MAY 1-14, 2015 NATURAL HISTORY NOTES FOR EASTVIEW
By Dick Harlow

WARBLER MIGRATION

The first two weeks of May, particularly around the 10th-14th, is the date for peak migrations of this insectivorous family of birds known as Wood Warblers! Warblers are a favorite of many birders, probably because of their small, flashy, dainty, and industrious activity. They scour the tree trunks, leaves, and branches and glean throughout a tree for insects they can find to devour or bring to their young.

Yellow-rumped Warbler, (M) *Setophaga coronata*
Photo © Dick Harlow

These denizens fly long distances, some over large bodies of water, surviving strenuous flights from South and Central America to arrive in the northern hemisphere to breed, and we have the pleasure to see these beauties!

Various species of warblers winging into North America during the early morning after long journeys over water and over land cause heart palpitations of major proportions for birders waiting for the chance to view and photograph them. After their trek, they land in trees that have just begun to leaf, or a shrub next to a walkway looking for insects to sustain them, which makes them easy to view with the naked eye or a pair of binoculars. What a wonderful experience to be practically next to these travelers as they have either come here to breed or progress further north to breed.

Blackburnian Warbler, (M) *Dendroica fusca*
Photo © lakecountrynature.com

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My first introduction to the above species was hearing him singing his territorial song high up in a spruce tree on the coast of Maine. Ever since then this species has been one of my favorites, easy to identify with the bright orange throat, yellow orange markings on the head and large white patch on the secondary feathers of his wing. He is just a very beautiful bird.

Walking on a woodland path or trail, you might hear a noise that almost sounds like a squeaky wheelbarrow. That sound comes from a black and white flecked warbler, accurately called the Black and White Warbler. Moreover, this fellow will attach himself to the bark of a tree and climb up or down the bark, much like a nuthatch or creeper, as well as flitting from branch to branch.

Black and White Warbler, *Mniotilta varia*
Photo © naturetravelnetwork

Then there is the longest distance traveler of them all, known as the Blackpoll Warbler. Wintering in South America east of the Andes Mountains, they migrate as far north as northwest Alaska. Tiny transmitters have been attached to this species and the data suggest that they travel great distances over water, either on their way south over the Atlantic, or on their way north over the Gulf of Mexico.

Blackpoll Warbler, (M) *Dendroica striata*
Photo © abcbirds.org

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This Blackpoll is a gleaner, foraging in the spring in the middle to upper parts of the canopy, whereas in the fall they will feed lower in the middle of a tree. During the nesting season they nest in low young coniferous trees.

And, then there is the Common Yellowthroat that likes brush, low shrubs along field edges and shrubs next to marshy areas or near water. Its call of *wichety, wichety, wichety, wich*, will catch your attention.

Common Yellowthroat, (M) ***Geothlypis trichas***
Photo © Laura Meyers

There are 50+ warbler species that migrate and nest in North America. During the spring and early summer the males tend to be easily identified. However, as early fall progresses this family of Woodland Warblers will lose their striking colors and become primarily difficult to identify. Most, not all, of the colorful aspects of the males become muted, and thus it is more difficult to see their identifying characteristics. The light and drab females tend to be difficult anyway because of the evolutionarily necessity to shield females from predators while incubating eggs or feeding their chicks. Although this group can be a challenge, they are a wonderful diversion from looking at more common everyday birds.

HUMMERS

Ruby-throated Hummingbirds, *Archilochus colubris,* arrived at Deer Meadow Drive on May 9. They arrived in MA the last week in April. But, the cold spring kept them in MA until the weather started to warm on May 1. I felt with the abnormally warm weather hummers might arrive earlier than they have in the past. Earliest I have recorded them in Milton, VT was the 4th and the latest was last year here in Middlebury on May 8. Therefore, I waited 'til the 3rd to actually put out my hummingbird feeder, figuring the warm temperatures we had been having would propel them to migrate north. But, that didn't happen; however, by May 11, we have had as many as three at the feeder at the same time.

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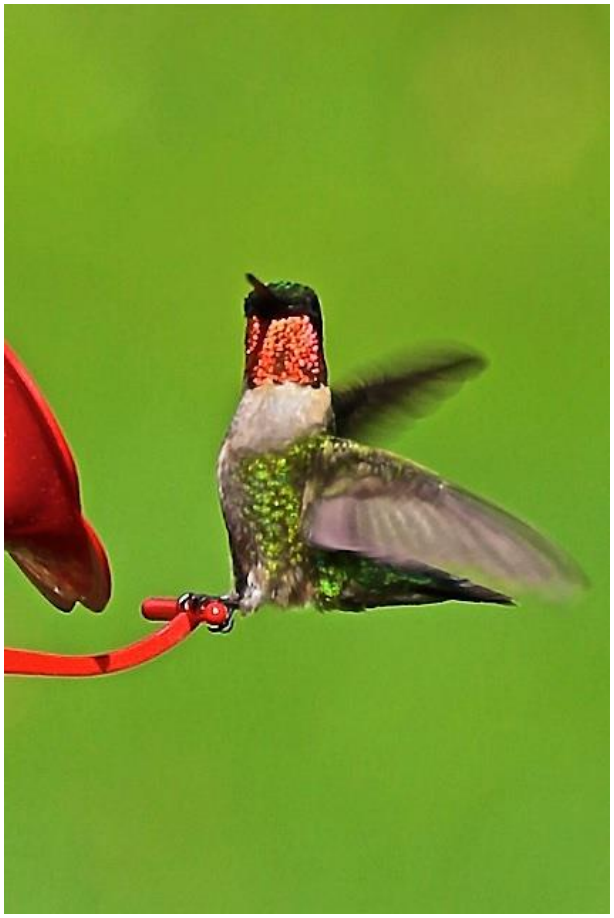

Ruby-throated Hummingbird, (M) ***Archilochus colubris***
Photo © Dick Harlow

The first two weeks in May usually bring about early flowers that hummingbirds can use along with those hummingbird feeders that people set out. Hummingbirds feed on flower nectar from garden plants as well as tree flowers. But, they also feed on small insects and spiders. If you ever were able to see a hummingbird nest, you would notice spider web silk fibers attached to and in the nest. Hummingbirds also need protein for themselves and their young that these small insects and spiders can give them along with the minerals and vitamins that are part of this arthropod protein. Hummingbirds have shown that they will frequent feeders that are colored red. That is because they have shown a preference for red tubular flowers. They also seem to like the color, pink and orange.

Caution: Manufacturers of hummingbird feeders know that the color red attracts hummingbirds and they will try and sell red dyed sugar water. Don't buy it! It is a waste of money and the dye could be harmful to hummingbirds. You will **NOT** find red or any color in nectar, it is a clear liquid. Sugar water made by mixing and dissolving 1 cup of regular cane sugar in 4 cups of water mimics the nectar hummingbirds can extract from flowers.

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RETENTION PONDS

(a) April 18th View of the Deer Meadow Retention Pond aka 'Dragon's Pool', and the greenish hue to the water.
Photo © Dick Harlow

I felt it would be appropriate to give a summary about retention ponds in general and specifically about EastView's aquatic habitat.

EastView has two retention ponds. One is in back of the Inn as one looks northeast. The other is in back of Deer Meadow Drive as you face south. The Bluebird and Tree Swallow nest boxes on tall poles with baffles are on the far embankment of the Deer Meadow Retention pond, aka 'Dragon's Pool', so named for the many Dragonflies using the pond in the past two years. Retention ponds in general are usually built as a permanent pool of water designed to capture diverted stormwater runoff from residential areas, such as impermeable surfaces of roads, streets, driveways, sidewalks, walkways, and roof surfaces. Also, some of that drainage is from lawns and gardens. Retention pond stormwater generally contains harmful and toxic chemicals and metals from asphalt roof tiles, fertilizers, pesticides and herbicides from our lawns, various corrosive dusts shed by our vehicles and household chemicals and cleaning agents that form harmful compounds that can harm life that uses large bodies of water.

(b) April 18th View of the Deer Meadow Retention Pond aka 'Dragon's Pool', and the drain at the far end.
Photo © Dick Harlow

The newly captured water from a rainstorm or thundershower is then slowly released over a particular period of time, usually 12 hours, before that captured water travels into a marsh or stream or lake. Therefore, the permanent pool water is replaced, in part, by stormwater runoff

as the permanent water and stormwater mix. It should be noted that retention ponds are effective vehicles that allow for sedimentation, which removes suspended solids and metals. Also biological processes, e.g. cattails, sedges, rushes, grasses, aquatic plants, etc., removes organic and inorganic nutrients that flow to these ponds.

In our case, the water level stays relatively constant due to openings in the vertical exit pipe. If water levels were to become so great that the exit holes in the pipe couldn't keep the water at a constant level, then the drain at the top of the vertical pipe will do the rest. There is a reason in the two years I have been at EastView, that I have seen the water level stay constant even when we have had summer downpours! In (b) above you can see both the vertical and horizontal pipes that maintain the water level in the pond. The horizontal pipe moves water to the other side of the embankment into the adjacent marsh.

Retention ponds provide two primary services. First, ideally, they retain runoff before releasing it into a marsh, stream, creek or lake. This helps prevent pollution. Key: water is released at flow rates and frequencies similar to those that existed under natural conditions. Second, retention ponds provide pollutant removal through settling and biological activity. That is a good thing!

The only negative problem that exists with our ponds is the build-up of anaerobic (without oxygen) conditions due to the large amount of accumulated dead and dying algae over time.

Certainly the Tree and Barn Swallows, Purple Martins, flycatchers and dragonflies can help in capturing mosquitoes. However, some means of introducing oxygen into the pool would be very beneficial in bringing oxygen to the bottom of the pool to prevent stagnation and anaerobic activity from developing. This would decrease the mosquito breeding population and the aeration could help in alleviating pollution toxicity and increase water clarity.

Of course with a pair of Muskrats occupying the Deer Meadow retention pond, they may have already allowed for releasing some water into the marsh through their burrowing. It is amazing to me how these animals survived the winter with a thick blanket of ice on a shallow pond. However, I observed two swimming in the pond the last week of April and one gathering grass for food just before this article was released. They are certainly more resilient than I gave them credit!

There is certainly a developing habitat here, as evidenced by several Bullfrogs that have lived in the pond in 2014 and survived this winter to begin their croaking in May. Bullfrogs, Leopard Frogs, toads along with the myriads of dragonflies, birds and other animals use the pond throughout the summer.

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(c) April 18th View of the Deer Meadow Retention Pond aka 'Dragon's Pool', looking SW.
Photo © Dick Harlow

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ALSIKE CLOVER

Last year I talked about the five different clovers or plants of the legume family. I mentioned the five different clovers we have here at EastView, but wasn't very specific about each one. I would like to talk about one specific one that looks like it could be a hybrid between Red Clover and White Clover. Clovers are not native to North America, but are to Europe, Asia and Africa, how did they get here? The settlers brought clover seed along with their livestock. They didn't have any idea what food would be available for their cattle and sheep. The result was that they were able to add European clovers and grasses to the native grasses so that they would be assured that their domestic animals had food.

Clovers also have the ability to fix nitrogen to their root structure, which adds fertility to the surrounding soil. Because we have all the clovers growing here at EastView, the little known one, which looks so similar to others, and could be confused as a hybrid, (which it is not), is Alsike Clover, *Trifolium hybridum*. Alsike Clover was recognized in the 1700's in Sweden. It was growing in areas that were hard on plants, especially ones that could be used for cattle, it was considered to be a hybrid of white and red clover as it had traits of both. Later, it was found not to be a blend, but its own type. This clover has the ability to grow in areas where it is cold, flooded and it is able to deal with a wide range of soil pH, unlike many other legumes. Evolution may be slow, but it is always working.

Many clovers are cut (hayed) with grasses for food and are considered excellent forage for livestock. Key here is that the clovers in the hay need to be dry, cured correctly. Unfortunately there seems to be a down side to a good thing. When pastures have a majority of clovers in them there becomes a toxicity issue. When Alsike Clover is wet with dew, and cattle eat it, a condition called Trifoliosis, or dew poisoning, also called bighead photosensitization, or big liver disease occurs. The lighter skinned animals are more affected than darker animals and horses in particular seem to have a problem with this clover. The way this problem is controlled is not to pasture animals on wet fields with a high Alsike Clover content. And, to make sure hay is cured properly so that mold is not trapped and active on clover.

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Alsike Clover, *Trifolium hybridum*
Photo © Dick Harlow

From the picture above, taken in back of our cottage here at EastView, you can see how farmers and plant biologists originally might have thought that this was a hybrid of both white clover and red clover.

Black Swallowtail, (M) *Papilio polyxenes* FOY- May 8, 2015
Photo © Dick Harlow

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As seen above this quickly taken flight picture of a male Black Swallowtail butterfly occurred during the warm spell we had in the first two weeks of May. It was the first Swallowtail seen this year, and the second species observed.

MAMMALS

- Muskrat
- Meadow Vole

AMPHIBIANS

- Bullfrog
- Leopard Frog

BUTTERFLIES

- Cabbage White
- Black Swallowtail

Weather Tidbits

MAY First Two Week Totals

All Measurements taken at solar noon (1130 EDT).

PRECIPITATION

MAY 2015 Total Precipitation: 53.8 mm or 2.2 inches

Overcast Days, May 1-14: 3

WIND

Highest wind May 12 : 35 MPH, Direction: WSW

Average Wind speed for two weeks: 3.1 mph,

Dominate Wind Direction: North

Days w/wind gusts 20-30 MPH: 9

Days w/wind gusts 30 MPH: 2