JULY 1 - 14, 2021 NATURAL HISTORY NOTES By Dick Harlow

MONARCH



 Monarch, <u>Danaus plexippus</u>, female, feeding on Lilac flowers. © Dick Harlow

The above image, **#1**, was taken June 4, 2021, the first week in June when the lilac was blooming. This year, 2021 was one of the earliest we have seen Monarch here at EastView.

Normally, we see **Monarchs** when the milkweed is flowering as this butterfly is known as a milkweed butterfly. Besides the Monarch butterfly's size, its color and markings can be confused with the smaller **Viceroy** butterfly as seen in picture **#3.** The main difference is that the Viceroy has a black bar crossing the full length of its hindwing, whereas the Monarch in **#2** has no black bar on its hindwing.

It should be noted that Monarchs are poisonous butterflies to eat, whether it is a bird or any animal that might eye a Monarch butterfly. The preferred plant for the Monarch caterpillars to feed on is milkweed. Milkweed contains toxic glycosides that are poisonous to any organism other than the Monarch caterpillar. The caterpillars feast on milkweed leaves and store the glycosides in their bodies as well as in the developing butterfly's body. Consequently, both the caterpillar and the adult butterfly are toxic to other animals.



2. Monarch, <u>Danaus plexippus</u>, female, feeding on Aster flowers. © Dick Harlow

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Viceroy, <u>Limenitis Archippus</u>, on a Cone Flower.© Dick Harlow

There is a reason for mimicry! Looking closely at picture **#2** and **#3** the two butterflies look enough alike that if a bird were to choose the Monarch, find it distasteful, it will not see the difference between what a Monarch and a Viceroy looks like, and thus will not go after the otherwise fine tasting Viceroy.

Each Fall millions of Monarch butterflies migrate from their breeding areas in the Northeast, Midwest, and West as well as Canada to travel as much as 3,000 miles to their wintering grounds in Southwestern Mexico.

Because of this migration and the dangers to the Monarchs survival brought about by insecticides, pesticides, herbicides, lack of habitat along with increasingly destructive weather, the Monarch survival as a species is dire.

However, we can help the species survive by planting milkweed in our gardens. Many people harvest Monarch eggs or caterpillars, provide a safe place for them to develop into adulthood, free of toxins, and then release them.

We need to be proactive about preserving habitat and our planet by avoiding using pesticides and herbicides in our gardens.

<u>COLUMBINE</u>



Wild Columbine, (<u>Aquilegia canadensis</u>) growing in our garden. The plant and its progeny have the run of the garden! © Dick Harlow

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Columbine is a flowering plant of the Buttercup Family. It has been hybridized to be found in Whites, Blues, Yellow, Purple and even a deep reddish-purple. The way to tell the Wild Columbine from the Garden or European Columbine is simply to see if the stamens protrude below the petals. Wild Columbine's stamens protrude as seen in both pictures. Whereas the stamens of Columbine hybrids do not protrude and stay compact to the center of the petals.

When the plant grows in the wild it will be found in areas that are rocky and around ledges. However, if grown in your garden and allowed to go to seed it can spread like wildfire. This shows that in the wild the plant doesn't do well with normal forest plant competition.



Wild Columbine, (<u>Aquilegia canadensis</u>) notice the stamens hanging down below the petals. © Dick Harlow

On the other hand, Garden Columbine, at least from my experience, tends to be less hardy than the Wild type although with minimal competition it will also come up year after year.



Garden Columbine, (<u>Aquilegia</u> <u>vulgaris</u>), non-native to the United States. Notice the stamens do NOT hang below the petals.
© Dick Harlow

JULY 1 - 14, 2021 NATURAL HISTORY NOTES By Dick Harlow OBSERVATIONS

MAMMALS

Red Fox * full fluffy tail and full bodied. White-tailed Deer (Doe and Fawn)

* **Note**: A fox (Red or Gray) whose tail is thin, not fluffy, and body thin not full needs to be avoided, may have Rabies!

REPTILES

Garter Snake

BUTTERFLIES

Monarch Cabbage White Yellow Sulphur Orange Sulphur Pearl Crescent

AMPHIBIANS,

Bullfrog Green Frog

All Measurements taken at solar noon (1230 EST). **PRECIPITATION**

Average July Monthly Precipitation for Vermont = 4.2 inches.

Total precipitation for July 3.6 inches. This is within 0.6 inches of the average!

Overcast Days 1-14: We had 11 days of overcast skies. Of those overcast skies 11 days produced rain. We needed a wet July!