JUNE 15 – 30, 2021 NATURAL HISTORY NOTES
By Dick Harlow

SILVERY BLUE

1. **Silvery Blue,** *Glaucopsyche lygdamus*, (nominate southern race) Dorsal view, nectaring on vetch. © Dick Harlow

This butterfly is slightly larger than a nickel, in other words small, quite small. Actually you could very easily miss seeing it. However, the blue is striking and when walking on a lawn you could easily pick out the tiny specks of blue fluttering about feeding on vetch. Once it closes its wings together then the butterfly almost becomes invisible. Picture #2 viewed five to six inches above the surface of the lawn is almost impossible to notice.

Currently there are two physically different races of this butterfly that can be found in our area. The difference is in lifestyle and their markings, especially on the ventral side of their wings. The northern race, called the (*couperi)* race has fewer small dots on the underside of the wings while the southern (*lygdamus)* race has many larger dots outlined prominently in white. Unfortunately, the reference images are not distinct enough for me to use and I do not have my own images of the Northern Race. The southern race is more common of the two groups. The southern race has more distinct dots surrounded by a white ring on the underwing than does the northern race.

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2. Silvery Blue, *Glaucopsyche lygdamus*, (nominate southern race) Ventral view, nectaring on vetch. © Dick Harlow

When the two varieties are found in the same geographic area they do not seem to interbreed as far as lepidopterists know; and because of that they may eventually be considered separate species in the future.

The southern race feeds on Carolina Vetch, *Vicia caroliniana*, while the northern race feeds on legumes. Some of these legumes are non-native such as White Sweet-Clover, *Melilotus alba*.

The southern race has a range along the Appalachians from northern Georgia to southern PA, while the northern race covers most of New England. Currently we here in Vermont are seeing evidence that the southern race is moving into New England.

SUNSETS

"Pink (red) sky at night sailors delight, Pink (red) sky in the morning sailors take warning."

This 'old sailor saying' refers just to a red or dark pink sky. Therefore picture #2 because it was taken in the evening is a sailors delight. A yellow sky or an orange sky has little meaning relative to the saying.

#1 SUNSET. MAY 28, 2021,
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Ever wonder why when you look at a sunset, they all seem to be shades of orange, or yellow and even red? Why don't we see other colors?

During the day the sun is high, and the colors are muted or brightened out and what is left is the blue sky because the actual colors such as violets are scattered so that you will not notice them.

During sunset or as the sun moves below the western horizon the sun is very low or at least below the tree line from your viewpoint. At this point there is more concentrated air molecules for sunlight to pass through.

#2 SUNSET. SEP 8, 2020,
© Dick Harlow

#3 SUNSET. NOV 14, 2020,
© Dick Harlow

The yellows, orange and reds of a sunset are caused by a phenomenon known as scattering. Sometimes we can see particles floating around in the atmosphere. But we can't see the actual molecules in the air we breathe. These molecules and particles cause light rays to bounce off these molecules and particles, thus the process of scattering. Because they bounce off these particles, they in fact change direction.

When there is scattering, the shorter wavelengths of light such as violet and blues are moved away from the longer wavelengths such as reds, oranges, and yellows. Thus, the sunset colors we see.

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OBSERVATIONS

MAMMALS

Red Fox
White-tailed Deer

REPTILES

Garter Snake
Bull Frog

BUTTERFLIES

Cabbage White
Yellow Sulphur

Note: Disturbing that we have seen so few butterflies for the month of June!

All Measurements taken at solar noon (1230 EST).

PRECIPITATION

Average June Precipitation for Vermont = 3.7 inches.

Total precipitation for June was 55.6 mm or 2.2 inches. This is a 1.5-inch deficit for the month.

Overcast Days 1-30: We had 15- days, of overcast skies. Of those overcast skies 14-days produced some form of precipitation. June has definitely added to the draught, even though it may not feel like it.