THE UNIVERSITY OF ARIZONA
Cooperative Extension
Yavapai County

Backyard Gardener
#188

Butterfly Gardening

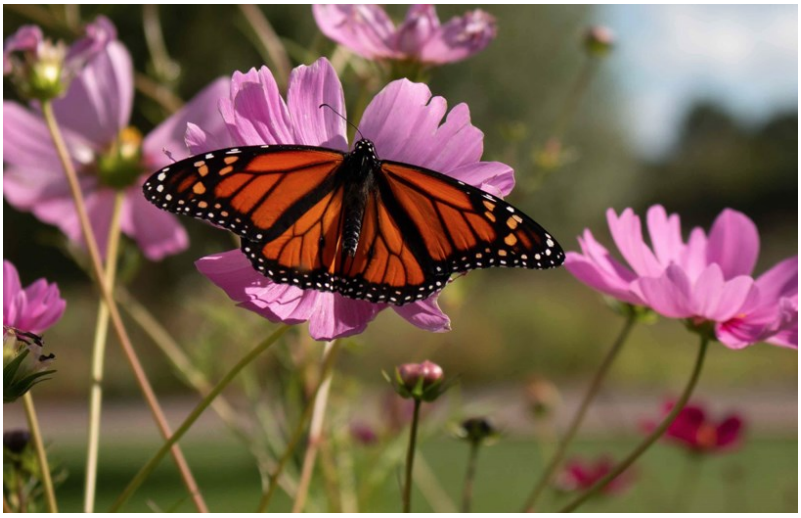
Over 350 butterfly species have been found in Arizona. Our ecosystem diversity, large land area, and proximity to the subtropics certainly contribute to this fantastic array. Dedicated gardeners can create butterfly habitats that attract multiple species of butterflies to your landscape. There are many books and web sites that can help you create butterfly gardens and identify the butterflies that visit your garden. This publication will hopefully pique your interest and give you some basic information to get you started with butterfly gardening.

As most people know, butterflies go through a four-stage developmental process known as metamorphosis (egg, larva or caterpillar, pupa or chrysalis, and adult). Understanding a butterfly's life cycle can make observing them more enjoyable and give you a greater appreciation of butterfly gardening. Depending on the species, the life cycle of a butterfly (one generation) may take anywhere from about one month to an entire year. Usually, the most common butterflies are multiple-brooded and provide a continuous array of color and activity to your butterfly garden throughout the season.

Although plant selection and placement are the most effective methods to attract butterflies, site selection for a butterfly garden is also important. Butterflies like sunny sites and areas sheltered from high winds. Warm, sheltered sites are most needed in the spring and fall. Provide rocks or bricks for pupation sites and for basking and warming in the sun. Butterflies require food plants for their larval stages and nectar plants for the adult stage. Some larvae feed on specific host plants, while others will feed on a variety of plants. Well-planned butterfly gardens include both larval host plants and adult nectar plants. Wet soil or areas around ponds are frequently visited by male butterflies — a behavior called "puddling" where they extract sodium and other nutrients needed for mating.

A few woody plants in the butterfly garden will provide protection from predators, offer shelter, a place to lay eggs, and a place to attach chrysalides. It can be relatively simple to attract butterflies and still have a garden that suits your tastes and needs. Nectar flowers and other favorite butterfly plants come in many forms--annuals, perennials, herbs, vines, grasses, shrubs, and trees.

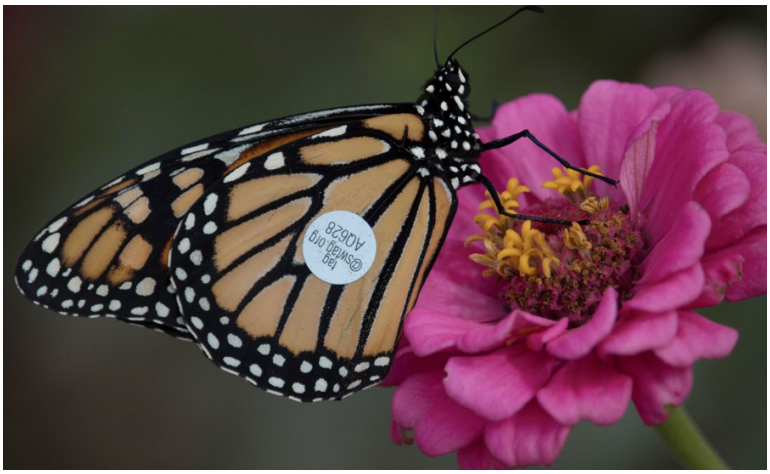
Plants with clusters of flowers are often better than plants with small, single flowers because it is easier for butterflies to land on clustered and/or larger flowers. Planting in mass (several plants of the same kind) will usually attract more butterflies, as there is more nectar available to them at a single stop. Select plants adapted to your site and location, and develop a plan for the butterfly garden. In addition, pesticides should not be used in or near butterfly gardens. This includes Bacillus thuringiensis (Bt) which is a toxin to caterpillars.



Monarch butterfly on cosmos flower. Photo by Sharon Marmaduke, Yavapai County Master Gardener.

Some plants that provide food for butterfly larvae include: cabbage, common sunflower, lamb's quarter, snapdragon, hollyhock, Queen Anne's lace, dill, parsley, fennel, alfalfa, aster, clover, mallow, milkweed, and grasses. Some common nectar producing plants include: cosmos, zinnia, nasturtium, marigold, petunia, sweet alyssum, catnip, mint, chives, blanket flower, chrysanthemum, phlox, pinks, and yarrow.

Monarch butterflies have been a subject of increasing concern as their numbers have decreased greatly at overwintering sites in Mexico and California. Reasons for the decline in monarch butterflies vary from place to place but include the loss of wild milkweed populations (larval food plants), pesticide use in agriculture and urban areas, climate change, and logging and development of overwintering sites. Several local efforts are under way to increase the availability of milkweeds and to "tag" migrating adults as they pass through Arizona. These citizen science efforts monitor preferred milkweed species used for food, migration routes used, and ultimately which monarchs are successfully arriving at overwintering sites.



Tagged monarch butterfly. Photo by Sharon Marmaduke, Yavapai County Master Gardener.

Additional Resources:

Butterfly Gardening
University of Nebraska - Lincoln Extension, Institute of Agriculture and Natural Resources

Attracting Butterflies to the Garden
Colorado State University Extension

Monarch Conservation
Xerces Society for Invertebrate Conservation

Butterflies of the Central Arizona Highlands
297 page book written by Philip McNally, PHD

Current and extension information on monarch butterflies, including habitat conservation, teaching curriculum and butterfly gardening

Southwest Monarch Study (https://swmonarchs.org). - tagging information and distribution.

Monarch Watch, national center for Monarch Studies, located at the University of Kansas.

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Adapted from original Backyard Gardener publications by Jeff Schalau, Agent, Agriculture & Natural Resources, University of Arizona Cooperative Extension, Yavapai County