

## 2020 Eastern Catskills NABA Butterfly Count

The 14<sup>th</sup> annual Eastern Catskills North American Butterfly Association (NABA) Fourth of July Butterfly Count was conducted on our rain date, Sunday, **28 June 2020**, following a first attempt on the originally scheduled Saturday date that was thwarted by frequent rain showers. Sunday's weather was better than Saturday, but far less than ideal, with early morning overcast skies and afternoon rain showers that effectively shortened the count day once again this year. Two field parties were not available to survey on the rain date, and the remaining field parties were forced to shorten their effort and area of coverage.

Considering the inclement weather and a reduction in field party effort resulting in a number of traditional survey sites not receiving any coverage this year, six observers in three field parties collectively found a remarkable total of **4,085 individuals** representing **30 adult butterfly species**, plus **two** additional unique immature species (Harris' Checkerspot and Question Mark).

For the third consecutive year, total abundance was significantly influenced by a spectacular flight of **3,500 Baltimore Checkerspots** in the Thorn Preserve colony. The contribution of this single species advanced our total number of individuals to a new record high, eclipsing our previous high count of 1,901 in 2018 and our ten-year average of 1,417. All other species combined accounted for just 584 individuals, considerably better than last year's 323, but well below our previous record low count of 956 in 2013 when only 39 Baltimore Checkerspots were recorded. Diversity set a new record low, four species less than last year's rain-hampered effort and well below our ten-year average of 40 species/count.

**Baltimore Checkerspots** (3,501) greatly exceeded our previous high count of 1,206 from last year. Two **Giant Swallowtails** represents a new record high count for a species that is typically between broods at the time of our survey, previously encountered as single individuals in 2018 and 2012. New record high counts were also established for **Hackberry Emperor** (6, compared to 4 in 2017) and **Little Glassywing** (84, surpassing 79 in 2010). We did not find any **Eastern Comma** or **Red Admiral** for the first time in the 14-year history of this survey. **Black Swallowtail**, **Summer Azure**, **American Lady**, and **Hobomok Skipper** were missed for only the second time. No southern immigrants were encountered this year.

Major historical survey sites within the count circle that were not surveyed this year include Poet's Walk Preserve in Dutchess County, a large field at Fehr Bros. in Saugerties that has traditionally hosted a Baltimore Checkerspot colony and is the only reliable site for Coral Hairstreak, and approximately two miles of significantly productive utility cuts in northern Saugerties. Persistent rain showers moved in by 3:25 p.m., effectively ending the search effort for adult butterflies while permitting some extended time to look for immature stages.

Count day temperatures ranged from 71-82° (F) with little or no wind. A very dry period with frequent sunshine and very little rain preceded the count for several weeks but appeared to have little negative impact on nectar resources, with Common Milkweed abundant and at peak bloom. Repeating last year's summation, the flowers were there, the butterflies were not, and the weather was once again a big disappointment in a year that has been very challenging on all fronts.

Below is a summary of the count results with field party effort. Thanks to all of the participants for their double effort this year, including Barry Haydasz and Jessica Prockup for their effort trying to conduct the survey on a rainy Saturday. Next year's count is scheduled for Saturday, **June 26, 2021**, with Sunday June 27<sup>th</sup> reserved as a rain date.

– Steve M. Chorvas (Compiler/Coordinator)

**Adult Butterflies:** Giant Swallowtail (2), Eastern Tiger Swallowtail (11), Spicebush Swallowtail (2), Cabbage White (69), Clouded Sulphur (24), Orange Sulphur (1), Banded Hairstreak (1), Eastern Tailed-Blue (27), Great Spangled Fritillary (36), Meadow Fritillary (14), Pearl Crescent (3), Baltimore Checkerspot (**3,501**), Red-spotted Purple (4), Viceroy (2), Hackberry Emperor (6), Northern Pearly-eye (6), Appalachian Brown (7), Little Wood-Satyr (73), Common Wood-Nymph (43), Monarch (8), Silver-spotted Skipper (47), Hoary Edge (1), Northern Cloudywing (1), Least Skipper (74), European Skipper (11), Peck's Skipper (7), Northern Broken-Dash (10), Little Glassywing (84), Delaware Skipper (4), Dun Skipper (5), *Unidentified Grass-Skippers* (1).

**Immature Butterflies:** Giant Swallowtail (17 caterpillars [cats], 16 eggs, 3 pupae), Spicebush Swallowtail (4 cats), Harris' Checkerspot (654 cats, 220 eggs), Baltimore Checkerspot (20 cats, 7 pupae), Question Mark (16 cats), Hackberry Emperor (9 cats, 107 eggs), Monarch (1 cat), Silver-spotted Skipper (2 eggs), Hoary Edge (2 cats, 63 eggs).

Total: **9 species / 1,141 individuals**.

**Participants, Field Parties and Field Party Effort (Miles on Foot):** Party-hours: 16.75 Party-miles: 9.00

**Northern Area** – Steve Chorvas, Alan Beebe (08:00 – 18:00, 10.0 hrs., 2.5 miles)

**Southern Area** – Mark DeDea, Wendy Tocci (09:00 – 13:15, 4.25 hrs., 4.5 miles)

**Juniper Flats** – Joe Bridges, Barbara Hart (10:36 – 1:06, 2.5 hrs., 2 miles)