



Healthy Garden Tips

University of California Cooperative Extension - Napa County (707) 253-4221



GARDENING FOR BUTTERFLIES

By Dean R Donaldson, Farm Advisor; V.Fish and P.Pawl, Master Gardeners



Over 230 types of butterflies live in California, and more than 50 can be found in Napa County. The variety of local plant communities and climates favor a wide range of butterfly types. The largest are the Mourning Cloak, Swallowtail and Monarch which can have a wing span up to about 4 inches. The smallest, the blue hairstreak, can be as tiny as one-half inch. Butterflies are seen from early spring until late fall, with different kinds appearing at their preferred season.

Home gardeners can encourage butterflies by providing blooming flowers, resting places and garden damp spots. Butterflies need water, food and shelter to survive, but each type prefers a different food source so they don't compete with each other. Adult butterflies, especially females, feed on nectar from plants.

Nectar Plants:

Adult butterflies feed only on liquid foods. Grow nectar plants for butterflies in anything from window boxes and flower pots to large meadows. Plan to provide blooming plants throughout the year so wandering butterflies can snack in your garden. While some butterfly species are attracted to specific types of plants, most are general feeders. Butterflies are attracted to flowers planted as a group, avoid planting flowers in lines or mixtures.

Some plants are attractive to many kinds of butterflies. These examples are planted in Napa County gardens: lupine, mints, asters and others in that family such as zinnias and sunflowers, violets, cosmos, columbine, coreopsis, clovers, dianthus, gaillardia, geranium, geum, impatiens, hollyhock, yarrow, lantana, nasturtiums, monarda, verbena, sweet alyssum, wild buckwheat, wall flowers (*Erysimum*) and herbs such as sages, rosemary, lavender and chives. Common shrubs attractive to butterflies include: ceanothus, buddleia, lilac, manzanita, rhododendron, and members of the rose family.

Drinking Water:

Butterflies cannot drink from open water. The best way to provide drinking water for butterflies is to place a pan of wet sand in an open area under a dripping faucet. Butterflies can also get a drink from drops of morning mist or dew on plant leaves. (Caution: misting plants late in the day can favor plant diseases.)

Resting Places:

Butterflies appreciate a place out of the wind where they can sun themselves or hide from strong sunlight and birds. Large rocks in open areas are welcome spots for resting butterflies. Some prefer the sunny surface of a fence. Other butterflies prefer to rest inside of trees where they are shaded and are protected from birds.

Food for Larvae

Butterflies lay eggs on selected favorite plants that are usually different from the ones adults feed on. Egg hatch and larvae development is timed to match host plant growth. Larval growth is different for different types of butterflies, and can take only a few weeks or as long as two or more years. Butterfly larvae are also known as 'caterpillars'. When old enough, larvae leave the feeding area and begin a process called 'metamorphosis', changing form inside of a hard or leathery case called a pupa or chrysalis. Pupae may be found in the soil, on plants or in garden debris. After an appropriate time, the adult butterfly emerges from the pupa and 'pumps-up' their wings. They fly away to seek a mate, blooming plants and a place to lay their eggs.

PLANTS USED BY COMMONLY SEEN BUTTERFLIES IN NAPA COUNTY

Butterfly	Host plant (for caterpillars)	Nectar plant (for butterflies)
Painted Lady	cheeseweed, lupine, thistles, fiddleneck	thistle, knapweed, aster, yarrow, marigold, zinnia
Fritillary	violets	thistle, coneflowers, bergamot, milkweed, ironweed
Common White	mustard, cabbages	mustards, sweet anise
Monarch	milkweed (Aesclepias),	milkweed, goldenrod, thistle, liatris, cosmos
West Coast Lady	mallow, hollyhock, nettle	milkweed, goldenrod, thistle, liatris, cosmos
Mourning Cloak & Admirals	willow, elm, poplar, birch, hackberry, orchard stone fruits	milkweed, rotting fruit, sap, shasta daisy, yarrow
Common Hairstreak	hibiscus, backwheat, senna, hops	aster, thistle, black-eyed susan, yarrow
Red Admiral	nettles	rotting fruit, sap, aster, thistle, dandelion, clover
Painted Lady	thistles, nettle, malva, fiddleneck	rotting fruit, sap, aster, thistle, dandelion, clover
Common Sulfur	clover, vetch, alfalfa, beans	clover, goldenrod, aster, milkweed, phlox
Pipevine Swallowtail	Dutchman's pipevine	sweet anise, asters, butterfly bush, ceanothus
Western Tiger Swallowtail	alder, birch, cottonwood, willow, California sycamore, elms, apple	thistle, milkweed, phlox, bee balm, clover, sunflower

References: 'California Butterflies', John Garth and J W Tilden, University of California Press, 1986. 'Gardening for Butterflies', Oregon State University Extension Online Leaflet, April 2000. 'Attracting Butterflies to the Garden', Colorado State University Coop. Ext. Leaflet No. 5.504, Nov 1999. California Insects, Calif. Nat. Hist Guide No 44, Jerry Powell and C L Hogue, Univ. of Calif. Press, 1979. 'Gardening for Butterflies', University Extension, Iowa State University, RG601 March 2006

The University of California prohibits discrimination against or harassment of any person on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6th Floor, Oakland, CA 94612-3550, (510) 987-0096.