

BUTTERFLY GARDENER

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Eastern Tiger Swallowtail nectaring from Swamp Milkweed, a deer resistant plant that works in any style garden. Photo ©Jean Barrell

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Front Cover: Eastern Tiger Swallowtail nectaring from goldenrod. Goldenrods and New England Aster are deer resistant, and great plants in a grassland or more traditional garden. Photo ©Jeff Worthington

North American Butterfly Association is a not-for-profit organization formed to educate the public about the joys of non-consumptive, recreational butterflying including listing, gardening, observation, photography, rearing, and conservation. Membership is open to all who share our purpose.

Our National Butterfly Center is located on approximately 100 acres fronting the Rio Grande in Mission, Texas. The Center uses native plants to create a spectacular butterfly garden that significantly benefits butterflies, an endangered ecosystem, and the people of the Rio Grande Valley.

The NABA standard for identifying plants in publications is to use the USDA common name, found at this website: <http://plants.usda.gov>. Scientific names are omitted.



Grasslands for Butterflies

Jodi Morgan

Grasslands are an important type of ecosystem found in temperate and tropical parts of the world, usually in regions that don't receive enough rainfall to support the growth of forests, but that are not as dry as a desert. As the name implies, the dominant vegetation consists of grasses; although other herbaceous plants are usually present, prairies support little to no tree cover.

Grasslands are known by many names. In North America, especially in the Midwest, grasslands are usually known as prairies. In other parts of the country, they may be known as meadows, and have a higher percentage of wildflowers. A savanna is a variation on the prairie theme, with scattered trees present among the dominant grasses and wildflowers. For the purposes of this article, I'll refer to them as prairies.

The deep-rooted grasses and wildflowers that grow in prairies stabilize the soil, preventing the type of erosion that happened to agricultural soils during the "dust bowl" of the 1930s. They help the soil to absorb rainfall, filter impurities from stormwater, remove carbon dioxide and other pollutants from the air, and sequester carbon—all vital processes that help to mitigate the effects of weather extremes. The aboveground parts of the plants die back at the end of the growing season and gradually break down, adding vital nutrients and organic material to the soil.

The diverse vegetation found in a prairie supports a vast variety of wildlife species adapted to find shelter and food in this type of habitat—not just during the growing season, but throughout the year. A prairie can encompass many different microhabitats created by varied topography that includes low, wet spots and higher, drier areas, each of which supports a different suite of plants, that in turn support different animal populations. A prairie also provides patches of bare ground for butterflies to puddle, bees to nest, or birds to take dust baths; grasses and wildflowers of different heights; varied nectar sources available throughout the growing season; caterpillar food plants for butterflies and moths; safe shelters to spend the winter; and nesting material and food for birds and other animals.

The plant composition of a prairie can change over time, as some plant species decline and others move in to fill in the void. It is a dynamic community of plants, sometimes working together, sometimes competing, filling a variety of ecological niches. The greater the diversity of plants present in a prairie, the more robust it is, and the more wildlife it will support.

The amount of rainfall a prairie receives influences the species that will thrive. Regions with higher rainfall support tall grasses such as Indiangrass, Big Bluestem, and Switchgrass. As the rainfall and soil moisture decrease, mid-height grasses including Little Bluestem, Sideoats Grama, and Prairie Dropseed begin to dominate, and in drier regions, shorter grasses like Buffalograss and Blue Grama thrive. Grass-like sedges and rushes may also be part of the plant palette of a prairie.

Hundreds of species of wildflowers, or forbs, make their homes in prairies. Milkweeds, blazing stars; Blackeyed Susan; Prairie, Purple and other coneflowers; sunflowers; thistles; goldenrods; asters; wild indigos; and lespedezas are just a sampling of the plants that add to the diversity of prairies. They are great nectar sources for butterflies, bees, flies, beetles, and other insects.





Dixie Stitchwort, Scarlet Indian Paintbrush, Meadow Garlic, and Bluejacket (also known as Ohio Spiderwort), blooming among several species of grasses, sedges, and rushes.
Photo ©Clark Mitchell



Common Yellowthroat in a grassland.
Photo ©Mary Anne Borge

Caterpillar food plants for butterflies and moths abound in a prairie. Many Grass-Skippers and some other butterflies depend on one or more grass or sedge species as their caterpillar food. To name just a few examples, Little Bluestem is one of the grasses that supports Cobweb, Ottoe, Indian, Crossline, Dakota, Leonard's, and Dusted skippers. Big Bluestem, Sideoats Grama, and Switchgrass are also caterpillar food for various butterflies.

Gorgone Checkerspot, Silvery Checkerspot, and Pearl Crescent are a few of the butterflies that use various Aster Family members as caterpillar food, while Silver-spotted Skippers, Eastern Tailed-Blues, and many other butterflies use Pea Family members.

Almost all natural prairie habitat in the U.S. has been lost to development or agriculture. Incursion of alien, invasive plant species in hedgerows, pesticide use on agricultural fields, and a lack of truly large-scale conservation initiatives all contribute to the degradation of this special environment. This in turn leads to the loss of the butterflies, bees, birds, and other wildlife that depend on prairie habitat.

We can help to stem this loss by advocating for the preservation of these special places, and by providing prairie habitat on a smaller scale on our own properties. Recently, terms like micro-prairie, strip-prairie, and postage-stamp prairie (or meadow) have been appearing in gardening blogs. These phrases allude to small prairie-garden areas—conscious attempts to mimic prairie qualities on a smaller scale. Micro-prairies can be any size, from just a few square feet to several thousand square feet. They can fit into any size yard, community space, green space, hedgerow (or other unused space) in agriculture fields, or even on rooftops. Prairie restoration even on a micro-scale can help our struggling wildlife.

As a multifaceted volunteer with Southeastern Grasslands Gardener Extension Volunteer, and Cherokee County Fair creating butterfly-friendly habitats and spreading her passion for SGI at segrasslands.org.

Beyond providing food and habitat for butterflies and other wildlife, micro-prairies provide the same environmental benefits that a larger prairie does, such as reducing soil erosion and stormwater runoff, removing impurities from water, and sequestering carbon. Despite their smaller scale, such efforts will help the environment even in an urban setting. Another advantage is that most prairie plants are drought tolerant, so once they are established, watering is not needed.

Prairie plants are beautiful, not just during the growing season, but even in the fall and winter, as their colors change to many shades of warm tans and browns, and a fascinating variety of structure and texture emerges. The best part is the opportunity to enjoy the wildlife that make their home even in surprisingly small habitat patches throughout the year.

Prairie plants or seed mixes can be found through many local or online native-plant nurseries. Once your prairie is established, you may need to check periodically for—and remove—invasive species, or unwanted woody species. Fortunately, the dense nature of a prairie planting provides fewer openings for unwanted plants to become established.

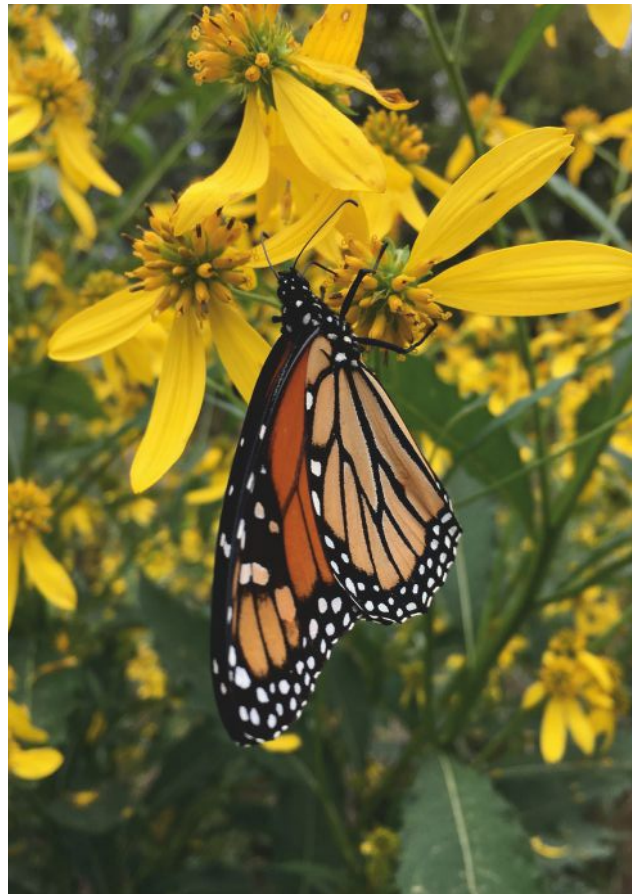
"I think of butterflies as flying flowers." Providing even small patches of prairie on our properties can help these and other captivating, hidden gems that depend on this vanishing habitat.



ds Institute (SGI), University of Georgia Master
rm Bureau, Jodi Morgan of Georgia spends her time
ssion through multiple endeavors. Learn more about



Blooming Carolina Larkspur, Meadow Garlic, Wild Quinine, Largeflower Tickseed, Slender Wedgescale, Winter Bentgrass.
Photo ©Reed Noss



Monarch nectaring from Wingstem, an Aster Family member. Photo ©Dwayne Estes