

July EcoQuest – Milkweeds and Monarchs

Milkweeds (*Asclepias* sp.) are one of the most common, showy flowers now blooming in the greater metro area. Milkweeds are easily identifiable – they have sepals and petals, but they also have an elaborate corona, usually comprised of a “horn” and “hood.” Milkweeds also have opposite leaves and a milky sap. There are 10 species of *Asclepias* found in the greater metro area, but *Asclepias speciosa* (showy milkweed) is our most common species. The Xerces Society has a great guide to the [milkweeds of Colorado](#) that you can use to recognize the most common native species of milkweeds in our region.

Milkweeds are the sole food source for monarch butterfly (*Danaus plexippus*) caterpillars. Although milkweeds are toxic to most insects, monarch caterpillars can eat the leaves and store the toxins in their bodies, in turn making them toxic as well. Once these caterpillars have developed



(LEFT) *Asclepias incarnata* (swamp milkweed) with monarch butterfly, (RIGHT) *Asclepias speciosa* (showy milkweed), photos by Jennifer Ackerfeld

into butterflies, they then drink the nectar from the milkweed flowers for food. And in drinking this nectar, the butterfly’s foot sometimes slips into a structure of the corona called the stigmatic slit, within which lies a ball of sticky pollen called pollinia. This pollinia then becomes attached to the butterfly, traveling with it as it moves on to the next flower, where it is again deposited into another stigmatic slit, thus completing the act of pollination. And pollination ensures that the milkweed will produce fruit and seeds for the next generation. It’s a win-win for milkweed and monarchs!

Monarch butterflies migrate an astounding 6,000 miles each year, roundtrip from Mexico to Canada, through successive

generations (it will take three to four generations before they reach Canada from Mexico). And as they migrate, monarchs lay eggs on milkweeds before dying. Migrating monarchs are divided into two populations – with one east of the Rocky Mountains and one west of the Rocky Mountains. In Colorado, our monarchs are part of the eastern population. Both populations have experienced recent severe declines in numbers – the eastern population has dropped by more than 80% in the past two years, and the western by 99.9% since 1980, bringing it near the brink of extinction.

One reason for the decline in monarchs is the loss of milkweeds across its range – loss of habitat and herbicide application have all led to a decrease in milkweed numbers. However, you can help the monarchs by planting a milkweed or two in your own garden!

Help Denver Botanic Gardens document monarchs and milkweed in the greater metro area by photographing as many plants and caterpillars (or even monarch butterflies!) as possible in the month of July. Post your findings to [iNaturalist](#) so they will automatically be added to the [Denver EcoFlora Project](#).

June EcoQuest – Heuchera Hunt

Three species of *Heuchera* were observed in June – *H. bracteata*, *H. hallii*, and *H. parvifolia*, with *H. parvifolia* winning the most observed *Heuchera* award!

What is an EcoQuest?

EcoQuests are part of the Denver EcoFlora Project. These monthly quests challenge citizens to become citizen scientists and observe, study and conserve the native plants of the Denver – Boulder metro area via iNaturalist, an easy-to-use mobile app.

How Do I Get Started?

1. Download the iNaturalist app or register online at [iNaturalist.org](#).
2. Take photos of the plants in bloom that you find on your daily neighborhood walk. It is okay if they are weeds! Avoid taking photos of cultivated plants in gardens or in your home.

3. If you are concerned about revealing the location of sensitive plants or observations at your own house, you can hide the exact location from the public by changing the “geoprivacy” of the observation to “obscured.”
4. Post your findings on iNaturalist via the app.
5. Your observations will automatically be added to the Denver EcoFlora Project.
6. Sign up to be a member of the [Denver EcoFlora Project](#) on iNaturalist to receive updates and additional information.

What is the Goal?

The Denver EcoFlora Project is designed to meaningfully connect citizens with biodiversity and to assemble novel observations and data on the metro area’s flora to better inform policy decisions and conservation strategies.



Photo by Scott Dressel-Martin