



**Create a Schoolyard Habitat®
for Monarchs and Other Pollinators**



**GARDEN
FOR WILDLIFE™**



www.nwf.org/schoolyard

Eco-Schools USA Monarch Recovery Garden Resources



**GARDEN
FOR WILDLIFE™**

Here are some tips to get you started on planting a pollinator-friendly monarch garden.

Essential Elements for Your Monarch Garden

Monarchs and other pollinators, like all wildlife, need four things to survive: **food, water, cover and places to raise young**. Here's how to provide these elements for monarchs in your garden.

Food

Monarch butterflies and other pollinators feed on nectar, so plant plenty of native wildflowers and blooming shrubs that collectively provide nectar from spring, through summer and into fall. [Regional guides for native plants that provide nectar for monarchs](#) are a great resource!

Water

Add gravel to your a birdbath or create a muddy patch in a corner of your yard to supply butterflies with a shallow place to drink water.

Cover

Monarchs need shelter from harsh weather and predators. A brush pile, a dense patch of shrubs, a meadow filled with tall grasses and wildflowers, or even just a planting bed with at least 10 plants close together will do the trick.

Places to Raise Young

All butterflies need host plants for their caterpillars to eat. Milkweed is the only host plant for monarch caterpillars, and without it, monarchs can't produce the next generation. Monarch populations have plummeted due to declines in milkweed, so planting it will help monarchs recover. There are many native milkweed species. Find which milkweeds are native to your area using the [Native Plant Finder](#).

Practice Sustainable Gardening

Monarchs and other butterflies are insects and insecticides will kill them, both as winged adults as well as during their caterpillar phase. Practice [organic gardening](#) and rely on birds, toads and predatory insects to control pests. No need to spray!





**GARDEN
FOR WILDLIFE™**

Planting Tips and Design Ideas

Creating a healthy habitat garden for monarchs and other pollinators is easy if you follow these simple guidelines.

Pick a Sunny Spot

Most pollinators feed on flower nectar from plants that grow in sunny areas. Ideally your butterfly garden should receive at least six hours of direct sunlight each day.

Prepare a Planting Bed

Clear grass and weeds and gently turn compacted clay soil by adding compost to loosen and enrich the soil and improve drainage. The more area you can devote to garden beds planted with nectar and host plants, the more success at attracting monarchs you'll have. Try for a bed that is at least ten by ten feet, or multiple smaller beds. Or turn your whole landscape into a wildlife habitat garden.

Choose Plants

Start by planting the seeds you receive from the National Wildlife Federation then add more plants from your local garden center. Plants native to your region provide the best habitat for monarchs and all wildlife. Be sure to request plants grown without chemical pesticides.

Plant Densely and Diversely

The more native habitat plants you add, the more butterflies and other wildlife you'll attract. Planting in clusters will make it easier for wildlife to spot the plants that you have planted to attract them.

Think Seasonally

When you design your garden, make sure that something is blooming in spring, summer and fall to provide food for monarchs throughout their migration and breeding seasons.





GARDEN
FOR WILDLIFE™

How to Establish Your Pollinator Garden as a Schoolyard Habitat®

In 1996, the National Wildlife Federation's Schoolyard Habitats® program was created to meet the growing interest and distinct needs of schools and school districts in creating and restoring wildlife habitat on school grounds. The program focuses specifically on assisting school communities in the use of school grounds as learning sites for wildlife conservation and cross-curricular learning.

Basic Steps to Creating a Schoolyard Habitat

1. Start a Habitat Team

The Habitat Team is composed of educators, students, parents, maintenance personnel, administrators and community volunteers. Every member of the team brings their own skills. Some will focus on creating the garden and gardening, while others can fit the wildlife habitat into the curriculum.



2. Choose A Site

Get students and other team members to study and map out the potential garden. Everyone can participate by either writing or drawing:

- physical elements (soil, topography, water sources, drainage patterns, sun and wind exposure),
- ecological components (plants and animals, including insects),
- human influences (buildings, sidewalks, playing fields, utility right-of-ways and asphalt areas),
- boundaries (including nearby habitats).

It's also fun to learn about the history of your site. How was the land used before your students arrived? Students might interview long-time community residents and conduct other research.

When you choose your site, make sure it's great for wildlife and people. All wildlife requires **food**, **water**, **cover**, and **places to raise their young**. Make the habitat accessible for classes to use and for community members to visit.

3. Create a Work Plan

Careful planning will help your habitat project run smoothly. Elements like goals, task assignment, resource inventory, and tracking progress will divide and organize the workload into manageable steps.





**GARDEN
FOR WILDLIFE™**

4. Involve the Community

The creation of a schoolyard habitat is an excellent opportunity to reach out to the community members and invite their participation. To **build support for your project**, introduce your community to the contributions that the habitat site can make to enrich the school's educational offerings. The schoolyard habitat can be a benefit to the entire community as a public place for all to visit and enjoy.



You may **find assistance in your community** from a wide variety of sources:

- landscape architects ready for a new challenge
- local businesses willing to donate plants, landscape materials and expertise
- garden and civic clubs excited to offer their knowledge and hands-on involvement.

5. Certify Your Schoolyard Habitat

When you're ready, visit www.nwf.org/certify and add your habitat to the thousands of backyards, parks, businesses, and other schools that provide habitat for wildlife through National Wildlife Federation **Certified Wildlife Habitat** program.

These are but a few suggestions for making the link between your project and the community, be creative and don't be afraid to ask! The material contributions, in-kind support and resource connections will be invaluable to your project and will help strengthen school-community ties.



Note: Certifying your Schoolyard Habitat is FREE!

Schools and organizations benefit from certifying their habitat projects in many ways. When a school gets certified, National Wildlife Federation sends the school a press release the school can send to local papers. This publicity helps schools gain additional community support and aids in future fundraising efforts for the schoolyard project. Once certified, schools are also able to order an attractive sign, which they can post to announce and describe their efforts.

In addition, certified schools can receive an online newsletter specifically for educators, and benefit from belonging to this dynamic network of educators and schools involved in habitat restoration and hands-on outdoor instruction.

Most people find that applying for certification is a helpful, tangible goal along the road of habitat restoration. Receiving **Schoolyard Habitat®** certification from NWF is a huge accomplishment and reason for a school-wide celebration. Certification represents official acknowledgment of a school's hard work and achievements, and provides a new boost of energy for the work that lies ahead to maintain and fully utilize the schoolyard habitat. Certification is just the beginning!



**GARDEN
FOR WILDLIFE™**

Maintaining Your Schoolyard Habitat®

Once your site is certified, you will need to make sure it is maintained. Make a plan of what needs to be done and by whom. Your habitat will need watering, weeding, and other maintenance throughout the summer and following school year. Also include [sustainable gardening practices](#) in your maintenance plan.

Regular and Ongoing Maintenance:

- **Watering:** This is most important just after planting and during drier parts of the year.
- **Cleaning and Refilling:** Bird baths need to be cleaned and refilled regularly. In the hot summer months, this should be done every couple of days to guarantee a good source of water and mosquito control.
- **Weeding/Removing Invasive Exotics:** Your site does not need to be weed free, but if invasive exotics are ignored, they will cause you more problems later.
- **Cleaning Feeders:** Whether it is a seed feed in winter or a hummingbird feeder in the fall and spring, it is important to keep your feeders clean.
- **Removing Litter:** Litter gives the impression that your site is unimportant, which can lead to vandalism.
- Maintaining a **compost pile**.

Custodial staff may help but most projects should **include students, parents, educators and community members**. Plan some planting and maintenance days or make a schedule for regular volunteers, especially in summer when people tend to go on vacation.

Winter	Spring	Summer	Fall
Keep water source free of ice (if applicable)	Check soil conditions and adjust as needed	Fertilize plants with compost	Divide and replant perennials
Clean old nests from bird nest boxes	Check for winter damage and conduct cleanup	Be sure to water!	Plant bulbs
Put up new bird nesting boxes	Plant perennials and shrubs and add mulch as needed	Keep bird baths and ponds filled	Plant trees
Make labels and signs for the habitat	Monitor nest boxes	Remove weedy invasive plants	Mulch or cover young trees and plants for winter
Plan spring projects	Recruit and train volunteers to handle summer duties	Harvest vegetables and plant some flowers	Clean up habitat and remove litter



**GARDEN
FOR WILDLIFE™**

Using Your Schoolyard Habitat® as an Outdoor Learning Classroom

The planning, design, implementation, and on-going monitoring and maintenance of a schoolyard habitat provides endless opportunities to meet and exceed high academic standards across the curriculum.

Teaching with [Schoolyard Habitats®](#) as an integrating context across the subject areas can both support and deepen the quality of instruction and student engagement.

Educators who participate in the Schoolyard Habitats® program realize that use of these outdoor classrooms is an excellent way to meet the requirements of national and state educational standards.

- **Science Standards:** A schoolyard habitat serves as a living laboratory where students engage in hands-on inquiries into the natural world.
- **Geography and Social Studies Standards:** Geography and social studies involve understanding connections between people, social constructs and the environment, and the Schoolyard Habitats® program can be applied successfully to help teach those connections by assisting students in understanding both space and place.
- **Math Standards:** A schoolyard habitat provides students with the opportunity to apply math concepts to the real world; whether estimating numbers of plants in an on-site plant community or looking for geometric shapes in nature, an outdoor area is full of mathematical wonders.
- **English Standards:** A schoolyard habitat provides a quiet space for creative writing about nature or a research laboratory where students can develop research, writing and communication skills.

In today's learning environments, where schools are striving to meet and exceed

high standards of learning, educators and youth leaders must be creative in presenting content. The schoolyard can provide a valuable avenue for reinforcing concepts for students.



There are now over 9,100 certified Schoolyard Habitats nationwide.



GARDEN
FOR WILDLIFE™

Resources

Join our growing family of wildlife-friendly outdoor learning laboratories today and connect your students to nature!

- **Schoolyard Habitats®** www.nwf.org/schoolyard
- **Eco-Schools** <https://www.nwf.org/Eco-Schools-USA/Resources/Activities/Projects/Monarch-Recovery-Garden>
- **The Monarch Mission — A Next Generation Science Standards-based curriculum K-12 (including a Spanish language version)** <https://www.nwf.org/Eco-Schools-USA/Resources/Curriculum/Monarch-Mission>
- **Eco-Schools USA Schoolyard Habitats® Pathway:** <https://www.nwf.org/Eco-Schools-USA/Pathways/Schoolyard-Habitats>

