These winged denizens zip by us or lazily rest on a leaf as you stand by one of our ponds. These insects are the target of old wives' tales, dreaded by women that they might get caught in their hair. Not to worry, they are just winged insects called either Dragonflies or Damselflies that have excellent visual perception.

Dragonflies are separated from Damselflies in this country, whereas in Europe and most of the rest of the world these two groups are classified only as Dragonflies and are not separated.



**Eastern Pondhawk**, Imm Male, <u>Erythemis</u> <u>simplicicollis</u> © Dick Harlow

Various groups of Dragonflies perch differently. Individuals perch horizontally, at an angle or vertically, dependent on the group they belong to and their species. This is one way to determine what species you are observing.

However, temperature regulation is important for odonates (Dragonflies and Damselflies). Odonates are ectotherms, where the temperature of the environment regulates their body temperature. We, on the other hand are endothermic, we generate our own body temperature.

As of the last week of May this year, two primary skimmer dragonflies were patrolling our retention ponds, the Dot-tailed Whiteface and the Common Whitetail.

Unlike many common names that humans have attached to various animals, the Dottailed Whiteface is well named.



**Dot-tailed Whiteface,** Male, <u>Leucorrhinia</u> <u>intacta</u> © Dick Harlow, 2016

In this image you can easily see the white face and the yellow dot on the abdomen. The length of the abdomen is black except for the single yellow dot. Thus, Dot-tailed Whiteface is quite appropriate.

This dragonfly is a member of a large Family of dragonflies called the Skimmer family. Various members are readily seen patrolling our two retention ponds throughout spring, summer and fall.

The above image was taken this May in the south pond (Dragon's Pool). It fits the habitat requirements for this species, which are ponds and backwaters that are vegetated. The Dot-tailed Whiteface can be viewed from spring to summer throughout the northern United States, from the East to the West coast.

It is understandable that because these insects are dependent on the environment to help them regulate their temperature, they also have evolved abilities to adjust that regulation to meet their own requirements. They can raise or lower their abdomen and adjust it in line with the sun, or they can point it vertically (obelisking), to minimize solar radiation. That is what this Dot-tailed Whiteface is doing at midday in this image.



**Dot-tailed Whiteface,** <u>Leucorrhinia</u> <u>intacta</u> © Dick Harlow

Once you get to know these regular visitors, or in this case locals, you will be able to identify them and know the "what and why" of their behavior.

# **SILVERY BLUE**



**Silvery Blue Butterfly,** <u>Glaucopsyche</u> <u>couperi,</u> © Dick Harlow, 2016

The Silvery Blue Butterfly is small, the size of a large dime or nickel. The picture above shows a dandelion seed next to the butterfly giving you a perspective of its size. They can be seen from April to late June.

If you are fascinated with butterflies, then you might be interested in the fact that it is thought that there are two physically isolated races of this species that occur in the eastern United States. When I read about this in various references, I was interested in what is known about each of these groups. The northern *couperi* race, located in ME, NH, VT, northern NY and MA is said to be moving south. The southern nominate race, *lygdamus*, located in southern PA, central VA down through the western edges of NC, SC and northern GA this species is thought to be coalescing or merging toward the northern race. Most of PA and southern NY separate these two groups. Both the pictures I have shown, in my opinion, look closely like the southern race, *lygdamus*. But, those who know more than I, say the pictures are of the *couperi* race.

One would think that each of these races would move closer together if the climate and host plants were plentiful enough. That seems to be the case in my mind. A few of the host plants that the southern race particularly likes are various vetch plants and Whitesweet Clover. We have an abundance of those plants here at EastView, so it is understandable why we might see the southern race here. However, the mystery is how did it get here, as we are considerably removed from the southern race's geographic area.



**Silvery Blue Butterfly,** <u>Glaucopsyche</u> <u>couperi,</u> © Dick Harlow, 2016

It seems to me that the climate is changing so fast, that what was thought concerning the distribution of these groups 10 or so years ago or when references were written, are currently out of date. Evolution of organisms and their distribution is normally a slow process, but changing climate and an abundance of host plants can change an organism's adaptability. We may be witnessing throughout our lifetime the evolution of these organisms moving faster and in different locations than expected. It could even be considered historic. This is a fun time to live, but can also be a tough and drastic time for many organisms with which we share this planet.

### **OBSERVATIONS**

#### **BUTTERFLIES**

Black Swallowtail Cabbage White Clouded Sulphur Orange Sulphur Eyed Brown Pearl Crescent White Admiral Silvery Blue Monarch

#### **DRAGONFLIES**

Eastern Pond Hawk Common Whitetail 12-Spotted Skimmer Widow Skimmer

#### **DAMSELFLIES**

Eastern Forktail Marsh Bluet

#### **AMPHIBIANS**

Gray Tree Frog American Bullfrog Leopard Frog Common Toad

#### **MAMMALS**

Gray Squirrel
Eastern Chipmunk
Eastern Cottontail
Meadow Vole
White-tailed Deer
Coyotes howling

# **Weather Tidbits**

Month of July 1-14 2016

All Measurements taken at solar noon (1230 EST).

#### **PRECIPITATION**

**Total Precipitation: 73.6 mm or 2.9 inches** 

**Overcast Days: 4** 

#### **WIND**

Highest wind gust: July 25, 25 MPH, Direction: South

Average Wind speed for July: 1.5 mph,

**Dominate Wind Direction: South** 

Days w/wind gusts 20-30 MPH: 4 Days w/wind gusts 30 MPH: 0

#### **TEMPERATURE**

Mean Temp: 21.5 C<sup>0</sup>/70.7°F High Temp: 29.4 C<sup>0</sup>/84.9°F Low Temp: 11.3 C<sup>0</sup>/52.3°F