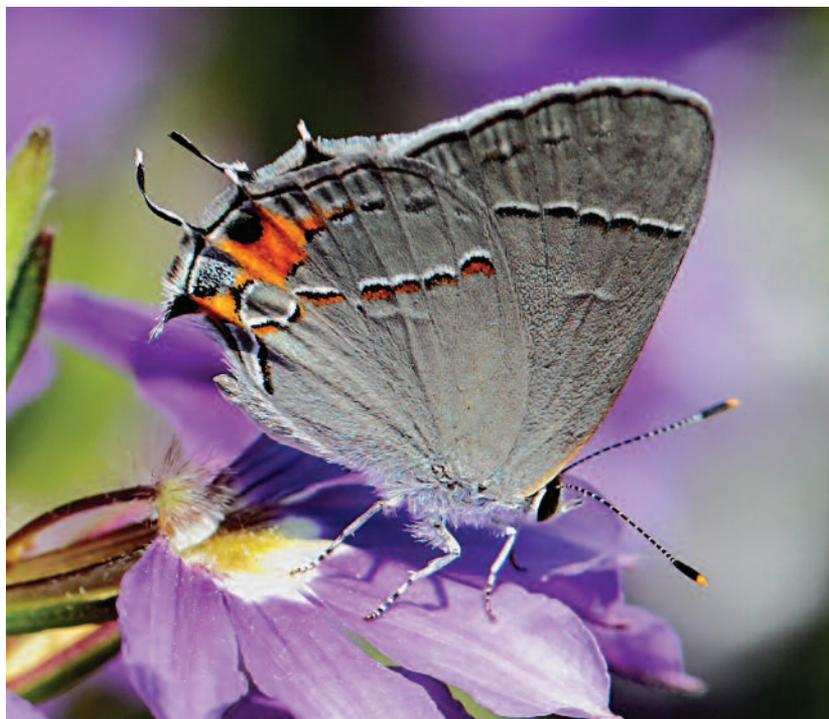


Massachusetts Butterflies



Spring 2014, No. 42

Massachusetts Butterflies is the semiannual publication of the Massachusetts Butterfly Club, a chapter of the North American Butterfly Association. Membership in NABA-MBC brings you *American Butterflies*, *Butterfly Gardener*, *Massachusetts Butterflies*, and our spring mailing of field trips, meetings, and NABA Counts in Massachusetts. Regular NABA dues are \$35 for an individual, \$45 for a family, and \$65 outside the United States. Send a check made out to NABA to: NABA, 4 Delaware Road, Morristown, NJ 07960. An “MBC only” membership is \$15, and includes a subscription to *Massachusetts Butterflies* and all club mailings. Send a check made out to Massachusetts Butterfly Club to our club secretary, address below.

MASSACHUSETTS BUTTERFLY CLUB

Officers

President: Howard Hoople, 10 Torr Street, Andover, MA, 01810-4022.
(978) 475-7719 howard@massbutterflies.org

Vice President-East: Wendy Miller, 508 Edgebrook Drive, Boylston, MA, 01505. (508) 869-6039 wendy@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

Massachusetts Butterflies No. 42, Spring 2014

© Copyright 2014 Massachusetts Butterfly Club. All rights reserved.

Contents

- 2 From the Editor
Bill Benner
- 3 Berkshire Butterflying--The Best is Yet to Come
Tom Tynning
- 10 2013 Season Summary and Records
Mark Fairbrother
- 26 Frosted Elfin Flights in Foxboro
Madeline Champagne
- 31 Observations While Raising Monarch Butterflies
Carol Duke



Bog Elfin (*Callophrys lanoraiensis*),
5/27/13, Ashburnham, MA, Bruce deGraaf

Cover photo: Gray Hairstreak (*Strymon melinus*),
Shrewsbury, MA, 8/13/13, Bruce deGraaf

From the Editor:

Spring is almost upon us, and with it will come another exciting butterfly season in the Bay State. Before starting the new field season, I like to take some time and carefully look over last year's butterfly records, including those provided here by Mark Fairbrother, our excellent and extremely hard-working records compiler. Looking at these records reminds me of the sightings I had last year, but it also reminds me of the butterflies I forgot to record, or didn't take the time to search for. Plus, it gives me some ideas of places to look for butterflies where I might not have done so before, and that helps to add data to the broader landscape of the distribution of our butterflies.

Keeping this in mind, check out our first article by Berkshire Community College professor Tom Tynning, an outstanding western Massachusetts butterflyer, birder, and all-around naturalist (*e.g.* author of the Stokes Nature series book, *A Guide to Amphibians and Reptiles*). He has provided us with some great historical and geographical information on the least-butterflied part of our fair state. This is a vast area, well worth exploring this summer, and undoubtedly home to as-yet-undiscovered populations of some of our most exciting butterflies.

Madeline Champagne has long been a champion of butterflies and the MA Butterfly Club, and she has especially become a steward of her local patch, a population of state-listed Frosted Elfins. Her contribution to this issue details the attention she has given these butterflies and conveys her strong attachment to their well-being. Likewise, Carol Duke has written a beautiful essay portraying her many years of raising Monarchs, and the soaring emotions they evoke for her. Her submission is especially timely, as we wait to see what this year's Monarch numbers will be like, after an especially poor 2013 Monarch season here in the Northeast. The lack of Monarchs in our area in 2013 has captured the (welcome) attention of the general public, and speculation abounds about the future of the great Monarch migration in the East.

Finally, take some time to delve more deeply into the details of our Massachusetts butterfly species by checking out the club's website, at www.massbutterflies.org, and the fantastic website compiled by Dr. Sharon Stichter, at www.butterfliesofmassachusetts.net. These are outstanding and unparalleled resources for us, freely providing a wealth of wonderful information on our butterfly fauna. Happy butterflying to all!

Bill Benner

Berkshire Butterflying —The Best Is Yet To Come

by Tom Tynning

The westernmost extent of the Commonwealth of Massachusetts is a mosaic of extremes. The average altitude in Berkshire County is 1500', which is greater than the maximum at any other location in the state. The lowest elevation is 590' on the Hoosic River in Williamstown, followed by the Housatonic River in Ashley Falls just 70 feet higher. The greatest elevation in the Berkshires (and the state) is the summit of Mt. Greylock, at 3491 feet. There are three major watersheds that drain the Berkshires: the Connecticut, the Housatonic, and the Hudson. These are further divided into six sub-basins (including the Farmington, Deerfield, and Connecticut rivers) that have at least some of their headwaters in Berkshire County, making the topography here a series of geologic divides. It is somewhat disorienting to visitors driving on either side of Greylock to notice that the roadside rivers (the Green, Hoosic, and their tributaries), actually run north, while just a few minutes in the opposite direction waters run south.

The Taconic hills, the Berkshire Plateau, and the river valleys between them provide the ecological diversity and travel corridors for birds, butterflies, and other wildlife to establish and maintain populations. The vegetation of the region has been well studied, beginning with Chester Dewey, a Sheffield native who graduated from and later taught at Williams College. In 1829 he completed the first county plant list. A century later (1922) Ralph Hoffmann produced the Flora of Berkshire County, and in 1966 Pam Weatherbee updated her botany of the region with the same title. Particular plants and entire vegetative communities are the key to animal distribution, a fact well known to butterflyers and other naturalists.

The Berkshires comprise several ecoregions as described in BioMap2 (<http://maps.massgis.state.ma.us/dfg/biomap/>). These include the Berkshire Highlands and Taconic Mountains, dominated by northern hardwood and spruce-fir forests, along with classic acid bogs. Prolonged winters sculpt the area's landscape,

especially on mountain summits and the entire Berkshire Plateau. The Western New England Marble Valley region includes transition forests, farms, and calcareous fens, all sitting atop a limestone base. More rare and endangered species and habitats are found in this county than any other. Dissecting all these landscapes, of course, are 31 cities, towns, and villages with approximately 131,000 citizens (and 2.5 million tourists annually) using approximately 3,000 miles of roads. What does this mean for those interested in butterflies? There's a lot of space and only a few people. Like birders, local butterflyers and those visiting from elsewhere have a nearly equal opportunity to further our knowledge of Berkshire species. There's plenty of work yet to be done.

In recent decades, Massachusetts Butterfly Club members have been the main recorders of our leps. Previous to this attention, the initial push for modern information came with the Massachusetts Butterfly Atlas Project, begun by Brian Cassie, Chris Leahy, and Dick Walton in 1986 and running four years. About a dozen Berkshire residents took up the call, virtually none of whom had spent much, if any, time previously looking at butterflies in more than a cursory way. Exceptions to this were two notable people: Asher Treat, a professional entomologist and Rene Wendell Sr., a life-long naturalist, hunter, and collector. Both offered current data and further provided unique historical insights. For the newcomers to butterflies, the Atlas was a game changer, if not a new lease on life. Edna Dunbar (who was highlighted in the Spring 2012 (No. 38) issue of *Massachusetts Butterflies*) became the face of the region's lep watchers when she discovered, in 1988, a significant population of Early Hairstreaks in Berkshire County. Along with Sue Cook, Norma Purdy, and others, she continued to add to a growing faunal list. Butterfly clubs from New Jersey, New York, and Pennsylvania have further added the Berkshires to their semi-annual field trip schedule, adding to our collective knowledge.

The Atlas also kick-started the first annual July 4th count in Massachusetts, initially sponsored by the Xerces Society. In 1986, with the help of several energetic butterfly enthusiasts, I launched the Central Berkshire Count that persists to this day. Like

all counts, participant numbers wax and wane, but a solid core group of people have participated in most, if not all the 28 events to this day. Foremost among them is Tom Gagnon, a Western Mass monster of a naturalist who can be counted on to record everything from birds, to bugs, to mammals, to wildflowers. Few things escape his incredible eyes (just don't ask him to look at a snake!). Other original and current significant contributors to the July 4th Counts have been Edna Dunbar, Rene Wendell Jr., Bruce Callahan, Ed Neumuth, Betsy Higgins, Bill Benner, Joe Wicinski, Bob Wellspeak, Terri Armata, Diane Potter, Jill Johnson, Dottie Case, Mark Fairbrother, Frank Model, Marilyn Flor, Lorraine Blank, Moe O'Connor, and others with more or less participation. Two other annual surveys are also now in place. The Northern Berkshire count was begun by Mark Fairbrother in 1994 and a South Berkshire survey was initiated by René and Christyna Laubach in 1991. Together, the three counts provide a fair, but limited (in space and time), sampling of some of the rich landscapes of our area. While new species to the county are not recorded on every count, we do average a new record about once every two or three years. We're still finding hidden corners in our count circles, and new people come with fresh eyes.

Many of the Berkshire sites we check regularly were pioneered by Edna Dunbar; she traveled the width and breadth of the county, butterfly net tucked into her windshield wipers, and she revisited those locations that were particularly rewarding. I scribbled furiously when she called to report one of her daily wanderings: "The whole of upper Gieberson is especially good for butterflies..." she stated. Then added, "...and for turtles, birds, mosquitoes, grouse, and cardinal flower." To complete her report, she offered "... the south end of the road is where Harvester, White M, and gray treefrog comes from; oh, and the Gnatcatcher." Sometimes the butterflies found her, as with the first Berkshire record (1991) of Common Checkered Skipper that was nectaring on flowers in her rented space at the Canoe Meadows Public Gardens in Pittsfield.

Other locations normally surveyed for butterflies come from experienced birders who have sought out some of the

more fascinating locales in the county. The lower floodplain of the Housatonic, in Sheffield, Ashley Falls, and Clayton, is great for birds and butterflies (Giant Swallowtails in recent years, Pipevine Swallowtail in the recent past). Greylock is a landscape unto itself and accounts for rare and common species (Early Hairstreak, of course, both Tiger Swallowtails.) The Berkshire Plateau, from Florida and Savoy to Windsor and Washington yields a number of highland species (Gray Comma, admirals, tortoiseshells, Pepper and Salt Skipper). The upper Housatonic Valley, in central Berkshire County has broad floodplains between rich mountains that provide butterfly seekers with a wide variety, including Mustard and West Virginia White, and at least 25 different skippers.

To date, we have recorded 94 butterfly species within the county in the past twenty years; at least 14 of these are represented with fewer than 5 individuals or locations. There is an outside chance for 10 or more species that may be here (see below), either in isolated pockets, or as uncommon visitors. The Berkshires consistently produces good opportunities to locate the following species that are limited in other parts of the state: West Virginia White, Mustard White, Canadian Tiger Swallowtail, Early Hairstreak, Atlantis and Meadow Fritillaries, Gray Comma, and Dion Skipper.

The following comments are my current take on the rare, historic, or wildly possible species that some butterfly enthusiast may turn up some sunny day in the Berkshires.

Giant Swallowtail: Will flights continue and will multi-year breeding be confirmed in the county? The 2011 explosion of this species in many parts of the state and especially in Berkshire County (preceded by several years of single animals discovered) will be interesting to follow. See Sharon Stichter's account (<http://www.butterfliesofmassachusetts.net/giant-swt.htm>) of the historic fluctuations in the region.

A number of Berkshire butterflies have less than 5 records in recent decades and they need more attention. These include, Cloudless Sulphur, Edward's Hairstreak, Oak Hairstreak, Brown Elfin, Henry's Elfin, Hackberry and Tawny Emperors, Sleepy Duskywing, Wild Indigo Duskywing, Two-spotted Skipper, Com-

mon Roadside Skipper, Cobweb Skipper, Dusted Skipper, and Leonard's Skipper.

Species with very few locations, or irregularly observed: Bronze and Bog Coppers, Hickory Hairstreak, Gray Hairstreak, White M Hairstreak, Variegated Fritillary, Silver-bordered Fritillary, Appalachian Brown and American Snout. Butterflies that have only historic, no recent records, or whose range is close to Berkshire county, either north, south, or west, that they should be looked for: Bog Elfin (with all of our Black Spruce bogs, it ought to be here). Also, Green Comma, Falcate Orange-tip, Pink-edged Sulphur, Southern Dogface, Cloudless Sulphur, Sleepy Orange, Little Yellow, Northern Metalmark, Silvery Checkerspot (the type locality for this species is Lenox, MA), and Columbine Dusky-wing.

If you are needing some suggestions on where to find good butterfly habitat in the Berkshires, the following may be of use, though they are in no particular order:

The Berkshire Plateau, particularly Windsor, Savoy, Hinsdale, Cheshire, Becket, and Otis. The Stafford Hill Wildlife Management Area (WMA), Moran WMA, and Hinsdale Flats are rich and very under-sampled. See this Division of Fisheries and Wildlife site for maps/directions (<http://www.mass.gov/eea/agencies/dfg/dfw/maps-destinations/western-district-wildlife-management-area-maps.html>). The plateau is the best area to find acid bog wetlands, even along roadsides that should be checked more regularly.

The Lower Housatonic Valley is the "tropical zone" for the Berkshires, where southern influences are pronounced. A few standard locales are the Tyringham Cobble, Bartholomew's Cobble, Jug End WMA, and the backroads of Great Barrington, Sheffield, and Ashley Falls.

The Green River Corridor in the north end of the county is a fascinating mix of open meadows, forests, and wetlands. Mt. Greylock, of course (at all levels, including the Visitors Center meadows as well as Greylock Glen and Ragged Mountain), Linear Park (City of Williamstown), Hopkins Forest, Berlin Mountain, and Field Farm (Trustees of Reservations) are excellent.

The Central Berkshire region is the most densely populated but has remarkable places that consistently produce great leps. These include Springside Park, Canoe Meadows, Berkshire Community College, and the area affectionately known as the Sewer Beds, all in Pittsfield. Nearby Lenox has the Derry WMA, October Mountain, and Woods Pond, most of which are part of the Housatonic WMA. Here is a link to the Lenox area management areas: (<http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-wma/western/george-darey-housatonic-wma.pdf>).

There are a number of locales that remain very poorly covered (especially since the loss of Edna Dunbar) where butterfly discoveries are yet to be made. These include, in no particular order, again, the Natural Bridge and surrounding Mohawk Trail in Savoy, Florida, and Clarksburg, the Cheshire Jungle (Dalton/Lanesboro), Ice Glen (Stockbridge) the Tyringham Valley, Steven's Glen (Berkshire Natural Resources Council), Beartown State Forest, Thousand Acre Swamp (New Marlborough), and the lower Appalachian Trail (Egremont, Sheffield, Great Barrington).

While finding adult butterflies (recording species) is necessarily a main goal of most people who come to the Berkshires, we still know very little about their other life stages. Larval food preferences, activity dates, egg numbers and deposition sites, overwintering micro-habitats and success, survivability, predators, effects of introduced plants and "pest" control species, and many other areas of inquiry abound. At the very least we enthusiastically invite you out to any or all of our three Berkshire 4th of July counts (check the MBC website for dates and meeting locations). Remember that collecting specimens is regulated by landowners. All State Parks require permits, and there is a No Collecting policy on every The Trustees of Reservations properties. Scientific permits are required for collecting Division of Fisheries and Wildlife management areas.

I appreciate the extensive work done by numerous people who collect information and share it through the Mass Butterfly Club, especially the photographers. Information on the club web site is wonderfully accessible. Especially impressive is Sharon Stichter's Butterflies of Massachusetts site. The Butterflies of the

East Coast (1995, Cech and Tudor) is an invaluable resource for information including species ranges that come tantalizing close to us. The Massachusetts Butterfly Atlas project brought these insects to the forefront for many of us here in the Berkshires two decades ago.



Tom Tynning
and Snapping
Turtle friend
(*Chelydra
serpentina*),
7/7/13

Brian Cassie, founder, MA Butterfly Club, and Harvey Allen, western MA naturalist and conservationist, studying salamander larvae, 5/27/13



2013 Season Summary and Records

Mark Fairbrother

The major flights of various species into or through the state that typified 2012 were largely absent in 2013. Indeed, the species that generated the most comments in this regard was the Monarch, which due possibly to very unfavorable weather in late spring was present in only the smallest numbers and produced no strong flight southward in the fall. The three other much talked about species were Red-banded Hairstreak, which appeared in several locations across the state, White-M Hairstreak which began appearing in numbers that made me inquire of reporters that had perhaps a typo been made, and Sachem, which seemed to be everywhere in the southeast and islands.

Over 7,700 records were received for the 2013 season. Thank-you to the many observers submitting records either directly to me or posting their sightings on the MassLep butterfly list server. 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, in that order.

Following the NABA checklist the number of species reported for 2013 was 105.

SWALLOWTAILS

Giant Swallowtail had another amazing season in 2013, showing up just about anywhere and everywhere. Will the streak of strong flights continue in 2014? Pipevine Swallowtails were reported from Paxton with some regularity and a few other scattered locations. Black, Eastern Tiger, Canadian Tiger, and Spicebush Swallowtail were reported in about normal numbers. Appalachian Tiger Swallowtail was reported from Newbury and Sheffield in July.

WHITES AND SULPHURS

Mustard White was reported only from two locations in the Berkshires, where it is probably more widespread than that, while West Virginia White was again reported in low numbers primarily in higher elevations from the CRV westward. Cabbage White was abundantly reported throughout the season. Clouded and Orange Sulphur reports were about average, and beginning in August Cloudless Sulphur was reported mostly from scattered coastal areas in September, and in small numbers, which is what would be expected. Little Yellow was absent from the state in 2013.

GOSSAMER-WINGS

This year Harvester was hardly reported away from its stronghold in the Mystic Lakes area, with isolated reports from two other locations.

American Copper numbers were about average, while both Bog and Bronze Copper were reported largely from the expected locations. Hair-

streak species provided much of the excitement in 2013. Coral Hairstreak numbers were down, while Banded Hairstreak numbers were about average. Edwards Hairstreak was again well reported from the Woburn-Canton area, but otherwise only from East Longmeadow. Frosted Elfin of both flavors were reported from the usual locations, with one individual non-conformist sparking a protracted debate on the Internet over its lineage. Bog Elfin was reported only from Ashburnham. Henry's Elfin turned up from late April through early May, with all records from the eastern half of the state. Hoary Elfin was reported only from Plymouth County in 2013. Starting in early August Red-banded Hairstreak put in appearances in seven or more locations, almost all in the southeastern part of the state. Hickory Hairstreak was reported from four locations. White M Hairstreak put in a few early appearances, but really got going in August when it seemed to be showing up everywhere and anywhere, relatively speaking. The Mattapoissett colony sustained double-figure reports throughout August and into early September. Hessel's Hairstreak was reported only from Canton, while the relatively more common Juniper Hairstreak was found at the known locations in the CRV and nearer the coast. Gray Hairstreaks were generally widespread with high numbers coming from the Falmouth area. Early Hairstreak was reported only from Mt. Greylock in late May and early June. Spring Azure, in all its wonderful variety, was on the wing from early April, while Summer Azure started flying in mid-June. Cherry Gall Azure was reported from a hand-

ful of locations across the state from early May through early June. Silvery Blue, a species that arrived in the state 25 years ago to much fanfare, now quietly slips along almost un-noticed and under reported with reports from only seven locations in 2013.

BRUSHFOOTED BUTTERFLIES

Variegated Fritillary was scarce in 2013, with the species quietly appearing as single individuals at seven locations across the state. Aphrodite seemed to have a good year while Atlantis Fritillary numbers continue to be only a shadow of what they were 20 years ago. Harris' Checkerspot was reported from only three locations, while Baltimore Checkerspot was down in numbers if not locations. Question Mark had an off year, and Gray Comma was again reported from scattered locations in Berkshire County. Mourning Cloak appeared early and often, while neither Tortoiseshell was reported at all. American Lady numbers returned to a more normal level, while Painted Lady put in only scattered appearances after last Fall's stunning migration through our area.

Viceroy enjoyed an average season, while both Hackberry and Tawny Emperor were reported from the usual scattered locations in the CRV and southern Berkshires. Northern Pearly-eye was reported from the western and central parts of the state, Eyed Brown reports were low, while Appalachian Brown, Little Wood-Satyr, Com. Ringlet and Com. Wood-Nymph numbers and reports were about as would be expected. Monarchs were largely a missing species in 2013, with very

low numbers filtering through the area and no major southward movement in the Fall.

SKIPPERS

The rather pronounced influx of southern skippers in late summer and fall 2012 was not repeated in 2013, partially because some of them have apparently decided to stay. Long-tailed Skipper stayed away, and there were few records of Fiery and Ocola Skippers. On the other hand, Sachem was found in large numbers over most of southeastern Mass., with some making it to the north shore—far too many and too soon to have been immigrants. Likewise for Zabulon Skipper, which is rapidly approaching ho-hum status in the state.

Silver-spotted Skipper had a more or less average year. Hoary Edge put on a show in Worcester at Broad Meadow, but otherwise reports were still down; Sleepy Duskywing was reported only from Plymouth and the Vineyard; and Horace's Duskywing numbers were up, including some western and far western MA sightings. Common Checkered Skipper appeared somewhat briefly in only three locations. Common Sootywing numbers were again off.

Arctic Skipper was reported only from the Moran WMA in Windsor, even though it is actually much more widespread in northern Berkshire, Franklin, and probably Worcester Counties. European Skipper numbers continued to be for the most part greatly reduced compared to a few years ago. Let's all pause to shed a tear. Most of the few Leonard's Skippers were again from the eastern half of the state. Cobweb Skipper was again surely under re-

ported, with most reports from the CT river valley, and Indian Skipper was scarce with the exception of nearly 100 in Northampton. Broad-winged Skipper was widespread although usually in small numbers, while Dion Skipper appeared in Franklin County for the first time when the species was found in Deerfield. Two-spotted Skipper went unreported, while Pepper and Salt Skipper was again mostly in higher elevation settings. Ocola Skipper appeared only in Foxboro and Northampton.

Abbreviations: AP-Allen's Pond; BMB-Broad Meadow Brook, CG-Community Gardens; CRP-Charles River Peninsula; CST-Crane Swamp Trail; F&G-Fish & Game; FPB-Fort Pond Brook; FS-Fannie Stebbins 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; MS-SF-Myles Standish State Forest; MV-Martha's Vineyard; NABA 4JC-North American Butterfly Association 4th of July Count; NAC-Nine Acre Corner; NCM-North Common Meadows TTOR; NP-Newburyport; NRT-Norwottuck Rail Trail; NWR-National Wildlife Refuge; PL-Power Line; 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.

Pipevine Swallowtail

6/15 1 MBWMA, Newbury - Matt Arey
7/8 1 Norfolk - Michelle Noonan
7/12 1 Williamsburg - Carol Duke
7/15 1 Barry Yard, Paxton - Elise Barry
8/26 3 Barry Yard, Paxton - Elise & Karl Barry
9/4 1 Northampton CG - Tom Gagnon
9/18 1 Barry Yard, Paxton - Elise Barry

Black Swallowtail

4/24 1 Canton - Bruce deGraaf
5/1 1 Amherst - Josh Rose
5/5 1 E Longmeadow - Karen Parker
5/16 1 MMP, Williamstown - Pam Weatherbee
5/22 4 Westport - Fred Bouchard
7/12 22 S Berkshire NABA - Renee Laubach
8/16 4 Hubbardston, Mt. Jefferson Cons. Area - Wendy Howes
8/17 7 Sandisfield - Mark Lynch, Sheila Carroll
9/4 12 Appleton Farms, Ipswich - Matt Arey
9/19 1 Marblehead - Karen Haley
10/15 1 Allens Pond Wildlife Sanctuary, Dartmouth - Madeline

Giant Swallowtail

5/29 1 Northampton CG - Tom Gagnon
6/1 2 Paxton - fide Elise Barry
6/5 2 Sheffield - Tony Gola
6/9 1 Williamstown - Pam Weatherbee
6/16 1 Rowley - Phil Terpos
6/28 1 Whately - Bill Benner & Joe Wicinski
7/27 19 Sheffield - Steve Moore & Barbara Volkle
8/5 1 Wilbraham - Bob & Ellen Kemp
8/8 1 Truro - David Walsh
8/11 18 Sheffield - Mark Lynch, Sheila Carroll
8/12 1 Heirloom Harvest CSA gardens, Westboro - Garry Kessler
8/12 2 Lanesborough - Gael Hurley
8/16 1 Arlington - Lisa Wolfe
8/17 2 Saffarewich Yard, Newbury - dorothy saffarewich
8/18 1 Reading - Lorraine Kaplan
8/22 1 Greenfield - Mark Fairbrother
8/23 2 Arnold Arboretum, Boston - Paul Peterson
8/24 1 Arnold Arboretum, Boston - Ben Cromartie
8/24 1 Edgartown - Elise & Karl Barry
8/28 2 Richmond - Harley Wolff
8/31 1 Sandwich - Tim Crowninshield
9/6 2 Drumlin Farm, Lincoln - Marj Rines
9/8 1 Saugus - Alex Grkovich
9/13 1 Saffarewich Yard, Newbury - dorothy saffarewich
9/14 1 Athol - Dave Small

Eastern Tiger Swallowtail

4/28 1 Provincetown - Mark Faherty
4/28 2 HPM, Woburn - Matt Arey
5/1 1 Vineyard Haven - Matt Pelikan
5/7 2 Middlesex Fells, Winchester - Matt Arey
5/13 1 Lakeville - Robin Gross
5/17 2 Holliston - Richard Hildreth
6/2 40 BFD, Hubbardston - Dolores Price & Marvin St. Onge
6/17 1 MBWMA, Newbury - Joe Stichter
6/23 6 Warwick - Mark Lynch, Sheila Carroll
7/13 8 Truro - Truro 4J count
7/16 4 Bernardston - Carl Kamp
7/30 4 Oakham - Elise Barry & Wendy Howes
8/4 5 W Bridgewater - Don Adams
8/11 13 Mount Washington - Mark Lynch, Sheila Carroll
8/25 6 Dartmouth - Carl Kamp & Alyce Mayo
9/4 2 Appleton Farms, Ipswich - Matt Arey
9/18 1 Barry Yard, Paxton - Elise Barry

Canadian Tiger Swallowtail

5/12 8 Ware - Brian Klassanos
5/12 1 Whately - Bill Benner and Joe Wicinski
5/17 2 Dinosaur Footprints TTOR, Holyoke - MBC trip
5/18 2 Tolland - Mark Lynch, Sheila Carroll
5/27 2 Ashburnham - Bruce deGraaf & Greg Dysart
5/30 12 North Adams, Mt. Greylock State Res. - Tom Gagnon
6/1 75 Monterey - Mark Lynch, Sheila Carroll
6/5 4 Greylock Glen, Adams - Bet Bresett

6/9 30 Pittsfield SF - Mark Lynch, Sheila Carroll
6/29 2 N Worcester NABA - Carl Kamp
7/13 2 N Berkshire NABA - Tom Tynning et al
7/20 1 C Berkshire NABA - Tom Tynning et al
Appalachian Tiger Swallowtail
7/7 15 MBWMA, Newbury - Matt Arey
7/27 5 Sheffield - Matt Arey

Spicebush Swallowtail

5/5 1 Delaney WMA, Stow - Barbara Volkle & Steve Moore
5/7 1 Shelburne Falls - Jeff Boettner
5/11 1 Old Town Hill, Newbury - Matt Arey
5/21 1 E Longmeadow - Karen Parker
5/31 1 Arlington - Lisa Wolfe
6/1 1 Monterey - Mark Lynch, Sheila Carroll
6/2 1 BMB WS, Worcester - Garry Kessler
6/9 1 Framingham - Dawn Puliafico
6/13 1 Florence - Tom Gagnon
6/20 1 E Longmeadow - Karen Parker
6/29 2 HPM, Woburn - MBC trip
7/3 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/4 2 Sheffield - Mark Lynch, Sheila Carroll
7/4 11 Thompson Fields, Harwich - Joe Dwelly
7/13 8 Truro - Truro 4J count
7/16 8 Thompson Fields, Harwich - Scott Baron
7/24 1 Middlesex Fells, Winchester - Rosemary Mosco
7/30 1 Oakham - Elise Barry & Wendy Howes
8/4 15 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/10 19 Thompson Fields, Harwich - Joe Dwelly
8/11 1 Sheffield - Mark Lynch, Sheila Carroll
8/12 2 Pelham - Carl Kamp
8/16 1 Montague Plains - Elise & Karl Barry
8/18 12 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/26 1 Edgartown - Matt Pelikan
9/4 1 Appleton Farms, Ipswich - Matt Arey
9/24 1 E Longmeadow - Karen Parker
10/2 2 Wellfleet Bay Ws, Wellfleet - Mark Faherty

Mustard White

7/20 29 C Berkshire NABA - Tom Tynning et al
7/27 2 Berkshire County - Mark Lynch, Sheila Carroll

West Virginia White

4/27 2 Sandisfield - Mark Lynch, Sheila Carroll
5/2 2 Reservoir Rd, Sunderland - Sue & Ron Cloutier
5/5 1 Cummington - Barbara Spencer
5/5 8 Westfield - Janis LaPointe
5/30 3 North Adams, Mt. Greylock State Res. - Tom Gagnon
6/5 1 North Adams, Mt. Greylock State Res. - Tom Gagnon et al

Cabbage White

4/5 1 Chestnut Hill Farm, Southborough - Dawn Puliafico
4/8 1 Greenfield - Mark Fairbrother
4/18 1 Edgartown - Brian Lawlor
4/25 6 Holliston - Richard Hildreth
5/11 24 Appleton Farms, Ipswich - Matt Arey
6/24 120 Borden Colony, Raynham - Joe Dwelly
8/6 7 Greylock Glen, Adams - Terri Armata
8/17 550 FS WMA, Longmeadow - MBC trip
8/30 14 Wellfleet Bay Ws, Wellfleet - Mark Faherty
9/20 36 Appleton Farms, Ipswich - Matt Arey
9/28 11 Sandisfield - Mark Lynch, Sheila Carroll
10/9 300 Callahan SP, Framingham - Greg Dysart
10/17 20 Northampton CG - Tom Gagnon & Betsy Higgins
10/18 1 Southwick - Karen Parker
11/2 3 Stichter Yard, Newbury - Sharon Stichter

Clouded Sulphur

4/24 1 Montague Plains - Ron & Sue Cloutier
4/28 5 Crane WMA, Falmouth - Joe Dwelly
5/16 35 Borden Colony, Raynham - Joe Dwelly
6/24 80 Borden Colony, Raynham - Joe Dwelly
7/3 1 MMP, Williamstown - Pam Weatherbee
7/6 47 Deerfield - Bill Benner & Joe Wicinski
7/30 29 Oakham - Elise Barry & Wendy Howes
8/6 2 Ashby - Carl Kamp
8/11 27 Sheffield - Mark Lynch, Sheila Carroll
8/16 174 Hubbardston, Mt. Jefferson Cons. Area - Wendy

Howes

- 8/21 27 Rutland State Hospital grounds - Elise & Karl Barry
- 9/2 19 Southborough - Dawn Puliafico
- 9/15 100 NAC, Concord - MBC Trip
- 10/1 20 Moore SP, Paxton - Elise & Karl Barry
- 10/8 2 Amherst - Josh Rose
- 10/9 100 Callahan SP, Framingham - Greg Dysart
- 11/2 14 Westport - Mark Lynch, Sheila Carroll
- 11/18 1 Stichter Yard, Newbury - Joe Stichter

Orange Sulphur

- 5/4 1 GBH, Canton - Matt Arey
- 5/18 1 Oak Bluffs - Matt Pelikan
- 5/27 1 Williamsburg - Carol Duke
- 5/31 3 LPWS, Barnstable - Joe Dwelley
- 6/8 2 Ballard Hill RA, Lancaster - Tom Murray
- 6/24 30 Borden Colony, Raynham - Joe Dwelley
- 7/6 18 Deerfield - Bill Benner & Joe Wicinski
- 7/8 26 Borden Colony, Raynham - Joe Dwelley
- 7/17 25 Crane WMA, Falmouth - Fred Bouchard
- 7/27 116 Brewster NABA - Mark Faherty et al
- 8/4 4 Crane WMA, Falmouth - Joe Dwelley
- 8/6 2 Greylock Glen, Adams - Terri Armata
- 8/10 4 Sheffield - Greg Dysart
- 8/11 8 Stafford Hill WMA, Cheshire - Terri Armata
- 8/21 8 Rutland State Hospital grounds - Elise & Karl Barry
- 9/4 68 Borden Colony, Raynham - Joe Dwelley
- 9/14 67 AP Field Station, Dartmouth - Lauren Miller-Donnelly,
- 9/19 24 Appleton Farms, Ipswich - Garry Kessler
- 9/21 4 Cuttyhunk Island - Brian Cassie
- 9/24 1 E Longmeadow - Karen Parker
- 9/28 16 Sandisfield - Mark Lynch, Sheila Carroll
- 10/9 100 Callahan SP, Framingham - Greg Dysart
- 10/17 2 Northampton CG - Tom Gagnon & Betsy Higgins
- 11/2 2 Stichter Yard, Newbury - Sharon Stichter
- 11/18 1 Framingham - Dawn Puliafico

Cloudless Sulphur

- 7/7 1 MBWMA, Newbury - Matt Arey
- 8/4 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
- 9/3 1 Manomet, Plymouth - Mark Faherty
- 9/7 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
- 9/21 8 Cuttyhunk Island - Brian Cassie
- 10/2 1 W Tisbury - Matt Pelikan

Harvester

- 5/28 1 Horn Pond Area, Woburn - Marj Rines
- 5/31 6 Mystic Lakes, Medford - Renee LaFontaine
- 6/5 1 Hubbardston - Elise Barry & Wendy Howes
- 8/19 1 E Longmeadow - Karen Parker
- 9/10 1 Ashland - Dawn Puliafico

American Copper

- 4/26 1 Tisbury - Matt Pelikan
- 5/3 1 Ward Res, Andover - Howard Hoople
- 5/10 3 Lamson Rd, Foxborough - Madeline Champagne
- 5/12 2 Florence - Tom Gagnon
- 5/12 1 Holliston - Richard Hildreth
- 5/18 1 Williamsburg - Carol Duke
- 7/10 85 Wellfleet Bay Ws, Wellfleet - Mark Faherty
- 7/13 69 Truro - Truro 4J count
- 7/16 4 E Longmeadow - Karen Parker
- 8/16 12 Tuckernuck Island - Matt Pelikan
- 9/4 26 Borden Colony, Raynham - Joe Dwelley
- 10/27 11 Ward Res, Andover - Howard Hoople
- 10/28 1 Westport - Mark Lynch
- 11/2 1 Amherst - Scott Turner

Bronze Copper

- 6/6 1 GMNWR, Concord - Tom Murray
- 6/23 12 Sedge Meadow, Wayland - Matt Arey
- 8/16 1 Jug End Res, Egremont - Steve Shelasky
- 9/7 1 Borden Colony, Raynham - Matt Arey
- 9/20 12 Appleton Farms, Ipswich - Matt Arey
- 9/29 1 Quabog WMA, Brookfield - Mark Lynch, Sheila Carroll
- 10/11 1 Wellesley - Greg Dysart

Bog Copper

- 6/22 2 Eastham - Mark Faherty

- 7/4 1 Bank Street bog, Harwich - Joe Dwelley
- 7/6 6 Tully Dam, Royalston - Steve Moore
- 7/6 356 C Franklin NABA - Mark Fairbrother et al
- 7/8 1 Shutesbury - Bruce deGraaf
- 7/13 8 Provincetown - Truro 4J count

Coral Hairstreak

- 6/27 3 HPM, Woburn - Howard Hoople
- 7/2 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
- 7/3 1 Tower Hill, Boylston - Wendy Miller
- 7/10 24 Wellfleet Bay Ws, Wellfleet - Mark Faherty
- 7/23 8 Correllus State Forest, West Tisbury - Matt Pelikan
- 8/12 1 E Longmeadow - Karen Parker
- 9/20 1 Royalston - Alyce Mayo

Acadian Hairstreak

- 6/29 11 Pittsfield - Tom Gagnon
- 6/29 3 HPM, Woburn - MBC trip
- 7/2 1 HPM, Woburn - Howard Hoople
- 7/20 14 C Berkshire NABA - Tom Tynning et al

Edwards' Hairstreak

- 6/20 2 GBH, Canton - Garry Kessler
- 6/23 10 HPM, Woburn - Matt Arey
- 6/29 1 E Longmeadow - Karen Parker
- 7/13 2 Truro - Truro 4J count
- 7/23 12 Correllus State Forest, West Tisbury - Matt Pelikan

Banded Hairstreak

- 6/19 1 Shrewsbury - Bruce deGraaf
- 6/30 58 GBH, Canton - MBC trip
- 7/3 11 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelley
- 7/3 4 Wellfleet Bay Ws, Wellfleet - Mark Faherty
- 7/20 2 MV NABA - Matt Pelikan et al
- 7/27 2 Sheffield - Matt Arey
- 7/31 1 E Longmeadow - Karen Parker

Hickory Hairstreak

- 6/28 1 Shrewsbury - Bruce deGraaf
- 6/29 1 Belchertown - Larry Therrien
- 7/6 2 C Franklin NABA - Mark Fairbrother et al
- 7/26 1 Bart's Cobble, Sheffield - MBC Trip

Striped Hairstreak

- 6/23 1 HPM, Woburn - Matt Arey
- 6/29 10 HPM, Woburn - MBC trip
- 6/30 12 GBH, Canton - MBC trip
- 7/4 1 Williamsburg - Carol Duke
- 7/5 3 Moore SP, Paxton - Elise Barry
- 7/5 1 MBWMA, Newbury - Joe & Sharon Stichter
- 7/8 2 Shutesbury - Bruce deGraaf
- 7/13 5 Provincetown - Truro 4J count
- 8/6 1 Nasketucket Bay Reserve, Mattapoisett - Ron & Sue
- 8/6 1 Ashby - Carl Kamp

Oak Hairstreak

- 6/11 1 Amherst - Joshua Rose
- 6/13 1 Florence - Tom Gagnon
- 6/29 1 HPM, Woburn - Greg Dysart & Bruce deGraaf
- 7/2 1 Canton - Garry Kessler

Brown Elfin

- 4/17 18 Wellfleet Bay WS, Wellfleet - Mark Faherty
- 4/25 1 Westfield - Tom Gagnon et al
- 4/25 42 High Head Bike Path, Truro - Joe Dwelley
- 4/27 5 Edgartown - Matt Pelikan
- 5/4 1 Oxbow NWR, Harvard - Steve Moore
- 5/7 35 Pilgrim Heights, Truro - Joe Dwelley
- 5/27 5 Myles Standish State For. Carver - Joe Dwelley & Rand

Hoary Elfin

- 5/1 1 MSSF, Plymouth - Garry Kessler
- 5/7 24 MSSF, Plymouth - Steve Moore & Garry Kessler
- 5/19 6 MSSF, Plymouth - MBC trip

Frosted Elfin

- 4/25 6 Westfield - Tom Gagnon et al
- 4/25 18 Westover AFB, Chicopee - MBC trip
- 4/28 2 HPM, Woburn - Matt Arey
- 5/1 11 Crane WMA, Falmouth - Joe Dwelley
- 5/7 2 Middlesex Fells, Winchester - Matt Arey
- 5/10 38 Lamson Rd, Foxborough - Madeline Champagne
- 5/16 1 Florence - Tom Gagnon

5/19 5 MSSF, Plymouth - MBC trip
5/27 78 Lamson Rd, Foxborough - Madeline Champagne

Henry's Elfin

4/20 1 Power Line, Georgetown - Matt Arey
4/24 7 Milton - Bruce deGraaf
4/26 1 Great Meadows, Lexington - Greg Dysart
4/27 8 Fowl Meadows, Milton - Sue Cloutier
5/4 1 Wayland CG - Jason Forbes
5/4 1 Oxbow NWR, Harvard - Steve Moore
5/5 1 Concord Sewage Plant - Barbara Volkle & Steve Moore
5/5 1 Acton - Tom Whelan
5/6 1 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelley

Bog Elfin

5/18 1 Ashburnham - Garry Kessler
5/21 2 Petersham - Garry Kessler
5/27 3 Ashburnham - Bruce deGraaf & Greg Dysart

Eastern Pine Elfin

4/24 3 Montague Plains - Ron & Sue Cloutier
4/25 1 Westfield - Tom Gagnon et al
4/26 3 Lamson Rd, Foxborough - Madeline Champagne
4/28 9 Crane WMA, Falmouth - Joe Dwelley
5/2 26 Montague Plains - Sue & Ron Cloutier
5/4 5 Oxbow NWR, Harvard - Steve Moore
5/5 1 Nahant - Linda Pivacek
5/6 22 Assabet River NWR, Sudbury - Greg Dysart
5/12 1 Bayberry Hills NL-Bike Path, Yarmouth - Joe Dwelley
5/19 8 MSSF, Plymouth - MBC trip
5/27 9 Ashburnham - Bruce deGraaf & Greg Dysart
6/5 1 Hubbardston - Elise Barry & Wendy Howes
6/9 1 Florence - Tom Gagnon
6/19 1 Crane WMA, Falmouth - Joe Dwelley

Juniper Hairtreak

4/27 1 HPM, Woburn - Howard Hoople et al
5/7 3 Middlesex Fells, Winchester - Matt Arey
5/17 11 Dinosaur Footprints TTOR, Holyoke - MBC trip
5/30 2 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/21 2 Northampton NABA - Mark Fairbrother et al
7/13 23 World's End, Hingham - Greg Dysart
8/10 1 Oak Bluffs - Matt Pelikan

Hessel's Hairtreak

5/19 1 Ponkopaug Bog, Canton - Greg Dysart
5/27 3 Ponkopaug Bog, Canton - Garry Kessler

White M Hairtreak

4/29 1 Waskosim's Rock, Chilmark - Allan Keith
5/5 1 New Salem - Ron & Sue Cloutier
5/7 1 Middlesex Fells, Winchester - Matt Arey
7/20 1 C Berkshire NABA - Tom Tynning et al
7/23 1 Lind Farm Cons. Area, Norfolk - Josh Fecteau
7/27 1 Sheffield - Steve Moore & Barbara Volkle
7/28 1 GBH, Canton - Greg Dysart
7/31 1 Champagne yard, Foxborough - Brian Cassie
8/4 1 Crane WMA, Falmouth - Joe Dwelley
8/4 1 Gardner - Rosemary Mosco
8/4 11 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/4 1 Grafton - Rosemary Mosco
8/6 1 Met State, Waltham - Jason Forbes
8/11 1 Tidmarsh Farms, Plymouth - Mark Faherty
8/11 1 Stafford Hill WMA, Cheshire - Terri Armata
8/12 1 MNWS, Marblehead - Greg Dysart
8/14 1 Norton - Greg Dysart
8/15 1 Oak Bluffs - Matt Pelikan
8/15 1 Northampton CG - Tom Gagnon
8/17 1 Edgartown - Matt Pelikan
8/24 1 Lexington - Jason Forbes
8/25 1 Holyoke - Bill Benner
9/4 1 Appleton Farms, Ipswich - Matt Arey
9/7 1 AP Allens Neck, Dartmouth - Lauren Miller-Donnelly, et al
9/7 2 Nasketucket Bay Reserve, Mattapoisett - Matt Arey

Gray Hairtreak

4/28 1 HPM, Woburn - Matt Arey
4/28 9 Crane WMA, Falmouth - Joe Dwelley
5/7 6 Middlesex Fells, Winchester - Matt Arey
5/27 3 Lamson Rd, Foxborough - Madeline Champagne

7/3 6 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/10 8 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/17 3 Southborough - Dawn Puliafico
7/28 4 GBH, Canton - Greg Dysart
8/17 2 Edgartown - Matt Pelikan
8/23 1 Shrewsbury - Bruce DeGraaf
9/9 2 BMB WS, Worcester - Elise & Karl Barry
10/1 1 Dartmouth - Madeline Champagne
10/17 1 Westborough WMA - Greg Dysart

Red-banded Hairtreak

8/4 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/10 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren
8/16 1 AP Field Station, Dartmouth - Lauren Miller-Donnelly
8/16 1 DWWS, Marshfield - David Ludlow
8/18 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/20 1 Foxborough - Madeline Champagne
8/20 1 E Longmeadow - Karen Parker
8/24 1 Norton - Brian Cassie
9/9 1 Crowe's, Dennis - Joe Dwelley
9/19 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren

Early Hairtreak

5/30 4 North Adams, Mt. Greylock State Res. - Tom Gagnon
6/1 6 North Adams, Mt. Greylock State Res. - MBC trip
6/5 7 North Adams, Mt. Greylock State Res. - Tom Gagnon et al

Eastern Tailed-Blue

4/27 1 Edgartown - Matt Pelikan
4/28 6 Crane WMA, Falmouth - Joe Dwelley
4/28 1 Lamson Rd, Foxborough - Madeline Champagne
5/4 1 Oxbow NWR, Harvard - Steve Moore
5/12 4 Florence - Tom Gagnon
5/16 1 E Longmeadow - Karen Parker
5/27 1 Athol - Dave Small
6/8 2 Ballard Hill RA, Lancaster - Tom Murray
6/21 1 MBWMA, Newbury - Joe & Sharon Stichter
7/2 15 Southborough - Dawn Puliafico
7/4 3 Williamsburg - Carol Duke
7/28 12 Hubbardston old landfill - Wendy Howes
7/30 18 Breakneck Hill Conservation Land, Southborough -
8/11 5 Hinsdale - Terri Armata
8/12 5 Cunningham Pond area, Hubbardston - Wendy Howes
8/16 22 Montague Plains - Elise & Karl Barry
8/17 4 Edgartown - Matt Pelikan
8/21 20 Rutland State Hospital grounds - Elise & Karl Barry
8/31 21 Sherborn PL - MBC trip
9/2 4 LPWS, Barnstable - Joe Dwelley
9/28 3 Concord - Dawn Puliafico
10/17 1 Williamsburg - Carol Duke
10/21 1 Hubbardston - Wendy Howes

Spring Azure

4/9 1 Sherborn - Greg Dysart
4/10 1 Menemsha Hills, Chilmark - Russ Hopping
4/17 1 E Longmeadow - Karen Parker
4/17 2 Borden Colony, Raynham - Joe Dwelley
4/17 2 Montague Plains - Ron & Sue Cloutier
4/24 29 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelley
4/26 10 Tisbury - Matt Pelikan
4/28 50 Crane WMA, Falmouth - Joe Dwelley
4/30 21 Oxbow NWR, Harvard - Steve Moore & Barbara Volkle
5/2 4 MBWMA, Newbury - Joe & Sharon Stichter
5/5 21 Acton - Tom Whelan
5/6 23 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelley
5/15 14 Foxborough - Greg Dysart
5/22 1 Petersham - MBC Trip
5/27 2 CRPL, Chelmsford - Tom Whelan
6/2 4 BFD, Hubbardston - Dolores Price & Marvin St. Onge
6/5 3 Greylock Glen, Adams - Bet Brestet
6/30 2 Dauphinis Park, Grafton - Dolores Price

Cherry Gall Azure

5/2 1 Amherst - Josh Rose
5/4 4 Oxbow NWR, Harvard - Steve Moore
5/11 5 Old Town Hill, Newbury - Matt Arey
5/16 2 Moore SP, Paxton - Elise Barry

6/17 1 Windsor - Tom Gagnon & Harvey Allen

Summer Azure

6/17 2 West Cummington - Tom Gagnon & Harvey Allen
6/21 3 Norcross Wildlife Sanctuary, Wales - Elise Barry & Jen
6/22 1 Nasketucket Bay Reserve, Mattapoisett - Lauren Griffith
6/30 3 GBH, Canton - MBC trip
7/3 2 LPWS, Barnstable - Joe Dwelly
7/4 7 Williamsburg - Carol Duke
7/20 27 C Berkshire NABA - Tom Tynning et al
7/21 33 Northampton NABA - Mark Fairbrother et al
7/27 9 Sheffield - Steve Moore & Barbara Volkle
8/1 8 Moore SP, Paxton - Elise & Karl Barry
8/5 1 Oak Bluffs - Matt Pelikan
8/10 1 Oak Bluffs - Matt Pelikan
8/11 6 W Bridgewater - Don Adams
8/16 3 Tuckermuck Island - Matt Pelikan
8/19 21 Allens Pond Wildlife Sanctuary, Dartmouth - Greg
8/24 1 E Longmeadow - Karen Parker
9/7 5 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
10/1 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren

Silvery Blue

5/5 6 Delaney WMA, Stow - Barbara Volkle & Steve Moore
5/11 1 Appleton Farms, Ipswich - Matt Arey
5/22 1 Ware - Brian Klassanos
6/1 1 Windsor - MBC trip
6/5 1 Hubbardston - Elise Barry & Wendy Howes
6/8 1 Delaney WMA, Bolton - Tom Murray & Howard Hoople
6/22 1 Williamsburg - Carol Duke

Variegated Fritillary

6/5 1 North Adams, Mt. Greylock State Res. - Tom Gagnon et al
6/9 1 Ware - Brian Klassanos
7/13 1 Concord NABA - Dick Walton et al
7/21 1 Norfolk - Josh Fecteau
7/21 1 Northampton NABA - Mark Fairbrother et al
7/25 1 Rumney Marsh, Revere - Kirk Marshall
8/17 1 Beverly - Karen Haley
8/25 1 Northampton CG - Tom Gagnon

Great Spangled Fritillary

6/9 1 Florence - Tom Gagnon
6/14 11 Ware - Brian Klassanos
6/15 12 MBWMA, Newbury - Matt Arey
6/21 36 MBWMA, Newbury - Joe & Sharon Stichter
6/23 6 Rough Meadows WS, Rowley - Sharon Stichter
6/29 23 N Worcester NABA - Carl Kamp
7/5 12 WMWS, Princeton - Dawn Puliafico
7/5 47 MBWMA, Newbury - Joe & Sharon Stichter
7/10 1 Truro - Tor Hansen
7/12 88 S Berkshire NABA - Renee Laubach
7/15 7 Muir Meadow, Paxton - Elise Barry
7/27 14 Sheffield - Steve Moore & Barbara Volkle
7/30 6 Oakham - Elise Barry & Wendy Howes
8/10 6 Sheffield - Greg Dysart
8/12 10 Pelham - Carl Kamp
8/15 7 Shrewsbury - Bruce DeGraaf
8/24 5 CST, Westborough - Dawn Puliafico
8/27 2 E Longmeadow - Karen Parker
8/27 1 Easton - Stafford Madison
9/4 5 Appleton Farms, Ipswich - Matt Arey
9/6 8 BMB WS, Worcester - Steve Moore
9/17 1 Marblehead - Karen Haley
10/1 1 Athol - Dave Small
10/3 1 Northampton CG - Tom Gagnon
10/11 1 Adams Farm, Walpole - Brian Sullivan

Aphrodite Fritillary

6/21 1 MBWMA, Newbury - Joe & Sharon Stichter
7/6 26 C Franklin NABA - Mark Fairbrother et al
7/12 8 S Berkshire NABA - Renee Laubach
7/19 3 Whately - Bill Benner & Joe Wicinski
7/30 4 Oakham - Elise Barry & Wendy Howes
8/17 1 Northampton CG - MBC trip

Atlantis Fritillary

6/17 7 Windsor - Tom Gagnon & Harvey Allen
7/6 1 Monroe - Mark Lynch & Sheila Carroll

8/29 1 Williamstown - Pam Weatherbee

Silver-bordered Fritillary

5/11 2 Appleton Farms, Ipswich - Matt Arey
5/22 24 Hubbardston - Wendy Howes
6/17 2 Windsor - Tom Gagnon & Harvey Allen
6/23 1 Rough Meadows WS, Rowley - Sharon Stichter
7/8 1 Shutesbury - Bruce deGraaf
7/21 2 Ware - Brian Klassanos
7/21 27 Northampton NABA - Mark Fairbrother et al
8/10 3 Wenham Canal - Matt Arey
9/4 15 Appleton Farms, Ipswich - Matt Arey
10/2 1 Appleton Farms, Ipswich - Howard Hoople

Meadow Fritillary

5/16 3 Williamstown - Pam Weatherbee
6/20 1 Paxton - Elise Barry
7/3 1 MMP, Williamstown - Pam Weatherbee
7/4 1 Graves Farm, Williamsburg - Bill Benner & Joe Wicinski
7/13 10 N Berkshire NABA - Tom Tynning et al
7/27 30 Sheffield - Matt Arey
8/23 2 Williamstown - Pam Weatherbee

Harris' Checkerspot

6/2 3 BMB WS, Worcester - Garry Kessler
6/2 2 N Andover - Howard Hoople
6/15 2 Weir Hill Res, N Andover - Bruce deGraaf
6/17 5 West Cummington - Tom Gagnon & Harvey Allen

Pearl Crescent

5/5 1 Whately - Bill Benner
5/16 35 Borden Colony, Raynham - Joe Dwelly
5/27 22 Ware - Brian Klassanos
5/28 60 Crane WMA, Falmouth - Joe Dwelly
6/1 2 North Adams, Mt. Greylock State Res. - MBC trip
6/4 59 Moore SP, Paxton - Karl & Elise Barry
7/13 2 Provincetown - Truro 4J count
7/14 5 Lunenburg - Carl Kamp
7/20 112 C Berkshire NABA - Tom Tynning et al
7/21 172 Bristol NABA - Mark Mello et al
7/30 49 Oakham - Elise Barry & Wendy Howes
8/2 36 Cunningham Pond area, Hubbardston - Wendy Howes
8/4 76 Crane WMA, Falmouth - Joe Dwelly
8/6 34 Greylock Glen, Adams - Terri Armata
8/10 13 Thompson Fields, Harwich - Joe Dwelly
8/17 20 Edgartown - Matt Pelikan
8/21 10 Rutland State Hospital grounds - Elise & Karl Barry
9/4 79 Borden Colony, Raynham - Joe Dwelley
9/18 3 Morris Island, Chatham - Mark Faherty
9/21 20 Appleton Farms, Ipswich - MBC trip
10/1 1 Windsor - Frank Model
10/12 1 Fairhaven - Mark Lynch
10/17 1 Signal Hill TOTOR, Norwood - Madeline Champagne

Baltimore Checkerspot

6/8 2 W Bridgewater - Don Adams
6/15 2 MBWMA, Newbury - Matt Arey
7/2 175 Marston Mills Airport - Joe Dwelly
7/6 234 Blackstone Valley NABA - Tom Dodd
7/7 2 MMP, Williamstown - Pam Weatherbee
7/20 45 C Berkshire NABA - Tom Tynning et al
10/15 1 Allens Pond Wildlife Sanctuary, Dartmouth - Madeline

Question Mark

4/8 1 Holliston - Richard Hildreth
6/5 1 Crowe's, Dennis - Joe Dwelly
7/7 1 MBWMA, Newbury - Matt Arey
7/28 1 E Longmeadow - Karen Parker
8/10 1 Sheffield - Greg Dysart
8/25 1 Dartmouth - Carl Kamp & Alyce Mayo
9/7 1 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly, et al

Eastern Comma

3/29 1 Mt. Tom State Reservation, Holyoke - Tom Gagnon
4/4 2 Ward Res, Andover - Howard Hoople
4/8 1 Juniper Hill, Lexington - Tom Whelan
4/30 4 Oxbow NWR, Harvard - Steve Moore & Barbara Volkle
6/23 1 Chester - Brian Sullivan
7/21 4 Oxbow NWR, Harvard - Garry Kessler
8/5 1 CST, Northborough - Steve Moore

9/19 1 FS WMA, Longmeadow - Janis LaPointe
10/1 1 Windsor - Frank Model
10/17 1 Amherst - Jeff Boettner
11/16 1 Meadow Road, Montague - Mark Fairbrother
11/18 1 Stichter Yard, Newbury - Joe Stichter

Gray Comma

4/24 4 Berkshire County - Tom Gagnon
6/1 2 Windsor - MBC trip
7/12 2 S Berkshire NABA - Renee Laubach
9/20 2 Windsor - Frank Model
10/11 1 Williamsburg - Tom Gagnon

Mourning Cloak

3/13 1 Nahant - Linda Pivacek
3/20 1 Vineyard Haven - Brian Lawlor
4/10 9 Sherborn PL - Greg Dysart
4/24 4 New Salem - Ron & Sue Cloutier
4/25 1 High Head Bike Path, Truro - Joe Dwelly
4/25 3 Westfield - Tom Gagnon et al
4/27 10 Woburn - Garry Kessler & Howard Hoopole
5/7 12 Rutland SP - Elise Barry
5/30 1 North Adams, Mt. Greylock State Res. - Tom Gagnon
6/17 1 Windsor - Tom Gagnon & Harvey Allen
6/30 4 Dauphinais Park, Grafton - Dolores Price
7/27 3 Sheffield - Steve Moore & Barbara Volkle
8/14 1 Northborough - Steve Moore & Barbara Volkle
9/21 2 Cuttyhunk Island - Brian Cassie
10/1 1 Windsor - Frank Model
10/17 1 E Longmeadow - Karen Parker
11/2 1 Williamsburg - Carol Duke

American Lady

4/27 1 Stichter Yard, Newbury - Joe Stichter
4/27 1 Whately - Bill Benner
8/11 1 Stafford Hill WMA, Cheshire - Terri Armata
8/17 3 Edgartown - Matt Pelikan
9/28 8 Gooseberry Neck, Westport - Lauren Miller-Donnelly
10/20 1 Framingham - Dawn Puliafico

Painted Lady

5/1 1 GBH, Canton - Greg Dysart
5/10 1 Brighton - Peter DeGennaro
5/27 1 Athol - Dave Small
6/16 1 Crane WMA, Falmouth - Lauren Griffith
8/16 12 Tuckernuck Island - Matt Pelikan
9/8 1 Oak Bluffs - Matt Pelikan
10/19 1 Dunback Meadows, Lexington - Renee LaFontaine

Red Admiral

4/20 1 Power Line, Georgetown - Matt Arey
5/4 1 Stichter Yard, Newbury - Joe Stichter
5/4 1 GBH, Canton - Matt Arey
6/15 1 W Bridgewater - Don Adams
6/30 1 Dauphinais Park, Grafton - Dolores Price
7/27 1 Sheffield - Steve Moore & Barbara Volkle
7/31 1 DWWS, Marshfield - Rosemary Mosco
8/16 1 Hubbardston - Wendy Howes
9/7 1 Northampton CG - MBC Trip
9/21 1 Cuttyhunk Island - Brian Cassie
10/1 2 Dartmouth - Madeline Champagne
10/17 3 Medfield - Walt Webb

Common Buckeye

6/4 1 Ware - Brian Klassanos
7/7 1 MBWMA, Newbury - Matt Arey
8/14 1 Hubbardston old landfill - Wendy Howes
10/1 1 Dartmouth - Madeline Champagne

Red-spotted Admiral

5/15 1 Holliston - Richard Hildreth
6/4 1 Oak Hill Cem., NP - Bo Zarembo
6/14 8 Williamsburg - Carol Duke
7/27 1 Sheffield - Steve Moore & Barbara Volkle
8/8 1 Meadow Road, Montague - Mark Fairbrother

White Admiral

6/3 1 Ware - Brian Klassanos
6/16 1 Crane WMA, Falmouth - Lauren Griffith
6/17 1 West Cummington - Tom Gagnon & Harvey Allen
6/19 3 SF, Savoy - Pam Weatherbee
7/6 6 Monroe - Mark Lynch & Sheila Carroll

8/4 1 Ware - Brian Klassanos
8/26 1 Paxton - Elise Barry

Red-spotted Purple

5/31 2 Whately - Bill Benner
6/5 2 North Adams, Mt. Greylock State Res. - Tom Gagnon et al
6/9 3 Dauphinais Park, Grafton - MBC Trip
6/17 13 Windsor - Tom Gagnon & Harvey Allen
6/24 9 BFD, Hubbardston - Wendy Howes
7/28 1 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelly
8/10 3 W Bridgewater - Don Adams
8/23 1 Spencer - Ellen Sousa
8/26 1 Falmouth - Alison Robb
9/7 1 Norfolk - Michelle Noonan

Viceroy

5/27 2 Dauphinais Park, Grafton - Dolores Price & Martin St.
5/27 1 New Salem - Ron & Sue Cloutier
5/30 1 Amherst - Josh Rose
6/5 4 Hubbardston - Elise Barry & Wendy Howes
6/15 5 MBWMA, Newbury - Matt Arey
6/17 2 West Cummington - Tom Gagnon & Harvey Allen
6/21 2 MBWMA, Newbury - Joe & Sharon Stichter
6/23 1 Sedge Meadow, Wayland - Matt Arey
7/8 2 Bay Farm, Duxbury - Mark Faherty
7/17 4 Crane WMA, Falmouth - Fred Bouchard
7/26 1 Bart's Cobble, Sheffield - MBC Trip
7/31 6 Hubbardston, Williamsville Road - Elise Barry & Wendy Miller
8/12 9 Pelham - Carl Kamp
8/15 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
9/1 4 Groton, Rocky Hill Sanc. - Tom Murray
9/15 2 NAC, Concord - MBC Trip
10/3 1 Northampton CG - Tom Gagnon
10/8 1 W Boylston - Mark Lynch
10/12 1 Nasketucket Bay Reserve, Mattapoisett - Brian Cassie

Hackberry Emperor

8/17 9 Forest Park, Springfield - MBC trip

Tawny Emperor

7/18 4 Mt. Holyoke, Hadley - Tom Gagnon
7/18 2 Northampton CG - Tom Gagnon
7/21 3 Northampton NABA - Mark Fairbrother et al
7/26 2 Bart's Cobble, Sheffield - MBC Trip
7/27 4 Sheffield - Steve Moore & Barbara Volkle
8/17 2 Forest Park, Springfield - MBC trip

Northern Pearly-Eye

6/28 1 Ward Res, Andover - Howard Hoopole
7/4 1 Fitzgerald Lake, Florence - Bill Benner & Joe Wicinski
7/6 1 Monroe - Mark Lynch & Sheila Carroll
7/7 1 MBWMA, Newbury - Matt Arey
7/12 10 S Berkshire NABA - Renee Laubach
7/15 1 Muir Meadow, Paxton - Elise Barry
8/6 5 Greylock Glen, Adams - Terri Armata
9/2 1 E Longmeadow - Karen Parker

Eyed Brown

7/5 2 N Essex NABA - Howard Hoopole et al
7/12 2 CST, Westborough - Steve Moore
7/12 16 S Berkshire NABA - Renee Laubach
7/14 15 Lunenburg - Carl Kamp
8/5 1 CST, Northborough - Steve Moore
8/17 1 FS WMA, Longmeadow - MBC trip

Appalachian Brown

6/15 1 Norfolk - Madeline Champagne
6/19 1 NRT, Amherst - Frank Model
7/7 10 MBWMA, Newbury - Matt Arey
7/12 17 S Berkshire NABA - Renee Laubach
7/21 20 Northampton NABA - Mark Fairbrother et al
7/30 6 Oakham - Elise Barry & Wendy Howes
9/9 4 Norfolk - Madeline Champagne
9/25 1 Amherst - Josh Rose

Little Wood-Satyr

5/17 2 Dinosaur Footprints TTOR, Holyoke - MBC trip
5/19 1 Lamson Rd, Foxborough - Madeline Champagne & Bob
5/22 6 Belmont - Rosemary Mosco
5/29 1 Oak Bluffs - Matt Pelikan

5/30 15 Lexington - Tom Whelan
6/9 12 Dauphinais Park, Grafton - MBC Trip
6/9 15 Thompson Fields, Harwich - Joe Dwelly
6/26 30 MPRA, W Newbury - Sharon & Joe Stichter
7/8 7 Williamsburg - Carol Duke
7/8 40 Borden Colony, Raynham - Joe Dwelly
7/12 33 S Berkshire NABA - Renee Laubach
7/13 20 Truro - Truro 4J count
7/13 1 Provincetown - Truro 4J count
7/16 2 Hubbardston, Williamsville Road - Wendy Howes
7/27 10 Sheffield - Matt Arey
7/30 2 Oakham - Elise Barry & Wendy Howes
8/5 1 CST, Northborough - Steve Moore
8/12 1 E Longmeadow - Karen Parker

Common Ringlet

5/10 1 Sandwich Old Game Farm - Joe Dwelly
5/15 1 CST, Northborough - Steve Moore & Barbara Volkle
5/16 1 Florence - Tom Gagnon
6/4 179 Moore SP, Paxton - Karl & Elise Barry
6/9 20 Ware - Brian Klassanos
6/17 7 Berlin - Carl Kamp
8/6 15 Ashburnham - Carl Kamp
8/18 10 NCM, Petersham - Wendy Howes
8/21 138 Lake Wampanoag WS, Gardner - Wendy Howes
9/19 2 Borden Colony, Raynham - Randy Buckner & Joe Dwelly
10/10 1 Turkey Hill, Hingham - Evan Lipton

Common Wood-Nymph

6/16 2 Crane WMA, Falmouth - Lauren Griffith
7/2 1 Southborough - Dawn Puliafico
7/3 2 MMP, Williamstown - Pam Weatherbee
7/8 22 Borden Colony, Raynham - Joe Dwelly
7/12 978 S Berkshire NABA - Renee Laubach
7/13 560 N Berkshire NABA - Tom Tynning et al
7/15 9 Tidmarsh Farms, Plymouth - Mark Faherty
7/20 308 C Berkshire NABA - Tom Tynning et al
7/30 30 Appleton Farms, Ipswich - Howard Hoople
8/6 20 Ashby - Carl Kamp
8/11 4 Hinsdale - Terri Armata
8/21 41 Lake Wampanoag WS, Gardner - Wendy Howes
8/28 10 Moore SP, Paxton - Elise & Karl Barry
9/8 1 BMB WS, Worcester - Wendy Miller, Dolores Price,
9/20 1 Royalston - Alyce Mayo

Monarch

5/7 1 Middlesex Fells, Winchester - Matt Arey
6/2 1 Lakeville - Karen Haley
6/4 1 Amherst - Joshua Rose
6/26 1 MBWMA, Newbury - Sharon & Joe Stichter
7/5 1 White Horse Beach, Plymouth - Mark Faherty
7/13 1 Truro - Truro 4J count
7/21 12 Northampton NABA - Mark Fairbrother et al
7/27 2 Sheffield - Steve Moore & Barbara Volkle
7/31 2 Borden Colony, Raynham - Joe Dwelly
8/7 4 Adams Farm, Walpole - Madeline Champagne
8/17 1 Edgartown - Matt Pelikan
9/4 7 Appleton Farms, Ipswich - Matt Arey
9/5 2 Northampton - Tom Gagnon
9/19 4 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren
9/28 2 Lincoln - Dawn Puliafico
10/2 2 Appleton Farms, Ipswich - Howard Hoople
10/8 1 Amherst - Josh Rose
10/23 1 Stichter Yard, Newbury - Joe Stichter
10/30 1 Allens Pond Wildlife Sanctuary, Dartmouth - Lauren

Silver-spotted Skipper

5/28 1 E Longmeadow - Karen Parker
5/30 1 Lexington - Tom Whelan
5/30 1 Amherst - Josh Rose
6/4 1 Oak Hill Cem., NP - Bo Zaremba
6/6 2 Norcross Wildlife Sanctuary, Wales - Elise Barry &
6/13 4 Florence - Tom Gagnon
6/22 3 Nasketucket Bay Reserve, Mattapoisett - Lauren Griffith
6/22 1 Sandwich Old Game Farm - Joe Dwelly
6/26 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/2 9 Ware - Brian Klassanos

7/3 8 Hubbardston - Wendy Howes
7/5 20 WMWS, Princeton - Dawn Puliafico
7/7 10 MBWMA, Newbury - Matt Arey
7/12 55 S Berkshire NABA - Renee Laubach
7/13 14 Truro - Truro 4J count
7/16 4 Hubbardston, Williamsville Road - Wendy Howes
7/21 2 Stichter Yard, Newbury - Sharon Stichter
7/27 9 Sheffield - Steve Moore & Barbara Volkle
8/6 1 Greylock Glen, Adams - Terri Armata
8/10 2 Sheffield - Greg Dysart
8/23 3 Northampton CG - Josh Rose
9/19 1 E Longmeadow - Karen Parker
10/3 4 Northampton CG - Tom Gagnon
10/20 1 Easthampton - Bruce King

Hoary Edge

5/10 7 MSSF, Plymouth - Greg Dysart
6/15 1 MBWMA, Newbury - Matt Arey
6/17 2 Berlin - Carl Kamp
6/20 11 BMB WS, Worcester - Frank Model
6/23 1 HPM, Woburn - Matt Arey
7/3 2 BMB WS, Worcester - Steve Moore
7/6 1 C Franklin NABA - Mark Fairbrother et al

Southern Cloudywing

6/15 1 MBWMA, Newbury - Matt Arey
6/16 1 W Hill Dam, Uxbridge - Russel Holden
6/19 3 Crane WMA, Falmouth - Joe Dwelly
6/23 3 HPM, Woburn - Matt Arey
7/6 3 C Franklin NABA - Mark Fairbrother et al

Northern Cloudywing

5/27 1 Dauphinais Park, Grafton - Dolores Price & Martin St.
6/4 2 Ware - Brian Klassanos
6/15 3 Weir Hill Res, N Andover - Bruce deGraaf
6/22 2 Nasketucket Bay Reserve, Mattapoisett - Lauren Griffith
7/4 1 GBH, Canton - Garry Kessler

Dreamy Duskywing

5/2 2 MBWMA, Newbury - Joe & Sharon Stichter
5/5 1 Delaney WMA, Stow - Barbara Volkle & Steve Moore
5/17 3 Nasketucket Footprints TTOR, Holyoke - MBC trip
5/27 2 Dauphinais Park, Grafton - Dolores Price & Martin St.
5/28 1 Crane WMA, Falmouth - Joe Dwelly
6/1 1 Windsor - MBC trip
6/9 11 Dauphinais Park, Grafton - MBC Trip

Sleepy Duskywing

4/27 1 Edgartown - Matt Pelikan
5/5 1 MSSF, Plymouth - Garry Kessler

Juvenal's Duskywing

4/21 1 Ware - Brian Klassanos
4/25 1 High Head Bike Path, Truro - Joe Dwelly
4/26 1 Tisbury - Matt Pelikan
4/29 6 Woburn - Greg Dysart
5/2 3 Montague Plains - Sue & Ron Cloutier
5/4 1 E Longmeadow - Karen Parker
5/5 15 Westborough Community Gardens - Elise & Karl Barry
5/7 10 Middlesex Fells, Winchester - Matt Arey
5/9 4 Holliston - Richard Hildreth
5/19 30 Buck Hill, Spencer - Dolores Price
5/22 12 Hubbardston - Wendy Howes
5/27 3 CRPL, Chelmsford - Tom Whelan
5/28 13 Crane WMA, Falmouth - Joe Dwelly
6/1 10 Dennis-Greenough Ponds, Yarmouth - Joe Dwelly
6/4 2 Oak Hill Cem., NP - Bo Zaremba
6/9 1 Florence - Tom Gagnon
6/17 5 Nasketucket Bay Reserve, Mattapoisett - Joe Dwelly
7/4 1 Williamsburg - Carol Duke

Horace's Duskywing

5/4 2 GBH, Canton - Matt Arey
6/5 1 Crowe's, Dennis - Joe Dwelly
7/6 12 Blackstone Valley NABA - Tom Dodd
7/7 1 MBWMA, Newbury - Matt Arey
7/12 2 Oak St. PL, Shrewsbury - Steve Moore
7/13 1 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelly
7/17 3 Southborough - Dawn Puliafico
7/27 3 Sheffield - Matt Arey
8/4 10 Nasketucket Bay Reserve, Mattapoisett - Matt Arey



Gray Comma (*Polygonia progne*), 7/11/04,
Berkshire Co., MA, Tom Tynning



American Copper (*Lycaena phlaeas*) and
Wood Lily (*Lilium philadelphicum*),
7/23/12, Mount Washington, MA, Tom Tynning



Black Swallowtail
(*Papilio polyxenes*),
aberrant form,
8/16/13, Shrewsbury,
MA, Bruce deGraaf



Pipevine Swallowtails (*Battus philenor*) hatching, 7/21/13,
Paxton, MA, Elise Barry



Milbert's Tortoiseshells
(*Nymphalis milberti*),
6/23/03, Tom Murray
(No reports of this species in
Massachusetts for 2013)



Raising Monarchs (*Danaus plexippus*), Williamsburg, MA, Carol Duke



Frosted Elfin (*Callophrys irus*), 4/25/13, Chicopee, MA, Garry Kessler



Juniper Hairstreak (*Callophrys gryneus*),
5/17/13, Holyoke, MA, Bill Benner



White M Hairstreak (*Parhassius m-album*),
8/11/13, Mattapoisett, MA, Bruce deGraaf



Coral Hairstreak (*Satyrium titus*), 7/14/13,
Mt. Greylock, Adams, MA, Frank Model

Wild Indigo Duskywing

- 4/25 1 AP, Dartmouth - Lauren Miller-Donnelly
5/7 2 Middlesex Fells, Winchester - Matt Arey
5/15 2 CST, Northborough - Steve Moore & Barbara Volkle
5/27 14 Lamson Rd, Foxborough - Madeline Champagne
5/31 1 Whately - Bill Benner
7/12 1 HPM, Woburn - Steve Moore
7/30 3 GBH, Canton - Bruce deGraaf
9/7 5 Northampton CG - MBC Trip
9/19 1 Borden Colony, Raynham - Randy Buckner & Joe Dwelley
10/3 1 Andover - Howard Hoople
10/11 1 Northampton CG - Tom Gagnon

Common Checkered-Skipper

- 5/31 1 Northampton CG - Chris Gentes
6/4 1 Ware - Brian Klassanos
7/21 1 Ware - Brian Klassanos
8/30 1 Northampton CG - Tom Gagnon
9/7 1 Northampton CG - MBC Trip
9/8 3 Helfand Community Gardens, Dartmouth - Lauren Miller-Donnelly

Common Sootywing

- 5/12 2 Ware - Brian Klassanos
7/6 3 Deerfield - Bill Benner & Joe Wicinski
7/17 9 Westborough Community Gardens - Garry Kessler
8/23 3 Stearns CSA Farm, Framingham - Dawn Puliafico
9/11 1 Framingham - Dawn Puliafico

Arctic Skipper

- 6/1 24 Windsor - MBC trip

Least Skipper

- 6/2 4 Ware - Brian Klassanos
6/15 4 Weir Hill Res, N Andover - MBC trip
6/21 3 MBWMA, Newbury - Joe & Sharon Stichter
7/5 2 MBWMA, Newbury - Joe & Sharon Stichter
7/27 2 Oak Bluffs - Matt Pelikan
7/27 3 Sheffield - Steve Moore & Barbara Volkle
8/5 6 Oak Bluffs - Matt Pelikan
8/10 6 Sheffield - Greg Dysart
8/10 1 Templeton - Wendy Howes
8/19 30 Allens Pond Wildlife Sanctuary, Dartmouth - Greg
8/27 1 E Longmeadow - Karen Parker
9/4 15 Appleton Farms, Ipswich - Matt Arey
9/7 8 Northampton CG - MBC Trip
9/7 20 Borden Colony, Raynham - Matt Arey
9/19 10 Appleton Farms, Ipswich - Garry Kessler
9/21 1 Cuttyhunk Island - Brian Cassie
10/14 3 Walpole, Andean CA - Madeline Champagne
10/15 4 Allens Pond Wildlife Sanctuary, Dartmouth - Madeline

European Skipper

- 6/2 2 Holyoke - Bill Benner & Joe Wicinski
6/4 27 Borden Colony, Raynham - Joe Dwelley & Randy
6/6 2 Southborough - Dawn Puliafico
6/8 13 Delaney WMA, Bolton - Tom Murray & Howard Hoople
6/15 11 Weir Hill Res, N Andover - MBC trip
6/21 477 Norcross Wildlife Sanctuary, Wales - Elise Barry & Jen
6/23 25 Sedge Meadow, Wayland - Matt Arey
7/6 14 Blackstone Valley NABA - Tom Dodd
7/20 3 C Berkshire NABA - Tom Tynning et al
7/30 2 GBH, Canton - Bruce deGraaf

Fiery Skipper

- 8/18 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
8/25 1 Dartmouth - Carl Kamp & Alyce Mayo
9/7 3 Borden Colony, Raynham - Matt Arey
9/7 1 Nasketucket Bay Reserve, Mattapoisett - Matt Arey
9/18 2 Marblehead - Karen Haley
9/20 2 Appleton Farms, Ipswich - Matt Arey
9/29 1 Dauphinais Park, Grafton - Dolores Price & Marvin St.

Leonard's Skipper

- 8/23 1 Hoff Farm, W Tisbury - Matt Pelikan
8/23 1 Athol - Ron & Sue Cloutier
8/30 4 Wellfleet Bay Ws, Wellfleet - Mark Faherty

- 9/5 1 Florence - Tom Gagnon
9/6 3 BMB WS, Worcester - Steve Moore
9/7 1 BMB WS, Worcester - Ron Hamburger
9/9 6 BMB WS, Worcester - Elise & Karl Barry
9/21 6 Cuttyhunk Island - Brian Cassie

Cobweb Skipper

- 5/7 1 Middlesex Fells, Winchester - Matt Arey
5/12 3 Florence - Tom Gagnon
5/19 4 MSSF, Plymouth - MBC trip
5/21 1 Ashburnham - Ron & Sue Cloutier
6/15 1 E Longmeadow - Karen Parker

Indian Skipper

- 5/19 2 Lamson Rd, Foxborough - Madeline Champagne & Bob
5/27 93 Florence - Tom Gagnon
5/27 11 Myles Standish State For. Carver - Joe Dwelley & Rand
6/4 5 Oak Hill Cem., NP - Bo Zarembo
6/27 1 HPM, Woburn - Howard Hoople
6/29 1 N Worcester NABA - Carl Kamp

Peck's Skipper

- 5/21 1 E Longmeadow - Karen Parker
5/27 1 Petersham - Mark Lynch
5/31 8 LPWS, Barnstable - Joe Dwelley
6/4 32 Moore SP, Paxton - Karl & Elise Barry
6/15 9 Weir Hill Res, N Andover - MBC trip
6/17 12 Windsor - Tom Gagnon & Harvey Allen
7/28 28 E Longmeadow - Karen Parker
7/30 14 Oakham - Elise Barry & Wendy Howes
8/5 3 Oak Bluffs - Matt Pelikan
8/7 19 Adams Farm, Walpole - Madeline Champagne
8/12 40 Moore SP, Paxton - Elise & Karl Barry
8/15 44 Shrewsbury - Bruce deGraaf
8/21 50 Rutland State Hospital grounds - Elise & Karl Barry
9/7 10 Borden Colony, Raynham - Matt Arey
10/11 1 Northampton CG - Tom Gagnon
10/14 1 Adams Farm, Walpole - Madeline Champagne

Tawny-edged Skipper

- 5/21 1 E Longmeadow - Karen Parker
5/27 2 Florence - Tom Gagnon
5/30 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
6/1 8 Dennis-Greenough Ponds, Yarmouth - Joe Dwelley
6/2 1 BFD, Hubbardston - Dolores Price & Marvin St. Onge
6/4 10 Oak Hill Cem., NP - Bo Zarembo
6/9 1 Florence - Tom Gagnon
7/21 1 Stichter Yard, Newbury - Sharon Stichter
7/27 3 Oak Bluffs - Matt Pelikan
7/28 3 GBH, Canton - Greg Dysart
7/30 3 Oakham - Elise Barry & Wendy Howes
8/11 20 W Boylston - Gail Trenholm & Elise Barry
8/17 12 Edgartown - Matt Pelikan
8/23 3 Hoff Farm, W Tisbury - Matt Pelikan
9/6 1 Fort Hill, Eastham - Mark Faherty
9/7 1 Northampton CG - MBC Trip
9/14 1 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly, et
10/14 1 Adams Farm, Walpole - Madeline Champagne

Crossline Skipper

- 6/29 4 HPM, Woburn - MBC trip
7/5 3 MBWMA, Newbury - Joe & Sharon Stichter
7/13 3 Truro - Truro 4J count
7/13 9 N Berkshire NABA - Tom Tynning et al
7/19 8 E Longmeadow - Karen Parker
7/26 1 Bart's Cobble, Sheffield - MBC Trip
7/30 6 E Longmeadow - Karen Parker
8/11 1 W Boylston - Gail Trenholm & Elise Barry

Long Dash

- 5/30 2 Weir Hill Res, N Andover - Howard Hoople
6/5 1 Hubbardston - Elise Barry & Wendy Howes
6/15 10 MBWMA, Newbury - Matt Arey
6/21 29 Norcross Wildlife Sanctuary, Wales - Elise Barry & Jen
6/23 4 MPRA, W Newbury - Sharon Stichter
9/4 1 Northampton CG - Tom Gagnon
9/7 1 Borden Colony, Raynham - Matt Arey
9/19 1 Appleton Farms, Ipswich - Garry Kessler

Northern Broken-Dash

- 6/29 2 N Worcester NABA - Carl Kamp
7/3 1 MMP, Williamstown - Pam Weatherbee
7/3 1 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelley
7/5 12 MBWMA, Newbury - Joe & Sharon Stichter
7/12 26 S Berkshire NABA - Renee Laubach
7/15 10 Tidmarsh Farms, Plymouth - Mark Faherty
7/21 23 Nasketucket Bay Reserve, Mattapoissett - Joe Dwelley
7/30 5 Oakham - Elise Barry & Wendy Howes
8/5 3 Oak Bluffs - Matt Pelikan
8/10 2 Sheffield - Greg Dysart
8/14 1 Holliston - Richard Hildreth
8/23 1 Hoff Farm, W Tisbury - Matt Pelikan

Little Glassywing

- 6/23 6 MPRA, W Newbury - Sharon Stichter
6/26 4 MBWMA, Newbury - Sharon & Joe Stichter
6/27 1 E Longmeadow - Karen Parker
7/3 18 Tower Hill, Boylston - Wendy Miller
7/4 7 Fitzgerald Lake, Florence - Bill Benner & Joe Wicinski
7/5 11 Moore SP, Paxton - Elise Barry
7/20 96 C Berkshire NABA - Tom Tynning et al
7/27 4 Sheffield - Steve Moore & Barbara Volkle
7/28 2 E Longmeadow - Karen Parker
8/12 1 Hubbardston - Wendy Howes

Sachem

- 6/4 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/11 2 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/14 1 Oak Bluffs - Matt Pelikan
7/15 4 White Horse Beach, Plymouth - Mark Faherty
7/19 8 Acoaxet - Mark Lynch
7/27 6 Oak Bluffs - Matt Pelikan
9/6 88 Fort Hill, Eastham - Mark Faherty
9/7 128 Sylvan Nursery, Dartmouth - Lauren Miller-Donnelly, et al
9/18 15 Morris Island, Chatham - Mark Faherty
9/20 1 Appleton Farms, Ipswich - Matt Arey
10/1 60 Dartmouth - Madeline Champagne
10/13 1 Cuttyhunk Island - Linda Ferraresso
10/15 80 Allens Pond Wildlife Sanctuary, Dartmouth - Madeline
11/1 1 Foxborough - Brian Cassie
11/2 1 Westport - Mark Lynch

Delaware Skipper

- 6/21 1 Norcross Wildlife Sanctuary, Wales - Elise Barry & Jen
6/30 1 HPM, Woburn - Bruce deGraaf
7/3 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/5 8 MBWMA, Newbury - Joe & Sharon Stichter
7/7 10 MBWMA, Newbury - Matt Arey
7/13 4 Truro - Truro 4J count
7/16 1 Thompson Fields, Harwich - Scott Baron
8/14 2 Holliston - Richard Hildreth
9/19 1 Borden Colony, Raynham - Randy Buckner & Joe Dwelley

Mulberry Wing

- 7/6 16 Blackstone Valley NABA - Tom Dodd
7/6 2 C Franklin NABA - Mark Fairbrother et al
7/12 40 S Berkshire NABA - Renee Laubach
7/14 12 CST, Westborough - MBC trip
7/19 1 CST, Westborough - Wendy Miller & Elise Barry
7/27 1 Sheffield - Steve Moore & Barbara Volkle

Hobomok Skipper

- 5/18 1 Holliston - Richard Hildreth
5/27 2 Williamsburg - Tom Gagnon
5/31 1 Oak Bluffs - Matt Pelikan
5/31 2 E Longmeadow - Karen Parker
6/4 10 Moore SP, Paxton - Karl & Elise Barry
6/5 1 Greylock Glen, Adams - Bet Bressett
6/5 11 Hubbardston - Elise Barry & Wendy Howes
6/9 13 Dauphinis Park, Grafton - MBC Trip
6/9 3 Thompson Fields, Harwich - Joe Dwelley
6/19 3 E Longmeadow - Karen Parker
6/22 4 Nasketucket Bay Reserve, Mattapoissett - Lauren Griffith
6/29 8 N Worcester NABA - Carl Kamp
7/6 1 C Franklin NABA - Mark Fairbrother et al

Zabulon Skipper

- 5/17 1 Natick - Greg Dysart
5/17 1 Dinosaur Footprints TTOR, Holyoke - MBC trip
5/27 1 Champagne yard, Foxborough - Madeline Champagne
5/27 4 E Longmeadow - Karen Parker
5/31 2 Whately - Bill Benner
6/4 10 Borden Colony, Raynham - Joe Dwelley & Randy
6/5 2 Amherst - Joshua Rose
6/8 1 Ponkopaug Bog, Canton - Rosemary Mosco
6/9 2 Boylston - Dawn Puliafico
6/9 1 Florence - Tom Gagnon
6/9 6 Ware - Brian Klassanos
6/15 1 MBWMA, Newbury - Matt Arey
6/15 2 Norfolk - Madeline Champagne
6/17 1 Moore SP, Paxton - Karl & Elise Barry
7/27 1 Sheffield - Matt Arey
8/2 2 Ashland - Dawn Puliafico
8/3 10 E Longmeadow - Karen Parker
8/4 10 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
8/5 2 Franklin - Keith Shaw
8/10 2 Hingham - Dawn Puliafico
8/10 2 Sheffield - Greg Dysart
8/11 3 Foxborough - Brian Cassie
8/11 3 Mansfield CA - Madeline Champagne
8/12 6 Signal Hill TTOR, Norwood - Madeline Champagne
8/15 8 Northampton CG - Tom Gagnon
8/17 4 Mystic Lakes, Medford - Renee LaFontaine
8/17 1 Williamsburg - Carol Duke
8/18 25 Nasketucket Bay Reserve, Mattapoissett - Matt Arey
8/19 25 Borden Colony, Raynham - Joe Dwelley
8/24 2 CST, Westborough - Dawn Puliafico
8/25 2 Sherborn PL - Greg Dysart
8/27 1 Shrewsbury - Bruce deGraaf
9/1 1 Wellesley - Dawn Puliafico
9/3 3 White Horse Beach, Plymouth - Mark Faherty
9/4 1 Ashland - Dawn Puliafico
9/4 3 Florence - Tom Gagnon
9/4 3 Borden Colony, Raynham - Joe Dwelley
9/4 2 Appleton Farms, Ipswich - Matt Arey
9/7 4 Northampton CG - MBC Trip
9/19 1 Borden Colony, Raynham - Randy Buckner & Joe Dwelley
9/21 2 Cuttyhunk Island - Brian Cassie
10/3 1 Ashland - Dawn Puliafico

Broad-winged Skipper

- 7/5 1 MBWMA, Newbury - Joe & Sharon Stichter
7/12 31 S Berkshire NABA - Renee Laubach
7/13 2 Truro - Truro 4J count
7/19 7 CST, Westborough - Wendy Miller & Elise Barry
7/21 1 Ware - Brian Klassanos
7/24 3 E Longmeadow - Karen Parker
8/5 1 Oak Bluffs - Matt Pelikan
8/17 1 FS WMA, Longmeadow - MBC trip
8/25 2 Dartmouth - Carl Kamp & Alyce Mayo

Dion Skipper

- 7/4 2 Fitzgerald Lake, Florence - Bill Benner & Joe Wicinski
7/6 1 Deerfield - Bill Benner & Joe Wicinski
7/13 1 Field Farm, Williamstown - Terri Armata
7/13 2 N Berkshire NABA - Tom Tynning et al
7/20 2 C Berkshire NABA - Tom Tynning et al

Black Dash

- 7/5 2 MBWMA, Newbury - Joe & Sharon Stichter
7/6 8 Blackstone Valley NABA - Tom Dodd
7/21 2 Northampton NABA - Mark Fairbrother et al
7/23 1 Wellfleet Bay Ws, Wellfleet - Mark Faherty

Dun Skipper

- 7/2 6 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/4 5 Graves Farm, Williamsburg - Bill Benner & Joe Wicinski
7/7 20 MBWMA, Newbury - Matt Arey
7/10 40 Wellfleet Bay Ws, Wellfleet - Mark Faherty
7/16 64 Moore SP, Paxton - Elise Barry
7/20 245 C Berkshire NABA - Tom Tynning et al
7/23 24 Correllus State Forest, West Tisbury - Matt Pelikan
7/27 20 Sheffield - Matt Arey

7/28 4 Bayberry Hills PL-Bike Path, Yarmouth - Joe Dwelly
 7/30 34 Oakham - Elise Barry & Wendy Howes
 8/4 1 Lancaster - Ruth Anderson
 8/10 2 E Longmeadow - Karen Parker
 8/17 2 Edgartown - Matt Pelikan
 8/24 2 Nasketucket Bay Reserve, Mattapoisett - Greg Dysart
Dusted Skipper
 5/17 2 Florence - Tom Gagnon
 5/18 2 Correllus State Forest, West Tusbury - Matt Pelikan
 5/22 4 Ware - Brian Klassanos
 5/27 3 Myles Standish State For. Carver - Joe Dwelly & Rand
 5/27 5 Lamson Rd, Foxborough - Madeline Champagne
 6/5 14 Hubbardston - Elise Barry & Wendy Howes

6/9 4 Dauphinais Park, Grafton - MBC Trip
 6/20 1 Norfolk - Madeline Champagne
Pepper and Salt Skipper
 5/21 1 Petersham - Garry Kessler
 6/1 4 Monterey - Mark Lynch & Sheila Carroll
 6/1 13 North Adams, Mt. Greylock State Res. - MBC trip
 6/3 2 Barry Yard, Paxton - Elise Barry
 6/9 1 Dauphinais Park, Grafton - MBC Trip
 6/17 3 Windsor - Tom Gagnon & Harvey Allen
Ocola Skipper
 8/11 1 Foxborough - Brian Cassie
 8/22 1 Florence - Tom Gagnon
 10/1 1 Northampton CG - Frank Model



A Poem, Not By Emily Dickinson

On the 18th of July in 2010,
 The Sunday we've waited for has now come again.
 As hot summer sun shines down upon rocks
 The time has arrived to don our binocs.
 For flowers flaunt their tempting perfume
 While our worn-out field guides we humans exhume.
 The Butterflies fly--though not so "free"--
 (it costs Three dollars to go on this spree.)
 Head out the door to see what you may
 Through field and fen and boggy way.
 Just re-trace from yesteryear your steps
 As you search the scene for those dazzling leps.
 Count skippers and admirals, monarchs and ladies galore.
 Then take a quick break and go out for more.
 So at 5pm on Sugarloaf Summit
 We'll gather again as the Peregrines plummet.
 We will tally results and dine--what a feast--ah!
 On treats and more treats and good ol' Pizza.
 But, alas, if you cannot attend the Fest,
 Please send in your list; that would be best.
 Though should you be unable to appear,
 We'll raise the glass and shed a tear.
 Now thanks to one and all, I say,
 And have a wonderful time that Day!

-dottie case, former compiler, Northampton 4th of July Count
 [in hopes that it will inspire participants
 for the upcoming 2014 counts! -ed.]

Frosted Elfin Flights in Foxboro

by Madeline Champagne

With my first step onto the crunchy dry ground and the scruffy landscape at the Lamson Road Foxboro Water Authority property in Foxboro, I thought to myself, “Why are we looking for butterflies here?” This was in the early 1990’s for the Foxboro 4th of July Count. I was fairly new to the world of butterflies, and wasn’t knowledgeable about the intricacies of butterfly behavior and survival. There’s been a lot to learn!

This property has been home to Frosted Elfins for many years. Massachusetts Butterflies No. 1 (Feb. 1993) reports 3 Frosted Elfins observed by Brian Cassie on June 19, 1992. Notable is the Massachusetts Butterflies No. 8 (Feb. 1997) report of 19 Frosted Elfins observed by the MBC Butterfly Institute on May 25, 1996. Sightings have continued over the years, and on May 25, 2002, I was there with Brian Cassie, and we counted 164 Frosted Elfins.

Having retired at the end of May in 2004, in 2005 I decided to closely monitor the population and walk the property often. I’ve been going to the site about fifteen times each year. I keep to a definite pattern of walking, around certain trees and bushes and the same pathways through open areas, and keep records by sections. When I am by myself the walk around the property takes from three to four hours. Current and last season weather conditions, predation, and host plant condition are obvious variables from year



Habitat, Lamson Road site, 4/30/13, Madeline Champagne

to year. Unfortunately there have been some good weather days when I have commitments, or problems such as extreme heat, as in the days between late May and early June in 2013 when I couldn't do the walk, and so probably missed that year's actual high count. On the other hand, as the years progress I am probably counting more butterflies as I have gained a better sense of their flight behavior and presence.

My first sightings have been towards the end of April. In 2002 I had a count of 18 on April 26, which is the earliest and highest first sighting. My latest first sighting was May 26, 2008, which was the extremely low population year.

My highest counts occur towards the end of May and into June, and have ranged from May 24 to June 3. My complete data set is available to the butterfly club, but here are my high counts:

Year	Day	High Count
2005	June 3	85
2006	June 1	27
2007	May 29	83
2008	June 2	7
2009	May 25	23
2010	May 24	39
2011	May 25	17
2012	May 27	123
2013	May 27	78

The 2008 numbers were markedly frightening, and it was scary to keep going back and see no Frosted Elfins. My first sighting that year was 2 individuals on May 26, and my highest count was on June 2. One premise on the drop in population was that predation or disease might have been extremely high that year. But a few more years of low counts led into a high count in 2012 and a good count in 2013.

For a few years I was curious to see when the flight was finished,

but found that I was too sad to see the numbers decline after watching these butterflies for five or six weeks. In 2008 (which was a very low year) I did count 6 Frosted Elfins on June 14, and in 2011 I saw 1 Frosted Elfin on June 17.

I think that counting Frosted Elfins at this site is a different experience than recording other butterfly species numbers. There is a certain predictability about the Frosted Elfins. I have learned where I'll probably find the first one (the place has changed over the years). I may see a movement, or I may see that brown silhouette perched on the top of a plant. If perched on a plant, the butterfly will likely leave and then come back to the same area. I have always seen the males before I see the females. The males claim an area – trying to be in an optimum location for the females to find – and stay in that area with their perching behavior. Once I see a male in an area, the next time I go it is pretty predictable that the male (or a male) will be there. In the larger open areas, there are sometimes a few males, or in certain gravel pathways there are a few patrolling up and down. After twelve days or so from my first sighting I'll see the first females – a different flight behavior, as they are going to the host plants (here they use Wild Indigo, *Baptisia tinctoria*) for ovipositing.



Frosted Elfin ovipositing on Wild Indigo,
Lamson Road Site, 5/27/13, Madeline Champagne

It is my understanding that this property was bulldozed back in the early 1960's to supply material for the construction of Route 95, and that some planting was done to restore the landscape. There has been little management in the property in the years I have been walking there. Some cutting of pine trees in the higher area was done to discourage the shade, and an Eagle Scout project was undertaken to eliminate areas of the invasive Sweet Fern. Rebuilding a dam in a sparsely populated area disturbed some landscape, but the plants including Wild Indigo have grown back there and I have seen the Frosted Elfin there again.

More recently, a new water treatment plant is being installed on the property, in a lower southeast three acres that had a very low density of Frosted Elfin. Because the Frosted Elfin is listed as a Species of Special Concern under the Massachusetts Endangered Species Act (MESA), Natural Heritage and Endangered Species Program (NHESP) required habitat restoration management as well as the conservation restriction as mitigation in exchange for a permit to build the water treatment plant. The Town of Foxboro and the Lloyd Center for the Environment are doing the habitat restoration and management. The initial restoration work has been done – shade trees were removed from the area and Wild Indigo plants were transplanted into the area. The habitat condition is to be reassessed every five years, with additional management if necessary.

This property includes some large open areas and many small and sometimes connected open areas. The higher area has the highest density of Frosted Elfin population, as there are some trees there for shade. Wild Indigo plants flourish, although I have seen areas of diminished intensity where Sweet Fern is taking over, and in the past couple of years have found a large patch of the invasive, alien Black Swallow-wort. Except for occasional off-leash dogs, there is not much disruption to the habitat as motorized vehicles are not allowed, and I haven't seen evidence of paint-ball games or partying for quite a while.

When I first go in April, the landscape is very brown, so the Frosted Elfins really blend in with the ground and the brown grasses and leaves. I watch carefully for the first shoots of Wild Indigo (they usually come up at the end of April), so as not to trample them. Flowers on low- and high-bush Blueberry, flowering trees, and Birds-foot Violets are the predominant nectar sources when the Frosted Elfins are first flying, although I don't often see them nectaring (unlike other species which are often most visible on nectar sources). As May progresses the landscape fills in with green – leaves on trees, Wild Indigo plants filling in, and dandelions, hawkweed, cinquefoil, toadflax, and daisies come into bloom, but the flowers are scattered and are not abundant.

The joy I feel to be so intimately involved with this one of the many wonders of nature balances out the impact of having my life revolve around monitoring this butterfly population through the spring. Garden neglect, no mid-day social plans, frustration with weather forecasts, few visits to other sites--these become minimal concerns. I have learned to love everything about the land (well, except for the ticks), and can point out the tree where I saw a Mourning Cloak ovipositing in 2007, and the place where I saw a Milbert's Tortoiseshell in the spring of 2009. I yelp out loud at the first Frosted Elfin sighting, and I pretend to be able to call in the males, when I know that most probably they'll be in the same place I have already seen them. I watch the females ovipositing, to check out those beautiful little eggs. In my search for Frosted Elfins, I see lots of other butterfly species (23 in 2013). I see day-flying moths (Grapevine Epimenis, Snowberry Clearwing), deer, rabbits, bluebirds, hawks, Painted Turtles, and Black Racer snakes, and usually I am listening to the sweet sound of Prairie Warblers.

April cannot come soon enough for me!



Observations While Raising Monarch Butterflies by Carol Duke

Twenty-thirteen was a fantastic butterfly year for me, with one exception: I did not find a single monarch butterfly egg in our Williamsburg gardens. For the first time in thirty years, I did not have the pleasure of raising monarch caterpillars and releasing the butterflies.

The Monarch Butterfly (*Danaus plexippus*) has a great sense of its wings. Seemingly carefree, the butterfly sails through layers of sky. It floats and glides in between fluttering like no other butterfly, and when back-lit by the sun the wings are as brilliant as stained glass. There is joy remembering times in the garden, walking behind tattered and faded female butterflies as they winged their way from one young milkweed to another, fastening hundreds of eggs on their host plants scattered throughout the gardens and fields. I remember observing one female monarch losing her balance, then sliding down a leaf abdomen first from fatigue after



Monarch (*Danaus plexippus*),
Northampton, MA, 10/1/04, Bill Benner

fastening an egg. I was so struck by the vulnerability and, at the same time, the tenacity of these butterflies.

I raise only caterpillars I find within our grassy garden paths. Mowing comes to a halt at the first sighting of a monarch butterfly. I begin examining the young milkweed plants, searching for the tiny ivory eggs against the jade-green milkweed leaves in order to determine which plants to harvest and bring indoors. Unfortunately, our resident rabbits do not follow the rules, and I cringe when seeing a rabbit chomping down the new milkweed growth. I have to work hard to keep ahead of the troublesome critters.

Raising caterpillars in milkweed bouquets arranged in small glasses and cups set securely on pedestals allows me to freely observe and document the complete and fascinating life cycle. The green wooden pedestals stand in front of french doors in my barn studio allowing the caterpillars breezes of fresh air. During a light rain, I sometimes hold one bouquet of caterpillars at a time under the drizzle. Within the milkweed bouquets I add stems of sedum 'Autumn Joy' and Artemisia 'Silver King', offering a safe place for the caterpillars to move to during their quiet molting periods. I have no pets to cause harm, and I am vigilant concerning predators. All the milkweed harvested from our garden is carefully inspected outdoors for spiders and other creatures that might prey upon my captives. Keeping the larger caterpillars in separate bouquets away from the smaller ones and always having eggs in their own bouquet helps to maintain a more congenial and safe community. Caterpillar bouquets eventually become chrysalis and butterfly bouquets through thoughtful guardianship.

I have had nearly 100 percent success, even with the occasional mutineer morphing off site. I usually find the rebels weaving their silk mats just under the edge of the top of the pedestal, or on a curtain or cupboard, and if they are out of danger I let them be. I keep a close count of all my wards with copious notes, and know the telltale signs, alerting me to when a caterpillar will be roaming in search for the perfect spot to unveil its chrysalis.

I tend to love beginnings and find the intricately designed dome shaped egg a marvel. It must be a relief for the cream colored caterpillar to escape the cramped egg shell and begin exploring its leafy landscape. From that moment on, I document the caterpillar's life as it munches its first meal of egg casing, throughout its five stages of instars, and right up to when it hangs like the letter J revealing its hidden pupa or chrysalis. I so delight in the peculiar antics of the monarch caterpillars. The contractions and contortions a caterpillar goes through during each molt as it pulls itself out of its old skin seem heroic. Once, I witnessed a caterpillar molting from third to fourth instar. It took hours and felt like being with a friend going through labor. The lengthening tentacles are wet and slicked back when the caterpillar first wriggles out of its tight skin. Now, it must rub its bright yellow head back and forth against the leaf in order to remove its smaller, clinging face mask. Within a couple of hours, a new mask hardens covering the yellow face with a black triangle and black borders. The new, more comfortable cuticle will also harden over its body and the hungry caterpillar now turns around to devour its old skin before continuing on its journey towards becoming a butterfly.

Tentacles on the front and end of the body are sometimes mistaken for antennae. The tentacles or filaments grow larger and more lively as the caterpillar grows. Sometimes called horns, tentacles actually help scare off predators in the wild, especially flies and wasps that try to lay eggs on the caterpillar's body. Some caterpillars shake their tentacles at me, too. These expressive black lines are constantly drawing circles and assorted scribbles in the air. They may reveal moods and perhaps play a role in how the caterpillars communicate with each other.

When getting too familiar, caterpillars may grow intolerant and 'bark' at each other with their animated tentacles. They sometimes deliberately collide, like walruses or sea lions on a beach engaged in a challenge. This bit of conflict is very short-lived and they quickly return to sharing a milkweed leaf. In my orderly commodious community the caterpillars seem mostly forgiving

and compatible. Some prefer the solitary life and chew alone, while others enjoy dining together.

Third and fourth instars go to the base of a leaf next to the stem and carve out a notch-like portion akin to the slice of wood foresters take out of a tree before cutting it down. They are actually stopping the flow of the sap or latex substance to the leaf they wish to consume. The sap contains the protective toxic cardiac glycosides or cardenolides that even they can over-ingest. Different species of milkweed may contain larger doses that can be deadly even to the monarch caterpillars. When tiny caterpillars, they eat between milkweed veins to keep from drowning in a flood of sticky latex. I actually saved a wee caterpillar from this fate a few years back.

As the caterpillars grow, their hunger grows as well, and I am often running into the garden for more food. With all this eating and digesting there is a goodly amount of frass falling about. I am fastidious in keeping my caterpillar community tidy. My favorite tools for clearing away frass are either a thin plastic ruler or a long feather, and a sheet of paper. I also have paper under the vases making it easy to simply lift the vases and replace the paper. My indoor plants seem to enjoy the caterpillar manure. As the caterpillar progresses towards its final molt, the frass gives a clue. There are four segments to fresh green frass just before the caterpillar is about to molt for the fifth and final time. I must pay attention both to these fecal details and the caterpillars that may wander from the community.

This phase requires a great deal of attention and patience. If I have caterpillars in the roaming stage, I am pretty much on watch duty until they decide on a spot. I gently try to persuade the caterpillars to choose a stem of artemisia or sedum to fasten their knob and then chrysalis to. Sometimes it takes a number of relocations before the resolute caterpillars settle down. Once one or two caterpillars choose my preferred stems and begin to weave their silk mats, others will follow, and, before long, I have lovely bouquets

dripping in chrysalises.

One year I had a solitary Black Swallowtail caterpillar next to the monarch community and found it striking in how much the two species differ. The swallowtail was more like a monk in its quiet demeanor, while the monarchs were rambunctious and had, as always, an insatiable appetite. The monarchs were very accepting of the swallowtail caterpillar and before long I had a swallowtail chrysalis within the bouquet.

The fifth instar spins its own destiny with silk threads brought forth from within itself. Measuring out each thread from its spinneret, its head turns from left to right like a silk-filled bobbin a weaver throws back and forth through a warp. After building the mat and securing threads of silk around leaves and sedum stalks to further anchor it, the caterpillar's true legs carefully shape a mound of silk like the hands of an adept sculptor working with clay. Hundreds



Monarch (*Danaus plexippus*) and Black Swallowtail (*Papilio polyxenes*) caterpillars, Williamsburg, MA, Carol Duke

of minute, nearly invisible threads meld together to build a knob or button.

When sensing the fastening to be firmly fixed, the caterpillar backs into the knob and clasps on tight. It soon begins to gingerly release one pair of prolegs at a time. Then finally it completely lets go and hangs overnight. I can see the blue-green of the chrysalis beneath the skin. The monarch caterpillar has completed a remarkable journey. It is being absorbed by the life it had created while living as a caterpillar—a new life that will carry it on yet another miraculous journey.

The tentacles have been expressive throughout the life of the caterpillar and in the end, right before the chrysalis curtain rises, they begin to spiral and become lifeless. Stretching and splitting skin, twitching and twisting, the forming chrysalis works the old skin up, working quickly and vigorously to connect to the caterpillar crafted silk knob. Remarkably the cremaster, a barbed appendage at the top of the chrysalis, comes out from under the pile of old skin, feeling its way, barely being connected at this point, and reaches over attaching to the silk button. The cremaster has hundreds of hooks, like tiny crochet needles, at its tip. The chrysalis continues to twist and turn securing the tiny hooks through hundreds of silk threads that make up the knob. The old skin falls away looking like a dried up fly. This is an extraordinary and dangerous moment in the monarch's life cycle. I often hold out one hand, just in case, while my other hand is taking the photos. It paid off once when a chrysalis did fall right into my hand. I placed it in the soft corolla of an autumn crocus, quickly found some thread and tied the chrysalis onto a stem. I am very fortunate to know small miracles and to feel the weight of one in the palm of my hand.

Beginning in its egg, caterpillar cells set about cultivating 'imaginal' cell groups. In the last days of the caterpillar's life, these cell clusters speed up the work of uniting the butterfly components. Now, viridescent fluid, butterfly template wings, antennae, legs, and proboscis can all be seen disappearing into jade green. The

caterpillar is being digested as a chrysalis is born. For its coming out, the chrysalis is wearing a white beaded necklace, mirroring pure white milkweed drops, with a yellow brush stroke across the top. Soon a broken black line appears as if by magic under the white beads. The capable caterpillar is not forgotten but is painted here in a design of white, yellow and black. After a few hours, alchemy transpires and the necklace exhibits a cast of gold. The clear casing hardens, protecting the forming chrysalis, which dangles like a jade jewel. The chrysalis will remain this way for twelve to fourteen days, at which time the butterfly becomes visible. Just as the teeny caterpillar must exit its egg casing, so now the butterfly must escape its casing in order to spread its wings. Smooth lines towards the top of the chrysalis widen, creating ridges, just before a butterfly is about to emerge. I use this indicator to carefully plan my days so that I can be present for the birth. Usually in the early morning, when observing the ridges widening, I stay alert to movement within the chrysalis. Suddenly, strong butterfly legs push open the template door. The butterfly flips out abdomen first, firmly holding onto its chrysalis shell. While the abdomen pumps blood into veins that run through all four delicate, wet fabric-like wings, the butterfly begins testing all its new parts.

Wings expand at the same time the tongue or proboscis is wound and unwound till both pieces work as a straw-like form. Drops of white, the color of milkweed sap, are scattered about the thorax, abdomen and edges of the orange and black wings. When the butterfly is acclimated to its new self, it begins opening and closing its wings more rapidly. This is my cue to release the monarch. I quickly and gently encourage the butterfly to climb on my finger. Then, as hundreds of times before, I open the screen door or walk a flawless, fresh butterfly out into the garden. A number of times I have three or four that are ready to go out at the same moment.

Each time I hold a butterfly, or butterflies, I feel so blessed. Sometimes, a monarch butterfly spends more than ten minutes resting on my hand while moving all its new parts about. In its own time, the butterfly moves into high-speed fluttering mode and lifts off. I

wonder at how thrilling, and possibly frightening, it must be to fly for the first time, and it is always a moment that fills me with awe. Soon I am left with bouquets of empty, clear chrysalis casings. Knowing caterpillars and butterflies this way certainly makes any ordinary day seem exceptional, creating memories that add magical fibers to the fabric of our lives, and help in building a better understanding of the natural world. I am certain to have raised over a thousand monarch butterflies during the last thirty years, but each time the metamorphosis astounds and amazes me. It is an honor and privilege to witness the miracle of this courageous creature's fleeting life. I surely hope I will have many more opportunities to experience this metamorphosis and share it with others.

Sadly, intense cold fronts, droughts, threats to fragile overwintering sites, and pesticides, most especially those used on GMO crops of corn and soybean in the Midwest—responsible for killing over a hundred species of milkweed—are known reasons creating concern for the survival of these amazing navigators.

Yet Monarch butterflies have survived for millions of years, and somehow I believe they will continue to adapt to our environmental disasters, even if we cannot. However, there are gloomy reports stating the migration north may disappear or greatly diminish. The numbers on their wintering grounds in Mexico seem to be fewer than ever. People are being asked to plant milkweed and are demanding change regarding the use of pesticides. Mexico, Canada and the United States, under the umbrella of NAFTA, are considering joining together to restore monarch habitats. These are all hopeful actions.

Monarchs are but one piece of our world fabric that is coming apart, but they are important, just as all pollinators and other creatures, both human and wild, suffering from the reckless stewardship of our planet, are important.



2013 Donors and Volunteers

Monetary and in-kind contributions includes donating money; donating goods to be sold, auctioned, or used for the club's benefit; donating the cost of a good or service; other donations. Volunteer Services includes leading field trips or counts; working for Barbara J. Walker Butterfly Festival; manning the MBC table at Mass Land Trust Conference or other events; running the MBC Monarch Guardian Program; providing products for the club to sell or auction or distribute; leading walks for, or speaking to, trusts or other organizations; conducting butterfly classes; other services. The lists are for calendar year 2013.

Monetary and In-Kind Contributions

Karl and Elise Barry	Joe Dwelly
Bill Benner	Greg Dysart
Bob Bowker and Lesley Stillwell	Mark Fairbrother
Madeline Champagne	Lula Field
Karen Daniels	Martha Gach
Tom Gagnon	Tom Gagnon
Howard Hoople	Tor Hansen
Wendy Howes	Howard Hoople
Carl Kamp	Russ Hopping
Garry Kessler and Annie Reid	Ian Ives
Robert and Susan Mayer	Sam Jaffe
Ann E. Meilus	Carl Kamp
Wendy Miller	René Laubach
Steve Moore and Barbara Volkle	July Lewis
Brad and Diane Silfies	Julie Lisk
Sharon Stichter	Alyce Mayo
James and Janet Tracy	Rosemary Mosco
Dick Walton	Mark Mello
Joe Wicinski	Wendy Miller
Bo Zaremba	Lauren Miller-Donnelly
	Steve Moore
	Tom Murray
	Jennifer Ohop
Art and Frame Emporium, 18 Lyman	Karen Parker
Street, Westborough, MA	Matt Pelikan
Collective Copies, Florence, MA	Dolores Price

Volunteer Services

Elise Barry	Anne Reid
Karl Barry	Julie Richburg
Bill Benner	Alison Robb
Bob Bowker	Dave Small
Madeline Champagne	Gail Howe Trenholm
Karen Daniels	Tom Tynning
Cathy Dodd	Barbara Volkle
Tom Dodd	Dick Walton
	Tom Whelan
	Joe Wicinski

Corrigenda

The following species were erroneously omitted by your editor from the tables of the 2013 4th of July Count results in the Fall 2013 issue of *Massachusetts Butterflies*, #41. Apologies to all, especially to those who missed seeing some of the hard-won results of their much-appreciated efforts.

Apologies also for the misspelling of photographer Bruce deGraaf's name in that same volume; one of his excellent photos graces this issue's cover.

Total														
Northern Berkshire								3	1					560
Central Berkshire				3	9			2	3	11				308
Southern Berkshire	4	2		1	2			10	16	17	33	1		978
Central Franklin	5	1		11	6			1		8	26			7
Northampton	2			6	35		3	3		20	12			265
Northern Worcester			1	6						2	17	6		
Concord				1	9					4	24			49
Northern Essex	1			1					2	4	22			3
Blackstone Corridor					5				1	4	78			156
Bristol				2	10					4	3			30
Falmouth				1	4							4		27
Brewster	1											2		33
Barnstable														
Truro	1			1						3	21			28
Martha's Vineyard										6	2			38
	Red Admiral	Common Buckeye	Red-spotted Admiral	White Admiral	Red-spotted Purple	Viceroy	Hackberry Emperor	Tawny Emperor	Northern Pearly-Eye	Eyed Brown	Appalachian Brown	Little Wood-Satyr	Common Ringlet	Common Wood-Nymph

Submission of Articles, Illustrations, and Season Records

We encourage all members to contribute to *Massachusetts Butterflies*. Articles, illustrations, photographs, butterfly field trip reports, garden reports, and book reviews are all welcome, and should be sent to the Editor by August 30 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 31** 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>

Contributions

As a chapter of the North American Butterfly Association, the Massachusetts Butterfly Club is a non-profit, tax-exempt organization under section 501(c)(3) of the Internal Revenue Code. Gifts (in excess of dues) to the Massachusetts Butterfly Club are gifts to NABA, and are fully tax deductible.

Massachusetts Butterflies Advisory Board

Brian Cassie, Foxboro, MA
Madeline Champagne, Foxboro, MA
Mark Fairbrother, Montague, MA
Richard Hildreth, Holliston, MA
Carl Kamp, Royalston, MA
Matt Pelikan, Oak Bluffs, MA

Massachusetts Butterflies has been published continuously since 1993. Previous issues are viewable at <http://www.massbutterflies.org/club-publications.asp> after a one-year time lag. Print copies may be ordered for \$6 each, if still available. Send a check made out to Massachusetts Butterfly Club to our secretary, Barbara Volkle, at the address on the inside cover.





Arctic Skipper male, (*Carterocephalus palaemon*),
Windsor, MA, 6/1/13, Frank Model



Monarch chrysalids (*Danaus plexippus*),
Williamsburg, MA, Carol Duke