Creating a Butterfly Garden at Your School

Creating a class or school butterfly garden is a wonderful hands-on way to expose your students to nature. Butterflies are not just beautiful to watch; they also play a key role in plant reproduction by transporting pollen from flower to flower. Loss of habitat, increased pesticide use, and pollution are the primary reasons their numbers are declining. Working with a butterfly garden teaches students that even small steps can help improve the environment. Butterfly gardens aren’t just for younger students—colleges and universities can incorporate them for campus beautification and as a resource for biology classes.

You don’t need a lot of space for a butterfly garden. Search the Internet or consult local parks or nature centers with butterfly-friendly habitats for advice on creating and maintaining a butterfly garden. Your students will also enjoy visiting these locations on a field trip.

Butterflies are attracted to a variety of plants, but certain flowers and bushes have proved to be particular favorites. Many butterflies will lay their eggs on only one type of plant: For example, Monarchs will lay their eggs only on milkweed; Zebra Longwings on passion flowers. Providing the preferred types of plants will help ensure that butterflies thrive in your area.

Planting many different types of flowers and bushes will entice a variety of butterflies to visit your garden. They especially like purple and yellow flowers, as well as white, blue, and red. But brightly colored clothes will startle them. Advise students to wear blues, greens, and camouflage clothing, but not black, loud plaids, or patterns, while working with butterflies.

How to Get Started

How can you attract butterflies? The easiest way is to plant enticing flowers and bushes and wait for them to discover your garden. Or you can obtain chrysalises or live butterflies (see section on “Ordering

BY BEVERLY J. ROBINSON-RUMBLE
Your butterflies will need blooming plants, shrubs, bushes, and/or trees; water, and food (sugar water and overripe fruit).

Butterflies’). Your butterflies will need blooming plants, shrubs, bushes, and/or trees (see list on page 28); water, and food (sugar water and overripe fruit).

Butterflies flourish in warm, but not too hot temperatures. They cannot fly if the temperature is below 60° F. (15.6° C.). So the best time to create a butterfly garden is during an extended period of warm weather. However, if you have an enclosed butterfly shelter, you will need a fan or other method of air circulation and temperature control, especially if you live in a tropical climate.

Most butterflies live for only a few weeks, but some survive long enough to migrate long distances. Your students will enjoy using a map to locate the places the butterflies go when the weather gets cold.

Select a sunny plot of land on school grounds to cultivate, or even strips of dirt next to the buildings. Provide protection from the wind by placing the garden near natural barriers like buildings or trees, or include flowering shrubs in your garden plan. A raised-bed butterfly garden, created from a frame of bricks, concrete blocks, treated lumber, or railroad ties and filled with soil requires less fertilizer and water than regular garden plots, drains well, and makes efficient use of space. Work some potting soil, compost, or fertilizer into the loosened dirt.

If your school is in the city, or in a location with extreme temperatures, you can create a container garden or window boxes with flowers and herbs that attract butterflies. Bring the containers inside in bad weather, and you and your students can enjoy them all winter.

Be sure to choose a large variety of plants that are attractive to butterflies (see list on page 28). You can buy plants from a local nursery or raise them from seeds in your classroom. When purchasing from a retailer, ask what kinds of pesticide have been used on the plants, as some chemicals can kill butterflies and their caterpillars. Keep in mind your school schedule, the local climate, and the amount of sun available in the garden area. Avoid introducing invasive non-indigenous plants.

Contact local firms to see if they will donate plants, and/or send a horticulturalist to talk to your class about gardening.

The section on resources lists a few Websites that provide butterfly garden designs. Some basic guidelines: Using a narrow strip of land or a raised flowerbed makes it easier to cultivate, water, and add new plants. Arrange the garden with tall plants as the back row, medium plants in the middle area, and shorter plants in the front row. Replace the plants as the flowers fade.
See the Resources for a list of butterfly identification books, activity books, Websites, and organizations where you can obtain more information or order butterfly pavilion kits and other supplies. *The Family Butterfly Book* by Rick Mikula offers step-by-step instructions for raising butterflies and creating a habitat for them, including advice on finding butterfly eggs and identifying caterpillars. It also offers tips for making containers for the eggs or caterpillars, butterfly nets, and cages for adult butterflies.

**Obtaining Butterflies**

Caterpillars can often be found on the leaves and stems of wildflowers, garden flowers, tall grasses, and shrubs, and on trees. Look for torn or jagged leaves of a favorite host plant, and clumps of caterpillar droppings. Warn children not to touch unfamiliar caterpillars, as some can cause a sting or rash. If you buy butterflies, be sure to obtain only varieties that are native to your area. Do not import butterflies or chrysalises from other countries. Make sure that the breeder/shipper has the proper permits.

Do not collect butterflies in U.S. state or federal parks. Under the Plant Protection Act, there is a $50,000 fine for illegally transporting live butterflies across a state line.

**Care and Feeding of Butterflies**

Keep chrysalises out of the sun. They can be stored in an airtight container in the refrigerator for a time. After being warmed up to room temperature, the butterflies will emerge.

Butterflies look very fragile, but are amazingly sturdy. They can be handled if you do so with care. A small paintbrush is the best way to transport a caterpillar.

In addition to flowering plants, bushes, and trees, butterflies also like overripe fruit, particularly melon. You can create your own butterfly food with a five to 10 percent sugar water solution (one teaspoon of sugar to a cup of distilled water), or use hummingbird food if it is diluted with distilled or bottled water.

Adult butterflies need small, shallow puddles of water for drinking. A fountain or birdbath will supply what rain and dew cannot.

---

**Butterfly Favorites**

*Trees, bushes, and shrubs:* Ash, butterfly bush, button bush, dogwood, eucalyptus, lilac, oak, plum, poplar, sassafras, spice bush, sweet pepperbush, tulip tree, Virginia sweetspire, wild and choke cherry, willow.

*Flowering plants:* aster, bee balm, black-eyed Susan, blazing star, Brazilian butterfly weed, caladium, clover, cosmos, daisy, dutchman’s pipe, Egyptian starcluster, false indigo, flowering vinca, globe amaranth, goldenrod, hollyhock, hop, impatiens, joe-pye weed, lantana, lavender, lobelia, lupine, Mexican sunflower, marigold, milkweed, nasturtium, New York ironweed, pansy, passion flower, phlox, polka dot, purple coneflower, salvia, snapdragon, sunflower, tuberous begonia, verbena, vetch, violet, Virginia snakeroot, yarrow.

*Herbs:* anise, basil, dill, fennel, mallows, marjoram, mint, mustard, oregano, parsley, rue, sweet bay, sassafras.

*Other:* blueberry, cabbage, carrot, citrus, eucalyptus, hyssop, pea.
Creating a class or school butterfly garden is a wonderful hands-on way to expose your students to nature.

Get your students involved in a butterfly garden, and watch their eyes light up as a butterfly emerges from “their chrysalis” or an adult butterfly lands on their shoulder!

Beverly J. Robinson-Rumble is the Editor of The Journal of Adventist Education and an avid observer and photographer of butterflies.

RESOURCES

Handbooks*
Carter, David A., Butterflies and Moths (Dorling Kingsbury, 2002).
Mitchum, Robert T., and Herbert Zim, Butterflies and Moths (St. Martin’s Press, 2002).
Opler, Paul A. Butterflies and Moths (Houghton Mifflin, 1993).

Coloring Books/Activity Books*
Wynne, Patricia J., Butterfly Activity Book (Dover Pub., Inc., 2007).

Other Helpful Books*
Roth, Sally, Attracting Butterflies and Hummingbirds to Your Backyard (Rodale Press, 2002).


* Many of these books are available from Amazon.com.

Websites
Monarch Watch: http://www.monarchwatch.org/garden/index.htm
Montana State University-sponsored Children’s Butterfly Site: http://bsi.montana.edu/web/kidsbutterfly/
University of Kentucky Entomology, “How to Make Butterfly Gardens”: http://www.ca.uky.edu/entomology/entfacts/ef006.asp
Teacher Website: “Bloom’s Butterfly Garden Basics”: http://udel.edu/~lynnhe/butterfly/
Butterfly Gardens and Exhibits in 38 Countries: http://butterflywebsite.com/gardens/index.cfm

Supplies
Butterfly Pavilion (includes 75-100 butterflies): http://insectlore.stores.yahoo.net/gibupa100bu.html
Butterfly Garden (with live caterpillars): http://insectlore.stores.yahoo.net/butgarwitliv1.html
Butterfly Garden Habitat, Butterfly Pavilion, Butterfly Curriculum: http://24hours7days.com/Butterflies/Butterflies.html

Butterfly Garden Design
http://sciencedotnet/Pages/ngardenng.html
http://www.mygreathome.com/outdoors/garden_butterfly.htm

http://jae.adventist.org
THE JOURNAL OF ADVENTIST EDUCATION • FEBRUARY/MARCH 2009 29