

JULY 15 - 31, 2020 NATURAL HISTORY NOTES

By Dick Harlow

BIRD'S-FOOT TREFOIL

What is that yellow pea like flower growing in EastView's lawns? It is called Birds-foot Trefoil, *Lotus corniculatus*, because its leaves look like a bird's foot. It is also a legume that fixes nitrogen to the soil.



Bird's-foot Trefoil, *Lotus corniculatus*,
Middlebury, VT, on lawn. © Dick Harlow

Generally, legumes are nitrogen fixing plants that have bacteria that are able to fix atmospheric nitrogen into globules at their roots and thus that nitrogen will eventually be available to root systems of other plants.



Bird's-foot Trefoil, *Lotus corniculatus*,
Middlebury, VT, on lawn. © Dick Harlow

Birds-foot Trefoil is not native to the United States, but in fact is native to the grasslands of Eurasia and North Africa.

Its function has been as forage and as a nitrogen fixer in the soil. The fact that this plant can thrive in soil that is low in fertilization, low in nutrients, means it can be used in poor soils and still provide nutrient fodder for livestock. However, the problem with this plant is that it will outgrow most other plants with which it competes and therefore becomes invasive.

The roots do contain nodules that have symbiotic bacteria that will fix atmospheric nitrogen. That means that the bacteria have the ability to convert atmospheric nitrogen into a form that can be easily absorbed by plants.

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Bird's-foot Trefoil, *Lotus corniculatus*.
Middlebury, VT, close-up of flowers © Dick Harlow

This plant can grow to a height of 2-3 feet and form mats with a wide and deep root system that will out compete other plants from growing near it; but a fire will cause the plant to throw out its seed and thus give this plant a head start over native plants after a devastating prairie fire.

MILBERT'S TORTOISESHELL



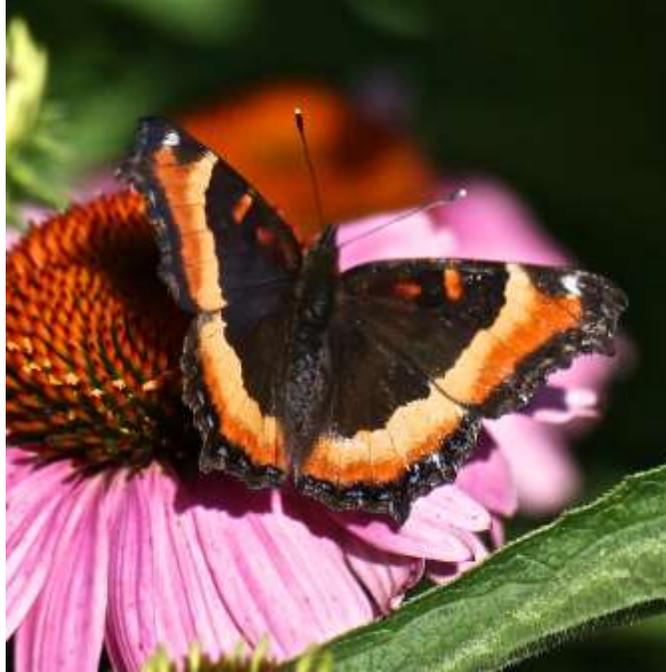
Milbert's Tortoiseshell Butterfly, *Nymphalis milberti*,
feeding on Catmint, © Dick Harlow

This butterfly quickly darts about and is unassuming until it opens its wings or lands for a sip of nectar. When that happens, you can get a much better view of this species. Note those oranges and yellows with a false eye, (the short black bar sided by orange at the edge of the wing) on the dorsal midline of the wing when it is open.

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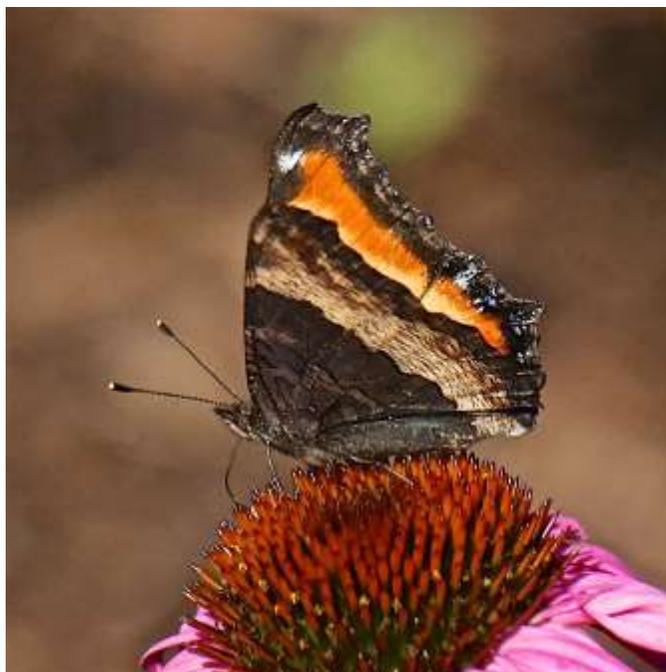
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The Milbert's has two broods between May and October. It is found throughout most of the United States and Alaska frequenting moist areas, roadsides, wooded lanes and pathways where there are flowers in abundance. This species overwinters as adults in groups.



Milbert's Tortoiseshell, nectaring on Purple Coneflower. © Dick Harlow

The food items for Milbert's larva are Thistle, Goldenrod and Lilac. Adults like the nectar of flowers like Catmint and Purple Coneflower or plant sap, rotting fruit and dung. One has to be alert, to catch sight of this beauty.



Milbert's Tortoiseshell, © Dick Harlow

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OBSERVATIONS

MAMMALS

- Eastern Coywolf
- Gray Fox
- Red Fox
- Gray Squirrel
- Eastern Cottontail Rabbit

Note: Cottontail seen early month, not in the latter part of the month.

REPTILES

- Garter Snakes, several.

AMPHIBIANS

- Northern Leopard Frog
- American Bull Frog
- Green Frog
- Gray Tree Frog

BUTTERFLIES

- Cabbage White
- Clouded Sulphur
- Eastern Tiger Swallowtail
- Black Swallowtail
- Giant Swallowtail
- Monarch
- Viceroy
- Milbert's Tortoiseshell
- Pearl Crescent
- Wood Nymph, pagala (southern_type)
- Wood Nymph, nephle (northern dark type)
- Wild Indigo Duskywing

MOTH

- Wavy Sphynx Moth

Weather Tidbits

Month of JUNE 15-30, 2020

[All Measurements taken at solar noon \(1230 EST\).](#)

PRECIPITATION

Total Precipitation: 44.2 mm or 1.7 inches. Average precipitation for July is 6.2 inches. We have a 4.5-inch deficit!

Overcast Days: 13