

Massachusetts Butterflies



Spring 2016, No. 46

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NABA-MASSACHUSETTS BUTTERFLY CLUB

Officers

President: Howard Hoople, 10 Torr Street, Andover, MA, 01810-4022.

(978) 475-7719 howard@massbutterflies.org

Vice President-East: Dawn Puliafico, 18 Irene Circle, Ashland, MA, 01721.

(508) 881-0936 dawn@massbutterflies.org

Vice President-West: Tom Gagnon, 175 Ryan Road, Florence, MA, 01062.

(413) 584-6353 tombwhawk@aol.com

Treasurer: Elise Barry, 45 Keep Avenue, Paxton, MA, 01612-1037.

(508) 795-1147 elise@massbutterflies.org

Secretary: Barbara Volkle, 400 Hudson Street, Northboro, MA, 01532.

(508) 393-9251 barb620@theworld.com

Staff

Editor, Massachusetts Butterflies: Bill Benner, 53 Webber Road, West Whately,

MA, 01039. (413) 320-4422 bill@massbutterflies.org

Records Compiler: Mark Fairbrother, 129 Meadow Road, Montague, MA,

01351-9512. mark@massbutterflies.org

Webmaster: Karl Barry, 45 Keep Avenue, Paxton, MA, 01612-1037.

(508) 795-1147 karl@massbutterflies.org

www.massbutterflies.org

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'White Mountain' Melissa Arctic (*Oeneis melissa*), 7/6/15,
Mt. Washington, NH, Garry Kessler

Cover photo: Spring Azure (*Celastrina ladon*), lucia form,
4/22/15, Concord, MA, Bruce deGraaf

The Butterflies of Massachusetts

TOM GAGNON

Vice-President West, NABA-Massachusetts Butterfly Club

When did you start watching butterflies?

As a child, I didn't really watch butterflies, but I was always aware of the birds. I also took care of the family flower garden as a kid. I started keeping bird notes in 1960 or 1961, and I would also write down my first Mourning Cloak, and a few other butterflies, though I didn't know most of the butterflies back then. I didn't have all of the good field guides that we have now, but I did have the little Golden guide—I've still got it!



One Saturday March morning, I went to get the car out of the garage, and there was a butterfly inside a garage window. I got a fishbowl and brought the butterfly inside and called Paul Maleotis. He was a birder friend who lived in the Rockport area, who I met on the BBC trips. He had a very big butterfly collection. Well, the butterfly opened up, and I described it to him. There were only a few possibilities, so we narrowed it down from my description. It was a Compton Tortoiseshell. To this day, this is still one of my top five favorite butterflies. I still look for them in my shed every year, and have several times found one in the shed trying to get out, on a warm sunny day.

I joined the MA Butterfly Club when it first started. I was part of the first Atlas, and the club started right after the Atlas ended. My first field trip was to West Springfield, led by Bruce King from Easthampton. I saw my first Hoary Edge on that trip.

What are your top 5 butterflies? Can you tell us why?

Compton Tortoiseshell; Gray Comma, because it's rare, and I've been lucky to find quite a few the past few years; Common Checkered-Skipper, because of finding the second colony of them in MA at the Northampton Community Gardens (NCG). Edna Dunbar had found the first colony at Pittsfield CG, literally in Tom Tynning's back yard! Hickory Hairstreak is another. One year, on the 4th of July, the day before the Greenfield Count, my 2nd butterfly count ever, I was at the West Meadows behind Arcadia [Mass Audubon's Arcadia Sanctuary]. There were 9 Hickory Hairstreaks on one clump of milkweed! I told folks at the count next day, and they said "No Way!" The day after that Mark Fairbrother came to see them and agreed they looked like Hickory. He took one that a crab spider had killed, sent it to an expert in CT, and he agreed, "Yes, Hickory Hairstreak". It's always been one of my favorites, because I saw it before Mark did! Then there's also Pipevine Swallowtail, because they're so rare, and it's fun to see one. Red-banded Hairstreak, because of the excitement of finding the second MA record on a NABA-MBC walk at Fannie Stebbins in Longmeadow.

The following year, I had two sightings of Red-banded Hairstreak at NCG on my butterfly bushes! Dion Skippers can be pretty nice too—they're fun. That's more than 5, but of course, any day that you're in the field is a good day.

Would you like to tell us something about your butterfly gardening?

It's a lot of work! I have kept track of how many hours I've spent working on my 4 garden plots at the NCG, and in 2014 I spent 61 hours there, and 41 hours in 2015. But it's absolutely worth it, to see the number of people who've come to see the butterflies there. We've put the NCG on the map as a butterfly destination. I went one day to garden there after work, and saw my first ever Massachusetts Long-tailed Skipper, missing a tail. I went back the next day after work and found another one with two tails! The butterfly log book under the bench has also been fun—I enjoy reading the sightings and the little stories that people write.

What else would you like to say about butterflies?

One of my passions now is heading for Mission, Rio Grande Valley, TX, every November, for the butterflying there. Part of that is just seeing old, good friends, like Buck and Linda Cooper from Florida, and being with good MA butterflying friends, like Steve Moore and Barbara Volkle. It's so exciting there, because you never know what's going to show up. This past year, I found a Yellow-tipped Flasher, which hadn't been seen in the Valley since 2008. Buck Cooper is 86 years old, and he had told Linda that the one butterfly he really wanted to see this year was a Yellow-tipped Flasher. He was able to get there to see it, and that made me very happy. At one point, there were 29 people watching this butterfly, and it was a lifer for almost all of them. I think that any serious butterfly person should try to get to the Rio Grande Valley at least once in his or her life, to see all of the special butterflies there.



A Colony of Baltimore Checkerspots, *Euphydryas phaeton*, in West Bridgewater, MA

by Don Adams

Getting Started

The spring/Summer of 2016 will mark the 22nd year I've maintained a colony of the Baltimore Checkerspot butterfly here on our 3 acre property (Adams Farm), assuming presently overwintering hibernation nests of caterpillars survive and recover. The primary hostplant has been Lance-leaved Plantain, *Plantago lanceolata*, but White Turtlehead, *Chelone glabra*, introduced at several locations here, continues to be accepted by both ovipositing females and their resulting offspring. Early groundwork for this began in 1982/83 and is fairly well discussed in my writing for the Fall 2003 *Massachusetts Butterflies* edition. By 1995, the Hockomock population of Baltimores in W. Bridgewater had changed considerably from my first encounter in 1989 but was still viable. Butterflies at the original Hockomock site were considerably reduced as was the primary hostplant there (*P. lanceolata*), however a small number of other Baltimores had discovered two adjacent pastures which also had ample *P. lanceolata*. The original site no longer had any management to control plant succession, since the dairy farmer who had used this as a free-range pasture had passed away, and the site was being overrun with invasive Russian Olive, *Elaeagnus angustifolia*, and Glossy Buckthorn, *Frangula alnus*. The two adjacent pastures supported butterflies for a season or two more, but these were harvested regularly for hay, and butterflies there eventually disappeared in spite of new infusions from my colony.

I managed to get a colony started here at Adams Farm in that year by adding a second infusion of 1-2 dozen additional post-hibernation cats, from the Hockomock population original site (which had totally overrun and depleted the *Plantago* there) to ones already present here, and begin management with cages for protection. The goal would be to create a condition of more stable population from year to year for continued observation and study. I managed to get

3 pairings that summer and overwinter cats from these to the next spring with cages for protection (photo, rear cover). That summer I also added *C. glabra* to Adams Farm and attempted to transplant *P. lanceolata* into my 1 acre ‘butterfly pasture’ which would be mowed once annually after Baltimore cats had abandoned their temporary hibernation nests. Butterflies oviposited on both the new *C. glabra* and established *P. lanceolata*, and cats moved from *Chelone* to *Plantago*, to save the new *Chelone*, developed normally to hibernation.

Begin Management Development

The problem now to be solved for the next season was how to provide the management *P. lanceolata* seemed to require in order to persist, and to raise butterflies on it at the same time. The idea I came up with then was to maintain un-mowed Plantain in ‘islands’ on which gravid females would oviposit and cats would develop to the hibernation phase. The second part of this idea was that in between these islands, I’d mow frequently enough to maintain the Plantain, and since this would leave the Plantain closely cropped, normally fussy gravid female butterflies would not oviposit there.

It didn’t take long to discover that only the first part of this idea would work somewhat. Butterflies did oviposit on Plantain in the locations I had allowed to grow. However it also became quite easy to see that females actually seemed to prefer to oviposit on Plantain in areas I had kept cut once or twice, and that I’d sacrifice a large number of egg masses without a change in plan. This consisted of checking the areas to be mowed first for egg masses, which were bright yellow in color and easy to find when freshly deposited, and harvesting these to save.

A Big Improvement

Of course harvesting of these egg masses now meant working out some practical scheme of re-deploying them in safe areas. All of my early ideas on this were inefficient and worked poorly. The only advantage gained was that temporary storage of eggs eliminated much of the predation of egg masses that occurs under

natural circumstances. If the Plantain leaf bit, with egg mass, being saved in food containers became dry, the eggs would spring off into space at the slightest touch and be lost, so handling to set eggs out was very difficult! It took me many seasons to work out the simple method here described to solve this problem and is based on the observation that multiple egg masses (Fig 1, p. 19), which occur naturally, seem to have the greatest success. The method is also really designed for use on *P. lanceolata* but can be adapted for *Chelone* as well.

Firstly, it's important to note that this procedure should be performed as soon as possible after egg masses are recovered by snipping off the leaf bit with eggs. Secondly, this method will work best if the egg masses selected hatch close to the same time. Therefore, using color as a guide to the incubation period, match the color of the egg masses as closely as possible: yellow for new eggs; deep crimson for more advanced eggs. Tools that will be handy to have are a pair of small scissors and long fine tweezers from a manicure kit. Now, while the leaf bit is still fresh and supple, do the following...

- 1) Remove as much excess leaf as possible with scissors, but leaving about 1/4 inch of leaf at both ends of the egg mass.
- 2) Cut a piece of wax paper about 3-1/2 inches square which is just right for mounting three 'normal' egg masses. For mounting say two egg masses, I'd reduce the size to 3-1/2 x 2-1/2 inches.
- 3) Use tweezers to pick up leaf bits and align in a row about an inch from a side of the wax paper tending to roll up as shown in Fig 2 (p. 19).
- 4) Cut 4 small pieces of painters masking tape, and with tweezers set these down to hold the egg masses in place. The painters masking tape can be picked up and reset with tweezers as required to align as shown in Fig 2. Using the blunt end of the tweezers, carefully press the tape pieces down securely.
- 5) Now, starting at the egg mass end of the wax paper, roll this into a cylinder roughly 1/2 inch in diameter and hold in place with scotch tape at both ends as shown in Fig 3 (p. 19).

6) The cylinders can now be stored in plastic food containers and kept at normal outside temps but out of direct sunlight. These should be checked 2-3 times each day, and when the first egg mass changes color from deep red to dull grey, it's time to deploy to hostplant.

7) Find a robust rosette of *P. lanceolata* that is also nearby to other rosettes of this hostplant. Now, holding the cylinder with egg masses 'up', simply slide the cylinder over a long leaf or two until the leaves have extended an inch or two out the end of the cylinder as shown in Fig 4 (p. 19). It helps here to squeeze the cylinder slightly while doing this so that the eggs do not rub on the leaves.

Now that the egg masses have been set in place as above, the cylinder should not be disturbed. The hatching caterpillars will be in close contact with hostplant and in just a day or two after an egg mass has hatched, a feeding web will extend out of one or both ends of the cylinder (Fig 5, p. 19). Also, after setting the cylinder in place, I usually cover the hostplant rosette with a 1 or 2 cubic foot cage. This will help greatly to reduce predation and other issues that can cause difficulties. Fig 6 (p. 19) shows a feeding web with advanced caterpillars close to hibernation that originated from the cylinder in the background. After the several seasons it took me to iron out bugs with this, raising success had now reached a point that enabled me to have good control over population boom/bust cycles.

Too Many Butterflies

By 2000, I was using 'donations' as a tool to reduce excess butterflies, and began sending post-hibernation cats to the Maryland Restoration Program. This continued for several seasons until Dr Wayne Whelling at USDA APHIS advised that Maryland would do best to restore *E. phaeton ozarke* not *E. phaeton phaeton*. *Ozarke* there had not yet switched over to *P. lanceolata*, but I did continue to support their public relations efforts by sending smaller numbers of butterflies to nature centers which would keep these on display but quarantined.

In the spring of 2001, I discovered that cats in deep hibernation during winter could survive extended periods of total submergence when a period of heavy rain on top of deep snow here left a number of my overwinter cages underwater. Overwintering cats remained this way for several days and I was sure all had been drowned, although I had read in European papers that butterflies in this genus in the UK could survive this. However, on a warm day the following spring, I was happy to discover that all affected cages had clusters of basking cats!

A Case of ‘Fatal Attraction’

In 2003, rather by accident, I was surprised to find what was clearly a Baltimore egg mass on the underside of a Butterfly Bush (*Buddleja*) leaf. This prompted more careful searching wherewith I was able to locate a half dozen or so more, and actually get a

photo of a female during oviposition (Fig 7). At first I thought I was discovering a NEW primary host plant, but decided to wait on reporting this first to see if caterpillars would feed. So, I marked the egg mass locations and watched all carefully. The first surprise came, long before any eggs began to hatch, when the egg masses began to disappear one by one and always at night. Sometimes it would take two-three evenings for an entire egg mass to be stolen, but after a few such nights it seemed clear I could lose my ability to find whether or not cats would feed on the Butterfly Bush. To prevent this, I sleeved one remaining large egg mass with a nylon stocking. These eggs finally hatched and I was lucky to be checking the sleeve close to that moment. It was easy to see that tiny cats were spread all over both the inside of the nylon sleeve and the leaf and branch it covered. The ‘normal’ behavior for cats intending to feed would



Fig. 7

have been to remain together and spin a small collective web from the egg mass location to the end of the leaf, and begin to feed inside this web by mining the surface of the leaf. Just the same, I re-tied the sleeve in place and left until the next day. After checking again, there was no small web or signs of feeding and I could find many small motionless cats in the sleeve making it clear that they had starved and perished. Although this scenario has repeated itself for many seasons, I've yet to observe an instance of Baltimore cats, either pre or post-hibernation, that will accept Butterfly Bush, and I'm still not certain what the egg mass predator is although I strongly suspect the ants that seem to scour every branch and leaf of our Butterfly Bush here.

For many seasons, I've had a similar result with Baltimore egg depositions on Round-leaved Plantain, *Plantago major* (Fig 8),



Fig. 8

which newly hatched pre-hibernation cats also have yet to accept, although for years, prior to the first occurrence of this I observed, I was aware that, unlike the case with Butterfly Bush, post-hibernation cats would accept *P. major* and develop to pupation. In fact for many of these years, I can say that *P. major*, along with

other 'alternate' host plants here such as Valerian, *Valeriana officinalis*, have saved this post-hibernation colony from starvation upon depletion of the primary host plant, and many others of these (listed by Scott, 1986) have been used here successfully as well. The transition of host plant preference, from primary only, to a much broader selection of even unrelated plants has been, in most texts, associated with recovery from overwinter hibernation and for this colony, this has been the case for the most part. Evidence here however suggests that acceptance of alternates by post-hibernation

cats is greatly facilitated if they first have access to available new shoots of primary host plant for some time.

New Pre-Hibernation Behavior

In 2013 however, I was able to observe an instance involving a very large cluster of pre-hibernation caterpillars that had fed to an advanced state entirely on the primary host plant *P. lanceolata* and depleted all that was available in sight. After trekking a considerable distance, the cluster came upon a large rosette of *P. major* and devoured this within 20 minutes (Fig. 9)! This fasci-



Fig 9

inating behavior raises intriguing questions about precisely when/ what induces Baltimore cat feeding preferences to transition from primary host plant only to the much broader acceptance of primary plus a lengthy list of known alternates. Additionally this behavior contributes to my belief that this transition, usually

associated with recovery from overwinter hibernation, is enhanced if cats are able to feed initially on new shoots of the primary host plant. Also in the 2013 season, for the first time, an egg deposition on Pink Turtlehead, *Chelone lyonii*, developed into a successful feeding nest of cats, a 'sort-of-new' primary host plant for this colony at least. As with *P. major*, for many seasons prior to this, I had observed that post-hibernation cats would also accept *lyonii* as an alternate.

The 'Starvation Scenario'

By 2014, the improvements I had made with raising details left me with a very large number of post-hibernation caterpillars, and early on I was able to see some trouble was coming. Cats were wiping out everything edible in sight and not very close to pupation. I realized I may have now placed this colony on the edge of, what I had read in European literature to be, the 'starvation scenario'. I now know the 'starvation scenario' that happens in nature has two

phases. The first one is when post-hibernation cats are too numerous, totally overwhelm the primary food plant (*P. lanceolata*), and only some are able to locate alternates and survive, resulting in huge mortality. The second phase happens when gravid females from the surviving population are on the wing but primary host plant has not recovered enough to be egg-worthy. This is exacerbated by dry weather that retards re-development of the host plants, which was the case that summer. The result of this can be almost total elimination of any new survivable pre-hibernation cats. In these seasons, there seems to me to be a greater number of ‘multiple egg masses’ (Fig 1 p. 19), and ‘desperation depositions’ on *Buddleja* and *P. major* which new cats won’t accept. Alternate host plants, which helped get some butterflies through the first phase, are no help now for the same reason.

That season I resorted to some somewhat extreme measures to do what I could to salvage the situation. For example, I’ve long been aware that various species of Ash (*Fraxinus*) (listed by Scott, 1986), including ones I have here, are accepted by post-hibernation cats. The problem, though, is how to get cats at ground level to find the nearby Ash trees. I solved this by manually gathering up hundreds of the most advanced cats and setting them out in three large sleeves over robust Ash branches at ladder height. This worked, as cats accepted the food handout, and most pupated in the sleeves attached both to branches and the sleeve itself. The outcome of this saved hundreds of butterflies.

Additionally, I was able to secure a good number of egg masses by setting out potted-up *Chelone* plants from a local nursery. More help was also provided by a new area of Plantain that came up in our vegetable garden which was too far removed from the area of post-hibernation cats for them to find. However many new gravid Baltimore females that had survived the first phase were able to find this spot and deposit egg masses which I then protected with cages. Most of my hibernation nests saved for 2015 came from this 20 x 20 ft area, and one of these is shown in Fig. 10 (p. 12).



Fig. 10

Temporary Hibernation Webs

At close to 3rd instar, cats cease feeding, spin up the denser co-coon-like temporary hibernation web, and enter a state of diapause even though there remains sufficient time to continue

development to the pupal phase to overwinter. Typically I harvest these webs and move to a suitable location for the next year. These webs are almost always extensions of the feeding webs, but cats use any plant or other materials available nearby. When I employ cages over feeding webs for protection, cats frequently construct the hibernation web in a corner of the cage. Cats remain in this web until late summer-early fall, then abandon this for cover deep in the duff layer. At this point, it should be safe to mow the area involved without harming the cats, however I'd still avoid the use of vacuuming-type mowers.

For the 2015 season I had recovered a sufficient number of post-hibernation cats to keep the colony going and also make modest donations to the New England Wildflower Society's Garden-In-The-Woods, and to an on-going research program at the University of Colorado. Gravid female butterflies oviposited on both *P. lanceolata* and the *C. glabra* plants I had started in 2014, and both provided me with a number of temporary hibernation webs. These have all been moved and caged over rosettes of Plantain and will remain this way until spring 2016.

Literature Cited: Scott, J. A. 1986. *Butterflies of North America*. Stanford: Stanford University Press.

2015 Season Summary and Records

Mark Fairbrother

The long cold winter of 2014-2015 may well have taken a toll on our butterflies this past year. Species such as Giant Swallowtails, Painted Lady and Sachem had sharply reduced numbers, while Gray Comma and Bog Copper did well. There were no major flights into or through the state in 2015, as compared to recent years. Monarch numbers were again low even in the fall. There was no real late summer push by species such as Little Yellow, Fiery and Ocola Skipper.

About 6,000 records were received for the 2015 season, a significant decrease from the past couple years. Thank-you to the many observers submitting records either directly to me or posting their sightings on the MassLep butterfly listserv. For the sake of a compiler's sanity I would like to request assistance from submitters. Records, sometimes in bulk, were received from various reporters into December. Sooner would be better, especially if you'd like them included in the summary. Also, if you post sightings on-line during the season and then send in a group of records post-season, it would be very helpful to indicate which records, if any, were posted earlier and which were not. Unfortunately it's not possible to fit more than a fraction of the total records in the available space. This does not mean that they aren't important; all reported butterflies are logged in the database and help to give a picture of the health of the various butterfly populations in Massachusetts. In deciding which records to include I tried to balance a combination of early and late dates, location, high numbers, and observer, generally in that order. Following the NABA checklist, the number of species reported for 2015 was 114.

SWALLOWTAILS

Giant Swallowtail may have succumbed to the hard winter. The species was reported widely but there were only nine records submitted with a high count of 3. Only one adult Pipevine Swallowtail was reported (Sheffield). Black, Eastern Tiger, Canadian, and Spicebush Swallowtail were again reported in about normal

numbers. Appalachian Swallowtail was reported from Newbury and Sheffield.

WHITES AND SULPHURS

Mustard White was again reported (3) from locations in the Hoosatic watershed, while West Virginia White was reported from the CRV west into Berkshire County throughout May. Cabbage White got through the winter with healthy populations throughout the state and season, in case you were worried about them. Clouded and Orange Sulphur reports were about average, with Cloudless Sulphur reported from the south coast in September. Little Yellows were absent in 2015.

GOSSAMER-WINGS

Harvester reports were actually well balanced between eastern and western Mass. in 2015, with several sightings in Berkshire County and the CRV in addition to its stronghold in the Mystic Lakes area.

American Copper reports were about average. Bog Copper turned up in Worcester County, the Cape and Islands. Standing (and sinking) in a quaking bog watching hundreds dancing together low over cranberry and sphagnum moss in a very small space was easily the highlight of this reporter's season. Bronze Copper were again reported mostly from the Wayland/Concord area, with outliers in Berkshire County and Newbury. Hairstreak numbers (except Striped) were generally down in 2015. Coral Hairstreak turned up across the state, from Northern Berkshire County to the outer Cape. When I came to write this I thought Banded Hairstreak numbers were down in 2015, but the records show many reports with double-digit numbers.

Edwards Hairstreak was reported mostly east of Worcester County. Striped Hairstreak had a very good year, both in numbers and locations. Frosted Elfins of both Baptisia and lupine feeders were reported from the expected places. Bog Elfin was reported once from the Ashburnham site. Most of the dozen reports of Henry's Elfin were east of Worcester County, while Hoary Elfin was re-

ported only from Plymouth Co., the Cape and Islands. Red-banded Hairstreak was found along the south east coast, mostly in September. Hickory Hairstreak was reported three times: once in the northeast, once in the northwest, and once sort of in the middle.

Only five reports of White M Hairstreak were received, with four from Mattapoisett. Hessel's Hairstreak was only reported from Canton, while Juniper Hairstreak was also found mostly in Woburn, Hingham, and Holyoke. Gray Hairstreaks were reported from early May into mid-October. Early Hairstreak was reported once from the Mt. Greylock area at the end of late May. Spring Azure began cheering people up in mid-April and continued well into June, with generally higher numbers in the eastern half of the state, while Summer Azure flew mostly from early June into early October. Six reports were received of Cherry Gall Azure ranging from Berkshire County to Falmouth and MV. Silvery Blue reports were again low, and most reports were from Worcester County.

BRUSHFOOTED BUTTERFLIES

Variegated Fritillary had nine reports in 2015, half in Falmouth and the others scattered from Northampton through Royalston to Nahant, from early July into October. Great Spangled Fritillary had a great year, flying from mid-June through mid-October. Aphrodite Fritillary reports were about normal, with sightings from Worcester County west, especially the Berkshires. Atlantis Fritillary numbers continue to be very low and limited to the high Berkshires. The days appear to be gone when Tom Gagnon and I drove down a dirt road in Pittsfield, each leaning out a side window and calling numbers back and forth and ending up with several hundred.

Meadow Fritillary was reported from the CRV west, except for one individual which apparently didn't get the memo and ended up in Westport. Silver-bordered Fritillary was well reported and often in good numbers. Only six reports of Harris' Checkerspot were received, with most from Broad Meadow Brook, while Baltimore Checkerspot was again under-reported, considering how widespread the species is known to be. Question Mark reports

were again rather low, but from many locations and from mid-April to November 1. Eastern Comma was well reported across most of the state, and from mid-April to November 5. Gray Comma tallied nearly a dozen reports, mostly from Berkshire County but also from Newbury and Wenham.

Mourning Cloak seems to have rescued a lot of people from a brutal winter when it began flying at the end of March, with the last being a Christmas Day individual. Exactly two Milbert's Tortoiseshell were reported, one in Hubbardston and the other in Acton. Apparently not wanting to be outdone, exactly two Compton Tortoiseshell were reported, one from North Adams and one from Sharon. American Ladies were widespread in generally low numbers throughout the season, from early April until December 12! Painted Lady reports were few, and most were of 1's and 2's.

Viceroy was reported widely in small numbers from late May into October. Hackberry was reported only once, from Sheffield where two of the three Tawny Emperor reports were from; Northampton had the other. No. Pearly-eye was reported from numerous Worcester Co. sites, with additional reports scattered across the Berkshires. Eyed Brown reports were low and scattered from Worcester Co. westward. This is a species which, even more so than Appalachian, does nothing to help you find it. Appalachian Brown reports were about average, flying from early June into early September. Little Wood-Satyr, Com. Ringlet and Com. Wood-Nymph numbers and reports were about as would be expected. Monarch numbers were somewhat improved but still below what we had been used to. Only the Dartmouth area in September and October could muster numbers to be hopeful for.

SKIPPERS

There was again no pronounced influx of southern species this year, although Ocola Skippers turned up in a surprisingly wide range of places, while the hard winter apparently brought the Sachem invasion of MA to a screeching halt. Grass skipper numbers were down pretty much across the board.

Only six Hoary Edge reports came in, half from Broad Meadow Brook. Three Long-tailed Skippers appeared in late

September, one in Newton and two in Dartmouth. Seven Sleepy Duskywing reports came in from the Eastern half of MA, while Horace's Duskywing reports were all from the Eastern half of the state except for one Northampton record. The four Common Checkered Skipper reports were limited to Northampton and Pittsfield. Common Sootywing numbers were quite low. Arctic Skipper was reported six times, mostly from the Berkshires.

European Skipper reports were surprisingly few and often in single digits. Fiery Skipper was reported six times, mostly along the coast but also in Northampton and Sudbury. Only six Leonard's Skipper reports were received, all from the eastern half of the state. This reporter made a special effort to see Leo this year, but came up empty when I found all of the 'old' spots were grown up or man-altered. Cobweb Skipper was reported only from Martha's Vineyard, while Indian Skipper did well in Carver, but otherwise in low numbers in a handful of locations. Zabulon Skipper numbers and reports were down sharply from the previous few years. Broad-winged Skipper reports were scattered across the state, with the highest number of sightings from the Eastern half of the state. Dion Skipper was reported from Northampton and Berkshire County. Two-spotted Skipper was found in Berkshire County in mid-July, while Pepper and Salt Skipper was reported from North Adams to Belmont. Sachem was limited to three reports, two from Dartmouth and one from Mattapoisett. Ocola Skippers appeared at least eleven different places, mostly near the coast but also as far inland as Royalston and Northampton.

Abbreviations: AP-Allen's Pond; BFD-Barre Falls Dam; BMB-Broad Meadow Brook, CG-Community Gardens; CRP-Charles River Peninsula; CRV-Connecticut River Valley; CST-Crane Swamp Trail; EQLT-East Quabbin Land Trust; F&G-Fish & Game; FPB-Fort Pond Brook; FS-Fannie Stebins Wildlife Sanctuary; GBH-Great Blue Hill; GM-Great Meadows NWR; GITW-Garden in the Woods; HPM-Horn Pond Mountain; IBA-Important Bird Area; IRP-Ipswich River Park; IRWS-Ipswich River Wildlife Sanctuary; LA-Larz Anderson Park; LPWS-Long Pasture Wildlife Sanctuary; MAS-Mass Audubon Sanctuary; MCRT-Massachusetts Central Rail Trail; MBWMA-Martin Burns WMA; MHF-Moose Hill Farm; ML-Mystic Lakes; MMP-Mountain Meadow Preserve; MPRA-Mill Pond Recreational Area; MSSF-Myles Standish State Forest; MV-Martha's Vineyard; NABA 4JC-North American Butterfly Association 4th of July Count; NAC-Nine Acre Corner; NCG-Northampton Community Gardens; NCM-North Common Meadows TTOR; NP-Newburyport; NRT-Norwottuck Rail Trail; NWR-National Wildlife Refuge; PL-Power Line; PRNWR-Parker River NWR; Res.-Reservoir or Reservation; RM-Rumney Marsh; S-C - Stevens-Coolidge TTOR; SF-State Forest; SP-State Park; TTOR-The Trustees of Reservations; WMA-Wildlife Management Area; WMWS-Wachusett Meadow Wildlife Sanctuary; WRR-Waskosim Rock Res.

Pipeline Swallowtail

7/10 1 Sheffield - Matt Arey

Black Swallowtail

5/6 2 HPM, Woburn - Matt Arey
5/6 2 Hadley - Tom Gagnon
5/7 1 Stichter Yard, Newbury - Joe Stichter
5/10 4 Woodsom Farm, Amesbury - Marjorie Watson
5/12 1 Vineyard Haven - Matt Pelikan
5/17 1 W Bridgewater - Don Adams
5/20 2 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
5/26 2 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes
5/30 2 Moran WMA, Windsor - MBC trip
6/4 1 Williamsburg Flower Hill Farm - Carol Duke
6/7 1 Boxford - Jim Berry
6/9 1 Fowl Meadows, Milton - Paul Peterson
6/13 3 Appleton Farms, Ipswich - Howard Hoople
6/20 1 Crane WMA, Falmouth - MBC trip
7/3 4 GBH, Canton - Michael Newton
7/5 7 C Franklin NABA - Mark Fairbrother *et al.*
7/10 5 Sheffield - Matt Arey
7/11 1 Provincetown - Faherty, Dwelly, Barry
7/13 1 Roslindale, Boston - Lucy Merrill-Hills
7/18 4 Pittsfield - Tom Gagnon, Harvey Allen
7/19 6 Leicester - MBC trip
7/23 2 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly
7/25 4 Eastham - Joe Dwelly *et al.*
8/1 1 Falmouth - Alison Robb
8/1 3 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
8/8 3 BMB WS, Worcester - MBC trip
8/15 1 Westport - Mark Lynch & Sheila Carroll
8/30 1 E Longmeadow - Karen Parker
9/5 4 Northampton CG - MBC trip
9/5 52 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
9/15 5 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly *et al.*
9/25 3 W Bridgewater - Don Adams
9/27 1 Appleton Farms, Ipswich - Jim Berry
10/7 3 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
10/11 1 Endicott Road, Middleton - Matt Arey

Giant Swallowtail

5/26 1 Williamsburg Flower Hill Farm - Carol Duke
5/30 1 Highland Farm, Belmont - Mark Rainey
8/1 3 Bart's Cobble, Sheffield - Bill & Nancy Callahan
8/7 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/9 2 Williamstown - Mark Lynch & Sheila Carroll
8/14 1 Arlington Heights - Lisa Wolfe
9/5 1 Northampton CG - MBC trip
9/6 1 Crane WMA, Falmouth - Joe Dwelly

Tiger Swallowtail (spp)

5/9 1 Ward Res, Andover - Howard Hoople
5/10 2 Robinson Sp, Agawam - Moe O'Connor
5/10 1 Salem - Karen Haley
5/24 20 Williamsburg Flower Hill Farm - Carol Duke
5/27 5 Moore SP, Paxton - Elise & Karl Barry
6/7 1 Otis - Moe O'Connor
7/24 5 W Bridgewater - Don Adams
7/26 1 Arlington - Lisa Wolfe
8/19 1 E Longmeadow - Karen Parker

Eastern Tiger Swallowtail

4/18 1 Longmeadow - Keith Parker
5/6 1 HPM, Woburn - Matt Arey
5/6 1 Amherst - Josh Rose
5/10 1 Delaney WMA, Stow - Mark Lynch & Sheila Carroll
5/14 1 Oak St. PL, Shrewsbury - Steve Moore
5/17 4 Petersham, Rutland Brook Sanc. - Wendy Howes & Alan Rawle
5/17 1 Orleans - Larry Barry
5/20 4 Holliston - Richard Hildreth
5/20 1 Vineyard Haven - Matt Pelikan
5/22 7 Wendell - Mark Lynch & Sheila Carroll

5/29 9 MBWMA, Newbury - Jim Berry
5/30 4 Acoaxet - Mark Lynch & Sheila Carroll
6/4 12 Williamsburg Flower Hill Farm - Carol Duke
6/4 2 Leicester - Mark Rowden
6/8 3 W Bridgewater - Don Adams
6/10 1 Marston Mills Airport - Joe Dwelly
6/14 20 Sandisfield - Mark Lynch & Sheila Carroll
6/20 1 Holliston - Richard Hildreth
6/27 2 Warwick - Mark Lynch & Sheila Carroll
7/3 2 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes & Alan Rawle
7/5 19 N Worcester NABA - Wendy Howes *et al.*
7/5 16 C Franklin NABA - Mark Fairbrother *et al.*
7/5 11 Huntington - Mark Lynch & Sheila Carroll
7/10 2 Worthington - Gagnon, Moore, Volkle
7/11 7 Truro - Faherty, Dwelly, Barry
7/12 2 Wendell - Mark Lynch & Sheila Carroll
7/13 1 Roslindale, Boston - Lucy Merrill-Hills
7/15 1 Athol - Dave Small
7/19 9 Northampton NABA - Mark Fairbrother *et al.*
7/22 6 Roslindale, Boston - Lucy Merrill-Hills
7/25 1 Colrain - Mark Lynch & Sheila Carroll
7/25 2 Wellfleet - Joe Dwelly *et al.*
7/29 2 Holliston - Richard Hildreth
8/5 2 Arlington Heights - Lisa Wolfe
8/8 1 Onset - Christine Houghton
8/9 2 Fowl Meadows, Milton - Michael Newton
8/18 1 E Longmeadow - Karen Parker
9/6 3 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
9/25 1 W Bridgewater - Don Adams
10/12 1 Moore SP, Paxton - Karl & Elise Barry
10/12 1 Berkshire County - Tom Gagnon, Betsy Higgins

Canadian Tiger Swallowtail

5/11 1 Beartown SF, Great Barrington - Mark Lynch & Sheila Carroll
5/14 4 Hadley - Tom Gagnon
5/15 1 World's End, Hingham - MBC trip
5/17 2 West Whately - Bill Benner
5/27 1 Moore SP, Paxton - Elise & Karl Barry
5/30 21 North Adams, Mt. Greylock State Res. - MBC trip
6/10 1 Tower Hill, Boylston - Wendy Miller
6/12 6 North Adams, Mt. Greylock State Res. - Larry Barry
6/14 3 Windsor - Steve Moore & Barbara Volkle
6/14 3 Field Farm, Williamstown - Steve Moore & Barbara Volkle
7/3 1 S Berkshire NABA - Rene Laubach *et al.*
7/11 1 Williamstown - Terri Armata

'Appalachian' Tiger Swallowtail

5/30 5 Old Town Hill, Newbury - Matt Arey
7/10 3 Sheffield - Matt Arey

Spicebush Swallowtail

5/17 1 MSSF, Plymouth - MBC trip
5/24 1 Longmeadow - Karen Parker
5/26 1 W Bridgewater - Don Adams
5/29 1 W Tisbury - Matt Pelikan
5/31 12 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
6/13 2 W Bridgewater - Don Adams
6/20 1 HPM, Woburn - Mark Rainey
6/26 3 MHF, Sharon - Madeline Champagne
6/30 1 Willow Farm, Ware - Wendy Howes
7/4 2 Leominster State Forest - Steve Moore & Barbara Volkle
7/5 8 C Franklin NABA - Mark Fairbrother *et al.*
7/5 12 Mashpee - Erik Nielsen, Peter Trimble
7/11 1 Truro - Faherty, Dwelly, Barry
7/17 1 Williamsburg - Carol Duke
7/19 4 Northampton NABA - Mark Fairbrother *et al.*
7/20 3 Westport - Mark Lynch & Sheila Carroll
7/25 5 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
8/3 1 Wilson Mtn. Reservation, Westwood - Lucy Merrill-Hills
8/9 5 Fowl Meadows, Milton - Michael Newton
8/10 3 MHF, Sharon - Madeline Champagne

8/17 1 Chelmsford - Giancarla Kalpas
8/22 1 E Longmeadow - Hilda Parker
8/31 1 Arlington - Lorene Melvin
9/5 4 Raynham - Tom Murray
9/6 1 Rowley - Bo Zaremba
9/12 1 Ipswich, New England Biolabs - Jim Berry
9/17 1 E Longmeadow - Karen Parker
9/15 1 Borden Colony, Raynham - Joe Dwelly
9/26 1 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey

Mustard White

5/27 4 Berkshire County - Gagnon, Allen, Higgins
7/10 8 Windsor - Gagnon, Moore, Volkle
9/9 2 Berkshire County - Tom Gagnon

West Virginia White

5/3 1 Great Barrington, Myrin Preserve - Mark Lynch & Sheila Carroll
5/3 2 Sunderland - Ron & Sue Cloutier
5/4 1 West Whately - Bill Benner
5/6 1 Williamsburg Flower Hill Farm - Carol Duke
5/11 8 Beartown SF, Great Barrington - Mark Lynch & Sheila Carroll
5/17 2 Fitzgerald Lake, Florence - Tom Gagnon *et al.*
5/17 2 West Whately - Bill Benner
5/27 5 Berkshire County - Gagnon, Allen, Higgins
5/30 2 North Adams, Mt. Greylock State Res. - MBC trip

Cabbage White

4/15 1 Stichter Yard, Newbury - Joe Stichter
4/18 1 Ware - Mark Lynch & Sheila Carroll
4/19 1 Longmeadow - Karen Parker
5/2 2 Natick - Michael Newton
5/3 1 Mount Washington - Mark Lynch & Sheila Carroll
5/3 5 Holliston - Richard Hildreth
5/5 2 Leicester - Mark Rowden
5/6 11 Springfield - Karen Parker
5/9 2 Chicopee - Karen Parker
5/10 12 Uxbridge - Dawn Puliafico
5/10 2 Robinson Sp, Agawam - Moe O'Connor
5/13 6 Delaney WMA, Stow - Steve Moore
5/14 2 Wellfleet Bay Ws, Wellfleet - Mark Faherty
5/16 3 Beech Forest, Provincetown - Fred Bouchard
5/17 3 West Whately - Bill Benner
5/17 10 W Bridgewater - Don Adams
5/21 15 Boston Nature Center - Lucy Merrill-Hills
5/21 2 Little River Nature Trail, NP - Bo Zaremba
5/22 5 Holliston - Richard Hildreth
5/24 1 Correllus State Forest, West Tusbury - Matt Pelikan
5/27 10 World's End, Hingham - Greg Dysart
5/30 7 Cherry Hill Res, W Newbury - Bo Zaremba
6/5 12 Hatfield - Bruce King
6/9 4 Fowl Meadows, Milton - Paul Peterson
6/11 1 Hopkin's Forest, Williamstown - Steve Moore & Barbara Volkle
6/14 10 BMB WS, Worcester - Bill & Nancy Callahan
6/19 10 Lincoln - Paul Peterson
6/21 5 Holliston - Richard Hildreth
6/22 233 Northfield - Mark Lynch & Sheila Carroll
6/23 4 Springfield - Karen Parker
6/24 68 Wachusets Res, Boylston - Mark Lynch & Sheila Carroll
6/27 24 Amherst - Moe O'Connor
7/1 100 DCR Kristoff Farm, Sterling - Wendy Howes
7/2 25 Thompson Fields, Harwich - Joe Dwelly
7/3 9 Tisbury Meadow - Matt Pelikan
7/5 24 Huntington - Mark Lynch & Sheila Carroll
7/6 8 Borden Colony, Raynham - Joe Dwelly
7/10 2 Ipswich, New England Biolabs - Jim Berry
7/10 2 Windsor - Gagnon, Moore, Volkle
7/10 250 Worthington - Gagnon, Moore, Volkle
7/11 33 Sandisfield - Mark Lynch & Sheila Carroll
7/11 68 Williamstown - Terri Armata
7/11 18 Truro - Faherty, Dwelly, Barry
7/13 40 Belle Isle Marsh, Boston - Paul Peterson
7/15 1 Athol - Dave Small
7/16 20 Tower Hill, Boylston - Wendy Miller

7/17 5 E Longmeadow - Karen Parker
7/19 231 Northampton NABA - Mark Fairbrother *et al.*
7/19 8 Holliston - Richard Hildreth
7/22 9 Roslindale, Boston - Lucy Merrill-Hills
7/24 8 Grass Rides, Hamilton - Jim Berry
7/25 116 Eastham - Joe Dwelly *et al.*
8/1 10 Sheffield, Project Native-Housatonic - Bill & Nancy Callahan
8/2 15 Wayland CG - Steve Moore & Barbara Volkle
8/2 9 Holliston - Richard Hildreth
8/3 7 Sandisfield - Mark Lynch & Sheila Carroll
8/5 17 Borden Colony, Raynham - Joe Dwelly
8/7 4 Arlington - Lorene Melvin
8/9 32 Williamstown - Mark Lynch & Sheila Carroll
8/10 20 MHF, Sharon - Madeline Champagne
8/13 3 Amherst - Josh Rose
8/13 24 Allendale Farm, Boston - Lucy Merrill-Hills
8/22 54 Sandisfield - Mark Lynch & Sheila Carroll
9/5 12 Royalston - Rick Chech *et al.*
9/5 37 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
9/5 20 Northampton CG - MBC trip
9/6 35 Wayland CG - Steve Moore
9/6 50 Rowley - Bo Zaremba
9/7 36 Allens Pond Wildlife Sanctuary, Dartmouth - Erik Nielsen
9/15 25 Williamstown - Bo Zaremba
9/15 30 Borden Colony, Raynham - Joe Dwelly
9/15 1 Lynn - Steve Moore
9/16 50 Hampden - Bill Callahan
9/16 21 Huntington - Mark Lynch & Sheila Carroll
9/19 12 Allens Pond Wildlife Sanctuary, Dartmouth - Steve Moore & Barbara Volkle
9/19 9 Nahant - Bo Zaremba
9/24 27 Muir Meadow, Paxton - Karl & Elise Barry
9/25 7 Springfield - Karen Parker
9/27 115 Appleton Farms, Ipswich - Jim Berry
10/1 1 Whately - Bill Benner
10/4 2 Royalston - Carl Kamp, Alyce Mayo
10/7 10 Crane WMA, Falmouth - Bo Zaremba
10/8 12 Appleton Farms, Ipswich - Jim Berry
10/9 1 Springfield - Karen Parker
10/10 5 Plum Island, Newbury - Jim Berry
10/12 15 Cherry Hill Res, W Newbury - Tom Murray
10/15 35 Ipswich - Jim Berry
10/22 1 E Longmeadow - Karen Parker
11/2 1 Billerica - Paula Lieberman
11/2 1 Greenfield - Jeff Boettner
11/5 5 AP Field Station, Dartmouth - Michael Newton
11/8 5 Stichter Yard, Newbury - Sharon Stichter
12/5 1 AP Field Station, Dartmouth - Michael Newton
12/24 1 Danvers - Matt Arey

Clouded Sulphur

5/2 1 Hatfield - Bill Benner
5/6 1 HPM, Woburn - Matt Arey
5/6 1 Holliston - Richard Hildreth
7/11 66 Williamstown - Terri Armata
7/12 8 Sudbury - Moore, Kessler, Reid
7/16 8 Tower Hill, Boylston - Wendy Miller
7/19 389 Northampton NABA - Mark Fairbrother *et al.*
7/23 18 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly
7/25 2 Colrain - Mark Lynch & Sheila Carroll
7/25 2 Eastham - Joe Dwelly *et al.*
7/31 5 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
8/3 5 Sandisfield - Mark Lynch & Sheila Carroll
8/9 9 NCM, Petersham - Wendy Howes & Alan Rawle
8/14 12 LPWS, Barnstable - Joe Dwelly
8/22 97 Sandisfield - Mark Lynch & Sheila Carroll
8/29 26 Tyringham - Mark Lynch & Sheila Carroll
8/31 98 Moore SP, Paxton - Elise & Karl Barry
9/5 180 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
9/5 14 Royalston - Rick Chech *et al.*
9/15 20 Williamstown - Bo Zaremba

9/15 400 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly *et al.*
 9/15 75 Borden Colony, Raynham - Joe Dwelly
 9/16 22 Huntington - Mark Lynch & Sheila Carroll
 9/19 1 Amherst - Josh Rose *et al.*
 9/23 8 North Adams, Mt. Greylock State Res. - Tom Gagnon, *et al.*
 9/24 40 Muir Meadow, Paxton - Karl & Elise Barry
 9/27 40 Appleton Farms, Ipswich - Jim Berry
 10/5 147 Moore SP, Paxton - Karl & Elise Barry
 10/6 31 Crane WMA, Falmouth - Joe Dwelly
 10/7 200 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
 10/8 30 Sherborn - Michael Newton
 10/12 17 Berkshire County - Tom Gagnon, Betsy Higgins
 10/12 24 Moore SP, Paxton - Karl & Elise Barry
 10/12 1 Meadow Road, Montague - Mark Fairbrother
 10/12 25 Ipswich - Jim Berry
 11/8 1 Sheffield - Josh Rose
 11/13 1 W Bridgewater - Don Adams
 11/14 2 Allens Pond Wildlife Sanctuary, Dartmouth - Mark Lynch & Sheila Carroll
 11/27 2 Westport - Mark Lynch & Sheila Carroll

Orange Sulphur

5/14 1 Dauphinais Park, Grafton - Steve Moore
 5/20 1 Crane WMA, Falmouth - Joe Dwelly
 5/27 2 Moore SP, Paxton - Elise & Karl Barry
 5/27 1 Berkshire County - Gagnon, Allen, Higgins
 6/7 1 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly
 6/11 1 Cow Common CA, Wayland - Michael Newton
 6/13 2 Appleton Farms, Ipswich - Howard Hoopole
 6/24 3 Borden Colony, Raynham - Joe Dwelly
 7/3 1 Sheffield - Mark Lynch & Sheila Carroll
 7/5 15 N Worcester NABA - Wendy Howes *et al.*
 7/5 32 C Franklin NABA - Mark Fairbrother *et al.*
 7/6 13 Borden Colony, Raynham - Joe Dwelly
 7/11 17 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 1 Sandisfield - Mark Lynch & Sheila Carroll
 7/13 4 Belle Isle Marsh, Boston - Paul Peterson
 7/16 1 E Longmeadow - Karen Parker
 7/19 64 Northampton NABA - Mark Fairbrother *et al.*
 7/25 1 Wellfleet - Joe Dwelly *et al.*
 7/25 6 Eastham - Joe Dwelly *et al.*
 8/10 2 MHF, Sharon - Madeline Champagne
 8/22 21 Sandisfield - Mark Lynch & Sheila Carroll
 8/31 7 Moore SP, Paxton - Elise & Karl Barry
 9/7 6 Ipswich, New England Biolabs - Jim Berry
 9/15 5 Williamstown - Bo Zaremba
 9/15 170 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly *et al.*
 9/16 47 Crane WMA, Falmouth - Joe Dwelly
 9/23 1 North Adams, Mt. Greylock State Res. - Tom Gagnon, *et al.*

9/28 7 CST, Northborough - Steve Moore
 10/5 8 Moore SP, Paxton - Karl & Elise Barry
 10/6 1 Williamsburg Flower Hill Farm - Carol Duke
 10/6 3 Wachusett Res, Clinton - Bruce deGraaf
 10/7 30 Crane WMA, Falmouth - Bo Zaremba
 10/8 7 Sherborn - Michael Newton
 10/12 3 Cherry Hill Res, W Newbury - Tom Murray
 10/20 1 Northampton CG - Tom Gagnon
 11/5 50 AP Field Station, Dartmouth - Michael Newton
 12/5 11 AP Field Station, Dartmouth - Michael Newton
 12/12 3 Nahant - Linda Pivacek
 12/25 1 Eastern Point, Nahant - Linda Pivacek

Cloudless Sulphur

9/6 1 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
 9/16 1 S Dartmouth - Ron & Sue Cloutier
 9/19 2 Allens Pond Wildlife Sanctuary, Dartmouth - Steve Moore & Barbara Volkle

Harvester

5/27 3 Mystic Lakes, Medford - Mark Rosenstein
 5/28 1 FS WMA, Longmeadow - Bill Callahan

6/4 2 FS WMA, Longmeadow - Bill Callahan
 7/11 1 Williamstown - Terri Armata
 7/23 21 Mystic Lakes, Medford - Renee LaFontaine
 7/26 2 Canoe Meadows, Pittsfield - Gael Hurley
 8/13 8 Medford - Garry Kessler
 9/1 12 Mystic Lakes, Medford - Renee LaFontaine
 9/16 1 FS WMA, Longmeadow - Bill Callahan
 9/27 1 Cow Common CA, Wayland - Michael Newton

American Copper

5/9 1 Ward Res, Andover - Howard Hoopole
 5/10 1 Uxbridge - Dawn Puliafico
 5/10 1 Wareham - Lauren Griffith
 5/12 6 Crowe's, Dennis - Joe Dwelly
 5/14 2 Brighton - Peter DeGennaro
 5/15 1 Florence - Tom Gagnon
 5/15 1 Oak Bluffs - Matt Pelikan
 5/17 7 Wareham - Lauren Griffith
 5/19 2 Hopkinton - Dawn Puliafico
 5/21 4 Little River Nature Trail, NP - Bo Zaremba
 5/22 2 Wendell - Mark Lynch & Sheila Carroll
 5/24 1 Correllus State Forest, West Tisbury - Matt Pelikan
 5/26 6 Williamsburg Flower Hill Farm - Carol Duke
 7/2 7 Bank Street bog, Harwich - Joe Dwelly
 7/11 107 Truro - Faherty, Dwelly, Barry
 7/19 32 Northampton NABA - Mark Fairbrother *et al.*
 7/31 1 Amherst - Josh Rose
 9/5 9 Tully Dam, Royalston - Rick Chech *et al.*
 9/6 2 Amherst - Josh Rose
 9/16 8 Crane WMA, Falmouth - Joe Dwelly
 9/26 20 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey
 10/4 1 Northampton CG - Bill & Nancy Callahan
 10/6 10 Crane WMA, Falmouth - Joe Dwelly
 10/6 30 AP Field Station, Dartmouth - Michael Newton
 10/8 2 Sherborn - Michael Newton
 10/11 2 MBWMA, Newbury - Matt Arey
 10/21 1 AP, Dartmouth - Lauren Miller-Donnelly
 10/31 1 Wachusett Res, Boylston - Barton Kamp
 11/5 3 AP Field Station, Dartmouth - Michael Newton

Bronze Copper

6/7 1 NAC, Concord - Jason Forbes
 6/11 2 Sedge Meadow, Wayland - Garry Kessler
 7/3 1 S Berkshire NABA - Rene Laubach *et al.*
 8/1 2 Lime Kiln, Sheffield - Bill & Nancy Callahan
 9/9 2 Berkshire County - Tom Gagnon
 9/18 4 NAC, Concord - Steve Moore & Barbara Volkle
 9/27 1 F&W Rte1, Newbury - Matt Arey
 10/12 2 Cherry Hill Res, W Newbury - Tom Murray

Bog Copper

7/3 15 Hubbardston - Wendy Howes & Alan Rawle
 7/3 50 Moshup's Trail, Aquinnah - Matt Pelikan
 7/5 3015 C Franklin NABA - Mark Fairbrother *et al.*
 7/9 7 Royalston - Steve Moore
 7/11 102 Provincetown - Faherty, Dwelly, Barry
 7/12 60 Wendell - Mark Lynch & Sheila Carroll
 7/19 1 Ware River Watershed, Barre - Mark Lynch & Sheila Carroll
 7/25 2 Eastham - Joe Dwelly *et al.*

Coral Hairtreak

6/27 1 HPM, Woburn - MBC trip
 7/3 3 GBH, Canton - Michael Newton
 7/5 9 Mashpee - Erik Nielsen, Peter Trimble
 7/5 1 MBWMA, Newbury - Marjorie Watson
 7/5 3 Belchertown - Sue Cloutier
 7/5 2 C Franklin NABA - Mark Fairbrother *et al.*
 7/11 15 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

7/11 6 Truro - Faherty, Dwelly, Barry
 7/13 11 Crowe's, Dennis - Joe Dwelly
 7/25 5 Wellfleet - Joe Dwelly *et al.*
 7/25 1 Eastham - Joe Dwelly *et al.*
 7/25 11 Harwich - Joe Dwelly *et al.*

Acadian Hairtreak

6/27 1 HPM, Woburn - MBC trip

7/2 1 Berkshire County - Ron & Sue Cloutier
 7/5 6 Mashpee - Erik Nielsen, Peter Trimble
 7/10 27 Pittsfield - Gagnon, Moore, Volkle
 7/18 47 Pittsfield - Tom Gagnon, Harvey Allen
Edwards' Hairstreak
 6/20 1 HPM, Woburn - Mark Rainey
 6/22 1 E Longmeadow - Karen Parker
 6/27 5 HPM, Woburn - MBC trip
 6/30 6 W Tisbury - Matt Pelikan
 7/2 3 Thompson Fields, Harwich - Joe Dwelly
 7/3 20 GBH, Canton - Michael Newton
 7/5 149 Mashpee - Erik Nielsen, Peter Trimble
 7/11 12 Truro - Faherty, Dwelly, Barry
 7/18 7 Falmouth NABA - Alison Robb, *et al.*
 7/23 1 E Longmeadow - Karen Parker
 7/25 5 Harwich - Joe Dwelly *et al.*
 8/2 1 Drumlin Farm, Lincoln - Dawn Puliafico
Banded Hairstreak
 6/13 1 Ashland - Michael Newton
 6/13 2 Northampton CG - Bill Callahan
 6/18 1 CST, Northborough - Steve Moore
 6/19 1 E Longmeadow - Karen Parker
 6/20 1 Crane WMA, Falmouth - MBC trip
 6/22 3 Leicester - Mark Rowden
 6/22 1 Gill - Mark Lynch & Sheila Carroll
 6/25 5 E Longmeadow - Karen Parker
 6/27 20 HPM, Woburn - MBC trip
 6/30 2 Willow Farm, Ware - Wendy Howes
 7/2 12 Teixeira Cons. Area, Harwich - Joe Dwelly
 7/3 18 MBWMA, Newbury - Jim Berry
 7/3 17 MBWMA, Newbury - Marjorie Watson
 7/5 20 Sherborn - Michael Newton
 7/5 15 Sharon - Madeline Champagne
 7/8 29 Pine Tree Nursery, Chatham - Mark Faherty
 7/9 4 Florence - Tom Gagnon & Betsy Higgins
 7/9 3 Moore SP, Paxton - Elise Barry, Beth Herr
 7/11 54 Williamstown - Terri Armata
 7/11 1 Truro - Faherty, Dwelly, Barry
 7/16 1 Williamsburg Flower Hill Farm - Carol Duke
 7/23 1 Holliston - Richard Hildreth
 7/25 1 Eastham - Joe Dwelly *et al.*
 7/28 1 E Longmeadow - Karen Parker
 8/7 2 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
 8/13 1 Leicester - Mark Rowden
Hickory Hairstreak
 7/3 1 MBWMA, Newbury - Marjorie Watson
 7/6 12 W Newbury - Bruce deGraaf
 7/11 6 Williamstown - Terri Armata
 7/19 1 Northampton NABA - Mark Fairbrother *et al.*
Striped Hairstreak
 6/20 1 HPM, Woburn - Mark Rainey
 6/27 20 HPM, Woburn - MBC trip
 6/30 3 Willow Farm, Ware - Wendy Howes
 7/2 1 Champagne yard, Foxborough - Madeline Champagne
 7/3 2 GBH, Canton - Michael Newton
 7/3 1 MBWMA, Newbury - Jim Berry
 7/3 5 S Berkshire NABA - Rene Laubach *et al.*
 7/5 2 Mashpee - Erik Nielsen, Peter Trimble
 7/5 3 N Worcester NABA - Wendy Howes *et al.*
 7/5 15 Sharon - Madeline Champagne
 7/6 7 Moore SP, Paxton - Elise Barry
 7/9 1 Florence - Tom Gagnon & Betsy Higgins
 7/9 30 Moore SP, Paxton - Elise Barry, Beth Herr
 7/10 3 Pittsfield - Gagnon, Moore, Volkle
 7/11 6 Concord NABA - Dick Walton *et al.*
 7/11 8 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/11 11 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 7 Provincetown - Faherty, Dwelly, Barry
 7/12 7 CST, Northborough - MBC trip
 7/15 1 Athol - Dave Small
 7/25 2 Wellfleet - Joe Dwelly *et al.*
 7/29 3 Ponkopaug Bog, Canton - Greg Dysart
 8/7 12 Nasketucket Bay Reserve, Mattapoisett - Matt Arey

8/9 1 Fowl Meadows, Milton - Michael Newton
Oak Hairstreak
 7/3 3 Old County, W Tisbury - Matt Pelikan
 7/3 2 Peaked Hill, Chilmark - Matt Pelikan
 7/3 1 Tisbury Meadow - Matt Pelikan
 7/5 1 Brewster Public Gardens, Brewster - Joe Dwelly
 7/15 12 Harwich - Mark Faherty
 7/17 2 Harwich - Mark Faherty
Brown Elfin
 4/26 6 Correllus State Forest, West Tisbury - Matt Pelikan
 5/2 4 Winchendon - Mark Lynch & Sheila Carroll
 5/3 24 MSSF, Plymouth - Steve Moore & Barbara Volkle
 5/4 29 Montague Plains - Tom Gagnon & Betsy Higgins
 5/7 1 Weir Hill Res, N Andover - Howard Hoople
 5/8 27 Correllus State Forest, West Tisbury - Matt Pelikan
 5/10 6 Thompson Fields, Harwich - Joe Dwelly
 5/11 18 Pilgrim Heights, Truro - Joe Dwelly
 5/14 1 Holden - Elise & Karl Barry
 5/17 60 MSSF, Plymouth - MBC trip
 5/24 9 Correllus State Forest, West Tisbury - Matt Pelikan
 5/30 1 Myles Standish State For. Carver - Joe Dwelly
 6/3 1 Winchendon - Mark Lynch & Sheila Carroll
Hoary Elfin
 4/26 6 Correllus State Forest, West Tisbury - Matt Pelikan
 4/26 1 Edgartown - Matt Pelikan
 5/3 18 MSSF, Plymouth - Steve Moore & Barbara Volkle
 5/10 4 Thompson Fields, Harwich - Joe Dwelly
 5/14 7 Wellfleet Bay Ws, Wellfleet - Mark Faherty
 5/17 30 MSSF, Plymouth - MBC trip
 5/31 3 Myles Standish State For. Carver - Matt Arey
Frosted Elfin
 5/4 1 Lamson Rd, Foxborough - Madeline Champagne
 5/8 1 Weir Hill Res, N Andover - Howard Hoople
 5/10 3 HPM, Woburn - Howard Hoople, Michael Newton
 5/14 24 Lamson Rd, Foxborough - Madeline Champagne
 5/15 9 Florence - Tom Gagnon
 5/17 22 Fitzgerald Lake, Florence - Tom Gagnon *et al.*
 5/21 41 Lamson Rd, Foxborough - Madeline Champagne
 5/31 10 Myles Standish State For. Carver - Matt Arey
 6/10 2 Crane WMA, Falmouth - Joe Dwelly
 6/12 4 Lamson Rd, Foxborough - Madeline Champagne
 6/20 1 Crane WMA, Falmouth - MBC trip
Henry's Elfin
 5/2 6 Crane Beach, Ipswich - Jim Berry
 5/2 1 Winchendon - Mark Lynch & Sheila Carroll
 5/2 34 Natick - Michael Newton
 5/3 17 Fowl Meadows, Milton - Garry Kessler *et al.*
 5/4 2 Oxbow NWR, Harvard - Mark Lynch & Sheila Carroll
 5/10 2 Pike's Bridge Rd, W Newbury - Marjorie Watson
 5/12 34 Natick - Michael Newton
 5/15 1 World's End, Hingham - MBC trip
 5/17 4 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly
 5/24 2 Ashburnham - Mark Rainey
Bog Elfin
 5/24 2 Ashburnham - Mark Rainey
Eastern Pine Elfin
 4/12 1 Headwaters Cons. Area, Westborough - Garry Kessler
 4/26 1 Correllus State Forest, West Tisbury - Matt Pelikan
 5/2 1 Holliston - Richard Hildreth
 5/3 2 Great Barrington, Myrin Preserve - Mark Lynch & Sheila Carroll
 5/3 4 MSSF, Plymouth - Steve Moore & Barbara Volkle
 5/3 12 Rocky Narrows, Sherborn - Michael Newton
 5/4 2 Lamson Rd, Foxborough - Madeline Champagne
 5/4 36 Montague Plains - Tom Gagnon & Betsy Higgins
 5/4 52 GBH, Canton - Lauren Griffith
 5/5 4 Longmeadow - Karen Parker
 5/6 10 Willowdale SF, Ipswich - Jim Berry
 5/6 11 Tower Hill, Boylston - Dawn Puliafico
 5/6 15 Maynard - Greg Dysart
 5/9 22 Ware River Watershed, Barre - Mark Lynch & Sheila Carroll
 5/10 1 Thompson Fields, Harwich - Joe Dwelly
 5/10 1 Uxbridge - Dawn Puliafico

5/14 17 Lamson Rd, Foxborough - Madeline Champagne
 5/14 8 Wellfleet Bay Ws, Wellfleet - Mark Faherty
 5/15 15 Lamson Rd, Foxborough - Madeline Champagne
 5/17 3 West Whately - Bill Benner
 5/21 6 Little River Nature Trail, NP - Bo Zaremba
 5/22 6 Wendell - Mark Lynch & Sheila Carroll
 5/24 3 Ashburnham - Mark Rainey
 5/24 11 Correllus State Forest, West Tusbury - Matt Pelikan
 6/7 10 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
 6/10 1 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
 6/13 1 Williamsburg Flower Hill Farm - Carol Duke
 6/13 5 Dighton PL - MBC trip
 7/8 1 MBWMA, Newbury - Matt Arey

Juniper Hairstreak

5/6 4 HPM, Woburn - Matt Arey
 5/10 7 HPM, Woburn - Howard Hoople, Michael Newton
 5/14 6 Wellfleet Bay Ws, Wellfleet - Mark Faherty
 5/15 3 World's End, Hingham - MBC trip
 5/20 1 Crane WMA, Falmouth - Joe Dwelly
 5/22 5 Holyoke - MBC trip
 5/27 23 World's End, Hingham - Greg Dysart
 6/9 1 Crane WMA, Falmouth - Bill Callahan
 7/11 1 Truro - Faherty, Dwelly, Barry
 7/25 5 Wellfleet - Joe Dwelly *et al.*
 8/12 1 MBWMA, Newbury - Matt Arey

Hessel's Hairstreak

5/24 1 Ponkopaug Bog, Canton - Steven Whitebread

White M Hairstreak

5/31 1 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 7/23 1 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
 8/7 2 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 9/6 2 Nasketucket Bay Reserve, Mattapoissett - Michael Newton
 9/16 1 S Dartmouth - Ron & Sue Cloutier

Gray Hairstreak

5/6 2 HPM, Woburn - Matt Arey
 5/14 2 Lamson Rd, Foxborough - Madeline Champagne
 5/20 1 Holliston - Richard Hildreth
 5/31 5 Myles Standish State For. Carver - Matt Arey
 6/27 3 GBH, Canton - MBC trip
 7/5 14 N Worcester NABA - Wendy Howes *et al.*
 7/11 7 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 2 Truro - Faherty, Dwelly, Barry
 7/11 4 Concord NABA - Dick Walton *et al.*
 7/11 1 Champagne yard, Foxborough - Madeline Champagne
 7/13 3 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
 7/16 2 Tower Hill, Boylston - Wendy Miller
 7/25 3 Bristol NABA - Mark Mello
 8/7 5 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 9/5 4 BMB WS, Worcester - Bruce deGraaf
 9/5 1 Northampton CG - MBC trip
 9/6 9 Nasketucket Bay Reserve, Mattapoissett - Michael Newton
 9/16 1 Arlington Heights - Lorene Melvin
 9/16 5 Crane WMA, Falmouth - Joe Dwelly
 9/20 1 E Longmeadow - Karen Parker
 9/21 1 Northampton CG - Tom Gagnon, R & S Cloutier
 9/27 1 Wayland - Michael Newton
 10/15 1 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico

Red-banded Hairstreak

5/31 2 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 8/7 3 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 9/1 1 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
 9/5 1 Raynham - Tom Murray
 9/5 3 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
 9/7 7 Allens Pond Wildlife Sanctuary, Dartmouth - Erik Nielsen
 9/15 6 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly *et al.*
 9/19 3 Dartmouth - Steve Moore & Barbara Volkle

9/26 1 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey

Early Hairstreak

5/30 1 North Adams, Mt. Greylock State Res. - MBC trip

Eastern Tailed-Blue

5/7 3 HPM, Woburn - Howard Hoople
 5/8 4 Correllus State Forest, West Tusbury - Matt Pelikan
 5/10 10 HPM, Woburn - Howard Hoople, Michael Newton
 5/12 1 Crowe's, Dennis - Joe Dwelly
 5/13 1 Brighton - Peter DeGennaro
 5/14 3 Lamson Rd, Foxborough - Madeline Champagne
 5/15 9 Florence - Tom Gagnon
 5/16 15 Foss Woods, Provincetown - Fred Bouchard
 5/17 8 Norfolk, Miller Street field - Madeline Champagne
 5/24 16 Sherborn PL - Dawn Puliafico
 5/24 5 Correllus State Forest, West Tusbury - Matt Pelikan
 5/26 1 Williamsburg Flower Hill Farm - Carol Duke
 5/30 2 Moran WMA, Windsor - MBC trip
 6/7 11 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
 6/13 1 Appleton Farms, Ipswich - Howard Hoople
 6/13 1 Arlington - Lorene Melvin
 6/21 1 E Longmeadow - Karen Parker
 6/27 3 Amherst - Moe O'Connor
 7/3 15 S Berkshire NABA - Rene Laubach *et al.*
 7/3 1 Sheffield - Mark Lynch & Sheila Carroll
 7/5 31 N Worcester NABA - Wendy Howes *et al.*
 7/5 28 C Franklin NABA - Mark Fairbrother *et al.*
 7/5 10 Mashpee - Erik Nielsen, Peter Trimble
 7/11 75 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 6 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/13 2 Crowe's, Dennis - Joe Dwelly
 7/19 27 Northampton NABA - Mark Fairbrother *et al.*
 7/19 15 Leicester - MBC trip
 7/25 6 Bristol NABA - Mark Mello
 7/25 7 Nasketucket Bay Reserve, Mattapoissett - Michael Newton
 8/1 1 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/5 11 Borden Colony, Raynham - Joe Dwelly
 8/8 1 Alewife Res., Cambridge - Rosemary Mosco
 8/8 1 Meadow Road, Montague - Mark Fairbrother
 8/9 2 MBWMA, Newbury - Marjorie Watson
 8/9 2 Williamstown - Mark Lynch & Sheila Carroll
 8/13 2 E Longmeadow - Karen Parker
 8/14 1 Lakeville - Myer Bornstein
 8/22 2 Sandisfield - Mark Lynch & Sheila Carroll
 8/29 2 Tyringham - Mark Lynch & Sheila Carroll
 8/30 10 Sherborn PL - MBC trip
 9/5 6 Raynham - Tom Murray
 9/6 21 Crane WMA, Falmouth - Joe Dwelly
 9/6 9 Swift - Bo Zaremba
 9/12 5 Swift River Res, Petersham - Wendy Howes & Alan Rawle
 9/16 39 Crane WMA, Falmouth - Joe Dwelly
 9/20 85 Norton - Brian Cassie
 9/23 1 North Adams, Mt. Greylock State Res. - Tom Gagnon, R & S Cloutier
 9/27 10 F&W Rte1, Newbury - Matt Arey
 10/6 5 Newbury - Bo Zaremba
 10/9 4 Nasketucket Bay Reserve, Mattapoissett - Lauren Miller-Donnelly
 10/10 1 FS WMA, Longmeadow - Bill Callahan
 10/12 2 Berkshire County - Tom Gagnon, Betsy Higgins
 10/12 3 Cherry Hill Res, W Newbury - Tom Murray

Spring Azure

4/18 1 Ware - Mark Lynch & Sheila Carroll
 4/21 2 Holliston - Richard Hildreth
 4/22 1 Longmeadow - Karen Parker
 4/26 1 Correllus State Forest, West Tusbury - Matt Pelikan
 4/28 1 Roberts Rd., Sandisfield - Mark Rowden
 5/1 2 Monson - Mark Lynch & Sheila Carroll
 5/2 25 Winchendon - Mark Lynch & Sheila Carroll
 5/2 3 Crane Beach, Ipswich - Jim Berry
 5/2 50 Natick - Michael Newton

- 5/3 6 Rocky Narrows, Sherborn - Michael Newton
5/3 35 MSSF, Plymouth - Steve Moore & Barbara Volkle
5/3 9 Great Barrington, Myrin Preserve - Mark Lynch & Sheila Carroll
5/4 18 Westborough - Steve Moore & Barbara Volkle
5/4 9 Montague Plains - Tom Gagnon & Betsy Higgins
5/5 4 Stichter Yard, Newbury - Joe Stichter
5/6 25 Maynard - Greg Dysart
5/6 9 Tower Hill, Boylston - Dawn Puliafico
5/6 45 Willowdale SF, Ipswich - Jim Berry
5/7 4 MBWMA, Newbury - Jim Berry
5/7 2 HPM, Woburn - Howard Hoople
5/8 4 Holliston - Richard Hildreth
5/8 19 Correllus State Forest, West Tusbury - Matt Pelikan
5/9 41 Ware River Watershed, Barre - Mark Lynch & Sheila Carroll
5/9 96 MSSF, Plymouth - Lauren Griffith
5/9 100 Ridge Hill Res, Needham - Michael Newton
5/9 16 Weir Hill Res, N Andover - MBC trip
5/10 9 Uxbridge - Dawn Puliafico
5/10 16 Pike's Bridge Rd, W Newbury - Marjorie Watson
5/10 2 Williamsburg Flower Hill Farm - Carol Duke
5/11 25 Pilgrim Heights, Truro - Joe Dwelly
5/11 3 Longmeadow - Karen Parker
5/11 2 Williamstown - Pam Weatherbee
5/11 8 Beartown SF, Great Barrington - Mark Lynch & Sheila Carroll
5/12 25 Falmouth - Larry Barry
5/12 50 Natick - Michael Newton
5/12 3 Vineyard Haven - Matt Pelikan
5/14 6 Wellfleet Bay Ws, Wellfleet - Mark Faherty
5/14 2 Holden - Elise & Karl Barry
5/15 63 World's End, Hingham - MBC trip
5/15 120 Shawme-Crowell St Pk, Sandwich - Bo Zaremba
5/16 80 Foss Woods, Provincetown - Fred Bouchard
5/17 2 West Whately - Bill Benner
5/17 5 Petersham, Rutland Brook Sanc. - Wendy Howes & Alan Rawle
5/17 68 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
5/17 22 MSSF, Plymouth - MBC trip
5/21 11 Pike's Bridge Rd, W Newbury - Bo Zaremba
5/22 6 Wendell - Mark Lynch & Sheila Carroll
5/23 2 Williamsburg Flower Hill Farm - Carol Duke
5/24 9 W Newbury - Bo Zaremba
5/27 15 World's End, Hingham - Greg Dysart
5/30 4 North Adams, Mt. Greylock State Res. - MBC trip
6/7 16 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
6/11 5 Williamsburg Flower Hill Farm - Carol Duke
6/21 5 Sherborn - Michael Newton
- *Cherry Gall* Spring Azure**
5/14 1 Oak St. PL, Shrewsbury - Steve Moore
5/20 1 Crane WMA, Falmouth - Joe Dwelly
5/20 2 Vineyard Haven - Matt Pelikan
5/24 5 Ashburnham - Mark Rainey
5/27 1 Berkshire County - Gagnon, Allen, Higgins
6/13 1 Dighton PL - MBC trip
- *Summer* Spring Azure**
5/17 1 Wareham - Lauren Griffith
6/6 1 E Longmeadow - Karen Parker
6/7 1 Leicester - Mark Rowden
6/12 6 MMP, Williamstown - Steve Moore & Barbara Volkle
6/14 8 BMB WS, Worcester - Bill & Nancy Callahan
6/14 7 Windsor - Steve Moore & Barbara Volkle
6/17 4 Holliston - Richard Hildreth
6/22 2 Assabet River NWR, Stow - Gary Freedman
6/26 2 MHF, Sharon - Madeline Champagne
6/30 1 Willow Farm, Ware - Wendy Howes
7/3 21 S Berkshire NABA - Rene Laubach *et al.*
7/3 5 GBH, Canton - Michael Newton
7/3 3 MBWMA, Newbury - Jim Berry
7/5 26 C Franklin NABA - Mark Fairbrother *et al.*
7/5 20 N Worcester NABA - Wendy Howes *et al.*
7/5 6 MBWMA, Newbury - Marjorie Watson
7/9 6 Moore SP, Paxton - Elise Barry, Beth Herr
- 7/10 10 Sheffield - Matt Arey
7/10 5 Ipswich, New England Bioblabs - Jim Berry
7/10 10 Windsor - Gagnon, Moore, Volkle
7/11 23 Concord NABA - Dick Walton *et al.*
7/11 2 Truro - Faherty, Dwelly, Barry
7/12 5 MMP, Williamstown - MBC trip
7/16 4 Williamsburg Flower Hill Farm - Carol Duke
7/18 14 Pittsfield - Tom Gagnon, Harvey Allen
7/19 21 Northampton NABA - Mark Fairbrother *et al.*
7/25 7 Nasketucket Bay Reserve, Mattapoissett - Micheal Newton
7/26 1 Arlington - Lisa Wolfe
8/2 2 Drumlin Farm, Lincoln - Dawn Puliafico
8/6 2 E Longmeadow - Karen Parker
8/9 8 Fowl Meadows, Milton - Michael Newton
8/14 1 LPWS, Barnstable - Joe Dwelly
9/5 7 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
9/15 2 Mt. Tom State Reservation, Holyoke - Tom Gagnon & Betsy Higgins
9/17 1 E Longmeadow - Karen Parker
9/19 4 Allens Pond Wildlife Sanctuary, Dartmouth - Steve Moore & Barbara Volkle
9/23 1 North Adams, Mt. Greylock State Res. - Tom Gagnon, R & S Cloutier
10/8 1 AP Field Station, Dartmouth - Lauren Miller-Donnelly
- Silvery Blue**
5/7 1 Southborough - Dawn Puliafico
5/13 7 Delaney WMA, Stow - Steve Moore
5/14 1 Dauphinais Park, Grafton - Steve Moore
5/18 6 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
5/24 1 Pepperell - Garry Kessler
5/26 1 F&G Fields, Westborough - Garry Kessler
5/27 3 Berkshire County - Gagnon, Allen, Higgins
5/28 1 Muir Meadow, Paxton - Elise Barry
5/30 5 Willard Brook State Forest, Ashby - Bo Zaremba
5/30 2 Moran WMA, Windsor - MBC trip
6/10 1 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
6/12 1 North Adams, Mt. Greylock State Res. - Larry Barry
- American Snout**
7/10 1 Sheffield - Matt Arey
- Variegated Fritillary**
7/5 1 N Worcester NABA - Wendy Howes *et al.*
7/18 1 Falmouth NABA - Alison Robb, *et al.*
9/4 1 Northampton - Tom Gagnon
9/6 1 Royalston - Rick Chech *et al.*
9/16 3 Crane WMA, Falmouth - Joe Dwelly
9/18 1 Nahant - Linda Pivacek
10/6 14 Crane WMA, Falmouth - Joe Dwelly
10/12 6 Crane WMA, Falmouth - Bo Zaremba
- Great Spangled Fritillary**
6/12 1 MMP, Williamstown - Steve Moore & Barbara Volkle
6/13 1 Dighton PL - MBC trip
6/13 2 Northampton CG - Bill Callahan
6/13 1 Champagne yard, Foxborough - Madeline Champagne
6/17 10 Ward Res, Andover - Howard Hoople
6/19 5 Lincoln - Paul Peterson
6/21 1 Holliston - Richard Hildreth
6/22 14 Harvard - Steve Moore
6/22 2 Northfield - Mark Lynch & Sheila Carroll
6/25 4 E Longmeadow - Karen Parker
6/26 37 MHF, Sharon - Madeline Champagne
6/27 3 Highland Farm, Belmont - Mark Rainey
6/30 50 Willow Farm, Ware - Wendy Howes
7/1 6 DCR Kristoff Farm, Sterling - Wendy Howes
7/3 42 MBWMA, Newbury - Marjorie Watson
7/3 126 S Berkshire NABA - Rene Laubach *et al.*
7/3 38 MBWMA, Newbury - Jim Berry
7/5 28 MBWMA, Newbury - Marjorie Watson
7/5 22 Huntington - Mark Lynch & Sheila Carroll
7/5 149 C Franklin NABA - Mark Fairbrother *et al.*

**Baltimore Checkerspot, *Euphydryas phaeton*,
eggs and caterpillars, West Bridgewater, MA,
photos by Don Adams**



Fig. 1

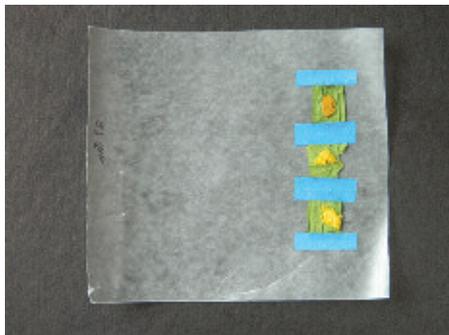


Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Great Spangled (*Speyeria cybele*) and Aphrodite (*S. aphrodite*) Fritillaries, 7/11/15, Tully Lake, Royalston, MA, MA, Bill & Nancy Callahan



Delaware Skipper (*Anatrytone logan*), 7/1/15, Sterling, MA, Wendy Howes

Long Dash (*Polites mystic*), 7/7/15, Lenox, MA, Bo Zaremba



Appalachian Brown (*Satyrodes appalachia*), 8/9/15, Canton, MA, Michael Newton



Pearl Crescent (*Phyciodes tharos*), 7/27/15, Plymouth, MA, David Newman



Oak Hairstreak
(*Satyrium favonius*),
6/25/15,
Middlesex Co., MA,
Garry Kessler

American Lady (*Vanessa
virginiensis*), 8/25/15,
Shrewsbury, MA,
Bruce deGraaf



Henry's Elfin
(*Callophrys henrici*),
5/3/15, Milton, MA,
Garry Kessler



Leonard's Skipper
(*Hesperia leon-
ardus*), 8/22/15,
Sherborn, MA,
Michael Newton



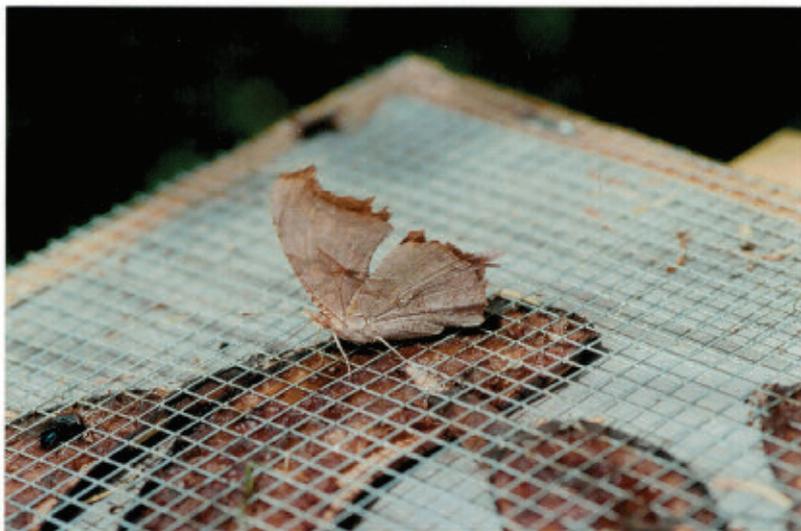
Monarch
(*Danaus plex-
ippus*), 9/12/15,
Westport, MA,
Michael Newton



The new banana feeder in operation

with Question Mark and Mourning Cloak
28 May 2012, Steuben, ME, RWH cabin yard

photographs by Richard W. Hildreth



7/5 80 N Worcester NABA - Wendy Howes *et al.*
 7/6 10 CST, Northborough - Steve Moore
 7/9 17 Tower Hill, Boylston - Wendy Miller
 7/10 8 Windsor - Gagnon, Moore, Volkle
 7/11 100 Concord NABA - Dick Walton *et al.*
 7/11 89 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 43 Williamstown - Terri Armata
 7/12 11 Wendell - Mark Lynch & Sheila Carroll
 7/13 12 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
 7/16 8 Williamsburg Flower Hill Farm - Carol Duke
 7/16 16 Tower Hill, Boylston - Wendy Miller
 7/19 83 Northampton NABA - Mark Fairbrother *et al.*
 7/20 1 Arlington - Lisa Wolfe
 7/22 18 Lake Wampanoag WS, Gardner - MBC trip
 7/24 4 Grass Rides, Hamilton - Jim Berry
 7/25 1 Attleboro - Kathleen Walker
 7/25 11 Colrain - Mark Lynch & Sheila Carroll
 7/30 5 Holliston - Richard Hildreth
 8/1 6 BMB WS, Worcester - Steve Moore
 8/1 1 Bart's Cobble, Sheffield - Bill & Nancy Callahan
 8/3 2 Sandisfield - Mark Lynch & Sheila Carroll
 8/5 4 Borden Colony, Raynham - Joe Dwelly
 8/7 6 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
 8/8 3 Meadow Road, Montague - Mark Fairbrother
 8/10 10 MHF, Sharon - Madeline Champagne
 8/13 11 Tower Hill, Boylston - Wendy Miller
 8/19 7 Holliston - Richard Hildreth
 8/25 2 Holliston - Richard Hildreth
 8/29 2 Tyringham - Mark Lynch & Sheila Carroll
 8/31 4 Moore SP, Paxton - Elise & Karl Barry
 9/5 2 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly *et al.*

9/5 5 Raynham - Tom Murray

9/7 1 Pepperell - Judith Schenck

9/15 7 Williamstown - Bo Zarembo

9/16 1 Williamsburg - Carol Duke

9/19 2 Leicester - Mark Rowden

9/20 12 Norton - Brian Cassie

9/25 4 W Bridgewater - Don Adams

10/4 1 Florence - Bill & Nancy Callahan

10/11 2 MBWMA, Newbury - Michael Newton

Aphrodite Fritillary

6/13 1 Williamsburg Flower Hill Farm - Carol Duke

6/25 1 WMWS, Princeton - Brian Cassie

7/5 12 C Franklin NABA - Mark Fairbrother *et al.*

7/8 3 MBWMA, Newbury - Matt Arey

7/10 3 Sheffield - Matt Arey

7/11 5 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

7/12 4 Wendmuth Meadow, N. Brookfield - MBC trip

7/22 1 Lake Wampanoag WS, Gardner - MBC trip

7/25 2 Colrain - Mark Lynch & Sheila Carroll

8/12 2 MBWMA, Newbury - Matt Arey

8/26 1 Barry Yard, Paxton - Elise Barry

Atlantis Fritillary

7/10 3 Washington - Gagnon, Moore, Volkle

7/10 1 Peru - Gagnon, Moore, Volkle

7/10 13 Windsor - Gagnon, Moore, Volkle

7/11 7 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

7/11 1 Williamstown - Terri Armata

8/14 1 Peru, Dorothy Rice Sanctuary - Gael Hurley

Silver-bordered Fritillary

5/25 7 Sherborn - Michael Newton

5/28 19 Sherborn - Michael Newton

5/31 3 Nasketucket Bay Reserve, Mattapoisett - Matt Arey

6/4 4 Morris Reservation, Newbury - Joe & Sharon Stichter

6/13 20 Appleton Farms, Ipswich - Howard Hoopole

7/9 2 Royalston - Steve Moore

7/10 5 Sheffield - Matt Arey

7/11 24 Concord NABA - Dick Walton *et al.*

7/19 13 Northampton NABA - Mark Fairbrother *et al.*

7/25 8 Nasketucket Bay Reserve, Mattapoisett - Michael

Newton

7/31 7 Attleboro - Brian Cassie

8/30 150 Sherborn PL - MBC trip

9/1 6 Carlisle CA Cranberry Bog - Jonathan Center

9/1 7 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly

9/6 8 Royalston - Rick Chech *et al.*

9/6 25 Rowley - Bo Zarembo

9/20 3 Norton - Brian Cassie

9/27 15 F&W Rte1, Newbury - Matt Arey

10/7 1 Appleton Farms, Ipswich - Howard Hoopole

Meadow Fritillary

5/11 2 Williamstown - Pam Weatherbee

7/3 1 Sheffield - Mark Lynch & Sheila Carroll

7/3 1 S Berkshire NABA - Rene Laubach *et al.*

7/5 8 C Franklin NABA - Mark Fairbrother *et al.*

7/11 50 Williamstown - Terri Armata

7/19 1 Northampton NABA - Mark Fairbrother *et al.*

7/22 2 Bullit TTOR, Ashfield - Tom Gagnon

8/9 11 Williamstown - Mark Lynch & Sheila Carroll

8/29 1 Tyringham - Mark Lynch & Sheila Carroll

9/15 8 Williamstown - Bo Zarembo

9/16 1 Acaxet - Mark Lynch & Sheila Carroll

Harris' Checkerspot

6/3 1 Petersham - Sue Cloutier

6/4 1 Weir Hill Res, N Andover - Howard Hoopole

6/6 10 BMB WS, Worcester - Garry Kessler

6/13 3 BMB WS, Worcester - Michael Newton

6/14 12 BMB WS, Worcester - Bill & Nancy Callahan

6/17 2 BMB WS, Worcester - Steve Moore

Pearl Crescent

5/9 1 HPM, Woburn - Michael Newton

5/13 1 Brighton - Peter DeGennaro

5/14 1 Hadley - Tom Gagnon

5/14 1 Worcester - Elise & Karl Barry

5/16 6 Chicopee - Moe O'Connor

5/15 20 Hopkinton - Dawn Puliafico

5/20 2 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico

5/24 7 Correllus State Forest, West Tusbury - Matt Pelikan

5/24 90 Western Ave CA, Sherborn - Dawn Puliafico

5/25 1 Longmeadow - Karen Parker

5/25 22 Sherborn - Michael Newton

5/26 37 NP - Bo Zarembo

5/27 45 Moore SP, Paxton - Elise & Karl Barry

5/29 7 Williamsburg Flower Hill Farm - Carol Duke

5/31 27 LPWS, Barnstable - Joe Dwelly

5/31 25 Nasketucket Bay Reserve, Mattapoisett - Matt Arey

6/4 7 MBWMA, Newbury - Joe & Sharon Stichter

6/4 1 Southwick - Karen Parker

6/4 16 Borden Colony, Raynham - Joe Dwelly

6/7 1 Otis - Moe O'Connor

6/10 5 Royalston - Mark Lynch & Sheila Carroll

6/12 21 MMP, Williamstown - Steve Moore & Barbara Volkle

7/11 68 Blackstone Valley NABA - Tom Dodd *et al.*

7/11 99 Concord NABA - Dick Walton *et al.*

7/11 5 Williamstown - Terri Armata

7/19 688 Northampton NABA - Mark Fairbrother *et al.*

7/23 60 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly

7/25 52 Wellfleet - Joe Dwelly *et al.*

7/25 100 Nasketucket Bay Reserve, Mattapoisett - Michael Newton

7/25 246 Bristol NABA - Mark Mello

7/29 1 Holliston - Richard Hildreth

7/31 30 WMWS, Princeton - Greg Dysart

8/1 10 Sheffield, Project Native-Housatonic - Bill & Nancy Callahan

8/3 228 Sandisfield - Mark Lynch & Sheila Carroll

8/7 6 Borderland St. Park, Easton - Kathleen Walker

8/9 5 MBWMA, Newbury - Marjorie Watson

8/9 15 Barre - Wendy Howes & Alan Rawle

8/9 25 Fowl Meadows, Milton - Michael Newton

8/13 3 Leicester - Mark Rowden

8/14 65 LPWS, Barnstable - Joe Dwelly

8/29 1 Tyringham - Mark Lynch & Sheila Carroll

8/30 170 Sherborn PL - MBC trip
 9/5 15 Tully Dam, Royalston - Rick Chech *et al.*
 9/5 30 Raynham - Tom Murray
 9/15 75 Borden Colony, Raynham - Joe Dwelly
 9/15 16 Williamstown - Bo Zaremba
 9/16 4 Huntington - Mark Lynch & Sheila Carroll
 9/17 1 E Longmeadow - Karen Parker
 9/19 1 Leicester - Mark Rowden
 9/27 20 Cow Common CA, Wayland - Michael Newton
 9/27 20 F&W Rte1, Newbury - Matt Arey
 10/6 11 AP Field Station, Dartmouth - Madeline Champagne
 10/8 15 Sherborn - Michael Newton
 10/12 1 AP Field Station, Dartmouth - Bo Zaremba
 10/12 1 Ipswich - Jim Berry
 10/12 2 Berkshire County - Tom Gagnon, Betsy Higgins

Baltimore Checkerspot
 6/10 2 W Bridgewater - Don Adams
 6/10 60 Marston Mills Airport - Joe Dwelly
 6/19 1 Weir Hill Res, N Andover - Howard Hoople
 6/20 50 Marston Mills Airport - Joe Dwelly
 6/20 6 Harvard - Garry Kessler
 6/24 1 AP, Dartmouth - Lauren Miller-Donnelly
 6/26 1 MHF, Sharon - Madeline Champagne
 7/10 10 Sheffield - Matt Arey
 7/10 1 Windsor - Gagnon, Moore, Volkle
 7/11 13 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 21 Williamstown - Terri Armata
 7/18 1 Pittsfield - Tom Gagnon, Harvey Allen
 7/19 27 Northampton NABA - Mark Fairbrother *et al.*
 7/22 12 Bullit TTOR, Ashfield - Tom Gagnon

Question Mark

4/15 1 Mt. Tom State Reservation, Holyoke - MBC trip
 5/24 1 Holliston - Richard Hildreth
 5/25 1 W Tisbury - Matt Pelikan
 5/29 1 Harwich - Larry Barry
 5/30 1 Moran WMA, Windsor - MBC trip
 5/30 2 Old Town Hill, Newbury - Matt Arey
 6/4 1 Bradley Estate, Canton - Lucy Merrill-Hills
 6/6 1 Amherst - Josh Rose
 6/9 1 Fowl Meadows, Milton - Paul Peterson
 6/13 1 Westborough WMA - Wendy Miller
 6/24 2 Borden Colony, Raynham - Joe Dwelly
 7/3 1 Moshup's Trail, Aquinnah - Matt Pelikan
 7/5 1 Mashpee - Erik Nielsen, Peter Trimble
 7/9 3 Moore SP, Paxton - Elise Barry, Beth Herr
 7/18 1 Pittsfield - Tom Gagnon, Harvey Allen
 7/20 1 Westport - Mark Lynch & Sheila Carroll
 7/25 1 Wellfleet - Joe Dwelly *et al.*
 8/1 1 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/7 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
 9/27 1 F&W Rte1, Newbury - Matt Arey
 10/11 1 MBWMA, Newbury - Michael Newton
 11/1 1 Westport - Lauren Miller-Donnelly

Eastern Comma

4/12 2 Mt. Tom State Reservation, Holyoke - Tom Gagnon
 4/12 3 Oxbow NWR, Harvard - Steve Moore *et al.*
 4/12 2 Holliston - Richard Hildreth
 4/12 5 Fessenden Field, Sherborn - Michael Newton
 4/18 1 SF, Boxford - Jim Berry
 4/19 1 Sheffield - Mark Lynch & Sheila Carroll
 4/29 1 Holliston - Richard Hildreth
 5/7 1 Longmeadow - Karen Parker
 5/23 1 Leicester - Mark Rowden
 6/18 2 CST, Northborough - Steve Moore
 6/22 2 Wendell - Mark Lynch & Sheila Carroll
 6/22 3 Northfield - Mark Lynch & Sheila Carroll
 6/30 2 Willow Farm, Ware - Wendy Howes
 7/3 6 MBWMA, Newbury - Marjorie Watson
 7/3 13 S Berkshire NABA - Rene Laubach *et al.*
 7/3 2 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes & Alan Rawle
 7/5 26 Huntington - Mark Lynch & Sheila Carroll
 7/5 8 N Worcester NABA - Wendy Howes *et al.*

7/8 10 MBWMA, Newbury - Matt Arey
 7/10 1 Windsor - Gagnon, Moore, Volkle
 7/11 6 Concord NABA - Dick Walton *et al.*
 7/11 6 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/13 1 E Longmeadow - Karen Parker
 7/19 5 Northampton NABA - Mark Fairbrother *et al.*
 7/22 3 Willowdale SF, Ipswich - Jim Berry
 7/28 1 E Longmeadow - Karen Parker
 8/1 1 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/2 3 Drumlin Farm, Lincoln - Dawn Puliafico
 8/9 1 Fowl Meadows, Milton - Michael Newton
 9/9 3 Berkshire County - Tom Gagnon
 9/15 1 Williamstown - Bo Zaremba
 9/23 3 North Adams, Mt. Greylock State Res. - Tom Gagnon, R & S Cloutier
 10/10 1 Wayland - Michael Newton
 10/10 2 FS WMA, Longmeadow - Bill Callahan
 11/5 1 Easthampton - Bruce King

Gray Comma

5/27 2 Berkshire County - Gagnon, Allen, Higgins
 7/2 1 Berkshire County - Ron & Sue Cloutier
 7/5 3 C Franklin NABA - Mark Fairbrother *et al.*
 7/5 2 Hampshire County - Mark Lynch & Sheila Carroll
 7/8 3 MBWMA, Newbury - Matt Arey
 7/11 1 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 8/1 2 Bart's Cobble, Sheffield - Bill & Nancy Callahan
 9/16 1 Hampshire County - Mark Lynch & Sheila Carroll
 10/12 1 Berkshire Co.unity - Tom Gagnon, Betsy Higgins

Compton Tortoiseshell

4/13 1 MHWS, Sharon - Vin Zollo
 7/11 1 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

Mourning Cloak

3/31 1 Vineyard Haven - Liz Loucks
 3/31 1 Holliston - Richard Hildreth
 4/2 1 Ward Res, Andover - Howard Hoople
 4/5 1 Norfolk - Michelle McMenamin
 4/12 4 S Main Street, New Salem - Ron & Sue Cloutier
 4/12 9 Sherborn PL - Michael Newton
 4/12 30 Mt. Tom State Reservation, Holyoke - Tom Gagnon
 4/12 4 Laughing Brook WS, Hampden - Bill Callahan
 4/12 5 CPWMA, Groveland - Jim Berry
 4/12 2 New Marlborough - Mark Lynch & Sheila Carroll
 4/15 28 Mt. Tom State Reservation, Holyoke - MBC trip
 4/15 1 Stichter Yard, Newbury - Sharon Stichter
 4/16 9 Signal Hill, Canton - Madeline Champagne
 4/28 2 Holliston - Richard Hildreth
 5/2 2 Mount Washington - Mark Lynch & Sheila Carroll
 5/2 1 Longmeadow - Karen Parker
 5/3 1 Ipswich, Dow Brook Reservoir - Jim Berry
 5/4 3 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
 5/4 1 Grafton - Steve Moore & Barbara Volkle
 5/6 5 Foxborough - Brian Cassie
 5/7 4 HPM, Woburn - Howard Hoople
 5/11 2 Ashland - Dawn Puliafico
 5/15 4 Shawme-Crowell St Pk, Sandwich - Bo Zaremba
 5/16 2 Foss Woods, Provincetown - Fred Bouchard
 5/24 1 Correllus State Forest, West Tisbury - Matt Pelikan
 5/30 4 Moran WMA, Windsor - MBC trip
 6/12 2 E Longmeadow - Karen Parker
 7/3 3 S Berkshire NABA - Rene Laubach *et al.*
 7/5 5 N Worcester NABA - Wendy Howes *et al.*
 7/10 1 Peru - Gagnon, Moore, Volkle
 7/11 1 Provincetown - Faherty, Dwelly, Barry
 7/11 5 Blackstone Valley NABA - Tom Dodd *et al.*
 7/12 2 Wendell - Mark Lynch & Sheila Carroll
 8/2 1 Drumlin Farm, Lincoln - Dawn Puliafico
 8/8 1 BMB WS, Worcester - MBC trip
 8/26 2 Ware River Watershed, Barre - Mark Lynch & Sheila Carroll

9/3 1 FS WMA, Longmeadow - Bill Callahan
 9/15 1 Borden Colony, Raynham - Joe Dwelly
 9/25 1 Amherst - Josh Rose
 10/4 1 Royalston - Carl Kamp, Alyce Mayo
 10/10 2 Wayland - Michael Newton
 10/12 1 S Main Street, New Salem - Ron & Sue Cloutier
 10/12 1 Berkshire County - Tom Gagnon, Betsy Higgins
 11/16 1 Granville - John Weeks
 12/25 1 Boxford - Matt Arey

Milbert's Tortoiseshell

5/17 1 Hubbardston - Wendy Howes & Alan Rawle
 5/24 1 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes
 6/12 1 Acton - Gigi Hopkins

American Lady

5/6 1 Holliston - Richard Hildreth
 5/7 1 Stichter Yard, Newbury - Joe Stichter
 5/11 1 Pilgrim Heights, Truro - Joe Dwelly
 5/11 1 Longmeadow - Karen Parker
 5/13 1 Brighton - Peter DeGennaro
 8/8 1 BMB WS, Worcester - MBC trip
 8/28 1 E Longmeadow - Karen Parker
 8/31 1 Boston Nature Center - Lucy Merrill-Hills
 9/6 3 Crane WMA, Falmouth - Joe Dwelly
 9/15 2 Hampden - Bill Callahan
 9/16 23 Crane WMA, Falmouth - Joe Dwelly
 10/4 1 Whately - Bill Benner
 10/6 9 Rowley - Bo Zarembo
 10/6 8 Gooseberry Neck, Westport - Michael Newton
 10/8 2 Northampton - Tom Gagnon, Betsy Higgins
 10/9 6 Nasketucket Bay Reserve, Mattapoissett - Lauren Miller-Donnelly
 10/15 5 Northampton CG - Tom Gagnon
 11/13 1 Plymouth - Robin Gross
 12/12 3 Nahant - Linda Pivacek

Painted Lady

5/11 1 W Bridgewater - Don Adams
 5/17 1 West Whately - Bill Benner
 6/13 1 Arlington - Lorene Melvin
 6/13 1 W Bridgewater - Don Adams
 7/3 2 GBH, Canton - Michael Newton
 8/2 1 Plymouth - Robin Gross
 9/5 1 Raynham - Tom Murray
 9/15 1 Northampton CG - Ron & Sue Cloutier
 9/19 2 Allens Pond Wildlife Sanctuary, Dartmouth - Steve Moore & Barbara Volkle
 10/11 1 Plum Island, Newbury - Erik Nielsen
 10/14 1 Plymouth - Robin Gross
 10/21 2 AP Field Station, Dartmouth - Lauren Miller-Donnelly

Red Admiral

4/12 1 Crane Beach, Ipswich - Matt Arey
 5/5 1 Stichter Yard, Newbury - Joe Stichter
 5/14 1 Brighton - Peter DeGennaro
 5/14 1 Hadley - Tom Gagnon
 5/21 1 Lamson Rd, Foxborough - Madeline Champagne
 5/22 1 Wendell - Mark Lynch & Sheila Carroll
 5/24 1 Longmeadow - Karen Parker
 5/26 1 NP - Bo Zarembo
 5/28 4 FS WMA, Longmeadow - Bill Callahan
 5/30 1 Highland Farm, Belmont - Mark Rainey
 6/9 5 Fowl Meadows, Milton - Paul Peterson
 6/14 3 Field Farm, Williamstown - Steve Moore & Barbara Volkle
 6/18 4 Sylvan Nursery, Westport - Howard Hoople
 6/22 1 W Bridgewater - Don Adams
 6/25 1 E Longmeadow - Karen Parker
 7/1 3 DCR Kristoff Farm, Sterling - Wendy Howes
 7/3 3 Sheffield - Mark Lynch & Sheila Carroll
 7/3 3 MBWMA, Newbury - Marjorie Watson
 7/3 2 Moshup's Trail, Aquinnah - Matt Pelikan
 7/3 22 S Berkshire NABA - Rene Laubach *et al.*
 7/5 15 C Franklin NABA - Mark Fairbrother *et al.*
 7/5 15 N Worcester NABA - Wendy Howes *et al.*
 7/5 27 Huntington - Mark Lynch & Sheila Carroll
 7/6 4 Winchendon - Mark Lynch & Sheila Carroll

7/8 2 Pine Tree Nursery, Chatham - Mark Faherty
 7/10 1 Windsor - Gagnon, Moore, Volkle
 7/10 10 Sheffield - Matt Arey
 7/10 3 Westport - Lauren Miller-Donnelly
 7/11 7 Sandisfield - Mark Lynch & Sheila Carroll
 7/11 19 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/11 5 Provincetown - Faherty, Dwelly, Barry
 7/11 4 Williamstown - Terri Armata
 7/11 44 Concord NABA - Dick Walton *et al.*
 7/11 12 Truro - Faherty, Dwelly, Barry
 7/12 2 Sudbury - Moore, Kessler, Reid
 7/12 3 Chicopee - Moe O'Connor
 7/16 3 Rosindale, Boston - Lucy Merrill-Hills
 7/16 1 Arnold Arboretum, Boston - Lucy Merrill-Hills
 7/19 29 Northampton NABA - Mark Fairbrother *et al.*
 7/24 1 Harwich - Larry Barry
 7/25 1 W Springfield - Steve Shelasky
 7/29 1 N Andover - Jim Berry
 8/1 2 Bart's Cobble, Sheffield - Bill & Nancy Callahan
 8/2 1 Woods Hole - Les Garrick
 8/7 1 Arlington - Lorene Melvin
 8/12 3 MBWMA, Newbury - Matt Arey
 8/31 2 Boston Nature Center - Lucy Merrill-Hills
 9/5 1 Winchendon - Mark Lynch & Sheila Carroll
 9/15 1 Williamstown - Bo Zarembo
 9/19 3 Sylvan Nursery, Dartmouth - Steve Moore & Barbara Volkle
 10/6 2 Sylvan Nursery, Dartmouth - Michael Newton
 10/11 1 MBWMA, Newbury - Matt Arey
 10/31 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
 12/12 1 Ipswich - Steve Mirick

Common Buckeye

5/31 1 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
 6/11 1 Cow Common CA, Wayland - Michael Newton
 7/5 2 Mashpee - Erik Nielsen, Peter Trimble
 7/8 1 MBWMA, Newbury - Matt Arey
 7/11 1 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 2 Concord NABA - Dick Walton *et al.*
 7/13 1 Belle Isle Marsh, Boston - Paul Peterson
 8/14 1 Stichter Yard, Newbury - Sharon Stichter
 8/20 1 Crane WMA, Falmouth - Joe Dwelly
 9/6 3 Crane WMA, Falmouth - Joe Dwelly
 9/16 2 S Dartmouth - Ron & Sue Cloutier
 9/16 4 Crane WMA, Falmouth - Joe Dwelly
 9/27 1 F&W Rte1, Newbury - Matt Arey
 10/6 1 W Meadows, Northampton - Tom Gagnon
 10/7 2 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly

10/12 1 Westport - Mark Lynch, Sheila Carroll
 10/15 1 Northampton CG - Tom Gagnon
 10/21 1 AP, Dartmouth - Lauren Miller-Donnelly

Red-spotted Admiral

6/5 1 Sharon - Madeline Champagne
 7/5 6 C Franklin NABA - Mark Fairbrother *et al.*
 7/11 1 Williamstown - Terri Armata
 7/25 1 Bristol NABA - Mark Mello
 8/13 1 Leicester - Mark Rowden

Red-spotted Purple

5/26 1 Sherborn - Michael Newton
 5/30 2 North Adams, Mt. Greylock State Res. - MBC trip
 5/30 20 Old Town Hill, Newbury - Matt Arey
 5/30 4 DCR Kristoff Farm, Sterling - Wendy Howes & Alan Rawle
 5/30 1 Acoaxet - Mark Lynch & Sheila Carroll
 6/3 3 Winchendon - Mark Lynch & Sheila Carroll
 6/4 5 MBWMA, Newbury - Joe & Sharon Stichter
 6/10 42 Royalston - Mark Lynch & Sheila Carroll
 6/13 2 Williamsburg Flower Hill Farm - Carol Duke
 6/14 26 Sandisfield - Mark Lynch & Sheila Carroll
 6/15 1 Rosindale, Boston - Lucy Merrill-Hills
 6/18 1 CST, Northborough - Steve Moore
 6/22 5 Wendell - Mark Lynch & Sheila Carroll

6/27 3 Warwick - Mark Lynch & Sheila Carroll
 7/10 1 Peru - Gagnon, Moore, Volkle
 7/11 1 Provincetown - Faherty, Dwelly, Barry
 7/11 16 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/22 4 Willowdale SF, Ipswich - Jim Berry
 7/25 1 Attleboro - Kathleen Walker
 8/1 9 Winchendon - Mark Lynch & Sheila Carroll
 8/7 3 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
 8/9 5 Fowl Meadows, Milton - Michael Newton
 8/13 1 Amherst - Josh Rose
 8/14 1 Peru, Dorothy Rice Sanctuary - Gael Hurley
 8/20 1 Holliston - Richard Hildreth
 8/26 1 Barry Yard, Paxton - Elise Barry
 9/9 1 Berkshire County - Tom Gagnon
 9/15 1 Mt. Tom State Reservation, Holyoke - Tom Gagnon & Betsy Higgins
 9/29 1 Falmouth - Alison Robb
 10/4 1 Stonehill College, Easton - Nick Block

Viceroy

5/24 1 Sherborn PL - Dawn Puliafico
 5/25 1 BMB WS, Worcester - Wendy Miller, Barbara Volkle
 5/30 1 Old Town Hill, Newbury - Matt Arey
 6/3 1 Winchendon - Mark Lynch & Sheila Carroll
 6/4 2 MBWMA, Newbury - Joe & Sharon Stichter
 6/6 1 Amherst - Josh Rose
 6/12 3 MMP, Williamstown - Steve Moore & Barbara Volkle
 6/13 3 Dighton PL - MBC trip
 7/11 4 Blackstone Valley NABA - Tom Dodd *et al.*
 7/19 12 Northampton NABA - Mark Fairbrother *et al.*
 7/25 4 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
 7/25 1 Colrain - Mark Lynch & Sheila Carroll
 8/1 1 Lime Kiln, Sheffield - Bill & Nancy Callahan
 8/7 1 Canoe Meadows, Pittsfield - Gael Hurley
 8/9 3 MBWMA, Newbury - Marjorie Watson
 9/5 1 Raynham - Tom Murray
 9/6 2 Royalston - Rick Chech *et al.*
 9/7 1 Ipswich, New England Biolabs - Jim Berry
 9/16 3 Huntington - Mark Lynch & Sheila Carroll
 10/7 1 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly

Hackberry Emperor

7/10 3 Sheffield - Matt Arey

Tawny Emperor

7/3 1 S Berkshire NABA - Rene Laubach *et al.*
 7/10 4 Sheffield - Matt Arey
 7/19 1 Northampton NABA - Mark Fairbrother *et al.*

Northern Pearly-Eye

6/21 1 Sherborn - Michael Newton
 6/24 1 Holliston - Richard Hildreth
 7/1 2 DCR Kristoff Farm, Sterling - Wendy Howes
 7/3 1 S Berkshire NABA - Rene Laubach **et al**
 7/3 6 New Salem - Ron & Sue Cloutier
 7/5 6 C Franklin NABA - Mark Fairbrother *et al.*
 7/5 12 N Worcester NABA - Wendy Howes *et al.*
 7/10 1 Peru - Gagnon, Moore, Volkle
 7/10 1 Washington - Gagnon, Moore, Volkle
 7/15 1 Athol - Dave Small
 7/17 1 Oxbow NWR, Harvard - Mark Lynch & Sheila Carroll
 7/18 3 Pittsfield - Tom Gagnon, Harvey Allen
 7/19 2 Northampton NABA - Mark Fairbrother *et al.*
 7/25 1 Bristol NABA - Mark Mello

Eyed Brown

7/3 1 Sheffield - Mark Lynch & Sheila Carroll
 7/5 1 N Worcester NABA - Wendy Howes *et al.*
 7/5 5 C Franklin NABA - Mark Fairbrother *et al.*
 7/11 2 Sandisfield - Mark Lynch & Sheila Carroll
 7/12 1 Sudbury - Moore, Kessler, Reid
 7/12 3 Chicopee - Moe O'Connor
 7/17 11 Oxbow NWR, Harvard - Mark Lynch & Sheila Carroll
 7/26 1 Windsor - Gael Hurley
 8/1 1 Winchendon - Mark Lynch & Sheila Carroll
 8/8 1 Holliston - Richard Hildreth

Appalachian Brown

6/4 1 FS WMA, Longmeadow - Bill Callahan
 6/7 2 Norfolk, Miller Street field - Madeline Champagne
 6/18 1 CST, Westborough - Steve Moore
 6/24 3 Borden Colony, Raynham - Joe Dwelly
 6/27 2 Warwick - Mark Lynch & Sheila Carroll
 7/5 3 N Worcester NABA - Wendy Howes *et al.*
 7/10 10 Sheffield - Matt Arey
 7/11 1 Provincetown - Faherty, Dwelly, Barry
 7/12 10 CST, Westborough - MBC trip
 7/24 1 Hubbardston - Wendy Howes
 7/25 1 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
 8/1 1 Bart's Cobble, Sheffield - Bill & Nancy Callahan
 8/9 8 Fowl Meadows, Milton - Michael Newton
 8/13 1 Tower Hill, Boylston - Wendy Miller
 8/20 1 Shrewsbury - Bruce deGraaf
 9/3 6 FS WMA, Longmeadow - Bill Callahan
 9/28 1 CST, Westborough - Steve Moore

Little Wood-Satyr

5/21 1 Tower Hill, Boylston - Wendy Miller
 5/22 3 Holyoke - MBC trip
 5/25 21 Sherborn - Michael Newton
 5/26 2 NP - Bo Zarembo
 5/28 4 Sherborn - Michael Newton
 5/29 29 Brewster Public Gardens, Brewster - Joe Dwelly
 5/29 80 Wilbraham - Bill Callahan
 5/29 4 Williamsburg Flower Hill Farm - Carol Duke
 5/30 24 Highland Farm, Belmont - Mark Rainey
 5/30 25 The Ordway Property, W Newbury - Bo Zarembo
 5/31 4 Holliston - Richard Hildreth
 5/31 75 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
 6/3 51 Winchendon - Mark Lynch & Sheila Carroll
 6/4 23 Borden Colony, Raynham - Joe Dwelly
 6/4 2 MBWMA, Newbury - Joe & Sharon Stichter
 6/5 40 TTOR Cedar River, Millis - Madeline Champagne
 6/8 2 W Bridgewater - Don Adams
 6/10 46 Royalston - Mark Lynch & Sheila Carroll
 6/10 3 Tower Hill, Boylston - Wendy Miller
 6/12 97 MMP, Williamstown - Steve Moore & Barbara Volkle
 6/13 40 Sturbridge, Wells State Park - Mark Lynch & Sheila Carroll
 6/30 6 Willow Farm, Ware - Wendy Howes
 7/1 9 DCR Kristoff Farm, Sterling - Wendy Howes
 7/3 3 Moshup's Trail, Aquinnah - Matt Pelikan
 7/3 26 S Berkshire NABA - Rene Laubach *et al.*
 7/3 11 MBWMA, Newbury - Marjorie Watson
 7/5 66 N Worcester NABA - Wendy Howes *et al.*
 7/5 26 C Franklin NABA - Mark Fairbrother *et al.*
 7/5 150 Mashpee - Erik Nielsen, Peter Trimble
 7/6 75 Borden Colony, Raynham - Joe Dwelly
 7/9 11 Moore SP, Paxton - Elise Barry, Beth Herr
 7/10 10 Sheffield - Matt Arey
 7/11 49 Concord NABA - Dick Walton *et al.*
 7/11 75 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 23 Truro - Faherty, Dwelly, Barry
 7/12 3 Wendell - Mark Lynch & Sheila Carroll
 7/12 17 CST, Northborough - MBC trip
 7/19 21 Northampton NABA - Mark Fairbrother *et al.*
 7/22 2 Willowdale SF, Ipswich - Jim Berry
 7/25 1 Wellfleet - Joe Dwelly *et al.*
 7/25 7 Bristol NABA - Mark Mello
 7/26 1 E Longmeadow - Karen Parker
 8/1 2 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/9 1 Barre - Wendy Howes & Alan Rawle

Common Ringlet

5/23 1 Williamsburg Flower Hill Farm - Carol Duke
 5/25 3 Sherborn - Michael Newton
 5/26 12 NP - Bo Zarembo
 5/28 59 Muir Meadow, Paxton - Elise Barry
 5/29 5 Williamsburg Flower Hill Farm - Carol Duke
 5/30 20 The Ordway Property, W Newbury - Bo Zarembo
 5/30 2 Moran WMA, Windsor - MBC trip

5/31 10 Myles Standish State For. Carver - Matt Arey
 6/4 32 Borden Colony, Raynham - Joe Dwelley
 6/7 30 Worcester Airport - Dolores Price
 6/10 6 Tower Hill, Boylston - Wendy Miller
 6/11 12 Hopkin's Forest, Williamstown - Steve Moore & Barbara Volkle
 6/12 1 North Adams, Mt. Greylock State Res. - Larry Barry
 6/12 51 MMP, Williamstown - Steve Moore & Barbara Volkle
 6/13 5 Dighton PL - MBC trip
 6/13 30 Appleton Farms, Ipswich - Howard Hoople
 6/14 125 Sandisfield - Mark Lynch & Sheila Carroll
 6/22 3 Harvard - Steve Moore
 7/5 7 N Worcester NABA - Wendy Howes *et al.*
 7/11 3 Williamstown - Terri Armata
 7/31 50 WMWS, Princeton - Greg Dysart
 8/1 12 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/5 14 Borden Colony, Raynham - Joe Dwelley
 8/8 3 Ipswich - Linda Ireland
 8/9 9 Williamstown - Mark Lynch & Sheila Carroll
 8/10 6 MHF, Sharon - Madeline Champagne
 8/22 116 Sandisfield - Mark Lynch & Sheila Carroll
 8/29 10 Tyringham - Mark Lynch & Sheila Carroll
 9/5 30 Tully Dam, Royalston - Rick Chech *et al.*
 9/15 2 Williamstown - Bo Zarembo
 9/23 3 North Adams, Mt. Greylock State Res. - Tom Gagnon, R & S Cloutier
 10/6 4 Wachusett Res, Clinton - Bruce deGraaf
 10/12 1 Westport - Mark Lynch, Sheila Carroll

Common Wood-Nymph

7/3 1 Williamsburg Flower Hill Farm - Carol Duke
 7/3 143 S Berkshire NABA - Rene Laubach *et al.*
 7/5 1 N Worcester NABA - Wendy Howes *et al.*
 7/5 18 Mashpee - Erik Nielsen, Peter Trimble
 7/5 1 MBWMA, Newbury - Marjorie Watson
 7/6 26 Borden Colony, Raynham - Joe Dwelley
 7/10 30 Sheffield - Matt Arey
 7/11 14 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
 7/11 207 Blackstone Valley NABA - Tom Dodd *et al.*
 7/11 26 Truro - Faherty, Dwelley, Barry
 7/12 2 Sudbury - Moore, Kessler, Reid
 7/18 63 Pittsfield - Tom Gagnon, Harvey Allen
 7/18 34 Falmouth NABA - Alison Robb, *et al.*
 7/19 210 Northampton NABA - Mark Fairbrother *et al.*
 7/24 45 Grass Rides, Hamilton - Jim Berry
 7/25 49 Bristol NABA - Mark Mello
 7/26 1 Wareham - Laura Sayward
 7/29 50 Stackyard Rd, Rowley - Mark Lynch & Sheila Carroll
 7/31 100 WMWS, Princeton - Greg Dysart
 8/1 6 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
 8/5 10 Borden Colony, Raynham - Joe Dwelley
 8/9 15 Plum Island, Newbury - Matt Arey
 8/10 8 MHF, Sharon - Madeline Champagne
 8/29 1 Tyringham - Mark Lynch & Sheila Carroll
 9/5 60 Plum Island, Newbury - Mark Lynch & Sheila Carroll
 9/5 5 Raynham - Tom Murray
 9/6 12 Main Street fields, Royalston - Rick Chech *et al.*
 9/27 1 F&W Rte1, Newbury - Matt Arey

Silver-spotted Skipper

5/18 1 Longmeadow - Karen Parker
 5/22 1 Holyoke - MBC trip
 5/26 1 Sherborn - Michael Newton
 5/30 2 Old Town Hill, Newbury - Matt Arey
 6/4 3 FS WMA, Longmeadow - Bill Callahan
 6/5 2 Hatfield - Bruce King
 6/10 1 Crane WMA, Falmouth - Joe Dwelley
 6/11 4 Hopkin's Forest, Williamstown - Steve Moore & Barbara Volkle
 6/11 1 Champagne yard, Foxborough - Madeline Champagne
 6/13 5 BMB WS, Worcester - Michael Newton
 6/17 3 FS WMA, Longmeadow - Bill Callahan
 6/19 3 Lincoln - Paul Peterson
 6/19 1 Holliston - Richard Hildreth

6/22 3 Montague - Mark Lynch & Sheila Carroll
 6/24 6 Borden Colony, Raynham - Joe Dwelley
 6/27 2 HPM, Woburn - MBC trip
 7/2 1 Thompson Fields, Harwich - Joe Dwelley
 7/2 3 Wrentham - Madeline Champagne
 7/3 21 S Berkshire NABA - Rene Laubach *et al.*
 7/3 4 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes & Alan Rawle
 7/3 1 Tisbury Meadow - Matt Pelikan
 7/5 7 MBWMA, Newbury - Marjorie Watson
 7/5 44 N Worcester NABA - Wendy Howes *et al.*
 7/5 112 C Franklin NABA - Mark Fairbrother *et al.*
 7/9 2 E Longmeadow - Karen Parker
 7/10 15 Sheffield - Matt Arey
 7/11 38 Concord NABA - Dick Walton *et al.*
 7/11 11 Truro - Faherty, Dwelley, Barry
 7/11 40 Blackstone Valley NABA - Tom Dodd *et al.*
 7/12 6 MMP, Williamstown - MBC trip
 7/13 1 Roslindale, Boston - Lucy Merrill-Hills
 7/15 1 Athol - Dave Small
 7/16 2 Tower Hill, Boylston - Wendy Miller
 7/19 30 Northampton NABA - Mark Fairbrother *et al.*
 7/19 22 Leicester - MBC trip
 7/23 1 Leicester - Mark Rowden
 7/25 3 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
 7/27 1 Onset - Christine Houghton
 7/31 4 Holliston - Richard Hildreth
 8/1 2 Bart's Cobble, Sheffield - Bill & Nancy Callahan
 8/9 1 MBWMA, Newbury - Marjorie Watson
 8/15 1 Walpole - Anna Eaton Butera
 8/21 2 Holliston - Richard Hildreth
 9/5 6 Northampton CG - MBC trip
 9/15 1 Hampden - Bill Callahan
 9/15 1 Boston Nature Center - Lucy Merrill-Hills
 9/16 2 S Dartmouth - Ron & Sue Cloutier

Long-tailed Skipper

9/24 1 Newton - Brian Cassie
 9/26 2 Dartmouth - Matt Arey

Hoary Edge

6/10 1 Tower Hill, Boylston - Wendy Miller
 6/14 3 BMB WS, Worcester - Bill & Nancy Callahan
 7/5 2 C Franklin NABA - Mark Fairbrother *et al.*
 7/10 1 Sheffield - Matt Arey

Southern Cloudywing

6/7 1 Norfolk, Miller Street field - Madeline Champagne
 6/10 6 Crane WMA, Falmouth - Joe Dwelley
 6/13 3 BMB WS, Worcester - Michael Newton
 6/20 4 Crane WMA, Falmouth - MBC trip
 6/21 1 Sherborn - Michael Newton
 6/26 1 MHF, Sharon - Madeline Champagne
 7/3 6 GBH, Canton - Michael Newton
 7/5 2 Mashpee - Erik Nielsen, Peter Trimble
 7/5 2 C Franklin NABA - Mark Fairbrother *et al.*
 7/11 5 Blackstone Valley NABA - Tom Dodd *et al.*
 8/6 1 Crane WMA, Falmouth - Joe Dwelley

Northern Cloudywing

5/25 1 BMB WS, Worcester - Wendy Miller, Barbara Volkle
 5/25 6 W Tisbury - Matt Pelikan
 5/28 3 Muir Meadow, Paxton - Elise Barry
 5/29 4 Wilbraham - Bill Callahan
 6/10 4 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
 6/12 8 MMP, Williamstown - Steve Moore & Barbara Volkle
 6/13 27 BMB WS, Worcester - Michael Newton
 7/3 1 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes & Alan Rawle
 7/5 2 C Franklin NABA - Mark Fairbrother *et al.*
 7/25 1 Willow Farm, Ware - MBC trip

Dreamy Duskywing

5/17 1 MSSF, Plymouth - MBC trip
 5/22 1 Wendell - Mark Lynch & Sheila Carroll
 5/22 1 Holyoke - MBC trip

5/24 2 W Newbury - Bo Zaremba
5/25 10 BMB WS, Worcester - Wendy Miller, Barbara Volkle
5/27 2 Berkshire County - Gagnon, Allen, Higgins
5/31 5 Myles Standish State For. Carver - Matt Arey
6/3 1 Petersham - Sue Cloutier
6/4 1 Norfolk, Miller Street field - Madeline Champagne
6/14 1 Windsor - Steve Moore & Barbara Volkle
7/31 1 Lee - Gael Hurley

Sleepy Duskywing

5/8 3 Correllus State Forest, West Tusbury - Matt Pelikan
5/11 1 Pilgrim Heights, Truro - Joe Dwelly
5/14 1 Dauphinais Park, Grafton - Steve Moore
5/24 6 Correllus State Forest, West Tusbury - Matt Pelikan
6/6 1 BMB WS, Worcester - Garry Kessler
6/13 1 Dighton PL - MBC trip
6/13 6 BMB WS, Worcester - Michael Newton

Juvenal's Duskywing

5/6 5 HPM, Woburn - Matt Arey
5/7 1 Longmeadow - Karen Parker
5/8 9 Correllus State Forest, West Tusbury - Matt Pelikan
5/9 4 Weir Hill Res, N Andover - MBC trip
5/11 6 Pilgrim Heights, Truro - Joe Dwelly
5/12 4 Falmouth - Larry Barry
5/12 1 Vineyard Haven - Matt Pelikan
5/13 8 Westborough - Dawn Puliafico
5/14 4 Wellfleet Bay Ws, Wellfleet - Mark Faherty
5/15 20 Shawme-Crowell St Pk, Sandwich - Bo Zaremba
5/17 1 Fitzgerald Lake, Florence - Tom Gagnon *et al.*
5/17 3 Quabbin Park, Belchertown - Mark Lynch & Sheila Carroll
5/22 3 Holliston - Richard Hildreth
5/24 16 Correllus State Forest, West Tusbury - Matt Pelikan
5/24 4 Sherborn PL - Dawn Puliafico
5/26 4 NP - Bo Zaremba
5/30 3 North Adams, Mt. Greylock State Res. - MBC trip
6/4 4 Borden Colony, Raynham - Joe Dwelly
6/10 2 Crane WMA, Falmouth - Joe Dwelly
7/3 1 S Berkshire NABA - Rene Laubach *et al.*
7/15 1 Holliston - Richard Hildreth

Horace's Duskywing

5/15 1 Longmeadow - Karen Parker
5/30 2 Old Town Hill, Newbury - Matt Arey
5/31 15 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
5/31 10 Myles Standish State For. Carver - Matt Arey
6/13 2 BMB WS, Worcester - Michael Newton
7/3 1 GBH, Canton - Michael Newton
7/11 1 Blackstone Valley NABA - Tom Dodd *et al.*
7/18 1 Falmouth NABA - Alison Robb, *et al.*
7/25 1 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
8/6 1 Crane WMA, Falmouth - Joe Dwelly
8/9 3 MBWMA, Newbury - Marjorie Watson
8/12 1 MBWMA, Newbury - Matt Arey
9/16 1 Crane WMA, Falmouth - Joe Dwelly
9/21 1 Northampton CG - Tom Gagnon, R & S Cloutier

Common Checkered-Skipper

9/12 1 Northampton CG - Tom Gagnon
9/27 1 Pittsfield - Gael Hurley
9/28 1 Northampton CG - Ron & Sue Cloutier
10/4 1 Northampton CG - Bill & Nancy Callahan

Common Sootywing

5/8 1 Shrewsbury - Bruce deGraaf
5/12 1 Leicester - Mark Rowe
5/30 6 DCR Kristoff Farm, Sterling - Wendy Howes & Alan Rawle
7/11 4 Concord NABA - Dick Walton *et al.*
7/11 1 Blackstone Valley NABA - Tom Dodd *et al.*
7/15 1 Amherst - Josh Rose
7/25 8 Willow Farm, Ware - MBC trip
7/28 2 Holliston - Richard Hildreth
8/4 1 Amherst - Josh Rose
9/5 1 Northampton CG - MBC trip
9/6 1 Nasketucket Bay Reserve, Mattapoisett - Michael Newton

9/27 2 F&W Rte1, Newbury - Matt Arey

Arctic Skipper

5/27 48 Berkshire County - Gagnon, Allen, Higgins
5/29 1 Hubbardston - Wendy Howes
5/29 1 Moran WMA, Windsor - Sue Cloutier
5/30 1 Townsend State Forest - Bo Zaremba
5/30 40 Moran WMA, Windsor - MBC trip
6/14 4 Windsor - Steve Moore & Barbara Volkle
Least Skipper
6/13 1 Williamsburg Flower Hill Farm - Carol Duke
6/13 3 Dighton PL - MBC trip
6/13 1 Appleton Farms, Ipswich - Howard Hoople
6/14 3 Field Farm, Williamstown - Steve Moore & Barbara Volkle

6/17 10 FS WMA, Longmeadow - Bill Callahan
6/22 7 Northfield - Mark Lynch & Sheila Carroll
6/24 3 Borden Colony, Raynham - Joe Dwelly
6/30 1 Chilmark - Matt Pelikan
7/3 4 S Berkshire NABA - Rene Laubach *et al.*
7/4 9 FS WMA, Longmeadow - Bill Callahan
7/5 5 C Franklin NABA - Mark Fairbrother *et al.*
7/12 2 CST, Northborough - MBC trip
7/28 1 Holliston - Richard Hildreth
7/31 1 Bart's Cobble, Sheffield - Russ Hopping
8/9 15 Fowl Meadows, Milton - Michael Newton
8/14 1 Wendell - Mark Lynch & Sheila Carroll
8/18 1 Lakeville - Myer Bornstein
8/29 1 Tyringham - Mark Lynch & Sheila Carroll
9/3 8 FS WMA, Longmeadow - Bill Callahan
9/16 4 FS WMA, Longmeadow - Bill Callahan
9/26 4 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey
10/12 1 Cherry Hill Res, W Newbury - Tom Murray
10/12 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly

European Skipper

6/4 24 Borden Colony, Raynham - Joe Dwelly
6/10 100 Tower Hill, Boylston - Wendy Miller
6/12 29 MWP, Williamstown - Steve Moore & Barbara Volkle
6/12 30 Muir Meadow, Paxton - Elise Barry
6/13 21 Dighton PL - MBC trip
6/14 8 Windsor - Steve Moore & Barbara Volkle
6/20 2 Marston Mills Airport - Joe Dwelly
6/25 36 WMWS, Princeton - Brian Cassie
7/2 100 Thompson Fields, Harwich - Joe Dwelly
7/3 362 S Berkshire NABA - Rene Laubach *et al.*
7/5 88 N Worcester NABA - Wendy Howes *et al.*
7/11 12 Truro - Faherty, Dwelly, Barry
7/11 14 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

7/12 1 Wendmuth Meadow, N. Brookfield - MBC trip
7/18 2 Pittsfield - Tom Gagnon, Harvey Allen

Fiery Skipper

9/15 1 White Horse Beach, Plymouth - Mark Faherty
9/19 2 Allens Pond Wildlife Sanctuary, Dartmouth - Steve Moore & Barbara Volkle
9/21 1 Florence - Tom Gagnon, R & S Cloutier
9/26 1 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey
9/27 1 Wayland - Michael Newton
10/11 2 Endicott Road, Middleton - Matt Arey

Leonard's Skipper

9/3 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
9/5 4 BMB WS, Worcester - Bruce deGraaf
9/5 1 Tully Dam, Royalston - Rick Chech *et al.*
9/16 3 Crane WMA, Falmouth - Joe Dwelly
9/26 1 Allens Pond Wildlife Sanctuary, Dartmouth - Matt Arey
10/6 1 AP Field Station, Dartmouth - Michael Newton

Cobweb Skipper

5/15 6 Edgartown - Matt Pelikan
5/24 6 Correllus State Forest, West Tusbury - Matt Pelikan

Indian Skipper

5/26 6 NP - Bo Zaremba
5/30 6 The Ordway Property, W Newbury - Bo Zaremba
5/31 25 Myles Standish State For. Carver - Matt Arey
6/13 1 Appleton Farms, Ipswich - Howard Hoople

6/13 3 Dighton PL - MBC trip
6/14 4 Northampton - Steve Moore & Barbara Volkle
7/5 2 Mashpee - Erik Nielsen, Peter Trimble
7/28 1 Holliston - Richard Hildreth

Peck's Skipper

5/24 3 Longmeadow - Karen Parker
5/26 2 Holliston - Richard Hildreth
5/28 7 Sherborn - Michael Newton
5/29 7 Brewster Public Gardens, Brewster - Joe Dwelly
5/30 4 Cherry Hill Res, W Newbury - Bo Zaremba
6/3 16 Winchendon - Mark Lynch & Sheila Carroll
6/4 48 Borden Colony, Raynham - Joe Dwelly
6/4 1 MBWMA, Newbury - Joe & Sharon Stichter
6/5 2 TTOR Cedar River, Millis - Madeline Champagne
6/6 1 Amherst - Josh Rose
6/10 8 Marston Mills Airport - Joe Dwelly
6/11 200 Cow Common CA, Wayland - Michael Newton
6/12 6 MMP, Williamstown - Steve Moore & Barbara Volkle
6/13 7 Dighton PL - MBC trip
6/13 1 Williamsburg Flower Hill Farm - Carol Duke
6/14 6 BMB WS, Worcester - Bill & Nancy Callahan
7/11 20 Williamstown - Terri Armata
7/24 2 E Longmeadow - Karen Parker
7/25 1 Eastham - Joe Dwelly *et al.*
7/26 2 IRP, N Reading - Linda Ireland
7/27 4 Holliston - Richard Hildreth
7/30 1 Somerset - Don Gagnon
8/1 3 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan

8/2 12 Holliston - Richard Hildreth
8/2 17 E Longmeadow - Karen Parker
8/5 15 Borden Colony, Raynham - Joe Dwelly
8/6 16 E Longmeadow - Karen Parker
8/7 10 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/12 3 MBWMA, Newbury - Matt Arey
8/13 12 Amherst - Josh Rose
8/13 2 Arnold Arboretum, Boston - Lucy Merrill-Hills
8/19 1 Norton - Myer Bornstein
8/22 3 Sandisfield - Mark Lynch & Sheila Carroll
8/26 3 Holliston - Richard Hildreth
8/30 10 Sherborn PL - MBC trip
9/5 10 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
9/6 10 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
9/19 2 Nahant - Bo Zaremba
9/27 3 F&W Rte1, Newbury - Matt Arey
10/8 1 W Meadows, Northampton - Tom Gagnon, Betsy Higgins

10/13 1 Holliston - Richard Hildreth

Tawny-edged Skipper

5/22 4 Holliston - Richard Hildreth
5/27 1 E Longmeadow - Karen Parker
5/28 3 Sherborn - Michael Newton
5/29 1 Brewster Public Gardens, Brewster - Joe Dwelly
6/4 1 FS WMA, Longmeadow - Bill Callahan
6/6 1 BMB WS, Worcester - Garry Kessler
6/13 3 Dighton PL - MBC trip
6/14 10 Northampton - Steve Moore & Barbara Volkle
6/26 6 Borden Colony, Raynham - Joe Dwelly
7/3 1 Edgartown - Matt Pelikan
7/11 1 Williamstown - Terri Armata
7/23 5 Holliston - Richard Hildreth
7/26 4 E Longmeadow - Karen Parker
8/1 1 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
8/5 2 Borden Colony, Raynham - Joe Dwelly
8/8 10 Holliston - Richard Hildreth
8/14 1 LPWS, Barnstable - Joe Dwelly
8/18 2 E Longmeadow - Karen Parker
8/25 2 Holliston - Richard Hildreth
8/31 1 Moore SP, Paxton - Elise & Karl Barry
9/5 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly
10/11 2 Endicott Road, Middleton - Matt Arey

Crossline Skipper

6/22 2 CST, Northborough - Steve Moore
6/30 1 W Tisbury - Matt Pelikan
7/3 1 E Longmeadow - Karen Parker
7/5 2 C Franklin NABA - Mark Fairbrother *et al.*
7/5 4 Mashpee - Erik Nielsen, Peter Trimble
7/5 3 N Worcester NABA - Wendy Howes *et al.*
7/11 12 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 7 Truro - Faherty, Dwelly, Barry
7/17 1 Holliston - Richard Hildreth
7/21 2 E Longmeadow - Karen Parker
7/24 1 Holliston - Richard Hildreth
7/25 2 Nasketucket Bay Reserve, Mattapoisett - Michael Newton
7/25 1 Wellfleet - Joe Dwelly *et al.*
8/8 1 BMB WS, Worcester - MBC trip
8/8 1 Holliston - Richard Hildreth

Long Dash

5/25 1 W Tisbury - Matt Pelikan
5/30 1 The Ordway Property, W Newbury - Bo Zaremba
5/30 10 Highland Farm, Belmont - Mark Rainey
6/4 1 Weir Hill Res, N Andover - Howard Hoople
6/12 8 Muir Meadow, Paxton - Elise Barry
6/27 2 Highland Farm, Belmont - Mark Rainey
7/2 6 Thompson Fields, Harwich - Joe Dwelly
7/3 11 S Berkshire NABA - Rene Laubach *et al.*
7/5 3 C Franklin NABA - Mark Fairbrother *et al.*
9/16 1 Crane WMA, Falmouth - Joe Dwelly

Northern Broken-Dash

6/27 2 GBH, Canton - MBC trip
7/3 2 S Berkshire NABA - Rene Laubach *et al.*
7/3 4 GBH, Canton - Michael Newton
7/5 1 Mashpee - Erik Nielsen, Peter Trimble
7/5 24 C Franklin NABA - Mark Fairbrother *et al.*
7/11 13 Blackstone Valley NABA - Joe Dwelly
7/11 37 Williamstown - Terri Armata
7/11 1 E Longmeadow - Karen Parker
7/11 26 Truro - Faherty, Dwelly, Barry
7/16 1 Roslindale, Boston - Lucy Merrill-Hills
7/18 3 Pittsfield - Tom Gagnon, Harvey Allen
7/18 4 Falmouth NABA - Alison Robb, *et al.*
7/19 31 Northampton NABA - Mark Fairbrother *et al.*
7/19 4 Leicester - MBC trip
7/22 1 Lake Wampanoag WS, Gardner - MBC trip
7/24 2 Hubbardston - Wendy Howes
7/25 36 Bristol NABA - Mark Mello
7/25 1 Attleboro - Kathleen Walker
7/25 6 Wellfleet - Joe Dwelly *et al.*
7/25 25 Harwich - Joe Dwelly *et al.*
7/31 3 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
8/1 2 Bart's Cobble, Sheffield - Bill & Nancy Callahan
8/5 1 E Longmeadow - Karen Parker
8/6 7 Crane WMA, Falmouth - Joe Dwelly
8/12 3 MBWMA, Newbury - Matt Arey
8/14 1 Holliston - Richard Hildreth
8/14 2 LPWS, Barnstable - Joe Dwelly

Little Glassywing

6/21 2 E Longmeadow - Karen Parker
6/26 1 MHF, Sharon - Madeline Champagne
6/27 3 Highland Farm, Belmont - Mark Rainey
7/2 5 Wrentham - Madeline Champagne
7/3 15 GBH, Canton - Michael Newton
7/3 19 S Berkshire NABA - Rene Laubach *et al.*
7/5 29 N Worcester NABA - Wendy Howes *et al.*
7/5 28 C Franklin NABA - Mark Fairbrother *et al.*
7/9 2 Royalton - Steve Moore
7/11 15 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 6 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*
7/13 4 Breakneck Hill Conservation Land, Southborough - Dawn Puliafico
7/19 8 Northampton NABA - Mark Fairbrother *et al.*
7/23 1 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly

7/25 1 Harwich - Joe Dwelly *et al.*
8/7 1 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes
8/9 1 Fowl Meadows, Milton - Michael Newton
8/16 1 Holliston - Richard Hildreth

Sachem

6/10 4 Crane WMA, Falmouth - Joe Dwelly
7/18 1 Falmouth NABA - Alison Robb, *et al.*
8/7 1 Nasketucket Bay Reserve, Mattapoissett - Matt Arey

Delaware Skipper

6/30 1 Willow Farm, Ware - Wendy Howes
7/3 2 S Berkshire NABA - Rene Laubach *et al.*
7/5 1 MBWMA, Newbury - Marjorie Watson
7/5 10 C Franklin NABA - Mark Fairbrother *et al.*
7/9 1 Florence - Tom Gagnon & Betsy Higgins
7/10 5 Sheffield - Matt Arey
7/11 40 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 4 North Adams, Mt. Greylock State Res. - Tom Gagnon *et al.*

7/13 1 Holliston - Richard Hildreth
7/18 5 Pittsfield - Tom Gagnon, Harvey Allen
7/19 4 Northampton NABA - Mark Fairbrother *et al.*
7/25 1 Wellfleet - Joe Dwelly *et al.*

Mulberry Wing

7/2 1 Wrentham - Madeline Champagne
7/5 2 Boxford - Russ Hopping
7/6 3 CST, Westborough - Steve Moore
7/8 3 MBWMA, Newbury - Matt Arey
7/9 5 Tower Hill, Boylston - Wendy Miller
7/10 10 Sheffield - Matt Arey
7/11 34 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 30 Concord NABA - Dick Walton *et al.*
7/12 17 Sudbury - Moore, Kessler, Reid
7/13 1 Wrentham - Madeline Champagne
7/18 1 Pittsfield - Tom Gagnon, Harvey Allen
7/19 10 Northampton NABA - Mark Fairbrother *et al.*
8/9 1 Fowl Meadows, Milton - Michael Newton
8/9 1 Williamstown - Mark Lynch & Sheila Carroll

Hobomok Skipper

5/25 10 BMB WS, Worcester - Wendy Miller, Barbara Volkle
5/26 5 Williamsburg Flower Hill Farm - Carol Duke
5/27 3 Berkshire County - Gagnon, Allen, Higgins
5/27 2 World's End, Hingham - Greg Dysart
5/30 20 DCR Kristoff Farm, Sterling - Wendy Howes & Alan Rawle
6/4 3 FS WMA, Longmeadow - Bill Callahan
6/4 1 MBWMA, Newbury - Joe & Sharon Stichter
6/6 2 E Longmeadow - Karen Parker
6/7 1 Otis - Moe O'Connor
6/10 5 Tower Hill, Boylston - Wendy Miller
6/11 3 Williamsburg Flower Hill Farm - Carol Duke
6/14 6 BMB WS, Worcester - Bill & Nancy Callahan
7/1 3 DCR Kristoff Farm, Sterling - Wendy Howes
7/5 1 C Franklin NABA - Mark Fairbrother *et al.*

Zabulon Skipper

5/30 1 Acoaxet - Mark Lynch & Sheila Carroll
5/30 3 Holliston - Richard Hildreth
5/31 10 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
6/6 1 E Longmeadow - Karen Parker
6/7 5 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
6/13 2 BMB WS, Worcester - Michael Newton
6/24 1 Borden Colony, Raynham - Joe Dwelly
7/15 1 Holliston - Richard Hildreth
7/25 1 E Longmeadow - Karen Parker
8/1 1 Sheffield, Project Native- Housatonic - Bill & Nancy Callahan
8/9 6 Fowl Meadows, Milton - Michael Newton
8/12 2 MBWMA, Newbury - Matt Arey
8/13 1 Roslindale, Boston - Lucy Merrill-Hills
8/28 1 E Longmeadow - Karen Parker
9/1 6 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelly
9/6 5 Nasketucket Bay Reserve, Mattapoissett - Michael Newton
9/15 2 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly *et al.*

9/19 1 Nahant - Bo Zaremba

Broad-winged Skipper

7/3 1 Westborough WMA - Wendy Miller
7/3 1 S Berkshire NABA - Rene Laubach *et al.*
7/9 3 CST, Northborough - Steve Moore
7/10 2 Sheffield - Matt Arey
7/11 1 Provincetown - Faherty, Dwelly, Barry
7/11 1 Blackstone Valley NABA - Tom Dodd *et al.*
7/12 1 Sudbury - Moore, Kessler, Reid
7/19 2 Northampton NABA - Mark Fairbrother *et al.*
7/25 7 Wellfleet - Joe Dwelly *et al.*
8/1 1 AP, Dartmouth - Myer Bornstein
8/1 1 BMB WS, Worcester - Steve Moore
8/7 2 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
8/8 1 Alewife Res., Cambridge - Rosemary Mosco
8/9 10 Plum Island, Newbury - Matt Arey
9/7 1 Allens Pond Wildlife Sanctuary, Dartmouth - Erik Nielsen

Dion Skipper

7/9 5 Florence - Tom Gagnon & Betsy Higgins
7/10 2 Hinsdale - Gagnon, Moore, Volkle
7/10 3 Sheffield - Matt Arey
7/11 1 Hampshire County - Ron & Sue Cloutier
7/18 5 Pittsfield - Tom Gagnon, Harvey Allen

Black Dash

7/8 1 MBWMA, Newbury - Matt Arey
7/10 5 Sheffield - Matt Arey
7/11 3 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 8 Concord NABA - Dick Walton *et al.*
7/12 2 Sudbury - Moore, Kessler, Reid
7/19 2 Northampton NABA - Mark Fairbrother *et al.*

Two-spotted Skipper

7/10 2 Peru - Gagnon, Moore, Volkle

Dun Skipper

6/22 4 Montague - Mark Lynch & Sheila Carroll
7/3 6 Edgartown - Matt Pelikan
7/5 25 C Franklin NABA - Mark Fairbrother *et al.*
7/5 9 Mashpee - Erik Nielsen, Peter Trimble
7/11 22 Concord NABA - Dick Walton *et al.*
7/11 19 Blackstone Valley NABA - Tom Dodd *et al.*
7/11 22 Truro - Faherty, Dwelly, Barry
7/12 2 MMP, Williamstown - MBC trip
7/16 3 Tower Hill, Boylston - Wendy Miller
7/17 2 Leicester - Mark Rowden
7/18 18 Pittsfield - Tom Gagnon, Harvey Allen
7/19 41 Northampton NABA - Mark Fairbrother *et al.*
7/22 6 Holliston - Richard Hildreth
7/25 14 Willow Farm, Ware - MBC trip
7/25 8 Bristol NABA - Mark Mello
7/27 1 E Longmeadow - Karen Parker
7/29 1 Greenfield - Erica Burns
8/1 1 Bart's Cobble, Sheffield - Bill & Nancy Callahan
8/1 1 BMB WS, Worcester - Steve Moore
8/1 6 Winchendon - Mark Lynch & Sheila Carroll
8/7 1 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes
8/9 2 Holliston - Richard Hildreth
8/10 1 World's End, Hingham - Greg Dysart

Dusted Skipper

5/22 6 Holyoke - MBC trip
5/24 1 Paxton - Kristin Steinmetz
5/24 5 Correllus State Forest, West Tisbury - Matt Pelikan
5/27 1 World's End, Hingham - Greg Dysart
5/29 8 Crowe's, Dennis - Joe Dwelly
5/30 4 Highland Farm, Belmont - Mark Rainey
5/30 14 Myles Standish State For. Carver - Joe Dwelly
6/7 3 Norfolk, Miller Street field - Madeline Champagne
6/13 1 Dighton PL - MBC trip
6/14 3 Northampton - Steve Moore & Barbara Volkle
6/17 1 BMB WS, Worcester - Steve Moore
6/20 1 Crane WMA, Falmouth - MBC trip

Pepper and Salt Skipper

5/27 1 Berkshire County - Gagnon, Allen, Higgins
5/28 3 Oxbow NWR, Harvard - Tom Murray
5/30 1 Highland Farm, Belmont - Mark Rainey

5/30 6 North Adams, Mt. Greylock State Res. - MBC trip

Ocola Skipper

9/2 1 White Horse Beach, Plymouth - Mark Faherty

9/5 1 Royalston - Rick Chech *et al.*

9/15 1 Northampton CG - Ron & Sue Cloutier

9/15 1 White Horse Beach, Plymouth - Mark Faherty

9/16 3 S Dartmouth - Ron & Sue Cloutier

9/19 1 Nahant - Bo Zaremba

9/19 5 Sylvan Nursery, Dartmouth - Steve Moore & Barbara Volkle

9/27 1 F&W Rte1, Newbury - Matt Arey

9/29 1 Stichter Yard, Newbury - Sharon Stichter

10/7 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren Miller-Donnelly

10/7 1 Crane WMA, Falmouth - Bo Zaremba

10/7 1 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly

10/10 1 Wayland - Michael Newton

10/11 1 Endicott Road, Middleton - Matt Arey

10/12 2 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly

10/12 1 Upton - Tom & Cathy Dodd

10/14 1 Plymouth - Robin Gross

The Butterfly That Stamped

by Rudyard Kipling

There was never a Queen like Balkis,
From here to the wide world's end;
But Balkis talked to a butterfly
As you would talk to a friend.

There was never a King like Solomon
Not since the world began;
But Solomon talked to a butterfly
As a man would talk to a man.

She was Queen of Sabea--
And he was Asia's Lord--
But they both of 'em talked to butterflies
When they took their walks abroad!



Atlantis Fritillary
(*Speyeria atlantis*),
7/5/15, Lenox, MA,
Bill & Nancy Callahan

EARLY AND LATE SIGHTINGS—AN UPDATE

by Sharon Stichter

The four tables below show the new earliest and latest sighting reports based on 2014 and 2015 records. These tables update the list of earliest and latest dates shown on the *Butterflies of Massachusetts* (BOM) website. For details of the prior record sightings, and flight advancement in some species, check the species account on the website: www.butterfliesofmassachusetts.net.

The vast majority of these records are the same as those in the Massachusetts Butterfly Club database, which are reported in the Season Summary. In addition, for recent years the photographic records on BAMONA (www.butterfliesandmoths.org), and the photos and reports of the Massachusetts Butterflies Facebook group are also included in these tables.

The Club's 25 years of active butterfly observation have set many early and late records, and the database—as summarized by the flight charts on the MBC checklist—by now probably pretty accurately reflects the real flight periods of our butterflies. The downside of this is that the existing early and late records are now going to be pretty hard to beat!

When a species starts showing new early and late sightings now, it's a good bet that this reflects either lengthening of the flight period due to climate warming, or the arrival and expansion of new southern species, also due to climate warming. A case in point is the recently arrived Red-banded Hairstreak, which set both new early and new late records in 2015. On the other hand, if we are seeing a species begin its flight later than in the past, or cut short the end of its flight period, it may be that that species is declining in numbers, and/or contracting its range. This could be the case with Atlantis Fritillary and Harris' Checkerspot (see Tables II and IV). Such inferences assume, of course, that we butterfly watchers have put forth a consistent amount of effort from year to year.

Interpreting the meaning of first and last sightings can be tricky. If a first sighting report is followed up fairly quickly by other reports in the next few days, it is probable that the first report really did represent the onset of the flight period. But if a first report is very far ahead of succeeding reports, that may signal that something unusual is going on

—perhaps an isolated hotspot causes an early emergence, or perhaps the report is more wishful thinking than accurate observation. This is why most scientific studies of flight period do not rely on single reports; rather they take an average of, say, the first 5% of reports for that species, and the last 5% for late dates. In the tables below, and on the BOM website, strong “outlier” early and late reports have not been omitted; instead two or more sighting dates are shown, to illustrate the range of variation.

Many recent early records were set during the particularly warm springs of 2010 and 2012, as can be seen in Tables I and II. In the main, 2014 and 2015 early reports did not surpass these dates; only Sachem and Red-banded Hairstreak set significant new early records. The late records in Table III are more numerous, showing species such as Black Swallowtail, Giant Swallowtail, Red Admiral, and Monarch lingering during our warm autumns, setting new records. The late American Ladies seen on Nahant *almost* set a record—they didn’t surpass Nantucket’s late date, but they did apparently beat Martha’s Vineyard! A final note is that, for two years in a row, 2013 and 2014, single fresh Baltimore Checkerspots were found in mid-October at Allen’s Pond in south Dartmouth. The species normally finishes its flight here by the end of July, and is not known to have even a partial second brood anywhere in its range. But occasional mis-timed emergences can happen, or perhaps these individuals were releases from indoor artificial breeding. Whatever the case, these two “outlier” reports are definitely interesting and unusual.

TABLE I: Earliest Sightings: New Records and Near Records
(Bold, underlined text = new early record)

Species	Previous Early Record 1991-2013 (BOM)	2014	2015
Bronze Copper	6/6/2013, Concord, T. Murray	6/22/2014, Pittsfield, G. Hurley (ph)	6/7/2015, Concord, J. Forbes (ph)
Coral Hairstreak	6/21/2010, Woburn, R. and S. Cloutier	7/5/2014, Woburn, G. Kessler (ph)	6/27/2015, Woburn, H. Hoople et al. (ph)
Acadian Hairstreak	6/21/2010, Woburn, R. and S. Cloutier	6/29/2014, Pittsfield, G. Hurley (ph)	<u>6/21/2015, Berks. Co., G. Hurley (ph)</u>
Banded Hairstreak	6/11/2010, Canton, S. Jaffe	6/22/2014, Worcester, W. Miller et al.	6/13/2015, Ashland, M. Newton (ph)

Hickory Hairstreak	6/23/2001, Woburn, M. Rines	7/5/2014, Greenfield and W. Newbury (ph)	6/27/2015, Belmont, M. Rainey (ph)
Bog Elfin	5/18/2013,(ph),Ashburnham, B. de Graaf & G. Kessler	<u>5/17/2014</u> <u>Ashburnham</u> <u>G. Kessler</u>	5/24/2015, Ashburnham, M. Rainey (ph)
Hessel's Hairstreak	5/15/2000, Ponkapoag, T. and C. Dodd	5/18/2014, Canton, G. Kessler (ph)	5/24/2015, Canton, S. Whitebread (ph)
Red-banded Hairstreak	8/3/2011, Westport, B. Bowker	8/17/2014, Mattapoisett, M. Arey	<u>5/31/2015, Mattapoisett, M. Arey</u>
Aphrodite Fritillary	6/9/2004, Mt. Greylock, T. Gagnon et al.; 6/10/2000, Hawley, M. Lynch	6/20/2014, Holliston, R. Hildreth	6/13/2015, Williamsburg, C. Duke
Tawny Emperor	7/3/2004, Holyoke Range, B. Benner	7/11/2014 Sheffield, R. Laubach et al.	<u>7/3/2015, S. Berks. NABA</u>
No. Pearly-Eye	6/20/2004, Harvard, T. Murray	6/27/2014, Harvard, G. Kessler	6/21/2015, Sherborn, M. Newton
Leonard's Skipper	8/12/2012, Charlton, B. Bowker	8/23/2014, Royalston, S. Cloutier	8/15/2015, Ware, W. Howes et al. (ph)
Sachem	6/4/2013, Wellfleet, M. Faherty (ph)	<u>5/31/2014, Oak Bluffs, M. Pelikan (ph)</u>	6/10/2015, Falmouth, J. Dwelly
Broad-winged Sk.	7/2/2012, Newbury, M. Arey	7/5/2014, Northboro, S. Moore/B. Volkle	7/3/2015, Westboro, W. Miller
Two-spotted. Sk.	6/23/2012 Athol, F. Model	No early sightings.	6/24/2015, W. Mass., S. Cloutier (ph)
Pepper-and-Salt Sk.	5/15/2010, Stow, B. Zaremba (ph)	5/17/2014, Sheffield, M. Arey	5/27/2015, Berks. Co., T. Gagnon et al.

TABLE II: Earliest Sightings: Selected Species and Species not on BOM

Species	Previous Early Record 1991-2013 (BOM)	2014	2015
Ea. Tiger Swallowtail + Tiger Swt. spp.	4/10/2010, Northboro, S. Moore/B. Volkle	5/6/2014, Natick, G. Dysart	4/17/2015, E. Longmeadow, K. Parker

Cabbage White	2/26/2002, Oak Bluffs, M. Pelikan; 3/11/2006, E. Longm., K. Parker	4/4/2014, Wellfleet, M. Faherty	4/15/2015, Newbury, J. Stichter
Clouded Sulphur	3/19/2012, Raynham, R. Buckner; 4/11/2006, Boston, A. Birch	5/3/2014, Canton, M. Arey	5/2/2015, Hatfield, B. Benner
Orange Sulphur	3/22/2012, Edgartown, M. Pelikan	5/10/2014, Canton, M. Arey	5/10/2015, Newbury, M. Arey
American Copper	3/20/2012, Carlisle, S. Perkins	5/2/2014, W. Tisbury, L. Loucks (ph)	5/9/2015, Andover, H. Hoople
Coral Hairstreak	6/21/2010, Woburn, R. and S. Cloutier	7/5/2014, Woburn, G. Kessler (ph)	6/27/2015, Woburn, H. Hoople et al. (ph)
Banded Hairstreak	6/11/2010, Canton, S. Jaffe	6/22/2014, Worcester, W. Miller et al.	6/13/2015, Ashland, M. Newton (ph)
Brown Elfin	3/23/2012, Woburn, M. Arey; 4/2/2000, Truro, B. Nikula	4/19/2014, Woburn, T. Whelan et. al.	4/21/2015, Wellfleet, M. Faherty
Frosted Elfin	4/6/2012, Westfield, T. Gagnon; 4/8/2010, N. Andover, H. Hoople	5/3/2014, Carver, M. Arey	5/4/2015, Foxboro, M. Champagne
E. Pine Elfin	3/29/2006, Burlington, M. Rines	4/22/2014, E. Longmeadow, K. Parker	4/12//2015, Westboro, G. Kessler
Juniper Hairstreak	4/13/2012, Woburn, H. Hoople (ph)	4/28/2014, Woburn, B. de Graaf, (ph)	5/6/2015, Woburn, M. Arey
White M Hairstreak	4/7/2012, Mt. Tom, T. Gagnon et al.	5/10/2014, Canton, M. Arey	5/31/2015, Mattapoisett, M. Arey
Gray Hairstreak	3/23/2012, Woburn, M. Arey; 3/29/2002, Hingham, D. Peacock	4/25/2014, Stoneham, R. LaFontaine	5/6/2015, Woburn, M. Arey
E. Tailed-Blue	4/14/2012, Edgartown, M. Pelikan	5/3/2014, Edgartown, M. Pelikan	5/7/2015, Woburn, H. Hoople (ph)
Azure spp.	3/20/2010, E. Longmeadow, K. Parker; 3/20/2012, Ware, B. Klassanos	4/12/2014, Falmouth, L. Griffin	4/16/2015, Sherborn, G. Dysart (ph)
Silvery Blue	5/1/2010, Ware, B. Klassanos	5/17/2014, Stow, T. Murray	5/13/2015, Stow, S. Moore
Gr. Spangled Fritillary	5/13/2012, Natick, G. Long; 6/1/2010, Ware, B. Klassanos	6/14/2014, Newbury, M. Arey	6/12/2015, Williamstown, S. Moore/B. Volkle
Atlantis Fritillary	6/16/2004, Mt. Greylock, B. Benner	6/27/2014, Berks. Co., T. Gagnon et al.	7/5/2015, Lenox, B. Callahan

Silver-bordered Fritillary	5/6/2010, Middleton, M. Arey; 5/7/2012, Hubbardston, W. Howes	5/17/2014, Royalston, C. Kamp/A. Mayo	5/17/2015, Amesbury, M. Arey
Pearl Crescent	4/18/2012, Milton, S. Jaffe; 4/25/2010, Newbury, M. Arey	5/15/2014, Raynham, J. Dwelly	5/9/2015, Woburn, M. Newton
Baltimore Checkerspot	6/1/2002, E. Bridgewater, E. Giles; 6/4/2012, D. Adams	6/8/2014, Barnstable, J. Dwelly	6/10/2015, Barnstable, J. Dwelly
Question Mark	3/18/2012, Athol, D. Small	4/20/2014, Northfield, W. Howes (ph)	4/15/2015, Mt. Tom, B. deGraaf (ph)
Eastern Comma	1/8/2003, Longmeadow, J. LaPointe	4/1/2014, Sheffield, J. Richburg (ph);	4/11/2015, Boxford, M. Arey
Gray Comma	4/16/2012, Windsor, T. Gagnon	5/25/2014, Windsor, T. Gagnon et al.	5/27/2015, Berks. Co., T. Gagnon et al.
Mourning Cloak	1/12/2006, Brookline, B. Cassie	3/15/2014, Upton, T. and C. Dodd	3/31/2015, Holliston, R. Hildreth
American Lady	3/14/2008, Wellfleet, D. Berard; 3/20/2012, Holliston, R. Hildreth	4/20/2014, Oxford, E. Solberg	4/25/2015, Wales, B. and N. Callahan
Red Admiral	3/30/1997, Provincetown, B. Nikula; 4/1/2008, Whately, B. Benner	6/7/2014, Rowley, J. Stichter	4/12/2015, Ipswich, M. Arey
Common Buckeye	4/21/2012, Medford, M. Arey	7/11/2014, So. Berks. NABA	5/31/2015, Mattapoisett, M. Arey
Red-spotted Purple/ Wh. Ad	5/3/1998, Holliston, R. Hildreth	6/1/2014, N. Andover, H. Hoople (ph)	5/26/2015, Longmeadow, S. Shelasky (ph)
Viceroy	5/2/2010, Middlesex Fells, M. Arey; 5/4/2009, Petersham, R. Hopping	5/29/2014, Southboro, D. Pugliafico	5/24/2015, Sherborn, D. Pugliafico
Little Wood-Satyr	5/4/2009, Petersham, R. Hopping; 5/9/1998, Mashpee, A. Robb	5/26/2014, Southboro, D. Puglifico	5/21/2015, Boylston, W. Miller
Common Ringlet	4/29/2012, Andover, H. Hoople (ph)	5/17/2014, Royalston, C. Kamp/A. Mayo	5/16/2015, Stow, M. Arey
Common Wood-Nymph	6/10/1995, Petersham, C. Kamp	7/1/2014, Williamsburg, C. Duke	7/3/2015, Ipswich, R. Hopping

Monarch	4/7/1997 (10 reports)	5/17/2014, Sheffield, M. Arey	4/28/2015, Foxboro, C. Naughton
Silver-spotted Skipper	4/21/2012, Middlesex Fells, M. Arey; 5/9/2010, Newbury, M. Arey	5/25/2014, Greenfield, J. Rose	5/16/2015, Longmeadow, S. Shelasky (ph)
So. Cloudywing	5/20/2012, Falmouth, J. Dwelly	6/8/2014, Barnstable, J. Dwelly (ph)	5/25/2015, (ph), W. Tisbury, M. Pelikan
No. Cloudywing	4/15/2012, E. Longmeadow, K. Parker; 5/1/2010, Barre, M. Lynch/S. Carroll	5/26/2014, Southboro, D. Pugliafico	5/17/2015, Amesbury, M. Arey
Juvenal's Duskywing	4/10/2010, Carver, M. Arey; 4/11/2012, Ware, Klassanos	4/22/2014, W. Tisbury, L. Loucks	4/26/2015, Carver, M. Arey
Horace's Duskwng	4/20/2010, N. Andover, R. Hopping/ 4/26/2012, Foxboro, M. Champagne	5/10/2014, Canton, M. Arey	5/16/2015, Canton, M. Arey
Least Skipper	5/25/2001, Sherborn, B. Bowker	6/15/2014, Barnstable, J. Dwelly	6/3/2015, Medfield, G. Dysart (ph)
European Skipper	5/21/2004, Holliston, R. Hildreth	6/5/2014, Southboro, D. Pugliafico	6/3/2015, Easthampton, S. Orlowski (ph)
Peck's Skipper	4/30/2012, Chelmsford , B. Bowker	5/17/2014, Sheffield, M. Arey	5/26/2015, Holliston, R. Hildreth
Tawny-edged Skipper	5/7/2012, Upton, T. Dodd	5/30/2014, W. Tisbury, M. Pelikan	5/22/2015, Holliston, R. Hildreth
Long Dash	5/17/2012, Barnstable, J. Dwelly	6/7/2014, Newburyport, B. Zaremba (ph)	5/25/2015, W. Tisbury, M. Pelikan
Mulberry Wing	6/28/2012, Athol, F. Model	7/8/2014, Westboro, W. Miller/E. Barry	7/2/2015, Wrentham, M. Champagne
Zabulon Skipper	4/28/2012, E. Longmeadow, K. Parker	5/15/2014, Raynham, J. Dwelly (ph)	5/30/2015, Holliston, R. Hildreth
Dusted Skipper	5/13/2012, Foxboro, M. Champagne	5/21/2014, Foxboro, M. Champagne	5/22/2015, Holyoke, T. Gagnon et al.
Ocola Skipper	8/14/2012, Plymouth, M. Faherty	8/30/2014, Northampton, T. Gagnon et al. (ph)	8/22/2015, Northampton, J. Body (ph)

TABLE III: Latest Sightings: New Records and Near Records

(Bold underlined text=new late record)

Species	Previous Late Record 1991-2013 (BOM)	2014	2015
Black Swallowtail	10/20/2008, B. Bowker	<u>10/25/2014, Dartmouth, M. Newton</u>	10/13/2015, W. Bridgewater, D. Adams
Giant Swallowtail	9/14/2013, Athol, D. Small	<u>9/17/2014, Medford, L. Melvin</u>	9/6/2015, Falmouth, J. Dwelly
Mustard White	9/12/2006, Lenox, B. Spencer	7/21/2014, Berks. Co., T. Gagnon	9/9/2015, Berks. Co., T. Gagnon
Cabbage White	12/19/2006, Montague, M. Fairbrother; 12/5/01, Charlton, R. Hildreth	11/4/2014, Wayland, D. Pugliafico	12/5/2015, Dartmouth, M. Newton
Banded Hairstreak	8/20/1992, Foxboro, B. Cassie	8/19/2014, Hubbardston, W. Howes	8/16/2015, Fall River, D. Hlousek
Red-banded Hairstreak	9/23/2013, Dartmouth, K. Keegan <i>vide</i> M. Mello	9/20/2014, Mattapoisett, J. Dwelly (ph)	<u>9/26/2015, Dartmouth, M. Arey</u>
Great Spangled Fritillary	10/18/2002, Sherborn, R. Hildreth	10/5/2014, Groton, T. Murray	10/11/2015, Newbury, M. Newton
Silver-bordered Fritillary	10/12/2000, Rockport, D. Savich/C. Tibbits	10/5/2014, Ipswich, H. Hoople et al. (ph)	9/27/2015, Newbury, M. Arey
Baltimore Checkerspot	10/15/2013, Dartmouth, M. Champagne (ph); 7/26/1997, C. Berks. NABA	<u>10/17/2014, Dartmouth, L. Miller-Donnelly;</u> 7/21/2014, Williamstown, J. Richburg (ph)	7/22/2015, Ashfield, T. Gagnon
American Lady	12/17/11, Nantucket, T. Pastuzak; 12/5/2001, Oak Bluffs, M. Pelikan	11/23/2014, Salisbury, C. Sheridan (ph)	12/12/2015, Nahant, L. Pivacek
Red Admiral	12/5/1998, Edgartown, V. Laux; 12/3/2012, Marion, M. Maurer	11/30/2014, Yarmouth, M. Keleher	<u>12/12/2015, Plum Island, S. and J. Mirick</u>
Red-spotted Purple/ White Admiral	10/6/1993, Gloucester, D. Savich/C. Tibbits	9/19/2014, Westport, L. Miller-Donnelly	10/4/2015, Easton, N. Block (ph)
Tawny Emperor	8/21/2005, Northampton, B. Benner et al.	<u>8/30/2014, Springfield, S. Moore</u>	8/16/2015, Springfield, MBC
Appalachian Brown	9/25/2013, Amherst, J. Rose	9/10/2014, Natick, M. Newton	<u>9/28/2015, Westboro, S. Moore</u>

Monarch	11/28/2006, Falmouth, G. Gove	11/11/2014, Nahant, L. Pivacek	<u>12/5/2015, Dartmouth, M. Newton (ph)</u>
So. Cloudywing	7/31/2003, Canton, T. Murray	7/12/2014, Concord NABA	<u>8/6/2015, Falmouth, J. Dwelly</u>
No. Cloudywing	8/5/2008, Sherborn, B. Bowker	<u>8/8/2014, Woburn, L. Melvin</u>	7/25/2015, Ware, W. Howes et al.
Wild Indigo Duskywing	10/17/2008, Belmont, F. Bouchard	<u>10/25/2014, Mattapoissett, M. Newton</u>	9/27/2015, Newbury, M. Arey
Com. Sootywing	9/21/2002, Marblehead, K. Haviland	9/20/2014, Wayland, M. Arey	9/6/2015, MNewton Mattapoissett
Least Skipper	10/16/2011, Ipswich, R. Hopping/H. Hoople	9/20/2014, Ipswich, H. Hoople et al.	10/12/2015, Dartmouth, L. Miller-Donnelly
Indian Skipper	7/13/2003, Newbury, S. Stichter et al.	6/19/2014, Wales, J. Ohop/E. Barry	<u>7/28/2015, Holliston, R. Hildreth</u>
Crossline Skipper	8/29/2004, Barnstable, S. Moore/B. Volkle	<u>8/31/2014, Holliston, R. Hildreth</u>	8/17/2015, Newbury, B. Zaremba
Tawny-edged Skipper	10/14/2013, Walpole, M. Champagne	9/14/2014, Whately, B. Benner	10/11/2015, Middleton, M Arey
Sachem	11/2/2013, Somerset, D. Gagnon (ph)	10/30/2014, Dartmouth, L. Miller-Donnelly	8/7/2015, Mattapoissett, M. Arey/A. Grkovich
Two-spotted Skipper	7/14/2007, Blackstone Valley NABA	<u>7/19/2014, C. Berks, NABA, T. Gagnon</u>	7/10/2015, Peru, S. Moore/B. Volkle
Ocola Skipper	10/11/2003, Westport, M. Lynch/S. Carroll	9/13/2014, Concord, G. Dysart et al. (ph)	<u>10/12/2015, Upton, T. and C. Dodd</u>

TABLE IV: Latest Sightings: Selected Species and Species not on BOM

Species	Previous Late Record 1991-2013 (BOM)	2014	2015
Ea. Tiger Swallowtail +Tiger Swt. Spp.	11/7/2008, Athol, S. Mildern	9/28/2014, Whately, B. Benner	10/12/2015, Paxton, E. and K. Barry
Spicebush Swallowtail	10/31/1999, Gloucester, D. Savich	10/3/2014, Lexington, M. Arey	9/26/2015, Dartmouth, M. Arey

West Virginia White	6/13/2006, Mt. Greylock, T. Gagnon	6/7/2014, (ph), Mt. Greylock, G. Dysart	5/30/2015, Mt. Greylock, T. Gagnon
Clouded Sulphur	12/31/2011 (1/1/2012), Oak Bluffs, D. Small	11/12/2014, Dartmouth, M. Lynch/S. Carroll	11/13/2015, W. Bridgewater, D. Adams
Orange Sulphur	12/31/2011 (1/2/2012), Dartmouth, M. Champagne; 12/30/1999, W. Tisbury, M. Pelikan	11/8/2014, Hopkinton, D. Pugliafico	12/25/2015, Nahant, L. Pivacek
American Copper	11/20/1999, Edgartown, M. Pelikan	10/25/2014, Dartmouth, M. Newton	11/5/2015, Hingham, G. Kessler
Bronze Copper	10/21/2007, Wayland, J. Forbes	10/5/2014, Wayland, S. Moore/B. Volkle	10/12/2015, W. Newbury, T. Murray
Bog Copper	8/5/1995, Wachusett Res., T. Dodd	7/25/2014, Royalston, S. Cloutier	7/25/2015, Eastham, J. Dwelly
Brown Elfin	6/20/2002, Sharon, B. Cassie	6/3/2014, Mattapoissett, J. Dwelly	5/24/2015, W. Tisbury, M. Pelikan
Frosted Elfin	6/29/2003, Plymouth, T. Murray	6/7/2014, Foxboro, M. Champagne, and N. Andover, H. Hoople	6/12/2015, Sharon, M. Champagne
Juniper Hairstreak	8/19/2003, Dennis, T. and C. Dodd	7/30/2014, Hingham, G. Kessler	8/12/2015, Newbury, M. Arey
White M Hairstreak	10/28/2007, Tisbury, J. Holland	9/20/2014, Mattapoissett, J. Dwelly	9/16/2015, Dartmouth, S. Cloutier (ph)
Gray Hairstreak	11/1/1999, Edgartown, M. Pelikan	10/18/2014, Fairhaven, M. Lynch/ S. Carroll	10/15/2015, Southboro, D. Pugliafico (ph)
Eastern Tailed-Blue	10/24/1991, Milford, T. Dodd; 10/22/2012, Mattapoissett, J. Dwelly	10/17/2014, Dartmouth, L. Miller-Donnelly	10/12/2015, W. Newbury, T. Murray
Azure spp.	10/21/2007, Wayland, E. Nielsen/ S. Sweet	10/9/2014, Mattapoissett, JDwelly	10/8/2015, Dartmouth, LM-D
Variegated Fritillary	11/21/2000, Hingham, D. Larson	7/22/2014, Raynham, J. Dwelly (ph)	10/12/2015, Falmouth, B. Zaremba (ph)
Atlantis Fritillary	9/20/1999, Milford, R. Hildreth	8/20/2014, Windsor, S. Cloutier (ph)	8/14/2015, Peru, G. Hurley (ph)

Harris' Checkerspot	7/14/1996, Princeton, T. Dodd	7/4/2014, Newbury, M. Arey <i>leg.</i>	6/17/2015, Worcester, S. Moore
Pearl Crescent	11/1/2012, Harwich, S. Baron; 10/26/2009 Dartmouth, B. Bowker	10/18/2014, Fairhaven, M. Lynch/S. Carroll	10/12/2015, W. Newbury, T. Murray
Question Mark	11/11/2006, Dartmouth, E. Nielsen	10/28/2014, Dartmouth, L. Miller-Donnelly	10/11/2015, Newbury, M. Newton
Eastern Comma	12/4/1994, Foxboro, B. Cassie	10/12/2014, Halifax, W. Howes/A. Rawle	11/5/2015, Easthampton, B. King
Gray Comma	10/18/2012, Berks. Co., T. Gagnon	7/21/2014, Berks. Co., T. Gagnon et al.	10/12/2015, Berks. Co., T. Gagnon
Mourning Cloak	12/18/1996, E. Longmeadow, K. Parker	11/4/2014, Groton, J. Lisk	10/27/2015, New Salem, S. Cloutier
Painted Lady	12/10/2001, Oak Bluffs, M. Pelikan	11/11/2014, Nahant, L. Pivacek	10/12/2015, Dartmouth, M. Lynch/S. Carroll
Red-spotted Purple/ White Admiral	10/6/1993, Gloucester, D. Savich/C. Tibbits	9/19/2014, Westport, L. Miller-Donnelly	10/4/2015, Easton, N. Block (ph)
Viceroy	10/24/1998, W. Newbury, F. Goodwin	9/28/2014, Newbury, M. Arey	10/7/2015, Westport, L. Miller-Donnelly
Hackberry Emperor	9/10/2000, Springfield, T. Gagnon et al.	8/30/2014, Springfield, S. Moore	8/16/2015, Springfield, MBC
Northern Pearly-Eye	10/3/2007, Andover, H. Hoople (ph)	9/7/2014, Royalston, C. Kamp/A. Mayo	8/22/2015, Sherborn, M. Newton (ph)
Eyed Brown	9/1/2003, Milford, R. Hildreth	7/26/2014, Sharon, B. Cassie	8/8/2015, Holliston, R. Hildreth
Little Wood-Satyr	8/24/2009, Canton, S. Jaffe	8/10/2014, Mattapoisett, L. Miller-Donnelly	8/15/2015, Ware, W. Howes et al.
Common Ringlet	10/22/2006, Ipswich, J. Berry	9/17/2014, Paxton, E. and K. Barry	10/12/2015, Westport, M. Lynch
Common-Wood Nymph	10/5/2007, Newbury, J. Stichter	9/27/2014, Newbury, S. Stichter	9/27/2015, Newbury, M. Arey
Silver-spotted Skipper	10/20/2013, Easthampton, B. King	10/3/2014, Northampton, T. Gagnon	9/19/2015, Newbury, M. Arey
Horace's Duskywing	10/3/2013, Dartmouth, L. Miller-Donnelly	9/27/2014, Westport, M. Newton	9/21/2015, Northampton, T. Gagnon et al.

Com. Checkered-Skipper	10/15/2007, Northampton, F. Model	9/12/2014, Whately, B. Benner	10/4/2015, Northampton, B. Callahan
European Skipper	8/21/2005, Ipswich, S. Stichter et al.	8/4/2014, Newbury, S. Stichter	8/1/2015, Dartmouth, D. Hlousek
Leonard's Skipper	10/10/1995, Wellfleet, J. Sones	9/20/2014, Wayland, M. Arey	9/26/2015, Dartmouth, M. Arey
Cobweb Skipper	6/15/1997, Northbridge, R. Hildreth	6/8/2014, E. Longmeadow, K. Parker	5/24/2015, W. Tisbury, M. Pelikan
Peck's Skipper	10/26/1995, Sudbury, T. Dodd	10/3/2014, Bolton, T. Murray	10/13/2015, Holliston, R. Hildreth
Tawny-edged Skipper	10/14/2013, Walpole, M. Champagne	9/14/2014, Whately, B. Benner	10/11/2015, Middleton, M. Arey
Long Dash	9/30/2006, Dartmouth, E. Nielsen	8/8/2014, Holliston, R. Hildreth	9/16/2015, (ph), Falmouth, J. Dwelly
Northern Broken-Dash	9/12/1995, Westport, B. Cassie	8/19/2014, Westport, L. Miller-Donnelly	8/19/2015, Raynham, J. Dwelly
Little Glassywing	9/7/2008, Northampton, T. Gagnon	8/18/2014, Raynham, J. Dwelly	8/16/2015, Holliston, R. Hildreth
Mulberry Wing	8/25/2002, Milford, B. Cassie	7/26/2014, Sharon, B. Cassie	8/9/2015, Milton, M. Newton/R Hamburg
Hobomok Skipper	8/10/2002, E. Longmeadow, K. Parker	7/19/2014, C. Berks. NABA	7/5/2015, C Frank NABA
Zabulon Skipper	10/16/2012, Westport, L. Miller-Donnelly	10/10/2014, Dartmouth, S. Moore/B. Volkle	9/19/2015, Nahant, B. Zaremba (ph)
Black Dash	8/10/1994, Rockport, D. Savich/C. Tibbits	7/31/2014, E. Longmeadow, K. Parker	7/25/2015, Bristol NABA
Dun Skipper	9/25/2010, Wayland, E. Nielsen	9/13/2014, Westport, L. Miller-Donnelly	8/22/2015, Sherborn, M. Newton
Dusted Skipper	7/6/2002, Williamstown, P. Weatherbee	6/22/2014, Worcester, W. Miller et al.	6/17/2015, Worcester, S. Moore
Pepper-and-Salt Skipper	7/12/1997, N. Berks. NABA	6/22/2014, Worcester, W. Miller et al (ph)	5/30/2015, Mt. Greylock, T. Gagnon et al.

Banana Bait Feeder

by Richard W. Hildreth

Many species of butterflies as well as many moths, beetles, bees, wasps and flies are strongly attracted by sugary baits. At my primitive cabin in Steuben, ME, I have attracted the following butterfly species with various sugary baits: Question Mark, Red Admiral, Mourning Cloak, Eastern Comma, Gray Comma, Compton Tortoiseshell, White Admiral, Northern Pearly-Eye, Eyed Brown and Common Wood Nymph (both yellow-eyed and dark-eyed forms).

Just about any sugary solution will attract insects. Hummingbird feeder solution (4 cups of water, 1 cup of sugar) works just fine. Most hummingbird feeders can easily be modified into good insect feeders. The hummingbird feeder manufacturers try to make the feeders insect proof by making the holes through which the hummers sip the solution as small as possible. I have modified all my hummingbird feeders by drilling out the feed holes to 1/4 inch size. This allows all the sugar solution seeking insects to get at the sugar solution. The hummingbirds don't seem to mind (however, there are some interesting hummingbird-wasp battles). I would guess (I haven't tried it) that modified hummingbird feeders filled with "high test" moth bait solution would make great moth feeders.

Besides sugar solutions, sugar in overripe fruit becomes a powerful butterfly attractant. In my earlier days, I used to go frequently on overseas birding trips. These trips sometimes brought me to Amazonian South America and jungle birding lodges. These lodges always had butterfly houses where they raised butterflies for export (mostly to the USA). They always had plenty of live adult butterflies to show their guests. To feed all these butterflies they used bananas. Bananas cut longitudinally were put out, and in the tropical heat the bananas were soon overripe. The butterflies all eagerly feed on them. This gave me the idea of trying bananas as butterfly bait in Maine. I cut some bananas and put them out. I was not disappointed; lots of butterflies were attracted. However, various naughty mammals were also attracted: Eastern Chipmunks

by day and Raccoons, etc. by night. It soon became clear that I had to do some engineering/construction and produce a proper Banana Bait Feeder.

The feeder that I designed and built is as follows (see Figure 1, p. 50): A plywood platform (12" x 12" x 1/2" thick) is fastened securely to a post. A sturdy frame is built with enough clearance to allow the frame to fit easily over the plywood platform. To the frame is stapled a piece of 1/4" galvanized hardware cloth. Some screw eyes are put in the frame and in the post. Over-ripe bananas are cut longitudinally and placed cut side up on the plywood platform. The screen- frame is placed over the plywood platform and lowered so the screen rests on the cut bananas. The frame is secured to the post by use of small bungee cords. The bananas will last 2 days to a week, depending how overripe they are, the temperature, how fast they are eaten, etc. Bananas are expensive, so it is worthwhile to look for special deals on overripe bananas which some stores offer. Slices of watermelon can also be used with good results in these feeders. Around the 4th of July, stores often overstock with watermelons and soon the price falls, making them a good source of butterfly bait.

During the day great numbers of flies, bees, and wasps are attracted to the banana feeder; a great chance to count, collect, and photograph. Some interesting beetles are also attracted. After dark many moths are attracted, many times species not attracted by my mercury vapor lights. Hummingbirds occasionally stop to feed on the bananas. So far, the feeders have kept the marauding mammals at bay.

The banana Bait Feeder seems to be one of my "good ideas" that actually works. See p. 28 for photos of the feeder in action.



Gray Comma (*Polygonia progne*), 8/1/15, Berkshire Co., Bill & Nancy Callahan

Figure 1

Banana Bait Feeder

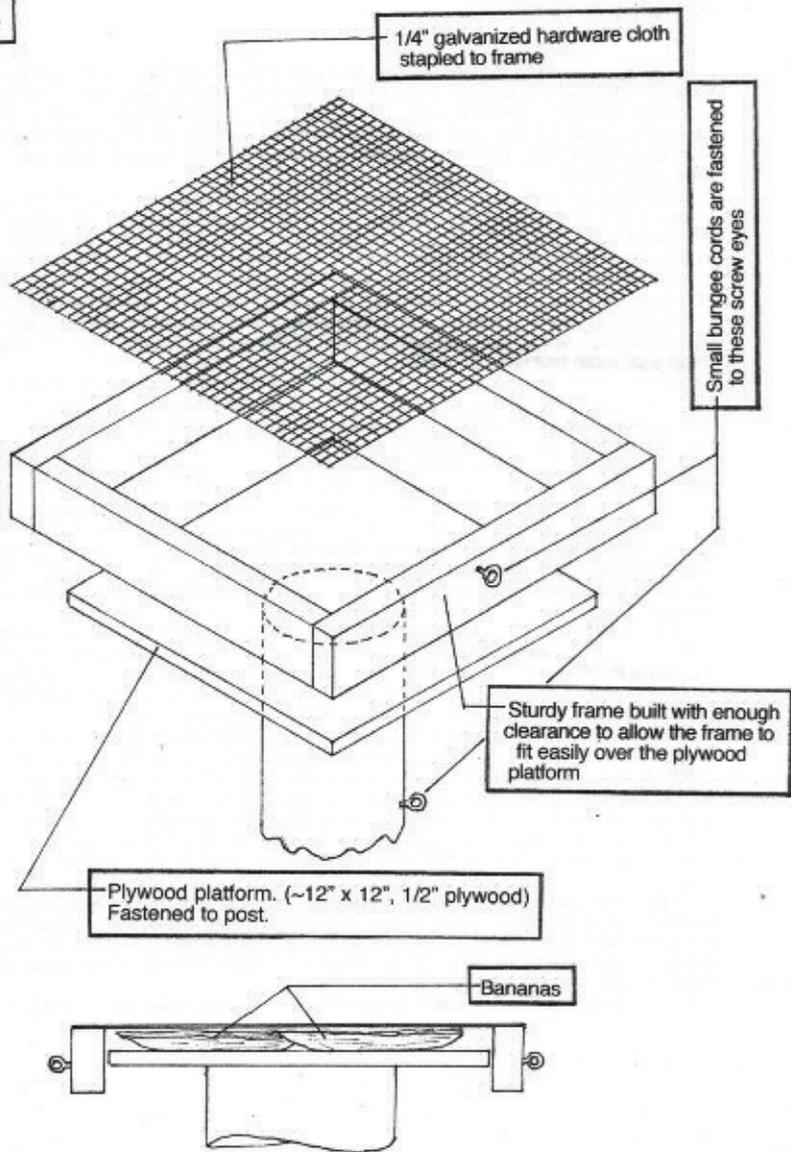


Fig. 1

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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 15 for the Spring issue.

Send NABA Fourth of July count results to Tom Gagnon tombwhawk@aol.com by **August 15** for inclusion in the Fall issue. Send your season sightings and records to Mark Fairbrother mark@massbutterflies.org 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: <http://www.massbutterflies.org/club-publications.asp>

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Joey Hoople at the Barbara Walker Butterfly Festival,
8/9/15, Mass Audubon's Broad Meadow Brook,
Worcester, MA, Marjorie Watson



Don Adams and Baltimore Checkerspot (*Euphydryas phaeton*)
caterpillar cages, Adams Farm, West Bridgewater, MA