JUNE 15 – 30, 2018 NATURAL HISTORY NOTES FOR EASTVIEW By Dick Harlow <u>CHANGE IS BEAUTIFUL</u>



Black Swallowtail, <u>Papilio</u> <u>polyxenes</u>, larva, © Ugly Hedgehog® - Photography Forum

To be clear, in the insect world there are changes/stages that happen from egg to adult. These are called either complete metamorphosis: 4 stages, going from egg – larva – pupa (chrysalis) – adult, or incomplete metamorphosis: 3 stages, going from egg – nymph – adult.

In the last notes I mentioned that species of butterflies have specific plants where they lay their eggs so that their larva can have a ready meal when they hatch from their eggs. However, I did not identify what those larval plants are. Consequently, I felt for this note, I should identify those plants for at least the mentioned species. This should give the observer the insight into some of the behaviors that these species are showing when seen flying about our campus.

Food plants for the larva of:

Mourning Cloak – Willows and other trees and shrubs. Cabbage White – Crucifers (cabbage family) Clouded Sulphur – White Clover Silvery Blue – Pea family of plants, Wood Vetch, Tufted Vetch Giant Swallowtail – family Rutaceae, (citrus plants) including different types of prickly ash.



Black Swallowtail, <u>*Papilio polyxenes*</u>, female, nectaring on Buddleji © Dick Harlow

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Black Swallowtail - Carrots, Parsley, Dill, Fennel, Queen Anne's Lace. Nonnative or natives in the <u>Parsley Family</u> of plants.

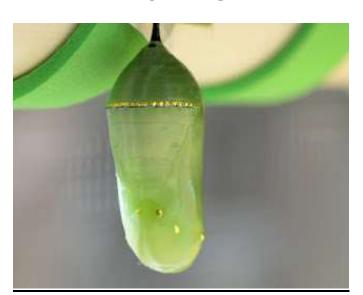
As you can see food plants of the above butterflies are quite specific. Case in point for another butterfly, is a butterfly that is known by many, but has not been mentioned so far; the **Monarch** butterfly consumes milkweed as its only larval food. If you find a caterpillar on a milkweed plant, then you can be fairly certain that it is the larval stage of the Monarch butterfly. Milkweeds contain various glucosidic chemicals called cardenolides that are toxic which is probably why this plant is minimally bothered by other insects and animals. This is also a reason why the Monarch butterfly when eaten causes birds to regurgitate it and therefore why they will avoid Monarchs in the future.



Monarch, <u>Danaus plexippus</u>, Female on milkweed. © Dick Harlow

Male Monarchs have a black scent gland, which is enlarged and appears as a black patch on the hindwing vein. No scent patch means it is a female.

In the case of a Black Swallowtail if you find a caterpillar on parsley or dill or any plant of the Parsley Family in our area you can rest assured you are most probably looking at the larval stage of the Black Swallowtail. Remember, however, that a larva grows and will look entirely different when it changes from a larva to a chrysalis, the resting stage of complete metamorphosis because changes take place inside the chrysalis to form the adult butterfly.



Monarch, <u>Danaus</u> <u>plexippus</u>, Chrysalis, Pupa Stage (chrysalis), © Lisa Wright, Virginia Living Museum

As you can see from the pupa stage where a chrysalis is formed it is completely different from any other stage of the butterfly. You also can see that it is in a resting and developmental stage where changes will take place within the chrysalis. It is truly amazing that the beautiful picture of a Monarch developed within a case like this.

Pupa Stage

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EASTERN GRAY TREE FROG

This frog is nocturnal and is responsible for some of the chirping and calls that you hear outside your window at this time of year as dusk and nightfall settle in.



Eastern Gray Tree frog, <u>Hyla</u> v<u>ersicolor</u>, © Dick Harlow

This frog is quite common here at EastView and easily stays out of sight. It is arboreal, common, native to most of eastern United States and Canada. Because this frog is arboreal, it lives most of its life in trees. I thought when we first moved to EastView that this was fairly unusual to see this frog in this new development right from the start. However, there were enough plantings of trees and shrubs to encourage it to make itself at home.

As its specific or scientific name implies this amphibian can change color from gray to green dependent on where it is and to what extent it wants to stay hidden.

Although these amphibians prefer to be high in trees, it is not conducive to mating. Frogs, even land frogs, need to be near water where females will lay eggs. Therefore, during the breeding season this species will come down from trees and seek a mate. Consequently, we hear them outside our windows during early summer. Plus, they are attracted to the night lamps where they can catch insects that are drawn to those lights.

OBSERVATIONS

<u>MAMMALS</u> White-tailed Deer – two groups of 3 Gray Squirrel Eastern Cottontail Eastern Coyote - howling

<u>AMPHIBIANS</u> American Bullfrog Leopard Frog Gray Tree Frog

LEPODOPTERA

Black Swallowtail Cabbage White Clouded Sulphur Viceroy Monarch

DRAGONFLIES

Common Whitetail

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DAMSELFIES

Marsh Bluet

Weather Tidbits JUNE 15-30, 2018

All Measurements taken at solar noon (1230 EST).

PRECIPITATION

Total Precipitation: 101.6 mm or 4.1 inches

Overcast Days: 11