survive transplanting and sometimes natural populations can be disturbed, damaged or eliminated by collecting plants or seeds. Seed from some wildflower species require special conditions to induce germination. Some wildflowers are endangered or rare and should not be collected.

The planting may consist of a single plant or many types of plants and/or a combination of domesticated flowers, grasses, native plants and wildflowers. Mini-meadows or prairie plantings can be used in small residential plots and commercial landscapes. Prairie plantings are alternatives to traditional lawns and may be used to attract butterflies and wildlife. Design

by planning. For complex designs and plantings on large commercial sites, consider consulting a landscape designer or someone familiar with prairie restoration. Check local regulations which may limit the type of wildflower plantings you can use.

Aggressive competition from weeds can be a problem in wildflower plantings. In addition,

some wildflowers produce large quantities of seed and can dominate other plantings. Periodically, weeds may need to be eliminated. Herbicides may be used in some plantings, but no one herbicide is available that will control all weeds without harming some wildflowers or grasses. Hand pulling weeds is effective on smaller plantings. Mowing is an effective weed control method during the first year on direct seeded, larger sites. Mow to a height of about six inches. Annuals and perennials planted together can complicate mowing especially during the first growing season.

Providing the right amount of moisture is important. For example, do not overwater plants adapted to dry sites. Over-seeding may be necessary when some species start to disappear.

Some professionals recommend an annual burning of a prairie. However, this is unfeasible, extremely dangerous and is not recommended for home landscapes. A good mowing, followed by raking the loose material, should take its place. (DJ)

Control of Smooth Sumac

Several management practices have been studied for control of smooth sumac. These include mowing or cutting, prescribed burning, herbicide application and various combinations of these methods.

Mechanical treatments (cutting or mowing) are ineffective unless repeated treatments over many years are used to control the abundant resprouts. The sharp stumps resulting from cutting are another drawback and may be a hazard to animals or vehicle tires.

Like cutting, prescribed burning is ineffective. Single spring fires can result in nearly 100 percent topkill of stems, but vigorous resprouting can lead to stem densities higher than those before the fire. Because fire topkills sumac, canopy height and cover is reduced in the short term.

Smooth sumac is a North American native



New sumac sprout following prescribed burn.



Sumac plants one month after prescribed burn.

species, and there are no known biological pathogens that would cause widespread mortality. Some insects do feed on smooth sumac and perhaps restrict its spread and numbers.

Many herbicides are very effective against smooth sumac. They can be applied to the foliage, stem bases or to the soil. Approved herbicides include 2,4-D, Crossbow, Spike, Tordon and Velpar. All are effective on a range of broadleaf plants, but are likely to damage desirable forbs. In addition, Spike and Velpar may harm grasses, especially when pelleted formulations are applied to the soil.

Estimated herbicide costs for 2,4-D LV4 ester, 2,4-D LV4 ester plus Banvel and Tordon 22K were \$6.76, \$20.30 and \$22.81 per acre, respectively, based on 1997 published herbicide prices. The least expensive herbicide, 2,4-D, provided control equal to the more expensive ones.

Application costs would be in addition to product costs, but would be similar regardless of herbicide. Long-term effects over several years were not studied, and it is possible additional treatment with 2,4-D may be necessary to control surviving plants. (DJ)

Urban Agriculture



Some Wood Mulches Can Encourage Turf Mushrooms

Green wood mulch may be the culprit in some nuisance fungi problems.

Turf fungi are harmless, but annoy homeowners by dotting the landscape with their fruiting bodies, commonly known as mushrooms. Mushrooms originate from large networks of thread-like tissue growing underground. When growing conditions are ideal and the fungi have an adequate food source, the tissue gets large enough to form a mushroom above ground. Most mushrooms are two to eight inches tall and one to eight inches in diameter.

Wood chips, mulches and sawdust from stump grindings are good food sources for fungi because they contain large amounts of live organic material. To prevent mushroom growth, avoid using mulches from oaks, cottonwoods or other deciduous trees, which are commonly used as growth medium by many fungi. Instead, use pine or other conifer-based mulches, which have fewer fungi able to grow on them. With any mulch, it will be less favorable for fungi growth when composted. Composted mulches don't have as many readily available food sources for fungi as non-



A typical mushroom

composted or "green" mulches.

Mushrooms already growing in lawns can't be chemically treated, but homeowners can remove them by cutting them at their base. Wear gloves when cutting mushrooms because some produce toxins that may be absorbed by the skin.

For more information on landscape fungi, see educational resource "Mushrooms, Puffballs, Fairy Rings, and Slime Molds in Turfgrass" (G89-951-A), available at local University of Nebraska Cooperative Extension offices or online at www.ianr.unl.edu/pubs/plantdisease/g951.htm (DJ)

Check for Bagworms

The bagworm is native to the United States and is found in eastern Nebraska. Bagworms feed on many species of trees and shrubs, but are most common on junipers. They are rarely a serious problem on deciduous trees, except when larvae move away from evergreens.

In urban areas, bagworms are most common on evergreen trees and shrubs. Juniper, arborvitae, pine and spruce may be killed, if completely defoliated. Less severe attacks can slow growth.

Bagworms feed on shade, orchard and forest trees of nearly every kind, as well as many ornamental shrubs and perennials. Severe attacks are unusual. Since deciduous plants grow new leaves, damage to them is usually not serious. The growth of small or newly planted trees, however, could be slowed by leaf feeding.

Newly hatched larvae begin to spin silken bags around themselves shortly after hatching. The first evidence of infestation is the presence of one-fourth inch bags which are carried almost on end by the

young caterpillars inside. As larvae grow, leaf fragments are added to the bag, which may reach a length of two inches by the end of summer. The adult

female moth is wingless and never leaves the bag. Adult males are small, grey moths with clear wings.

Bagworms overwinter in the egg stage inside female bags fastened to twigs. Eggs hatch in late May and early June, and larvae

feed until late August or early September. Males emerge in September and mate with females through the bag entrance.

Control infestations on small trees and shrubs by removing bags during the winter and spring before the eggs begin to hatch in late May. Destroy bags by burning, immersing in kerosene or by crushing. If bags containing larvae are discarded on the ground, the larvae can return to host plants.

Chemical controls are effective if applied during early stages of bagworm development. For most effective insecticidal control and prevention of damage, apply sprays from mid- to late-June. (DJ)



Bagworm

PHOTO/University Extension, University of Missouri-Columbia