

## 2019 HOWARD COUNTY BUTTERFLY YEAR

BY KEVIN HEFFERNAN AND LINDA HUNT

With the conclusion of the original five-year Howard County Butterfly Survey in 2018, and the subsequent decision to continue the survey to gather long term trends, there was a question regarding how many people would continue to actively monitor butterflies and report their findings. That question was answered resoundingly. The 62 contributors to the 2019 survey were the most in the six years that the survey has been conducted. A total of 26,258 individual butterflies (also a record) of 72 species (2nd highest) were reported. We feel that this survey is extremely important and we thank each and every one of you for continuing to support it.

2014-2019 Howard County Butterfly Totals							
	2014	2015	2016	2017	2018	2019	Totals
Total number of species	68	69	74	70	71	72	80
Total number of people	20	45	56	44	56	62	113
Total number of butterflies	10,360	17,570	21,622	25,053	25,245	26,258	126,108
Total number of minutes	19,970	19,437	35,924	50,196	55,787	49,242	230,556
Total number of surveys	372	696	715	870	958	748	4,359
Total number of sites	43	79	79	77	98	121	

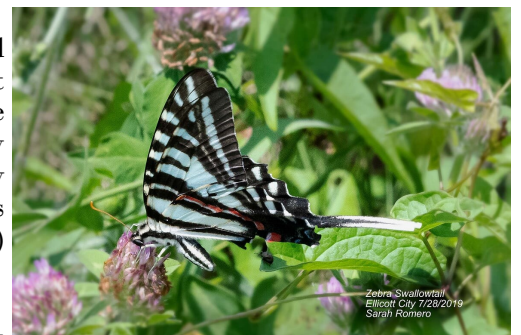
**Early Season:** The 2019 season started very early. On February 4th, Kathy Litzinger saw the first butterfly of the year, a Mourning Cloak, in one of Howard County's best butterfly hotspots, her backyard. Dave Ziolkowski saw an incredible 35 Eastern Commas and five Question Marks on March 14th attracted to the sap of two walnut trees that he had cut down. All three of these species overwinter as adults and can be seen on warm winter days. On March 24th, Mary Lou Clark found the first of the 5968 (new high count) Cabbage Whites seen in 2019. Grazina McClure found the first azure on March 31st in her yard. White M Hairstreaks are hard to find in Howard County anytime during the year, but the spring brood is particularly difficult to find. Incredibly, Sharon Smith found one in her yard on April 3rd. It was one of only two found during the year. The first Juniper Hairstreak was found by Annette Allor on April 7th at Mt. Pleasant. This was one of the species that was found at new locations, one of the goals of the survey, this year. They were reported at Centennial Park (Heffernans), Patapsco Valley State Park off of Landing Rd (Litzinger and Heffernans), and Alpha Ridge Park (Merkle). There were three FOY sightings on April 9th, Juvenal's Duskywing (Gateway, Linda Hunt), Falcate Orangetip (Western Regional, Bill Hill), and E. Tiger Swallowtail (Schooley Mill Park, John Harris). After missing it in 2018, the Eastern Pine Elfin reported by Jim Wilkinson nectaring on pussytoes at Trinity Cemetery on April 22nd was a welcome find.



Eastern Pine Elfin

by Kevin Heffernan

**Peak Years:** Of the 72 species reported in 2019, 21 had peak years and eight of those more than doubled their previous peak. Anyone who spent any time in the field last summer knew that the E. Tiger Swallowtails were everywhere. Woody Merkle found 90 in a field at Mt. Pleasant on July 16th only to be exceeded by Linda Hunt's 125 at the Westside Community Garden on July 29th. During the previous peak year, 2016, contributors reported 1508. In 2019, 3234 were found. Amazing! Red Admirals (205/93) and Eastern Commas (132/63) also more than doubled their previous peak.



Zebra Swallowtail

by Sarah Romero

**Southern Migrants:** There seems to be a growing trend of southern migrants being more common in our area in recent years. American Snout was very difficult to find in the early years of the survey with one, zero, eight, and one found in 2014 through 2017. Then, in 2018, with the discovery of a number of Hackberry trees at Mt. Pleasant, 30 were reported followed by an

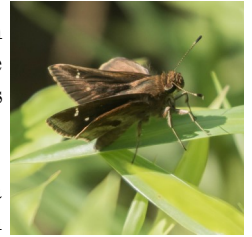
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Giant Swallowtail by Annette Allor

incredible 65 in 2019. They were common throughout the area this year. There were a total of seven Giant Swallowtails (peak year of three) seen in the first five years of the survey. This year 12 were reported. The 474 Fiery Skippers reported in 2019, more than doubled the previous peak of 208. From 2014 through 2016, seven, 19, and 30 Sleepy Oranges were reported. The 2017 through 2019 years had 153, 157, and 256. A similar trend is being seen with Cloudless Sulphurs. Both are currently believed to be reproducing in the county.

One of the most interesting stories of 2019 was Clouded Skipper. In the first five years of the survey, a total of six were reported. The three seen in 2016 earned it runner-up butterfly of the year. This year we saw 47, and again, they were common throughout the area.



Clouded Skipper by Kevin Heffernan

Jim Wilkinson (the Rare Butterfly Whisperer) found four Brazilian Skipper caterpillars on Canna Lily at Hopewell Pool on October 9, 2018. Almost exactly a year later, on October 8th, 2019, Jim fittingly reported an adult Brazilian Skipper butterfly, a first for the county.



Dainty Sulphur by Annette Allor

The most exciting find of the year was, once again, by Kathy Litzinger. She was walking her dog on the Baltimore County side of the Patapsco River along the Grist Mill Trail on September 16th when she found 10+ Dainty Sulphurs. Eventually, a total of 132 were reported on the Howard County side of the Patapsco, most of them found by Annette Allor. This was the first sighting of Dainty Sulphur in Howard County since 2012. Unlike 2012, which was an invasion year for Dainty Sulphur, this was the only location where this species was found in the area this year. The location had recently been landscaped, leading people to believe that the eggs were on plants that were transported north. We will check to determine if any survived the winter. *This Dainty Sulphur sighting was a new species for the survey bringing the total to 80.*

One of the great benefits of a long term survey is to look for trends and we will be looking closely at these species over the next few years.

**Low Counts:** Nine species of butterflies had the fewest numbers seen in the six years of the survey. Two of these were missed for the first time, Harvester and Dusted Skipper. Prior to the survey, not a single Harvester butterfly was seen in Howard County between 1996 and 2014. Seven were seen in 2014, four in 2015 and singles in each of the next three years. It is always tough to find. Missing it is disappointing but not a surprise. Last year we didn't even see aphids which the caterpillar feeds on. This is one species that we could use some help with in 2020.

The Dusted Skipper has been found in nine quads in Maryland according to the Maryland Biodiversity Project. Only five of these records are less than 10 years old. Three of these were on the Western Shore: Soldiers Delight, Patuxent Wildlife Research Center, and on a single hill on the Murray Hill powerline in Howard County. Over the winter of 2018 / 2019, The Columbia Association dumped sludge from the lakes next to the powerline area where the Dusted Skippers have been found. We missed Dusted Skipper for the first time during the survey in 2019. We will look for them again in 2020 and beyond.

Several hairstreaks had a rough year. Red-banded (13) and White M (2) posted six year low counts. Gray Hairstreak (67) had its second lowest count. Great Spangled Fritillary (39), Mourning Cloak (8), Orange Sulphur (748) and Tawny-edged Skipper (70) also had six year lows. Swarthy Skipper has had counts of 40, 31, nine and two in the last four years. Similar to previous years, 16 species had fewer than 10 individual butterflies reported.



Cloudless Sulphur by Kelsey Wellons

**Monarch:** The 2018 year was great for Monarchs with a six year peak of 1937 individuals reported. In 2019, the numbers dropped back more to the norm with 681 reported. This represents a 65% drop from the previous year, however, and is worth monitoring particularly with the issues being reported regarding the Western Monarchs.

**Butterfly Gardens and Bee City:** In our butterfly survey, 33% of the individual butterflies and 83% of the species have been found in garden sites. These gardens have been critically important particularly given the butterfly population trends. The lepidopterists in Ohio have been conducting a state-wide butterfly survey for the last 20 years. Over that time, the butterfly population in Ohio has dropped by 33%. Bees are suffering the same fate.

[Howard County has recently joined Bee City](#), a program of the Xerces Society designed to encourage people to plant pollinator gardens for these animals. We are working on a list of pollinator plants for different sun and soil moisture conditions. These lists will be released in the next few weeks. Please sign up for the Howard County Bee City Newsletter to follow the activities and gather helpful information regarding the planting of pollinator gardens. Also, please consider registering your garden with Bee City.

The 2019 year was very good for the Howard County butterflies and the butterfly survey thanks to the 62 people who have been active participants. We encourage the submission of as many surveys as you can even if they have a single butterfly. Every survey is important. If you are looking for something to contribute your time to where you can make a significant difference, this may be it. One person recorded 28% of the butterflies seen in the survey this year. The top three contributors recorded 52% of the butterflies. The top seven saw 75% and the top 14 recorded 88% of the total. Below is a list of all 62 contributors to the 2019 survey with the top 14 names in bold. Thank you all.

The 2019 volunteers were Annette Allor, Paul Bade, Renee Bade, **Kathy Barylski**, Gill Bentley, Jonathan Blithe, Karen Blum, Mary Lou Clark, Conservancy intern Kiley, Conservancy intern Riley, Robyn Evans, Sherry Fisher, Timothy Foard, Jeff Friedhoffer, Ed Gould, John Harris, John Hayes, **Karen Heffernan**, **Kevin Heffernan**, **Bill Hill**, Gayle Hill, **Linda Hunt**, Kathy Kaberle, **Clayton Koonce**, **Kathy Litzinger**, Anne Looker, Janet Lydon, Mary Maxey, Grazina McClure, Mike McClure, Allison McDaniel, John McKitterick, **Woody Merkle**, **Sue Muller**, Michelle Okonski, Michael Osborne, Bonnie Ott, Howard Patterson, Siobham Percy, Paul Petkus, **Sue Probst**, Tim Reichard, Linda Roberts, **Sarah Romero**, David Sandler, Kurt Schwarz, **Sharon Smith**, Bob Solem, Jo Solem, Chuck Stirrat, Ann Strozyk, LouTaylor, Tim Thompson, Robin Todd, Anthony VanSchoor, Kelsey Wellons, **Barbara White**, Robin White, **Jim Wilkinson**, **Katherine Wilson**, Michele Wright, and Dave Ziolkowski.

Spring is right around the corner and the butterflies will soon be back. Bonnie Ott has already recorded the first butterfly of 2020, an anglewing (Eastern Comma or Question Mark) on January 11th at Alpha Ridge Park.

