

## SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW

By Dick Harlow

### CRESCENT BUTTERFLIES

Is it a Pearl Crescent, *Phyciodes tharos*, or a Northern Crescent, *Phyciodes selenis*? That is the question that bothers many butterfly enthusiasts.



**Crescent species, *Phyciodes* Genus (1)** © Dick Harlow

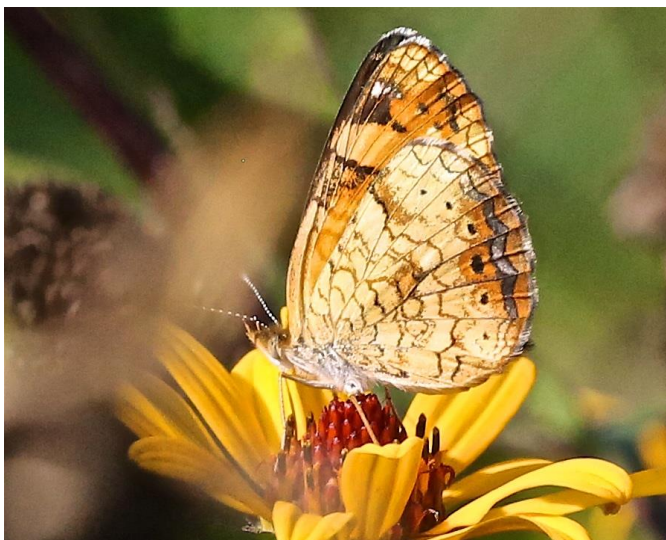
These very small colorful butterflies have created identification problems because they look so similar in many respects. They look similar, but do they interbreed?

The age-old species axiom is that if the species stays true to itself and either isn't in a position to interbreed with a similar species or does not interbreed, even if breeding territories overlap, then it is considered a separate species. They would still be considered separate if they interbred, but their offspring were unsuccessful breeding.

The best example is the **Yellow-shafted Flicker** of the East Coast and the **Red-shafted Flicker** of the West Coast. These were considered separate species until man set telephone poles, trees and homes across the prairie, which was the flickers' natural barrier. However, once the prairies were populated with possible nesting sites the two species eventually met and began to interbreed. And, once it was discovered that their offspring successfully bred, they were considered subspecies. Without going into more detail, the scientific community now sees each as a hybrid. And, since the hybrids have more yellow than red in the shafts of their wings, the Yellow-shafted Flicker and Red-shafted Flicker are considered subspecies, but the Yellow-shafted Flicker is known as the nominate race. Result is that the name for both has been changed to Northern Flicker.

Back to butterflies, do we have this same problem with these two butterfly species? I am not sure the Lepidopterists know. Sometimes an organism the size of the end of your thumb is more difficult to study than a medium sized bird.

**Image 1 and 2** are of the same butterfly. The first is showing a dorsal view and the second is showing the underside or ventral view of the left wing.

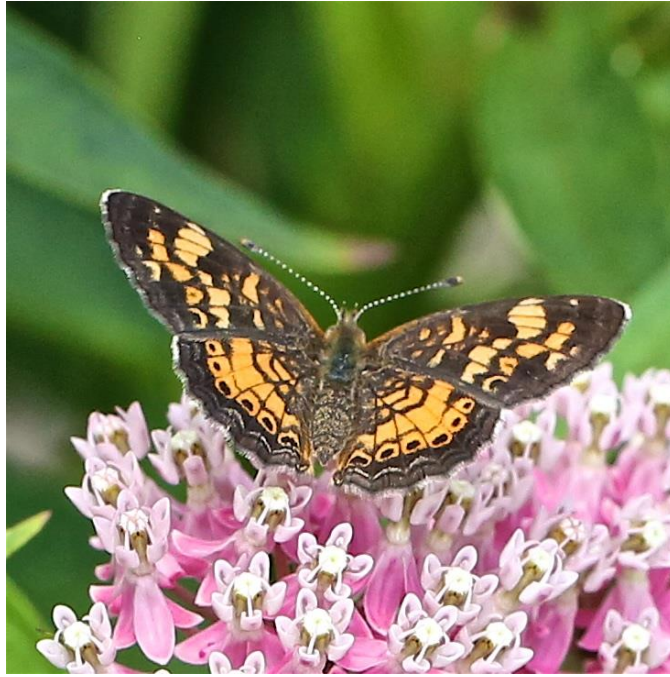


**Crescent species, *Phyciodes* Genus (2)** © Dick Harlow

## SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW

By Dick Harlow

Are Crescent butterflies variable? Yes! To show the variability I am posting several other pictures. It is not my intention to go through many specifics, but simply to give picture examples of Crescent differences that make it difficult for the human eye to find a visual characteristic that is specific to one and not the other.



**Crescent species, *Phyciodes* Genus (3)** © Dick Harlow

Again, **image #3 and #4** are also of the same butterfly; where **image #5** is entirely different from any of the first four photographs.

The dorsal view looks similar, except one has more black and therefore looks darker. The underside of the wings, ventral side, also appear similar, except that **image #4** is darker, slightly shadowy, which could be the reason. And, **image #5** is light with slightly different markings.

There aren't any one or two attributes that can definitely determine that this is a **Pearl Crescent**, which would distinguish it from a **Northern Crescent**. Therefore, we can only determine its name down to Genus. Now, if there were DNA markers, then they could decide the species.

All pictures of the Crescent species were taken on EastView property.



**Crescent species, *Phyciodes* Genus (4)** © Dick Harlow

Some people, like me, call this "fun" trying to determine if there is a visible marker to differentiate between species.

SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW  
By Dick Harlow



Crescent species, *Phyciodes* Genus (5) © Dick Harlow

**UNINVITED FIELD THISTLES**

**CANADA THISTLE**



**(1) Canada Thistle, *Cirsium arvense*, also known as the 'Thistle from Hell', © Dick Harlow**

**SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW**  
**By Dick Harlow**

Our fields seem to have an abundance of this introduced thistle. Native to Europe and Asia, it has become quite common in North America. One of the reasons it has survived so well is that it grows from creeping thick horizontal roots that will produce long vertical underground stems.

Because of this network of roots and vertical stems, the tough thorns or spikes on the leaves, one can see how this plant can be very difficult for people and farm animals to travel through.



**(2) Canada Thistle, *Cirsium arvense*, flowers,**  
© Dick Harlow

One of the reasons this plant is so successful is its production of flowers and seeds. The flower has one to five flower heads per branch. Under maximum conditions a plant can produce 100 heads per shoot. Add to this the production of over 1500 seeds per plant and you have an extremely successful plant when the conditions are right.

## BULL THISTLE



(3) Bull Thistle, *Cirsium vulgare*, leaves and flower heads, © Dick Harlow

When Bull Thistle, *Cirsium vulgare*, is in flower, you can see the difference between it and Canada Thistle. The flower of Bull Thistle, **image #4**, is red-purple, almost a bright magenta, whereas the Canada Thistle flower, **image #2**, is pink to light pink. Also, the Canada Thistle flowers are smaller, but more in number and spaced among its branches. Even though the Bull Thistle flowers seem to be fewer, they still are found on various branches and when mature produce a large volume of seed.



(4) Bull Thistle, *Cirsium vulgare*, flower, © Dick Harlow

The leaves of both plants are also different. As you can see in **image #1** Canada Thistle has this twisted spiky look to it with many spikes; whereas Bull Thistle's leaf is flat with spikes at the end of each of the four leaflets, **image #5**.

SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW  
By Dick Harlow



(5) Bull Thistle, *Cirsium vulgare*, leaf and spikes on leaf,  
© Dick Harlow

Bull Thistle like Canada Thistle was introduced to North America during the 17<sup>th</sup> century, probably with seed brought from Europe. Consequently, farmers have had to deal with this alien growing in their pastures, not only as a noxious weed, but also difficult to eradicate once established.

Bull Thistle has a two-year life cycle. Its first year produces a relatively flat to small shrubby spiky looking rosette. It only flowers during its second year. However, it produces a multitude of flowers and thus a plethora of seed that finches enjoy. Between the wind and finches the seed will be distributed far and wide for both Bull and Canada Thistle.



Black Swallowtail, *Papilio polyxenes*, feeding  
on Bull Thistle flowers, © Dick Harlow

As pointed as Bull Thistle and Canada Thistles are, they do have their attractions. The flowers not only need to be pollinated, but demand it with nectar and pollen for butterflies and other insects. As the flower emerges in June Black Swallowtails as seen above, and European Skippers as seen below, can garner the necessary nutrients.



European Skipper, *Thymelicus lineola*, feeding  
on Bull Thistle, © Dick Harlow

SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW  
By Dick Harlow



**European Skipper**, *Thymelicus lineola*, feeding on Bull Thistle, © Dick Harlow

Although I do not have a picture to show goldfinches working the seed heads of both Canada and Bull Thistle, they have been observed working the flowers in August after the thistles have gone to seed.

## OBSERVATIONS

### **BUTTERFLIES**

Cabbage White  
Clouded Sulphur  
Monarch  
Viceroy

### **DRAGONFLIES**

Green Darner  
Canada Darner  
Eastern Pond Hawk  
Black Meadowhawk

### **DAMSELFLIES**

Eastern Forktail  
Marsh Bluet

### **AMPHIBIANS**

American Bullfrog  
Leopard Frog

### **MAMMALS**

Eastern Coyote (heard close to cottages)  
Eastern Cottontail  
Gray Squirrel  
Eastern Chipmunk  
Meadow Vole  
Muskrat

SEPTEMBER 15-31, 2016 NATURAL HISTORY NOTES FOR EASTVIEW  
By Dick Harlow

**Weather Tidbits**

Month of SEPTEMBER 1-30, 2016

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

**PRECIPITATION**

Total Precipitation: 56.4 mm or 2.2 inches.

1.8 inches below normal for the month.

Overcast Days: 6

**WIND**

Highest wind gust: SEPTEMBER 11, 26 MPH, Direction: North

Average Wind speed for SEPTEMBER: 0.8 mph

Dominate Wind Direction: South

Days w/wind gusts 20-30 MPH: 5

Days w/wind gusts 30 MPH: 0

**TEMPERATURE**

Mean Temp: 18.2 C<sup>0</sup>/64.8<sup>0</sup>F

High Temp: 29.5 C<sup>0</sup>/85.1<sup>0</sup>F

Low Temp: 3.5 C<sup>0</sup>/38.3<sup>0</sup>F