

Butterfly Gardening in Texas

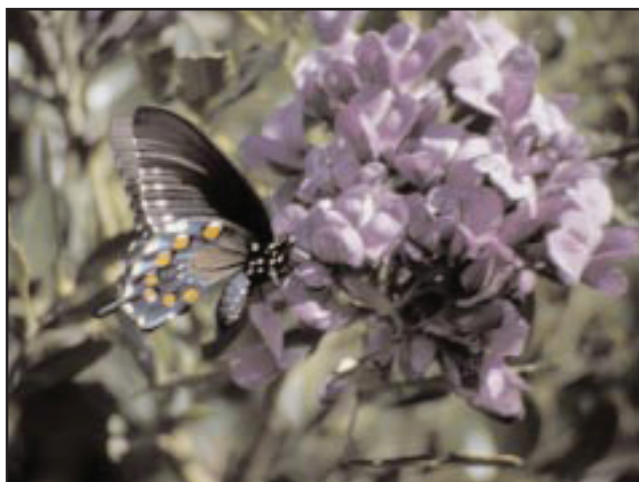


Bastiaan M. Drees and John A. Jackman*

Butterfly gardening is a fun, educational way to enjoy nature's most abundant form of wildlife – insects! A basic understanding of the life history of butterflies, their food needs and the plants that provide these is all you need to plan and grow a garden suited for butterflies. Butterfly gardening requires some knowledge of local butterfly species, flowers that are attractive to nectar-feeding adults, and host plants for the developing caterpillars.

Adult butterflies feed on flower nectar, using it as an energy source for flight and egg production. Some butterflies also are attracted to moist soil at puddles and pond edges and fermenting sap exuding from wounds on tree trunks. Butterflies rest, hidden in foliage of plants, during nights and on cloudy or rainy days.

Butterflies are most abundant from spring through fall. Several species of butterflies—monarchs, cloudless sulfurs and snout butterflies—



migrate during late summer and fall. Plants that flower throughout the summer and into October and November attract migrating butterflies.

Nursery flowers that are excellent nectar sources include **white mist flower**, *Eupatorium wrightii*, white; **blue mist flower**, *Eupatorium greggii*, bluish-purple; **lantana**, *Lantana* spp., in assorted colors; **scarlet sage**, *Salvia coccinea*, red; **Indigo spires sage**, *Salvia* x 'Indigo spires', blue; **butterfly weed**, *Asclepias tuberosa*, orange; and **Mexican mint marigold**, *Tagetes lucida*, yellow-orange. Two native plants that attract butterflies are the **common buttonbush**, *Cephalanthus occidentalis*, a white native, water-loving shrub, and **gayfeather**, *Liatris* spp., a spiked purple flower common along roadsides.

Local arboretums, botanical gardens and parks are excellent sources to observe butterflies and host plants. Make note of the flowers that attract butterflies, then talk to a local nurseryman about obtaining these plants for a home garden!

The addition of bait stations can enhance a butterfly garden. Bait stations use fermented or sweet liquids made from bananas or other cut fruit, brown sugar, beer or yeast. Painted on tree trunks or placed in dishes, bait attracts hackberry butterflies, tawny emperors and other brush-footed butterflies.

Some species—goatweed butterflies, comma butterflies and several other related brushfooted butterfly species—overwinter as adults. Most species, however, overwinter as one of the developmental stages of egg, caterpillar or as a pupa or chrysalis.

Caterpillars are vulnerable to predators, parasites, diseases, pesticides and environmental stresses. Control predators such as the red imported fire ant in and around the garden. Do not use contact insecticides or even *Bacillus*

*Professor and Fire Ant Coordinator and Professor and Extension Entomologist, The Texas A&M University System.

thurengiensis (Bt) products on host plants. If necessary for their protection, caterpillars can be raised in containers or screened cages. Provide them with fresh, clean leaves from their host plant daily. Most caterpillars develop through five stages (instars), molting between each stage, over 2 to 6 weeks before forming a chrysalis.

Caterpillars feed only on specific plants, usually wild plants and weeds. For a butterfly to complete its life cycle within a butterfly garden, the caterpillar must be allowed to feed on leaves and other plant parts. Excellent host plants for caterpillars include **common milkweed** or **butterfly weed** for rearing monarchs; **parsley**, **dill** and **fennel** for rearing the parsleyworm caterpillar (black swallowtail); **passionflower vines** (*Passiflora* spp.) for rearing the gulf fritillary; **citrus** or **Hercules club** for rearing the orange dog caterpillar (giant swallowtail butterfly); **canna** (*Canna x generalis*) for rearing the larger canna leafroller Brazilian skipper; and **nettles** and **thistles** for rearing caterpillars of several brush-footed butterfly species.

More butterfly gardening information can be found at <http://agpublications.tamu.edu>, <http://entowww.tamu.edu/extension> and <http://entowww.tamu.edu/entoweb/buttermot.html>.

References

- Butterfly Gardening for the South* by G. Ajilvsgi, 1990.
Landscape Plants for Texas and Environs by M.A. Arnold, 1999.
A Field Guide to Common Texas Insects by B.M. Drees, and J.A. Jackman, 1998.
A Field Guide to Butterflies of Texas by R.A. Neck, 1996.
 "Managing Fire Ants in Texas Schoolyards and Butterfly Gardens" by N. Riggs. Fire Ant Plan Fact Sheet #016, Texas Agricultural Extension Service, 1998.
Neil Sperry's Complete Guide to Texas Gardening by N. Sperry, 1991.
The Butterfly Garden by M. Tekulsky, 1985.
Native Texas Plants Landscaping Region by Region by S. Wasowski and A. Wasowski, 1997.
Perennial Garden Color by W.C. Welch, 1989.



The authors are grateful for review comments from Mike Arnold, Marvin Harris and Ed Riley.

For sale only, \$10 per set.

Produced by AgriLife Communications and Marketing, The Texas A&M University System

Extension publications can be found on the Web at <http://AgriLifeBookstore.org>.

Visit Texas AgriLife Extension Service at <http://AgriLifeExtension.tamu.edu>.

Educational programs conducted by Texas AgriLife Extension Service serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Chester P. Fehlis, Deputy Director, Texas Agricultural Extension Service, The Texas A&M University System.