

# A STEP-BY-STEP GUIDE TO RAISING MONARCH BUTTERFLIES



This Guide is provided by Pollinator's Place. See our Blog, Shop and other resources at [www.pollinatorsplace.com](http://www.pollinatorsplace.com).

The Guide is compiled from our personal experience and consultation with a number of resources from scientific organizations as well as other amateur monarch hobbyists. If you believe there are errors or misinformation in this Guide, please send us a note at [info@pollinatorsplace.com](mailto:info@pollinatorsplace.com).



Before we get started, please be aware that most monarch butterfly conservation organizations discourage captive rearing as a strategy for increasing monarch populations. For more information, read this important pamphlet from [Monarch Joint Venture](#). They recommend that "People who wish to rear monarchs should do so in small numbers, for outreach, personal enjoyment, or community science".

## First, You Need Milkweed – Lots of It!

You will want to plant milkweed in your yard or community for collecting eggs. You will also need milkweed in pots for feeding the caterpillars in cages. Milkweed is toxic, so handle with care.

**Only use milkweed plants that are native in your region.** It's important to [use the native](#) as there are chemicals in them that help the caterpillar orient themselves along their journey as the generations migrate. Avoid Tropical Milkweed unless you are in a tropical region. Monarch Joint Venture talks about [OE, a devastating parasite](#) that affects monarchs. Mainly, the OE survives on Tropical Milkweed. One way to ensure the parasites do not survive, is to cut back the milkweed every fall and winter.



This link will help you determine what kind of milkweed is best for your region. <https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/Milkweed>

Look for milkweed at nurseries and garden centers that have not been treated with pesticides. You can also find milkweed in regularly disturbed areas, local parks, nature reserved, prairie, and especially along roadsides. Research the difference between milkweed and dogbane if you are locating it in the wild.

You can google where to buy seeds and plants. Here are a few good sources.

<https://www.etsy.com/shop/MyButterflyLady>

[https://xerces.org/milkweed/milkweed-seed-finder#mwf\\_tool](https://xerces.org/milkweed/milkweed-seed-finder#mwf_tool)

<https://monarchbutterflygarden.net/milkweed-plant-seed-resources/>



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## Next, You Need Cages

We have tried cages from several sources and prefer the cages from [RaisingButterflies.org](http://RaisingButterflies.org). These cages have zipper protection (the ones on Amazon don't have this feature), which keeps the caterpillar from forming its chrysalis on the zipper. The prices are similar to Amazon and there is no shipping fee either.

Choose white cages as they do not generate as much heat as the black ones. We find the 18x18x30 is a good size to hold potted milkweed plants. You can use a slightly smaller size, 15x15x24 also. They are not quite tall enough for potted milkweed, but you can cut the tops of the milkweed tops off and put in water. The milkweed will become bushier.



## Some other Important Considerations

- Avoid crowding and keep plenty of fresh milkweed. Plan on 3-5 caterpillars per cage. You will need 6+ potted milkweed plants to support that quantity of cats. The cage will hold 2-3 pots, and you can rotate in fresh pots as necessary.
- Don't keep your caterpillars indoors. The best location for the milkweed and cats is outdoors and in the shade. A screened porch is ideal. Also, don't keep them in glass jars or in direct sun.
- [Keep the cages clean](#). Rearing containers need to be cleaned of frass (waste) and old milkweed daily to prevent mold growth and the spreading of bacteria. After you've raised each generation, clean containers with a 10-20% bleach or 50% vinegar and hot water solution and rinse *multiple times* before putting monarchs inside.
- Be conscious of disease. Viral and bacterial infections spread very quickly between caterpillars, so keep containers clean and sterilize them often. Before handling the plants, caterpillars, butterflies, or the cage, wash your hands with soap, again with vinegar, and then rinse with water. The vinegar will remove the fragrance, oils and any other bad stuff from your hands.
- Submit observations of reared monarch to citizen science. The [Monarch Larva Monitoring Project](#) collects observations on survival of monarchs, [Project Monarch Health](#) tests adult monarchs for the OE parasite, and many [other citizen science programs](#) may have use for your data.

## Life Cycle

Eggs 3-4 days



Caterpillars 8-15 days



Chrysalis 8-12 days



Voila!



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## Steps to raise monarch butterflies

- 1) Plant milkweed that is native to your region.
- 2) Check your outdoor milkweed for eggs on alternating days starting in the spring (and all summer and into the fall) once the temperatures are in the upper 60s or 70s. They are usually under the leaves



or in the flower buds. You can check the status of butterfly migration in your area with the maps at [JourneyNorth.org](http://JourneyNorth.org)

Please remember that the milk from milkweed is toxic, avoid skin and especially your eyes. Latex gloves are recommended.

- 3) Break off the leaf with the egg(s), tuck the bottom in-between the layers of wet paper towels arranged on a plate. If there are bugs, rinse them off without touching the egg(s). Avoid letting the leaf touch anything on the plate except for where the base is tucked in. If possible, keep them outdoors inside an enclosure.
- 4) Everyday check for mold on paper towels and for leaves drying out. Change the towels on alternating days.
- 5) When the eggs hatch the baby cats will begin consuming the leaves. You may need to add fresh leaves (bug free). You don't have to touch the caterpillars; they will move to the fresher leaves in time.
- 6) As they become larger and you no longer have to worry about squishing them, you can move them to a milkweed plant in a larger cage. It's better to move them to the plant sooner rather than later. Keep



them outside, natural conditions are important. They are safe as long as it does not get down to freezing at night. Take the leaves they are munching on



and set them on a milkweed plant that's in a cage with paper towels on the bottom under the pots. The plant can be a whole small milkweed plant in a pot or cut leafy milkweed stems in water. If in water, cover the container

with a double layer of foil and poke holes with something small and pointy for the stems. Check the water every few days.

- 7) On cloudy or rainy days, I will mist the milkweed, caterpillars, and chrysalises to simulate rain or dew.
- 8) Don't be alarmed when the caterpillars don't move for days. It's likely they are preparing to molt, which they do about five different times before they form their chrysalises. They are extremely vulnerable to disease during this period, so don't touch or disturb them.
- 9) The poop, frass, will accumulate. Change the paper towels on the bottom every couple of days, especially if wet.
- 10) Be ready to switch out the plants with uneaten milkweed in pots, or leafy milkweed stems in water covered with foil. When the caterpillars are bigger, they will strip them down to nothing overnight, so make sure there are plenty of leaves before you go to bed. Always check first thing in the morning to see if you need to switch plants out. Watch out for caterpillars hiding around the edges when you move the pots, they are easy to miss and crush, I've done that.



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- 11) If you notice any sign of disease on a cat, remove it from the cage, wrap or bag it and freeze it. Then dispose of it. Check the other cats in the cage. If necessary, remove that cage from service and sanitize it.

- 12) The caterpillars will move to the top, side of a pot, or even a leaf to make their chrysalis also known as pupating. They will hang in the shape of a "J" for about 24 hours.



- 13) At last, they will form their



chrysalis and remain in that state for 10-14 days. Don't touch or disturb for about a day. Then you can remove the plants and dirty paper towels.

- 14) Put fresh paper towels down for when they emerge as goo will drip during the process.

- 15) When the butterflies emerge leave them alone for 3-4 hours until their wings are dried out.

- 16) Release your butterfly if it's not raining. Don't touch the wings. Set the cage in a shady spot outdoors and clip the door open. You can keep them for 24 hours or a little longer if the weather is too stormy.



- 17) The newly emerged butterflies generally don't need to feed for about 24 hours.

- 18) If you can't release them after 24 hours due to bad weather, see [Dr. Lund's YouTube instruction](#) for feeding them homemade nectar. *It's a great thing to feed them before they leave for their long journey, especially if it's late in the season.*



- 19) If you decide you want to tag your butterflies, the [Monarch Watch Shop](#) is the place to order your tagging stickers. They are a nonprofit education, conservation, and research program

based at the University of Kansas. You must commit to send them the data at the end of monarch season. They have a problem with folks not following through. Monarch Watch will know exactly when your butterflies in your geographic area are migrating south, which are the ones that should be tagged, generally late summer and early fall. You'll receive your tags when it's time to tag your monarchs. Dr. Lund will show you [how to tag them](#) on YouTube.

- 20) One of the most important final steps is to **sanitize your butterfly enclosures**. I use vinegar in a mister. I also soak a clean rag (no other residual chemicals from previous washes) with vinegar and gently rub the cage with the rag. After this, I rinse it in the shower, thoroughly and let them dry in the sun. You can't let them soak overnight in vinegar as the metal parts will rust. It's critical to make sure these cages are clean. If there are any diseases or parasites, you don't want to pass them on to the next generation. Otherwise, all your work will be for nothing and could jeopardize the wild population when you release your tainted generation.



*Happy Monarch Raising!*

If you have questions or comments, please reach out to us at [info@pollinatorsplace.com](mailto:info@pollinatorsplace.com).

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