

2018 Eastern Catskills NABA Butterfly Count

The 12th annual Eastern Catskills North American Butterfly Association (NABA) Fourth of July Butterfly Count was conducted on **30 June 2018**, the latest possible date consistent with surveying on the traditional last Saturday in the month of June. Excessive heat on count day and very dry conditions over the prior two weeks apparently factored in this year's overall scarcity of butterflies, with one glaring exception. Count day temperatures ranged from 72-90° (F) under mostly sunny skies with little or no wind and no precipitation. Butterfly activity noticeably declined during the hottest part of the day.

Ten observers in four field parties encountered a total of **1,901 individuals** representing **39 adult butterfly species**, plus **four** additional unique immature species (Black Swallowtail, Harris' Checkerspot, American Lady, and Viceroy). Based on raw numbers alone, the 2018 count achieved a new record high for abundance, edging out 1,896 individuals recorded in 2009. This year's total, however, is somewhat misleading and hardly representative of the dearth of butterflies encountered at all but one survey site.

The overwhelming highlight of the count was a spectacular mass emergence of **1,175 Baltimore Checkerspots** in the meadow at Thorn Preserve in Woodstock, accounting for 62% of our total abundance. To put this number in perspective, our previous high count of Baltimore Checkerspots was 117 with a ten-year average of 38.3/year. Adjusted for this one phenomenal count, the total number of all other butterflies encountered on this year's survey, including additional Baltimores at two other sites, would have set a new record low at 726, well below our ten-year average of 1,399 and our previous record low of 956.

The only other species found in sufficient numbers to set a new record high count was **Northern Pearly-eye** (14, exceeding 12 in 2009 and 2010, and well above our ten-year average of 5.9). This is yet another rather misleading record considering all 14 individuals were seen in one concentrated area at Esopus Bend Nature Preserve in Saugerties, while no other field party or survey site produced an additional sighting. A single **Coral Hairstreak** in a meadow in Saugerties is by far the rarest butterfly on this year's count, representing our second count record and always a very good find in our area anytime of the year. A single adult **Giant Swallowtail**, typically between broods during our count period, was also only our second historical record. No new species were added to the count composite, maintaining our cumulative total at 66 species.

Diversity was reasonably close to average, two species below our ten-year average of 41.4 species/year, and two species better than last year's count. Every field party reported a noticeable lack of butterflies, consistent with a dismal region-wide season for many species. For the first time in our twelve-year history, we missed adult Black Swallowtail and American Lady. Adult Viceroy was missed for only the third time, cyclical hairstreaks (Banded and Striped) were almost non-existent, skippers were low in abundance, and we did not encounter any emperors or southern strays. Also noteworthy and influential on this year's results was our record low effort. Four field parties (down from a high of six) resulted in a number of traditional survey sites not receiving any coverage this year.

Below is a summary of the count results and field party effort. Thanks to all of the participants for their time and effort under uncomfortably hot conditions. Next year's count is scheduled for Saturday, **June 29, 2019**, with Sunday June 30th reserved for a rain date. – Steve M. Chorvas (Compiler/Coordinator)

Adult Butterflies: Giant Swallowtail (1), Eastern Tiger Swallowtail (7), Spicebush Swallowtail (2), Cabbage White (111), Clouded Sulphur (63), Orange Sulphur (4), American Copper (1), **Coral Hairstreak** (1), Banded Hairstreak (3), Gray Hairstreak (3), Eastern Tailed-Blue (23), Summer Azure (3), Great Spangled Fritillary (94), Meadow Fritillary (14), Pearl Crescent (3), Baltimore Checkerspot (1,182), Eastern Comma (2), Red Admiral (2), Common Buckeye (1), Red-spotted Purple (3), Northern Pearly-eye (14), Appalachian Brown (10), Little Wood-Satyr (75), Common Ringlet (7), Common Wood-Nymph (4), Monarch (15), Silver-spotted Skipper (75), Hoary Edge (8), Northern Cloudywing (1), Wild Indigo Duskywing (1), Least Skipper (64), European Skipper (11), Peck's Skipper (8), Northern Broken-Dash (2), Little Glassywing (50), Delaware Skipper (4), Hobomok Skipper (4), Zabulon Skipper (1), Dun Skipper (1), *Unidentified Grass-Skippers* (23).

Immature Butterflies: Black Swallowtail (5 caterpillars [cats], 2 eggs), Giant Swallowtail (24 cats), Spicebush Swallowtail (8 cats), Harris' Checkerspot (1,175 cats, 315 eggs), Baltimore Checkerspot (2 cats, 4 pupa), American Lady (5 cats), Viceroy (1 cat), Silver-spotted Skipper (2 eggs), Hoary Edge (7 cats). Total: 9 species, 1,550 individuals.

Participants, Field Parties and Field Party Effort (Miles on Foot):

Northern Area (1-10) – Steve Chorvas, Alan Beebe, Jim Clinton (08:00 – 20:00, 12 hrs., 4 miles)

Dutchess Area (1) – Barry Haydasz, Deb Weltsch (09:00 – 14:00 / 5 hrs. / 2.5 miles)

Southern Area (1-5) – Mark DeDea, Jessica Prockup, Wendy Tocci (08:25 – 15:30, 7 hrs., 3.5 miles)

Southern Area (11) – Thomas Crepet, Deb Kral (8:00 – 12:00, 4 hrs., 2 miles)

Party-hours: 28.00 **Party-miles:** 12.00 **Weather:** 76 -100 % Sunshine AM / PM **Temperature:** 72- 90° F **Wind:** 0-5 mph