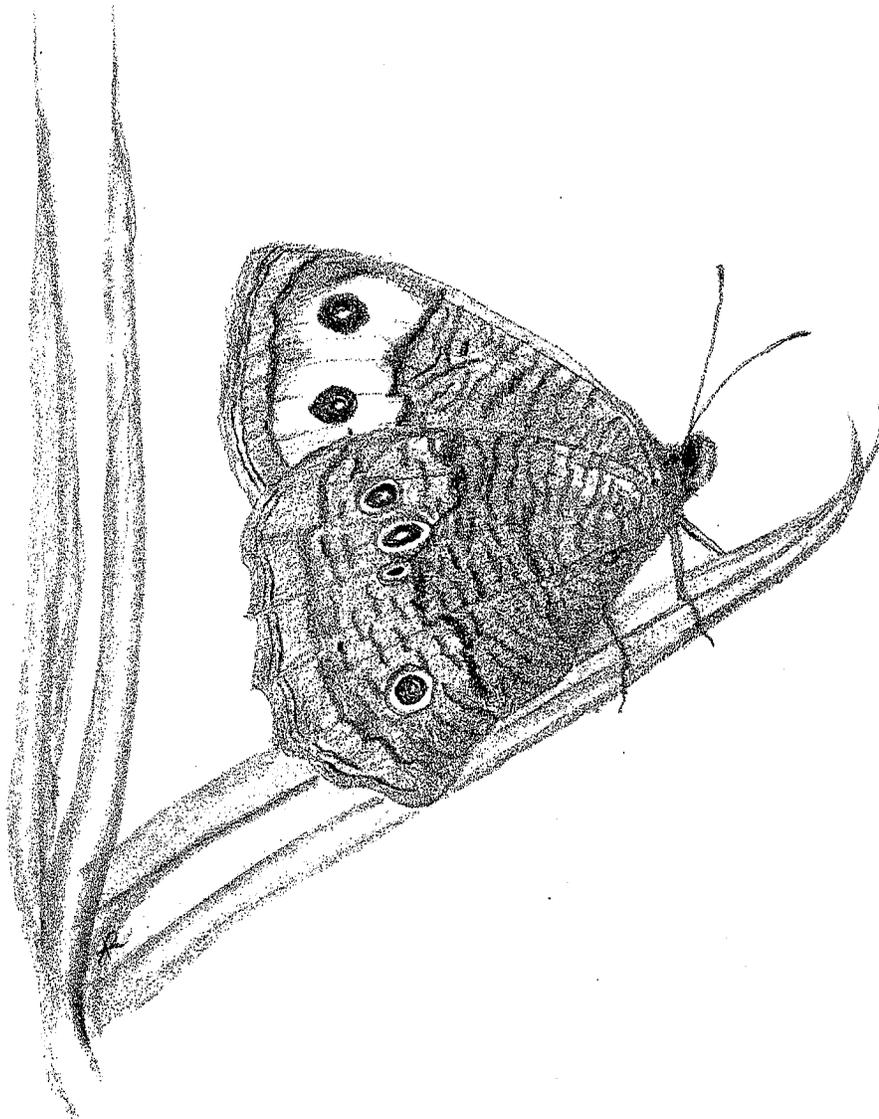


MASSACHUSETTS

BUTTERFLIES *Fall 2001, No. 17*



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*, *Butterfly Garden News*, *Massachusetts Butterflies*, MBC newsletter with count and field trip schedules for the year, and all of the benefits of the association and club, including field trips and meetings. Regular annual dues are \$30.00. Those joining NABA - MBC for the first time should make their checks 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 973-285-0907.

Officers of NABA - Massachusetts Butterfly Club

President - Madeline Champagne
7 Pond Ave., Foxboro, MA 02035-2006 (508-543-3380)

Vice-president East - Douglas Savich
21 Woodbury St., Gloucester, MA 01930 (978-283-7869)

Vice-president West - Carl Kamp
P.O. Box 111, Royalston 01368 (978-249-9675)

Secretary - Nancy Young
63 Vernon St., Northampton, MA 01060-2845 (413-585-9380)

Treasurer - Lyn Lovell
198 Purchase St., Milford 01757-1120 (508-473-7327)

MASSACHUSETTS BUTTERFLIES Staff

Records Compiler - Tom Dodd
33 Mechanic St., Upton 01568 (508-529-3392) tdodd@gis.net

Editor - Alison Robb
Box 186, Woods Hole 02543 (508-540-2408) alisonr@capecod.net

Submission of Articles, Illustrations and Season Records Deadlines

We encourage all members to contribute to *Massachusetts Butterflies*. Articles, illustrations, sightings, out-of-state sightings, adventures, book reviews are welcome. Please send 4th of July counts to Tom Dodd by August 1 for the Fall issue and your season sightings and records to Tom by December 1 for the Spring issue. Sending your records periodically during the season will make data entry an easier task for Tom. He will turn all our records into a summary and inclusive tabulated record, as has been done in the past. Send all other material to the editor by September 15, and January 31.

Contents

Cover	<i>Common Wood Nymph</i>	<i>Alison Robb</i>
Page 1	Contents	
2	2001 4th of July Butterfly Counts	<i>Tom Dodd</i>
6	Royalston Ramble	<i>Carl Kamp</i>
9	Black Swallowtails	<i>Matt Pelikan</i>
11	Community Gardens	<i>Tom Gagnon</i>
13	President's Message	<i>Madeline Champagne</i>

Publishing this journal has become our greatest expense. We want to make it the best in content and appearance. Our income sometimes does not quite cover the printing and postage of Massachusetts Butterflies and our newsletters. We ask that members who are willing donate \$20., \$50., \$100. or whatever they can so that we may publish all the fine articles and illustrations that come in. *Please make checks payable to Massachusetts Butterfly Club, and mail to the editor.*

2001 Fourth of July Butterfly Counts

Count Name	Abbrev	Compiler	Count Date	No. of Participants	Party Hours	Total Counted	Total Species
Southern Berkshire County	SBerk	R Laubach	7-14-01	11	36	1654	43
North Amherst	NAmh	d case	7-21-01	9	43	1596	43
Northern Worcester County	NWorc	G Howe	7-8-01	15	30	135	21
Concord	Conc	R Walton	7-7-01	13	10	634	42
North Essex	NEssx	B Speare	7-15-01	8		854	37
Blackstone Valley Corridor	BVal	T Dodd	7-14-01	22	59.5	2172	54
Middleboro	Middl	K Holmes	7-14-01	1	9.5	537	28
Bristol County	Brist	M Mello	7-22-01	8	6	343	28
Falmouth	Falmo	A Robb	7-15-01	5	10.25	296	23
Martha's Vineyard	MVine	M Pelikan	7-14-01	14		2452	38

Notes:

- 1) 4th July Count results for Northern Berkshire County, Central Berkshire County, Central Franklin County, and outer Cape Cod were not received.
- 2) The Northern Worcester County count had dismal weather, with only a few moments of sunshine. The vegetation was wet, and the majority of the flying butterflies found were "kicked up" by the butterflyers.

4th July Count Results

Common Name	SBerk	NAmh	NWorc	Conc	NEssx	BVal	Middl	Brist	Falmo	MVine
Black Swallowtail	3	59		3	6	8	10			10
Eastern Tiger Swallowtail	14	15		17	16	47	7		4	18
Spicebush Swallowtail	1	15		1	2	31	2	16	7	27
Cabbage White	72	121	1	30	64	114	310	20	9	141
Clouded Sulphur	202	280		78	79	104	101	2	18	302
Orange Sulphur	20	125	3	43	40	78	5	26	23	310
American Copper	4	24	11	2	30	87	4	2	49	220
Bronze Copper				2						
Bog Copper			47	42						2
Coral Hairstreak	3		1	2		20		1		43
Acadian Hairstreak						2				
Edwards' Hairstreak						2				66
Banded Hairstreak	2	9		6	1	23				3
Hickory Hairstreak	2					1				1
Striped Hairstreak	3	3		1	1	20		3	1	5
Juniper Hairstreak		7								
White M Hairstreak									2	
Gray Hairstreak		1				5			3	11
Eastern Tailed-Blue	5	2	7	5	12	44	1	10	11	57
'Summer' Spring Azure	9	18		25	26	28		2		1

Common Name	SBerk	NAmh	NWorc	Conc	NEssx	BVal	Middl	Brist	Falmo	MVine
Great Spangled Fritillary	61	68	4	50	49	114	2	6		
Aphrodite Fritillary	4	4		1	1	48				
Atlantis Fritillary	6					3	1			
Silver-bordered Fritillary		5		15	4	18		5		
Meadow Fritillary	29	1								
Pearl Crescent	5	239	4	1	105	58	26	60	19	16
Baltimore Checkerspot	3	4		15		15				
Question Mark	7	24		1	14	9	1	3	1	51
Eastern Comma	13	5		3	3	7	1			
Mourning Cloak	7	1	1		2	2	1			4
American Lady	7	17	4	12	24	42	2	3	4	79
Painted Lady	9	3		3	12	7	7		10	18
Red Admiral	37	176	5	32	89	146	4		33	419
Common Buckeye										1
Red-spotted Admiral	1	5	1	2		2	1	2		
Viceroy		31		4	5	42	3	19		
Tawny Emperor		1								
Northern Pearly-Eye						4	2			
Eyed Brown	9	6		28	1	1				1
Appalachian Brown	13	12		14	4	11		12		13
Little Wood-Satyr	4	1	3	18	15	112	8		2	7
Common Ringlet	1	1	1		1	1				
Common Wood-Nymph	985	127		33	76	389	16	97	55	219
Monarch	9	32		2	2	3	7	1	4	49

Common Name	SBerk	NAmh	NWorc	Conc	NEssx	BVal	Middl	Brist	Falmo	MVine
Silver-spotted Skipper	25	61		42	51	81	6	6	23	111
Hoary Edge						18				
Southern Cloudywing						1				
Northern Cloudywing				2	1		2			1
Horace's Duskywing						2		4		
Wild Indigo Duskywing						14		13	1	1
Common Sootywing		14				13	4			
Least Skipper	1							1		5
European Skipper	8		29	10	20	10	1			1
Peck's Skipper	4			1		2		3		
Tawny-edged Skipper	1				2	3		1	1	14
Crossline Skipper	2		2	3		27				36
Long Dash										1
Northern Broken-Dash	26	22	1	7	45	75	2	6	6	84
Little Glassywing	2	1	2	21	3	41		1		
Delaware Skipper	16	11	4	18	3	69				
Mulberry Wing	3	4		23		15				
Broad-winged Skipper					36	8				
Black Dash		1	3	5		11				
Dun Skipper	16	37	1	11	9	134		6	10	104

The Royalston Ramble Sunday, June 24, 2001

Carl Kamp

For the past four years my hometown library, the Phineus P. Newton Royalston Library to be exact, has joined the Massachusetts Butterfly Club in sponsoring a butterfly walk around the town. Besides doing the bulk of the advertising, Librarian Kathy Morris, a butterfly and gardening enthusiast in her own right, also provides a breakfast prelude for the early butterfly crowd.

The phone rang at about 9:30 am on the usual fourth weekend in June and woke me from my indecision. Although it had been raining off and on Kathy wanted to open the library for breakfast. Perhaps it was the food rather than the lure of butterflies that brought seven hungry risk takers to the table on a day that was doubtful weatherwise. We all lingered over breakfast and coffee hopefully allowing the weather time to dry up. In previous years better weather had brought out greater numbers so this time the magnificent seven had extra to eat. After we were all fairly full there was nothing else to do but hit the dusty (wet) trail.

It was still heavily overcast with very wet ground as we approached the power line section of the recently completed (almost) nineteen-mile Tully Trail. Noticing the moccasin footwear on one of the attendees made me realize that starting down on the steepest part of the trail with wet conditions called for a change in my plans. Kathy pointed out the scarlet florets of Wild Columbine near the top before we regrouped and moved to a more gentle starting point. The new trail is the result of the joint efforts of a number of groups and is coordinated by the Trustees of Reservations. Besides great natural diversity, the trail loop passes Royalston's beautiful waterfall triumverate which includes Doane's, Spirit, and Royalston Falls.

The brothers Siegel, who oversaw the compilation of over 500 species for Royalston's Biodiversity Days 2001 tally, were quick to point out birds and mushrooms in the interim till the sun poked out. Cloudy damp conditions keep the leps hidden but mushrooms thrive. Pointing to a group of mushrooms, Noah Sigel explained that this long-stemmed variety was called Bleeding Mylena and had just sprung up during the recent rain, practically growing while we watched. The wet weather was ideal for observing these fresh sprouts. Some of them disappear almost as fast as they appear. Several others, including Platterful Mushroom and Turkey Tail, were quickly identified as we

walked along the gentle woodland access road.

It took only a little sky brightening to bring out a Pearl Crescent and a Long Dash. The flapping and gliding flight style of the Pearl Crescent was a sharp contrast to the now-you-see-it-now-you-don't style of the aptly named skipper. At least we had some butterflies for the trip list. We walked along passing white bursts of Mountain Laurel and the smaller pink bursts of Sheep Laurel.

A group of mature (my age) hikers approached from the opposite direction and as they paused to observe our motley crew, Earle Baldwin seized the chance to lead a trailside introduction to the butterflies and dragonflies that were beginning to fly. The folks from Lexington would never be the same, while their presence indicated that word of the new Tully Trail had spread almost to Boston.

As the trail veered off the power line we entered an area that Bob Bowker later described as "a woodland swamp magically filtered by the afternoon sunlight with flitting Harvesters and the lordly Delta-spotted Spiketail patrolling his domain." He also identified the Spotted Alder that was an appropriate landing pad for one of the Harvesters. Edging closer and deeper in the muck we noticed a splash of white along the bark that turned out to be a colony of Woolly Aphids. Then as if on cue the female Harvester began laying eggs among the aphids. The Harvester caterpillar is our only carnivore butterfly member that resides in Massachusetts. The eggs hatch and the caterpillars use the aphids as their food source until they are ready for chrysalis.

At the same time David Small and Earle were also knee deep in the muck as they worked the capture and release program needed for some fast moving members of the ode families. Dave pointed out the yellow delta-shaped spots on the top of the abdomen as they carefully extricated this dragon from the net. Additional yellow stripes circled the abdomen with three more on the sides of the thorax. He then advised us to look at the way the eyes met touching or almost touching in the center to help place it in the spiketail family. With a body measuring almost 2 1/2", this Delta-spotted Spiketail was a large beauty. We ended up a little sloshed but also in the right place at the right time to see a few of nature's wonders.

Back in the open of the power line a very fresh Viceroy patrolled its territory while the Harris' Checkerspots appeared a bit haggard, probably nearing the end of their short adult lives. A member of the other Lepidoptera struck a pose on a fern exposing its seldom seen clearwing patterns. The less than ideal weather helped us observe this Hummingbird Moth perched uncharacteristically

motionless. Someone spotted the masked bandit of amphibians, a Wood Frog, out on patrol and also indicating the existence of vernal pools in the area.

As the trail headed west across marshes and beaver dams, we turned east to circle back to the cars. Along the recently paved road many Red Efts had been flattened and baked into the tar. We passed a fresh hatch of ungainly Dobsonflies with white wing markings. As we neared the cars the last butterfly of the day was a fresh Banded Hairstreak that had a very dark ground color allowing it to blend into the road making it hard to see as it seemed intent on getting some nutrients from the new highway surface.

Despite an auspicious start we had a great day in the field. Earle wrapped it up by saying "the whole day was a tribute to being out in the wild whether the weather cooperates or not and finding bugs in unexpected places."

Thanks to all who attended and please consider joining me next year around the fourth week in June for the fifth version of this MBC/library ramble around Royalston.

The final tally:

tiger swallowtail sp. 3	Viceroy 1
Clouded Sulphur 1	Little Wood Satyr 2
Orange Sulphur 1	Common Ringlet 2
Harvester 3	Silver-spotted Skipper 1
Banded Hairstreak 1	Juvenal's Duskywing 1
Summer Azure 1	Northern Cloudywing 1
large fritillary sp. 1	Long Dash 2
Pearl Crescent 3	European Skipper 6
Harris' Checkerspot 4	Dun Skipper 1
Question Mark 1	
Red Spotted Admiral 2	
(a White Admiral type	
and a Red Spotted type	
with little or no obvious	
white markings)	

Black Swallowtails

Matt Pelikan

I've observed several butterfly species, including Cabbage White, American Copper, and Least Skipper, ovipositing in our Oak Bluffs yard during the four years we've been living here. But the only species that I can confirm has actually produced larvae (and indeed the species that may be the most entertaining to watch) has been the Black Swallowtail.

These large and striking butterflies are generally common and widespread on Martha's Vineyard; they have been observed here as early in the year as May 6 and as late as October 4. Highest concentrations of Black Swallowtails have been found during midsummer, either on patches of milkweed or over clover and alfalfa-rich hay fields; as many as 20 have been noted at a single location. But smaller numbers of individuals are also common visitors Island-wide in gardens, favoring many of the same nectar sources (especially *Buddleia*) that smaller butterflies visit or seeking out herbs that serve as larval hostplants. Many gardeners I've spoken with recognize the colorful larvae of this species and happily accept minor damage to their dill or parsley in exchange for the privilege of having this striking species attempting to breed in their gardens.

In our yard, female Black Swallowtails have been attracted by several umbelliferous plants we grow. I've watched female swallowtails laying eggs on parsley (in the herb garden) and Queen Anne's Lace (an exotic and mildly invasive wildflower that we have let establish a foothold on the fringe of the yard). But the most attractive host plant appears to be herb fennel, a gangly, anise-flavored, hollow-stemmed perennial that resembles a sparsely-leafed dill (indeed, we bought it thinking it was true dill); self-seeded herb fennel plants in other garden beds and a compost pile have joined the original specimen in our herb garden, and since the arrival of this species, Black Swallowtails have used it to the virtual exclusion of other host plants.

While visits to the yard by this species span the period from late May to early October, most instances of ovipositing females have been observed either from mid-June to mid-July, or in late August and early September. An ovipositing Black Swallowtail is a model of dexterity. Having located an appropriate host plant, the female butterfly hovers over a flower head, balancing delicately with her legs

while flapping only her forewings to hold position. Eggs, apparently sticky on the outside, are laid singly (seemingly invariably on the stems or underside of a flower head) with a rapid upward curve of the abdomen. A single female typically remains in the yard for most of the day (sometimes, it appears, for more than one day), alternately laying a few eggs and then flying out into the front yard to nectar on *Buddleia* or some other nectar source. In the course of this period, the female may lay several dozen round, off-white eggs. Male Black Swallowtails also sometimes make prolonged visits, alternating nectaring sessions with cruising around potential host plants in search of a female, but I have never seen this species mating in our yard.

First-instar larvae are tiny and nearly all black, but they grow rapidly and soon achieve the familiar green body with yellow-and-black stripes of the later instars. On a few occasions, I've found larvae without having previously observed any adults in the yard. Larvae, especially when small, experience a high rate of mortality (or at least of disappearance); but once they achieve respectable size, they often survive until they wander off, presumably in search of a place to metamorphose.

While they spend a good portion of the day sitting motionless, aligned along the top of a fennel branch, our Black Swallowtail caterpillars periodically embark on energetic bouts of feeding. The process is admirable for its dexterity and efficiency. The feeding caterpillar crawls out toward the end of a branch and then selects one of the threadlike leaflets of the herb fennel. Using its "true" legs, the caterpillar clutches the base of the leaflet and then passes it backwards through its legs, "hand over hand," bowing the leaflet until its tip is right under the larva's mouth. Then the caterpillar rapidly and methodically ingests the entire leaflet, guiding it towards its mouthparts with its legs. A caterpillar can inhale a couple of inches of leaflet in just a few minutes of steady chomping. When the bowed portion of the leaflet has been consumed, the caterpillar often finds it necessary to back up in order to continue eating, a process which involves a wavelike movement of one abdominal segment with its pair of "false" legs at a time; the jaws keep grinding away during the process, proving that unlike some people, butterfly larvae are smart enough to walk and chew gum at the same time!

The end of the feeding process is the production of surprisingly large, neat pellets of frass: cylindrical lumps, perhaps 2-3 mm in both diameter and length. I've yet to see one of these actually ejected, but there must be a robust and highly elastic back door to the critter's alimentary tract. Under 10x magnification, the droppings look like

horse manure in miniature: the same sort of fibrous texture still reflecting plant structures, suggesting that the caterpillars can't completely digest the plant material they eat.

In 2001, I captured a final-instar larva and transferred it to a jar with a cheesecloth lid. I placed a couple of sticks in the jar, along with a selection of parts (stems, leaves, flower heads) from an herb fennel plant (plus a few parsley leaves, for good measure). The caterpillar ate intermittently for a couple of days, then grew progressively more inert. One evening I noticed a dull, blackish spot on its back; within a couple of days, the caterpillar had died, whether because of an infection or a parasite I could not determine.

So I have no evidence that eggs laid in our yard by Black Swallowtails ever result in successful reproduction of adults. The sparse leaves of herb fennel offer little in the way of concealment, and flowers of this plant and of the various other herbs in the garden attract large numbers of wasps and flies, some of which may be parasites of butterfly larvae. So while the combination of good nectar sources and appropriate food plants may be enticing to Black Swallowtails, our yard may in fact be a high-risk location in which to attempt to breed. But of course high mortality is the rule rather than exception for butterfly eggs and larvae; while I'd be happier if I knew for sure that some of our larvae survived to adulthood, I've decided not to alter my gardening practices, on the assumption that the butterflies themselves are best able to choose where to lay their eggs.

Northampton Community Gardens

Tom Gagnon

The Northampton Recreation Department created the Community Gardens back in the early 1970s. There are 440 plots at 20 x 20 feet. The land at one time was part of the Northampton State Hospital grounds and was used to grow vegetables for the state hospital. Now each plot is rented out each spring to individuals, and one person can rent up to four plots. Usually each person keeps the same plot year after year.

I drove by these wonderful gardens for years and never stopped to appreciate them. This is public property, but I had never given any thought to visiting them. After all, there were no birds there (so I thought).

My first visit to the gardens was October 1, 1996. I was looking for a place where there were lots of late blooming flowers. Driving by the gardens one could not help noticing all the blooming annuals and perennials, so I stopped. What a wonderful surprise was in store for me. I wondered around for over an hour just checking out the labors of other hard working folks. Some of the gardens were spectacular, full of a wide assortment of vegetables and blooming flowers, both annuals and perennials. I believe that is what makes these gardens so attractive to butterflies — the wide variety of plants here in one area.

I usually start checking out the gardens by mid-July and continue until we have a real hard frost. Even if we have a light frost and most of the tender annuals are killed, such as Zinnias, there are many perennials that survive that first frost each fall and continue to bloom for a few more weeks.

Here are some of my more interesting records that I have recorded over the past few years:

Variegated Fritillary	July 18, 99; August 20, 00
Pipevine Swallowtail	August 4 till September 19, 99
	September 18, 00
Little Yellow	September 26, 99
Fiery Skipper	September 27 till October 1, 99
Common Buckeye	September 18, 00
Zabulon Skipper	September 18, 00
Leonard's Skipper	September 22, 00
Common Checkered-Skipper	September 22, 01

DIRECTIONS to the gardens: Starting point is in the center of Northampton where Route 5 crosses Route 9. Go west on Route 9 for .3 mile and bear left on Route 66 (at the gates of Smith College). Go .8 mile and bear right onto Burts Pit Road. Go .2 mile and the Northampton Community Gardens will be on your right. Drive past the gardens and park your car in the shade.

While you are in the area you might want to check out the flower gardens at Smith College. There is a wonderful Rock Garden that always seems to have something in bloom. The greenhouses are open to the public year round. Enjoy your visit to both places.

President's Message

Madeline Champagne

To The Massachusetts Butterfly Club, here's a big HAPPY BIRTHDAY wish! You've certainly done a lot of growing in the past 10 years, although you started off with a bang with 44 members back in 1991.

Highlights of MBC past 10 years include: Becoming a chapter of the North American Butterfly Association, increasing the number of field trips and field trip locations each year, conducting Butterfly Institutes (6- to 10-week classes with a weeknight presentation and weekend field trip), participating in the NABA Xerces Fourth of July Counts each year and establishing new count areas, building a comprehensive database of Massachusetts butterfly sightings, formalizing a fall Migration Watch in Westport, increasing the number of members over the years, and participating in the MassLeps listserv for reporting sightings and other butterfly information.

There are many MBC members, too numerous to list, who continue to support the MBC with leadership and enthusiasm and expertise. Whether it be in leading field trips, hosting the Butterfly Institutes or Fourth of July Counts, serving as one of the officers or as Record Keeper or as Massachusetts Butterfly Editor, reporting sightings, researching specific topics, contributing articles to Massachusetts Butterflies magazine, providing photography, teaching club and non-club programs, or just spreading knowledge and excitement about butterflies, every effort is important and every effort is greatly appreciated. We wouldn't be the strong club that we are without your support.

As MBC grows in many ways every year, so too each member of the club has an extraordinary opportunity to grow and to continue to grow with it. We encourage each member to take advantage of having such a remarkable network of butterfly enthusiasts who can answer questions and provide resources. If you have any questions or comments, or have any ideas about field trips or suggestions about club activities, please don't hesitate to contact any of the officers or other members. If you want to know more about butterflies and butterfly places in your area, be sure to attend one or more of the field trips or Fourth of July Counts. Every excursion is an adventure and a learning experience!

So, HAPPY 10TH BIRTHDAY to the Massachusetts Butterfly Club, and here's to many many more years of happy butterflying!

Massachusetts Butterfly Club
63 Vernon St.
Northampton, MA 01060-2845

