

Research, Restoration & Recovery

The Arboretum at Flagstaff Research Department

Milkweed for Monarchs: Monarch Butterfly Habitat Restoration and Local Seed Source

The monarch butterfly has experienced drastic declines in numbers in the past 20 years due primarily to habitat destruction. A petition to list the monarch as threatened under the Endangered Species Act is now under review by the Department of the Interior. Eastern monarch butterflies travel up to 3,000 miles each fall to winter in central Mexico. Milkweed (*Asclepias spp.*) is the only plant on which monarchs lay their eggs, and the plant is the primary food source for their larvae. To make this incredible journey, the butterflies need patches of milkweed habitat all along the route, referred to as migratory flyways or stopovers. The western monarch population, a smaller geographically distinct population of monarchs, overwinter along the California coast, and while their migratory journey is not as long as their eastern counterparts, they still need these stopovers in states such as ours.

Pollinators like the monarch are highly susceptible to the effects of global climate change, landscape changes and decreasing biodiversity. The common name “milkweed” can discourage landowners to keep them as the term may be confusing and imply that the species is not native or non-beneficial. Alternatively, some people are informed of the need for milkweed to save the monarch, and they cannot find local sources for milkweed, or commercially available milkweed species are frequently exotic, non-native species

The best way to save the monarch is to plant locally sourced milkweed throughout its migratory breeding range. The US Fish and Wildlife Service (USFWS) has recognized this need, and has launched a partnership with National Fish and Wildlife Foundation (NFWF) and the National Wildlife Federation (NWF) to provide The Arboretum with funds to help this conservation effort.

Project Goals:

This project will accomplish three long-term plant conservation and education outcomes over the next ten years:

- 1) Propagate and establish seed production beds of milkweed at The Arboretum by collecting and propagating wild provenance seeds of local *Asclepias spp.* across northern AZ. (*Asclepias asperula*, *A. speciosa*, *A. subverticillata*, *A. tuberosa*, and any other appropriate local species). These production beds will also serve as habitat for monarchs in the area. Information learned from the successful propagation of native milkweed will benefit the USFWS and lead to the ability to provide locally sourced plant material for restoration projects.
- 2) Increase the areas of milkweed plantings at The Arboretum by using our wild collected seeds and propagated adults throughout the Arboretum garden grounds, enhancing certain pre-existing garden areas, and creating a larger, habitat garden of milkweed, near our existing pollinator garden.
- 3) Expand public awareness of milkweed and the monarch butterfly. We will also increase and promote our milkweed inventory for our annual Plant Sale, and encourage the public to purchase locally sourced species of *Asclepias* for their homes.



U.S. Fish and Wildlife Service

