

2018 HOWARD COUNTY BUTTERFLY SURVEY

BY LINDA HUNT AND KEVIN HEFFERNAN

The butterfly year often begins by looking for the overwintering adult butterflies (Mourning Cloak, Eastern Comma, Question Mark) or early Cabbage Whites on warm, late winter days. The first butterfly of 2018 was a Mourning Cloak found by Clayton Koonce on February 21st at Lake Kittamaquidi. A cold, wet spring this year, however, kept the butterfly numbers low. The early challenge was to find the single or early-brood butterflies of spring (Falcate Orangetip, elfins, Juvenal's Duskywing, Dusted Skipper, Northern and Southern Cloudywing, Juniper Hairstreak). As the weather warmed and more nectar plants bloomed, the butterfly numbers increased. By mid-June when the milkweed bloomed, things were hopping, and in mid-July, they exploded. This continued through August, September, and October when the late season migrants appeared.

Initiated by Richard (Dick) Smith, Jo Solem, and Sue Muller in 2013 as a joint project of the Howard County Bird Club and the Howard County Department of Recreation and Parks, the five-year Howard County Butterfly Survey addresses several basic questions. What is the status of butterfly species historic to Howard County? What are the flight times of each species? Where are the best places in the county to find each species (particularly the rare ones)? Can multiple locations for each species be found to minimize the risk of losing them? Can the large variation in the numbers of some species be documented from year to year?

Each year of the survey, as the chart below indicates, the numbers of surveyors, counts, and geographically diverse locations continued to increase. *In 2018, more than 60 people spent over 930 hours completing 958 counts at 98 locations.* During the rainiest year in Maryland (60+ inches of rain and counting, as of mid-December), with only 64% of the days from late March to early November with any sun, surveys were done on 71% of the days. Surveyors persisted under less than optimal conditions. More homeowners submitted reports of butterflies in their gardens. Attendance at eight butterfly counts continued strong: one count each month at Schooley Mill Park with Sue Muller from June through September; Meadowbrook Park with Kathy Litzinger in June; Howard County Conservancy with Kevin Heffernan in July; Alpha Ridge Park with Woody Merkle in August; and Elkhorn Gardens with Linda Hunt in September. The Fall Bird Count also continued to include tallies of butterflies.

2013-2018 Howard County Butterfly Survey Totals						
Year	# Counts	Minutes/Hours	# Surveyors	# Locations	# Species	# Individuals
2018	958	55,787/930	60	98	72	25,249
2017	855	48,757/>812	66	89	71	23,897
2016	569	31,422/>523	53	44	74	21,695
2015	>272	-----	35	21+	70	17,457
2014	175	-----	14	41	68	10,340
2013	>140	Prototype Year	5 + Fall Count	11	59	3,943

By the Numbers: A total of 95 species of butterflies have been seen in Howard County. Of these seven are extirpated and 14 are considered very rare. This leaves 74 species in the abundant, common, uncommon, and rare categories. We have reached the low 70s in species counts each of the last four years, a huge tribute to the leppers spending the time doing the butterfly surveys. This year was very exciting in that we added two species new to Howard County: Henry's Elfin and Brazilian Skipper. These were the first species new to the county during the five years of the survey. Four species were not seen this year: Spring Azure, Eastern Pine Elfin, Giant Swallowtail, and Little Yellow. Of the 72 species seen, 10 had three or fewer individuals including three each of Long-tailed Skipper and Silvery Checkerspot, two each of Northern Cloudywing, Common Sootywing, Coral Hairstreak, Henry's Elfin, and Appalachian Brown, and singles of Clouded Skipper, Checkered White and Harvester.



Coral Hairstreak by Kevin Heffernan

There are several possible reasons for the low numbers of sightings of a species. First, the species may be/is hard to identify and thus is not counted as often (e.g. Crossline Skipper, Northern Broken-Dash, Spring Azure). While more people looking for butterflies probably accounts for increased numbers of common and easily recognizable butterfly species, totals of difficult to identify species, especially of skippers, have remained unchanged. Second, the species is a late-season migrant that only reaches Howard County during some years (e.g. Checkered White, Giant Swallowtail, Long-tailed Skipper). Third, the species is single-brooded and/or is primarily found in only a single location (e.g. Dusted Skipper, Northern and Southern Cloudywing, Tawny Emperor, Little Yellow). Fourth, the species is just rare in Howard County (Harvester, Clouded Skipper, Coral Hairstreak, Eastern Pine Elfin).

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(Butterfly continued from page 3)

Selected 2018 sightings: There was a single American Snout seen in 2017 and 30 found in 2018, mostly on the Hackberry trees at Mt. Pleasant. Snouts seemed to be more common around the Mid-Atlantic this year. There were 63 Ocola Skippers found in 2016, 17 in 2017, and 103 this year, a big invasion year for this late-season migrant. Painted Lady was hard to come by in 2016 with seven being seen. Last year was a huge invasion year with 486 seen. This year there were 29. Kathy Litzinger had 34 Tawny Emperors on the Hackberry tree in her backyard last year, the only location this species had been seen in the county. This year, Paul Petkus and Sue Muller each found a single Tawny Emperor in different locations, but the total number in the county dropped to nine. There was one Harvester found in the county again this year by Kevin and Karen Heffernan. When Kathy went looking for it, she found a Harvester caterpillar instead. Kathy also spotted her 50th yard species, a Viceroy, on October 9th. Congrats Kathy!! Coral Hairstreak numbers (14 last year, two this year) also illustrate year to year species variation. Monarch numbers have been steadily rising throughout the survey (178, 377, 587, 857 and 1,937) seen from 2014 through 2018. Part of the reason for the increase is the additional number of people and hours spent in the field, but we suspect that this was a good Monarch year in the East.



Brazilian Skipper Caterpillar
by Kevin Heffernan

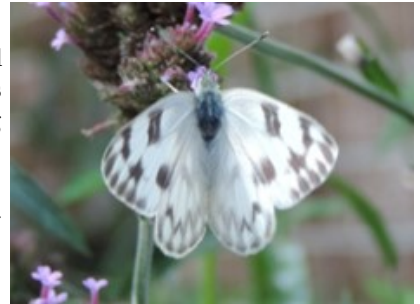
Caterpillar of the Year: Brazilian Skipper. Brazilian Skipper caterpillars were found on their host plant, Canna Lily, in several locations in the Mid-Atlantic this year. There was much discussion online about whether this was an actual invasion year or whether the caterpillars were on the Canna Lilies when they were sent to the nurseries. Jim Wilkinson checked the Canna Lily next to the parking lot at Hopewell pool for weeks looking for Brazilian Skipper caterpillars and on October 9th, his persistence paid off. This is the first-ever sighting of Brazilian Skipper in Howard County. Great find, Jim!!! Honorable mention: Harvester caterpillar.



Henry's Elfin by Linda Hunt

Butterfly of the Year: Henry's Elfin. This award was wrapped up on April 26th when Linda Hunt found a pair of Henry's Elfins at High Ridge Park in Laurel. This is the first sighting of this species ever in Howard County.

Honorable mention: Checkered White found by Grazina McClure in her garden on October 10th.



Checkered White by Grazina McClure

In conclusion, in the five years that this survey has been ongoing, many more people have become interested in and involved in butterflying. We have made much progress in documenting which species are found in Howard County, their flight times, and where they can be found. Two species new to the county were documented. More people are putting in butterfly gardens. There are still issues with development encroaching on critical habitats and park mowing and herbicide spraying times. Improvements can be made in skipper ID and knowledge of host plants. Too many species have three or fewer individuals seen each year and/or have only one known location in the county. The information that we have put together may become useful in facilitating planning for habitat preservation, enhancement, or creation as development continues to reduce existing natural habitat.

We wish to thank the field trip leaders and participants for their enthusiasm and eagle eyes. And special thanks to everyone who spent so many hours surveying parks, walking utility easements, checking their gardens, who then took the time to submit reports. 2018 Volunteers: Paul Bade, Kathy Barlyski, Gill Bentley, Jonathan Blithe, Karan Blum, Emily Calkins, Mary Lou Clark, Wes Earp, Ward Ebert, Robyn Evans, Timothy Foard, Mary Fox, Pam Franks, Meg and John Harris, Karen and Kevin Heffernan, Pam Henry, Robin Hessey, Gayle and Bill Hill, Pat Hooker, Linda Hunt, Kathy Kaberle, Clayton Koonce, Cathy Latham, Kathie Lillie, Kathy Litzinger, Anne Looker, Mary Love, Brigitte Lund, Janet Lydon, Nancy Magnusson, Grazina McClure, Woody Merkle, Sue Muller, Richard Orr, Michael Osborne, Bonnie Ott, Siobhan Percy, Paul Petkus, Sue Probst, Tim Reichard, Linda Roberts, Sarah Romero, Kurt Schwarz, Sharon Smith, Jo and Bob Solem, Carol Spangler, Ann Strozyk, Tim Thompson, Tony VanSchoor, Barbara White, Jim Wilkinson, Silvester Williams, Katherine Wilson, Michelle Wright, Carol Zancan, Dave Ziolkowski. We particularly want to thank Bob Solem who compiled the data, a tedious and lengthy task.

In 2016, with the death of Dick Smith, we lost our mentor and decades of butterfly knowledge. Although we can never replace that loss, through this survey he designed, we have learned a lot and, most importantly through it, many more people have become interested in butterflies and active in butterflying. We like to think that Dick would be proud of our collective accomplishment. Now that we have completed the five-year butterfly survey, the question is, where do we go from here?

The Thursday, January 10, 2019, Howard County Bird Club meeting will include a more detailed presentation of survey results, photographs of Howard County butterflies, and an opportunity to make suggestions for future butterfly activities.