

2019 Eastern Catskills NABA Butterfly Count

The 13th annual Eastern Catskills North American Butterfly Association (NABA) Fourth of July Butterfly Count was conducted on **30 June 2019** under adverse weather conditions. Frequent episodes of rain showers throughout the day interrupted the count, providing only brief breaks of partial sunshine with limited butterfly activity. Combined with regionally low numbers of butterflies in general during the month of June, the 2019 survey presented yet another challenging day in the field.

Several species were encountered in record low numbers, including **Cabbage White** (34, previous low count 93, ten-year average 188), **Clouded Sulphur** (11, avg. 57), **Eastern Tailed-Blue** (3, avg. 26), and **Great Spangled Fritillary** (10, previous low 92, avg. 159). The count accurately reflecting an historically poor year for Great Spangled Fritillary that may be attributed to exceptionally high caterpillar mortality resulting from excessive rain in 2018 and the spring of 2019. **Eastern Tiger Swallowtail** and **Hobomok Skipper** were missed entirely for the first time in the history of this survey. Twelve **Meadow Fritillaries** was just one above our previous record low, and well below our ten-year average of 40.

The overwhelming highlight once again this year was an impressive flight of **Baltimore Checkerspots** encountered in the meadow at Thorn Preserve, where an estimated 1,200 adults were observed. Combined with just six additional individuals found at two other sites, 1,206 represents a new record high, surpassing last year's remarkable 1,182 and well above our ten-year average of 152/count.

American Snout was experiencing what may turn out to be an unprecedented irruption into our area, providing ideal conditions for recording this species on our count for the first time. A single female was observed repeatedly ovipositing on a pruned six-foot high Hackberry just outside my window, representing a new species for the count and advancing our historical cumulative to 67 species. Incidentally, this female remained for at least another two weeks depositing dozens of eggs before being replaced by one or more additional females, though most of their eggs and caterpillars did not fare well. Once again this year, a single **Coral Hairstreak** was found in a meadow in Saugerties (third time from this location on this count) and continues to be the rarest butterfly in our area recorded on this annual survey.

By the end of the day, nine observers in four field parties recorded a total of **1,529 individuals** representing **34 adult butterfly species**, plus **four** additional unique immature species (Giant Swallowtail, Spicebush Swallowtail, Harris' Checkerspot, and Wild Indigo Duskywing). Total abundance was significantly influenced by the single enormous Baltimore Checkerspot colony (as it was last year), with just an additional 323 individuals accounting for all other species combined. For historical context, our ten-year average for this survey is 1,454 individuals, with a record high 1,901 and a record low 956. This year's diversity set a new record low, compared to our previous low of 36 in 2009, and our ten-year average of 40.5 species/count.

We managed to survey most of the geographic area that we have covered in recent past years, but it is difficult to assess the real negative impact on actual field party hours resulting from frequent down time waiting out rain showers or, in the case of at least one field party, shifting focus to immature butterfly stages while the adults were hunkered down. Count day temperatures ranged from 71-80° (F) with only an occasional light breeze. Excessive spring rain, followed by a period of much dryer weather, resulted in ample moisture to maintain a good selection of nectar resources, including peak bloom of Common Milkweed. The flowers were there, the butterflies were not, and the weather was a big disappointment in a rather dismal year for many butterfly species.

Below is a summary of the count results with field party effort. Thanks to all of the participants for their time and effort persevering under very challenging environmental conditions. Next year's count is scheduled for Saturday, **June 27, 2020**, with Sunday June 28th reserved for a rain date.

– Steve M. Chorvas (Compiler/Coordinator)

Adult Butterflies: Black Swallowtail (3), Cabbage White (34), Clouded Sulphur (11), **Coral Hairstreak** (1), Gray Hairstreak (1), Eastern Tailed-Blue (3), Summer Azure (4), **American Snout** (1), Great Spangled Fritillary (10), Meadow Fritillary (12), Baltimore Checkerspot (**1,206**), Eastern Comma (1), *Anglewing sp.* (1), American Lady (11), Painted Lady (2), Red Admiral (10), Common Buckeye (1), Red-spotted Purple (2), Viceroy (1), Hackberry Emperor (1), Northern Pearly-eye (9), Appalachian Brown (5), Little Wood-Satyr (42), Monarch (15), Silver-spotted Skipper (16), Hoary Edge (9), Northern Cloudywing (6), Least Skipper (52), European Skipper (2), Peck's Skipper (7), Tawny-edged Skipper (1), Northern Broken-Dash (1), Little Glassywing (37), Delaware Skipper (5), Dun Skipper (3), *Unidentified Grass-Skippers* (3).

Immature Butterflies: Black Swallowtail (3 caterpillars), Giant Swallowtail (9 cats), Spicebush Swallowtail (2 cats), Summer Azure (5 cats, 2 eggs), American Snout (8 eggs), Harris' Checkerspot (2,375 cats, 1,210 eggs), Baltimore Checkerspot (7 cats, 2 pupa), American Lady (4 cats), Hoary Edge (21 eggs), Wild Indigo Duskywing (4 cats). Total: **10 species / 3,650 individuals**.

Participants, Field Parties and Field Party Effort (Miles on Foot): Party-hours: 30.00 Party-miles: 11.75

Northern Area (1-10) – Steve Chorvas, Alan Beebe (06:00 – 20:00, 14 hrs., 4.5 miles)

Dutchess Area (1) – Barry Haydasz (09:00 – 15:00 / 6 hrs. / 3 miles)

Southern Area (1-5) – Mark DeDea, Jessica Prockup, Wendy Tocci (09:15 – 16:30, 7.25 hrs., 3.25 miles)

Southern Area (11) – Thomas Crepet, Joe Bridges, Barbara Hart (9:15 – 12:00, 2.75 hrs., 1 mile)