Feature

Build A Butterfly Garden

By Tina Stricklen

What has four colorful wings, a proboscis and starts out life as a caterpillar? If you answered butterfly, you are correct. These delightful dancers of the garden can be seen performing feats of grace and skill as they arabesque and pirouette through the blossoms. If you are interesting in attracting butterflies to your garden here are some tips to bear in mind.

Butterflies are members of the Lepidoptera order who are diurnal or daytime insects that use their sense of smell to seek out nectar. This is a big clue for the aspiring butterfly gardener. Because butterflies feed on nectar, you can be sure that lots of fragrant blossoms in the garden will attract these beauties to your area.

Plants such as liatris, agastache, coneflower, aster, sunflowers, baptisia, cleome, cosmos, hollyhock, gaillardia, scabiosa, pentas, marigolds, snapdragons, lantana and obviously butterfly bush will lure many butterflies to your garden. Don’t forget that butterflies also need plants to lay their eggs upon so their babies or caterpillars can feed once they hatch. These plants are called host plants. If you have specific types of butterflies on your must-see list realize that specific types of butterflies feed on specific host plants. For example, the monarch feeds on milkweed. Host plants can include herbs such as dill, parsley and fennel but also milkweed, pipe vine and passionflower vine. Don’t limit yourself to the cultivated garden either. Butterflies thrive on host and nectar plants found in nature which include trees, grasses and even weeds. You should remember, the most hospitable and successful butterfly garden provides continual bloom throughout the growing season.
Aside from plant selection there are a few other tricks to creating a butterfly-friendly garden. First you will want to site your garden in a sunny location or one that receives at least six hours of sunshine per day. A full sun location will ensure lots of blooms on your plants but will help warm the insects. Additionally, you will want to site your full sun garden out of windy locations. Butterflies are like delicate little gliders and heavy wind gusts will blow them away.

Other tips include adding a sandy, moist area for butterflies to whet their whistle as well as provide a cluster of dark stones so they may warm in the sun. Lastly, a 100 percent organic garden is preferred for optimum conditions. Eliminating pesticide use will increase not only your butterfly population but other beneficial insects as a whole.

Butterflies are a rewarding feature in any garden but they are inspiring as well; it is no surprise that time and again they are referenced in art and particularly in literature. One particular quote that seems to sum up this article is by the French lyric poet, Ponce Denis Ecouchard Lebrun which states "the butterfly is a flying flower, the flower a tethered butterfly." To learn more about butterflies please refer to [http://www.thebutterfliesite.com/](http://www.thebutterfliesite.com/).

**Resources:**


http://www.ncsu.edu/jcraulstonarboretum/horticulture/gardens/butterfly_garden/butterfly_garden.html


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**Featured Plant**

* Buddlea x 'Blue Chip'  
* Lo & Behold™ 'Blue Chip' Butterfly Bush  

_by Joanne King_

Lo & Behold™ - ‘Blue Chip’ Buddleia is a dwarf butterfly bush developed by Dr. Dennis Werner of the JC Raulston Arboretum at NCSU. It is a summer-flowering perennial that grows about 2-3 feet tall and wide, forming a compact mound. Unlike other butterfly bush varieties, ‘Blue Chip’ will not overwhelm your landscape space. It produces lavender blue spike-like flowers beginning in May until the first frost. The foliage is a gray-green. Because of its compact nature, the ‘Blue Chip’ butterfly bush is suitable as a container plant, border plant, or as a ground cover. Hardy to USDA Zone 5, it can be pruned back to one foot in early spring in our area.

Some of this plant’s key features include the following:

- Flowers from mid-summer to frost
- Pruning generally not needed, but may be trimmed in spring
• Deadheading not necessary, but removing spent flowers can improve appearance
  Deer resistant
• Attracts butterflies and hummingbirds
• Drought tolerant and heat tolerant
• Prefers well-drained, fertile soil and little water, once established

And if that isn't enough, it is fragrant, too! Give this plant a sunny spot, and it will show off all summer long.

More information can be found at:


http://www.provenwinners.com/plants/detail.cfm?photoID=9188

YARD VILLAIN
Raulstonia solanacearum

Bacterial Wilt of Tomato

By Shawn Bank

One of the worst diseases of tomato is bacterial wilt. This disease can survive in the soil for several years once it has been introduced. When the bacteria in the soil comes in contact with an injured root of the tomato plant, it infects the root where it gets taken up into the xylem (water conductive tissue in the stem of plants). Here the bacteria continues to grow and multiply until it plugs the xylem to the point where no more water can move from the roots up to the leaves.

The first symptom of bacterial wilt is the newer leaves wilting during the heat of the day. Sometimes the leaves will perk back up in the evening the first couple days. As the bacteria grows in the stem more leaves will begin wilting and the newest growth will not recover overnight.

If the plant can be sacrificed, remove the plant from the garden and cut the stem just above the soil level. The xylem (middle part of the stem) in a healthy plant will be white or light green. In a plant with bacterial wilt the xylem of the stem will have a gray appearance. When the stem is cut lengthwise the gray appearance will be more obvious.
There is no control for bacterial wilt in the home garden. Remove any plants that are infected and destroy them or throw them into the trash. There are some root stock varieties that can be used to graft onto that are resistant to bacterial wilt. Tomato grafting is fairly simple and except for not planting susceptible tomato varieties is the only way to grow tomatoes in home vegetables that has been infected with bacterial wilt.

A good source for more information on Tomato Wilt would be the following website, which has some very good pictures. [http://plantpath.ifas.ufl.edu/rsol/Trainingmodules/BWTomato_Module.html](http://plantpath.ifas.ufl.edu/rsol/Trainingmodules/BWTomato_Module.html)

**JUNE GARDEN TASKS**

**LAWN CARE**

[http://www.turffiles.ncsu.edu/](http://www.turffiles.ncsu.edu/)

- When do you water your lawn? When the grass blades are just starting to curl and your footprints remain on the lawn when you walk on it. Apply an inch of water in the early morning, this allows the lawn to dry during the day. The ground is dry so cycling the irrigation applying a little at a time will allow the water to soak deep into the soil.
- It's a good time to plant new sod in damaged areas. Get your soil tested first (we have free kits).
- Grasses vary in their needs for nutrients, mowing height and watering. to learn how to best care for your grass type check out the Lawn Maintenance Calendar for your grass and learn how best to care for it, month by month …
- Bermuda - [http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000016](http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000016)
- Centipede - [http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000019](http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000019)
- Zoysiagrass - [http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000020](http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000020)
- Tall Fescue - [http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000017](http://www.turffiles.ncsu.edu/Maintenance_Calendars.aspx#000017)
- This is NOT the time for planting or fertilizing fescue! Wait until the fall.
- Mow fescue at a height of 3 - 3 1/2 inches to help it survive hot, dry periods. It is a cool season grass that slows down in the summer and if cut too short the tender roots will be exposed to extreme heat which will certainly damage, if not kill, it. It is also difficult for the fescue to recover from being cut too short as it is not actively growing at this time.

**TREES, SHRUBS & ORNAMENTALS**

- Prune climbing roses after they bloom, then fertilize them to stimulate new growth. This summer’s growth carries next year’s buds, so keep the plants growing vigorously! Train long shoots horizontally to stimulate more branching.[http://cetulare.ucdavis.edu/mg/Pruning%20Climbing%20Roses.pdf](http://cetulare.ucdavis.edu/mg/Pruning%20Climbing%20Roses.pdf)
- As soon as their foliage dies, dig bulb clumps that have become crowded: daffodils, crocus, Dutch iris, etc. Divide
and replant bulbs immediately, or store them in a cool, dry place for planting this fall. (Note: Tulips and Hyacinths generally don’t perennialize in our area because our spring and winter is too warm.)

- Give plants room to grow. Pull/transplant excess seedlings of marigold, cosmos, zinnias, etc. Growing plants need room to develop. Spacing plants properly reduces the risk of fungal diseases like powdery mildew.
- Remove faded flowers. Many annuals and perennials will stop blooming once they’ve started to set seed. Dead heading or removing spent flowers will prolong the bloom period.
- Pinch growing tips of ornamentals. Pinching the growing tips will encourage compact, sturdy, branched growth with lots of blooms.
- Protect plants from dehydration. Transplanting on overcast days, early in the morning, or late in the afternoon will reduce water loss in transplants. Keep newly-planted ornamentals well watered for the first several days. Apply a 2-3” layer of mulch to conserve water and keep roots cool.

**EDIBLES**

- Squash plants wilting? squash vine borers may be the culprit. Check near the base of the plant for a small hole and a mass of greenish-yellow excrement. Slitting open the stem may reveal the villain: a fat, white caterpillar. It may be possible to save the plant by removing the caterpillar, then covering the injured vine with moist soil to encourage rooting.
- Warmer temperatures and longer days send a signal to spring greens that it is time to flower (bolt). Leaves generally do not taste as good when the plant starts to bolt. Once this quick process starts, there is no turning back. To delay bolting try the following - Cover spring salad greens with a cardboard box in mid afternoon. Remove it after sunset and give the plants a slurp of water to cool them down. This procedure fools the plants into thinking the days are shorter than they actually are and can delay bolting by a couple of weeks. -- Barbara Pleasant

**LANDSCAPE IDEAS**

- Tropical natives make excellent additions to our gardens in the summer, with colorful foliage, bright flowers, and heat-loving constitutions. They can’t survive our winters, but we can try over-wintering our favorites indoors. Ornamental peppers and Jerusalem cherries are other heat-lovers. More exotic tropicals, such as Alternanthera (Joseph’s Coat), Plectranthus (with lovely gray felty leaves), and Acalypha (Copper Plant), are becoming available. Visit the J.C. Raulston Arboretum at NCSU to see first-hand how tropicals can spice up our summer gardens.
- Mulch flower beds and vegetable gardens now to save on watering chores later. The mulch you choose should be one you think enhances the beauty of your garden. Find more information at: [http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html](http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html)
• Keep outdoor potted plants watered; in the heat they lose a lot of moisture. If you’re going on vacation, ask a friend to check your plants regularly.

HOUSEPLANT
• Water houseplants as needed. Do not allow them to dry out to the point of wilting, but watering too often will lead to root rot. Watering needs will vary according to the size of the plant and the container it is in.
• If moving plants outside for a summer vacation, move them slowly into the light. If put directly into the light after being in the house all winter the sun will give them a sunburn and could kill the plants.
• Remember to fertilize. This is the time when most houseplants will be doing the most growing and will need the nutrients to stay green and healthy.
• General Houseplant care: [http://muextension.missouri.edu/xplor/agguides/hort/g06510.htm](http://muextension.missouri.edu/xplor/agguides/hort/g06510.htm)