Massachusetts Butterflies No. 10



"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," "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 973-285-0890]

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Articles for Submission: We encourage all members to contribute to "Massachusetts Butterflies." Please send your notes, articles, or illustrations to Madeline Champagne and your field records to Tom Dodd, at the addresses noted above. Please remember that timely submissions make things much easier for editors. Thank you.

1997 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. Because of space limitations, 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."

Localities

BMBS Broad Meadow Brook Sanctuary in Worcester

GM Great Meadow in East Lexington

IRWS Ipswich River Wildlife Sanctuary in Topsfield

WBWS Wellfleet Bay Wildlife Sanctuary

WMWS Wachusett Meadow Wildlife Sanctuary in Princeton.

Those records of ovipositing, mating, and larvae received for 1997 are on file. Special thanks to the members who supplied these.

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Review of the 1997 Season

What an interesting butterfly year! We unofficially added two butterflies to the state list, which is remarkable, witnessed a significant flight of Common Buckeyes, found a good selection of southern strays, had a lot of good weekend butterfly weather in the summer and fall, increased the number of butterfly reporters across the state to 59 (resulting in better coverage in many areas, including the Connecticut Valley and Martha's Vineyard), and enjoyed 100 species of butterflies (compared with 94, 99, and 94 in the years 1994-1996, respectively).

Record numbers of a species at a given site were established for 21 butterflies: Mustard White, American Copper, Hickory Hairstreak, Atlantis Fritillary, Silver-bordered Fritillary, Meadow Fritillary, Pearl Crescent, Northern Pearly Eye, Little Wood Satyr, Common Ringlet, Common Wood Nymph, Monarch, Silver-spotted Skipper, Northern Cloudywing, Sleepy Duskywing, Wild Indigo

Duskywing, Common Sootywing, Least Skipper, Crossline Skipper, Hobomok Skipper, and Zabulon Skipper. We do not pretend to say that these are necessarily the largest populations that have ever occurred in the Commonwealth. In the past, whatever records of Massachusetts butterfly populations that may have been kept by collectors and observers were almost never published. Most of the data we have on relative population sizes have come to light in the past decade. It is true enough that the number of butterflies seen on a walk through a field does not usually equate to the size of the population, but we have to start gathering information somewhere. By the same token, information on earliest and latest flight dates is interesting and is mostly unavailable from before 1986, so our records are strongly biased toward recent observations. Anyone who would like a compilation of highest known state "populations" and /or early-late flight records, please send an s.a.s.e. to the secretary.

Swallowtails

With few exceptions, 1997 was an unremarkable year for our swallowtails. Blacks were generally uncommon, while the two Tiger Swallowtail species (almost no reporters distinguish between the two in their field notes) were found in adequate but not exceptional numbers, with 40 (presumably Canadian Tiger Swallowtails) at Monroe on June 27 the highest count by a wide margin. One Eastern Tiger Swallowtail was observed on the late date of October 6. Any double-digit accumulations of Spicebush Swallowtails are noteworthy, as were 15 at Crane WMA in Falmouth on July 14. There were two late summer Pipevine Swallowtails. Over the four years 1993-1996, there were four records in Massachusetts, all in July.

Whites and Sulphurs

Few reports of our "western whites" were received, but they included a high count of 10 Mustard Whites at October Mountain on May 26. A Checkered White was discovered by Tom Gagnon on the MBC September 20 field trip to Gooseberry Neck, Westport. This was the second consecutive late September sighting of this species at this exact locale - the two represent the only Massachusetts records in the past 50 years. The Checkered White was well seen by all 18 participants and well photographed by several. Cabbage Whites flew in abundance in the Newburyport-Plum Island area on August 9 and at the Katama fields on Martha's Vineyard in early September. There were also a great many Orange Sulphurs in evidence at Katama. Cloudless Sulphurs were a statewide no-show for the second year running.

Gossamer Wings

Three Harvesters were seen at two sites - not much of a 1997 harvest! On the other hand, it was a banner year for American Copper, with progressively larger populations found through the season at Northampton, World's End Reservation, Wachusett Reservoir, and finally Pasque Island. Just a few years ago, the largest number of American Coppers we had found at a single site was 177. By comparison, the four featured 1997 sites <u>averaged</u> 740. Bronze Coppers were once again found at the Wayland Community Gardens, where Richard Forster discovered a number in 1996, as well as on the southern Berkshires 4JBC. Bog

Coppers were not well reported.

Hairstreak numbers have been quite low for several years. This is obvious since hairstreaks are a popular group with butterfly watchers and they are actively sought out. Despite this, Coral, Acadian, Edwards', Banded, Striped. Gray, Juniper, and Hessel's hairstreaks were all reported in low-level numbers in 1997. The best showing of the lot was a total of 9 Grays at Wachusett Reservoir on August 3. The Hessel's Hairstreaks at West Hill Dam in Uxbridge were found by Cathy and Tom Dodd while they were conducting a season-long survey of the property. Two Early Hairstreaks at Rowe were a great find. The most surprising hairstreak news was that Hickory Hairstreaks were finally reported anywhere. It has been a long time since anyone has found or at least bothered to report Hickory Hairstreaks, but this year they were found on the Concord and Northern Worcester County Fourth of July Butterfly Counts[one each] and in Northampton (with at least 6) and possibly on Martha's Vineyard. Eight butterflies may not seem like a lot, but they are a million times plus eight higher than we have had in the recent past. Maybe 1998 will be an even bigger flight year for Hickory Hairstreak - the species has been known to stage occasional mega-flights.

The elfins are a delightful group of butterflies, especially for those who appreciate subtle coloration in nature. The big news in 1997 was that the Bog Elfin, a northern species scarcely considered possible to occur as far south as Massachusetts, was confirmed for the state. Remember that in 1996, on an MBC trip to Petersham, Richard Lent, Dave Small, and others found two butterflies that they strongly suspected to be this species. Subsequent searching in 1996 was unfruitful, but in 1997, additional researchers, including MBC member Jeff Boettner and Connecticut entomologist David Wagner, relocated the species and eventually confirmed its identification. We hope to have a separate article on this remarkable discovery in a future issue. Frosted Elfins made smaller headlines, being found in Great Meadow, East Lexington [see accompanying article] and at the Crane Wildlife Management Area in Falmouth.

We are still singing the blues over the azure identification question. There are a number of species in Massachusetts. If I read the situation correctly, the one that is still flying late in the season is the Summer Azure. Notable were one on September 12 at Holliston and one on September 16 at Mt. Tom. Turning to Silvery Blues, look how they have expanded their turf in the Commonwealth since the species was first discovered here in 1992. By 1995, the Silvery Blue was known from 17 locales. As of today, it is known from at least 28 locations in eight counties [Berkshire, Franklin, Hampshire, Worcester, Essex, Middlesex, Norfolk, and Bristol]. We encourage all of you to report every Silvery Blue you observe in 1998 so that we may track its progress southward.

Brush-footed Butterflies

A Gulf Fritillary was observed on October 4 & 5 on Nantucket [see accompanying article]. This was the first New England record of this marvelous subtropical species. Variegated Fritillaries were absent from Wachusett Reservoir for the first time in many years. There was not much of a Massachusetts flight. Atlantis Fritillaries were found in abundance at October Mountain in late July, but no great numbers of Great Spangled or Aphrodite fritillaries were observed. Tor Hansen accomplished the next-to-impossible by finding a Great Spangled Fritillary on Cape Cod - at North Truro to be exact. This is the first Cape Cod record this editor has heard about. Of the lesser fritillaries, the Meadow Fritillaries found in

Royalston were about as far east as the species is usually seen in the state. Twenty-eight at Greenfield was a high count. Silver-bordered Fritillaries were widely reported - note the big Rockport population [the state's largest known]. Checkerspot reports were unexceptional, except for the numbers in Easton on the 4JBC (see MB #9). The Pearl Crescent is one of our most widespread and wellknown butterflies. If there were ever a good candidate for a study of individual variation in a species, this would be it. Spend a little time in 1998 looking closely at Pearl Crescents; you will see what I mean. In 1997, Pearl Crescents were especially abundant at two sites: World's End Reservation in Hingham in June and Fannie Stebbins WLS in Longmeadow in September. Eastern Commas were well represented around the state this year, Question Marks not quite so well. Compton Tortoiseshell is a handsome butterfly and one that flies from early spring to fall. In 1997, the best Compton show was in the early spring; e.g., 10 at Mt. Tom and 23 at Ipswich River WS in late March. Mourning Cloaks got off to an even earlier start than the Comptons, with four reported in as many locales on February 22. The average early flight date for Mourning Cloaks from 1993-1997 is March 10. Of five double-digit records, the 17 found at Ipswich River WS in March and again at Broad Meadow Brook a week later in early April were the most outstanding. The only report of a Milbert's Tortoiseshell came from the yard of our MBC President, Lucky Madeline, but where are these butterflies in the rest of the state?

Red Admirals arrived remarkably early, on March 30 at Provincetown and Martha's Vineyard. The species was locally common this year. Note the numbers at Northampton, Heath, Chilmark, and Chappaquiddick Island as opposed to other locations. There were no major incursions of ladies, though American Lady made an early appearance at Truro (tied for earliest arrival date) and had a reasonable flight. Painted Ladies are typically uncommon in the state and 1997 was the norm. In the five years 1993-1997, there was one year with no Painted ladies (1993), one year with a large flight (1995), and 3 years with an average of a dozen reports (1994, 1996-7). It is this editor's opinion that not enough people know how to separate American from Painted ladies. Two "American Butterflies" articles on the subject failed to mention what I consider the critical characters. If your lady has solid black, separate round dots on the hindwing above and lacks the two large eyespots on the hindwings beneath, you have a Painted Lady. Otherwise, you do not. One or both of these features are easy to see on most ladies.

The timing and size of the annual flights of Common Buckeyes into Massachusetts varies considerably from year to year. For instance, in 1993, there were four sightings, all in September. In 1994, a widespread incursion occurred. beginning in mid-June and running to late October. In 1995, there were again but four sightings, this time from early June to early July. 1996 brought another diminutive flight, with five records from late August to late October. This past year, Common Buckeyes staged a significant flight into the state, beginning about the time of the 4JBC's and continuing until mid-October. Neither banded nor unbanded Red-spotted Purples caused much excitement this year, though the banded "White Admiral" form, normally rare in eastern MA, was evident at Gloucester and Topsfield, as well as Uxbridge and Holden. Hackberry and Tawny emperors were seen in their main haunt, Springfield's Forest Park, while the former was also observed at Mt. Holyoka. There were some excellent counts of Northern Pearly Eyes in July. Eyed and Appalachian browns are more colonial in nature and one should always be on the lookout for several once the first is found. Appalachian Browns were a Martha's Vineyard first in 1997.

Three of our commonest satyrs, Little Wood Satyr, Common Ringlet, and Common Wood Nymph, were found in outstanding numbers in the southeast. (See

the accompanying article about Little Wood Satyrs and Common Ringlets at Hingham's Worlds End Reservation.) Over the years, vague references have been made to flights of "thousands" of Common Wood Nymphs over coastal salt marshes, but no one has ever attempted to quantify the numbers. Alison Robb, to my delight, put a number to the Pasque Island flight - 2000.

1997 was a memorable year for Monarchs. They arrived at **nine** localities on the remarkably early date of April 7, ranged all over the state in healthy populations, and visited at least two traditional coastal locales [Eastern Point, Gloucester and Gay Head, M.V.] in large fall migratory movements. Matt Pelikan described the September 27 phenomenon at Gay Head:

"I visited the Gay Head Cliffs a bit after sunrise today with Vern Laux and Susan Yurkus. When we arrived, we noticed a diffuse cloud of Monarchs rising (mainly from a stand of pine trees) and moving out over the ocean on a moderate NNE wind. Trespassing enthusiastically, we found the branches of the stand of pine trees draped with bunches of Monarchs. A few branches I looked at closely had about 100 on them (a fairly close count); there were at least 20 such branches, for a total of 2000 on the trees (this number is well on the conservative side, since it includes only the butterflies in the main concentration). It seemed like about the same number were in the air, or had already soared out of sight. So 4000 is a rough, low-end estimate but probably accurate to within a factor of two or three. In any case it was an amazing concentration of Monarchs, far more than I've ever seen at one time before. Vern remarked that this phenomenon occurs almost every year at Gay Head. The birding was mediocre today, but the Monarchs made the trip more than worthwhile!"

For another perspective on the same event, here are two paragraphs from Vernon Laux's "Butterfly Beat" column of September 30 in The Vineyard Gazette:

"Dawn on the 27th began with Monarchs rising from trees and shrubs and heading straight up and out over the water in a south-southwesterly direction. In Gay Head there appeared to be a constant swirling cloud of butterflies emanating from the cliff face and rising up and away as far as one could see in binoculars. In nearby trees there were thousands of roosting Monarchs and it created a sight that was at once mesmerizing and unforgettable.

The flight of these butterflies on the 27th was impressive and dealt with many thousands and probably tens of thousands of these hardy insects. Counting them is problematical, for a variety of reasons, as they swirl up from all directions. Many individuals circled around flapping against the light northeast wind, gaining altitude, and letting the wind aid their progress. Many went straight up and out of sight. Once at altitude they basically soar and let the tail wind speed their progress south and west. They act just like migrating hawks."

Skippers

Several very good populations of Silver-spotted Skippers were found in 1997, including four numbering over 40. All of the Wachusett Reservoir record count of 90 were in a few hundred yards of shoreline, feeding mainly at dogbane. Last year's high count here was 71. All seven of the Massachusetts records for Long-tailed Skipper have come in the last decade, with five from 1995-1997. The species' presence in the state may have been overlooked previously. The August 24 sighting at Ipswich River WS was the earliest to date. Northern Cloudywings are far-ranging butterflies - you'll see lots of them in southeastern Arizona, for instance - but they are not normally found in high concentrations in

Massachusetts. The 56 noted along a Mendon gas line was incredible. Dreamy, Juvenal's, and Horace's duskywings were reported in average numbers. The totals of 10 Sleepy Duskywings at Truro on May 5 and 113 Wild Indigo Duskywings at Crane WMA in Falmouth on August 9 were Cape Cod, as well as Massachusetts, high counts. One very late Wild Indigo Duskywing was observed at Holyoke on October 13.

Common Sootywings put in a nice show at Northampton in July, Least Skippers are most definitely a colonial species. The outstanding 1997 colony was at Evan's Field in Provincetown. The 75 reported from Cuttyhunk was another good record. By the way, it was good to get some records from the Elizabeth Islands this year. European Skippers were abundant and flew later into July than usual. The big Mansfield colony was a bust this year, although the cause is uncertain. As far as we know, Fiery Skippers have been found in Massachusetts on only seven occasions, six in this decade. There were two Fiery Skippers identified in the state this year, both in October, both at Mass. Audubon sanctuaries - Arcadia and Broad Meadow Brook. With Silvery Blue and Fiery Skipper, Broad Meadow Brook Sanctuary now has 74 species of butterflies recorded. It is exciting to have an ever-expanding corps of competent observers to track down and identify rarities such as the Fiery Skippers. We tend to think of Leonard's Skipper as a September butterfly, but this late season resident was in evidence from August 12 to October 6 in 1997. With good numbers statewide and a long viewing season, Leonard's should have gotten on to many butterfly watchers' lists. Cobweb Skippers flew until mid-June, which is late for this springtime species. Richard Hildreth found 26 Crossline Skippers on his follow-up to the Mansfield-area 4JBC; that is more than anyone has ever found anywhere in the state. A female Sachem was a great surprise at West Hill Dam in Uxbridge. Only the fifth state record [the other four were all in 1995], it was identified by the only person to have seen two of them in Massachusetts - Tom Dodd. Another rare butterfly in Massachusetts, though perhaps resident and often overlooked, is the Zabulon Skipper. Tom Gagnon and company found as many as 13 in the Lower Connecticut Valley, their state stronghold. Zabulon Skippers are double-brooded, while the similarly-marked Hobomok Skipper has a single flight period in June and early July. Dun Skippers were found in big numbers: four counts over 40, with a high of 73 at Wachusett Reservoir in August. There was a very late Dun seen on September 12. Pepper and salt Skipper was fairly widely reported, although there were no reports from southeastern MA as in 1996. A single Common Roadside Skipper was detected at Northbridge.

BLACK SWALLOWTAIL

MAY	24	Northampton	3	TG
	28	IRWS	3	FG
JUN	12	Belchertown	3	CK
,	14	Mansfield	4	MBC
JUL	29	Holliston	10	RH
	31	Middleboro	4	DSm, DPr
AUG	9	Newburyport; GM	4; 3	DSm, DPr; MPe
SEP	9	Rowe	1	DP
	12	Katama, M.V.	6	VL
	18	Mt. Tom Reservation	1	TG
	20	Westport	2	MBC

CANADIAN TIGER SWALLOWTAIL EASTERN TIGER SWALLOWTAIL

JUL SEP OCT	18 9 20 25 27 28 29 11 26 17 28 6	West Hill Dam, Uxbridge Petersham; Royalston Sheffield Cape Ann Monroe Gill Hawley; Royalston Prescott Charlton Mt. Greylock Chilmark Royalston	6 10; 5 11 6 40 15 13; 11 16 12 1		CD, TD DSm; CK AR DS, CT DP DSm TG; CK DSm RH AR AK CK	
		SPICEBUSH SWALLOY	VTAIL			
JUN	27	IRWS	1 4		WT	
10.44	28	Gill North Oxford	4 6		DSm \ CK	
JUL	5 : 14	Crane WMA, Falmouth	15		AR&co.	
	16	Cape Ann	7		DS, CT	
	26	Chariton; Saugus	6; 1		RH; CJ	
AUG	15	Great Blue Hill, Milton	3		BC	
SEP	17	Webster	1		RH	
OLI	30	IRWS	2		CS	
OCT	3-12**	Cape Ann	1		DS, CT	
		PIPEVINE SWALLO	WTAIL	·		
AUG	8	Sandwich	1		EW	
SEP	6	Stoughton	1		PM:	
<u> </u>					•	
		MUSTARD WHITE				
MAY	26	October Mountain	10+		RP	
,		WEST VIRGINIA WE	IITE			
MAY	2	Greenfield	3		DP	
	23	Mt. Greylock	7.		BC	
·	CHECKERED WHITE					
SEP	20	Gooseberry Neck, West	port	1	TG & MBC	
CABBAGE WHITE						
APR	5	BMBS	1		NW	
ACIB	7	Lexington	1		MPe	
	•				-	

JUN JUL	27 29 14	Northampton Belmont WBWS	7 50 50+	TG MPe KM			
AUG	9	Cape Ann	67	DS, CT			
	9	Plum Is., Newburyport					
	31	Truro	60	DSm, DPr			
SEP	1	Katama	500+	AK			
OCT	1	Penikese Island	19	AR			
	11	Westport area	101	BC			
	30	Woods Hole	1	AR			
NOV	2	Hingham	1	SJC, BC			
	- 10	West Tisbury	4	MPe			
	CLOUDED SULPHUR						
APR	29	Cape Ann	1	DS, CT			
MAY	13	Mendon	1	CD, TD			
JUL	6	Concord	30	MPe			
AUG	3	Milford	15	RH ,			
	9	Cape Ann; Plum Işland	d 12; 25	DS; DSm			
	12	Holliston	16	RH			
	24	Gill	25	MBC-ABNC			
0==	30	Katama, M.V.	abundant	MPe			
SEP	. 6	Athol	35	DSm			
^~	12	Quabbin Area	80	DSm			
OCT	8	Middleboro	8 .	BC			
•	11	Westport area	56	BC			
MOV	31	Woods Hole	1	AR			
NOV	3	Truro	1	JS			
* ,	11	Cape Ann	1	DS, CT			
		ORANGE SULPHU	<u>IR</u>				
MAY	14	Westport	1	BC			
	18	West Hill Dam, Uxbridg	ye 1	CD, TD			
AUG	9	Falmouth; Newburypo	irt 22; 20	AR; DSm			
	23	Hadley; WMWS	15; 13	CK; TD & co.			
SEP	1	Katama	1000+	AK			
	2	Orange	15	DSm			
• • • •	27	West Hill Dam, Uxbridg		TD			
OCT	8	Middleboro	28	BC			
1101	11	Westport area	96	BC			
NOV	3	Truro	4	JS			
	10	West Tisbury	c.20	MPe			
	11	Cape Ann	1	DS, CT			
		HARVESTER					
JUL	5	Pepperell	1	JS			
•	20	Athol	2	MP			
		4 - 1	-	****			

		AMERICAN COPPE	R	
APR	15*	Truro	. 1	JS
	27	Chilmark	1	AK
MAY	18	Northampton	105	TG
	24	Northampton	308	TG
JUN	9		550	BC
JUL	13		612	BC
	23	IRWS	55	FG
007	27-31		500	AR
OCT	7 11	Rowe E. Longmeadow; Milford	5	DP DU
	12	Chappaquiddick Is.; Nor		KP; RH
	22**	Woods Hole	1 1	MPe; TG AR
		770005 1 1010	ı	79F1
		BRONZE COPPER	3	
SEP	20	Wayland Comm. Gardens	s 2-3	MPe
		BOG_COPPER		
JUN	23	Lunenburg	3+	JS
JUL	8 12	Cape Ann	22	DS, CT
	13	Sterling Falmouth; M.V.	6 16; 13 AR 8	TD,CD
	25	Warwick	25	R co.; VL, SY
	27	Mansfield	3	DSm PH
			J	
		CORAL HAIRSTREA	<u>AK</u>	
JUL	13	Falmouth	11	AR & co.
	19	GM; M.V. State Forest	2,2	MPe; AK
	27	Mansfield	4	RH
	30	BMBS	2	GH, JL
AUG	23	West Tisbury	1 .	MPe
		ACADIAN HAIRSTRE	EAK	
JUL	.6	GM	1	MPe
	19	Taunton	3	BC
		EDWADDO' UAIDOTO		
		EDWARDS' HAIRSTR	EAR	
JUN	28	Woburn	2	MPe
JUL	8	GM	7	MPe
	9	Waltham	2	CD :
	19	M.V. State Forest	15-20	AK
4110	26	West Boylston	3	TD,CD
AUG	23	Tisbury	2	MPe

BANDED HAIRSTREAK

JUL	1 5, 13 9 10 13 20	Southborough Cape Ann Waltham Northampton Falmouth IRWS	1 3, 3 3 1 5	JS DS, CT CD TG AR & co. VO
		HICKORY HAIRSTRE	<u>AK</u>	
JUL	6	Northampton	6	TG & co.
		STRIPED HAIRSTREA	<u>ık</u>	
JUL	5 13 17 19 26 27 8-14	Arlington IRWS WMWS Tisbury October Mountain Mansfield; Pittsfield GM	1 3 3 1 4 3; 4	MPe FG v.o. AK TG RH; TG MPe
	~	JUNIPER HAIRSTRE	<u>AK</u>	
JUN JUL	9 10 26	Crane WMA, Falmouth Salt Pond Sanctuary, Fair Middlesex Fells Reservation		JS AR, KW MPe
·		HESSEL'S HAIRSTRI	EAK	
MAY (31; JUN 15	West Hill Dam, Uxbridge	1; 1	TD, CD
		BROWN ELFIN		
APR MAY	15 26 8-27 17 18	Truro; WBWS Cape Ann Pamet Valley, Truro [max North Truro BMBS	7; 2 3 c. 30+ on 5-8] 6 4	JS DS, CT JS BC HT, CP
		HOARY ELFIN		
MAY	5-27 17	Pamet Valley, Truro [mat Provincetown	x. 13+ on 5-5] 1	JS BC

FROSTED ELFIN

JUN	14- JUNE 6 18 28 31 8 9 11	BMBS Turner's Falls Sudbury GM Foxboro Crane WMA, Falmot Lexington HENRY'S EL	2	GH & co. TG, MF TD MPe BC JS MPe		
	18-24 24-26	West Hill Dam, Uxbr GM	1	TD, CD MPe		
JUN	8 · ,	Crane WMA, Falmou		JS & co.		
		BOG ELFI	<u>N</u>			
JUN	?	Petersham	1 .	JB, DWa		
	EASTERN PINE ELFIN					
APR	20	Hopedale East Long,eadow	1	TD, CD KP		
MAY	29 8-27	Pamet Valley, Truro	[max. 5 on 5-8]	JS		
JUN	18 8 23	Uxbridge; Turner's F Crane WMA, Falmou WBWS		D, CD; TG, MF JS JS		
		EARLY HAIRS	TREAK			
JUN	4 8	Rowe Mt. Greylock	2 6	DP TG		
		GRAY HAIRST	REAK			
MAY JUL AUG SEP OCT	18 12 27 3 20 5-22 27 4 6-7	Uxbridge; Turner's F Wachusett Reserve Mansfield Wachusett Reserve Gooseberry Neck, V various M.V. locale West Hill Dam, Uxbr Mendon Woods Hole Westport EASTERN TAILE	ir 4 5 ir 9 Vestport 1 s 4+ idge 1 1 1	TD,TG,MF TD, CD RH TD, CD MBC MPe TD TD TD AR BC		
MAY	2-29	Cape Ann	[max. 59 on 5-18]	DS, CT		
147(7.)	13	Mendon	7	CD, TD		

JUN AUG SEP OCT	6 28 3 5 20 27 5	Hom Pond, Woburn IRWS Milford West Tisbury Westport West Hill Dam, Uxbridge Cape Ann	3	MPe GV RH MPe MBC TD DS, CT
	9 10 12 14	Woods Hole Edgartown Northampton Lakevile	1 5 1 2	AR MPe TG SS, MP
	SPRI	NG AZURE AND OTHER A	AZURE SP	ECIES
MAR APR MAY JUN JUL SEP	30 16 27 18 9 12 12 16	Duxbury Hopedale Hopedale; Falmouth IRWS Falmouth Cape Ann Holliston Mt. Tom	1 2 42; 25 55 10 5 1 2	FB CD, TD TD, CD; BC & co. FG JS DS, CT RH RP
		SILVERY BLUE		
JUN	18 26 1-15 8	Athol	2; 2; 1 2	DSm, TG; RP DSm
JUL	20-27 9**	WMWS Waltham	1-2 1	CD C
		GULF FRITILLAI	RY	
ОСТ	5-6	Nantucket VARIEGATED FRITI	1 LLARY	JSt, JSt
AUG SEP	17 2-17	Cape Ann	4 [max. 3 on 9	DS, CT -6] DP
		GREAT SPANGLED FR	ITILLARY	٤.
JUL AUG SEP	11 26 7 26 6 15	Prescott Charlton North Truro Leverett Stoughton; Heath IRWS Charlton	8 7 1 4 6; 1 2	DSm RH THa CK RM; DP RN RH

	APHRODITE FRITILLARY					
JUL	5 12	Oxford Florida-Savoy	5 15	CK DP		
SEP	26 5	Charlton IRWS	8 1	RH CS		
OL.	12	Heath	9	DP		
	15	Rowe	2	DP		
	. 17	Charlton	1	RH		
		ATLANTIS FRITIE	LARY			
JUL	12	Florida-Savoy	10	DP		
	26	October Mountain	101	TG		
	26	Charlton	1	RH		
	SILVE	R-BORDERED FRI	TILLARY			
MAY	26	Northboro	4	CD, TD		
JUN	14	Sudbury	6	TD, CD		
	21 22	Athol Rockport	7 67	DSm DS, CT		
	23	Charlemont	5	DB, C1		
	28	Gill	8	DSm		
JUL	19	Taunton	10	BC		
	20	Mendon	10	∞		
	23	Heath	7	DP		
AUG	17	Rockport	266	DS, CT		
SEP	17	Heath	1	DP DC ++		
	20 27	Taunton	6	BC, LL RH		
OCT	4	Milford Mendon	2	TD, CD		
001	T	MENDOLI	-	10,00		
		MEADOW FRITIL	LARY			
JUN	17	Heath	1	DP		
	28	Gill	1	DSm		
	29	Royalston	5	CK		
JUL	5	Greenfield	28	DP		
SEP	12	Heath	2	DP		
	N 2.	HARRIS' CHECKE	RSPOT			
JUN	16	Heath; Stockbridge	1; 2	DP		
יייסטע (19	WMWS	1, 2 8	JC D		
	20	Prescott	5	DSm		
	21	Athol	2	DSm		
	24	BMBS	16	JM & co.		
	27, 28	Milford	14, 10	PH .		

PEARL CRESCENT

MAY	18	West Hill Dam, Uxbridge 4	CD, TD
	27	Sudbury 33	TD
JUN	8		CD; DS, CT
	9	World's End Res.; Hardwick 1600; 90	BC; DSm
JUL	27	Mansfield 220	RH
AUG	8	Wachusett Reservoir 71	TD, CD
AUG	17	Cape Ann 170	DS, CT
	23	Tisbury/W.Tisbury 100+	MPe
		Cuttyhunk Island 30	JS
055	30		TG
SEP	19	201/311022011	TD, CD
OCT	4	Mendon 3 Chilmark 1	AK
	5	Office the state of the state o	
	12	Chappaquiddick Is.; Northampton 1; 1	MPe; TG
		BALTIMORE CHECKERSPOT	
JUN	23	WBWS 2	KM
JUL	3	Marshfield 21	BC
	8	GM 1	MPe
	13	Falmouth 7	AR & co.
	19	Tisbury 6+	AK
	26	Chariton 1	RH
		QUESTION MARK	
MAY	14	South Dartmouth 3	BC
JUN	9	World's End Res. 5	BC
SEP	16	Bolton Flats WMA 2	RH .
	6	Chilmark 1	MPe
OCT	0	Giningir. 1	1111 0
		EASTERN COMMA	
1445	00	W. Newbury; Mt.Tom; IRWS 1; 2; 2	SB; TG; FG
MAR	28 30	Falmouth; Hopedale 1; 1	AR; TD, CD
		•	JM
APR	7	BMBS 4 WBWS 1	fide JS
MAY	12	· · · · · · ·	
JUN	29	Woods Hole; Belmont 2; 2+	AR;MPe RH
JUL	21	Northbridge 2	
AUG	2	Longmeadow 9+	KP, RP
	23	Holyoke 2	CK
SEP	16	Longmeadow 5	TG
	17	Chariton 2	RH
	27	West Hill Dam, Uxbridge 3	TD
OCT	10	Northbridge 1	RH
	14	IRWS 1	FG
NOV	2	Norwood 1	BC & co.

RED-SPOTTED PURPLE [unbanded form; aka Red-Spotted Purple]

JUN	15	Oxford	3	СК
	20	Prescott; WMWS	7; 5	DSm; JC
AUG	3	Wachusett Reservoir	4	CD, TD
050	14	Rutland	6	DSm TC
SEP	16	Mt. Tom Reservation	2 1	TG BC
	17	Mt. Greylock	ŧ	ьс
		[banded form: aka White Adr	miral]	
JUN	14	West Groton	1	JS
	27	Monroe	8	DP
	29	Hawley	6	TG
JUL	20	Royalston	3	DSm
AUG	9	WMWS	1	1C
	19	IRWS	1	VO
•	23, 24	Cape Ann	1, 1	CT, DS
	24	West Hill Dam, Uxbridge	1 .	CD, TD
SEP	6	Holden; Mt. Watatic	1; 2	CD, TD; BN
	12	Cape Ann	1	DS, CT
	17	Mt. Greylock; Heath	1; 1	BC; DP
		VICEROY		
JUN	22	Orange	6	DSm
AUG	3	Milford; Wachusett Res.	11; 17	RH; TD, CD
	10	BMBS	6	DSm, DPr
	17	Cape Ann	8	DS, CT
SEP	6	Holden; Heath	6; 6	CD, TD; DP
	17	Greylock Glen, Adams	4	BC
OCT	9	Westport	2	RH, LL
		HACKBERRY EMPER	OR	
JUN	28	Forest Park, Springfield	2	TG
AUG	8	Forest Park, Springfield	1	TG
	23	Mt. Holyoke	1	CK
		TAWNY EMPEROR		
AUG	2-8	Forest Park, Springfield	1	TG & co.
		NORTHERN PEARLY	EYE	•
				. 80
JUN	30	Ponkapoag Bog, Canton	1	BC
JUL	1	Southborough	1	JS
	- 6	East Longmeadow	2	KP
	11	Prescott	6	DSm TG
	20, 26	October Mountain	9, 1 3	TG -
	21	Northbridge	3	RH

EYED BROWN

JUN JUL	27 4 6 9 19 20 23 29	Milford Athol IRWS Petersham GM October Mountain BMBS Milford GM	1 9 1 5 10 2 2 2 1-2	PH DSm SG DSm MPe TG GH, MB PH MPe	
		APPALACHIAN B	ROWN		
JUL SEP	5 12 13 19 23 26 13**	BMBS IRWS Falmouth Tisbury Holliston GM Sharon	1 3 9 10+ 2 2	BWa, RWa SG AR & co. AK RH MPe BC	
LITTLE WOOD SATYR					
MAY JUN JUL AUG	31 3 9 12 13 14 15 16 2	IRWS Holliston World's End Res. Boylston Waltham West Barnstable Northbridge Cape Ann Cape Ann	1 2 7300 60 62 80 35 22	FG RH BC CK CD AR RH DS, CT DS, CT	
		COMMON RING	ILET		
MAY JUN AUG SEP	24 9 11 12 14 15 22 27 14 31 12 14 20 7	Uxbridge; Northampto World's End Res. Charlemont Prescott Sudbury; Holliston Uxbridge; Cape Ann Orange WMWS IRWS Heath Heath; Prescott Cape Ann Uxbridge	3000 100 90 85; 36 85; 37 150 100 195 100 200;15	TD; TG BC DP DSm CD, TD; RH CD, TD; DS, CT DSm JC FG DP DP; DSm MBC TD	
OCT	<i>f</i> .	Heath; Rowe	2; 4	DP	

COMPTON TORTOISESHELL

MAR	28	Stoughton; Mt. Tom; WMV	VS 1;10;2 F	M; TG; v.o.
	28	Westwood; Sudbury	1; 1	DW; RW FG;TD, CD
	30	IRWS; Upton, Mendon, Ho	pedale 23,3,5,6 pm] 1	SB
APR	1	Acton [during 30" snowsto	71111 1 1	BW
	6	Westboro	3	SB
	14	Crooked Pond, Boxford	3	DSm
JUL	7	Prescott	1	CJ
	17	Belmont	1	TG ·
OCT	11	Prescott	1	RH
	12	Holliston IRWS	1	FG
	14	invo	•	
		MOURNING CLOAK	<u> </u>	
FEB	22	Cape Ann; BMBS; Northb	ridae: Arlinaton 1	; 1; 1; 1
1 120	£.6-	oupor and one of the	DS, CT; G	H; RH; MPe
MAR	27	Sudbury	4	TD .
148.//. 5	28	BMBS; Mt. Tom	8; 13	GH; TG
	30	IRWS; Hopedale, Mendon		7;12,5; 5
			FG; TC	CD; DS,CT
APR	7	BMBS; Heath, Deerfield	17; 3, 3	3H & co.; DP
	14	Crooked Pond, Boxford	3	SB
	20	Great Blue Hill; Hardwick	4; 5	BC; DSm
	26	Arcadia WS	11	BC
	27	GM; Horn Pond, Woburn		MPe
MAY	1	Franklin	3	BC
	8	BMBS	4	BC
AUG	19	Southwick	3	CK
OCT	6	Katama, M.V.	2	MPe
NOV	3	IRWS	1	FG
	•	MILBERT'S TORTOISES	SHELL	
007	10.10	Foxboro	1	MC
OCT	12-13	FUXDOIO	•	
		RED ADMIRAL		
MAR	30*	Provincetown; M.V.	1;1	BN; VL
APR	7	West Tisbury	1	PJ
	15	Florence	1	TG
MAY	. 26	Sterling	. 1	TD, CD
JUN	30	Auburn	4	BW
JUL	4	Northampton	10	TG
AUG	31	Heath	17	DP
SEP	25	Chilmark	20	fide VL AR; DS, CT
OCT.	6	Woods Hole; Cape Ann	1;1	MPe
	7	Chappaquiddick Is.	14+	RH, LL
	9	Westport	2 1	AK
	12	Chilmark	ŧ	ZII.

AMERICAN LADY

APR	15*	Truro 1	JS
MAY	4	IRWS 1	FG
	14	Cape Ann 9	DS, CT
** **	18	West Hill Dam, Uxbridge 7	CD, TD
JUL	12	Clinton 18	TD, CD
	13	Crane WMA, Falmouth 13	AR & co.
4110	23	Heath 15	DP
AUG	3	Chilmark 30 Heath 18	fide VL DP
SEP	2		
	18	Cape Ann 13 Gooseberry Neck, Westport 15	DS, CT MBC
○	20 1-22	Cape Ann [max. 10 on 10-6]	DS, CT
OCT		Woods Hole 8	AR
	6 7	Chappaquiddick Is. 10+	MPe
	9	Westport area 8	RH, LL
	23	Woods Hole 1	AR
NOV	23 4	IRWS 2	FG
140 A	4	111440	1 4
		PAINTED LADY	
JUN	4	Horn Pond, Woburn 1-2	MPe
JUL	22	Sherborn 1	RH
SEP	1,5,22	Edgartown 1,1,1	MPe
	11	Easton 1	BC
	12-13, 28	Cape Ann 1, 2	DS
	14	Rockport 1	BC
OCT	5	Florence 1	JB
	9	Westport 1	RH, LL
	*	COMMON BUCKEYE	
		All a Registration of the Control of	
JUL	14	World's End Res. 1	BC
	26	Uxbridge; Hopedale; Sterling 5;1;1	TD, CD
	27	Mansfield 3	RH
AUG	2	Rockport 1	DS, CT
	3	Milford 3	RH ·
	9	Crane WMA, Falmouth 1	BC
	10	BMBS; WBWS 1; 1	DSm; JS
	23	Athol 1	DSm, DPr
	26	No. Momonoy Island 1	JS
	27	So. Monomoy Island	JS
	31	Truro 1	JT
SEP	1-30	all towns on M.V.; max. 7 @ Katama 9-22	MPe
	2	Easton 14	BC TD
	6	Wachusett Reservoir 8	CD, TD
	20	Uxbridge; Westport, So. Dartmouth 3; 2, 1	
	21	Morris Is., Chatham 2	JS
OCT.	27		RP & co.; DS
OCT	9	Westport area 5 Chilmark 1	RH, LL
	12.	Chilmark 1	MPe

COMMON WOOD NYMPH

JUL	14	Crane WMA, Falmor	uth 151	AR&co.
002	19	West Hill Dam, Uxbr	idge 63	TD,CD
	27-31	Pasque Island	2000	AR
AUG	9	Newburyport	85	DSm, DPr
SEP	7	Rowe	10	DP
U	14	Cape Ann	5	MBC
	20	Heath	1	DP
	21	Squibnocket, M.V.	1	AK

MONARCH

APR	7 II	W.Tisbury; Vineyard Haven; M.V	/. ferry; Sa	indwich; Falmouth;		
Fastha	Eastham; Coast Guard Beach; N. Middleborough; Lakeville 1;1;1;1;1;1;1;1					
	P.J: AB: VL: PT: WL; AT; CC; M M; M M					
7	11	Chatham	1 -	JS		
	13	Wareham	1f.	BC		
	27	Falmouth	1m.	BC		
JUN	29	Marshfield	30+	TR		
JUL	7	Prescott	46	DSm		
001	23	Heath	50	DP		
AUG	. 17	Longmeadow	42	KP & co.		
,,,,,	24	Gill	24	DSm		
	30	Colrain	120	DP		
	31	Heath	75	DP		
SEP	1	Rowe, Monroe	75, 50	DP		
OL.	12	Prescott	42	DSm		
	24	Eastern Pt., Gloucester	2000+	DS, CT		
	27	Gay Head, M.V.	4000	MPe, VL, SY		
OCT	4	Amherst	45	TG		
	•	[note : counted flying over UMass	-UNH footb	all game]		
	7	Eastern Pt., Gloucester	300+	DS, CT		
	9	Westport area	211	RH, LL		
	12	Northampton	25	TG		
	18	Gill	2	DP		
NOV	5	Cape Ann	1	DS, CT		
	10	West Tisbury	1	MPe		
	. 3	in a 7 • · · · ·				

SILVER-SPOTTED SKIPPER

MAY	30	Sudbury	1	στ
JUN	28	Gill	60	DSm
JUL	1	Florence	14	TG
JOE	3	Plymouth	14	BC
•	4	Northampton	42	TG
	13	Wachusett Reservoir	90	LL, BC
	13	Crane WMA, Falmouth	47	AR & co.
	26	Charlton	26	RH
AUG	2	Longmeadow	12	KP & ∞.
AUG	3	Wachusett Reservoir	44	TD,CD

SEP	19 21 22	Longmeadow Woods Hole IRWS	1 1 1	TG AR FG		
÷		LONG-TAILED SKIPP	<u>ER</u>			
AUG	24	IRWS	1	FG		
•		HOARY EDGE				
JUN	25	North Grafton	1 .	DPr		
	26	BMBS	5	GH, JM		
JUL	5	GM; Woburn	1; 1	MPe		
	12	Wachusett Reservoir	3	TD & co.		
	26	Charlton	4	RH		
	<u> </u>	SOUTHERN CLOUDYW	ING			
MAY	26	Woods Hole	2	AR		
JUN	21	Westover AFB, Chicopee	2	TG		
	27	BMBS	1	GH, JM		
	28	Milford	1	RH.		
JUL	12	Clinton; Sterling	1;1	CD, TD		
	NORTHERN CLOUDYWING					
MAY	31	BMBS	1	GH		
JUN	8	Mendon	56	CD, TD		
	11	Lexington	7	MPe		
	. 12	Boylston	6	CK		
	15	Cape Ann	10	DS, CT		
	22	BMBS	11	GH & co.		
JUL	26**	Sterling	1	TD, CD		
		DREAMY DUSKYWIN	<u>G</u>			
MAY	18	Uxbridge; Concord	1; 1	CD, TD; JS		
*****	22	Cape Ann	1	DS, CT		
	31	GM; Turner's Falls	5+;2	MPe; TG		
JUN	6	Rowe	4	DP		
	8	Mendon	6	CD, TD		
	9	Crane WMA, Falmouth	7+	JS		
	15	Oxford	3	CK		
	16	Cape Ann	2	DS, CT		
	22	BMBS	3	GH & co.		
		SLEEPY DUSKYWIN	<u>G</u>			
MAY	Ę.	Truro	10	JS		
IVI/A T	5	· ·	·1	BC		
	18	Sharon		JS		
	27	Wellfleet, Truro	1, 1	BC		
	31	Crane WMA, Falmouth	3	DC.		

JUVENAL'S DUSKYWING

APR	20 26	West Hill Dam, Uxbridge Tisbury	1	CD, TD MPe
MAY	5	BMBS	7	GH
	14	Cape Ann	9	DS, CT
	18	Uxbridge; Turner's Falls		D, TD; TG, MF
	20	BMBS	20	CP
	21	Falmouth	15	AR RH
JUN	3	Holliston	10 1	RH.
,	28	Milford	,	1 11 1
		HORACE'S DUSKYWI	NG	
JUN	14	Sharon	1	MBC
JUL	27	Mansfield	1	RH
	31	Middleboro	1.	DSm, DPr
	<u>y</u>	VILD INDIGO DUSKYV	VING	
MAY	18	BMBS	3	HT, CP
141/-()	23	Sudbury	1	TD
	31	Turner's Falls; GM	1; 2	TG; MPe
JUN	8	Mendon	8	CD, TD
00.1	9	Waltham; Falmouth	12; 6+	CD; JS
JUL	27	Mansfield; BMBS	20; 5	RH; DSm
AUG	8	GM	4-6	MPe
,,,,,,	9		13	AR, BC
	23	Tisbury; West Tisbury	1; 2	MPe
OCT	13**	Holyoke	1	RP
	÷, ·	COMMON SOOTYWIN	<u>v</u> G	
MAY	26	Clinton	1	TD & co.
148-7 1	29	West Bridgewater	1	BC
\$	31	Upton	1	TD, CD
JUN	15	Oxford	2	CK
JUL	2	North Grafton	3	DPr
	19	Northampton	17	TG
	31	Middleboro	2	DSm, DPr
AUG	10	Grafton	3	DSm, DPr
		ARCTIC SKIPPER		
JUNE	15	Sudbury	2	MPe
	22	BMBS	1	GH&∞.
		LEAST SKIPPER	ν	•
JUN	15	West Hill Dam, Uxbridge	13	CD, TD
AUG	18	Woods Hole [one garden]		AR
	19	Bourne Farm, Falmouth	42	AR, AB, TH

SEP	24 29 30 31 7 14 16 2	West Tisbury Cape Ann Cuttyhunk Island Provincetown; Truro Uxbridge; Katama, M.V Cape Ann Bolton Flats WMA Cpae Poge, M.V. Eastham	/. 4;3 33 3 2 6+	SY DS, CT JS C; DSm, DPr TD; MPe MBC RH AK BN
		EUROPEAN SKIP	<u> 1511</u>	
JUN	6 26 28 29 5 13 20 23	BMBS Cape Ann Turners Falls Rock Meadow, Belmont Hopedale Windsor Chilmark Heath Mt. Greylock	1 374 450 thousands 2231 300+ 1 5	BC DS, CT DSm MPe CD, TD TG AK DP BC
		FIERY SKIPPER	3	
OCT	7 20	Arcadia WLS BMBS	1m. 1	TG JM
		LEONARD'S SKIPE	PER	
AUG	12 24	Athol Greenfield; Uxbridge; W		DSm TD CD: TO
SEP	25 26 28 3 5 6	Florence Leverett Northfield Foxboro Oak Bluffs - 3 sites Holden Sherborn	1 6 2 1 13, 11, 2 1	TD, CD; TG TG CK CK BC MPe CD, TD RH
OCT	17 6	Chariton Katama, M.V.	2 1	RH MPe
		COBWEB SKIPPER		
MAY	24 24 26 27	Florence; GM Cape Ann Sterling-Clinton Truro	12; 7 2 14 1	TG; MPe DS, CT TD & co. JS
JUN	31 8-9 15**	BMBS Crane WMA, Falmouth Northbridge	7 1 3	JS JS PH

<u>INDIAN SKIPPER</u>

MAY JUN	31 9 11 12	GM Crane WMA, Falmouth Lexington, GM; Charlemo Milford	5	MPe JT MPe; DP RH
	15	Sudbury	2	MPe
		PECK'S SKIPPER		v
MAY	26	Mansfield	1	BC
JUN	7	Upton	15	TD,CD
	10	East Longmeadow	19	KP
	12	Milford	31	AH
AUG	24	West Hill Dam, Uxbridge	16	TD, CD
SEP	22	Woods Hole	1 1	AR
		TAWNY-EDGED SKIP	PER	
MAY	24	West Hill Dam, Uxbridge	4	TD
JUN	8	Mendon	11	CD,TD
	12	Milford	3	RH
	14	East Longmeadow	30	KP
AUG	10	Westwood	24	DW
	23	Bourne	9	AR
SEP	15	Edgartown	1	MPe
		CROSSLINE SKIPPI	<u>ER</u>	
JÜL	8	GM	1	MPe
00=	27	Mansfield	26	RH
AUG	3	Milford	1	RH
		LONG DASH	,	
JUN	9	Florence	3	TG
	14	Sudbury	30	CD,TD
	15	West Hill Dam, Uxbridge	19	CD,TD
	22	Orange; Cape Ann	15; 5	DSm; CT, DS
	24	BMBS	13	JM & co.
JUL	26	Windsor	1	DP
	27	Holliston	1	RH
		NORTHERN BROKEN	DASH	
JUL	5	Horn Pond, Woburn	2	MPe
~~	14	Crane WMA, Falmouth	34	AR & co.
	19	Lexington; Woburn	4; 9	MPe
SEP	9	Foxboro	1	BC
	- ·	• • • • • • • • • • • • • • • • • • • •	-	

LITT	LE_	<u>GLA</u>	SS	YWI	NG

JUN JUL AUG	29 5 23 26 23	Rock Meadow, B Gm; Woburn Wellfleet Chariton Cape Ann	leimont 1 4;3 6 14 1	MPe MPe AR RH DS, CT
		SACHI	EM .	20, 0.
SEP	20	West Hill Dam, U		710
02,				TD
	,	DELAWARE	SKIPPER	
JUL	12	Wachusett Rese		TD & co.
AUG	14 12	Crane WMA, Fain Cape Ann	nouth 32	AR & co. CT, DS
		•		01,00
1	•	MULBERRY	WING	
JUL	27	Grafton; E. Longr	•	DSm, DPr; KP
AUG	29 2	Milford	9	RH
AUG	12	Petersham Cape Ann	5 1	DSm, DPr
	! 	Caperaini		DS, CT
		HOBOMOK S	KIPPER	
MAY	26	Mansfield	1	BC
JUN	9	World's End Res.	,	BC
	12	Woburn	11	MPe
JUL	24 14	BMBS	21	JM & co.
JUL	23	Cape Ann Heath	1	DS, CT
	20		•	DP
		ZABULON S	KIPPER	
AUG	16-SEP 6	Longmeadow	[max. 7m, 6f on 8-24]	TG & co.
		BROAD-WINGED	SKIPPER	
JUL	28	Petersham	1	DSm
	31 - AUG 29		nax. 17 on 8-1]	DS, CT
****	31	Plymouth	5	DSm, DPr
AUG	8 14	GM Constraints	3	MPe
	14	Sandwich	5	BC
		BLACK DA	ASH	
JUL	19	Taunton; Rehoboti	h 24, 2	BC
	20	Mendon	3	CD, TD
	26	GM	2	MPe
	29	Milford	3	RH

DUN SKIPPER

		*		
JUL	19	M.V. State Forest	10	AK
	20	Royalston	18	DSm
	26	Charlton; Windsor	47; 15	RH; DS
	27	Mansfield	26	PH.
	29	WMWS	50	JC
AUG	3	Wachusett Reservoir	73	TD & co.
	11	Petersham	45	DSm .
SEP	12**	Sherborn	1	RH
		DUSTED SKIPPER	3	•
MAY	28	Harwichport	1	JT
	31	GM	4+	MPe
JUN	8	Falmouth	5+	JS
	9	Milford	4	PH .
	15	Bellingham; Uxbridge	22; 11	BC; CD, TD
	28	GM	1	MPe
		PEPPER AND SALT SKI	PPER	
JUN	3	BMBS	3	CP & co.
	8	West Hill Dam, Uxbridge	4	CD, TD
	10	Petersham	1	JS
4	14	East Longmeadow	1	KP
	15	Davis Farm, Sudbury	4	MPe
	27	Rowe	1	DP
JUL	7	Florida	2	DP
		20120125 Altimos		
		ROADSIDE SKIPPE	<u>R</u>	
JUN	15	Northbridge	1	RH

New Butterfly Checklist Available

We are delighted to announce the publication of the Massachusetts Butterfly Club's "A Checklist of the Butterflies of Massachusetts", written by Vice President Tom Dodd. Tom did a fine job compiling over 19,000 recent Massachusetts butterfly records onto a 3-fold checklist. An extraordinary amount of information is packed into this listing, the first of its kind ever available for the state. The checklist includes all species, their flight dates, their relative abundance, and highest population densities. A fascinating map pinpoints major and minor data collection areas in the state. Copies are available at \$1.00 each from the club. Please send a stamped envelope with your order. Send your check, payable to Massachusetts Butterfly Club, to Tom Dodd 33 Mechanic Street Upton, MA 01568.

A Great Anglewing Day

by Tom Gagnon

March 28, 1997 dawned as a promising gorgeous day. After all, it was Good Friday. Ducks in the meadow, hawks on the ridge, or yard work? Trying to cover some of the bases, at 11:15 we decided to go to M t. Tom Reservation in Holyoke in the center of the Connecticut River Valley. M t. Tom is well-known for its hawk flights and we were hoping to see a Red-shouldered Hawk, an early spring migrant.

We arrived at the Bray Lake area of M t. Tom off Rte. 5 at 11:45. The road from the lake to the upper part of the reservation was closed, so we decided to walk around the lower parking lot. Sixty yards from the car, in the middle of the road, was a Compton Tortoiseshell. After admiring it for several minutes, we continued our walk and soon a second Compton was winging across the parking area. We then decided to walk the road to the upper part of the reservation.

Shortly after starting up the hill we could see why the road was closed. Storm damage had been tremendous from a major storm in December 1996. Still, most of the trees and limbs had been removed from the road, so walking was easy. While walking we kept a lookout for tree stumps that were still pumping the stored sap from their deep root systems. The only tree stumps producing sap were the birches and there we found more tortoiseshells. We did not find any Mourning Cloaks until we reached the upper part of the reservation. Near Bray Tower, a hundred yards to the north, we found our first Eastern Comma, sunning itself in an old picnic area.

We hiked as far as the Goat's Peak parking lot. On our return walk downhill to Bray Lake, we found one of the seven tortoiseshells seen on the way up the hill, plus six Mourning Cloaks that had not been seen on the way up. The total list for the day was 13 Mourning Cloaks, 10 Compton Tortoiseshells, 2 Eastern Commas, and 1 unidentified nymphalid. Skles were clear most of the time, though high thin clouds moved in at 2:00 or so.

I hope you might find your own sunny spring day to take a hike at M t. Tom. Please do not take the road to M t. Tom Ski area. Travel two miles farther north and watch for the sign to the M t. Tom Reservation. Good luck.

Butterflying on Skis

by dottie case

A few days after the 1997 April Fools' Day snowstorm, I decided to have one final cross-country ski around the fields near my home in Sunderland. I grabbed my binoculars to check out early bird migrants and set out. Before too long, I was greeted by a Mourning Cloak floating along over the snow drifts, seeking brown leafy patches in the woods. This butterflying by skis might be a great new hobby, I thought, though perhaps not likely to produce a very impressive list.

A few days later, after the meltdown, I found two Mourning Cloaks engaged in their nuptial agreements by a nearby waterfall. How romantic!

Some Highlights of my Butterfly Year

by Lyn Lovell

My year for butterflies did not get off to a good start. I saw my first Mourning Cloak on Easter Sunday and promptly killed it as it flew in front of my car. I had better luck with my first Monarch (May 21) and Tiger Swallowtails (May 23).

Memorial Day was a beautiful warm and sunny day for the local parades. While watching the Millville marching bands parading down the main street, everyone present was entertained by several Tiger Swallowtails that joined in the procession. By noon, the heat led throngs of people to the frozen lemonade truck, where a Compton Tortoiseshell landed several times, presumably looking for a handout. Several other nymphalids were zipping around, too.

Gail Jette from Holland [Mass., that is] arranged a great day for MBC members and guests in mid-July. We visited four wonderful habitats in Holland, with spectacular results. The first stop was a private estate with beautiful gardens filled with butterflies. The two most abundant butterflies were Pearl Crescent and Peck's Skipper, but during our one hour visit, we found at least 8 Black Swallowtails, and numbers of Tiger Swallowtails, Cabbage Whites, Clouded and Orange sulphurs, Eastern Tailed-Blues, Summer Azures, American Ladies, Great Spangled Fritillaries, Viceroys, Monarchs, Tawny-edged and Dun skippers, and Northern Broken Dashes. I did not try to keep track of numbers for each species, as six of the trip participants were children who kept me very busy identifying the butterflies.

We moved on from this spot to a pond with Joe-Pye Weed, Buttonbush, and Boneset. New butterflies for the day were Red Admiral and Red-spotted Purple. The third place we visited was a large hayfield edged with milkweeds and Joe-Pye Weed. Here we discovered Black and Spicebush swallowtails, Common Wood Nymphs, Common Ringlets, Little Glassywings, and Silver-spotted, Least, and Delaware skippers. The fourth and final stop was a lovely garden next to a field of milkweed and dogbane. This spot had more of the species we had seen previously.

In early August, I co-hosted the annual Forbush Bird Club "Bird and Butterfly "trip at the Worcester Airport. Many young Bobolinks were in the field in the back of the airport. The airport grasses and flowers held Black and Spicebush swallowtails, Cabbage Whites, Clouded and Orange sulphurs, Eastern Tailed-Blues, loads of Pearl Crescents, American Ladies, Great Spangled Fritillaries, Viceroys [including two drinking sap from a broken cherry tree], Common Wood Nymphs, Northern Broken Dashes, and Silver-spotted, Least, and Tawny-edged skippers.

1998 Butterfly Records

Please send all of your 1998 Massachusetts butterfly records to Tom Dodd 33 Mechanic Street Upton 01568 [note new address for Tom]. Tom has been storing all of the butterfly records you have sent in over the past few years and used them as the basis for the club's new checklist. We would like to get all of the butterfly records, new and old, in one central location and Tom has agreed to be it. If you need access to past records for research reasons, this can be arranged. We have a fine repository of data and will make it available to anyone who has need of it.

The Great Meadow

by Matthew L. Pelikan

Comprising roughly 170 acres of moraine and wetland, the Great Meadow area in East Lexington has long been a favorite with local birdwatchers, with well over 100 avian species recorded here. The range of habitats and the diversity of the flora found here make this suburban oasis (actually owned by the town of Arlington and, so far, lacking official conservation status) a fine destination for leps-lookers as well.

Habitats in the Great Meadow (not to be confused with Great Meadows NWR, in Sudbury and Concord) include extensive second-growth oak forest; a state-certified vernal pool; early successional birch/aspen groves; Little Bluestem fields rich with Wild Indigo and dogbane; a fragment of pine barren; grassy wetland rife with Buttonbush and the inevitable Purple Loosestrife; and a robust stand of Common Reed. It is possible that topography (The Great Meadow is at the head of a watershed and at the western foot of a north-south chain of hills) also fosters diversity by channeling birds and butterflies to this location.

The Great Meadow is hemmed in by suburban housing and bounded on the south by the Minuteman Bikeway and Massachusetts Avenue. To reach one good access point, head east 2.2 miles on Mass. Ave. from Lexington Center and turn left on Fottler Ave. (Enterprise Rent-a-Car marks the intersection) or west on Mass. Ave. 2.6 miles from Arlington Center and turn right on Fottler Ave. Pass Brandon St., follow Fottler as it curves right, and then take the next left on to Hillcrest. Go left on to Circle Rd. as the road climbs a short, steep hill. Circle curves steadily right, but where it makes a sharp right to become Sheila Rd., you will see a trail access on your left. Park and walk in.

The trail turns right, then left almost immediately and parallels the edge of an athletic field. Just after the playing field you will pass a vernal pool on the right; Mourning Cloaks fly reliably along the trail here from late March on. After the pool, you will pass a trail entering from the right before arriving at a large field. The Scrub Oak around the entrance to the field is a favorite spot for Edwards' Hairstreak.

The field, perhaps 200 yards across, is the main attraction at the Great Meadow. Like all the rest of the area here, it is unmanaged (though local hooligans thoughtfully torch the field often enough to retain its early-successional quality). The open, grassy areas have Cobweb, Indian, and Dusted skippers in spring. Dreamy, Juvenal's, and Wild Indigo duskywings are quite common then, too, particularly on a grassy hillside on the far side from where you enter. The rocky hilltop to the right as you enter the field has yielded Tiger and Black swallowtails, three species of elfins, and Northern Cloudywing. Later in the season, dogbane on the field's southern border attracts hairstreaks (Edwards', Gray, Striped, Acadian, and Coral have all turned up at least once), and Delaware Skipper and Little Glassywing can be found here, as well. Activity tails off late in the summer - the floral mix includes few late-bloomers - but a suspicious-looking reddish butterfly I briefly glimpsed on Sept. 20, 1996, makes me think that Leonard's Skippers occur here at least some years. I hope you manage a more satisfactory look!

Several paths cross the field, skirt its southern periphery, or cross the hilltop, but they all converge into one trail leaving the field directly across from where you entered. However you choose to work the area, you should end up here. Check the milkweed and then follow the main trail as it winds slightly downhill, past aspen woods on the left and a small marsh on the right. Appalachian Brown occurs here in small numbers and in early spring this area is fairly good for Eastern Comma, Mourning Cloak, and Compton Tortoiseshell.

The trail climbs slightly and in a few yards forks. Take the left fork, which gives access to another field, smaller than the first but offering similar vegetation and butterflies. Whorled Loosestrife, an elegant yellow wildflower (though apparently not much use to butterflies) is notably abundant here. The trail continues into the woods, passing some birch trees whose sap attracts anglewings in early spring, and dead-ends on the margin of an expansive, grassy marsh. Impassably wet early in the season, the marsh is usually dry enough to walk in by early July - just in time for the July-August marsh dwellers.

This wetland offers "Intermediate Butterflying" to say the least: there are no trails, and the tangled vegetation and multitudes of bees and wasps on the Purple Loosestrife can be intimidating. But just do your best browsing herbivore impersonation and push on through. Steer clear of cattails, which mark areas still likely to be muddy. One plan is to head straight out to the Common Reed stand that is visible on the marsh. Then, if you feel ambitious, make your way over toward a narrow throat of marshland, about 150 yards to the right of the starting point, where a cluster of Buttonbush attracts Viceroy and Northern Broken Dash. Just beyond, a trail cuts across this neck of marsh, its northern (right-hand) terminus at a prominent oak tree perched on a small bluff. Check along the trail for Dun Skipper. Climb the bluff; breathe a sigh of relief.

Working the area can be a steamy, strenuous operation and there is no guarantee of finding anything at all. But Eyed Brown can be common anywhere in the marsh grass, and in 1997 I found Mulberry Wing, Black Dash, and Broadwinged Skipper in and around the reedbed. Orange Sulphur, not easy to find in the Lexington area, is a frequent visitor on the marsh.

From the bluff, the main trail drops into the oak woods to your right, roughly paralleling the edge of the marsh, and takes you back to the fork by the Whorled Loosestrife field. Backtrack to the large field, skirt its edge to the left (avoiding a short driveway into a parking lot), and follow the trail through the oak woods around the base of the hill. You will soon see a trail leading to your left (a Northern Pearly Eye set up shop here in 1997); follow the trail through a cut in a bank and across a flimsy bridge over a stream. Turn left immediately and then right in a few yards and check out the artificial declivity you will shortly pass on your right. It is an abject failure as a wetland, more xeric than wet, But Baltimore Checkerspot and Crossline Skipper have turned up here, and a wide range of more common butterflies nectar on the flowers that grow in the basin.

Backtrack across the bridge and turn left when you reach the main trail, keeping an eye open for hairstreaks during July and August. This trail winds to the right, passing the vernal pool on your left and intersecting with the trail to the left that will take you back to your car.

With only a few years of records from a single observer, it is hard to assess the butterfly life of the Great Meadow. I do not know how many of the 56 species I have found there are breeders, regular visitors, or flukes. And I do not know how many other species I have missed. For starters, Spicebush Swallowtail, Banded Hairstreak, Question Mark, Sleepy Duskywing, Common Sootywing, and Tawny-edged and Leonard's skippers all probably occur at the site - but I lack satisfactory records (or any records at all) for these species. And who knows what else could show up?

There is much to be learned about this fascinating location. Good hunting! I would welcome Information from any observers who visit the Great Meadow - I miss the place.

Butterflies of the Great Meadow

Black Swallowtail, Eastern Tiger Swallowtail, Cabbage White, Clouded Sulphur, Orange Sulphur, American Copper, Coral Hairstreak, Acadian Hairstreak, Edwards' Hairstreak, Striped Hairstreak, Gray Hairstreak, Brown Elfin, Henry's Elfin, Frosted Elfin, Eastern Tailed-Blue, Spring Azure, Summer Azure, Great Spangled Fritillary, Pearl Crescent, Baltimore Checkerspot, Eastern Comma, Compton Tortoiseshell, Mourning Cloak, Red Admiral, American Lady, Red-spotted Purple, Viceroy, Northern Pearly Eye, Eyed Brown, Appalachian Brown, Little Wood Satyr, Common Ringlet, Common Wood Nymph, Monarch, Silver-spotted Skipper, Hoary Edge, Northern Cloudywing, Dreamy Duskywing, Juvenal's Duskywing, Wild Indigo Duskywing, Least Skipper, European Skipper, Cobweb Skipper, Indian Skipper, Peck's Skipper, Crossline Skipper, Long Dash, Northern Broken Dash, Little Glassywing, Delaware Skipper, Mulberry Wing, Hobomok Skipper, Broad-winged Skipper, Black Dash, Dun Skipper, Dusted Skipper.

One Fine Day at World's End Reservation by Brian Cassie

When I was a kid growing up in Hull, I lived in a corner of town not very far physically removed from World's End Reservation in Hingham. Hull is an o.k. place, with nice people and a terrific beach, but what it lacks most are trees and fields and so sometimes I gazed over at the peninsula with the beautiful upland meadows and long avenues of oaks and wished that were my town.

For some reason, my friends and I never went out to World's End - not once. It wasn't until I was in college and a fledgling birdwatcher that I thought back upon World's End, so I took my binoculars over there and saw my first Great Blue Heron, Black-crowned Night Heron, and Eastern Meadowlark. I have returned to this Trustees of Reservations sanctuary many times since 1972, including once to look at a stray Townsend's Solitaire, blown off-course from the Rockies.

Several years ago, with my Thayer Academy summer nature students, I began visiting World's End more or less regularly. I quickly saw that it was not only a great place for Orchard Orioles, Eastern Bluebirds, and Black-crowned Night Herons, but also potentially excellent for butterflies. In short order, we found swallowtails, sulphurs, crescents, Question Marks, satyrs, Monarchs, and skippers, among other butterflies. In 1995, one of my favorite campers, a bundle of energy named Trevor Wright, pointed out a Sachem, the third ever found in Massachusetts. In 1996, the numbers of Little Wood Satyrs and Long Dashes on June 14 were great, so I made a note to return to these fields in June 1997 to see if the concentrations were annual.

June 9, 1997 was a beautiful sunny day with a very light breeze - perfect butterfly weather. I arrived at World's End at 10:30 a.m. armed with my usual field equipment - wildflower guide, pad, and pencil. For the next four and a half hours, I did my best to count the butterflies in the reservation's rolling meadows. The fields at World's End are grassy, with lots of wildflowers and Poison Ivy, so one is always on butterfly and rash alert when walking through them. On this day, the butterfly alert overwhelmed the impulses to sidestep Poison Ivy.

When I find myself in the midst of meaningful butterfly populations, I almost always try to count them as best I can. Usually this involves counting butterflies individually, even well up into the hundreds, but when the butterfly numbers are too great to count in this way, due to time constraints, I employ the

following censusing method: I choose a large quadrilateral area with uniform habitat, walk either ten or twenty transects through it leach transect fifty feet from the last], counting all butterflies within three feet on either side of me on each transect, take my total, divide by the number of transects, and arrive at an average count of butterflies per transect. I then walk the area at 90 degrees to the angle of the transects to determine how many six foot-wide transects are possible. If I then multiple this number times the average number of butterflies per transect, I arrive at my estimate of the butterfly population for that area. Perhaps this method is frowned upon by the scientific community [I don't know], but it is the method I employed while walking virtually non-stop for 4.5 hours at World's End on June 9, and by this method I found there were about 550 American Coppers, 1600 Pearl Crescents, 3000 Common Ringlets, and 7300 Little Wood Satyrs flitting around in the fields. Along with 1 Tiger Swallowtail, 2 Black Swallowtails, 21 Cabbage Whites, 3 Spring Azures, 5 Question Marks, 4 Monarchs, 1 Juvenal's Duskywing, 2 Indian Skippers, 30 Hobomok Skippers, and 1 Europen Skipper, all of which were counted individually, this represents a remarkable accumulation of butterflies, perhaps one of the best ever noted in Massachusetts. Five species, including the Hobomok Skipper, flew at then-record high population levels. It was fabulous. I wish all of you had been there. Perhaps it will be as good in 1998.

p.s. Should you find yourself at World's End Reservation and the butterflies are so abundant that they are making your head spin and you happen to ask nine persons, between the ages of 14 and 35, if they are enjoying the butterflies and all but two of them say they haven't seen any butterflies and the other two answer that they have seen a single Monarch and "one big black one" and you wonder how it is possible for even a blind person to have missed all of the butterflies and what in the world people see when they go for a walk, you will know one of the emotions felt on that fine day in June 1997. What a day!

New Publication on Caterpillars

There is precious little printed material available for those of us who enjoy and want to know more about caterpillars. Therefore, we are very happy to announce that a new book, <u>Caterpillars of Eastern Forests</u>, by David L. Wagner, Valerie Giles, Richard C. Reardon, and Michael L. McManus, goes a long way toward teaching ecology and identification of these marvelous creatures. Included in the 113-page book are fine color photographs of over 200 common eastern lepidopteran larvae, as well as information on their family traits, distribution, food plants, and seasonality. You cannot help but be delighted with the work.

To obtain a copy, write to Richard Reardon, USDA Forest Service, 180 Canfield Avenue, Morgantown, WV 26505. There is no charge. Once you have your copy in hand, please write to Mr. Reardon again and thank him for coauthoring and sending the book. This is a great publication and your thanks will help to make more books like this possible.

Gulf Fritillary: A New England First

by Brian Cassie

On October 4 & 5, Joly and Jim Stewart observed a Gulf Fritillary visiting their garden flowers on Nantucket. Joly Stewart took photographs of the butterfly, passed them along to Bob Ridgely of the Philadelphia Academy of Sciences, and he, in turn, passed them along to his colleague, the well-known naturalist Guy Tudor. Tudor alerted me to this record and sent the photos for the MBC to view at the November meeting at Broad Meadow Brook Sanctuary. As this is one of the most spectacular and distinct butterflies in America, there was no disputing the species' identification.

As many MBC members know, there are a number of southern butterflies that move northward in late summer and fall. Opler and Krizek describe the phemonenon in Butterflies East of the Great Plains:

"Many southern species have irregular movements, often detected in late summer. Typical emigratory species include Gulf Fritillary, Variegated Fritillary, [Common] Buckeye, Reakirt's Blue, Sleepy Orange, Little Sulphur, [Common] Checkered Skipper, Fiery Skipper, Sachem, and Ocola Skipper. These movements are usually so sparse that they are not noted, yet are so regular that almost every year most species successfully colonize areas far to the north of their permanent ranges."

Note that Reakirt's Blue is not an eastern butterfly, living as it does in the plains and mountains of the mid-continent and West. With the expected exception of this species, all of the butterflies on this list other than Guif Fritillary had been recorded previously in Massachusetts, some rarely, some almost annually. We were, in effect, waiting for the Gulf Fritillary to show up. While the species is characterized by Gochfeld and Burger [Butterflies of New Jersey. 1997] as a "vagrant" and they note that there are "very few twientieth century records" in New Jersey, there are, in fact, New Jersey records from 1992, 1994, and 1995. With the increase in good field observers, more and more rare species, both resident and migrant, are now being detected.

While the Nantucket Gulf Fritillary occurrence fits nicely into the ecological pattern of fall northward dispersal, one has to ask if perhaps this butterfly got some human assistance somewhere along the line. It is certainly possible that a Gulf Fritillary, a common species in butterfly houses, could have escaped a solarium and found its way to Nantucket. There is a butterfly house in Newport, RI, not far to the west of Nantucket, but the proprietor, Mark Schenck, takes great pains to ensure that his butterflies do not escape. At the end of the season, he does not let his stock free. The Martha's Vineyard butterfly house has been non-operational for several years. One can purchase larvae and pupae and adults of Gulf Fritillaries and other species through the mail, but except for Painted Ladies, which are routinely released by classes of school children all over the Commonwealth (and everywhere else), and Monarchs, which are occasionally released at weddings, it is likely that very few of the adults of purchased butterflies are ever released to the wild.

In short, it is most likely that the Gulf Fritillary which Joly and Jim Stewart had the good fortune to find and document on Nantucket was a bona fide migrant. Time will tell if others will show up in the region. Let us hope so.

The Moth Page

The following is an excerpt from <u>The Audubon Society Handbook for Butterfly Watchers</u> by Robert Michael Pyle:

How are moths related to butterflies? The question should really be the other way around. Moths comprise most of the order Lepidoptera, several hundred thousand species in several suborders. Butterflies are but a diurnal, colorful offshoot of one of those suborders, some 15-20,000 in number worldwide. So moths vastly outnumber butterflies, to whom they have largely surrendered the daylight hours. Since butterflies fly by day, they evolved a great many defenses from color-sighted predators, usually expressed in their color patterns. Moths, on the whole nocturnal, generally tend to be drabber. Yet there exist moths - such as the Uranias - whose hue and brilliance rival those of any butterfly. Moths tend to have fuller, hairier bodies, but this is not always true. And while butterflies hold their wings vertically over their backs, and most moths fold them roof-like. geometrids hold them butterfly-like. The one characteristic most useful for separating butterflies and moths is the shape of the antennae. Virtually all butterflies have clubbed antennae (a thickening at the end), while those of nearly all moths, whether ferny, feathery, or filamentous, taper to a sharp point. By checking the antennae first you should always be certain. Soon, with practice and watchfulness, you will be able to learn the basic groups of moths by sight : sphinxes, silkmoths, millers, micros, tigers, geometers, and so on.

If moths are so like the universally beloved butterflies, why are they so often looked upon with indifference, antagonism, fear, and loathing? As creatures of the night, like bats, moths may seem malicious to some people. Then there are clothes moths. These are tiny, nondescript members of the microlepidopteran familt Tineidae. Most moths' larvae could no more subsist on woolens than you or I could. Of the others, nearly all plant-feeders, a number do compete vigorously for resources we value. The Gypsy Moth, Spruce Budworm, Tussock Moths, Peach Rollers, Tent Caterpillars, and garden cutworms of this world do not endear themselves. Even so, only a small percentage of moth species may be considered pests of food and fiber. The rest are benign or beneficial.

Some people dislike the hairiness of moths or worry about getting them in their hair. Like bats, moths have no desire to go there. Others object to their congregating about the porchlight. When dense they can be a nuisance, it's true. I remember a Colorado cabin so full of millers that one had to douse the lights in order to be able to breathe. Nonetheless, moths are mostly misunderstood. They comprise a little-known world of variety, soft beauty, and fascination that I would hate to miss. They take butterfly watching on around the clock. Moths, approached without prejudice, offer a great deal of enjoyment.

Our moths may lack the charming common names with which the English species have been endowed - names like True Lover's Knot, Angleshades, Maiden's Blush, and Lesser Lutestring. Yet they possess no less charm. If "charm" seems a peculiar word to apply to a moth, I would ask your opinion again after you have seen a few of our elegant underwing moths or followed an Eightspotted Forester making its rounds among the phlox. If you admire butterflies, you will be missing out on a great deal if you ignore their closest relatives, the mothsperhaps our most undervalued nature resource.

The President's Page

by Madeline Champagne

Every day I pass by the Cecropia cocoons spending the winter outside in mouse-proof aquariums at the back of my house, I cannot help thinking about the creatures inside, their lives suspended until spring, when the pupal stage progresses until the moths emerge in mid-June. I marvel at the evolutionary adaptations that have enabled these and other moths and butterflies to cope with the harsh New England winters. Although some are migratory, most species of moths and butterflies that we see flying in Massachusetts spend the winter here as egg, larva, pupa, or adult. I am sure my sense of wonder is enhanced by realizing how our winter conditions hold so much life, in contrast to the ideas I had when growing up thinking that all things "die" in the winter.

Each year we add to our list of programs, field trips, and Fourth of July butterfly counts with the hopes that you, our members, can join other enthusiasts in enjoying, appreciating, and learning more about Massachusetts butterflies and moths. We greatly appreciate the efforts of the people who have given their time, energy, expertise, and enthusiasm to these activities. This past year, activities of the club, in addition to those mentioned above, included The Butterfly Institute at the Massachusetts Audubon Society's Broad Meadow Brook Sanctuary in Worcester. Our very special thanks to Gail Howe, MBC member and MAS naturalist, who hosted and facilitated this one-of-a-kind, important, and fun program. Our Butterfly Bush sale, in the spring, added to our treasury and provided additional butterfly watching opportunities to many of our members. Thanks to all who helped out with the sale arrangements.

Winter is probably the busiest time for the vice-presidents of the club, as this is when most of the year's scheduling is done. Telephoning, arranging, and organizing the year-long schedule is a real labor of love. We would be lost without the efforts of dottie case and Tom Dodd. Also, as I write this in late December, Brian Cassie is busy putting together the yearly sightings, summary, and articles that will make up this February issue of "Massachusetts Butterflies." Brian began writing newsletters on the state's butterflies back in 1986, for the Massachusetts Butterfly Atlas Project, and, with the publication of this issue, will be passing on the reins of "Massachusetts Butterflies" to other MBC members. We greatly appreciate the work that has gone into this excellent publication and wish Brian success in his role as national Director of Education for NABA.

I'm hoping that your winter includes curling up with some good butterfly or moth books, and maybe includes a trip to see the Denton brothers' collection of butterfly books, mountings, photographs, and the like in Wellesley (I have heard from some members that this is excellent).

Please come out to our club activities in 1998. We have the best people and programs of any butterfly organization. Don't take my word for it - come take part and see for yourself. Our field trips visit well-known and out-of-the-way areas . We search out the common as well as the rarer species and have a great time doing it. 1998 is going to be the best butterfly year ever in Massachusetts. Make sure you are part of the fun.