Massachusetts Butterflies



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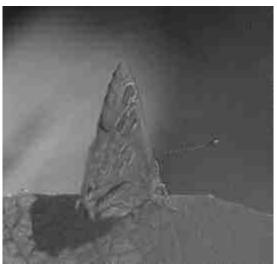
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Brian Cassie

Front Cover: Northern Pearly-Eye (Enodia anthedon), Garry Kessler Crane Swamp Trail, Northborough/Westborough, July 17, 2011



Banded Hairstreak, Nantucket July 9, 2011. *Photo:Eric LoPresti* The first documented report on Nantucket: no historical records.



Striped Hairstread, Squam Farm, Nantucket July 20, 2011. *Photo: Eric LoPresti*

Nantucket Butterflies: Past and Present

Eric LoPresti

During the last glacial period, a huge pile of sand and small rocks was deposited about 25 miles off the coast of present-day Cape Cod. As the glacier retreated it opened up a landscape of tiny hills and small kettle ponds and plants began to move in. About sixthousand years ago, the last land connection was severed between the island - Nantucket - and Cape Cod. The Wampanoag used the island extensively, exploiting the rich marine resources. In the mid-1600's, white settlers arrived and started farming and grazing the animals they brought with them. This farming and grazing continued until the middle of the 20th century - during wars, a whaling boom and bust, and several large fires. Therefore, extensive grasslands and heathlands confronted Charles Kimball in 1935 when he arrived to census the island's Lepidoptera. Eight years later he published "The Lepidoptera of Nantucket and Martha's Vineyard Islands" with Frank M. Jones, his counterpart on the Vineyard. What existed previous to Kimball's collections is fairly unknown, but from his intense collecting we get a snapshot of what species were present during the 1930's and early 1940's.

This past summer I began examining his collection, plus smaller ones by Marianna Hussey (~1907-1910) and Charles W. Johnson (1926-1929), as well as compiling modern records in an effort to make a checklist of butterflies on the island and determine how species composition has changed in the past 70 years. With 1907 as a starting point, 59 butterfly species have been documented on the island. This includes vagrants which certainly do not breed here, for instance the only Gulf Fritillary ever reported in Massachusetts (10/5/1997, J. and J. Stewart, MBC records) and a Brazilian Skipper (Kimball Collection). Because of this historic "snapshot" from 70 years ago, we can draw inferences about how changes in the land affect our butterflies. Because of the distance, butterfly immigration to the island is likely low – though it certainly occurs, both with migrants as well as other species. In the 1930's, the human population of the island was much lower and while grazing had decreased, extensive grasslands still existed, especially on the eastern side of the island. Scrub oak barrens existed, but far fewer than carpet the eastern side of the island today.

Today, over half the island is protected by various conservation organizations and government holdings. A small portion of this is maintained as grasslands by grazing, mowing and controlled fires, though much has reverted to scrub oak and pitch/black pine "forests". Most of the remaining lands are suburban with manicured lawns and ornamental trees and shrubs, though a few small farms still exist as well as two large farmed cranberry bogs.

The species lost due to declines in grasslands are predictable: Regal and Silver-bordered Fritillary. The population of Regal Fritillaries existed until the 1980's, but like populations on Martha's Vineyard and Block Island, and despite the continuing presence of Bird's-foot Violet, the preferred host-plant, the population died out. When Silver-bordered disappeared is less clear; I can find no records from the 1980's, but this species -described by Kimball in his book as "moderately common"-- must have declined sharply at some point. The commercialization of the cranberry bogs and intense pesticide use probably spelled the end of the Bog Copper – the last record is from 1987 (7/17/1987, W. Maple, MAS Atlas). Several skippers may or may not persist, but coverage of the island has been sparse in modern times, and more skippers may be documented.

What has been lost tells only half the story; four species established themselves as breeders in the same time. The first, the European Skipper, arrived on the island sometime in the 1960's or after, as in all of New England. The Red-spotted Purple is common now, and it seems likely Black Cherry, a common hostplant, increased in the past 80 years in scrubby areas and suburban yards. An immigrant could have arrived from either the mainland or Martha's Vineyard, where it was apparently fairly common at Kimball's time. The first record is a specimen by W. Maple, 14 July 1988, in the Maria Mitchell Museum. The last two species, Edwards' Hairstreak and Banded Hairstreak, benefited from the scrub oak invading un-maintained grasslands and may have also arrived from the Vineyard. Edwards' was described by Jones as "excessively abundant" historically on the Vineyard, and on Nantucket can now be abundant along roads through appropriate habitat. Banded was first definitively reported and photographed on Nantucket on July 9 of this year, but a handful of other sight records exist

What will the future bring? Perhaps an establishment of Silverspotted Skippers on the omnipresent locusts, and almost certainly a Common Ringlet will slip through somehow and thrive in the grassy fields along the southwestern shore. In 1943 Kimball could never have predicted Regal Fritillaries would have disappeared or that a little skipper from Europe would arrive and become abundant; thus documenting the fauna presently could be immensely important in the future. And to that end, come out and explore the island in search of butterflies: a short ferry ride from Cape Cod and you will have access to much of the island easily, either with a car or a bike or utilizing the cheap and easy bus system. If you come, the first thing that you may notice is that some of the most common butterflies present elsewhere, Common Ringlet, Viceroy, Baltimore Checkerspot, Silver-spotted Skippers and the Fritillaries, are entirely absent, despite adequate host plants. But butterfly trips can be wonderful without the diversity present elsewhere; in the fall you can find Leonard's Skippers everywhere, and migration can bring staggering numbers of Monarchs, not to mention the potential of an interesting tropical vagrant.



Eric LoPresti is from Wrentham, Mass. He studied fern moths and fish feeding in college, and then went to South America for a year to study swallows. He worked on an American Burying Beetle reintroduction project in Nantucket this past summer and looked at butterflies on the side, reviewing the collections at the Maria Mitchell Museum on Nantucket.

Nantucket Checklist 2011

	Current Status	Records 1943 and before	Specimen in MMA
Pipevine Swallowtail	LS	Y	Y
Black Swallowtail	В	Y	Y
Eastern Tiger Swallowtail	В	Y	Y
Spicebush Swallowtail	B?	Y	Y
Cabbage White	В	Y	Y
Clouded Sulphur	В	Y	Y
Orange Sulphur	В	Y	Y
Cloudless Sulphur	LDS	Y	Y
Little Yellow	LDS	Y	Y
American Copper	В	Y	Y
Bog Copper	E ?	Y	Y
Coral Hairstreak	В	Y	Y
Edwards' Hairstreak	В	Y 1800's	Ν
Banded Hairstreak	В	Ν	Ν
Striped Hairstreak	В	Y	Y
Brown Elfin	В	Y	Y
Frosted Elfin	?	?	Ν
Eastern Pine Elfin	В	Y	Y
Gray Hairstreak	LS	Y	Y
Eastern Tailed-Blue	В	Y	Y
Spring Azure	В	Y	Y
Gulf Fritillary	LDS	Ν	Ν
Variegated Fritillary	LDS	Y	Y
Great Spangled Fritillary	LS	Y	Ν
Regal Fritillary	Е	Y	Y

Silver-bordered Fritillary	E	Y	Y
Meadow Fritillary	Е	Y	Ν
Pearl Crescent	В	Y	Y
Question Mark	В	Y	Y
Eastern Comma	LS	Y	Y
Compton Tortoiseshell	Р	Y	Y
Mourning Cloak	В	Y	Y
American Lady	В	Y	Y
Painted Lady	LS	Y	Y
Red Admiral	В	Y	Y
Common Buckeye	В	Y	Y
Red-Spotted Purple	В	Ν	Y
Viceroy	LS	Y	Y
Little Wood-Satyr	В	Y	Ν
Common Wood-Nymph	В	Y	Y
Monarch	В	Y	Y
Southern Cloudywing	Р	Y	Y
Northern Cloudywing	Р	Y	Y
Dreamy Duskywing	В	Y	Y
Sleepy Duskywing	Р	Y	Y
Juvenal's Duskywing	В	Y	Y
Horace's Duskywing	Р	Y	Y
Wild Indigo Duskywing	В	Y	Y
Common Sootywing	Р	?	Ν
Least Skipper	В	Y	Y
European Skipper	В	Ν	Ν
Fiery Skipper	LDS		Ν
Leonard's Skipper	В	Y	Y
Peck's Skipper	В	Y	Y
Crossline Skipper	В	Y	Y
Long Dash	В	Y	Y

Tawny-edged Skipper	В		
Dun Skipper	В	Y	Y 2011
Dusted Skipper	В	Y	Ν
Brazilian Skipper	LDS	Y	Y

KEY:

Y = Yes N = No B = Regular Breeder LS = Local Stray LDS = Long-distance Stray P = Possible; historic records E = Extirpated MMA = Maria Mitchell Association collections





I. incisalia on *R. frangula*, slides 1 and 4, Wellesley, July 1985. *Photos by William D. Winter, in the Massachusetts Butterfly Club Slide Collection*

Henry's Elfin Adopts a New Host Plant

Sharon Stichter

The winsome little Henry's Elfin was a scarce creature in Massachusetts prior to the mid-1960's. But after that, sightings and specimens abound. Why? What happened was that Henry's Elfin switched from a host plant that was very scarce, even absent, in Massachusetts, to using the widespread and aggressive non-native Buckthorn: *Rhamnus frangula* (Common) and *Rhamnus cathartica* (Glossy). As with the Baltimore Checkerspot, this switch allowed Henry's Elfin to flourish here.

The discovery of the adoption of the new host plant is an exciting story which took place right in our backyard, so to speak.

In the 1980's, lepidopterists like William D. Winter and Dale Schweitzer used to visit Babson Park in Wellesley, where it was easy to find male Henry's Elfins perched on high-bush blueberry. But they could not figure out if this was the host plant, because no females, eggs or caterpillars were seen on it. In 1985 Dale Schweitzer spotted some females sitting on Common Buckthorn, perhaps 100 meters away, and several were seen ovipositing on the flower buds. A female was sleeved 30 May on a flowering branch of *Rhamnus frangula*. In June and July her larvae preferred blossoms and berries of *Rhamnus*, but also readily ate the foliage, pupating in the second week in July. Schweitzer also placed some Henry's caterpillars on a buckthorn in Dave Winter's backyard, and successfully raised them there.

Throughout its wide geographic range Henry's Elfin uses several different host plants, but usually only one or two in a given area.

On the mid-Atlantic east coast the two main hosts are Redbud (*Cercis canadensis*) and American Holly (*Ilex opaca*). But neither of these plants is very common in Massachusetts: we are north of redbud's historic range, and American Holly is found mostly on Cape Cod and the Islands. The redbud-feeding Henry's populations are mainly in rich forested areas in the Appalachians, while the holly-feeding populations are along the coastal plain, especially New Jersey north to Rhode Island.

The original native host plant here may not have been American Holly, but rather the closely related *Nemopanthus mucronata*, or Mountain-holly, according Common to Dale Schweitzer Mountain-holly is a host plant in New Brunswick, and it was abundant not far from the site where Henry's was first discovered using the introduced *Rhamnus* spp. On the other hand, the original native host here might have been blueberry (Vaccinium) and huckleberry (Gaylussaca) species, which are also common hosts in Canada (Kirk 2003). There is very little actual evidence for Scudder thought the native host plant was Massachusetts. Vaccinium. In Rhode Island, the species probably uses American Holly, since it is usually found associated with it, but it is also found in areas without holly (Pavulaan, quoted in Kirk 2003). Mello and Hansen thought that Henry's Elfin might use Ilex on Cape Cod (Mello and Hansen 2004), but again there is no definitive evidence

Whatever the original host here, Massachusetts is one of the first states where Henry's Elfin was shown to have switched to exotic, aggressive buckthorns. Today Common and Glossy Buckthorn are probably its most common host plants here.

The photographs by William D. Winter, shown on page 8, were taken in Wellesley in July 1985, and are the first observation of

Henry's Elfin caterpillars on *R. frangula*, including the feeding damage on the leaves. These and many other photos of historic interest by William D. Winter are kept in the Massachusetts Butterfly Club slide collection.

Sources:

Kirk, K. "Conservation Assessment for Henry's Elfin Butterfly (*Callophrys henrici*)," USDA Forest Service, Eastern Region, 2003

Mello, M. and T. Hansen. Butterflies of Cape Cod. 2004.

Season Summary 1985. In *News of the Lepidopterists' Society,* March-April 1996.

Stichter, S. www.butterfliesofmassachusetts.net/henrys-elfin.htm

Winter, Dave. "NIMBY?---Look Again!" *American Butterflies* 2: 1, February 1994, pp. 23-24.



2011 NABA Butterfly Counts

Compiled by Tom Gagnon

The number of individual butterflies counted in 2011 has once again dropped significantly from the previous year. In 2010, we counted 13,729 butterflies compared to this year's 10,773. Could it have been the wet weather? Fewer people out counting? As recently as 2006 we counted almost 22,000 butterflies. Our total species is about the same each year. Just the total individuals are dropping in numbers. This year 15 counts were held and all were reported.

Species seen on only ONE count were: Giant Swallowtail, Mustard White, Harvester, Bronze Copper, Hickory Hairstreak, Oak Hairstreak, Juniper Hairstreak, Milbert's Tortoiseshell, and Horace's Duskywing. In most cases, there were only one or two individuals of these nine species seen. Four species seen on only TWO counts were: Canadian Tiger Swallowtail, Acadian Hairstreak, Variegated Fritillary and Atlantis Fritillary. Missed on the counts were Tawny Emperor, which is usually found on the Northampton and South Berkshire counts and Harris' Checkerspot, which was not found on the Northern Worcester Count possibly due to limited access to Wachusett Reservoir. Low counts of Red Admirals just shows we are in one of their low cycles.

Looking over the charts there are three things that catch my eye. FIRST, we could say that it has been the year of the Common Buckeyes. They were reported on 13 of the 15 counts. That is the most counts ever reporting them and the total of 70 beats the previous all time high reported in 2003. In 2010 only two, and in 2009 none, were reported. The SECOND thing is the report of a

Giant Swallowtail. This is only the second ever reported on any of the 4th of July counts in Massachusetts. The first one was reported on July 17, 1999 on the same count, South Berkshire. (More on Giant Swallowtails can be found in Bill Benner's article in this issue, and in the forthcoming Season Summary in the Spring 2012 issue.) THIRD, all three of our Berkshire County counts reported GRAY COMMAS. On the South Berkshire count, Jill Johnson and I had one LAND on us. We got some very poor pictures. On the Central Berkshire count Betsy Higgins got pictures of the two we found together (see photos on p. 25 of this issue), and on the North Berkshire count Josh Rose found one. I believe they have been found only twice before on any of our counts.

Only two of the counts broke the 1,000 barrier in total individuals. Northampton led the way with 1,735 and Central Franklin had 1,662. Four of the five western counts broke the 40 species number, with Central Franklin leading the way with 48.

This year's number of participants totaled 120 but, MANY of these participants were counted two, three and some like myself five times, because of participating in several counts. Somehow, we have to try harder to get more people in the field on these counts. It is not like the Christmas Bird Counts where we can have "feeder watchers" helping out. Maybe having a person for each count organize a "pot luck supper" after the counts might help. I know people like Alison Robb who live down on the Cape would dearly love to have more people come down there to help out.

Comments from some of the compilers were that access was difficult at some places and that early mowing in some fields reduced the butterflies. From the Concord count: a special note of thanks to their gracious hosts, Simon Perkins and family. From Matt Pelikan/Vineyard count: "notable was the paucity of Vanessas and the low numbers of pierids, some species of which usually number in the hundreds on this count. From Rene Laubach/South Berkshire: "for a second year in a row, we came up empty on hairstreaks."

I sincerely hope you all have had a great Summer and Fall and look forward to seeing you in the field in 2012.



Editor's Note: The Butterfly Count Program is administered by the North American Butterfly Association, 4 Delaware Rd, Morristown, NJ 07960. Official reports for all counts held in the U.S., Canada and Mexico are available from NABA for \$10.00. The unofficial tallies for Massachusetts counts are reported here.

Total		125	1	98	18	53	6	776	732	669		1	452	2	171	98	13	22	104	1	7
Northern Berkshire		4			14			93	35	47				2		42	1	1	5	1	2
Central Berkshire		3			4		6	44	34	39						8	12		1		
Southern Berkshire		5	1	2		2		21	29	39											
Central Franklin		6		25		8		66	76	53			15		162	5			36		
Northampton		74		4		9		74	341	224			38			3					
Northern Worcester								17	25	15			28		3	1			2		1
Concord		2		4				59	33	30		1	60			4					
Northern Essex		2		12		2		193	20	28			2						23		
Blackstone Corridor		3		26		8		13	41	64			55			4			3		
Bristol		1		1		7		6	3	10			2								
Falmouth	L	3				1		2	11	14			9					1	4		
Brewster		4		9				99	6	28			101			8					3
Barnstable		4		6				24	12	5											
Truro				2				3		2			22		6	1					
Martha's Vineyard		14		7		16		62	66	71			120			22		20	30		1
	Pipevine Swallowtail	Black Swallowtail	Giant Swallowtail	Eastern Tiger Swallowtail	CanadianTiger Swallowtail	Spicebush Swallowtail	Mustard White	Cabbage White	Clouded Sulphur	Orange Sulphur	Cloudless Sulphur	Harvester	American Copper	Bronze Copper	Bog Copper	Coral Hairstreak	Acadian Hairstreak	Edwards' Hairstreak	Banded Hairstreak	Hickory Hairstreak	Striped Hairstreak

Total	1	3		60	237	68	3	363	23	22	64	48		764	121	42	30	4		8	1	37	7
Northern Berkshire					12	30		43	9	4		6			5	3	13	1		4	1	7	1
Central Berkshire					5	5		70	2	18	1	1		3	19	5	2	2		1			
Southern Berkshire					8			5				15			10	1	2	1		1		2	
Central Franklin				1	17	18		61	3		8	25		1	14	3	1						1
Northampton				1	14	4	2	58	1		42	1		359	12	6	4			1		3	
Northern Worcester					56	2	1	32	8		1					1							
Concord				6	17	3		6							4	2	3					2	
Northern Essex					4	2		30			5				26	7	1					7	1
Blackstone Corridor				8	66			53			3			33	27	1	3	_				6	
Bristol					2	2		5			4			195		1				1			
Falmouth				4	8									7	3							2	
Brewster		3		4	2	1								63		1						1	1
Barnstable					9									97		7							2
Truro														1	1	2						4	1
Martha's Vineyard	1			36	17	1								5		2	1					3	
	Oak Hairstreak	Juniper Hairstreak	White M Hairstreak	Gray Hairstreak	Eastern Tailed-Blue	"Summer' Spring Azure	Variegated Fritillary	Great Spangled Fritillary	Aphrodite Fritillary	Atlantis Fritillary	Silver-bordered Fritillary	Meadow Fritillary	Harris' Checkerspot	Pearl Crescent	Baltimore Checkerspot	Question Mark	Eastern Comma	Gray Comma	Compton Tortoiseshell	Mourning Cloak	Milbert's Tortoiseshell	American Lady	Painted Lady

Total	27	70		10	37	40			58	18	66	336	104	771	320	463	7	6	5	Π
Totai	21	70		10	31	40			30	10	00	330	104	//1	320	403	ľ	0	5	
Northern Berkshire	2	3		5	14	1			30	11			27	95	12	24				
Central Berkshire	1	3		1	1	3			9		6		1	169	5	16				
Southern Berkshire		1							3			5		128	2	7				
Central Franklin	3	5		3	10	8			8	2	5	24	18		20	75	5	1	3	
Northampton	1	6			6	18			3		25	16	3	37	43	100	1			
Northern Worcester	1	2				2			1	1	1	14	17		20	29		2	2	
Concord	7	12			1				1		6	34		9	11	48		1		
Northern Essex	4	4			1	1			2	4	8	125	3		21	16		1		
Blackstone Corridor		6				2			1		6	86		98	5	76	1	1	1	
Bristol		11				5					3	1		19	9	3				
Falmouth														21	4	2				
Brewster		3		1			ĺ							25	44	17				
Barnstable		11			1								35	30	34					
Truro	8				1		ĺ				1	26		1		14				
Martha's Vineyard		3			2						5	5		139	90	36				
	Red Admiral	Common Buckeye	Red-spotted Admiral	White Admiral	Red-spotted Purple	Viceroy	Hackberry Emperor	Tawny Emperor	Northern Pearly Eye	Eyed Brown	Appalachian Brown	Little Wood-Satyr	Common Ringlet	Common Wood Nymph	Monarch	Silver-spotted Skipper	Hoary Edge	Southern Cloudywing	Northern Cloudywing	Dreamy Duskywing

Total	3	45	50	14	1608	148	23	18	13	263	171	116	47	14		17	8	22		545
Northern Berkshire				6	171	55	1		3	31	21	6		4						50
Central Berkshire					1	57	10			5	3	12	1			1	4			194
Southern Berkshire					8	14	2			3	13	9		3			3	1		10
Central Franklin				2	782	1	7		2	9	23	23		4				3		11
Northampton		11	32		1			3	1	45	6	4	16			1	1	4		75
Northern Worcester					341	4			5	1	6									1
Concord		1	11					5		6	4	18	3			6		1		9
Northern Essex				3	292	16			2		39	1		3						3
Blackstone Corridor			4		3		2	7		25	53	33	27					12		17
Bristol	3	12	1			1				20						3		1		10
Falmouth		9	2		1					3	3	4								8
Brewster					1					50		2				3				30
Barnstable		12										1								
Truro					6					14		3				1				28
Martha's Vineyard				3	1		1	3		51						2				99
	Horace's Duskywing	Wild Indigo Duskywing	Common Sootywing	Least Skipper	European Skipper	Peck's Skipper	Tawny-edged Skipper	Crossline Skipper	Long Dash	Northern Broken Dash	Little Glassywing	Delaware Skippeer	Mulberry Wing	Hobomok Skipper	Zabulon Skipper	Broad-winged Skipper	Dion Skipper	Black Dash	Two-spotted Skipper	Dun Skipper

Summary	No. of Individuals	No. of Species	No. of Participants	Party Hours	Date	Compiler
Northern Berkshire	958	47	7	na	7/9	Tom Tyning
Central Berkshire	788	42	6	21.5	7/16	Tom Tyning
Southern Berkshire	357	32	12	na	7/8	Rene Laubach
Central Franklin	1662	48	8	44.5	7/4	Mark Fairbrother
Northampton	1735	47	9	43.25	7/19	Mark Fairbrother
Northern Worcester	662	35	10	30.5	7/2	Carl Kamp
Concord	430	36	14	14	7/9	Dick Walton
Northern Essex	959	37	9	19	7/2	Sharon Stichter
Springfield						not held
Blackstone Corridor	883	39	9	28.25	7/10	Tom Dodd
Bristol	334	29	2	11	7/23	Mark Mello
Falmouth	127	24	6	5	7/17	Alison Robb
Brewster	516	27	14	16	7/23	Alison Robb
Barnstable	290	16	4	5	7/30	Ian Ives
Truro	148	22	4	7	7/9	Alison Robb
Martha's Vineyard	924	33	6	26	7/17	Matt Pelikan
Total	10,773	72	120			-

Great Summer Finds 2011

This was a banner year for new species in the state: Giant Swallowtail and Red-banded Hairstreak come immediately to mind. The full report on the 2011 season, with numbers and analysis, will appear in the Spring 2012 issue of *Massachusetts Butterflies*. Included here are a few highlights from some of the many field trips and discoveries this year.

In April, the Club assisted the state Natural Heritage and Endangered Species Program in surveying for Frosted Elfin at Westover Air Reserve Base in Chicopee.



Unlikely habitat for Frosted Elfin? Two surveyors, Karl Barry and Mike Nelson, at work. April 29, 2011. *Photo: Joe Stichter*

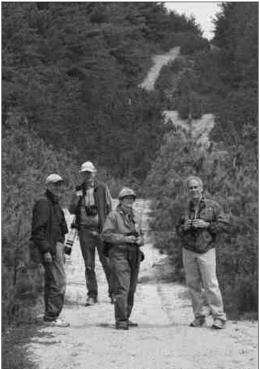


Masses of *Lupinus perennis* and 149 Frosted Elfins were found at the air base! April 29, 2011. *Photo: Sue Cloutier*

The gas lines at Myles Standish State Forest in Plymouth/Carver provided abundant Sleepy Duskywings in May. Hikers Erik Nielsen, Ron Hamburger, Joe Dwelly, Joe Stichter, and Sharon Stichter counted 19 Sleepy Duskywings.

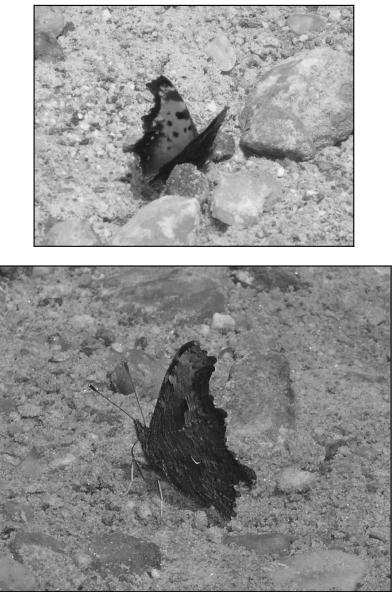


Mating Sleepy Duskywings, Myles Standish SF, 5-21-11 Photo: Joe Dwelly



Gas line at Myles Standish SF, May 21, 2011. Photo: R. Hamburger

The NABA Fourth of July Counts this year were especially productive (see the preceding report by Tom Gagnon). TWO Gray Commas were found on the Central Berkshire count! Betsy Higgins' photos on the next page show dorsal and ventral shots of the same individual; the dorsal shows the particularly small outermost FW spot, and the ventral shows the frosting on the outer half of the FW, but not on the HW. These are definitive identification characteristics; taken together they eliminate Eastern, Green and Hoary Commas.



Gray Comma, Central Berkshires, July 16, 2011. Photos: Betsy Higgins

Other great finds on the Counts were Hoary Edge, found by Elise Barry and Dolores Price on the Blackstone Valley Count, and Bronze Copper, found by Bill Benner on the North Berkshire Count. Bronze Copper is quite uncommon in the Berkshires.



Hoary Edge, Sutton, Mass., July 10, 2011. Photo: Elise Barry



Bronze Copper male, July 10, 2011, North Berkshire. Photo: B. Benner

Among the rarities photographed this year was the beautiful Redbanded Hairstreak: Bo Zaremba's photograph is on the back cover of this issue. Bo Zaremba also photographed this rare Oak Hairstreak in Rowley, Mass. on July 4, 2011; this is the furthest north along the coast that this species has been reported.



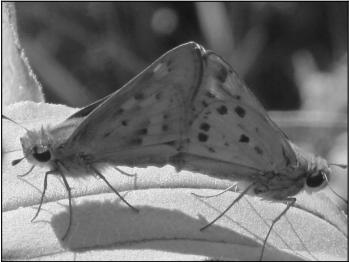
Oak Hairstreak, Rowley, Mass., July 4, 2011. Photo: Bo Zaremba

Another rarity, Zabulon Skipper, may soon no longer be in that category: it seemed to be spreading all over southeastern Massachusetts this year! Madeline Champagne photographed this one in her yard in Foxborough on August 3, 2011:



Zabulon Skipper, Foxborough, August 3, 2011. Photo: M. Champagne

Essex County had several great finds and "firsts" reported this year. In Beverly, Karen Haley photographed these mating Fiery Skippers on September 12, 2011. This prolific species will probably keep attempting to over-winter here, and may someday succeed. Fiery Skippers were also reported from several other locations in Essex County, including Ipswich, Plum Island, and Rockport.



Fiery Skippers mating, Beverly, Mass. Sept 12, 2011. Photo: K. Haley

Russ Hopping found Leonard's Skipper in a new location, Halibut Point TTOR Rockport, right on the rocky beach. Bob Bowker subsequently (9/13/11) reported 29 at this location! Leonard's Skipper is quite scarce in Essex County.



Leonard's Skipper, Rockport Halibut Point, Aug. 26, 2011. Photo: R. Hopping

And Bronze Copper, found last year at Appleton Farms Ipswich TTOR by Howard Hoople, was photographed this year on September 17, 2011 by Dave Amadio, visiting butterfly enthusiast from New Jersey. Howard Hoople also photographed two this year at Appleton, but it is still a rare species in Essex County.



Bronze Copper female, Appleton Farms 9-17-2011 Photo: Dave Amadio

On Cape Cod, Mark Faherty photographed Hoary Elfin in 2010 at MAS Wellfleet Bay sanctuary; but when he searched the usual spots this year, no Hoaries were found. Butterfly enthusiasts are urged to visit Wellfleet Bay to help monitor this population of Hoary Elfin. Hoary Elfin is now less common, and less widespread, than Frosted Elfin. All populations on Cape Cod should be monitored. Hoary Elfin was reported from Myles Standish SF, West Tisbury SF, and Falmouth in 2011.



Hoary Elfin on Bearberry, Wellfleet Bay WS, 4-22-2010 Photo: Mark Faherty

BUTTERFLY OF THE YEAR – photographed by Mikayla Willard, age 12, our Club's youngest member!



Giant Swallowtail, South Hadley, MA, Aug. 11, 2011 Photo: M. Willard

Rearing the Giant Swallowtail

Bill Benner

The full story of "the great 2011 invasion" of Giant Swallowtails into Massachusetts will be told in the Spring 2012 issue of *Massachusetts Butterflies*. There were at least two flights of Giants here, and the second brood of adults left us with some offspring.

Giant Swallowtail caterpillars were reported from at least four locations: Whately (in my garden), Ludlow (photographed in the garden of Annie Brown), Northampton (Smith College gardens, reported and photographed by Jeff Rankin), and at Bartholomew's Cobble in Sheffield, where they were found on the usual host plant



Giant Swallowtail, second or third instar Sept. 3, 2011. Photo: B. Benner

in the wild, Northern Prickly Ash (*Zanthoxylum americanum*) (reported by B. Cassie 8/12/2011). In the three gardens, Giant Swallowtail caterpillars were found on Garden Rue (*Ruta graveolens*) and on the closely related Gas Plant (*Dictamnus albus*), also in the Rue family. Neither of these is actually native to North America.

In my garden here in Whately, a Giant Swallowtail was seen briefly on August 26; shortly after that I found two caterpillars on the Rue plants. I raised one inside and sleeved one outside. Both caterpillars pupated on September 22, 2011. After a few days of allowing them to stabilize, I put them in a cool cellar on September 24 and into the fridge on September 26, and I am hoping that they survive the winter!



Giant Swallowtail, probable fourth instar Sept 10, 2011. Photo: B. Benner



Giant Swallowtail fifth instar Sept. 18, 2011. Photo: B. Benner



Giant Swallowtail chrysalis Sept. 22, 2011. Photo: B. Benner

My Dear Friends, Massachusetts Butterfly Club

Members #2 and #3

Brian Cassie

Donna Lang and Lyn Lovell said "Yes!" when I asked them two decades ago if they would like to be members of the brand new Massachusetts Butterfly Club. Donna and Lyn always said "yes" to butterflies. Before most of the readers of this publication were interested in butterflies in any more than a passing fashion, these ladies were watching them, studying them in the field, raising them, and sharing them with everyone they could.

Lyn and Donna were fixtures on our block-bashing sessions for the Massachusetts Butterfly Atlas Project, traveling all over the state and making many exciting discoveries, including most of the early state records for Hessel's Hairstreak, Broad-winged Skipper, and other species. They visited classrooms and helped home-schooled students and talked to garden clubs and brought caterpillars and slides with them. They helped shape a generation of Massachusetts butterfly lovers.

Both of these women also traveled beyond Massachusetts borders as butterfly ambassadors. They were on the well-documented first MBC-NYCBC trips to Maine and the Dismal Swamp and immediately became favorites of the Metropolitan gang. They went along on butterfly/bird trips to Mexico, Costa Rica, Arizona, Venezuela, the Gaspe Peninsula, and Churchill, Manitoba and I have to say, those trips were all the more wonderful for their presence.

I am writing these words in praise of these two remarkable women

in *Massachusetts Butterflies* for two reasons: as a celebration of the 80th birthday of Lyn Lovell this fall and as a remembrance of the life of Donna Lang, who died of breast cancer in the late fall of 2009, much too young. People of their stature come along so seldom. We are so lucky to have Lyn and have had Donna in our circle of loved ones, friends, and butterfly-loving colleagues.



Submission of Articles, Illustrations, and Season Records

We encourage all members to contribute to *Massachusetts Butterflies*. Articles, illustrations, butterfly field trip reports, garden reports, and book reviews are all welcome, and should be sent to the Editor by September 15 for the Fall issue, and January 15 for the Spring issue.

Send NABA Fourth of July count results to Tom Gagnon tombwhawk@aol.com by **August 15** for inclusion in the Fall issue. Send your season sightings and records to Mark Fairbrother by **December 31** for inclusion in the Spring issue. Records may now be submitted via the online checklist and reporting form, which is available for download from our website http://www.massbutterflies.org/club-publications.asp

Contributions

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

Massachusetts Butterflies Advisory Board

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

Massachusetts Butterflies has been published continuously since 1993. Previous issues are viewable at <u>www.massbutterflies.org/club-publications.asp</u> after a three-year time lag. Print copies may be ordered for \$6 each. Send a check made out to Massachusetts Butterfly Club to Sharon Stichter at the address on the inside front cover.



Meadow Fritillary, Mountain Meadow, Williamstown 8-26-2011 Frank Model



Red-banded Hairstreak, Fannie Stebbins Sanctuary, 8-20-2011 Bo Zaremba