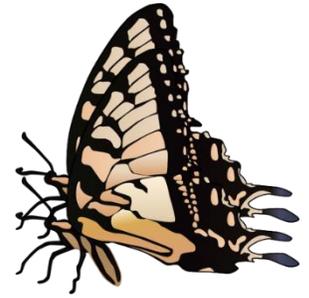


Alternatives to Raising and Releasing Wildlife for Education

Butterflies, Ladybugs, Frogs and More

Watching live organisms grow and develop is an amazing education experience. However, releasing animals into the wild that were purchased online may be harmful and/or illegal, even if the animals are native to the area. In many cases, mass production for commercial sale causes increased rates of disease so releasing purchased animals risks spreading those diseases into the wild population. Captive raised animals can also impact the genetic diversity of the wild population. Other animals are collected in unsustainable ways from wild populations. Legally, to release most animals into the wild in Maryland, you will need a permit ([COMAR 08.03.09.04](#)). To continue these enriching experiences without harming the local environment, please consider these alternatives:



- **Raise animals and keep in captivity.** Rather than releasing butterflies that were purchased as caterpillars, consider keeping and feeding the adults in a flight cage. Butterflies can survive inside on artificial nectar diets. (For rearing information, check out this page: <https://monarchwatch.org/rear/>). Try out vermicomposting with red wiggler worms, view their lifecycle, and experiment with worm food preferences. For activity ideas to use with worms, check out *Creepy Crawlies and the Scientific Method* by Sally Kneidel. Adult frogs may live 4-15 years with proper care, so consider the long term commitment before purchasing tadpoles. Never release crayfishes purchased from pet stores, bait shops, or online suppliers into Maryland waters. Dispose of them humanely or save them for future use.
- **Grow plants.** Plants go through lifecycles too. Consider growing different types of plants (monocots vs dicots, flowers vs trees) and having students compare and contrast their life cycles. Easy to grow plants such as sunflowers and beans can be taken home by students to plant. For ideas on native plants to grow, check our schoolyard wildlife garden guide (linked below).
- **Entice your own subjects!** Planting dill, fennel, parsley, and related plants in the spring attracts black swallowtail butterflies. Once they lay their eggs, you can collect, bring inside to raise, and then release back into the natural habitat. Cabbage white butterflies are extremely easy to attract by growing any plant in the cabbage family. For a list of butterflies in Maryland and the plants that attract them, please check out our butterfly checklist: https://dnr.maryland.gov/wildlife/Documents/butterfliesofmaryland_biological-summary_checklist.pdf. If you plant milkweed, monarchs may also lay eggs, but most breeding occurs in the summer. If you have summer classes, consider starting a Monarch Waystation and recording visitors: <https://www.monarchwatch.org/waystations>. Planting a schoolyard garden will allow students to watch the lifecycles of many local insects. Check out our schoolyard garden guide here: <https://bit.ly/2HjXvVu>
- **Raise and Release Programs.** Check out the following programs here in Maryland that provide organisms for classrooms to raise and then release at special events. Many of these programs come with associated curriculums for enhanced learning opportunities.
 - **Grasses for the Masses:** Grow wild celery (*Vallisneria americana*), a type of underwater grass, in a simple grow-out system for 10-12 weeks. After growing plants, participants plant their grasses in select local rivers to bolster grass populations and help restore the Bay. <http://www.cbf.org/how-we-save-the-bay/programs-initiatives/virginia/grasses-for-the-masses/index.html>
 - **Marylanders Grow Oysters:** Landowners and schools with waterfront property can raise oysters: <https://dnr.maryland.gov/fisheries/pages/MGO/index.aspx>
 - **Sunfish and Students:** Sunfish and Students is a Maryland Department of Natural Resources' (MD DNR) Aquatic Resources Education program that provides a releasable live animal that the class can watch grow as they care for and maintain the appropriate environment in the tank. Training and lesson plans are provided: <https://dnr.maryland.gov/ccs/Pages/sunfish-students.aspx>
 - **T.E.R.P. (Terrapin Education and Research Partnership):** Raise terrapins in the classroom and collect growth data: <https://www.arlingtonecho.org/programs/education/terrapiin-connection.html>
 - **Trout in the Classroom:** This program is administered through the Maryland Chapter of Trout Unlimited, with assistance in lessons and grant funding from MD DNR Aquatic Resources Education. Participants receive training, trout eggs, and other supplies to raise trout in the classroom and integrate lesson plans relating to the species <http://dnr.maryland.gov/ccs/Pages/trout-in-the-classroom.aspx>

Consider Animal Ambassadors

Several organizations bring live animals- both wild and domestic- into classroom settings for educational purposes.

Please note: programs below have a fee but grants are often available:

- **Humane Education-** The Maryland SPCA can present at your location on a variety of animal welfare topics tailored to your specific audience or needs. <https://www.mdspca.org/community-outreach/>
- **National Aquarium Outreach-** Aquarium staff bring hands-on learning to schools with their traveling outreach program. <https://www.aqua.org/Connect/Outreach-Programs>
- **Scales & Tales-** Maryland State Park staff bring non-releasable wildlife into classrooms to teach about species and adaptations. <http://dnr.maryland.gov/publiclands/pages/snt.aspx>
- **ZooMobile-** The Maryland Zoo has interactive educational programming with animal ambassadors. <https://www.marylandzoo.org/learn/virtual-zoomobile/>

Laws and Regulations

Before bringing animals into your classroom, it is best to check with your principal and science advisory staff on rules that may be in place. Rules vary by county. State laws and regulations can be found below.

Collection of Wild Organisms: Obey public land rules and check with landowners before removing any plants or animals from public land.

For **aquatic organisms** found in Maryland waters, a permit is needed to possess or maintain them in the classroom. You can find out more here: <http://dnr.maryland.gov/fisheries/Pages/aquatic-studies-permits.aspx> If the organisms will be released into the wild, release locations must be specified in advance; only healthy and disease-free animals should be released.

For **reptiles and amphibians**, a special permit may be issued to possess, breed, sell, offer for sale, trade or barter reptiles or amphibians. These species are broken into groups and regulations depend on whether animals were acquired



through captivity or from the wild. *Please note: any reptile or amphibian, including those taken from the wild, cannot be released after 30 days in captivity.* More information can be found here: <https://dnr.maryland.gov/wildlife/Pages/Licenses/captive.aspx>

Per **Maryland Code 10-902**, Permits and licenses relating to native wildlife:

- (a) Any person desiring to possess, import, export, breed, raise, protect, rehabilitate, hunt, kill, trap, capture, purchase, or sell any wildlife, native to Maryland, shall first obtain a permit or license from the Department. For most organisms, a scientific collecting permit will be needed to obtain animals from the wild:

<https://dnr.maryland.gov/wildlife/Pages/Licenses/scicoll.aspx>

For information on **Animals in Childcare Facilities** per the MSDE Division of Early Childhood, please consult this document: https://earlychildhood.marylandpublicschools.org/system/files/filedepot/3/animals_childcare.pdf



Larry Hogan, Governor; Jeannie Haddaway-Riccio, Secretary

dnr.maryland.gov/wildlife