

## 2017 HOWARD COUNTY BUTTERFLY YEAR

BY LINDA HUNT

Some of us of a certain age are known to spend significant time looking for our keys, glasses, and such, often finding them in our pockets or even in our hands. The 2017 butterfly season reminded us that what we are looking for is often right in front of us. Hackberry butterflies, Coral, Juniper and White M hairstreaks, various skippers and even a Harvester confirmed that the Howard County Conservancy is the “go to” place for finding butterflies. Home gardens and meadows continued to document increasing numbers of both individuals and species. And a massive migration of Painted Ladies provided late season compensation for the absence of the Bronze Copper, Checkered White and Little Yellow causing excitement in 2016.

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 Howard County five-year Butterfly Survey addresses a basic question: What is the status of butterfly species historic to Howard County? Dick, Jo, and Sue felt that with the increased interest in digital photography a butterfly survey might provide a framework for greater numbers of people to document butterflies from diverse countywide locations. Indeed, as the chart below indicates, the numbers of surveyors, counts, and geographically diverse locations continues to increase. More than 65 people spent over 812 hours completing 855 counts at 89 locations. More homeowners submitted reports of butterflies in their gardens. Attendance at butterfly counts continued strong (four counts at Western Regional Park with Sue Muller, one each month from June through September with additional counts at 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 Garden Plots with Linda Hunt in September. The annual Howard County Dragonfly Count and Fall Count (bird) continued to include tallies of butterflies.

2013-2017 Howard County Butterfly Survey Totals						
Year	# Counts	Minutes/Hours	# Surveyors	# Locations	# Species	# Individuals
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	61	3,943

2017 Species Not Reported: Hayburst’s Scallopwing, Checkered White, Little Yellow, Bronze Copper, Silvery Checkerspot  
 Unknown Status: Hoary Edge, Dreamy Duskywing, Sleepy Duskywing, European Skipper, Mulberry Wing, Baltimore Checkerspot  
 Extirpated: Leonard’s Skipper, Delaware Skipper, Black Dash, Common Roadside-Skipper, Regal Fritillary, Silver-bordered Fritillary



Hackberry Emperor

by Kevin Heffernan

In 2013 surveyors documented only 61 species in the first trial survey. The status of many of the rarer butterflies was uncertain and they were not even included in the initial survey list. In 2016 surveyors documented a high of 74 species. This year surveyors documented 23,897 individual butterflies of 71 species, none new to the survey. Some of the species that had made cameo appearances in previous years did not appear. However, many common and uncommon species were found in now predictable locations and others randomly around the county but during predictable time periods. Others were found in locations new for the species.

After four years of Howard County Bird Club members looking for a good location with hackberry trees for hackberry butterflies, and after planting a dozen hackberry trees around the county in memory of Dick Smith, Kevin and Karen Heffernan and Bonnie Ott found multiple trees in hedgerows around the Howard County Conservancy fields. From mid-July to mid-August they documented 15 Hackberry Emperors. Also in mid-July a

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Tawny Emperor returned to Kathy Litzinger's hackberry tree to lay eggs. By late September, Kathy had documented 34 Tawny Emperors. At the Conservancy in late June, Bonnie Ott, Kathy Litzinger, and others found 14 Coral Hairstreak butterflies. After an abundance of sightings of beech aphids, caterpillars, and Harvester butterflies in 2014, the Harvester lived up to its reputation and seemingly vanished from previous sites. This year, again at the Conservancy at the August BioBlitz, Carrie Harlow submitted a picture of a butterfly unknown to her; it turned out to be *the* single record of a Harvester in 2017 (and a new Harvester location).

Meadow and garden areas at Robinson Nature Center, Emy's Meadow at Centennial Park, and the Daisy Road Meadow continue to attract butterflies and other pollinators. In 2017, these areas and residential gardens supported successful broods of Monarch (milkweed), Fritillaries (violets), Tawny Emperor (Kathy Litzinger's hackberry tree), Pipevine Swallowtail (Barbara White's pipevine), Sleepy Orange and Cloudless Sulphur (Linda Hunt's Maryland senna) and Broad-winged Skipper (visiting from Kathy Litzinger's neighbor's phragmites). Three distinct Giant Swallowtail individuals stopped at Grazina McClure's, Linda Hunt's, and John McKitterick's gardens (lantana). Two Long-tailed Skippers showed up: one at Lake Kittamaquundi (Clayton Koonce) and one in Linda Hunt's garden. And Richard Orr saw this year's single American Snout in his yard.



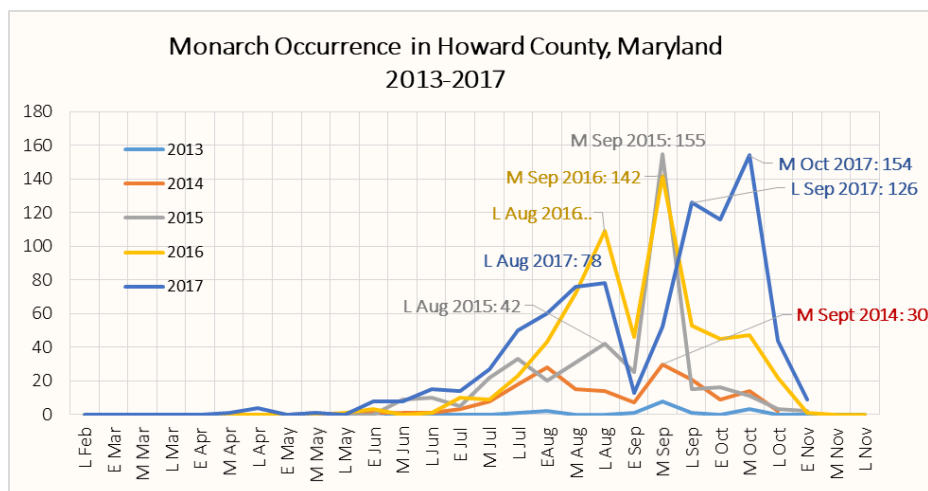
Long-tailed Skipper

by Clayton Koonce

While more people looking for butterflies and creating butterfly gardens probably account for increased numbers of common and easily recognizable butterfly species, totals of difficult to identify species, especially of skippers, have remained unchanged. For example, compare the numbers Eugene Scarpulla documented at the Howard County Conservancy BioBlitz with the totals documented for the entire survey (not counting Gene's): 17 (12) Swarthy Skippers, 6 (1) Crossline Skipper, and 3 (4) Dun Skippers. Total survey numbers of Clouded Skipper (3), Southern Broken-Dash (7), Northern Broken-Dash (2), and Hobomok Skipper (3) continue low, and the high numbers of Ocola Skipper in 2016 (63) were not seen this year (17).

Unfortunately, development this year has now encroached on most, if not all, of Howard County's sliver of Coastal Plain habitat along the Anne Arundel border, familiar to surveyors for Jim Wilkinson's sightings of Little Yellow and Checkered White. Neither these species nor the very rare, possibly stray, Bronze Copper, seen last year at Meadowbrook Park (these areas were sprayed with herbicide this year), were reported in 2016.

Of species known to migrate, in previous years only the Monarch has shown a distinct surge in Howard County survey numbers. The chart below compares 2013-2017 Monarch flight patterns. Note that we rarely see Monarchs heading north, though we find their caterpillars feasting on milkweed in our gardens. But we do see large numbers of adults in late summer and fall heading south, suggesting a need for abundant nectar plants such as goldenrod, heath, and other fall asters.



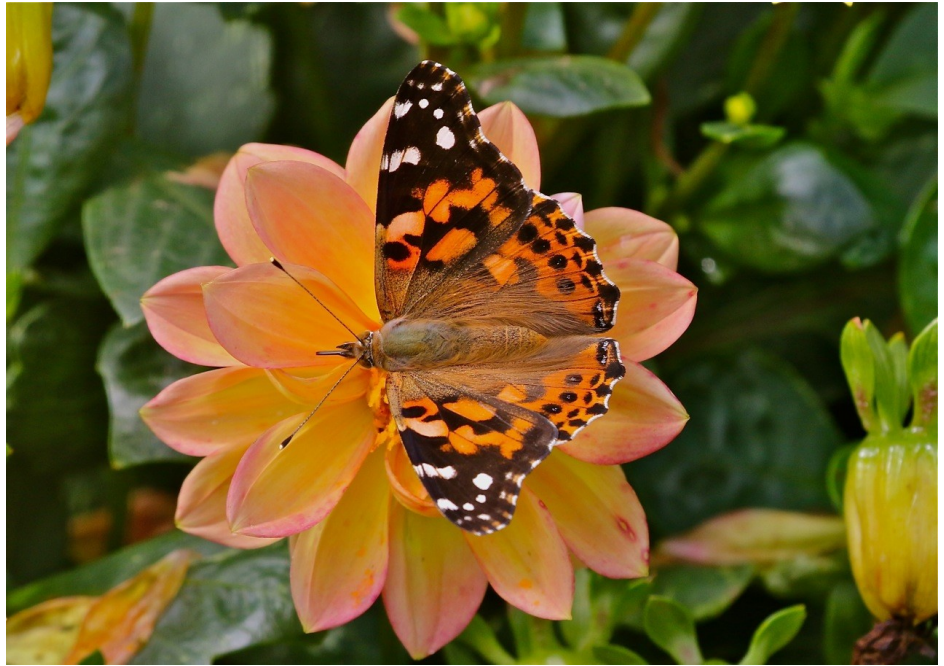
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2013-2017 Painted Lady and American Lady Occurrence					
Year	2013	2014	2015	2016	2017
Painted Lady	15	67	15	7	486
American Lady	6	48	38	52	53

This year marked a huge national, and possibly international, Painted Lady population surge. Normally we see very few Painted Ladies as compared to American Ladies. This year the Painted Lady migration extended from early July (19) through August (45) and September (84), peaking in October (313), to diminish with the cold weather in November (42).

The first and last butterflies of 2017 were both Eastern Commas: February 8 (Jim Wilkinson, Miller Library) and November 24 (Bonnie Ott, Centennial). Other “firsts” and “lasts” include Monarch – April 16 (Kathy Kabele, Clarksville) and November 6 (Kurt Schwarz, Howard County Conservancy); Painted Lady – April 30 (Gregg Petersen, Robinson Nature Center; David Gillum, Schooley Mill Park) and November 10 (Tim Thompson, Ellicott City); and Sleepy Orange – June 30 (Bonnie Ott, Howard County Conservancy) and November 2 (Jim Wilkinson, Howard County Conservancy).



Painted Lady

by Bill Hill

I want to thank Bob Solem for his continuing help creating and modifying data collection forms and streamlining the data compilation process. His technical expertise is essential. Thank you also to the field trip leaders and participants for their enthusiasm and eagle eyes. And special thanks to everyone who spent so many hours walking parks, searching utility easements, and checking their gardens and then taking the time to submit reports. 2017 participants: Annette Allor, Paul Bade, Kathy Baryl-ski, Gill Bentley, Jonathan Blithe, Karen Blum, Wes Earp, Sherry Fisher, John Fisher, Timothy Foard, Mary Fox, Jeff Friedhoffer, Ralph Geuder, David Gillum, Patricia Greenwald, Carrie Harlow, John Harris, John Hayes, Karen and Kevin Heffernan, Bill and Gayle Hill, Linda Hunt, Kathy Kaberle, Suzanne Klick, Clayton Koonce, Nancy Lawson, Jill Levin, Kathie Lillie, Kathy Litzinger, Emily Loghmani, Felicia Lovelett, Brigitte Lund, Janet Lydon, Nancy Magnusson, Joe Mankowski, Grazina and Mike McClure, John McKitterick, Woody Merkle, Sue Muller, Michael Osborne, Richard Orr, Bonnie Ott, Siobhan Percey, Gregg Petersen, Norma Petersen, Paul Petkus, Ann Phillips, Tim Reichard, Linda Roberts, Eugene Scarpulla, Kurt Schwarz, Gloria Smith, Sharon Smith, Warren Smith, Jo and Bob Solem, Jesse Standbridge, Elizabeth Starr, Tim Thompson, Robin Todd, Kate Tufts, Barbara White, Jim Wilkinson, Michele Wright.



Monarch on Aster

by Linda Hunt

In conclusion, as we complete the fourth full year of the five year survey, the cumulative data hints at year to year cycles of high and low occurrence of specific species but consistent year to year patterns in butterfly brood cycles. As years of surveys are completed, a picture of butterfly diversity is emerging. This may become useful in facilitating planning for habitat preservation, enhancement, or creation as development continues to reduce existing natural habitat.