

In This Issue

- *Garden Butterflies*
- *Garden Pests*
- *Cosmos*
- *Specialty Gardens*

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Animate Your Garden With Butterflies

Maggie Wolf, Utah State University Extension Agent

Butterflies add an extra dimension of motion into gardens, fluttering from one colorful bloom to the next, nectaring and possibly laying eggs for a new generation. Learning the common butterflies of Wasatch Front gardens can become a new hobby, and makes gardening even more enjoyable and fulfilling.



the flower, and assists cross-pollination of the flowers.

A checklist of the butterflies of Utah can be found at the Utah Lepidopterists' Society website, <http://www.utahlepsociety.org>. Butterflies' botanical and common names are listed so that reference to field guides is relatively easy. County-specific lists can be found at the Northern Prairie Wildlife Research Center 'Butterflies of North America' web page at <http://www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/bflyusa.htm>.

Garden flowers with relatively flat surfaces such as zinnia, yarrow, cosmos, asters, and gaillardia, or even convex surfaces such as purple coneflower, Mexican Hat, black-eyed Susan, or gomphrena are natural butterfly landing pads. Butterflies gather nectar from flowers using a long, straw-like 'proboscis', which does no harm to

In addition to nectaring, most butterflies and some moths appreciate a soggy wet muddy area at which they can 'puddle' or gather mineral nutrients. Most butterflies will also nectar on cut pieces of melon, fruit, or even wet sponges. Set up a special 'butterfly bird-bath' outside a window of your home for easy butterfly viewing, and stock it regularly with freshly-cut fruit pieces or a mud bath.

Some garden plants may be grown as larval food for certain species of butterflies. For example, the Buckeye larvae can feed on *Mimulus* ssp. (monkeyflower), snapdragons, sedums, and verbenas. Many Utah native butterflies lay their eggs on trees. The larvae of Mourningcloak hatch in Chinese Elm and Willow trees,

(Continued on page 4)

Pests In The Garden

Wade B. Bitner, USU Extension Agent

How can I prevent an insect invasion in my garden? There are several steps. First, identify the pest. Then determine if you have a level of tolerance to the damage that is evident. If damage can be tolerated, it will allow the predatory insects to aid you in your pest control. Predator populations need time to build up sufficient numbers to provide pest control. During that time, there is damage to the crop. Insect pests such as aphids reproduce very rapidly. Ladybugs, green lacewings and other aphid predators reproduce while there is still food (aphids) available, then they move. Purchase of these predators can aid the natural population and help get rid of the aphids.

Another method of controlling aphids is with a strong stream of water. Once washed off the plant, the aphids have a hard time to get back up the tree or plant to continue their damage. "Safer's insectidal soap" may be used with water to wash them off and provide some insecticidal properties without damaging the building population of predator insects. Other insecticides may take care of the aphids, but kill predators as well, allowing the problem to occur again. If there is a non-edible plant that needs protection, use a systemic insecticide to prevent population build up. This type of insecticide will be taken into the plant and every time the aphid tries to suck juices out of the plant, it will receive a dose of insecticide and die. This method takes planning because of the time required to be absorbed into the

plant. It works well.

New plants grow rapidly and they are very susceptible to insect damage at this stage of growth. Watch for single adult insects, then look for eggs or changes in plant color before the insects appear and you will know when to apply control measures.

Eggs may be massed as in this picture. The eggs are not susceptible to spray but can be removed physically. Or you may wait until they hatch into nymphs then treat



with a dust. The nymph stage insects are very susceptible to insecticides. Treatments of liquid spray must be applied to the underside of the leaf for effective control.

Other common pests are grasshoppers and mites. Grasshopper damage shows up as broken or torn leaves in irregular patterns. The hoppers are visible even though they are small. Remember, they eat double their body weight in green material each day, so control is very important. Small grasshoppers are most easily controlled because they are not flying and are restricted to small areas of infestation. Pyrethrins, Malathion, or Sevin are effective control measures. Use of "nosema" will mean the hoppers

do not die quickly and will continue to feed. However, this treatment may be effective if used on a large area.

Spider mites can be recognized by a change in leaf color before the mites are visible. The infested leaf looks like it has been covered with dust. It may be possible to see fine webbing on the underside of the leaf. Place a piece of paper under a leaf and hit the leaf sharply. When the dust falls, if it crawls, then you have spider mites. Avoid dusty areas for planting vegetables and flowers to prevent mites. Remove weeds from the area around the garden to prevent mite infestation buildup before moving to the desirable plants again. Some damage can be tolerated while waiting for predators to build up population levels high enough to control mites. If these solutions do not work, then use a miticide for control. Kelthane may be used to control mites. Remember to read the labels on all pesticides and apply as directed.

You can have a clean garden with few insects if you keep the plants healthy and spend enough time in the garden to recognize any changes in plant growth and development.

Cosmos – Garden Adornment

Maggie Wolf, Utah State University Extension Agent



The Greek origin of ‘cosmos’ means order, beauty, and adornment. The two most common species of our garden cosmos are *Cosmos sulphureus* and *Cosmos bipinnatus*. A wide variety of cultivars in each species can provide colorful annual gardens and beautiful cut flowers. Both species prefer a poor but well drained soil and can tolerate some drought conditions. Direct sow cosmos seed into the garden and grow in full sun for best flowering. Heavy fertilization will reduce flowering. Cosmos will re-seed readily, but the second generation will revert to the species characteristics. Tour local gardens this summer to recognize and appreciate the diversity within these two species of *Cosmos*.

Cosmos sulphureus flowers add ‘hot’ colors to your garden: bright yellow, orange, and red. Leaves are cut into finely textured lobes, giving an almost ferny appearance to the plants. Typically, these plants reach 18 to 36 inches in height. Because direct sowing is recommended, a stand of cosmos is easy to establish, with germination after about 7 days. Thin the seedlings to a 12- to 18-inch spacing. The plants will bear flowers continuously from early summer until frost.

Cultivars of *C. sulphureus* have been developed for radiant color, double blooms, and shorter plant heights. ‘Diablo’ produces burnt-orange, 2” wide double blooms and grows 18 to 30 inches tall. ‘Diablo’ was an All America

Selection (AAS) winner in 1974 and is still a favorite today. ‘Lemon Twist’ sports a bright yellow flower, and grows 24 to 30 inches tall. ‘Sunny Red’, a 1987 AAS winner is a shorter cultivar, growing only 12 to 14 inches tall. The flowers have bright red petals and a yellow center. ‘Cosmic Orange’ was a 2000 AAS winner; the compact, round habit of the plant offers a good choice for the smaller flower bed. Other cosmos cultivars are available, providing tall or short plants with yellow to red flowers.

Cosmos bipinnatus is the other species of cosmos commonly found in gardens. This species offers flowers of white, pink, violet, or lavender color blooms. Current favorites include the ‘Sonata’ series; a 20-inch tall cultivar with white, pink, and violet blooms. ‘Sea Shells’ is a variety with tubular petals of white, pink, or crimson, with a yellow center. This interesting blossom is especially nice in cut flower arrangements.

C. bipinnatus tends to grow tall, up to 6 feet, and will often lodge or fall over. Plants may be staked to stay erect using plant hoops or tomato cages. Or, drive pieces of rebar into the soil near the plants and loosely tie the cosmos upright.

Cosmos have been a garden favorite for years and years. New cultivars make this a good choice for background, focal points, or middle flower beds. Visit local gardens this summer to learn which cultivar you would like to grow next summer.

Try A Speciality Garden For Fun

Wade Bitner, USU Extension Horticulturist

Tired of ordinary gardening? Try a specialty vegetable garden this year. Have you ever considered a pizza sauce garden, a soup mix garden, a salad bowl garden, stir fry garden, rainbow planter garden, pesto pot garden or salsa garden. Sounds interesting doesn't it? This type of individual garden does not have to be big, just contain the ingredients for each type wanted. For example, the pizza sauce garden could contain tomato, sweet green pepper, onions or scallions and oregano. It may even be planted in a large whisky barrel or pot or just in a corner of the regular garden. A corner of the flower garden could be enhanced by the pizza sauce special.

A soup mix garden could have Lemon grass, thyme, parsley, chives, chervil and scallions or onions.

Salad bowl gardens would have small tomatoes, sweet pepper, cucumber, radishes and a mixture of three or four leaf lettuce varieties. This will help organize the salad and could even use exotic things like kohlrabi, spinach, or edible flowers.

A stir-fry garden might have Ichiban eggplant (narrow egg

plant), an assortment of hot peppers, snow peas, and bok choy. The peas and bok choy may be planted in the fall for a refreshing meal late in the season. If there is more room in the garden, try a jicama plant. It will grow in our area, just not as large as in the stores and it makes a good substitute for water chestnuts.

Rainbow planter could have any patio type tomato (red, yellow or orange), a purple or white egg plant, several bell peppers of different colors (green, yellow, red, orange, blue, ivory and chocolate), green and purple basil and Bright Lights chard to make a color statement in your vegetable garden.

Pesto garden would have several herbs that you want to make into a pesto. Some of the favorites are Basil (Queen of Siam), garlic, and even parsley.

Salsa gardens should contain tomatoes (usually a bush type for a container size planting), jalapeno peppers, cilantro, onions and garlic.

Herb combinations may be planted in pots and removed before danger of first frost to continue as a window-sill garden indoors for a good portion of the

winter. Basil, garlic chives, and parsley can be successfully raised this way for winter use.

For the forgotten pet... choose a spot away from the rest of the herbs and plant catnip. It will be greatly appreciated by your favorite cat.

If you are serious about your growing abilities, challenge your kids or neighbors to a "dash for the radish". Plant radish seeds in a twelve inch container (or larger) at the same time and see who can produce the first mature radish. This creates a fun way to keep others interested in the garden.

A kids corner may be planted with anything they want. Just watching the mixture that they come up with will be a fascinating learning experience. Radishes, tomatoes, bush beans (they have big seed), basil, carrots, beets are only a few options. The list goes on. They will be able to help with their garden and may get the bug just like you have.

The bottom line is, have fun. Many of these specialty gardens may be planted in a barrel or 24 inch pot to make a conversation piece in your landscape.

(continued from page 1)

and eat the foliage until they are ready to pupate. The Hackberry butterfly larvae, not surprisingly, feed on hackberry trees. Although we may enjoy seeing the adults fly by, most moth and butterfly larvae found in the vegetable garden are considered pests. For example, tomato hornworm is the larval form

of a type of sphinx moth, also known as a hawk moth or hummingbird moth. This moth is about as large as a hummingbird and hovers as it nectars on flowers like petunia during the evening hours.

Consider attracting butterflies into

your garden for an extra dimension of motion and beauty. Provide a 'puddle' or nectar source that is easily viewed from your window or patio, and the butterflies will sit still long enough for you to really enjoy their visit.