Schoolyard butterfly gardens



Establishing a garden on school property is a great way to benefit both wildlife and instill an interest in science and conservation for students. Planting a butterfly garden can provide opportunities for study, giving them an opportunity to observe butterflies and other insects throughout their life cycles, identify species, and more.

Planning your garden

Form a team: Include a variety of people who may be involved in the planning, installation, and maintenance of the garden, and keep them updated on your plans and progress, including other teachers, parents, local naturalists or gardeners, and students. Your school principal or administration and head building engineer/groundskeeper also need to be supportive of the project.

Identify space for your garden: Utilize your team, especially groundskeepers, to decide where to place the garden. Choose a spot that is easily accessible from classrooms, is in plain sight for public viewing, and is near a water source.

Remember that you can always start small and expand the site later. You may choose to start with a garden as small as 10′x10′ or plan for a little bigger if you have a larger, more ambitious team. Choose a location that receives full sun for a good portion of the day. You should also test the type and quality of the soil to determine which plants will do well there and if amendments are needed. Utilize existing features, like a row of shrubs, as wind breaks when possible.



Gardens take collaboration!





Native plant gardens provide habitat for pollinators and educational opportunities, too!

Designing your garden: Monarchs need milkweed to survive, so make sure to include native milkweed (and other butterfly host plants). All pollinators, including monarchs, need nectar throughout the growing season. Choose a wide variety of flowering plants so that something is blooming during the spring, summer, and fall. Start with at least two or three native flowering species for each season.

Plan and map your garden: Use colors to designate different species and include spaces for other features, such as a bird bath, bench, sign, or walking path. Designing a map engages students, builds excitement about planting and using the garden, and comes in handy on planting day!

Group plants in small clusters (at least three to five plants) by species. Make sure to space the plants far enough apart so that they do not crowd each other when they're fully grown. Also make sure that short plants are not covered by tall ones. If your garden space is limited, you may also experiment with potted plants or raised beds.

Installing your garden

Determine the best time for planting: Spring planting should be done after the risk of frost has passed. If you plant in the fall, perennial plugs or transplants should be planted when plants are not in bloom, temperatures have cooled, moisture is available, and before the ground freezes. Many seeds, including most native milkweeds, can be planted in the late fall or early winter. For species that need cold treatment to germinate, planting in fall or early winter allows this process to happen naturally.

Obtain plants or seeds for planting: Locate a native plant nursery on the Plant Native website (www.plantnative.org) or by contacting your local Wild Ones chapter. It is critical that any plants you purchase have not been treated with insecticides. Develop a relationship with a local garden club or master gardener; in addition to providing information and help, they may also be willing to share transplants.

If you do not have funding, pursue small grant opportunities and ask local nurseries to donate plants. Work with your students to write a letter to send to nursery owners (usually in early fall) requesting plant donations. Plugs are small plants that are transplanted directly into the ground. Plugs are easier for students to handle, you don't have to worry about poor germination, and the garden will come to life more quickly. However, they are significantly more expensive than seeds. You can start seeds in your classroom under a grow light, and then transplant them into the garden when the time is right.

Before you plant: Schedule a day to plant the garden. Assign duties, keeping in mind that students and adults need clear tasks and the right tools. Line up equipment needed for planting, including rakes, wheelbarrows, hoes, gloves, and mulch. Cover the garden with two to three inches of mulch.

Prepare the site: Before digging, locate and avoid any underground wiring or tubing. Test the soil to determine if it is sandy, clay, or wet, which may require specialized techniques. Prepare the soil by first removing lawn or other plant cover, then tilling or raking the soil. If the garden will replace lawn, you will need to kill and remove the sod. This may require assistance from the school grounds crew, parents, or a landscaping company.

Plant the garden: If you're using plugs, spread old newspapers (avoid colored ink and glossy-type papers) on the ground where you have prepared the soil. Use mulch to help keep the newspaper in place. This will help temporarily keep weeds from growing in your garden, giving the plants adequate time to establish. After you've planted plugs, add straw or mulch to retain water in the soil and prevent weed growth. Water the newly planted plugs. If seed is used, following the planting instructions on the package(s). Water the entire garden thoroughly after planting is complete. As you plant, place signs or markers throughout the garden to identify the species you include. Markers will also help you remember where to look for new perennial plant growth in the spring.

Maintain your garden: Water plants regularly for at least two weeks after planting. Additional water may be needed during warm, dry spells, or if the plants are drooping. Weed by hand as needed, avoiding the use of herbicides and insecticides. make sure volunteers are only pulling weedy invaders and not your plants. Monitor the plant communities and add plants where the original ones did not survive, or split, transplant, or remove plants that get out of control. Remember that the garden is meant to provide habitat for wildlife, so leave leaves in the fall, and celebrate when caterpillars or other wildlife chew up the plants!

Photo credits: Teal Johannsen and Wendy Caldwell