Massachusetts Butterflies



Fall 2022, No. 59

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Peck's Skipper (*Polites peckius*), 6/5/22, Shrewsbury, MA, Bruce deGraaf

Cover drawing: Cecropia moth (*Hyalophora cecropia*), colored pencil on tinted paper, © William Benner, 2022

Mothball 2022 by Dave Small

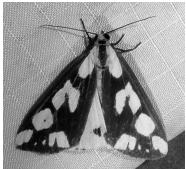
Beginning in 2009 Shelley and I have been hosting the annual Mothball at our home here in Athol. This event, sponsored by the Athol Bird and Nature Club, has become an annual hallmark of summer. The Mothball was co-hosted for many years by our late friend Lula Field, who kept meticulous records of all the species observed, with 155 species identified overnight 2019. Many thanks to the many skilled naturalists and entomologists who continue to attend the Mothball, sharing their enthusiasm and expertise with newer moth enthusiasts. In 2021, we moved the annual date of the Mothball from June to coincide with the July beginning of National Moth Week, which occurs the third week in July. Learn more about National Moth Week at: https://nationalmothweek.org/

The night of July 22-23, 2022 found more than 50 members and friends of the Athol Bird and Nature Club attending the annual Mothball. The warm week set up an active evening at the sheets and moth baits with more than 100 species observed. It was a great night, with a chance to visit with old friends, see Facebook friends face to face, and meet a whole slew of new folks who are new to mothing. Mark your calendars for Mothball 2023 on Saturday, July 22, 2023, 9:00 PM to whenever. Join us on the dark side.

Check out Dave and Shelley's yard list on iNaturalist - https://www.inaturalist.org/places/dhsmall



Black Zigzag Moth, (*Panthea acronyctoides*),7/23/22, Chocorua, NH, Linda Graetz



Confused Haploa (*Haploa confusa*), 7/23-24/22, Athol, MA, Dave Small



Pretty in Pink By Sue Cloutier

Two insects I eagerly look for each year are beautiful pink moths. One species is common at lights on spring nights while the other is an infrequent summer visitor on flowers in fields and along forest edges.

An easy to find favorite is the pink and yellow colored rosy maple moth, Dryocampa rubicunda. This moth is the smallest member of the saturnid silk moth family in Massachusetts and, like its relatives, does not eat as an adult. Rosy maple caterpillars do all the eating. Their meals are the leaves of red or sugar maples (Acer spp.), and even oak (Quercus). These trees are common here, so on nights in May or June, these moths will come to a porch light. Once the rosy maple moth settles under lights it will stay still, but if disturbed by being touched, will drop down and play dead. Rosy maple moths were my husband's favorite moth, so in 2019, I brought in a handful of them in for him to see. They remained still while in his hand but 'revived' after being placed on the ground. When the lights are turned off, these moths fly off to mate and lay eggs under leaves. Eggs hatch in summer, when at first the caterpillars are communal; later they move to other nearby leaves. The last caterpillar stage moves down to burrow in leaf litter to pupate and survive winter.

If you want to see rosy maple moths, protect maple trees, leave the leaves under those trees, and avoid the use of chemicals. Then, on a few nights in May or June, put on an outside light for a while and check for rosy maple moths just before midnight. After observing the night visitors, please turn the lights out so they can return to their usual nighttime activities.

Moths in the genus *Shinia* are called 'flower moths' and flowers are where to find them. North America has many species of *Shinia* and, as primrose moths are pink and yellow, this species may be the most beautiful of them all. Even though the primrose moth, Schinia florida, can be found during the day, it may be a challenge to find. When looking for butterflies and moths, knowing what the caterpillars of the sought species eat can direct you to a site that gives a higher probability for a successful search. In the case of the primrose moth caterpillar, it only eats in or on the seed capsules of the common evening primrose, *Oenothera biennis*. In July and August its flowers open overnight and the nectar feeding adult primrose moths may arrive. In the bright sun the flower closes and folds over any visiting primrose moths. The yellow of the petals covers most of the pink moth and may keep it safe.

Any time you see the evening primrose blooming, you know to look for this moth in or near the flower. If you want to include an evening primrose on your property to attract the primrose moth, provide a space at the edge of the lawn or garden that is informal. Evening primrose self-seeds and over time wanders. Seed sprouts form a rosette of leaves the first year. Next year the plant sends up a tall stock for flowers. In order to provide a place for a primrose moth to overwinter, leave the leaves under the evening primrose plants. In the fall, a late-stage primrose caterpillar will drop down to borrow into the leaf litter to pupate, survive winter, and emerge in summer.

I hope you get to see these pink moths next year. This Mass Moths website created by Steven Whitebread and managed by his team provides records of where and when these moths have been sighted: https://massmoths.org/moths/dryocampa-rubicunda/ and https://massmoths.org/moths/schinia-florida/.



Ron Cloutier holding Rosy Maple Moths (*Dryocampa rubicunda*), 6/1/19, New Salem, MA, Sue Cloutier

Arlington Butterfly Garden by Lisa Wolfe and Peter Loshin

When we moved to our Arlington Heights home in 2014, our first priority was to plant a native pollinator garden and replace the tired old turf, shrubs and invasive plants that came with the quarter acre lot. Located just a few hundred feet from the busy Massachusetts Avenue traffic corridor and Arlington Heights business district, we'd hoped to attract pollinators but never expected the remarkable diversity of species that has visited our garden.

For example, we've seen five different swallowtail species: Tiger, Black, Giant, Spicebush and a Pipevine Swallowtail, this year's newcomer. During the summer, we routinely see a half dozen Monarchs or more flying together over our garden; we counted fifteen Monarchs one day at the peak of this year's migration season.

Other species we see most years include Pearl Crescent, American Copper, Gray Hairstreak, Eastern Tailed-Blue, azures (Spring and 'Summer'), Red Admiral, sulphurs, American Lady, Painted Lady (oddly missing this year), Wild Indigo Duskywing, Silverspotted and numerous other skippers including Zabulon, Peck's, Dun, Northern Broken-Dash, Broad-winged, Fiery and Ocola Skippers. Also, Cabbage Whites.

Three of the most unusual butterflies we've spotted: an Oak Hairstreak, a Banded Hairstreak and this year's Pipevine Swallowtail. Many other more ordinary species that we see less reliably include Mourning Cloak, Viceroy, Common Buckeye, Great Spangled Fritillary, Red-spotted Admiral, Eastern Comma and Question Mark. We also see clearwing moths including Hummingbird, Snowberry and Squash Vine Borer.

Our gardening strategy is to minimize unproductive plants and turf and maximize the native plants that support wildlife including insects and birds -- we've seen nearly 50 different species of birds, and at least ten different native mammal species! In 2014, grass and non-native shrubs covered most of the property; we removed three large Norway maples before we even moved in. Also gone are a moldy old privet hedge (with bonus poison ivy), several roses of Sharon, endless hostas and invasive burning bush and Japanese barberry. Before:



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What we kept are the mostly native shrubs and trees that support pollinators, whether by providing nectar from blossoms, a host plant for caterpillars or a convenient place for birds to nest. These are the qualities we looked for in existing plants as well as in any new plants. After removing the invasives we were left with a mature silver maple, a cherry tree, several crabapples and snowberry bushes, a healthy hemlock and a dying ash tree. Though not native, a huge little leaf linden tree gives value to birds and small mammals. After:



Planting for pollinators

Our goal was to create a pollinator-friendly zone, with numerous flowering plants to provide nectar from spring through autumn as well as butterfly hosting plants. It was easy to get a stand of fennel in a bed that gets full sun, and we grow parsley both for our kitchen and for Black Swallowtail caterpillars. Our strategy to attract Monarchs starts with milkweed, and plenty of it. We've found that Monarch females sometimes prefer ovipositing on more isolated milkweed plants rather than on plants in our bigger groupings -- so we let milkweed plants pop up all around the garden.

We get double wildlife value from many of our plants which are both hosts for caterpillars and offer nectar from blossoms from spring to autumn. For example, we've got several spicebushes which were among the first additions to the garden and where Spicebush Swallowtails lay eggs every year.

We added many other tree and plant hosts for caterpillars: birch, cherry and mountain ash for Tiger Swallowtails; a red mulberry tree for Mourning Cloaks; false nettle and Pennsylvania pellitory for Red Admirals; thistles and pussytoes for ladies; American wisteria for Silver-spotted Skippers and showy tick trefoil for Eastern Tailed-Blues and Gray Hairstreaks. We planted a still-struggling pipevine a few years ago for Pipevine Swallowtails, and hackberries for Mourning Cloaks, Question Marks and American Snouts - we're hoping but not expecting to someday see snouts here in Arlington, but we weren't expecting to see a Pipevine Swallowtail either.



Pipevine Swallowtail (*Battus philenor*), 9/7/22, Arlington, MA, Peter Loshin

Challenges and the future

We've removed most of the invasives from our property, even the town-owned Norway maple tree in our hell strip. However, we can only try to educate the neighbors about the invasive species they plant and care for.

Climate change and extreme weather also pose challenges to pollinators. On the plus side, longer and hotter summers could bring more southerly species our way, as it already has with the Giant Swallowtail, a regular visitor to our gardens since 2012.

Rabbits have also become a problem in our neighborhood just as they have in so many other areas recently, and we often need to put fences around the juiciest and most tender young plants to protect them from the rabbits.

We've already eliminated almost all the grass lawn and invasive plants on our property, so our strategy going forward is a bit more nuanced: rather than getting rid of things, our focus is now on making sure that high-value plants are thriving while seeking out the native plants most attractive to local species.

Lessons learned

We've been fortunate to be able to create a small island of host and nectar plants in a densely settled area, and in doing so we can observe how pollinators interact with the environment over time. We live here, and so do the pollinators. That means we can observe and photograph pollinators and their behaviors from sunup to sundown, and through the entire lifecycle. We watch as adults mate, females oviposit, caterpillars eat and cycle through the earliest instars to the moment they eclose and the process begins again. Often, we can even identify and observe individuals returning to their favorite spots over succeeding days.

While simply observing pollinators is a great benefit, the garden itself requires attention so we always have something to do -- it is a great stress reducer!

We've learned so much about native wildlife gardening that isn't always obvious or well-known. For example, we planted a chokecherry tree in hopes of attracting more Tiger Swallowtails and Red-spotted Admirals - but we learned that caterpillars can't use the purple-leafed cultivar we chose. Although some native cultivars are suitable hosts, many have been genetically tweaked in ways that make them less suitable.

The most important lesson may be that a garden like ours is a great way to spread the word about butterflies and other pollinators. The signs and badges from various native planting and wildlife gardening groups like NABA, Monarch Way Station and the Xerces Society help raise neighborhood awareness while also demonstrating how easy it can be to get started. It's also given us a way to connect with other like-minded neighbors: we've shared plants with many, and even gotten some to start their own native pollinator gardens.



Common Buckeye (*Junonia coenia*), 8/31/22, Arlington, MA, Peter Loshin



Remembering Bruce Callahan



Bruce Callahan, our friend and fellow butterfly enthusiast, passed away August 14, 2022 after a long illness. He and his husband Tom Gagnon have been long-time members of the Massachusetts Butterfly Club, almost since its founding. Bruce was often Tom's driver, taking the wheel around the Connecticut Valley and beyond on their butterflying and birding trips. Bruce was a patient (mostly!) and willing chaperone, while Tom would be asking for frequent stops and back-ups to get better looks at a butterfly or bird that had zipped by the window. Tom led frequent field trips, and Bruce was always there in the background, leading the caravan without fanfare or complaint.

They also enjoyed butterfly trips further afield. Yellowstone and Grand Tetons National Parks were a favorite and recurring destination, where they both got to indulge their love of mammals and the West as well as butterflies. They also traveled to the Rio Grande Valley in southern Texas every fall for the butterfly festival, staying in their favorite casita surrounded by friends. They particularly enjoyed trips to the Connecticut Lakes of Pittsburg in far northern New Hampshire, where they would go most summers for a week or two. Tom loves counting butterflies, and they could be seen riding up and down the old dirt Scotts Bog or East Inlet Roads, Bruce driving slowly along while Tom stood with his head out of the sunroof counting out "Tigger, Tigger!" for each Tiger Swallowtail they passed. Bruce was born in Boston and grew up in Maine, and he was a Yankee through and through, from his accent to his frugality. But he was generous with his time and his willingness to be there when needed. For years he was a counselor with the SHINE program, an ongoing program that matches counselors with seniors to help guide older folks through the byzantine intricacies of the Medicare and Social Security systems. He was a member of the Hampshire Bird Club in Amherst, MA, where he always arrived early and stayed late to help set up and put away the chairs, always stacked properly in the correct way.

For years he bowled with Tom in the Gay Men's Bowling League in Northampton, MA, and he had a close family of friends that extended from the bowling league into the larger gay community, ranging from Out hiking and outdoor groups to regular Friday-night feasts at various homes in the Valley. He was a New England sports fan as well, enjoying Red Sox games on TV as well as season tickets to UMass basketball and football games at the stadium. And for 27 years, he was Head Usher at his beloved Tanglewood, the Boston Symphony's summer home. Bruce generously took some of us back and forth to concerts at times, providing us with terrific seats to hear world-class music.

We'll all miss Bruce's quiet presence and companionship in the field in coming years. Our condolences go out to Tom. Rest in peace, Bruce!



Dave – A.S.S. by Nan Wilson thistledownstudio.com

Dave Wilson, my husband of 53 years, was also a very good sport about it! His self defined title as A.S.S. (Artistic Support Specialist) made him the perfect "behind the scenes" person for my butterfly adventures. When he retired into his full time A.S.S. position he took it on with balanced enthusiasm, as he also pursued his love of history and writing. His New England roots (graduate of Amherst College) also made him an enthusiastic participant in the Massachusetts Butterfly Club. In fact, he wore his hats and t-shirts proudly on all occasions.

If there was a lack of enthusiasm detected at all, it was his inability to share our dedication. He coined the phrase "butterflying at zero miles per hour" from observing us at "work". He claims as he stood outside our circle, he would attempt to explain to people nearby watching that we were looking at a butterfly. To them they could see us surrounding something with our cameras and binoculars - likely pointed downward.

Those who know me would also know that I research and photograph my subjects in order to paint their life cycles. That often involves raising them. Dave was used to seeing various netted containers in our house and garage with nothing visible in them except "weeds". He truly was an outstanding A.S.S. and we miss him!!!

If you were to check out my website you would see a number of occasions where he was, probably not in front of the camera, but behind it, or presiding over my booth because I was out chasing butterflies – while he was performing his duties.



Evening Primrose Moths (Shinia florida) in Evening Primrose flower (Oenothera biennis), 7/31/15, New Salem, MA, Sue Cloutier





Green Leuconycta (*Leuconycta diptheroides*), 7/27/16, Lee, MA, Bo Zaremba

Promethea (*Calosamia promethea*), 6/18/22, Whately, MA, Bill Benner





Snowberry Clearwing (*Hemaris diffinis*), 7/23/22, Groton, MA, Tom Murray



Hummingbird Clearwing (*Hemaris thysbe*), 7/29/22, Groton, MA,, Tom Murray



Eyed Brown (*Satyrodes eurydice*), 7/10/22, Washington, MA, Garry Kessler

Appalachian Brown (*Satyrodes appalachia*), 7/4/22, Northborough, MA, Garry Kessler







female (above) and male (below) Zabulon Skippers (*Poanes zabulon*), 8/11/22, Oxbow NWR, Harvard, MA, Tom Murray

Variegated Fritillary (*Euptoieta claudia*), 7/15/22, Princeton, MA, Mark Rosenstein







Great Spangled Fritillary (*Speyeria cybele*), 9/21/22, Amherst, MA, © Bryan C. Harvey

Orange Sulphur (*Colias eurydice*), 9/15/22, Hardwick, Alan Rawle





Little Yellow (*Eurema lisa*), 7/10/22, Newbury, MA, Bo Zaremba

Common Ringlet, (*Coenonympha tullia*), 6/5/22, Shrewsbury, MA, Bruce deGraaf



Pearl Crescent, (*Phyciodes tharos*), 8/5/22, Southboro, MA, Dawn Vesey



Baltimore Checkerspot (*Euphydryas* phaeton), 6/29/22, Amesbury, MA, Marjorie Watson

Spicebush Swallowtail caterpillars (Papilio troilus) on Sassafras (Sassafras albidum), 8/12/22,Reading, MA, Ashley Gross



Pipevine Swallowtail (*Battus philenor*), ovipositing on pipevine (*Aristolochia* sp.), 7/26/22, Wareham, MA, Andrew Griffith



Spicebush Swallowtail (*Papilio troilus*), 7/23/22, West Bridgewater, MA, Don Adams





Giant Swallowtail (*Papilio cresphontes*), 8/7/22, Arlington, MA, Peter Loshin

2022 4TH OF JULY COUNTS by Karl Barry and Bill Benner

Butterflies rebounded somewhat this year, compared to 2021, though reports varied across the state, with some observers lamenting the loss of butterfly numbers of yore. It was also a terrible drought year for many of us, though the worst of the drought occurred after the bulk of the count season, and so perhaps didn't affect numbers quite as much as it might have otherwise. But in any case, over 10,000 individuals were seen this year (10,129 to be exact), of 70 species. This compares to the low of 7923 individuals of only 63 species in 2021; 2020 had 9941 individuals of 74 species. The Northampton count led the way with 1,477 individuals of 45 species, followed closely by the Central Franklin count, with 1,375 individuals of 43 species. The Northern Berkshire count took the lead for total individuals with 1,822; 888 of these were European Skippers. The Northern Berkshire count also had the highest number of party-hours of all of the counts.

The uptick in numbers varied somewhat across taxa, and though the overall trend was positive compared to 2021, and more similar to 2020, every year is different with respect to individual species. Tiger Swallowtails, for example (lumping the Easterns and Canadians together) had an increase to 91 in 2022 compared to 50 in 2021, but neither of these numbers comes anywhere close to the astounding 495 seen on the 2020 counts. Black Swallowtails, however, came in at 50 individuals, better than the 38 and 36 seen in 2021 and 2020 respectively, while Spicebush Swallowtails, at 62 individuals in 2022, were about average. Both Pipevines and Giants have been unrecorded on the counts for the past 3 years - not surprising for Pipevine, but 4th of July counts are probably not the best reflection of the recent increase in Giant Swallowtail numbers in MA over the past decade or so, since we tend to see more individuals in the late spring and later summer rather than during the count period.

For the second year in a row, no Mustard Whites were recorded. Orange Sulphurs numbers were quite a bit higher overall, with 298 reported on this year's count, vs. 102 in 2021 and 68 in 2020. American Copper numbers were also way up, with 968 reported, vs. 369 in 2021 and 295 in 2020. Hairstreak numbers generally were pretty good this 17 year. Banded, Hickory, and Striped Hairstreaks all had at least a fourfold increase in numbers compared to 2021. Acadian Hairstreak, however, went unrecorded for the second year in a row; that species seems to be in trouble in MA, with club member Garry Kessler leading the ongoing survey efforts for them. On the other hand, there was one Oak Hairstreak reported on the Brewster count, the first one since 2018.

Fritillary numbers were almost uniformly higher this year than last year, and there were four Variegated Fritillaries reported, 2 from Central Berkshire and 2 from Northern Worcester, for the first time since 2019. Anglewings also put on a good show, though for the second year in a row there were no Gray Commas, following a few years of increased count sightings. On the other hand, there were no fewer than 6 Compton Tortoiseshells reported, on the Central (4) and Southern (2) Berkshire counts, following many years when sightings of this species were rare throughout the season and had been unreported on a count since one was seen on the Northern Berkshire count back in 2015. Other nymphalids had average to good numbers reported, but Painted Ladies were again scarce during the count period. Common Buckeye continues to be uncommon but regular, appearing on 6 different counts in the central and eastern part of the state. Satyrid numbers weren't wildly different than last year's, and Monarch were about the same, with 450 last year and 442 this year.

Overall skipper numbers were also about where they usually are, in many cases, with a few notable changes. European Skippers topped out at 1,024, vs. last year's 298, helped out by those 888 reported on the North Berkshire count, where they hit the flight period just right. Least Skippers hit a high of 123, vs. last year's 29, and Delaware Skippers put in a good showing, almost doubling the numbers from the 2021 and 2020 counts. But the most intriguing skipper highlight has to be the one Common Roadside-Skipper reported on the Central Franklin count. This species seems to have essentially vanished from Massachusetts. Searching *Massachusetts Butterflies* back through 1998, which is the first year the club began including 4th of July count totals in the journal, there are no prior reports of this species on any previous count. This sight record, unfortunately not documented with a photo, would represent the first Common Roadside-Skipper reported in the state since 2012. Our gratitude to those who make these counts and reports possible bears repeating: MANY thanks to Karl Barry for compiling the tables of counts and species, and for tabulating totals. His expertise with this is invaluable. Thanks also go to ALL of the compilers: Tom Tyning, Rene Wendell, Mark Fairbrother, Wendy Howes, Jay Shatterly, Mark Rosenstein, Tom Dodd, Andrew Griffith, and Mark Faherty. A special thanks to Dick Walton and Joe Dwelly, who led the Concord and Falmouth counts for so many years and who have now retired and passed the batons to Jay Shatterly and Andrew Griffith. THANKS to each and every participant as well—the information gathered every year about butterfly distribution and population dynamics is interesting to us butterfliers and invaluable to future researchers.

If you've been considering joining a count, please check our website, massbutterflies.org, for the schedule of counts in 2023, and contact the compilers. You don't need to be an expert to participate; the compilers are accustomed to partnering newcomers with more experienced counters to make sure you don't feel overwhelmed. The counts are fun times with good people, and they also give you the added satisfaction of knowing that you've contributed something to butterfly science. Enjoy!



Acadian Hairstreak (*Satyrium acadicus*), 7/3/22, Barnstable Co., MA, Garry Kessler



| July Count 2022 | Black Swallowtail | Eastern Tiger Swallowtail | Canadian Tiger Swallowtail | Spicebush Swallowtail | Cabbage White | Clouded Sulphur | Orange Sulphur | Harvester | American Copper | Bronze Copper |
|------------------------|-------------------|---------------------------|----------------------------|-----------------------|---------------|-----------------|----------------|-----------|-----------------|---------------|
| Total count | 50 | 86 | 5 | 62 | 1,057 | 741 | 298 | 2 | 968 | 3 |
| Northern Berkshire | 4 | 34 | 4 | | 194 | 24 | 2 | | | |
| Central Berkshire | 3 | 19 | 1 | | 87 | 47 | | | 8 | |
| Southern Berkshire | 1 | 5 | | 2 | 119 | 17 | | | | |
| Central Franklin | 3 | 11 | | 1 | 110 | 51 | 8 | 1 | 69 | |
| Northampton | 13 | 9 | | 7 | 148 | 177 | 30 | 1 | 51 | |
| Northern Worcester | 15 | 7 | | 2 | 61 | 165 | 12 | | 311 | |
| Concord | 9 | | | 3 | 50 | 43 | 10 | | 20 | |
| Northern Essex | | | | 1 | 112 | 25 | 5 | | 9 | 3 |
| Blackstone Corridor | | | | 2 | 90 | 48 | 11 | | 56 | |
| Falmouth | 2 | | | 27 | | 142 | 203 | | 219 | |
| Truro | | 1 | | 5 | 27 | 1 | | | 134 | |
| Brewster | | | | 12 | 59 | 1 | 17 | | 91 | |

| July Count 2022 | Bog Copper | Coral Hairstreak | Edwards' Hairstreak | Banded Hairstreak | Hickory Hairstreak | Striped Hairstreak | Oak Hairstreak | Gray Hairstreak | Eastern Tailed-Blue | Summer Azure |
|------------------------|------------|------------------|---------------------|-------------------|--------------------|--------------------|----------------|-----------------|---------------------|--------------|
| Total count | 919 | 34 | 19 | 181 | 12 | 41 | 1 | 54 | 127 | 90 |
| Northern Berkshire | | | | 106 | 1 | 3 | | | 11 | 8 |
| Central Berkshire | | 3 | | 25 | | 4 | | | 21 | 15 |
| Southern Berkshire | | 1 | | 43 | 11 | 1 | | | 7 | 3 |
| Central Franklin | 907 | 7 | | 4 | | 1 | | | 1 | 8 |
| Northampton | | | | 2 | | | | | 7 | 9 |
| Northern Worcester | | | | | | | | 1 | 13 | 25 |
| Concord | | | | | | | | 2 | 13 | 6 |
| Northern Essex | | | | | | | | 1 | 1 | 1 |
| Blackstone Corridor | | | | | | | | | 33 | 10 |
| Falmouth | | 3 | 17 | | | | | 46 | 12 | |
| Truro | 12 | 2 | 2 | | | 30 | | | | |
| Brewster | | 18 | | 1 | | 2 | 1 | 4 | 8 | 5 |

| July Count 2022 | Variegated Fritillary | Great Spangled Fritillary | Aphrodite Fritillary | Atlantis Fritillary | Silver-bordered Fritillary | Meadow Fritillary | Pearl Crescent | Baltimore Checkerspot | Question Mark | Eastern Comma |
|------------------------|-----------------------|---------------------------|----------------------|---------------------|----------------------------|-------------------|----------------|-----------------------|---------------|---------------|
| Total count | 4 | 365 | 53 | 17 | 82 | 50 | 532 | 474 | 10 | 42 |
| Northern Berkshire | | 89 | 1 | | | 34 | 1 | 73 | | 7 |
| Central Berkshire | 2 | 57 | 1 | 17 | | 13 | 5 | 99 | 2 | 5 |
| Southern Berkshire | | 58 | 4 | | | 3 | | 14 | 2 | 18 |
| Central Franklin | | 29 | 3 | | | | | 7 | | 3 |
| Northampton | | 51 | | | 79 | | 308 | 34 | 1 | 8 |
| Northern Worcester | 2 | 52 | 42 | | 1 | | 145 | | 1 | |
| Concord | | 5 | | | | | 43 | | | 1 |
| Northern Essex | | 10 | | | 2 | | 1 | 7 | | |
| Blackstone Corridor | | 14 | 2 | | | | 3 | 16 | | |
| Falmouth | | | | | | | 3 | 224 | | |
| Truro | | | | | | | 3 | | 1 | |
| Brewster | | | | | | | 20 | | 3 | |

| July Count 2022 | Compton Tortoiseshell | Mourning Cloak | American Lady | Painted Lady | Red Admiral | Common Buckeye | White Admiral | Red-spotted Purple | Viceroy | Tawny Emperor |
|------------------------|-----------------------|----------------|---------------|--------------|-------------|----------------|---------------|--------------------|---------|---------------|
| Total count | 6 | 26 | 32 | 2 | 17 | 8 | 8 | 43 | 31 | 1 |
| Northern Berkshire | | 1 | | | | | 2 | 11 | 6 | |
| Central Berkshire | 4 | 10 | | 1 | | | 6 | 18 | | |
| Southern Berkshire | 2 | 11 | | | 1 | | | 3 | 2 | |
| Central Franklin | | 1 | 3 | | 6 | 1 | | 1 | 2 | |
| Northampton | | 1 | | 1 | 4 | 1 | | 2 | 16 | 1 |
| Northern Worcester | | 1 | 2 | | 2 | 2 | | 2 | | |
| Concord | | 1 | | | 2 | | | | 4 | |
| Northern Essex | | | 2 | | | | | 1 | | |
| Blackstone Corridor | | | 1 | | | 2 | | | | |
| Falmouth | | | 14 | | | | | | | |
| Truro | | | 4 | | | 1 | | 3 | 1 | |
| Brewster | | | 6 | | 2 | 1 | | 2 | | |

| July Count 2022 | Northern Pearly-Eye | Eyed Brown | Appalachian Brown | Little Wood-Satyr | Common Ringlet | Common Wood-Nymph | Monarch | Silver-spotted Skipper | Hoary Edge | Northern Cloudywing |
|------------------------|---------------------|------------|-------------------|-------------------|----------------|-------------------|---------|------------------------|------------|---------------------|
| Total count | 9 | 16 | 70 | 126 | 198 | 590 | 442 | 112 | 7 | 2 |
| Northern Berkshire | 1 | 3 | 5 | 3 | 123 | 65 | 16 | 6 | | 1 |
| Central Berkshire | 4 | 2 | 1 | | | 105 | 31 | 8 | | |
| Southern Berkshire | 1 | 1 | 2 | 9 | 16 | 32 | 13 | 25 | | |
| Central Franklin | | 9 | 10 | 9 | | | 7 | 8 | 5 | 1 |
| Northampton | 1 | | 10 | 11 | 15 | 148 | 134 | 22 | 2 | |
| Northern Worcester | 2 | | 4 | 20 | 38 | 120 | 122 | 13 | | |
| Concord | | | 11 | 6 | | 12 | 35 | 12 | | |
| Northern Essex | | | 2 | 5 | 6 | | 7 | 2 | | |
| Blackstone Corridor | | 1 | 3 | 50 | | 45 | 8 | 2 | | |
| Falmouth | | | | 1 | | 21 | 25 | 2 | | |
| Truro | | | 21 | 11 | | 20 | 4 | 6 | | |
| Brewster | | | 1 | 1 | | 22 | 40 | 6 | | |

| July Count 2022 | Horace's Duskywing | Wild Indigo Duskywing | Common Sootywing | Least Skipper | European Skipper | Indian Skipper | Peck's Skipper | Tawny-edged Skipper | Crossline Skipper | Long Dash |
|------------------------|--------------------|-----------------------|------------------|---------------|------------------|----------------|----------------|---------------------|-------------------|-----------|
| Total count | 7 | 32 | 4 | 123 | 1,064 | 2 | 115 | 16 | 10 | 51 |
| Northern Berkshire | | | | 24 | 888 | | 24 | 1 | | 22 |
| Central Berkshire | | | | 5 | 51 | | 67 | 2 | 1 | 7 |
| Southern Berkshire | | | | 23 | 82 | | 15 | 1 | 1 | 6 |
| Central Franklin | | | 1 | | 9 | 2 | | 5 | 2 | |
| Northampton | 1 | 15 | 3 | 10 | | | 2 | 1 | 1 | |
| Northern Worcester | | 14 | | | 3 | | | 5 | | |
| Concord | 1 | 1 | | 5 | | | | | | |
| Northern Essex | | | | 42 | 27 | | 5 | | | 16 |
| Blackstone Corridor | | | | 14 | | | | | | |
| Falmouth | | 2 | | | | | | 1 | 3 | |
| Truro | | | | | | | | | | |
| Brewster | 5 | | | | 4 | | 2 | | 2 | |

| July Count 2022 | Northern Broken-Dash | Little Glassywing | Delaware Skipper | Mulberry Wing | Hobomok Skipper | Broad-winged Skipper | Dion Skipper | Black Dash | Dun Skipper | Common Roadside-Skipper |
|------------------------|----------------------|-------------------|------------------|---------------|-----------------|----------------------|--------------|------------|-------------|-------------------------|
| Total count | 140 | 56 | 84 | 51 | 8 | 14 | 2 | 6 | 214 | 1 |
| Northern Berkshire | 6 | 7 | | | 5 | | 1 | | 5 | |
| Central Berkshire | 16 | 5 | 4 | | 1 | | | | 49 | |
| Southern Berkshire | 14 | 9 | | | 2 | | 1 | | 9 | |
| Central Franklin | 12 | 11 | 27 | 1 | | | | 1 | 16 | 1 |
| Northampton | 21 | 8 | 9 | 31 | | | | 5 | 66 | |
| Northern Worcester | 7 | | 5 | 2 | | 3 | | | 9 | |
| Concord | 13 | 1 | 2 | 16 | | 3 | | | 7 | |
| Northern Essex | 1 | 13 | | | | | | | | |
| Blackstone Corridor | 1 | 2 | 4 | 1 | | | | | 4 | |
| Falmouth | 4 | | 32 | | | | | | 9 | |
| Truro | 15 | | 1 | | | | | | 14 | |
| Brewster | 30 | | | | | 8 | | | 26 | |

| July Counts 2022 Summary | No. of Individuals | No. of Species | No. of Participants | Party Hours | Date | Compiler |
|--------------------------------|-----------------------|-------------------|------------------------|----------------|---------|------------------|
| Total | 10,129 | 70 | - | - | - | - |
| Northern Berkshire | 1,822 | 40 | 11 | 37 | July 3 | Tom Tyning |
| Central Berkshire | 832 | 42 | 9 | 13 | July 10 | Tom Tyning |
| Southern Berkshire | 590 | 41 | 8 | 21 | July 1 | Rene Wendell |
| Central Franklin | 1,375 | 43 | 3 | 19 | July 4 | Mark Fairbrother |
| Northampton | 1,477 | 45 | 7 | 29 | July 17 | Mark Fairbrother |
| Northern Worcester | 1,235 | 36 | 11 | 30 | July 15 | Wendy Howes |
| Concord | 337 | 29 | 15 | 20 | July 9 | Jay Shetterly |
| Northern Essex | 307 | 26 | 5 | 4 | June 25 | Mark Rosenstein |
| Blackstone Corridor | 423 | 25 | 7 | 17 | July 3 | Tom Dodd |
| Falmouth | 1,012 | 22 | 9 | 11 | 30 | Andrew Griffith |
| Truro | 319 | 23 | 4 | 9 | July 10 | Mark Faherty |
| Brewster | 400 | 30 | 6 | 17 | July 17 | Mark Faherty |



Annie Kessler with 'Karner' Blue (*Lycaeides melissa* samuelis), 7/7/22, Concord, NH, Garry Kessler

Ho Hum, just another Zabulon Skipper by Tom Murray

The 2022 butterfly season has come to a close and it was a strange one. We had one of the hottest and driest summers on record. Some of the butterflies we have been used to seeing in large numbers in previous years were present in just a fraction of those numbers this year. This season, hairstreaks were generally seen one or two at a time, not in double digit numbers, as often happens. Leonard's Skipper, never an abundant butterfly, was barely seen anywhere this year. The summer drought may have been a factor with fewer flowers blooming.

An interesting phenomenon seems to be taking place. While quite a few of our butterflies are being seen less than in the past, some that used to be southern migrants, coming up late in the season, are now more common and spreading in Massachusetts. Quite a few of the MassLep reports this year included Zabulon Skippers. While most reports were near the coast or in the Connecticut River valley, I had regular Zabulon sightings in Worcester and Middlesex Counties. One trip to the Oxbow NWR in Harvard produced fifteen Zabulons, making it the most abundant species on that walk. I also had several sightings in Groton, even from my yard.

The Fiery Skipper, another southern species that is normally seen in the same range as the Zabulons, also found its way to Groton. Was this year an anomaly or is it a sign of how the fauna will be changing geographically in the future? Will Sachems and Red-banded Hairstreaks start spreading farther inland and northward too? Let's see what 2023 brings us. Will these expansions continue?

Fiery Skipper (*Hylephila phyleus*), 9/3/22, Groton, MA, Tom Murray



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Submission of Articles, Illustrations, and Season Records

We encourage all members to contribute to *Massachusetts Butterflies*. Articles, illustrations, photographs, butterfly field trip reports, garden reports, and book reviews are all welcome, and should be sent to the Editor by August 31 for the Fall issue, and January 31 for the Spring issue. Please include location and date taken for all photos.

Send NABA Fourth of July count results to Karl Barry at: <u>karl@massbutterflies.org</u> by **August 15** for inclusion in the Fall issue. Send your season sightings and records to Mark Fairbrother at: <u>mark@massbutterflies.org</u>, by **December 15** (or earlier if possible!) for inclusion in the Spring issue. Records may now be submitted via the online checklist and reporting form, which is available for download from our website at: <u>http://www.massbutterflies.org/club-publications.asp</u>

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Crane WMA trip, 7/9/22, Falmouth, MA: (left to right, back:) Joy Marzoff, Peter Johnson-Staub, Nicole Madden, Andrew Griffith, Mark Kasprzyk, Justin Fleming; (front:) Elise Leduc-Fleming, Lauren Griffith. Photo by Larry Barry



Tom Murray and other guests, Mothball 2022, July 23, 2022, Athol, MA, Dave Small