

Collecting, Processing, Storing and Sowing Milkweed Seed

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The decline of Monarch butterflies is at a critical level. The Mexican overwintering population has declined from using an area of 22 acres to about one acre. There are many reasons for the decline, including loss of habitat, both in Mexico and in their Midwest migration route throughout North America. What can we do to help Monarchs now and in the near future?

1. Scout out areas for milkweed plants. Learn to identify at least common milkweed and swamp milkweed. Others you might find are Sullivan's, purple, tall green, butterfly, whorled, or spider [in un-glaciated areas]. Common milkweed grows on field edges and roadsides where soil has been disturbed. It is a tall robust plant with wide opposite leaves. Pale pink flowers grow in large clusters from leaf nodes. Pods are about 4 inches long, 1.5 in. in diameter, and are usually covered with scattered extended knobs. Swamp milkweed grows in ditches and other muddy areas. It is tall, smooth with long pointed opposite leaves. Bright pink flowers usually cluster on the top of the plant. Pods are about 3 inches long, ½ in. in diameter, smooth, and point upward in a cluster.
2. Don't mow areas where you find milkweed growing.
3. Delay fall Rx burns until milkweed seed has been collected from burn units.
4. Collect seed pods from milkweed when they are ready. Pods are ready when they are dry, gray or brown. If center seam pops with a gentle pressure, they can be picked. If they are starting to fluff out, of course they can be collected. It is best to collect pods into paper bags such as lunch sacks or grocery bags. Label the bag as to location and habitat and the species. Store in an air-conditioned space until processed.
5. Process the seed (remove the seed from pods and silk). All manner of mechanical devices have been tried, to do this in bulk. Most methods are unsuccessful. It is time consuming to clean seed by hand, but it is the most efficient way. Hold pod in both hands by the ends. Pop it open enough to hold thumb over silk. Open pod a bit more so you can tease seed into a container. Drop silk into another container; when it becomes unruly, spray it with a little water. There could be seed still in with the silk and pods ["trash"], so place it somewhere it might grow.
6. Store seed properly. Seed needs to be completely dry. Seed is a living plant. When air temperature and humidity added together are < 100, there is a very good chance seed will retain viability for a few years. If the combined number reaches 150, the seed has lost viability. SO: do not leave seed in a locked vehicle in the sun with the windows closed, nor in a closed container in an outdoor shed. DO NOT FREEZE seed; they have moisture in them and will explode and die if frozen. After processing, store in a clean plastic container in refrigerator. Label: "species, year, for planting location"
7. Identify appropriate areas to sow the seed. While you were collecting you noted habitat. Find another area where habitat is similar and there are few/no milkweeds growing. Do not sow in areas likely to be sprayed with Glyphosate or other herbicides.
8. Prepare the planting site if needed (this can be done with common garden tools). If the planting site such as a strip next to a field or road, is thick with fescue or brome, or some other alien vegetation it would be beneficial to spray glyphosate over the area to be planted several weeks before planting. Then mow short and scruff up the surface with a rake. Do not till.
9. Sow the seed on bare soil, prior to the first snow; sometime between Halloween and Christmas is best. If soil is workable, germination success would be higher if seed is raked a bit into the surface. But this is not necessary. Simply walk on the seed for good contact. A very light cover of dead vegetation [mulch] can be helpful to keep seedlings from drying out in early summer.
10. GPS the seed collection site and planting location or mark it correctly on a map or aerial photo. A photo of the location would also help future monitoring efforts.

Useful Resources

Websites:

- Service Pollinator webpage and HQ/Regional Pollinator Coordinators contact information: <https://inside.fws.gov/go/post/EC-Pollinators>
- Monarch Joint Venture: <http://monarchjointventure.org/>
- The Xerces Society: <http://www.xerces.org/>

Habitat Assessment Tool:

- Monarch Breeding Habitat Assessment Tool. University of Minnesota Monarch Lab and Monarch Joint Venture. Online at: http://monarchjointventure.org/images/uploads/documents/Habitat_Assessment_Tool_Final_test.pdf

Milkweeds Information and Seed Sources:

- Border, B. and E. Lee-Mader. 2014. *Milkweeds: A Conservation Practitioner's Guide*. 143 pp. Portland, OR: The Xerces Society for Invertebrate Conservation. Online at: <http://www.xerces.org/milkweeds-a-conservation-practitioners-guide/>
- *Pollinator Plants of the Central United States: Native Milkweeds (Asclepias spp.) (2013)*. The Xerces Society for Invertebrate Conservation, Portland OR, in collaboration with USDA-NRCS. Online at: http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/mopmcpu11905.pdf
- *Great Basin Pollinator Plants: Native Milkweeds (Asclepias spp.) (2012)*. The Xerces Society for Invertebrate Conservation, Portland OR, in collaboration with USDA-NRCS Great Basin Plant Materials Center, Fallon NV. NVPMTN Technical Note No. 56. Online at: http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/nvpmctn11525.pdf