

Factsheets to download on various topics, including rearing, milkweeds to plant, and how to get involved (including community level engagement such as HOAs):

<https://monarchjointventure.org/resources/downloads-and-links>

Learn more about the Miles for Monarchs local fundraising opportunity; see #3 to start a conversation with us about organizing your own event: <https://donate.monarchjointventure.org/campaign/miles-for-monarchs/c211353>

We have a few monarch books, learning materials, and MJV clothing at the MJV store.

<https://monarchjointventure.org/store> If you cannot find the book you're looking for, we recommend ordering through your local bookstore. Direct donations to MJV, which support the education, habitat conservation, and science programs, are accepted here <https://monarchjointventure.org/donate>

Information about Monarch Waystations and other yard programs. These programs typically ask the landowner to verify that they are providing certain habitat features to pollinators or wildlife and provide the landowner with a habitat sign for a small fee.

<https://monarchjointventure.org/mjvprograms/partnership/projects/monarch-habitat-certification-programs>

- 1) Are monarchs in South America migratory?
 - a. Monarchs in South America have been studied very little. Given that populations in southern Central America and the Pacific Islands are non-migratory, it is likely the South American monarch also do not migrate.
- 2) I found or reared a monarch very late in the season. What should I do with it?
 - a. These monarchs should be released as soon as possible to maximize their chances of reaching the overwintering grounds. If the monarch was reared, wait 24 hours for their wings to harden before releasing. Release them within three days of their capture or eclosion, on the warmest, driest day, preferably above 50 degrees. If holding the adult monarch for over 24 hours, offer them a cottonball soaked in a 20% sugar, 80% water solution.
- 3) What time of year do the overwintering surveys occur?
 - a. In central Mexico, the official surveys typically occur in the second half of December.
 - b. On the US west coast, surveys occur both around Thanksgiving and in early January so that changes throughout the winter can be assessed.
- 4) Is the 4th generation of monarchs that flies to central Mexico physically larger?
 - a. Yes, studies show that the wings of fall migrants are over 4% larger than wings of other summer breeding generations. Butterflies further north in North America also have slightly larger wings than those in the southern or central US.
- 5) More about the milkweed vine?

- a. There are both native and nonnative genera of milkweed vine. The native species sandvine, *Cynanchum leave*, is an appropriate monarch host and grows in central and eastern US. Nonnative black swallow-wort, *C. louisea*, and pale swallow-wort, *C. rossicum*, are members of the milkweed family native to Europe. Monarchs will lay eggs on the nonnative swallow-worts, but the caterpillars cannot eat them.
- 6) Where do monarchs form their pupae, and how can I protect those areas?
 - a. Monarch larvae will travel up to 10 m from the milkweed they're feeding on to find a sheltered, hidden place to pupate. This is typically on a firm or woody stem, but can be on a variety of human structures as well such as under windowpanes and picnic tables. For the benefit of both monarchs and other insects and birds using your yard as habitat, limit 'clean up' and retain most of the fallen leaves and old plant stems throughout the growing season, fall, and winter. Early spring is a good time for some light clipping if you choose to do so.
- 7) Has the monarch population dropped to 30,000?
 - a. The western population of monarchs has dropped below 30,000 the past two winters. This is troubling because research shows that at least 30,000 monarchs are needed to maintain a stable, migrating population in the west. The monarch population in the east has varied between 3-6 hectares the past few years; 6 hectares is the minimum long-term goal for sustaining a healthy migration. Monarchs in the east are measured by the area of overwintering forest they cover, not an individual count.
- 8) How can I plant milkweed, and where can I find its seeds or plugs to plant?
 - a. Most milkweeds are difficult, though not impossible, to transplant or grow from cuttings of other plants. Sprinkling seed in the desired area on a thin layer of snow in the winter is an easy and reliable method of getting milkweed to establish in the eastern US. Learn more here: <https://monarchjointventure.org/resources/faq/growing-milkweed-from-seed>
 - b. Use this tool to find milkweed seed sources near you. https://xerces.org/milkweed/milkweed-seed-finder#mwf_tool Also seek out local groups, such as Master Naturalist and Wild Ones groups, local Facebook groups for native plants, or asking neighbors via NextDoor app or similar connecting platforms.