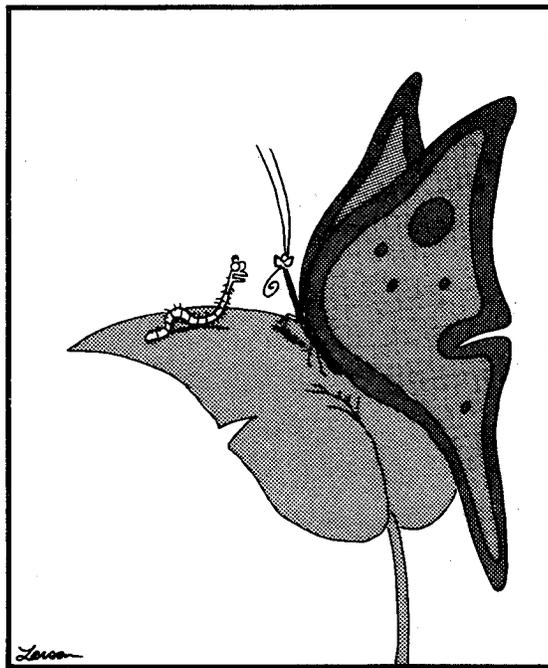


MASSACHUSETTS  
BUTTERFLIES

No. 8

February 1997



"How could you think that? ... I've always been  
attracted by your personality."

**"MASSACHUSETTS BUTTERFLIES"** is the semi-annual publication of the Massachusetts Butterfly Club, a chapter of the North American Butterfly Association. Membership in NABA-MBC brings you "American Butterflies," "Massachusetts Butterflies," "The Anglewing," "Butterfly Garden News," and all of the benefits of the association and club, including field trips and meetings. Regular annual dues are \$25.00. Those joining NABA-MBC for the first time should make their check payable to "NABA" and send it to our treasurer, Lyn Lovell, at the address listed below. Membership renewals are handled through the national office [NABA 4 Delaware Road Morristown, NJ 07960; telephone 201-285-0907]

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**Articles for submission** : We encourage all members to contribute to "Massachusetts Butterflies." Please send your notes, articles, and /or illustrations to Brian Cassie at the above address by the following deadlines : July 31 for the late summer issue, December 15 for the winter issue. Please send in all yearly records by November 30.

# The Butterflies of Ipswich River Wildlife Sanctuary

by Bob Speare, IRWS Naturalist

1996 marked an interesting year for the staff and volunteers of the Ipswich River Wildlife Sanctuary [IRWS] who took part in a year-long butterfly census of the property.

IRWS is located in Topsfield, MA, and contains 2800 acres of field, forest, and wetland habitats. Now a Massachusetts Audubon Society sanctuary, much of the site was once the arboretum of the late Thomas Proctor. He planted over 2000 species of exotic trees and shrubs on the property from around 1900 to the late 1940's. Many of these flowering trees and shrubs survive today, and along with adding to the beauty and diversity of the sanctuary, they may also be nectaring and larval feeding sources for some of the butterflies found here.

The sanctuary has over ten miles of trails, so when we began to think about areas to visit on a regular basis, we had to scale down. It was important to include the major fields, but we also wanted to include woodlands and some of the wetland habitats in the census. We wanted the sites to be in areas that were easy to get to and in spots where we had casually observed butterflies in the past. We ended up making two loops, each beginning at the parking area. One heads north through the north field, then through woodlands and wetlands before looping back. The other loop heads through the south field, past the Wisteria arbor, and down to the Ipswich River. Each loop takes about an hour to walk. We also chose a couple of remote locations on the sanctuary that we would visit from time to time.

The butterfly season began at IRWS on February 27 when, along with the return of the Red-winged Blackbirds and Eastern Bluebirds, the first Mourning Cloak was seen, flying over the south field. It would be a few weeks before we would see any others, but that first sighting provided the momentum that would carry us through the rest of the year.

It was a busy summer outside of butterflying, but when we finally laid the season to rest in November, we had gone out 25 times and had identified 45 species. Among our favorites were Spicebush Swallowtail, Striped Hairstreak, Eastern Tailed-Blue, Silver-bordered Fritillary, Question Mark, and Eastern Comma.

One of the remote locations that we visited was the Salem-Beverly Canal. This is a two-mile stretch of water diverted off the Ipswich River that eventually flows into Wenham Lake. The canal itself sits in a narrow opening in the woods that resembles a powerline opening. A trail runs down each side of the canal, which is lined with grasses and wildflowers. This site had the greatest numbers of individuals recored on the sanctuary. In a few hundred yards on August 14, we recorded 127 Pearl Crescents and 90 Common Ringlets. On August 22, over the same distance, we recored 23 Pearl Crescents, 78 Common Ringlets, and 63 American Coppers, and on September 21, we found 35 American Coppers and 21 Silver-bordered Fritillaries. We found similar results on most other bright days from July through September, except for a two-week period late in August following the mowing of the grass when the numbers were very low. We first visited this site in July, but we plan to get there much earlier in 1997.

After our first year of really looking at the butterflies on the sanctuary, we realize that IRWS is a very good North Shore butterfly spot. You can be sure we will be out there in 1997 and we will find more species. If you would like to get involved in the inventory, give us a call [508-887-9264]. We can also use some help with our butterfly garden, which we plan to further develop this year. For those interested in coming to visit the sanctuary, a map of our butterfly census trail is available, and all current sightings are marked on the Natural History Board. When you do visit, please stop by the office, say hello, and let us know what you find!

## What Butterfly is That?

Lepidopterists at the turn of the century often possessed lyrical, highly descriptive writing styles. Enjoy the following descriptions of Massachusetts butterflies and send us your guesses as to their identities. Good luck.

1. When in our childish ignorance we regarded a small butterfly as not yet fully grown, we often found on thistle blossoms in the pasture certain small butterflies that carried "money" under their wings and we thought them too young to be trusted with so much silver. These small Croesuses were \_\_\_\_\_.
2. For delicacy of gray-brown color tones few butterflies can compare with this exquisite creature. It seems indeed to have succeeded in a modest attempt to obliterate itself....at rest in its native haunts, with wings closed together so that only the very delicate light-brown color tones of the under surface are revealed, it actually becomes invisible.
3. For a wee bit of a gossamer-winged creature that expands scarcely an inch across its outstretched wings, the \_\_\_\_\_ has caused American scientists an immense amount of patient labor. Over the vast territory from Labrador across to Alaska and south to the Gulf of Mexico, this little butterfly exists in so many different forms that it requires special analytical keys to separate them.
4. It is a brave flier and lifts itself easily over houses and trees. And as if to demonstrate that it is truly at home wherever it may be and that it has no race or color prejudice, it has in the South wives that are black.
5. This little creature just saves itself from Quaker costume by an orange spot or two and by a frivolous white-tipped tail that looks like a curlicue. The \_\_\_\_\_ is a frisky little creature living up to its orange spots in action rather than to its decorous body color; it dances about shrubbery, and is much given to taking long swigs of nectar from the flowers of the bush-clover.
6. It is somehow surprising to find the wings so rich above and so smooth and ordinary beneath; it reminds one of the right and wrong side of velvet. This sovereign loves shady roads, and is addicted to the refuse of the road, which, according to butterfly standards, is anything but waste material.

# June Butterflies

## by Brian Cassie

For butterflies and me, June is a time of transition. I ease out of traveling around New England giving school presentations and into the relative calm of running a summer nature program. Butterfly populations shift from elfins and Mourning Cloaks to Viceroy's and Red-spotted Purples and finally to early-emerging fritillaries and hairstreaks.

This year, I found thirty-five hours to devote to June butterfly watching, usually an hour or two at a stretch. Here are some of my observations, borrowed from the pages of my butterfly journal.

June 1 - The Cumberland Farms fields in Middleboro are huge! Of course, birders love them for the hawks, owls, shorebirds, grassland birds, and rarities they attract, but I have never received a butterfly report from "Cumbies" so I thought I would give the place a chance to overwhelm me. This morning I tramped among countless blossoms of buttercups and stitchworts, through acres of fabulous meadows. I flushed Red-winged Blackbirds, Bobolinks, and Eastern Meadowlarks from their nests and was serenaded by a pair of Upland Sandpipers yodeling overhead. The birds could not have been better, but the butterflies were a bust, with only 49 individuals seen. Seven male Black Swallowtails were the highlight.

June 2 - The Butterfly Institute program, a combined effort of the Massachusetts Butterfly Club and the Massachusetts Audubon Society and artfully directed by Chris Phillips at Broad Meadow Brook Sanctuary, gets its participants into the field as well as into the classroom. Yesterday's field trip to Petersham and vicinity with Richard Lent visited the bog along Tom Swamp Road. Among the butterflies observed were two small elfins ( I mean small even for *elfins* .), which the observers thought might be Bog Elfins. No specimens or photos were taken, and since this would mark a dramatic southern range extension for this Spruce bog-loving species, Rich decided to go back for documentation, today. Cathy Asselin, Tom Dodd, and I all missed yesterday's trip, so we made arrangements to meet Rich and his son Alex for another go at the area.

This part of the Harvard Forest is well known to the "dragonfly set" in Massachusetts, and last year they found a new "state" dragonfly here, a species known previously only from northern New England spruce bogs. The dragonfly shares the same habitat as the Bog Elfin, so perhaps both have been long overlooked at this bog.

We had great weather and saw three elfins, but they were Eastern Pine Elfins. We were anything but disappointed, however, as the place is beautiful and we found Arctic Skippers, lots of puddling Canadian Tiger Swallowtails, and two Harvester larvae among other butterflies at the site. We all decided to give the Bog Elfins another try next year and to go better prepared.

June 6 - This morning, with two second grade classes in tow, I walked up to a Sassafras sapling outside a Somerset elementary school, picked off a mitten-shaped leaf to show the students, and there on the underside of the leaf was the egg of a Spicebush Swallowtail. Don't you just love when that happens?

June 7 - One tiny, very bizarrely-arrayed Spicebush Swallowtail caterpillar emerged from its egg and spent the better part of the morning leisurely devouring the shell.

June 8 - I like to hike around on Great Blue Hill, on the Canton-Milton line - up along the red trail through beech-oak woods, around the scrubby, shrubby summit, and back down the main ski slope. There are not many butterflies in the woods, but the summit usually has several showy nymphalids and swallowtails, and the slope has skipper-attracting wildflowers, mostly introduced species, such as Oxeye Daisies, Cow Vetch, and Yarrow.

Today, at the summit, two Juniper Hairstreaks took nectar from a patch of daisies so small that you could almost encircle it with your arms. Where did these butterflies come from? As far as I can see, there is only a single, small Red Cedar in the area.

June 11 - On the drive home from my last school program of the spring, I pulled off the highway in Tolland, CT to get gas and some iced tea. Behind the mini-mall, on the verge of Route 84, a terrific little meadow was home to at least the twenty-one species of butterflies I saw in the hour I was there. Connecticut has some great butterfly watchers and an active state butterfly association, but I wonder if anyone knows about this spot? Two Pepper and Salt Skippers were the best finds.

June 12 - Jane Layton, MBC member and dedicated conservationist, called months ago and asked if I could help out the Lincoln Conservation Commission by identifying June-flying butterflies in some of the fields the LCC administers. We agreed on this date and this morning Jane and I met and walked seven properties, she in long pants and boots, I in shorts and sneakers, no socks. Guess who will more likely regret trampling those 5000 Poison Ivy plants?

All of the threatening clouds on the horizon stayed there, and Jane and I rounded up two dozen species of butterflies, including another Pepper and Salt Skipper. I never see this species around Foxboro, so three in two days is exciting!

June 13 - I would never recommend taking a dog along on a butterfly watching trip, but this afternoon I took two. Two Golden Retrievers, bounding along, always in front, always getting to the butterflies before me. We three took our walk in a Wild Indigo field here in Foxboro, not too far from my house. When I brought the Butterfly Institute people here on May 25, we saw nineteen Frosted Elfins and eleven Wild Indigo Duskywings. Today, even with the lateness of the season and the dogs, I saw seven elfins and four duskywings in half an hour. One Frosted Elfin laid several eggs on Wild Indigo. The beautiful emerald-colored eggs were deposited between unopened leaflets at the very tips of the plants.

June 14 - "I'm gonna need an ocean of calomine lotion!"

World's End Reservation in Hingham is one of the prettiest spots along the coast south of Boston. Its upland meadows can at times be great for butterflies. But, for goodness sake, if you want to chase butterflies here wear long pants [I didn't] - these fields have a lot of Poison Ivy. In two hours, I saw a whole lot of little butterflies, mostly skippers and satyrs. The totals of 650 Little

Wood Satyrs, 195 Long Dashes, and 38 Indian Skippers were my highest ever. The European Skippers favored Rough-fruited Cinquefoil for nectaring, while 90% of the Long Dashes were found at Field Scabious. A tiny patch of six Blue Flag irises attracted thirteen Long Dashes and no other butterflies. The millions (no exaggeration) of Multiflora Rose blossoms had no butterfly visitors - as usual.

June 15 - I got a lot of work done today and still found time to squeeze in three butterfly watches. Sarah Jane and I, on a morning walk, watched a Red-spotted Purple laying eggs on the tips of crabapple leaves. After lunch, at Great Blue Hill, the Cow Vetch at the base of the ski slope was alive with skippers, including three Hoary Edges and yet another Pepper and Salt Skipper. Is this a big year for this species? Finally, after 8:00 p.m., while we were waiting for the Olympic flame to pass by, my kids and I found two Red-spotted Purples, eleven European Skippers, and a few damselflies dead along the Route 1 roadside at the Foxboro-Walpole line.

June 16 - World's End Poison Ivy is in full bloom on my calves! Mid-June is the season for European Skippers and the big field next to the Elm Street Garage in Mansfield is the place to see them. At least 20,000 little orange butterflies swarmed in the fields - every patch of Cow Vetch had hundreds. Plague proportions!

European Skippers are without a doubt our commonest Massachusetts butterfly and populations in the thousands may be commonplace, but most butterfly species occur in very modest numbers at any one locality. In fact, the twelve Southern Cloudywings at Elm Street today were more than I had ever seen in one place in the state and were just as exciting as the masses of European Skippers.

June 17 - Everyone has her or his favorite patch. For the past several years mine has been the mixed meadow community under the powerline crossing Bay Road in Easton. I was floored when I came here in late April and found contractors had ripped up one end of the big hayfield and begun new home construction. Today, they are busy on home #2. Three calls to the Easton Conservation Commission and the Brockton Enterprise newspaper produced no interest whatsoever on their parts. Why not? I wish some of the Lincoln Con.Com. people worked down here!

Today, there were Silver-bordered Fritillaries and Baltimore and Harris' Checkerspots flying around together. Where else can you see that? In two sections of the meadow, I had to watch every step for fear of trodding upon checkerspot larvae and pupae - hundreds and hundreds were in sight. I brought home some chrysalises and compared them in size to those of my jar-raised Baltimores. On average, the "wild" Baltimores produced chrysalises 25% larger. Judging by the size of the caterpillars I saw in the field today, they must wait longer to pupate in the outdoors.

June 18 - Ever visit an evening butterfly roost? The European Skippers in Mansfield have favored roosting spots, generally on or near the numerous patches of Cow Vetch. The roosting skippers rest mostly one per inflorescence, roosting at the top of the "spike." All of the skippers held their bodies upright, at 45-90 degree angles to the ground.

June 21 - As a light rain fell, I walked among the resting European Skippers at mid-morning. None made an attempt to fly, nor to shelter itself from the rain. I lightly touched ten : two stayed put, one flew about eight feet to another flower, the other seven dropped down like stones among the vetch foliage.

In the late afternoon, I walked around the Pondville Prison in Norfolk. This is the best wildlife sanctuary in my area and the authorities give me permission to look for birds and butterflies. Today, I found a single Spicebush Swallowtail larva on some Sassafras, but the real surprise were the numbers of Giant Leopard Moths around the main building - eight alive and a few dead. These are really handsome moths and the staff said there had been lots more but people were killing them. Most people just do not like moths, even beautiful ones!

June 24 - Saw both Banded and Southern Hairstreaks at the summit of Great Blue Hill this morning. In mid-afternoon, at Wompatuck State Park in Hingham, I backed up along the park road three times to pick up stunned butterflies - Banded Hairstreak, Red-spotted Purple, and Eastern Comma - all alive and standing on or very near the yellow center stripe. Don't try this on a highway!

June 25 - First two Great Spangled Fritillaries of the year at Goodnough Dike at Quabbin Reservoir.

June 26 - Visiting the islands of the Boston Harbor Islands State Park is always a kick. My Thayer Academy Summer Program colleagues and I watched a colony of Least Terns on the beach at Lovell's Island and then found some butterflies, including a Tiger Swallowtail, a Red Admiral, and two Mourning Cloaks. Question Marks are sometimes found here, but not today.

June 27 - Gooseberry Neck, in Westport, is often a good migratory trap for butterflies and birds in fall. On this June day, it was a bust. Huge numbers of Wild Radish, Oxeye Daisy, and Beach Pea were in bloom, but only Cabbage Whites and Orange Sulphurs were seen and not a single one was observed nectaring.

June 28 - At Great Blue Hill, there was another Southern Hairstreak near the top of the ski slope and my first Pocahontas (dark female Hobomok Skipper) of the season at its base.

June 29 - One final June butterfly bash, at the Crane Wildlife Management Area along Route 151 in Falmouth. Crown Vetch and Wild Indigo by the ton. Crown Vetch flowers attract nothing! A few Intermediate Dogbane plants had a worn Gray Hairstreak and an immaculate Southern Hairstreak. This place has a lot of possibilities. Watch out for ticks - I got 66 (who's counting?); all dog ticks.

By way of review, I saw about 25,000 butterflies of 52 species in Massachusetts in June. Just about 95% were European Skippers!

## 1996 Fourth of July Butterfly Counts

Fourth of July Butterfly Counts were held in nine localities in Massachusetts this summer, an increase of one over 1995. The new addition, and a notable one at that, is the Northern Worcester County count, organized by Gail Howe, Cathy Asselin, and Tom Dodd. Their scouting made this first-year count the most successful, species-wise, in the region. The butterfly counts are modeled after the Christmas Bird Counts, with participants covering as much of their prescribed 15-mile diameter circle as possible and counting all the butterflies they see. Massachusetts counts, in general, are much better than the national average in both effort and species found.

Sixty-four species were observed statewide.

Following are summaries of eight of this year's counts [The results of the other count were not submitted.]. Space restrictions have not allowed us to print out all of the species tallies.

Every count circle has many unwatched areas. Please help out on one or more 1997 butterfly counts. Results of all of the continent's 4JBC's are compiled by NABA and may be purchased as a separate volume.

**NORTHERN BERKSHIRE COUNTY [MARK FAIRBROTHER - COMPILER] :** Weather for the count was marginal, with strong winds, 40-75% cloud cover, and temperatures struggling through the 70's. European Skippers represented 78% of the butterfly individuals counted. Three new species were added to the count list - Baltimore Checkerspot, Eyed Brown, and Dion Skipper. All three were found in the same location. The Dion Skipper is known from only three or four sites in MA, and this location, previously unknown, is considerably farther north than the others.

Participants : 4    Party-hours : 20    Species : 36    Individuals : 683

**CENTRAL BERKSHIRE COUNTY [TOM TYNING - COMPILER] :** This count gets pride of place; in its eleventh year, it is the longest-running in Massachusetts. The day before the count, the Berkshires had about six inches of rain from Hurricane Bertha. Count day was incredibly pleasant.

Participants : 5    Party-hours : 21    Species : 40    Individuals : 1168

**SOUTHERN BERKSHIRE COUNTY [RENE LAUBACH - COMPILER] :** The season has been distinctly wetter and cooler than normal. The count was delayed one week by inclement weather. Nectar sources included : Red and White Clovers, Canada Thistle, Wild Bergamot, Spotted Knapweed, and Black-eyed Susan.

Participants : 8    Party-hours : 29.5    Species : 37    Individuals : 1062

**LOWER PIONEER VALLEY [ROGER PEASE - COMPILER]** : The Hackberry Emperor dropped out of the trees to greet us and provided numerous photo opportunities but did not alight on the participants as one did last year. This was probably due to the cool weather which was not conducive to heavy human sweating in contrast to the hot humid conditions last year. The huge Buttonbush nectaring site was in full bloom but only nine individuals and six species were in attendance.

Participants : 3 Party-hours : 6.75 Species : 30 Individuals : 164

**CENTRAL FRANKLIN COUNTY [MARK FAIRBROTHER - COMPILER]** : Nectar sources were generally abundant. The cool, somewhat wet season leading up to the count showed in a much delayed flight for many species. Common Wood Nymph was missed for the first time in seven years and several summer species, such as Crossline Skipper, Black Dash, and Dun Skipper, were low in numbers or missed. On the other hand, the slow season kept Little Wood Satyr and the Red-spotted Purple forms flying in record numbers.

Participants : 23 Party-hours : 37 Species : 44 Individuals : 1638

**NORTHERN WORCESTER COUNTY [GAIL HOWE - COMPILER]** : Editor's comments - Fifty species (and forty-five party-hours) on an inaugural count - fabulous! Just goes to show you what a lot of advance scouting, time in the field, and good weather can do for your balance sheet. I'm sure next year will be better yet.

Participants : 21 Party-hours : 45 Species : 50 Individuals : 2479

**CONCORD [RICHARD WALTON - COMPILER]** : Of special interest was the participation of Alexander Windmiller, age six months, five days, who edged out Kate Hatheway (eight months in 1989) and now holds the title of youngest participant for the Concord count. Ten Compton Tortoiseshells was a notable count high, while Monarch numbers and total individuals seemed relatively low.

Participants : 19 Party-hours : 31.5 Species : 46 Individuals : 1241

**FOXBORO [BRIAN CASSIE - COMPILER]** : Despite the absence of some key personnel and various new housing developments and soccer fields, this year's count was quite good. Especially noteworthy were the numbers of American Coppers, with over 500 in one large field of flowering Hoary Allysum, and European Skippers, which persisted in relatively high populations later into the summer season than usual. The previous high count for the species was 254; this year there were 3900. The Baltimore Checkerspot hotspot in Easton is under intense development and a large portion of this field will go under the plow this summer.

Participants : 12 Party-hours : 48.5 Species : 49 Individuals : 7075

# A New Site Location for Hessel's Hairstreak (*Callophrys hesseli*) with Notes on its Distribution and Behavior in Massachusetts

by Richard Forster

Few established resident Massachusetts butterfly species are difficult to locate if the observer is knowledgeable about the habitat requirements, larval host plants, and the geographic distribution of the species within the state. Among the rarer resident butterflies, Hessel's Hairstreak is one species with which the observer must be particularly well versed in its ecological and biological requirements to locate it, for it is both very local and easily misidentified. Even fully armed, the intrepid butterflyer may find this species devilishly hard to observe.

Hessel's Hairstreak is extremely similar in appearance to the Juniper Hairstreak (*Callophrys gryneus*), formerly known as Olive Hairstreak, which is far commoner in Massachusetts. Notes on their identifications appear at the end of this article. In addition to being very similar in appearance, the species share similar larval host plants. In the case of Juniper Hairstreak the host plant is Eastern Red Cedar (*Juniperus virginiana*) while that of Hessel's is Atlantic White Cedar (*Chamaecyparis thyoides*). Eastern Red Cedar is usually associated with dry hillsides and is typical of early successional stages of abandoned farmlands. The heyday of this cedar is probably past. Atlantic White Cedar is mostly confined to areas near the coast. In Massachusetts, it is most prevalent in southeastern coastal areas, with scattered stands located in Essex County and with a few inland locations in southern Worcester County and points west. Formerly the valuable wood was used in shipbuilding and for shingles and commercial harvesting undoubtedly caused the extermination of many fine stands. Even in recent years Atlantic White Cedar swamps have been destroyed in the guise of "reclamation," a practice that is considered unwise if not illegal.

Because of its close similarity to Juniper Hairstreak, Hessel's Hairstreak went unrecognized as a distinct species until it was described in 1950. The common and scientific names honor Sidney Hessel, an amateur lepidopterist from Connecticut, who was among the first to draw attention to the slight differences in the Atlantic White Cedar dwelling "Olive" Hairstreaks. Since its official designation as a species, it has remained relatively unknown in Massachusetts since few amateur or professional butterfly enthusiasts have actively sought out the species in its limited habitat. Prior to the Massachusetts Butterfly Atlas Project (MBAP), which ran from 1986-1990, it was known from approximately seven locations in the state. During the MBAP, it was recorded in an additional ten locations. The majority of these records were the result of a concerted effort mounted in 1988 to visit white cedar swamps in pursuit of this elusive butterfly. Most of the sites where Hessel's Hairstreaks have been located lie south of Boston in Norfolk, Plymouth, and Bristol counties. This distribution is not surprising since the bulk of Atlantic White Cedar swamps are located in this region. Site localities away from this stronghold include Andover in Essex County, Westboro, Auburn, and Douglas in Worcester County, and

Wilbraham in Hampden County. Extensive searching will likely find it in numerous other localities.

On May 25, 1996, I was visiting an area in Holliston, Middlesex County, that has an interesting diversity of habitats and species. It is a low wetland area that has ample amounts of Atlantic White Cedar and Red Maple bounded by an open field (actually a capped dump) that hosts species typical for the habitat. Snuggled in the wooded area are two shallow, man-made, sandy ponds. The area taken in its entirety has interesting bird, dragonfly, and butterfly species. While walking along the edge of one of the ponds, at about 11:00 a.m., I noticed a small dark form fluttering at my feet. It paused on a buttercup and I noticed it was a green hairstreak. Careful inspection revealed it to be a Hessel's Hairstreak, the first I had ever encountered. The incident prompted me to look around and I saw two additional Hessel's Hairstreaks. Both were very low to the ground and one was on a buttercup, presumably nectaring, a scant three inches or less from the ground. I returned to the site on June 1 with Dick Walton, when we found and videotaped a lone Hessel's Hairstreak.

My encounters with the Hessel's Hairstreaks were particularly satisfying not only because they were my first sightings of this species but also because their behavior was contrary to my perceptions of their habits. I was under the impression that this butterfly was most likely to be found early in the morning or late in the afternoon, with the intervening time spent high up in the tops of white cedars. Highbush Blueberry and Leatherleaf are among the nectar sources listed for Hessel's Hairstreak so I presumed that if I ever saw one it would be at eye level or above, not at ground level on buttercups. I have since learned that dedicated New York City butterflyers have found that it is best to search for them from 10:00 a.m. to noon and then again after 4:00 p.m. (Guy Tudor pers. comm., fide B. Cassie). My two encounters with Hessel's Hairstreak fit nicely into this search pattern.

Hessel's Hairstreak is an early season butterfly with a flight period extending from mid-May to mid-June. Farther south in its range, there is a second, less noticeable flight in July. To date, there have been no July records in Massachusetts, but there are two mid-summer reports from Rhode Island. This flight pattern closely corresponds to the commoner Juniper Hairstreak. It is gratifying to discover that Hessel's Hairstreaks frequent wetlands adjacent to Atlantic White Cedar swamps, since penetrating these swamps in search of this fascinating butterfly is difficult at best.

Finally a note on identification. It may have been prophetic, at the very least fortuitous, that the most recent issue of "Massachusetts Butterflies" featured a cover drawing by Richard Hildreth of both Juniper and Hessel's Hairstreaks depicting field marks for separating the two species. From my experience the brown on the outer margin of the white median band on the underwings is extensive and obvious and the terminal white spot of the forewing band is noticeably offset in Hessel's Hairstreak. Most importantly, if you are near Atlantic White Cedar you can be relatively certain that you are viewing a Hessel's Hairstreak. If you find yourself in the vicinity of a cedar swamp in late May be alert and you too may enjoy a chance encounter with this little known, mysterious jewel of the butterfly world.

# 1996 Season Summary and Records

## by Brian Cassie

Our thanks, once again this year, to the Club members who sent in their records of Massachusetts butterfly sightings. As in the past, not all records received are published in "Massachusetts Butterflies." For each species, early and late flight dates, maximum high counts, and various other representative records are included. Note that data from the Fourth of July Butterfly Counts are published separately and with few exceptions are not incorporated into the listing of records. One asterisk signifies a new "earliest flight date" and two asterisks signifies a new "latest flight date." Locality WBWS is Wellfleet Bay Wildlife Sanctuary; LBWS is Laughing Brook Wildlife Sanctuary, WMWS is Wachusett Meadow Wildlife Sanctuary, and GBH is Great Blue Hill, Milton. Those records of ovipositing, mating, and larvae received for 1996 are on file. Special thanks to Cathy Asselin, Tom Dodd, Richard Hildreth, and WMWS for supplying these.

OBSERVERS : K.Andberg [KA], C.Asselin [CA], Athol Bird & Nature Club [ABNC], J.Berry [JB], B.Cassie [BC], S.J.Cassie [SJC], M.Champagne [MC], J.Dawson [JD], T.Dodd [TD], M.Fee [MF], R.Forster [RF], T.Gagnon [TG], F.Goodwin [FG], R.Godefroi [RG], T.Hansen [TH], R.Hildreth [RH], G.Howe [GH], Butterfly Institute field trip [BI], C.Kamp [CK], A.Keith [AK], D.Lang [DL], J.Layton [JL], R.Lent [RL], L.Lovell [LL], B.Malcolm [BM], MA Butterfly Club [MBC], M.Murphy [MM], B.Nikula [BN], K.Parker [KP], R.Pease [RP], M.Pelikan [MPe], M.Polana [MP], D.Potter [DP], D.Savich [DS], D.Small [DSm], J.Sones [JS], B.Speare [BS], S.Stichter [SS], W.Tatro [WT], C.Tibbetts [CT], J.Trimble [JT], R.Walton [RW], C.Woodruff [CW], N.Woodruff [NW].

When, at our fall get-together, I mentioned in the course of my recitation on the 1996 butterfly season that it had been a poor year for the larger fritillaries, one member said, "On the contrary." So, I noted that no more than two or three Great Spangleds or Aphrodites had been seen in most spots. He responded, "Three is good!" Well, what could I say? It is all a matter of perspective, correct?

This summary is written from the perspective of a guy who has more or less carefully looked at all of the MA butterfly records for the last ten years, paid attention to species' numbers and flight dates, and spent a great deal of time in the field in Massachusetts. That there are considerably more eastern than western MA records printed here speaks to the volume of records received, not to any geographical bias.

At the aforementioned meeting, another member wanted to know what sorts of records to send in. My answer is always the same - any sort. Send photos or slides or videos or notecards or photocopies of journals or neatly arranged species-by-species lists or whatever. Make your records phylogenetic or chronologic, call them in if you like. BUT, unless we receive them, we cannot find a way to use them. Don't you get tired of seeing the same old names, again and again? [To you "same olds" please keep up the wonderful efforts!!!!] Most of you have seen something that would look nice on these pages and you, how can I say this, keep inadvertently forgetting to send it along. Stop forgetting. And

while you are at it, if you know about a person or organization that keeps butterfly records, ask for "MA Butterflies" to get a copy of their data. There are a number of butterfly gardens, for instance at several Mass. Audubon properties, where volunteers and staff keep track of butterflies. I have written to every one I know about, but very few have taken the time to reply. If you regularly visit these areas, put in a word for us. This journal is the only place where future butterfly enthusiasts will be able to turn for information on the 1996 butterfly season. The better the data on hand, the better the season review.

Special thanks to Brian Malcolm, who found 52 species of butterflies at Stony Brook Meadow in the Arnold Arboretum, Jamaica Plain during 1996 and sent along a 16-page compilation of his data. Wow!

Lastly, I would like to add a few words about the acceptability of records submitted to this editor. Many persons in the lepidoptera field accept virtually no sight records. Their attitude is "If you don't have a specimen in hand, don't bother me." This is unfortunate, as most species of Massachusetts butterflies are easily identifiable in the field. I believe that the vast majority of sight records submitted are valid. That said, I am also quite convinced that some of the records submitted are incorrect. Sometimes a species is reported well outside its normal flight period; sometimes a species rarely seen in the state is reported; on a few occasions, butterflies completely unknown to New England have been reported. I check out all such records [if the observer has not included observation details with the report] and try to make an objective judgment on the records' validity. Those reports that do not have sufficient details are not printed in this journal.

## SWALLOWTAILS

Black Swallowtails can be hard to find in eastern Massachusetts some years, but 1996 was a pleasant exception. Several site totals were quite high. Since I have seen some real Black Swallowtail droughts in recent years, it is a little strange to be talking about dozens of them, but it is interesting that the first 12 I saw in 1996 [June 1- July 7] were all males, while the next 12 [July 12 - 14] were all females. The December 11 Black Swallowtail in Wayland was discovered flopping about in a greenhouse at Russell's Garden Center in Wayland. Its biological clock was obviously in need of rewinding. Tiger Swallowtails of both species were unrecorded in any large concentrations. Wompatuck State Park in Hingham has loads of Sassafras trees and last August it was, in common with several spots, a good place to find Spicebush Swallowtails. The Cape Ann September 19 sighting is the latest on record for MA. Two Pipevine Swallowtails were found in 1996, both at Audubon sanctuary butterfly gardens [Wonder what was at the other gardens?].

## WHITES AND SULPHURS

Mustard Whites and West Virginia Whites are local residents of western Massachusetts. Both species fly in the spring, and the Mustard White has additional flights in mid-summer and fall. West Virginia Whites are said by w. MA observers to be fairly common; Mustard Whites are much more local. Neither species is very well reported to us. How many are really out there, 20 or so WV Whites at places [as I HEAR] or a few [as I READ]? Please help us easterners get a read on these butterflies. A single Checkered White put in the first MA appearance of the species in 50 years or so when it consorted with Monarchs and

Cabbage Whites at Gooseberry Neck, Westport, on September 30. There were some excellent August-September counts of Cabbage Whites, with a highest 1350 on the Katama Plain of Martha's Vineyard in mid-August, as reported by Allen Keith, our pierid watcher extraordinaire on the Vineyard. Note that most of the Clouded Sulphur reports of the same period were 'elevens.' Orange Sulphur populations were highest at Katama, though not as high as last year. No Cloudless Sulphurs were seen in 1996.

### **COPPERS, HAIRSTREAKS, ELFINS, AND BLUES**

Videographers from the British Broadcasting Corporation planned to visit Massachusetts in July-August to film Harvesters, but the species failed to show in even normal numbers so the whole thing had to be called off. Southeastern Massachusetts is a very good place to see numbers of American Coppers. Most of the recent high counts for the state have come from this region. This year, 225 were seen in May at World's End Reservation in Hingham and 532 were counted in half of a single large field of Hoary Alyssum in Wrentham in July. Bronze Coppers continue to be rare outside the Sudbury River Valley. Six were discovered at the Wayland Community Gardens in September and various MBC members got good looks at them over several days. There were few Bog Copper reports. All of the hairstreaks that fly from early July to sometime in August; namely, Coral, Acadian, Edwards', Banded, and Striped [and Hickory?, which fits the description but is almost never reported in MA] were found in much reduced numbers in 1996, as in 1995. Some of the flights were pathetically small. Two or three Southern Hairstreaks were observed, about average. Hessel's Hairstreaks were in a traditional area at Ponkapoag Bog and a new locality in Holliston [see article this issue] and Juniper Hairstreaks showed up on Great Blue Hill during both of the species' flight periods. If you have never seen the Early Hairstreak, try to visit Mt. Greylock for a look around in June. It is definitely worth the trip to see this fabulous gem, gleaming blue above, red-spotted below. Gray Hairstreaks had the best flight of the clan. Elfins are great springtime butterflies but are perhaps flying before a lot of you are out looking. Try elfin hunting in 1997; it's much easier than elephant hunting, which is what everyone will think you said, and you might just get hooked. And besides, I hardly get any elfin reports so you would have something noteworthy to send along. The extent of the Frosted Elfin colony in Foxboro was probably the year's elfin highlight. Eastern Tailed-Blues had an average year, but azure numbers were down for all flights-species-forms [whatever!]. Silvery Blues were noted for the first time from Hopedale, Newburyport, Princeton, Wellesley, Waltham, Clinton, and Athol. Please continue to send along any info on this handsome southward-spreading lycaenid.

### **BRUSH-FOOTED BUTTERFLIES**

There was a lot of hooting in the Northeast about what an awful year 1996 was for butterflies [It was, after all, the wettest year on record.] and many of the species most frequently cited as "off" were nymphalids. It certainly seems that for most species in the family, 1996 was less than a banner year in Massachusetts. Beginning with the Variegated Fritillary, there were a small number at the traditional Wachusett Reservoir site and only two others. When we

speak of traditional sites for this species, we mean in the sense that it occurs there seemingly every year. Variegated Fritillaries are supposedly unable to overwinter in New England in any life stage, so the Wachusett "colony" must start anew each year from southern immigrants. The fact that they do indeed find their way to the same corner of the reservoir each summer is quite astounding, especially as they are seldom seen elsewhere. Of the extant greater fritillaries [What is happening with the Regal Fritillary project?], all three species flew in low numbers. Silver-bordered Fritillaries did very well at Rockport and o.k. elsewhere, but Meadow Fritillaries were scarcely reported. The checkerspot records often involve large concentrations and this year the pattern continued, with hordes of Harris' at Holden and bunches of Baltimores in Easton.

There were certainly a number of Pearl Crescent sightings, though only three reports above 100, and those just barely. Can someone figure out how to definitively tell a Northern Crescent? When you do, go out there and find one in Massachusetts. The Question Mark had a pretty good year. By the way, the species can almost always be found on George's Island in the Boston Harbor Islands. The little elms there are a great place to find Question Mark larvae. Eastern Commas were not abundant, but then some years they are barely noticeable. No Green Commas or Gray Commas were reported [no surprise]. A big surprise was the Compton Tortoiseshell flight [92 records] which lasted from March to October [typical] and was widespread and conspicuous [atypical]. The seven at Wompatuck State Park on July 10 were all along a few hundred yards of campground roads. Mourning Cloaks, too, did well in 1996, with a new high of 19 recorded at Waltham on April 19. Unfortunately, there were no reports of my favorite butterfly, Milbert's Tortoiseshell. Red Admiral, Painted Lady, and Common Buckeye were virtually absent, while the American Lady's late September coastal flight was the saving grace for that species. The closely related Red-spotted Purple and Viceroy flew in respectable numbers. We need to more closely watch the colony of Tawny Emperors and Hackberry Emperors in Springfield. How did they fare in 1996? Four Northern Pearly Eyes at Heath on August 2 was a nice find, as were the 8 Eyed Browns at Petersham on July 5. Very good numbers of the June-flying "Type I" Little Wood Satyrs were noticed, with a maximum of 650 at World's End on June 14. Common Ringlets and Common Wood Nymphs were about average. Last among the nymphalids [and woe unto me if I should forget this species] is the Monarch, which basically had a poor flight. The fall flight at Gloucester was far below normal, though the September 30 count at Gooseberry Neck was respectable.

## SKIPPERS

The Silver-spotted Skipper was widely reported, with impressive counts of 45 in Northfield and 71 at the Wachusett Reservoir, the latter almost all nectaring at various patches of dogbane. Long-tailed Skippers are rare in the state, so the two September reports are noteworthy. One was found on our club's Cape Ann trip, which was quite wonderful, and the other was visiting the Butterfly Bushes at Quansett Nursery in South Dartmouth. Not many Hoary Edges were found, but both of the cloudywings were fairly well reported, with new high counts established for both species. Most of the duskywings were underreported, I think, especially Dreamy and Sleepy. There have been few Horace's Duskywing sightings in the last few years, but good numbers of Wild Indigo Duskywings. No

Persius Duskywings have been recognized in a decade or more. They are probably still around; I think we have to look more carefully for them.

The Common Sootywing should be renamed the Uncommon Sootywing. Does anyone have a reliable site for this species? Arctic Skippers were few, while Least Skippers were fairly widespread, as usual. Six 1000+ populations of European Skipper were noted, with the Mansfield regiment the largest. Remember the Variegated Fritillaries that cannot overwinter in MA but show up at the same spot along the Wachusett Reservoir each year? How about the Rockport Fiery Skippers! One corner of one field has been visited by butterfly watchers three times over the last six years, always in September, and every time one or more Fiery Skippers have been there. How can that be explained? Outside of this one tiny patch of land, there are only two other state occurrences. What is the magnet for vagrants; or is the species somehow surviving here? The latter is highly doubtful, of course, but the question was on the minds of some of the MBC members who saw the female Fiery Skipper at Rockport in September. You should have been there - Long-tailed and Fiery skippers on the same trip - unprecedented! Perhaps of interest to the reader is the fact that the Fiery Skipper was identified by committee; that is, several observers watched an unknown skipper, compared field marks they had observed, and by consensus and with the help of open field guides virtually next to the butterfly, made a determination. One among us, an "old school" collector, was unwilling to accept the group identification until he had personally seen all of the various field marks, but then he came around. Maybe we have a convert! Leonard's Skippers were notably common at Athol and most especially on the Outer Cape, where 41 were counted on September 20, most at Wellfleet Bay Wildlife Sanctuary.

Many of the June-flying skippers, some of which have a second brood in August-September, flew in decent numbers. These include Indian, Tawny-edged, Peck's, and Hobomok skippers and Long Dash. The count of Long Dashes at World's End Reservation was exceptional. July-emerging skippers, including Crossline Skipper, Northern Broken Dash, Little Glassywing, Delaware Skipper, Mulberry Wing, and Black Dash were seemingly below average throughout their respective flights. Two Dion Skippers were reported in Berkshire County on July 10, although no details of observers or location were received by us. This species is exceptionally local in fens in western Massachusetts and all populations should be carefully documented and protected. Broad-winged Skippers were noted only in the coastal plain. The Pepper and Salt Skipper put on a bit of a show, or so it seems, with sightings as far south and east as Jamaica Plain and the Blue Hills. Roadside Skippers were typically scarce. Finally, for the third year running, there was a single Ocola Skipper found in Massachusetts, this year's in Andover at Robert Godefroi's petunia patch. Perhaps there is hope for those of us who have not yet seen this long-winged southern stray that it will keep occurring annually.

# 1996 Butterfly Records

## BLACK SWALLOWTAIL

MAY	15	West Townsend	1	RF,RW
	21	Provincetown	1	RF,JS,BN
JUN	1	Middleboro	7 males	BC
JUL	10	IRWS	2	BS, WT
	21, 27	Hopedale	10	CA,TD
AUG	3	Katama Plains, M.V.	2	AK
	11	Griffin Is., Wellfleet	4-6	TH
	14	D.Webster Farm, Marshf.	8	BC & co.
SEP	1	Ipswich	2	JB
	14	Mt. Tom Reservation	1	TG
	15	Bolton Flats WMA	2	MPe
	30	Newton	1	RF
DEC	11**	Wayland	1	MF, MM

## CANADIAN TIGER SWALLOWTAIL EASTERN TIGER SWALLOWTAIL

MAY	5	Lexington	1	MPe
	8	Waltham	1	CA
JUN	2	Petersham	16+	RL & co.
	4	Rowe	14	DP
	6	Woburn; Arlington	2; 3	MPe
	8	Northbridge	6	RH
	15	Winchendon	7	DSm
	28	Prescott	5	DSm
JUL	11	Hardwick	5	DSm
	16	WMWS	19	Staff
	27	Chilmark	3	AK
AUG	17	Northbridge; Mendon	8; 4	RH;CA,TD
	18	LBWS	7	GH
	25	Cape Ann	4	DS,CT

## SPICEBUSH SWALLOWTAIL

MAY	25	Holliston, Millis	1,1	RF
JUN	8	GBH	2	BC
	27	Westport	2	BC
JUL	14	Cape Ann	4	DS,CT
	21	Mendon	3	CA,TD
AUG	6	Wompatuck S.P., Hingham	10	BC
	9	Douglas	8	RF
	14	Charlton	4	RH

	22	Millford	4	RH
SEP	1	Mendon	4	CA,TD
	5	Foxboro	2	BC
	11	Jamaica Plain	1	BM
	19**	Cape Ann	1	DS,CT

**PIPEVINE SWALLOWTAIL**

JUL	22	LBWS	1	KP, GH
	27	Moose Hill, Sharon	1	BC,KA

**MUSTARD WHITE**

MAY	8	Monroe	1	DP
JUN	2	Windsor	2	ABNC
	11	October Mountain	1	DP

**WEST VIRGINIA WHITE**

MAY	5	Florence	1	TG
	9	Greenfield	1	DP
	20	Deerfield	1	DP
	21	Ashfield	1	DP
	26	Mt. Greylock	5	CA,TD
JUN	1	Mt. Greylock	<b>30-40</b>	KP & co.

**CHECKERED WHITE**

SEP	30	Gooseberry Neck, Westport	1	BC
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**CABBAGE WHITE**

APR	12,21	Wellesley	1,4	RF
	21	Boxford	4	JB
	23	Sudbury	2	TD
JUN	10-30	Jamaica Plain	[max 84 on 6-24]	BM
	27	Gooseberry Neck	41	BC
	29	World's End, Hingham	98	BM,JD
AUG	3	Jamaica Plain	105	BM
	14	IRWS	79	BS
	17	Newburyport; Newbury	<b>450</b> ; 115	DSm
	17	Katama Plains, M.V.	<b>1350+</b>	AK
	30	Truro; Wellfleet	75; 45	DSm
SEP	15	Cape Ann	94	MBC
	16	Concord	<b>500+</b>	RF
	19	Wayland	34	TD
	20	Truro; WBWS	50; 60	DSm, MP
	30	Westport-So. Dartmouth	344	BC
OCT	26	Sterling, W. Bolyston; Richmond	1, 1; 1	CA,TD; DP
	27	Cape Ann; Northampton	4; 1	DS,CT; TG

### CLOUDED SULPHUR

MAY	5	W. Bridgewater; Lexington	5; 1	RF; MPe
	23	World's End, Hingham	12	BM,JD
JUN	1	Middleboro; Orange	13; 8	BC; DSm
JUL	14	Concord	20	MPe
	15	Feely Park, Sudbury	12	TD
AUG	14	Charlton	11	RH
	18	Athol	11	DSm
	25	Cape Ann	11	DS,CT
SEP	1	Mendon	11	CA,TD
	15	Cape Ann	21	MBC
OCT	26	W.Boylston; Richmond	5; 6	CA,TD; DP
	31	Foxboro	1	SJC, BC
NOV	5,8	Cape Ann	5,1	DS,CT

### ORANGE SULPHUR

MAY	13	Sudbury	1	TD
	15	Ashburnham; Prescott	1; 1	RF,RW; DSm
	20	Middlesex Fells	3	BM
	23	World's End, Hingham	10	BM,JD
JUL	9	Feely Park, Sudbury	13	TD
	22	Prescott	10	DSm
AUG	17	Katama Plains, M.V.	<b>350-400</b>	AK
	25	Cape Ann	18	DS,CT
	30	Truro	50	DSm
SEP	21	Cape Ann	44	DS,CT
	30	Westport-So.Dartmouth	61	BC
OCT	6	Katama Plains, M.V.	100+	AK
	26	Chilmark + Gay Head; W.Boylston	15; 5	AK; CA,TD
NOV	5	Prescott; Cape Ann	1; 3	DSm; DS,CT

### HARVESTER

JUN	8	Northbridge	1	RH
JUL	21	IRWS	1	FG
AUG	18	Milford	1	RH

### AMERICAN COPPER

MAY	23	World's End, Hingham	<b>225</b>	BM,JD
	25	Foxboro	29	BI
	26	Cape Ann	22	DS,CT
JUN	1	Athol	75	DSm
JUL	7	Wrentham St. School	<b>532</b>	GH,BC
	9	Charlemont	40	DP

	17	Provincetown	100+	TH
	21	Chilmark	25	AK
	22	Marstons Mills Airport	200	TH
AUG	22	IRWS	65	FG
	25	Cape Ann	11	DS,CT
	30	Truro	33	DSm
SEP	15	Cape Ann	12	MBC
	20	Truro; WBWS	35; 25	DSm,MP
	21	IRWS	42	FG
OCT	25	Sudbury	1	TD
	27	Hopedale	1	CA,TD

#### BRONZE COPPER

SEP	9-10	Wayland Com.Gardens	6	RF & co.
	10	Feely Park, Sudbury	1	TD

#### BOG COPPER

JUL	10	Ashby	3	RF
	17	Rockport	18	DS,CT
	20	Sterling	7	CA,TD

#### CORAL HAIRSTREAK

JUL	5-28	Athol	1	MP
	7	Woburn	1	MPe
	10	GBH; Cape Ann	10;6	BC;DS,CT
	16	North Oxford	5	CK
	20	Middlesex Fells	5	BM
AUG	1	Cape Ann	1	DS,CT
	7	North Truro	5-7	TH

#### ACADIAN HAIRSTREAK

JUN	22	Westover AFB	1	TG
	29	Sterling	1	CA,TD
JUL	8	Jamaica Plain	2	BM
	11	East Longmeadow	1	KP, RP

#### EDWARDS' HAIRSTREAK

JUN	28	Waltham	2	CA
JUL	2	Arlington	1	MPe
	4	Horn Pond, Woburn	4	MPe

**BANDED HAIRSTREAK**

JUN	24	GBH, Hingham; Waltham	1,1;1	BC; CA
	29	Athol; North Truro	1; 1	DSm; TH
JUL	1	Waltham	7	CA
	4	Lexington	1	MPe
	8	North Truro	3-5	TH
	10	North Oxford	1	CK

**STRIPED HAIRSTREAK**

JUN	23	Wellesley	1	RF
	29	Arlington	1	MPe
JUL	21	IRWS	2	FG
	28	Sterling	1	CA,TD
AUG	4	Heath	1	DP
	8	Cape Ann	1	DS,CT
	12	Martha's Vineyard	1	VL

**SOUTHERN HAIRSTREAK**

JUN	24, 28	GBH	1, 1	BC
	29	Crane WMA, Falmouth	1	BC

**JUNIPER HAIRSTREAK**

MAY	25	Foxboro	6	BI
JUN	8	GBH	2	BC
JUL	28	GBH	2	BC

**HESSEL'S HAIRSTREAK**

MAY	16	Canton	1	BM
	25	Holliston	3	RF

**BROWN ELFIN**

APR	27	Lexington; Cape Ann	4; 2	MPe; DS,CT
MAY	5	Cape Ann	7	DS,CT
MAY	15	GBH	3	BC

**FROSTED ELFIN**

MAY	25	Foxboro	19	BI
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### HENRY'S ELFIN

APR	23-26	Sudbury	[max. 3 on 4-26]	TD
	28	IRWS	1	FG
MAY	5	Lexington	1	MPe
	7-23	Acton	1-2	RF,RW
	22	Holliston	2	RF

### EASTERN PINE ELFIN

MAY	9	Sudbury	1	TD
	15	Ashburnham; GBH	2;1	RF,RW;BC
	19	Orange; Springfield	4; 1	DSm; KP
	20	Middlesex Fells	1	BM
	22	Holliston	3	RF
JUN	2	Petersham	3	RL & co.

### EARLY HAIRSTREAK

MAY	31	Heath	1	DP
JUN	2	Mt. Greylock	4	ABNC

### GRAY HAIRSTREAK

MAY	5	Cape Ann	1	DS,CT
	7	Acton	1	RF,RW
	25	Foxboro	4	BI
JUL	21	Mendon	6	CA,TD
	28	Sterling; GBH	5; 3	CA,TD; BC
AUG	7, 11	Cape Ann	2, 2	DS,CT
SEP	1	Mendon	8	CA,TD
	15	Plum Island	2	RF
	21	Truro	3	DSm
	30	Sudbury ; Westport	1; 2	TD; BC

### EASTERN TAILED-BLUE

MAY	1-27	Cape Ann	[max. 56 on 5-8]	DS,CT
	25	Foxboro	10	BI
AUG	10	Petersham	15	DSm
	18	Cape Ann; Plum Island	35; 30+	DS,CT; MPe
	24	New Salem	15	DSm
	31	Sterling	34	CA,TD
SEP	1	Mendon	18	CA,TD
	6	Eastham	24	TH
	15	Cape Ann	9	MBC
OCT	14	Cape Ann	1	DS,CT
	26**	Pittsfield	1	TG

**SPRING AZURE AND OTHER AZURE SPECIES**

APR	20	Sterling	3	CA,TD
	21	Cape Ann	3	DS,CT
	22	Canton	4	RF
APR	28	Hopedale	18	CA,TD
MAY	3	Holliston	33	RF
	23	World's End, Hingham	7	BM,JD
	25	Lexington	6	MPe
JUN	1	Topsfield-Hamilton; Mt. Greylock	15; 23	JB; KP
JUL	9	Arlington	1	MPe
AUG	4	North Oxford	1	CK
	7	Cape Ann	1	DS,CT

**SILVERY BLUE**

MAY	15*	Ashburnham; Prescott	1; 3	RF,RW;DSm
	18	Hopedale	1	CA,TD
	22- JUN 11	Gloucester	[max. 5 on 5-27]	DS,CT
	26	Newburyport	1	RF
	29	Wellesley	1	RF
	31	Waltham	1	CA
JUN	1	Clinton; Athol	17; 1	CA,TD; MP,DSm
	11-14	WMWS	2	Staff
	12	Prescott	5	DSm

**VARIEGATED FRITILLARY**

JUL	7	Wrentham	1	GH,BC
	17	North Oxford	1	CK
	28	Cape Ann; Sterling	1; 6	DS,CT;CA,TD
SEP	28	Sterling	4	CA,TD
OCT	12	Sterling	1	CA,TD

**GREAT SPANGLED FRITILLARY**

JUN	25	Goodnough Dike, Quabbin	2	BC &co.
AUG	3	Heath	4	DP
	10	Petersham	4	DSm
	14	Charlton	12	RH
	15	Cape Ann	1	DS,CT
	25	IRWS	1	FG
	31	Northboro	4	CA,TD
SEP	15-19	Wayland	1	MPe,TD

**APHRODITE FRITILLARY**

JUL	6	WMWS	1	Staff
	10	Savoy	2	DP
	16	North Oxford	2	CK
	20	Northboro	2	CA,TD
	27-28	Gloucester	1	DS,CT
	27	Jamaica Plain	1	BM
AUG	14	Charlton	1	RH
	18	LBWS	1	GH
	24	Prescott	2	DSm
	31	East Longmeadow	1	KP
SEP	1	Mendon	2	CA,TD

**ATLANTIS FRITILLARY**

JUN	21	Royalston	1	DSm
JUL	2	Rowe	4	DP
	10	Savoy	2	DP
AUG	3	Heath	1	DP

**SILVER-BORDERED FRITILLARY**

MAY	21-31	Feely Park, Sudbury	1-2	TD
	25	Easton	2	BI
JUN	16	Charlemont; Athol	15; 8	DP; DSm
JUL	14	Rockport	32	DS,CT
AUG	18	Athol	17	DSm
	25	Rockport	98	DS,CT
	31	Northboro	7	CA,TD
SEP	1-30	Feely Park, Sudbury [max. 10 on 9-10]		TD
	15	Rockport	156	MBC
	21	IRWS	21	FG

**MEADOW FRITILLARY**

JUL	6	Greenfield	1	DP
	9	Charlemont	17	DP

**HARRIS' CHECKERSPOT**

JUN	12	Prescott	7	DSm
	14	WMWS; Rowe	20; 6	Staff; DP
	15	Holden; Winchendon	92; 5	BI; DSm
	16	Easton	9	BC
JUL	10	Savoy	1	DP

**PEARL CRESCENT**

MAY	21-31	Feely Park, Sudbury [max. 38 on 5-29]	TD
	22	Holliston	25 RF
	27	Jamaica Plain; Easton	23;50 BM;BC
JUN	2	Holden	43 CA,TD
JUL	24	Feely Park, Sudbury	148 TD
	27	LBWS	29 GH
	29	Jamaica Plain	31 BM
AUG	4	North Oxford	60 CK
	10	Petersham	86 DSm
	14	C. Ann; Charlton; IRWS	119; 70; 127 DS,CT; RH; vo
SEP	22	Cape Ann	9 DS,CT
	28	Sterling	13 CA,TD
OCT	12	West Boylston	2 CA,TD
	13	Quabbin Reservoir	1 TG
	14	Longmeadow	3 KP, RP

**BALTIMORE CHECKERSPOT**

JUN	16	Easton	9 BC
	23	Northboro	3 CA,TD
	27	North Truro	20 TH
	29	World's End, Hingham	12 BM,JD
JUL	7	Easton	547 CA,TD

**QUESTION MARK**

MAY	23	World's End, Hingham	1 BM,JD
JUN	7	IRWS	1 SS
	23	Northboro	3 CA,TD
JUL	6	LBWS	2 GH
	15	Jamaica Plain	3 BM
	20	Sterling	2 CA,TD
	22	Athol	1 MP
SEP	29	Northboro	1 CA,TD
	30	Jamaica Plain; S. Dartmouth	1; 1 BM; BC
OCT	12	Plum Island	1 RF

**EASTERN COMMA**

MAR	25	Waltham;Sudbury	2;1 CA;TD
	31	Wellesley	1 RF
APR	23	Rowe	1 DP
JUL	2	IRWS	3 BS
	7	East Longmeadow	2 KP
	28	Acton	2 BM,PB
AUG	24	Prescott	3 DSm
SEP	15	Bolton Flats WMA	2 MPe
OCT	14	Foxboro	1 BC

**COMPTON TORTOISESHELL**

MAR	13	Bedford	1	fide RF
	25	Sudbury;Waltham	1;1	TD;CA
	31	Boxford; IRWS; E.Longmeadow	5;3;2	JB; FG; KP
APR	20	Heath; GBH; Harvard	2; 1; 1	DP; BC; MPe
	20	Sterling, W.Boylston, Northfield	1,1,1	TF
	21	Franklin Park, Boston	1	BM
	25	Rowe	3	DP
JUL	2	Rowe; Sudbury	2; 2	DP; RF
	5	Mt. Greylock	2	TG
	6	Cape Ann; LBWS	2; 1	DS,CT; GH
	10	Wompatuck S.P., Hingham	7	BC & co.
	16	Petersham	2	DSm
OCT	12	Cape Ann	1	DS,CT
	15	Medfield; WMWS	1; 1	DL; Staff
	30	Walpole	1	DL

**MOURNING CLOAK**

FEB	27	IRWS	1	BS
MAR	24	Hopedale; Belmont; Wayland	1;2;1	CA,TD;BM;MPe
	25	Waltham; Franklin Park, Boston	9;9	CA;BM
	31	Wellesley; Cape Ann; Holliston	8;4;8	RF;DS,CT;RH
APR	15	Middlesex Fells	8	BM
	18	Worcester	8	CK
	19	Waltham	19	CA
	20	IRWS	15	FG
	21	Plum Is.; Woburn; Lexington	1; 6; 1	MPe
MAY	14	Waltham	4	CA
JUN	8	Mt. Greylock	6	TG
JUL	21	Mendon	6	CA,TD
OCT	15	Medfield	3	DL
NOV	10	Cape Ann	1	DS,CT
	17	Foxboro; Ipswich	1; 1	MC; JB
DEC	18	East Longmeadow	1	fide KP

**RED ADMIRAL**

APR	29	WMWS	1	Staff
MAY 16 - JUN 6		Jamaica Plain	1	BM
JUN	9	Wellesley	1	CK
	26	Lovell's Island	1	BC & co.
JUL	15	Waltham	1	CA
AUG	7	Athol	1	MP
	10	IRWS	2	FG
	17	Katama, M.V.; Hadley	1; 1	AK; TG
SEP	15	Bolton Flats WMA	1	MPe
	30	South Dartmouth	3	BC
OCT	1	Florence	1	TG

### AMERICAN LADY

MAY	2	Cape Ann	1	DS,CT
	25	Foxboro	3	BI
JUL	2	IRWS	2	BS
	8-29	Jamaica Plain	[max. 3 on 7-25]	BM
AUG	24	New Salem	2	DSm
	30	Truro	4	DSm
SEP	22	Cape Ann	28	DS,CT
	30	Westport-So. Dartmouth	35	BC
OCT	17	South Dartmouth	1	BC
	27	Foxboro	1	SJC

### PAINTED LADY

MAY	23	World's End, Hingham	1	BM,JD
JUN	6	Arlington	2	MPe
	8	Belchertown	1	DSm
JUL	4	Woburn	1	MPe
	9	Cape Ann	1	DS,CT
	28	GBH	1	BC

### COMMON BUCKEYE

AUG	30	WBWS	1	DSm
SEP	20	Northampton	1	TG
	22	Rockport; WBWS	1; 1	DS,CT; JT & co.
OCT	26	Chilmark	1	AK

### RED-SPOTTED PURPLE

[unbanded form; aka Red-Spotted Purple]

MAY	18	Hopedale	1	CA,TD
	26	Jamaica Plain	1	BM
JUN	8	GBH; Northbridge	2; 6	BC; RH
	15	Winchendon; GBH	35; 4	DSm; BC
	18	Heath	6	DP
	21	Royalston	24	DSm
JUL	6	Northfield	6	RH
	10	Savoy	5	DP
AUG	11	Griffin Island, Wellfleet	6-8	TH
SEP	14	Mt. Tom Reservation	2	TG

[banded form; aka White Admiral]

JUN	11	Charlemont	1	DP
	12	Woburn	1	MPe

	15	Winchendon	12	DSm
	18	Heath	5	DP
	21	Royalston	13	DSm
JUL	2	Rowe	10	DP
	5	Mt. Greylock	4	TG
	10	Savoy	7	DP
	21	Royalston; IRWS	3; 1	CK; FG
	18	Sterling	1	CA,TD
AUG	7	Crane Res., Falmouth	1	TH

### VICEROY

MAY	18	Hopedale	1	CA,TD
	19	Wachusett Reservoir	3	CA,TD
JUN	15	Winchendon; LBWS	6; 4	DSm; GH
	17	Easton	5	BC
JUL	28	Sterling	12	CA,TD
AUG	3	LBWS	5	GH
	10	Petersham	8	DSm
	14	Charlton	21	RH
	18	Milford; Northboro	8; 7	RH; CA,TD
SEP	2	Orange	4	DSm
	29	Northboro	1	CA,TD
	30	South Dartmouth	1	BC

### HACKBERRY EMPEROR

JUL	20	Springfield	1	RP & co.
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### NORTHERN PEARLY EYE

JUN	30-7/26	Holliston	3	RF
JUL	20	Deerfield	1	DP
	21	Athol	1	DSm
	27	IRWS; E. Longmeadow	2; 2	FG; KP
AUG	2	Heath	4	DP
	8	WMWS	1	Staff

### EYED BROWN

JUN	29	Lexington [2 locales]; Athol	2; 1	MPe; ABNC
JUL	5	Petersham	8	RF
	10	IRWS	5	WT
	20	Longmeadow	1	KP, RP
	21	Royalston	1	CK
AUG	15	WMWS	1	Staff
	18	Milford	1	RH

**APPALACHIAN BROWN**

JUL	6	Ipswich	1	JB
	10, 21	Cape Ann	3, 3	DS,CT
	16	East Longmeadow	1	KP
	21	IRWS; Royalston	3; 1	FG; CK
	30	WMWS	1	Staff
AUG	10	Petersham [3 locales]	3	DSm
	17	Northbridge	2	RH
	30	Holliston	1	RF

**LITTLE WOOD SATYR**

MAY	25	Lexington; Wellesley	1; 4	MPe; RF
	27	IRWS	2	FG
	29	Wellesley	90	RF
JUN	1	Middlesex Fells	49	BM,JD
	5	Wellesley	150	RF
	6	Jamaica Plain; Arlington	196; 70	BM; MPe
	12	Lincoln fields	134	JL, BC
	14	World's End, Hingham	650	BC
	16	Chilmark	35	AK
JUL	11	Woburn	1	MPe
	18	IRWS	3	BS
AUG	3	Jamaica Plain	1	BM

**COMMON RINGLET**

MAY	23	LBWS; World's End, Hingham	5; 4	GH;BM,JD
	25	Wellesley	5	RF
	25;27	Easton	5;750	BI; BC
JUN	1	Athol	84	DSm
	8	Mendon; Sudbury	70; 69	CA,TD
	12	Lincoln fields	166	JL, BC
	14	WMWS	100	Staff
	16	Charlemont	100	DP
AUG	11	Easton	1000+	BC
	17	Mendon	77	CA,TD
	22	IRWS	78	FG
SEP	11	Cape Ann	1	DS,CT
OCT	2	Heath	1	DP
	7	Feely Park, Sudbury	1	TD

**COMMON WOOD NYMPH**

JUL	4	Horn Pond, Woburn	1	MPe
	14	Cape Pogue, M.V.	20+	AK
	20	Northboro	40	CA,TD

	21	Mendon	43	CA,TD
AUG	4	Cape Ann	97	DS,CT
	10	Nelson's Island, Rowley	400+	JB
	22	Heath	50	DP
SEP	21	Cape Ann	1	DS,CT

### MONARCH

	22	Holliston	1	RF
	23	World's End, Hingham	1	BM, JD
JUL	20	Northboro	11	CA,TD
	28	Cape Ann	10	DS,CT
AUG	3	Katama Plains, M.V.	10+	AK
SEP	11	Prescott	11	DSm
	15, 16	Heath	15, 20 [flying over]	DP
	19	Mt. Tom Reservation	72	TG
	21,22	Eastern Pt., Gloucester	140, 153	DS,CT
	22	Westport; Gooseberry Neck	60; 175	CA,TD
	30	Gooseberry Neck, Westport	540	BC
OCT	13	Quabbin Reservoir	10	TG
	17	So. Dartmouth; Cape Ann	10; 2	BC;DS,CT
	26	Salisbury; Pittsfield	1; 1	RF; DP
	27	Chilmark	4	AK

### SILVER-SPOTTED SKIPPER

MAY	25	Sharon	1	BI
JUN	2	Petersham	1	RL & co.
	6	Northfield	45	RH
	23	Wachusett Res., Sterling	18	CA,TD
	27	Jamaica Plain	7	BM
JUL	12	Waltham	10	CA
	14	Wachusett Res., Sterling	71	BC, LL
AUG	3	Jamaica Plain	18	BM
SEP	1	Mendon; Jamaica Plain	1; 1	CA,TD; BM

### LONG-TAILED SKIPPER

SEP	15	Rockport	1	MBC
	30	South Dartmouth	1	BC

### HOARY EDGE

JUN	15	GBH	4	BC
JUL	2	Waltham	1	CA
	4	Mendon	1	CA,TD

**SOUTHERN CLOUDYWING**

JUN	16	Mansfield	12	BC
	23	Wachusett Res. and vic.	4	CA,TD
	29	Crane WMA, Falmouth	5	BC
JUL	4	Mendon	1	CA,TD
	6	Greenfield	1	DP

**NORTHERN CLOUDYWING**

MAY	26	Cape Ann	2	DS,CT
JUN	1,8	Mendon	27,26	CA,TD
	1-30	Cape Ann	[max. 9 on 6-5]	DS,CT
	15	GBH	4	BC
	16	Charlemont	5	DP
JUL	6	Greenfield	1	DP
	12	Cape Ann	2	DS,CT

**DREAMY DUSKYWING**

MAY	14-31	Waltham	[max 7 on 5-20]	CA
	26	Lexington	6+	MPe
JUN	1	Heath, Windsor, W.Boylston	2,1;4	DP;CA,TD
	6	Sudbury	3	BM,RW
	11	Waltham	4	CA
	15	GBH	1	BC
	23	IRWS	1	FG

**SLEEPY DUSKYWING**

MAY	5	GBH	5	BC
	9	Middlesex Fells	2	BM
JUN	2	Lexington	1-2	MPe
	8	IRWS	2	FG

**JUVENAL'S DUSKYWING**

MAY	1-31	Waltham	[max. 9 on 5-31]	CA
	9	Middlesex Fells	3	BM
	25	Cape Ann; LBWS	12; 12	DS,CT; GH
	31	Osterville	10+	BC & co.
JUN	8	GBH; Mendon	4; 10	BC; CA,TD
	14	World's End, Hingham	7	BC
	16	IRWS	1	FG
	21	Cape Ann	1	DS,CT

**HORACE'S DUSKYWING**

JUL	25	Jamaica Plain	1	BM
AUG	3-8	Jamaica Plain	max. 2	BM

**WILD INDIGO DUSKYWING**

MAY	15	GBH	3	BC
	25	Wellesley; Foxboro	7;11	RF;BI
	28	Waltham	2	CA
JUN	4	Deerfield	15	DP
JUL	21	Mendon	22	CA,TD
	22	Marstons Mills Airport	40-50	TH
	28	Sterling	11	CA,TD
AUG	3	GBH	35	BC
	9	Cape Ann	2	DS,CT
	15	Holliston	11	RH
SEP	1	Mendon	1	CA,TD

**COMMON SOOTYWING**

MAY	20	Middlesex Fells	1	BM
	27	IRWS	1	FG
JUN	12	Lincoln fields	2	JL,BC
JUL	20	Northboro	1	CA,TD
	22	LBWS	1	GH
	27	Upton	3	CA,TD
AUG	5	Jamaica Plain	1	BM
	14	Charlton	1	RH
	24	Lexington	1	MPe

**ARCTIC SKIPPER**

JUN	2	Petersham	2	RL & co.
	6-8	Sudbury	3	BM,RW,RF
	9	Mt. Greylock	1	TG
	14	Rowe	1	DP

**LEAST SKIPPER**

JUN	2	IRWS	1	FG
	16	Athol	15	DSm
	24, 28	IRWS	12; 12	WT; SS, BS
	27	Jamaica Plain	11	BM
	29	World's End, Higham	6	BM,JD
	30	Chilmark	2	AK
AUG	12	Jamaica Plain	24	BM
	17	Mendon	24	CA,TD
	25	Cape Ann	7	DS,CT
	30	Truro	42	DSm
SEP	15	Bolton Flats WMA	1	MPe
	21	Jamaica Plain	1	BM

### EUROPEAN SKIPPER

JUN	8	Hopedale; IRWS	5; 1	CA,TD; FG
	14	World's End, Hingham	1400	BC
	16	Mansfield	c. 20000	BC
	16	Hopedale; Mendon	2300; 434	CA,TD
	18	North Truro	200	TH
	24	Jamaica Plain	495	BM
	28	GBH	950	BC
	29	LBWS	456	GH
	29-30	Cape Ann	2000+	DS,CT
JUL	5	Moran W.R., Windsor	450+	TG
	7	Plainville	2900	NW,CW,GH,BC
	9	Charlemont	1000	DP
	21	Cape Ann	1	DS,CT

### FIERY SKIPPER

SEP	15	Rockport	1 female	MBC
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### LEONARD'S SKIPPER

AUG	18-24	Athol	[max. 8 on 8-24]	DSm
	26	GBH	3	BC
	27	Feely Park, Sudbury	1	TD
	31	Naushon Island; Northboro	5; 2	BC; CA,TD
SEP	1	Mendon	4	CA,TD
	6	Eastham	3-5	TH
	15	Rockport	1	MBC
	20	Truro; WBWS; Wellfleet	6; 3; 3 2	DSm, MP
	25	WBWS; So. Wellfleet; Eastham	2 0; 6; 4	TH

### COBWEB SKIPPER

MAY	19	Wachusett Reservoir	5	CA,TD
	20	Middlesex Fells	1	BM
	22	Holliston	1	RF
	25	Foxboro, Sharon	2,4	BI
JUN	1	Middlesex Fells; Clinton	4; 8	BM,JD; CA,TD
	14**	Rowe	1	DP

### INDIAN SKIPPER

MAY	31	Charlemont	2	DP
JUN	1	Middlesex Fells	16	BM,JD
	4	Deerfield	8	DP
	12	Lincoln fields	20	JL, BC
	14	World's End, Hingham	3 8	BC
	15	GBH	15	BC
	16	Athol; Lexington	5; 2	DSm; MPe

**PECK'S SKIPPER**

MAY	26	IRWS~	1	FG
	28	Feely Park, Sudbury	2	TD
	29	Wellesley	2	RF
JUN	8	Feely Park, Sudbury	104	CA,TD
	12	Lincoln fields; E. Longmeadow	50; 30	JL,BC; KP
	16	Lexington	25	MPe
JUL	10	Savoy	3	DP
AUG	11	E. Longmeadow; Easton	30; 27	KP; BC
	17	Hopedale; Mendon	21; 34	CA,TD
	18	LBWS; Athol	20; 16	GH; DSm
	20	Lexington	20	MPe
SEP	1	Mendon	15	CA,TD
	15	Cape Ann	4	MBC
	29	Northboro	1	CA,TD

**TAWNY-EDGED SKIPPER**

MAY	25	Easton; Longmeadow	1; 4	BI; KP
JUN	1	Clinton	12	CA,TD
	2	LBWS	8	GH
	8	Feely Park, Sudbury	15	CA,TD
	12	Lincoln fields	5	JL, BC
	15	GBH	5	BC
AUG	5	Jamaica Plain	5	BM
	11	East Longmeadow	9	KP
	17	Mendon	11	CA,TD
	18	LBWS	11	GH
SEP	1	Mendon	5	CA,TD

**CROSSLINE SKIPPER**

JUL	7	Woburn	1	MPe
	9	Charlemont	2	DP
	21	Hopedale; Mendon	6; 4	CA,TD
AUG	3	GBH	9	BC

**LONG DASH**

MAY	27	IRWS	1	FG
	31	Waltham	1	CA
JUN	8	Feely Park, Sudbury	11	CA,TD
	12	Lincoln fields; LBWS	18; 7	JL, BC; GH
	14	World's End, Hingham	195	BC
	16	Lexington	6	MPe
	21	Brewster	20	TH
	29	Athol	8	DSm
JUL	10	Cape Ann; Savoy	5; 2	DS,CT; DP
AUG	19	IRWS	2	FG

**NORTHERN BROKEN DASH**

JUL	1	Heath	1	DP
	6	Leyden	4	DP
	14	Athol	9	DSm
	15	Jamaica Plain	8	BM
	20	Sterling	7	CA,TD
	21	Hopedale	7	CA,TD
AUG	3	GBH	30	BC
	18	LBWS	1	GH
	27	Wellesley	1	RF

**LITTLE GLASSY WING**

JUL	6	IRWS	2	FG
	14	Athol	14	DSm
	15	Jamaica Plain	5	BM
	21	Mendon	3	CA,TD

**DELAWARE SKIPPER**

JUL	14	Athol; Lincoln	8; 1	DSm; MPe
	20	Sterling	6	CA,TD
	21	Royalston	1	CK

**MULBERRY WING**

JUL	18	Dover	9	BM,RF,RW
	20	Northboro	4	CA,TD
	21	Cape Ann	7	DS,CT
	27	Sharon; E. Longmeadow	2; 1	BC; KP
AUG	2	Cape Ann	1	DS,CT

**HOBOMOK SKIPPER**

MAY	26	Lexington; IRWS	1; 1	MPe;FG
	27	Jamaica Plain	3	BM
	31	Concord	5	RF,RW
JUN	1	West Boylston	10	CA,TD
	8	Hardwick	15	DSm
	12	LBWS	7	GH
	14	World's End, Hingham	18	BC
	16	Charlemont	15	DP
	18	North Truro	20	TH
	23	Cape Ann	11	DS,CT
JUL	5	Rockport; Gloucester	3; 3	CA,TD

**BROAD-WINGED SKIPPER**

JUL	16	Brewster	3-5	TH
	24,30	Gloucester	3,5	DS,CT
	27	East Longmeadow	1	KP
AUG	3	Jamaica Plain	7	BM
	14	Gloucester	1	DS,CT
	17	Newburyport	7	MP,DSm

**BLACK DASH**

JUL	11-22	Jamaica Plain	max. 2	BM
	18	Dover	6	BM,RF,RW
	20	Northboro; Sterling	4; 1	CA,TD
	21	Cape Ann	9	DS,CT
AUG	2	Cape Ann	5	DS,CT

**DUN SKIPPER**

JUL	14	Athol	11	DSm
	18	Dover	19	BM,RF,RW
	20	Sterling	38	CA,TD
	21	Hopedale; Royalston	15; 10	CA,TD; CK
	26	LBWS	15	GH
AUG	2	Heath	8	DP
	3	Jamaica Plain	22	BM
	24	New Salem	1	DSm
	25	IRWS	1	FG
	31	Northboro; W.Groton, Framingham	1;1,1	CA,TD;RF

**DUSTED SKIPPER**

MAY	28	Waltham	1	CA
	29	Wellesley	2	RF
	31	Concord, Sudbury	7,2	RF
JUN	1	Boylston; Clinton	4; 6	CA,TD
	6	Sudbury	6	BM,RW
	8	GBH	1	BC
	15	Lexington	1	MPe
JUL	6	Cape Pogue, M.V.	1	AK

**PEPPER AND SALT SKIPPER**

MAY	27	Jamaica Plain	1	BM
	31	Concord, Sudbury	2,2	RF,RW
JUN	1	Heath	1	DP
	6	Sudbury	1	BM,RW
	8	Sudbury; Mendon	5; 1	RF; CA,TD

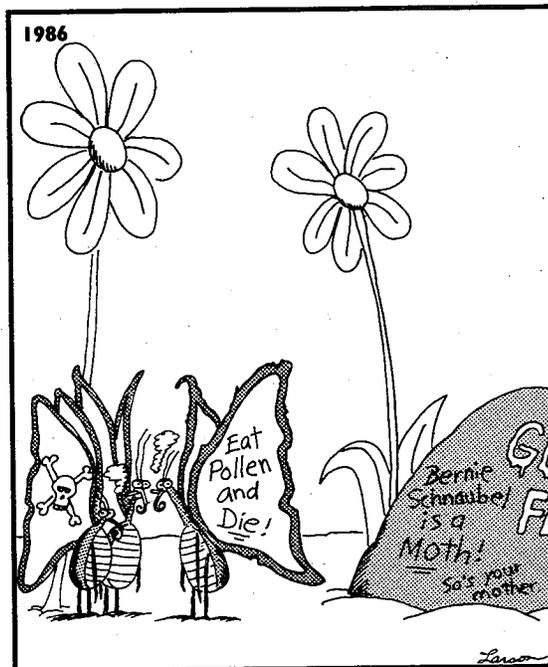
9	Mt. Greylock	8	TG
11	October Mountain	2	DP
12	Lincoln	1	JL,BC
15	GBH	1	BC
24	WMWS	1	Staff

**ROADSIDE SKIPPER**

MAY	26	Mt. Tom	2	CA,TD
JUN	18	Washington	1	RF

**OCOLA SKIPPER**

SEP	29**	Andover	1	RG
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Butterflies from the wrong side of the meadow

## The Moth Page

Yes, of course, this is "Massachusetts Butterflies" and we shall always devote most of our space to butterflies, but certainly moths are deserving of a bit of space and so we christen "The Moth Page." Perhaps it will become "The Moth Pages" in time, depending on your interest and your contributions. For now, we quote from the chapter on the Promethea Moth in *Caterpillars and their Moths*, a delightful book written by Ida M. Eliot and Caroline Gray Soule in 1902. The authors refer to themselves throughout the book as "the One of Us" and "the Other of Us," and to their moth rearing room as "The Crawlery." The writing and technical information brought forth from the pens of the One and the Other are both very fine indeed.

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We have been much laughed at for "seeing so many cocoons in impossible places," too high to be reached in any way, on forbidden grounds, in park shrubbery with a "Keep off the Grass" between the bushes and us, and in places passed in trains, far from any station; but once the laugh was on our side. On a train going out of Boston, one winter day, the Other of Us saw dangling leaves on some wild-cherry trees near the track, and not very far from a station. The train had just left this station, however, so it was too late to stop; but the next day we went back, walked along the track, - not a crime in Massachusetts, or even a misdemeanor, in that day, - and found that the heavy swinging of the leaves did mean cocoons. There they hung, scores of them! They were like *cynthia* cocoons in shape and color, and we had to cut either the stems or the silk, for the silk was too tough to break. We filled the tin box we had brought, then our coat pockets, then our dress pockets, then cut stems and all, and made bunches of cocoon-hung twigs. Every little wild-cherry in sight was treasure-hung.

It was too cold to examine the cocoons there and we were inexperienced then and did not test them by weight and the "thud" when shaken, so we carried them all home and began cutting them open very carefully to examine the pupae. Great was our disappointment on finding that most of them contained dried-up larvae, cylindrical bundles of tiny parasitic cocoons, and empty pupa-skins from which the parasites had already escaped - probably in the autumn. From all the mass of cocoons we got but twenty or thirty sound pupae. Still these were enough for our purposes, and when the moths emerged in June we found it easy to get all the eggs we wanted, each female laying between two and four hundred.

The moths are very easy to mate, for they fly at any time after two in the afternoon, and a caged female out of doors or in a window - unless the wind blows into the window - will draw so many males that they can be caught in the fingers as they fly or crawl about the cage. We have often drawn forty at a time, and once had all the neighbors' cats trying to catch the low-flying moths, until two dogs chased away the cats, leaving the moths to flutter in peace.

Promethea is double-brooded in the South, and has been found so in Rhode Island by one entomologist, but all ours have been single-brooded in Massachusetts, New Hampshire, and Vermont.



## Butterflies at Baleen !

Tom French, MBA member and prominent state wildlife biologist, often has various parts of whales decomposing on his West Brookfield property [Hey, that's his thing!]. In July, 1996, Tom saw the following butterflies visiting Right Whale baleen in Worcester Co. : Black Swallowtail [2], Tiger Swallowtail [2], Compton Tortoiseshell, Eastern Comma [2], and Question Mark. The butterflies were joined in their feast by over 1000 carrion beetles, hundreds of flies, tens of rove beetles, and at least five Nessus Sphinx moths. Fabulous stuff, Tom.

## Checkered White Seen in Westport

On September 30, 1996, a Checkered White was observed at Gooseberry Neck, Westport. The butterfly was first noticed among perhaps two dozen Monarchs and Cabbage Whites which were flitting about and visiting Seaside Goldenrod flowers. In flight, the Checkered White appeared light grayish, in stark contrast to the almost immaculate Cabbage Whites. Female Checkered Whites are much more "checkered" than males, and this was undoubtedly a female. The butterfly landed on two occasions and the distinctive wing patterning was well observed. Unfortunately, no photographs were taken and, in fact, the observation lasted only about three minutes, as the mosquitoes at that spot were incredibly thick.

At the turn of the century, the Checkered White was known from many localities around the Commonwealth, including Boston, Worcester, Holyoke, and Springfield. It has since retreated southward and is now a rare insect in New England. The last state records this editor can find are a female on September 4, 1940 at Westport Harbor and a male on October 4, 1943 at Fall River, both recorded by William Prescott Rogers, who remarked at the time that the species is occasionally found at fall asters and goldenrods in fields near shore. Since the species is regular in late summer-early fall in the New York City area, we should expect it at times in southern New England. The fields of Westport-South Dartmouth are quite extensive and geographically they are as far south and west as one can get coastally in Massachusetts. A 1995 Little Yellow and three Cloudless Sulphurs and the 1996 Checkered White and Long-tailed Skipper are testimony that the area has great potential as an important spot to search for southern strays.

The Checkered White was observed by Brian Cassie, who has previous field experience with hundreds of Checkered Whites in the South.