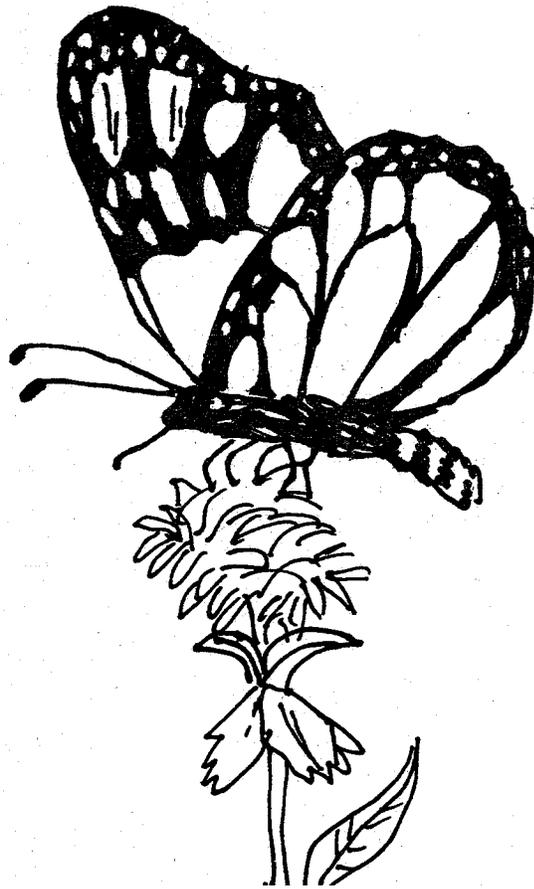


Massachusetts Butterflies # 18

Spring 2002



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Message From the President, Madeline Champagne

At first it's just plain fun. Butterflies are so beautiful, floating around on the warm sunny days, or flitting from one pretty flower to another, or basking in the sun so we can get a better look. Then there's a lot to learn about them - all the different shapes and sizes and colors and patterns; attracting butterflies to our own backyards by planting the right flowers; identifying butterflies without a field guide; going on butterfly walks and field trips with other enthusiasts; thinking about the last 48 million years of evolution that have resulted in the species that we see today; finding local populations; even identifying skippers without a field guide.

Along the way, some harsh realities set in. New England butterflies usually live only 1 to 2 weeks; survival rates from egg to adult are only about 2% to 8%; sometimes a wasp emerges from a chrysalis, from an egg that was laid in the caterpillar; there are other insects and birds and lots of other predators; weather can affect populations. But these things are all part of the intricate web of nature - and the species

that we see today have survived against these odds.

But worse than the things that have been happening in nature for millions of years are the human activities, such as manicured chemical lawns, shopping malls, house and industrial developments, and soccer fields. In the past few years I've seen three populations of Baltimore Checkerspot disappear, from bulldozing under a the power line and from crop spraying. At the wild fields at the Foxboro State Hospital, milkweed and mint and wildflowers have been replaced by soccer fields and parking areas. The gravel pits where we used to go for the New Jersey Tea Party are now leveled with asphalt and built on. I've had a strip of land sprayed by my neighbor's lawn service, who didn't care to find out that on our common border all the plants are mine, including the Sassafras which hosts the Spicebush Swallowtail and the locust which hosts the Silver-spotted Skipper. There's a big new office building that replaced some of the area, and now bulldozers are tearing up the land behind a greenhouse where the largest recorded population of Oak Hairstreaks in Massachusetts used to be and where wildflowers and lots of milkweed used to be. There is now a twenty-foot pile of construction dirt on top of a big patch of dogbane that I noticed last year. These are just some of the local things that I have personally witnessed.

And far worse are some of the more widespread issues: a fly that was imported 30 years ago to lay eggs in the Gypsy Moth caterpillars and has been observed laying eggs in Cecropia and Promethea Moth caterpillars - and who knows what else; severe deforestation in the Monarch overwintering area in Mexico; genetically engineered crops - widespread in crops for human consumption, and including the Bt corn that has been proven to be lethal to Monarch and Black Swallowtail caterpillars. Last October the EPA announced approval of genetically engineered Bt corn for another seven years, despite serious questions about the dangers that Bt crops pose to the environment and human health. While these are complex issues, it seems like the environment continues to lose at the hands of man.

So, while most aspects of butterflying (and "mothing" which I also do) are increasingly exciting and interesting and fun, there is this dark side that haunts me. I wish I could buy lots of land and keep it safe. I can't. But I can support groups who can preserve land, who lobby for the environment, and who speak out against the rampant destruction. Locally, I can talk to people about their yards, and to students and to adults about butterflies and respect for nature. I can educate people about the delicate life cycles. I can fill my yard with flowers and host plants and let the rest of it go back to wild. And I can hope that other people will become more aware and help to make a difference.

A Lamentation Over the Loss of A Butterfly Field

by Bob Muldoon

My favorite butterfly field is now a hotel and parking lot on Tech Drive in Andover, MA, 20 miles north of Boston.

As fields go, even in its heyday, mine was unremarkable. Crammed between a parking lot and busy road, the field held pedestrian varieties of weeds, wildflowers, and tall grasses. Calculated generously, it measured not much more than a football field. But to me it was an unforgettable place of magic and enchantment.

Back in the summer of 1997, I had just started a job off River Road. Formerly a cradle of farming on the banks of the Merrimack, River Road had morphed into a sizzling high tech corridor off Interstate 93. Even so, vestiges of farms, like Konjoian's and Sirkisian's, still stood in the shadows of Agilent, PictureTel, and the Marriott.

Early on, I faced the quandary of all new hires: what to do at the lunch hour? Others in my group met daily in a windowless room dubbed "the dungeon" to dissect the latest TV episode of "Friends." But these were not kindred spirits.

Nature was my passion. An outdoors enthusiast, I fancied myself a birder of modest accomplishment. But after some 20 years, and despite sometime heroic efforts, I was rarely rewarded with a new sighting. And this is what birders crave. For while there is satisfaction in seeing the same species again and again, the pulse-pounding rush is in finding new ones, building one's "life list." For me, it wasn't happening. I needed a new frontier.

At the foot of a small hill, just beyond the company parking lot, lay the elixir for my spirits and answer to the lunch dilemma. Dancing around like bits of colorful confetti were butterflies, a field of them!

What to do: birds or butterflies, dungeons or fields? Unlike Buridan's Ass -- the philosopher's indecisive donkey who dies of hunger when placed midway between two bales of hay-- my path was clear. Armed with An Instant Guide to Butterflies, I bounded down to the little field below the parking lot. And the treasures that awaited me I valued more than a miser does gold.

With the zeal of a convert, I threw myself into learning about Lepidoptera. Oddly, in years of birding, I'd never once taken notice of these bedazzling creatures. The same held true for 99 percent of the monomaniacal birders I knew. Anything without feathers came in beneath our radar.

Each day, I discovered butterflies heretofore unknown to me: Common Wood Nymphs, Common Ringlets, Pearl Crescents, sulphurs,

American Ladies and more. I could hardly wait.

Although I carried no long-handled nets or specimen jars, the sight of a grown man leaping about in a field is bound to attract notice. I became known in some circles as "Butterfly Boy." But I wore the scorn as a badge of honor. I was having the time of my life!

Initially, I confined my investigations to the field: a strict separation of work and pleasure. But one day, a delicate blue butterfly alit on a flower near the company entrance. By now I was hooked. Dropping to all fours (thank God for corporate casual), I beheld an Eastern Tailed-Blue. But at that moment, as fate would have it, the vice president of my division strode purposefully out the door.

"I hope you don't mind my asking," he inquired, "but what are you doing?"

"Oh; hi," I said unselfconsciously. "I'm looking at a butterfly."

Maybe it was imagination, but his retreat seemed awfully brisk. (Rumor would later circulate in the dungeon that I had barked like a dog in response and that the VP had bolted to his car, leaving a trail of rubber behind.)

When winter came, I felt at a loss. With the field dormant, I took to scouting nearby land that might provide different habitats for butterflies. I filed the information away for spring. By March, I was chomping at the bit. In weeks, the year's first butterflies would emerge, spring varieties that had not been in flight in July when I began. A colorful new cast of characters awaited discovery. And apparently the dungeon dwellers were as excited as I. One anonymously plastered my cubicle with scores of butterfly pictures from the internet. Was this a sign they awaited spring just as I?

Before long a pageant of brilliantly costumed butterflies arrived on the vernal stage: Mourning Cloaks, burgundy-winged with gold and blue trim; tiny Spring Azures, powder-blue with delicate black etchings; Eastern Commas, orange- and -black patterned but with the telltale white "," mark on the rear hindwing. Alas, the Question Mark, similarly colored but with a "?" in place of a ",", continued to elude. But the fun was in the chase. The game was aflutter!

The field was my living laboratory. I learned about the seasonal role of wildflowers; the camouflages and mimicry that help butterflies elude predators; their telltale flight patterns and times. By now, I carried so many field guides that I strapped them in a pack around my waist.

By mid-summer, my field's law of diminishing returns kicked in; I had mined it of all I could. But even then, it could amaze and delight. One night, I returned to find it twinkling and sparkling. On a midsummer's eve, the fireflies took center stage.

Fortunately, there were other habitats to explore: forest trails,

river woodlands, and milkweed meadows. And there I found Red Admirals, Red-spotted Purples, and Viceroy's. And resting near the spot I found my first Great Spangled Fritillary was an even rarer species: a gorgeous, purple-spandexed jogger. We began dating. Hey, man does not live by butterflies alone!

But fields are ephemeral things, even in the natural order. Left alone, they become forests in a process known as old field succession, whereby a series of plant communities (such as shrubs and trees) replaces others (grasses and wildflowers) over time. Disturbances, like fire and farming, create openings in forests, and the cycle of succession continues, creating fields anew.

In August of 1998, several wooden stakes appeared without warning inside the perimeter of the field. It was an ominous sign. But in the weeks ahead, no other disturbances followed. My worries subsided.

By October, the winds of change were gusting. At such times, seeds disperse, butterflies take wing, and with job uncertainty in the air, "Butterfly Boy" took flight, alighting clear across the state near the Connecticut border.

For me, as sad as the severing of any human tie was the loss of my connection to the field. The separation was eased only somewhat by winter's imminent arrival.

When I returned last summer, after three years absence, the hotel and parking lot did not completely surprise me. Deep in my heart, I knew it must have always been zoned for such. The wooden stakes had been there for a reason.

At the foot of the small hill I had bounded down countless times, I crossed a thin strip of tended lawn. Stepping off the curb, in fields where crescents and nymphs once danced, I reached the lot. Flightline vans darted in and out, where Painted Ladies and Monarchs once did the same. Potted trees in pits and a murky golf-course-type water hole completed the scene. A green damer dragonfly patrolled the stagnant water.

Overall, the feel was of an intensely tamed and trimmed strip mall. But the caged basketball court and outdoor pool apparently kept the right people happy. The Porsche with Ohio plates in the lot indicated as much. In my Field of Dreams, the sad irony was: if you build it, they will come...but the butterflies will go.

Continuing on foot, I reached a sign "Pet Walk" staked in a sliver of grasses and wildflowers, recognizable as a last vestige of the butterfly field. But its size (two chihuahuas would jostle walking there) and debris (cans, cups, and a tobacco tin) mocked the simple dignity of the old field.

At the last corner, a second "Pet Walk", slightly larger than the first, supported a patch of goldenrod, Black-eyed Susans, and Queen

Anne's Lace. But it was nearly barren of butterflies: a lone Cabbage White flitted about.

Alas, almost everything wild and untamed about my field had been subdued. The image of a timber wolf in one of those knit doggie sweaters came to mind. The clerk told me that 4 Tech Drive had opened six months ago.

Jobs and human development are vital, but so too are fields and butterflies. On a recent North American Butterfly Association (NABA) Fourth of July Count, I discovered a company in Newton, NH where mowing was confined to the plant's perimeter. Beyond, wild meadows stretched to the property's edge.

The effect was dazzling with colorful varieties of wildflowers and populations of fritillaries, swallowtails, and skippers, not to mention rabbits, birds, and toads. This seemed a worthy paradigm for the balance of industry and nature. I wondered if any butterfly boys-- or girls -- worked here.

On the final leg of my farewell tour, I noticed a few strands of yellow Wild Indigo on the lawn. These served as wistful reminders of the way these flowers once bloomed in bushes, attracting four or five butterflies at a time.

The poet Shelley wrote of a desert traveler coming across the toppled ruins of a statue of Ozymandias, "King of Kings." Strown about were the shattered visage and trunkless legs of the once great man: "Nothing beside remains. Round the decay of that colossal wreck, boundless and bare..."

And now nothing remained of my butterfly field but the scattered pet walks and Wild Indigo. Unremarkable in its short reign, yet host to Monarchs, my field was but one of many that came and went, much like the succession of kings. But I, for one, will never forget it.

Bob Muldoon, a graduate of Bates College, has written on topics from boxing to butterflies, telecommunications to forklifts. Along with Michael Onyon, he participated last year in the first ever NABA 4th of July Count in New Hampshire. E-mail is Muldoonb@aol.com.

Fall 2001 Migration Watch at Westport - South Dartmouth

by Brian Cassie and Richard Hildreth

The third year of the Migration Watch Project, coordinated by the authors, was a success in many ways. The butterflies and birds (and to some extent the odonates) were exciting, the season was incredibly and delightfully long, and the weather was usually obliging. As noted in last year's report, the goals of the project are twofold : to document the scope of butterfly, bird, and dragonfly autumnal migrations in the region between Horseneck Beach State Reservation, Westport and Allen's Pond Sanctuary, South Dartmouth and to gather general additional information on animals and plants in the immediate region.

In 2001, observers watched and recorded information over 128.9 hours on twenty-five dates, from September 2 to December 8. The observers were Brian Cassie, Madeline Champagne, Paula Chasen, Richard Hildreth, Erik Nielsen, Wendy Miller, Mimi Murphy, Dolores Price, Nish Raymond, Sam Raymond, Alison Robb, Seth Sweet, and Thomas Whalen. We gratefully acknowledge the help we received from MBC members and other interested participants.

Butterflies

Thirty-three species of butterflies have been found in the study area (plus three additional species just outside the area). Naturally, the list does not include those spring- and summer-flying species that live here, nor are all of the species on this list seen annually. In fact, the 2001 fall total of twenty-one species was the lowest recorded in three years. Here are the species found and a few notes about their occurrence, including their dates of occurrence in 2001 :

Black Swallowtail - The fields at Allen's Pond, with an abundance of Queen Anne's Lace (larval foodplant) and nectaring flowers, are the best spots to find this handsome swallowtail. As many as seven were seen here. [September 4 - September 23]

Cabbage White - Cabbage Whites are widespread across the study area and are typically most abundant at Gooseberry Neck. Wild Radish is an abundant larval foodplant. [September 2 - October 20]

Clouded Sulphur - This well known butterfly is recorded on most

dates in September and October, though not yet in large numbers. [September 2 - October 20]

Orange Sulphur - At least some of the Orange Sulphur population is apparently migratory and, as such, we can expect numbers to vary from year to year. After a banner 2000, fewer Orange Sulphurs were seen in 2001, though the numbers were still respectable. They were seen very late into the fall, when the almost completely yellow individuals that are common at this season presented identification challenges. [September 2 - December 8]

American Copper - This diminutive but beautiful butterfly was not really a feature this fall, after showing a strong flight in the fall of 2000. No more than five were seen on any day. [September 2 - October 12]

Gray Hairstreak - Another species suspected of being migratory, the Gray Hairstreak put in but a single appearance in 2001, with one noted on September 12. In the previous two years it was regularly seen from early September to mid-October, with as many as four in a day. [September 12]

Eastern Tailed-Blue - Typically found in small numbers at Allen's Pond and vicinity. In 2001, the high daily total was four. [September 9 - 26]

"Summer" Azure - Each year we find this species at the end of its flight period but just barely, with two records in 1999, one in 2000, and one in 2001. [September 12]

American Snout - This highly migratory southern species is a rare find in Massachusetts, but three have been observed in our Westport - South Dartmouth study area : one in 2000 and two in 2001. [September 3 & 15]

Variagated Fritillary - A regular summer-fall migrant into the Bay State, usually in small numbers, the Variagated Fritillary has been observed here each year, with one in 2001. [September 16]

Pearl Crescent - Expected in small numbers in the fields of Allen's Pond and vicinity, the Pearl Crescent flew true-to-form in 2001. [September 2 - October 9]

Question Mark - Almost all (perhaps every) Question Mark seen in our study area is a migrant and the majority of individuals are seen in rapid migratory flight. The highest daily total in 2001 was six, the lowest such

total in the four years we've counted Question Marks here. [September 9 - October 12]

Mourning Cloak - After several good to great fall flight years running, the Mourning Cloak was virtually nonexistent in 2001. [September 12 - October 9]

American Lady - The big American Lady migratory flights in 2001 were in the spring, not in the fall. However, the excellent fall weather produced a small, very late brood and two fresh American Ladies were observed on December 1, a strikingly late date for any ladies, fresh or worn, to be flying. [September 2 - December 1]

Painted Lady - Painted Ladies typically arrive in Massachusetts in small to very small numbers in mid- to late summer. In 2001, they arrived in appreciable numbers in late spring and apparently had a fine breeding season. The fall numbers at our study site were superb, with as many as 216 in one day (September 6). As with the closely related American Lady, a small number emerged from the chrysalis very late, with three fresh individuals seen on December 1. [September 3 - December 1]

Red Admiral - This was the highly hyped "Year of the Red Admiral" in the Northeast, with a big spring flight and an enormous summer flight from at least Delaware to Atlantic Canada. We hoped for a massive fall flight in Westport - South Dartmouth but apparently the parasitoids did their thing and an incredible fall flight never materialized. Despite that, Red Admirals were much more frequent than in 1999 and 2000 and an impressive 137 were noted on October 2. One late-emergent Red Admiral was seen at Allen's Pond on December 5 [September 2 - December 5]

Common Buckeye - This species occurs in very variable numbers in Massachusetts from year to year. In the fall of 2001, Common Buckeyes were found in our study area over a seven week period, but with never more than four in one day. [September 2 - October 20]

Viceroy - The Viceroy puts in a yearly cameo appearance : one in 1999, one in 200, one in 2001. [September 12]

Monarch - Like the other migratory butterflies, the Monarch has its good years and poor years. The 2001 fall flight was comparatively poor throughout New England. The highest one-day count at our site was 420 on October 7. [September 2 - November 3]

Least Skipper - Small numbers of Least Skippers are regularly seen in the area in September. This year's high count was five. [September 2 - 23]

Leonard's Skipper - A single Leonard's Skipper was observed sunning itself on the rocky outcrop at Allen's Pond Sanctuary. Erik Nielsen's comment was, "There's Lenny." It was our first for the study area. [September 23]

Birds

Birdwatching can be very good in the area in fall and detailed bird lists are always kept by the authors, as well as occasionally by others. In 2001, we observed 163 species (two additional species were reported to us from the study area). Birds recorded by us for the first time were Harlequin Duck, Virginia Rail, Common Snipe, Pectoral Sandpiper, Western Sandpiper, Buff-breasted Sandpiper, Caspian Tern, Royal Tern, Snowy Owl, Common Nighthawk, White-eyed Vireo, and Common Redpoll. Including two Western Grebes reported in late November at Horseneck Beach (seen by birders with the Maine Audubon Society), the 3-year fall total for the study area is 190 species.

Mammals and Amphibians

Ten species of mammals were identified in the study area this fall, based on sightings of living animals, roadkills, or tracks and scat. Short-tailed Shrews were seen by us for the first time this fall, with one each at Gooseberry Neck and Allen's Pond.

Fowler's Toads, which are always present at Gooseberry Neck, were rather sparsely observed this fall. Spring Peepers were calling at various times in woodland wet areas at Horseneck Beach - four were still peeping on December 1.

Dragonflies and Damselflies

Dragonfly flights were very light during the Migration Watch time frame, the exception being 800+ dragonflies migrating west on September 2 (75% Common Green Darners, 25% Black Saddlebags). The species identified this fall were Common Green Darner, Black Saddlebags, Carolina Saddlebags, Wandering Glider, Eastern Pondhawk, and Twelve-spotted Skimmer. Many meadowhawks and damselflies, as well as several "mosaic" darners, were seen as well but not identified to species.

2001 Season Summary and Records

Tom Dodd

There were 102 butterfly species reported. Again, thank you to the observers listed below for submitting their records. A significant number of these records were scoured from the Massachusetts Lepis Internet list server. Others were received via e-mail or postal. There were 4 new early records and 8 late records. This year we witnessed a phenomenal flight of Red Admirals, a new location hosting the Bog Elfin, and a recent sighting of Persius Duskywing!

Observers

(AG)A Grkovich (AK)A Keith (AM)A McGinnis (AR)A Robb
(BB)B Bowker (BC)B Cassie (BN)B Nikula (BW)B Walker
(BWr)B Wright (CD)C Dodd (CDe)C Decker (CK)C Kamp (CT)C Tibbets
(DF)D Furbish (DLr)D Larson (DLu)D Ludlow (DMa)D Marotte
(DMi)D Minear (DPe)D Peacock (DPr)D Price (DS)D Savich
(DSm)D Small (EC)E Crowley (EG)E Giles (EiBa)E Barry (EN)E Nielsen
(ES)E Solberg (FG)F Goodwin (GH)G Howe (JBe)J Berry (JM)J Mullen
(JS)J Sones (KHal)K Haley (KHo)K Holmes (KP)K Parker
(LizL)L Loveland (LS)L Stillwell (MC)M Champagne (MFI)M Fiaherty
(MFr)M Freeman (ML+SC)M Lynch+S Carrol (MM)M Murphy
(MN)M Nelson (MPe)M Pelikan (MR)M Rines (NY)N Young (PD)P Duffy
(PW)P Weatherbee (RH)R Hildreth (RP)R Pease (SS)S Stichter
(SSe)S Selkow (TD)T Dodd (TG)T Gagnon (THa)T Hansen
(TM)T Moore (WB)W Bosse

Locations

(APND) Allen's Pond, S Dartmouth --- (BFDAM) Barre Falls
Dam/Rutland State Park, Barre --- (BMBS) MAS Broad Meadow Brook
Wildlife Sanctuary, Worcester --- (BMBS BI) Butterfly Institute Field Trip
---(BMOOR) MAS Broadmoor Wildlife Sanctuary, Natick --- (BMOOR
BO) Butterfly Institute Field Trip --- (CRFAL) Crane WMA, Falmouth ---
(CRGRO) Crane Pond WMA, Groveland --- (DSTOW) Delaney WMA,
Stow --- (DWWS) Daniel Webster Wildlife Sanctuary, Marshfield ---
(FANST) Fannie Stebbins Refuge, Longmeadow --- (GOOS) Gooseberry
Neck, Westport --- (IRWS) MAS Ipswich River Wildlife Sanctuary,
Topsfield --- (LRA) Larkin Recreation Area, Northbridge --- (MBNEM)
Martin Burns WMA, Newbury --- (MBC) Massachusetts Butterfly Club
Field Trip --- (MV) Martha's Vineyard --- (PL) Power Line --- (SF) State
Forest --- (SP) State Park --- (M&M) Metacomet-Monadnock Trail

2001 Season Summary

SWALLOWTAILS

In the western half of the state, Tom Gagnon commented that the numbers of swallowtails, in general, were low. Tiger Swallowtails appeared only in low numbers. In the east, Bob Bowker, Mimi Murphy and Eleanor Solberg found a record high of 25 Black Swallowtails in a field with Queen Anne's Lace. Spicebush Swallowtails appeared to have a normal year, and Pipevine Swallowtails just didn't make it this far north.

WHITES AND SULPHURS

Mustard Whites had a poor showing this year, with only two sightings. However, they have a very restricted distribution in western MA, and there may have been few visits to these areas during their flight. West Virginia Whites had a good year, with a record high of 40 reported in Sunderland. Clouded and Orange Sulphur flights appeared normal. There were only four reports of Cloudless Sulphur this year. On the annual MBC field trip to Cape Ann on September 15, members found what was thought to be a Pink-edged Sulphur. Afterwards, I referred to *The Butterflies of North America* which states that the Clouded "usually" has a satellite spot on the underneath hind wing, and has a plate showing the Clouded without that spot. Harry Pavulaan, of Virginia, who has contributed to *Massachusetts Butterflies* in the past, sent me an email commenting on this sighting. He informed me that Pink-edged Sulphurs are "univoltine obligate diapausers", or in simpler terms, have one flight each year, and its eggs require an over-winter period to complete its life cycle. He stated their flight, at this elevation, would be late May or early June, and would be ragged by late July. Harry alludes to the possibility with his closing statement: "But then of course, butterflies do all sorts of strange things that defy what we know about their natural history."

COPPERS, HAIRSTREAKS, ELFINS, AND BLUES

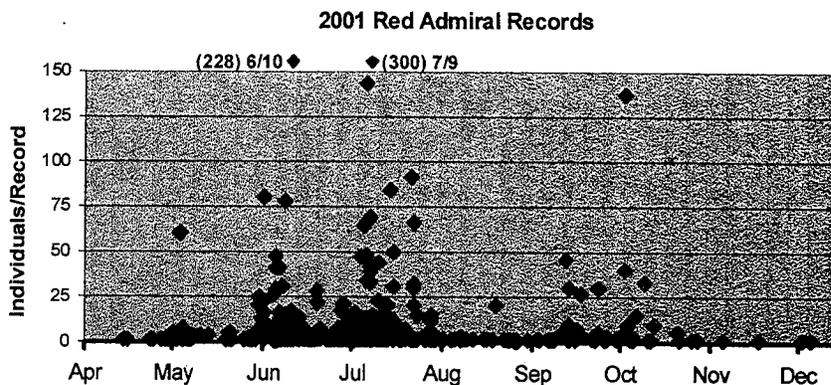
Harvesters had a good year. Bronze Coppers are rarely found outside of the Concord/Sudbury River valleys. This year was no exception, with the lone sighting being at Great Meadows NWR, in Concord. In general, the hairstreaks appeared to have just a fair year. However, Richard Hildreth hit the mother lode of Striped Hairstreaks, with a new high of 55, found at Whitney Swamp in Holliston. The rare Bog Elfin was found in Rutland. This is only the second location known in Massachusetts to host this denizen of Black Spruce Bogs. Brian Cassie counted a new high record of 73 Frosted Elfins at Foxboro's town water supply. Brian and Madeline Champagne recently cleared some encroaching brush from this area to help maintain their food plant (Wild Indigo). Brian also informed the

"Mass Lep's" list that the Frosted Elfin has been nominated as a state listed species by the Natural Heritage and Endangered Species Advisory Committee, but needs to be approved by the State of Massachusetts. Silvery Blues have their headquarters at Delaney WMA in Stow. Barbara Walker and Elise Barry counted 104 there.

BRUSH-FOOTED BUTTERFLIES

An American Snout was observed by Brian Cassie at Gooseberry Neck on two occasions in September. This is only the third sighting in this state, in the last ten years. Make a mental note to visit this location in September this year - there's always something interesting. Doug Savich and Claudia Tibbets noted a huge flight of Silver-bordered Fritillary in Rockport with a new high record of 342. Dennis Peacock observed a record high 44 Eyed Browns at Martin Burns WMA in Newbury. Painted Lady's were noted from April 26 to a new late date of December 10. There numbers increased in coastal locations dramatically in the fall, when 216 were counted on September 9. There was a grand flight of Red Admirals this year! The first sighting occurred on Mt Tom, on April 14. On May 3, from out of nowhere, there were 60 flying around Stinging Nettles (larval host plant) at Daniel Webster Wildlife Sanctuary, in Marshfield. Then, in early June, the first big wave hit. Sharon Stichter watched for five straight days as Red Admirals (as many as 78 on June 8) streamed north through her yard in Newbury. At the same time, Richard Hildreth had counted 228 at Larkin Recreation Area, in Northbridge. A second wave occurred in early July. While in Eastham on July 9, Cathy Dodd and I made two fifteen-minute counts of individuals moving north. We estimated there were 300-400/hour flying north along the coast during the one hour time period we counted. The last wave occurred during mid September through early October with 137 sighted in the Westport area on October 2. The last sightings occurred at Westport and Edgartown on December 5. A comparison of this past year with the last ten years gives an idea of the magnitude of the flight that we witnessed:

Year	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01
Records	15	23	116	71	19	?	99	58	168	439
Records with >=10 Individuals	0	0	2	0	0	4	3	1	6	80



SKIPPERS

Broad Meadow Brook Wildlife Sanctuary has always been a great place to see Hoary Edges. This year, Gail Howe found 10 flying among the Tick trefoils. Brian Cassie reported 222 Juvenals Duskywings. This shatters the previous high record of 105, found in 1998. Mike Nelson from the Massachusetts Natural Heritage & Endangered Species Program found two Persius Duskywings on May 26. This species, state-listed as threatened, was last reported in Massachusetts in 1985. These individuals were located in the pitch pine /scrub oak barrens of Myles Standish SF. Tom Gagnon found a Common Checkered-Skipper on September 22 at the Northampton Community Garden. Just days before the sighting, Brian Cassie got a tip from Guy Tudor, of the New York City Butterfly Club, that there were more sightings of this species than usual in New York, also being noted in Connecticut. According to Brian, this is only the 3rd sighting in Massachusetts in the last 40 years. On July 5, Richard Hildreth found a Sachem on a power line in Sherborn. He submitted a detailed report of this finding with a sketch of his observation. The chief field marks he reported were: 1) the unusual ground color - yellow-brown and finely mottled, 2) a cream-colored "V" pattern and median spot on the underneath hind wing, and 3) the late date for similar "June" butterflies. Previous flights of Sachems in Massachusetts had a precursor flight in New York. This past year, there were few records from that state. There were only a few sightings of Fiery Skipper this year, all from Cape Ann. This is down from a high of 33 records in 1999. This species was first reported by Chris Leahy in Rockport in 1991, and has had at least one report each year in Massachusetts since 1995.

2001 Butterfly Records

* = new early flight date, ** = new late flight date, high counts in **bold**

Black Swallowtail					
Apr	29	M&M, Holyoke Mt Holyoke	1 2		TD
Jun	15	Marshfield	5		DF
	30	World's End, Hingham	8		MC et al
Jul	14	Middleboro	10		KHo
	28	Lincoln Concord	25 5		BB, MM, ES BB
	29	Edgartown Marshfield	11 14		MPe BC
Aug	11	Northeastern Campus, Burlington	3		MR
Sep	8	Morning Glory Farm, Edgartown	6+		MPe
	17	GOOS+APND	7		RH
Oct	4	Oak Bluffs	1		MPe
Eastern & Canadian Tiger Swallowtail					
May	1	Wompatuck SP, Hingham	1		DPe
	13	Williamstown	5		PW
	26	Petersham	20+		DSm
Jun	10	Royalston Petersham Mt Greylock	30 30 16		CK EN TG
	16	BFDAM	29		ML+SC
Jul	2	Rt 169 PL, Charlton	10		RH
Aug	11	Northeastern Campus, Burlington	5		MR
Sep	17	Springfield	1		KP
	30	Florence	1		TG
Oct	10	Northfield	1		KP
Spicebush Swallowtail					
May	6	Holyoke	1		TD
Jun	25	Douglas	4		RH
Jul	2	Rt 169 PL, Charlton	13		RH
	6	LRA	9		RH
	10	Rt 85 PL, Milford BMBS	6 7		RH GH+DPr
	15	Falmouth	7		AR
Sep	9	SF, Edgartown	1		MPe
Mustard White					
Apr	28	Lenox	3		RP
Jul	22	Lenox	3		TG
West Virginia White					
Apr	28	Sunderland	2		TG+MBC
May	6	Sunderland Mt Tom	40 2		AG BB
	9	Granby	1		TD
	19	Mt Greylock	4		ML+SC
	20	Mt Greylock	13		TG
Cabbage White					
Apr	2	Woods Hole Cape Ann	1 1		AR DS+CT
May	3	DWWS	66		DF
Jun	27	Sterling	~222		RH

Jul	7	Truro	110	AR
Aug	11	Burlington	104	MR
Sep	12	Cape Ann GOOS+APND	25 172	DS+CT RH
	17	GOOS+APND	138	RH
Oct	2	Cape Ann GOOS+APND	25 74	DS+CT RH
	21	GOOS+APND	13	MC
Dec	5 **	Charlton	1	RH
Clouded Sulphur				
Apr	16	Chilmark	1	AK
May	3	DWWS	29	DF
	29	APND	29	DLr
Jul	14	Edgartown	295	MPe
Sep	19	Katama,Edgartown	~200	MPe
	26	FANST	86	TG
Oct	2	APND	49	RH
Dec	5	W Tisbury	2	MPe
	7 **	W Tisbury	1	AK
Orange Sulphur				
Apr	17	Foxboro	1	BC
May	15	Edgartown	30	AK
Jul	4	Katama,Edgartown	40	MPe
Aug	16	Edgartown	500+	AK
	23	Edgartown	200+	AK
Sep	19	Katama,Edgartown	~250	MPe
	23	Edgartown	250+	AK
Oct	2	GOOS+APND	186	RH
	19	GOOS+APND	177	RH
Dec	1	APND	68	BC
	7	Edgartown Chilmark	1 2	AK
	22	MV CBC,Chilmark	1	BN+SYurkis
Cloudless Sulphur				
Sep	7	Woods Hole	1	AR
Oct	22	Westport	1	TD+CD
Nov	1	Chilmark	1	AK
	13	Chilmark	1	AK
Harvester				
May	19	Wompatuck SP,Hingham	1	DPe
Jun	8,9	Foxboro	2	BC
	23	S Hadley	1	TG
	25	Royalston	3	CK
Jul	24	Arnold Arboretum,Boston	2	BC
	29	BMBS	2	GH
Sep	8	Halifax	2	MFI
	9	Marblehead	1	KHal

American Copper			
Apr	29	E Longmeadow	1 KP
May	12	CRFAL Marshfield	28 22 DPe+EC
	29	N Andover	205 FG
Jun	10	Hingham	60 DPe
Jul	6	Acoaxet, Westport	46 ML+SC
	7	Truro	114 AR
	15	Falmouth	49 AR
Sep	16	Milford	13 RH
Nov	8	Chilmark	2 MPe
Bronze Copper			
Aug	24	Great Meadows, Concord	1 DLr
Bog Copper			
Jun	25	Cape Ann	33 DS+CT
	26	Waring Field, Rockport	44 FG
	28	IRWS Wakeman Ctr, Tisbury	15 19 FG MPe
Jul	2,16	Cape Ann	31,4 DS+CT
Coral Hairstreak			
Jul	4	Milford	4 RH+BMBS BI
	6	Acoaxet, Westport	2 ML+SC
	11	Mountain Meadow, Williamstown	1 PW
	14	Edgartown	22 MPe
	15	Upton	3 TD+CD
	21	E Longmeadow	1 KP
	30	SF, Edgartown Cape Ann	4 1 MPe DS+CT
Acadian Hairstreak			
Jul	4	Milford	5 RH+BMBS BI
	22	Pittsfield	6 TG
Edwards' Hairstreak			
Jun	27	Great Blue Hill, Milton	1 BC
Jul	7	W Tisbury SF, Edgartown	7 3 MPe
	28	E Longmeadow	3 KP
	30	SF, Edgartown	1 MPe
Banded Hairstreak			
Jun	20	Milford	1 RH
	23	Framingham Woburn S Hadley	5 10 2 TD+CD MR TG
	25	Foxboro	8 MC
Jul	10	Milford	13 RH
	29	Sunderland Cape Cod	1 1 DMi SSe
Hickory Hairstreak			
Jun	23 *	Woburn	1 MR
	29	Rt 85 PL, Milford	1 RH
Aug	19 **	Comm Garden, Northampton	1 TG+NY
Striped Hairstreak			
Jun	23	Woburn	1 MR
	30	Whitney Swamp, Holliston	55 RH

Jul	3	BMBS	5	GH et al
	4	Milford	9	GH+BMBS BI
	28	Upton	4	TD+CD
Aug	22	Cape Ann	1	DS+CT
		Oak Hairstreak		
Jun	23	Woburn	2	MR
	27	Great Blue Hill, Milton	1	BC
		Brown Elfin		
Apr	14	Pamet, Truro	2	BN
	26	N Reading	4	PD
	29	Sherborn Truro Cape Ann	4 65 3	BB BN DS+CT
May	2	Myles Standish SF, Plymouth	16	DPe
	4	Blue Hills, Milton Quabbin Park	10 2	AG ML+SC
	6	SF, MV Turners Falls	15 3	MPe TG
	19	SF, MV	~20	MPe
Jun	10	LRA	1	RH
		Hoary Elfin		
Apr	20	Wasque, MV	1	L Raleigh fide MPe
	29	SF, MV	7	MPe
	29	Pamet, Truro	2	BN
May	2	Myles Standish SF, Plymouth	14	DPe
	6	SF, MV	9	MPe
	10	SF- all fairly worn, MV	7	MPe
	19	SF- all very worn, MV	3	MPe
		Frosted Elfin		
May	5	Turners Falls	3	TG
	7	Foxboro	73	BC
Jun	8	Foxboro	6	BC
	13	Grafton	1	TM
		Henry's Elfin		
Apr	29	Westport	1	DPe
May	6	Amherst	2	TG
	8	Halifax	2	DPe
	22	Royalston	1	CK
		Bog Elfin		
	date ?	Rutland	1	fide BC
		Eastern Pine Elfin		
Apr	22	Myles Standish SF, Plymouth	1	DPe
	29	Petersham	23	EN
May	2	Marshfield	4	DLu
	6	Petersham	13	EN
	10	SF, MV	42	MPe
	12	E Quabbin	22	TG
	19	SF, MV	~30	MPe
	26	DSTOW	4	EIBa+BW
Jun	16	BFDAM	2	ML+SC

Juniper Hairstreak					
Apr	30	Trade Winds, Oak Bluffs	2-3		MPe
May	19	Trade Winds, Oak Bluffs	4		MPe
	19	Farm Pond, Oak Bluffs	7		MPe
Jun	8	Trade Winds, Oak Bluffs	3+		MPe
	9	Foxboro	3		BC
Jul	28	Mt Tom Reser Mt Holyoke Reser	13 2		TG
Aug	1	Oak Bluffs W Tisbury	2 1		MPe
Hessel's Hairstreak					
May	8 *	Halifax	7		DPe
Jun	6	Brentwood Cons Area, Holliston	2		RH
White M Hairstreak					
May	1	Wompatuck SP, Hingham	1		DPe
	10	SF, Edgartown	1		MPe
Jul	15	CRFAL	2		AR
Sep	2	Sutton	1		TM
Gray Hairstreak					
Apr	29	SF, W Tisbury	1		MPe
Jun	~10	Hingham	1		DPe
Jul	10	Rt 85 PL, Milford	3		RH
	10	BMBS	1		GH+DPe
	30	SF, Edgartown	5		MPe
Sep	24	IRWS	1		FG
Oct	2	W Tisbury	1		MPe
Early Hairstreak					
Jun	10	Mt Greylock	3		TG
Eastern Tailed-Blue					
Apr	30	Cape Ann	4		DS+CT
May	10	SF, MV	22		MPe
Jun	15	Falmouth	11		AR
Jul	4	Old RR PL, Milford	~30		RH
Aug	10	Wachusett Meadow, Princeton	20		CK et al
	23	W Tisbury W Tisbury Edgartown	3 13 18		MPe
Sep	16	Rt 85 PL, Milford	15		RH
Oct	4	SF, West Tisbury	12		MPe
	11	Waring Field, Rockport	1		FG+DS
Spring Azure (spp)					
Apr	10	Moosehill MAS, Sharon	1		DLr
	22	Myles Standish SF, Plymouth	28		DPe
May	2	Myles Standish SF, Plymouth	32		DPe
	3	Bird St Cons Area, Stoughton	38		DLr
	12	E Quabbin	30		TG
	14	Chicken Farm, Truro	30		AR
	22	Royalston	30		CK
Jun	16	BFDAM	35		ML+SC
Jul	5	Western Ave Cons, Sherborn	8		RH
	10	Wenham Canal Milford	21 7		FG RH

	29	BMBS	7	GH
Sep	13	Chilmark Chilmark	1 2	AK MPe
		Silvery Blue		
May	14	Chicken Farm, Truro	1	AR
	26	DSTOW	104	EIBa+BW
Jun	6	Greylock Glen, Adams	1	PW
	10	LRA Windsor	2 3	RH TG
		American Snout		
Sep	3	GOOS	1	BC
	15 **	GOOS	1	BC
		Variegated Fritillary		
Jun	20	Cape Ann	1	DS+CT
Sep	16	GOOS	1	BC
Oct	5	Quabbin Reservoir	1	DSm
		Great Spangled Fritillary		
Jun	17	Brentwood Cons Area, Holliston	1	RH
	26	BMBS	24	GH+DPr+JM
	30	Whitney Swamp, Holliston	35	RH
Jul	1	Purchase St PL, Milford BMBS	38 26	RH GH
	2	Rt 169 PL, Charlton	81	RH
Aug	5	Ware River Watershed, Barre	26	ML+SC
	25	MBNEW Sherborn	14 7	EN BB
Sep	23	Bolton Flats Royalston	1 1	ML+SC CK
		Aphrodite Fritillary		
Jun	29	BMBS Milford	1 2	DPr RH
Jul	2	Rt 169 PL, Charlton	3	RH
	10	Rt 85 PL, Milford	4	RH
Aug	26	Amherst	2	DMi
Sep	8	E Longmeadow	1	KP
		Atlantis Fritillary		
Jul	7	Dubuque SF, Hawley	5	ML+SC
	22	Cummington	1	TG
		Silver-bordered Fritillary		
May	14,31	Cape Ann	7,131	DS+CT
Jun	7	Cape Ann	54	DS+CT
	9	Waring Field, Rockport	300	FG
	10	Petersham	5	EN
	11-20	Cape Ann	max 110	DS+CT
Jul	11-20	Cape Ann	max 342	DS+CT
	21	Fowl Meadow, Milton	6	DPe
	25-31	Cape Ann	max 194	DS+CT
Aug	10	Cape Ann	65	DS+CT
Sep	18	Evans Field, Provincelands	50	AR, THa
	19	Cape Ann	1	DS+CT
		Meadow Fritillary		
May	28	High Ledges WS, Shelburne	12	DPe
Sep	15	Bartholomew's Cobble, Sheffield	4	ML+SC

		Harris' Checkerspot		
Jun	5	BMBS	2	GH+DP
	8	Rt 85 PL, Milford	13	RH
	11	BMBS	20	GH
	13	BMBS	23	EIBa+BW
	15	BMBS	24	GH+JM
	25	Royalston	4	CK
	28	BMBS	1	WB
		Pearl Crescent		
May	9	Granby	1	TD
Jun	10	CRFAL	300	AR,THa
Jul	11	Stoughton	55	DLr
	25-30	Cape Ann	max 215	DS+CT
Aug	5	Ware River Watershed, Barre	162	ML+SC
	18	FANST	35	TG
Sep	23	Wenham Canal, Wenham	94	FG
Oct	9	APND	1	RH
		Baltimore Checkerspot		
Jun	9	Old RR PI, Milford	1	RH
	26	Watcha Path, Edgartown	2	MPe
	30	Turkey Hill, Hingham	236	MC et al
Jul	4	Old RR PI, Milford	7	RH+BMBS BI
	7	Truro	114	AR
	11	Mountain Meadow, Williamstown	13	PW
	12	Weir Hill Reservation, N Andover	17	FG
	22	Boxford	2	JBe
		Question Mark		
Apr	15	Royalston	1	CK
Jun	1	DWWS	1	DF
	29	Katama, Edgartown	7	MPe
	30	World's End, Hingham	5	MC et al
	30	Cape Ann	2	DS+CT
Jul	25	George's Island	3	BC
Aug	20	Cape Ann	3	DS+CT
Sep	13	Squibnocket, Chilmark	3	MPe
Oct	12	GOOS	1	RH
		Eastern Comma		
Apr	4	Holliston	1	RH
	9	Ipswich	1	CDe
	14	Mt Tom Reservation	17	TG
May	2	Stoughton	3	DLr
Jun	19	Uxbridge	6	RH
	28	LRA	12	RH
Jul	26	Dunback Meadows, Lexington	12	MR
Oct	5	LRA	1	RH
		Compton Tortoiseshell		
Apr	11	Hingham	6	DPe

	22	Hingham	3	DPe
	23	Quabbin,Petersham	2	DSm
May	19	Wompatuck SP,Hingham	1	DPe
		Mourning Cloak		
Mar	16	Nickerson SP,Brewster	1	JS
	19	Malden	1	AM
Apr	4	Cambridge Cape Ann	1 9	MM DS+CT
	14	Mt Tom Reservation BMBS	10 5	TG BW et al
	29,30	Mt Holyoke	9	TD
May	3	Mt Holyoke	9	TD
Jun	6	Mt Greylock	10	TG
Jul	7	Provincelands	18	AR
Oct	10	Nomans Land,Chilmark Milford	1 2	AK RH
		Milbert's Tortoiseshell		
Apr	29	PL,Sherborn	1	BB
May	28	E Longmeadow	1	KP
Jun	10	Mt Holyoke	1	CK
	18	Florence	1	TG
	19	Montague	1	DMi
	20	Hubbardston	5	DSm
	28	Dunback Meadows,Lexington	2	MR
Jul	1	Sterling Peat,Sterling	1	ML+SC
		American Lady		
Apr	4	Chappaquidick,Edgartown	1	AK
	24	Burlington Mt Tom Holliston	2 4 8	BWr TD RH
	29	Westport	57	DPe
May	5	Joppa Flats (moving N)	31	ML+SC
	14	Plum Island,Newbury	15	DLr
	31	Cape Ann	34	DS+CT
Jun	6	Mt Greylock	48	TG
	7	Rt 169 PL,Charlton	18	RH
Jul	10	Rt 85 PL,Milford Wenham	10 8	RH FG
	30	SF,Edgartown	4	MPe
Sep	2	Sterling S Monomoy	4 14	SSe EN
	12	Westport	11	RH
Oct	2	GOOS	6	RH
	19	Westport	5	RH
Dec	3-5 **	Oak Bluffs	1	MPe
		Painted Lady		
Apr	26	New Salem	1	DSm
Jun	6	Mt Greylock	10	TG+BC
Jul	30	Edgartown	7	MPe
Sep	3	GOOS+Westport Oak Bluffs	90,28 16	BC MPe
	9	GOOS	216	BC
	16	Aquinnah, MV	~30	MPe
	17	GOOS+APND	76	RH
	18	Somerville	~8	LizL

	23	Westport	53	BC+MC+EN
Oct	6	Dartmouth, Westport	9	BC+MC et al
Dec	1	APND	4	BC
	10 **	Oak Bluffs	1	MPe

Red Admiral

Apr	14,15	Mt Tom Reservation	1	TG
May	3	DWWS	60	DF
	30	Edgartown	25	MPe
Jun	4-8	Newbury	max 78	SS
	10	LRA	228	RH
Jul	1	IRWS	12	DMa+WT
	5	Cape Ann Georges Isl.(61 min),Hull	64 65	DS+CT BC
	6	(Most heading N),Westport	143	ML+SC
	9	~300/hr,Eastham	300	TD+CD
	21	flying N/NW,Orleans	91	MFr
	22	Dunback Meadows,Lexington	20	AM
Aug	19	Jone's Nose,	20-30	PW
Sep	12	GOOS+APND	46	RH
Oct	2	Cape Ann MV	5 40	DS+CT MPe
	2	GOOS+APND	137	RH
Dec	5	APND Edgartown,	1 1	MC MPe

Common Buckeye

Jul	5	Western Ave Cons,Sherborn	1	RH
Sep	2	Westport	2	BC
	3	Chilmark	2	AK
	9	GOOS	4	BC
	23	Westport	2	BC+MC+EN
Oct	6	Dartmouth,Westport	2	BC+MC et al
	21	GOOS+APND	1	MC

Red-spotted Admiral (White Admiral form)

Jun	10	Wrentham Petersham	1 1	MC EN
	10	Mt Greylock Royalston	1 1	TG CK
	16	BFDAM	2	ML+SC
	25	Royalston	1	CK
Aug	26	Barre	1	EIBa

Red-spotted Admiral (Red-spotted Purple form)

May	25	PL,Sherborn	1	BB
Jun	10	Petersham	8	EN
	8-10	Hingham (Bio Days)	32	DPe
	16	BFDAM	19	ML+SC
Aug	5	Ware River Watershed, Barre	14	ML+SC
	28	Waskosim's Rock,Chilmark	6	MPe
Sep	7	Natick	1	ES

Viceroy

May	21	BMBS	1	GH
Jun	5	BMBS	7	GH+DPe
	7	Rt 169 PL,Charlton	7	RH

Jul	2	Rt 160 PL,Charlton	5	RH
	27	CRGRO	10	SS
	29	MBNEW BMBS	12 10	EN GH
	29	Cherry Hill Reservoir,W Newbury	6	EN
Aug	4	MBNEW	13	EN
	26	Oxford BFDAM	2 7	BW EIBa
Oct	5	IRWS LRA	1 1	FG RH
Hackberry Emperor				
Jun	24	Forest Park,Springfield	2	TG
Aug	18	Forest Park, Springfield	8	SSe+TG
Tawny Emperor				
Jul	28	Mt Holyoke	1	TG
Aug	18	** Forest Park,Springfield	1	SSe+TG
Northern Pearly-Eye				
Jun	28	LRA	1	RH
Jul	2	Rt 169 PL,Charlton	3	RH
	7	Dubuque SF,Hawley	2	ML+SC
	14	Middleboro	2	KHo
	21	Ware River Watershed, Barre	3	ML+SC
Aug	11	Northeastern Campus,Burlington	1	MR
Eyed Brown				
Jun	9	* Hale Reservation,Westwood	20	EN
Jul	1	IRWS	2	DMA+WT
	1	Purchase St PL,Milford	3	RH
	14	MBNEW	44	DPe
	28	Royalston	1	CK
Aug	22	PL,Sherborn (fresh)	1	BB
Appalachian Brown				
Jun	16	Purchase St PL,Milford	1	RH
Jul	6,7	Hoft Farm,W Tisbury	max 8	MPe
	12	Falmouth	12	AR
	19	Cape Ann	5	DS+CT
Aug	18	FANST	3	SSe+TG
Little Wood-Satyr				
May	20	W Roxbury,Boston M&M,Holyoke	1 1	EC TD
Jun	5	BMBS	71	GH+DPPr
	8,9	Foxboro	max 130+	BC
	10	Falmouth	250+	AR
	11	BMBS	123	GH
	29	Cape Ann	9	DS+CT
Jul	10	BMBS	13	GH+DPPr
	30	Cape Ann	1	DS+CT
Common Ringlet				
May	20	Turkey Hill,Hingham	9	DLr
Jun	1	Turkey Hill,Hingham	115	DPe
	4	Weir Hill Reservation,N Andover	102	FG
	7	IRWS	200+	FG

	9	IRWS Rockport	115 167+	DMa FG
	10	CRFAL	150+	AI Ro,ToHa
	16	IRWS	88	DMa
Aug	10	Princeton Cape Ann	50 18	CK DS+CT
	26	BFDAM	30	EIBa
Sep	6	Newbury IRWS	3 2	FG
Oct	3	Comm Garden,Northampton	1	TG
Common Wood-Nymph				
Jun	30	BMOOR World's End,Hingham	1 2	BB MC et al
Jul	25	Cape Ann	78	DS+CT
	31	Cape Ann	75	DS+CT
Aug	5	Ware River Watershed, Barre	138	ML+SC
	10	Wachusett Meadow,Princeton	100	CK et al
	10	Cape Ann	59	DS+CT
	31	Cape Ann	12	DS+CT
	31	Trade Winds,Oak Bluffs	2	MPe
Sep	21	Chappaquidick,Edgartown	1	AK
Monarch				
May	8	Chicopee	1	RP
Jun	18	Western Ave Cons,Sherborn	3	RH
Jul	22,23	Chilmark	5	AK
	27	Crane Pond WMA,Groveland	8	SS
Aug.	10	Wachusett Meadow,Princeton	17	CK et al
	16,23	Edgartown	30	AK
Sep	4	Gay Head Cliffs,Aquinnah	14	MPe
	12	GOOS+APND	145	RH
	15	Mt Tom	91	TG
	16	Somerville	55	LizL
	17	GOOS+APND Cape Ann	141 87	RH DS+CT
	26	Deerfield FANST	30 94	KP TG
Oct	2	GOOS+APND	322	RH
	6	Dartmouth,Westport	420	BC+MC et al
	12	GOOS+APND	99	RH
	21	GOOS+APND	55	MC
Nov	14	Cape Ann	1	DS+CT
Silver-spotted Skipper				
May	20	BMBS	2	GH+BMOOR BI
Jun	7	Rt 169 Pl,Charlton	16	RH
Jul	2	Rt 169 PL,Charlton	17	RH
	3	Florence	21	TG
	5	Western Ave Cons,Sherborn	18	RH
	6	Tisbury Meadow,Tisbury	47	MPe
	15	Falmouth	23	AR
	29	W Newbury Sherborn	7 5	EN BB
Oct	4	Comm Garden,Northampton	1	TG
Hoary Edge				
Jun	7	Rt 169 PL,Charlton	8	RH

	16	Whitney Swamp,Holliston	4	RH
	18	Woburn	6	MR
	26	BMBS	6	GH+DPr+JM
Jul	1	BMBS	10	GH
	2	Rt 169 PL,Charlton	9	RH
	10	Rt 85 PL,Milford BMBS	3 4	RH GH+DPr
Southern Cloudywing				
Jun	4	Peabody	1	AG
	10	CRFAL	2	AR,THa
	16	BFDAM	2	ML+SC
	20	Hubbardston	1	DSm
Jul	2	Rt 169 PL,Charlton	4	RH
Northern Cloudywing				
May	13	Sunderland	1	TG
Jun	11	Cape Ann BMBS	9 6	DS+CT GH
	18	Woburn	8	MR
	26	W Tisbury BMBS	1 4	MPe GH+DPr+JM
Jul	25	BMBS	1	GH
Dreamy Duskywing				
May	2	Myles Standish SF,Plymouth	8	DPe
	26	DSTOW	8	EIBa+BW
Jun	1	Grafton Plymouth	10 8	DPr DPe
	5	BMBS	7	GH+DPr
	20	Hubbardston	3	DSm
Sleepy Duskywing				
Apr	29	SF,W Tisbury	1	MPe
May	10	SF,MV	4	MPe
	19	SF,MV	12	MPe
	25	PL,Sherborn	1	BB
Jun	1	Plymouth	1	DPe
	8	Foxboro	1	BC
Juvenal's Duskywing				
Apr	22	Myles Standish SF,Plymouth	3	DPe
May	7,8	BMBS	max 35	GH
	11	PL,Sherborn	22	BB
	12	Upton Quabbin BMBS	17 91 28	TD TG GH
	14	FG Hills SF,Foxboro	222	BC
Jun	5	BMBS	20	GH+DPr
	25	Royalston	1	CK
Horace's Duskywing				
May	7	Lexington	2	BWr
	12	BMBS	5	GH
Jun	1	Dauphinais Park,Grafton	2	DPr
	5,11	BMBS	max 4	GH+DPr
	8	Foxboro	1	BC
Jul	28	Natick	1	BB
Aug	11	Northeastern Campus,Burlington	1	MR

Wild Indigo Duskywing			
May	7	Foxboro	1 BC
	26	DSTOW	12 EIBa+BW
Jul	28	Natick	14 BB
	29	Marshfield BMBS	10 20 BC GH
Aug	14	BMBS	6 GH+DPr
Oct	2	Comm Garden,Northampton	1 TG
Persius Duskywing			
May	26	Myles Standish SP,Plymouth	2 MN
Common Checkered-Skipper			
Sep	22	Comm Garden,Northampton	1 TG
Common Sootywing			
May	20	Agawam,Holyoke BMBS	1,1 2 TD JM+DPr
Jun	10	Middleboro W Newbury	1 1 KHo FG
Jul	25	BMBS	3 GH
	28	Lincoln	5 BB+MM+ES
	28	Comm Garden,Northampton	10 TG
Sep	8	Comm Garden,Northampton	1 TG
Arctic Skipper			
May	26	DSTOW	1 EIBa+BW
	29	N Andover	1 FG
Jun	6	Greylock Glen,Adams	7 PW
	10	Windsor Royalston	11 2 TG CK
	11	BMBS	2 GH
	15	BMBS	1 GH+JM
Least Skipper			
May	25	PL,Sherborn	3 BB
Jun	10	LRA	5 RH
	26	Rockport Edgartown	27 35 FG MPe
Aug	11	Northeastern Campus,Burlington	20 MR
	12	Wampesket,W Tisbury	19 MPe
	18	FANST	30 TG
Sep	8	Waring Field,Rockport	5 FG
Oct	3	Chilmark	3 AK
European Skipper			
May	25	PL Sherborn	4 BB
Jun	14	Maple Park Cons,Mansfield	1358 RH
	17	Wachusett Res,W Boylston	660 ML+SC
	18	Western Ave Cons,Sherborn	484 RH
	20	Hubbardston	2500 DSm
	27	Cape Ann	162 DS+CT
Jul	11	Mountain Meadow,Williamstown	2 PW
	14	Middleboro Edgartown	1 1 KHo MPe
Aug	14 **	Mt Greylock	1 Guy Tudor
Fiery Skipper			
Sep	8	Waring Field,Rockport	1 FG
	10,13	Cape Ann	1 DS+CT

	15	Gloucester, Rockport	1,2	MBC
		Leonard's Skipper		
Aug	19	Florence	2	TG
	25	PL, Sherborn	9	BB
	31	Trade Winds, Oak Bluffs	24	MPe
Sep	9	Trade Winds, Oak Bluffs	35	MPe
	23	APND	1	BC+MC+EN
	23	Cape Poge, Edgartown	2	AK
Oct	4	SF, W Tisbury	3	MPe
		Cobweb Skipper		
May	7	BMBS	1	GH
	10	SF, MV, W Tisbury	17,5	MPe
	12	CRFAL BMBS	4 10	DPe+EC GH
	20	BMBS	31	GH+BMOOR BI
Jun	11	BMBS	1	GH
		Indian Skipper		
May	28	Florence	8	TG
Jun	8	Foxboro	7	BC
	9	Amherst	4	TG
	10	Cherryhill Reservation, W Newbury	4	FG
	17	Wachusett Res, W Boylston	8	ML+SC
	20	Hubbardston	11	DSm
	27	Westminster, Gardner	1	RH
		Peck's Skipper		
May	18	Cape Ann	2	DS+CT
Jun	3	E Longmeadow	20	KP
	9	Old RR PL, Milford	20	RH
	10	June 8-10, Hingham	22	DPe
Aug	5	E Longmeadow Stoughton Milford	20 10 11	KP DLr BB
	14	BMBS	23	GH+DPr
	19	Florence	20	TG
	25	Quabbin Park	20	ML+SC
Sep	18	(fresh), Oak Bluffs	1	MPe
		Tawny-edged Skipper		
May	28	Florence	1	TG
Jun	10	Hingham CRFAL	4 2	DPe AR+THa
Jul	7	Truro	7	AR
Aug	12	Franklin Ave., Oak Bluffs	5	MPe
	18	FANST	5	TG
	23	W Tisbury	4	MPe
Sep	22 **	Westwood	1	EN
		Crossline Skipper		
Jun	10	Hingham	1	DPe
	29	SF, Edgartown	9	MPe
Jul	5	Western Ave Cons, Sherborn	2	RH
	10	BMBS	6	GH+DPr
	31	Woods Hole	1	AR

Aug	4	E Longmeadow	2	KP
	5	E Longmeadow	1	KP
	11	E Longmeadow	2	KP
Long Dash				
Jun	1	Turkey Hill,Hingham Oak Bluffs	10 1	DPe MPe
	9	Hale Reservation,Westwood	12	EN
	9	IRWS Rockport	7 8	DMa FG
	14	Cape Ann	13	DS+CT
	26	Edgartown	7	MPe
Jul	14	(male, very worn), Edgartown	1	MPe
Sep	5	(fresh) Franklin Ave.,Oak Bluffs	1	MPe
Northern Broken-Dash				
Jul	1	SF,Edgartown	3	MPe
	10	BMBS	7	GH+DPr
	11	Mountain Meadow,Williamstown	6	PW
	15	Falmouth	6	AR
	29	PL,Sherborn	5	BB
Aug	12	Franklin Ave.,Oak Bluffs	1	MPe
Little Glassywing				
Jun	26	BMBS	1	GH+DPr+JM
Jul	3	Brook St PL,Sherborn	4	RH
	3,10	BMBS	max 5	GH et al
	10	Rt 85 Pl,Milford	3	RH
Aug	5	Stoughton	3	DLr
	14	BMBS	2	GH+DPr
Sachem				
Jul	5	Western Ave Cons,Sherborn.	1	RH
Delaware Skipper				
Jun	18	Florence	1	TG
Jul	4	Milford	3	GH+RH et al
	10	BMBS	3	GH+DPr
	12	Weir Hill Reservation,N Andover	4	FG
	28	Lincoln	1	BB+MM+ES
Mulberry Wing				
Jul	4	Old RR PL,Milford	3	RH+GH et al
	19	Cape Ann	7	DS+CT
	21	Puffers Pond,Amherst	4	DMi
	29	PL,Sherborn	14	BB
	31	Old Coke Kiln Rd,Leverett	1	DMi
Hobomok Skipper				
May	20	E Longmeadow FANST,Holyoke	1 1,1	KP TD
Jun	5	BMBS	14	GHo+DPr
	9	Rockport Amherst Grafton	6 6 9	FG TG DPr
	11	BMBS	20	GH
	18	Cape Ann	7	DS+CT
Jul	7	Dubuque SF,Hawley	2	ML+SC

		Zabulon Skipper		
Aug	18	16m, 7f FANST	23	TG
	18	1m Forest Park, Springfield	1	TG
		Broad-winged Skipper		
Jul	4 *	Milford	1	RH+GH et al
	10	Wenham Canal, Wenham	11	FG
	28	Fowl Meadows, Milton	26	sethe
	29	BMBS	17	GH
Aug	14	BMBS	18	GH+DPr
	18	FANST	1	TG+MBC
		Black Dash		
Jul	5	Western Ave Cons, Sherborn	3	RH
	15	Middleboro E Longmeadow Upton	1 1 1	KHo KP TD+CD
	19	Cape Ann	2	DS+CT
	22	Richmond	1	TG
		Dun Skipper		
Jun	25	Royalston	1	CK
Jul	7	Truro	18	AR
	10	Rt 85 PL, Milford	6	RH
	29	BMBS	12	GH
Aug	5	Ware River Watershed, Barre	63	ML+SC
	11	Northeastern Campus, Burlington	15	MR
	22	PL, Sherborn	9	BB
Sep	3	BMBS	1	BW et al
		Dusted Skipper		
May	19	Wompatuck SP, Hingham	1	DPe
	28	Florence	3	TG
Jun	7	W Tisbury BMBS Charlton	4 2 3	MPe BW RH
	9	Hale Reservation, Westwood	15	EN
	11	BMBS	8	GH
	18	Western Ave Cons, Sherborn	1	RH
		Pepper and Salt Skipper		
May	20	BMBS	2	GH+BMOOR BI
	21	BMBS	7	GH
Jun	4	IRWS	2	FG
	5	BMBS	3	GH+DPr
	10	Petersham Mt Greylock	1 1	EN TG
	11	BMBS	1	GH
		Common Roadside-Skipper		
Jun	9	Sunderland	1	TG
	16	BFDAM	2	ML+SC
	20	Rt 85 PL, Milford	2	RH

The 2001 Flights of Vanessas in Massachusetts

by Matthew Pelikan, Brian Cassie, and Richard Hildreth

Bright in color, widespread in distribution, and active in habits, our three members in the genus *Vanessa* - Red Admiral, Painted Lady, and American Lady - rank among the most familiar butterflies in America. Paradoxically, they are also among the most enigmatic: these three species exhibit some of the most impressive mass movements found among our butterflies, huge migrations that defy explanation and produce startling variations in abundance within and between seasons. In 2001, Bay State observers were treated to an outstanding year for all three Vanessas. Moreover, the growing number of active observers, and improved communication among them, makes it possible to assemble a fairly clear picture of the entire season's events. Relying on posts to the Massachusetts butterfly listserver (MASSLEP), personal communications from many observers, and existing information on butterfly migrations, this article attempts to summarize one of the most captivating facets of a generally excellent year for state butterfly enthusiasts.

One interesting thing about *Vanessa* butterflies is the rarity with which they may overwinter in Massachusetts. One American Lady, found in badly worn condition in a greenhouse in Edgartown on March 2, 1998 (J. Verner, pers. comm.) probably survived the winter with human assistance; otherwise, a handful of late March Red Admirals and early April American Ladies appear to represent all of the truly early-season Bay State *Vanessa* sightings from recent years (Massachusetts Butterflies, nos. 7-16). Even these reports may not reflect overwintering individuals, because the warm conditions that might resurrect a dormant butterfly are usually associated with warm southwesterly winds that might just as easily be blowing migrants into the region. For all practical purposes, every spring brings a fresh population of these butterflies to the Bay State. Where things go from there is anybody's guess, though, and 2001 illustrated what dynamic results may spring from our annual influx of these butterflies.

American Lady

The Massachusetts early date for this species was pushed back by two full weeks (April 15 to April 1) between 1997 and 2001, according to Massachusetts Butterfly Club (MBC) records - a change probably more reflective of increased observer effort than of any meaningful change in the habits of the butterfly. But while many years see a smattering of early April records for this species, often but not always from the southeast

coast, the appearance of significant numbers of American Ladies in the state usually occurs in the latter half of the month. In this respect, then, 2001 got off to a thoroughly typically start. A lady, not identifiable to species but presumably American, was noted (M. Pelikan) on April 5 in West Tisbury. Then, on a very warm April 24, a sharply defined influx of American Ladies became evident in the eastern part of the state: eight individuals were counted as they headed east-northeast through a yard in Holliston (R. Hildreth) - a report of particular interest because it provides direct evidence of migration by early American Ladies - while MASSLEP carried reports of two ladies, probably American, in Burlington (B. Wright), and single individuals in Orleans and Dover (M. Freeman). Behavioral notes from the latter observer suggest that these arrivals were already seeking suitable host plants on which to oviposit: the Orleans butterfly was described as "fly[ing] in over the salt marsh" before "scanning the yard," while the Dover individual was reportedly sniffing around a yard known to be rich in everlasting, one of this species' host plants, even though emergent vegetation was not yet evident to the observer.

The establishment of American Ladies in the state rapidly gained steam, and MASSLEP reports tracked the process. Beginning on April 26, a North Shore observer (S. Stichter) provided more evidence both of coordinated movements and of oviposition, noting small numbers of American Ladies passing northward through her yard in Newbury, with some lingering to pursue each other or lay eggs on pussy-toes, another host plant. American Ladies began to appear farther west and north, as in the case of a "very pale and worn" individual noted at Barre Falls on April 28 [M. Lynch]. And numbers rapidly increased, as indicated by an April 29 report of 57 from Westport (D. Peacock).

May was simply an excellent month for this species in Massachusetts. Across most of the state, American Ladies were virtually inescapable: wherever you stood, ladies flew past, and any nectar source you checked seemed to have one or several ladies refueling on it. Many variables, from patchy distribution of the butterflies to varying observer effort and skill, complicate any attempt to compare this flight to previous flights of this species in terms of numbers or density. Rough assessments by veteran observers, though, suggest that the May 2001 flight was enormous, very appreciably larger than average.

But regardless of how this flight stacked up in terms of volume, it stood out because of the clarity with which the migratory behavior of the butterflies was evident. On May 2, 27 American Ladies were noted moving north at Plum Island, in Newburyport (R. Heil). Two days later, and again on May 10, the same observer reported over 100 moving north at this location (these reports seem to indicate the height of the migration). Highest numbers were generally noted along the coast, although

significant numbers were also reported from inland: e.g., 75-100 near Holyoke on May 6 (A.Grkovich). In most cases, butterflies were noted heading to the north or northeast, suitable bearings for southern butterflies intent on colonizing New England. But the migration picture was complicated by a few reports of American Ladies moving in other directions. For example, on April 29, "a steady stream [of American Ladies] heading west" from Aquinnah, on the western tip of Martha's Vineyard, was noted (V. Laux). The course would take butterflies toward the mainland, which is a reasonable direction for them to want to head from the Vineyard. But how they knew they were off course, and how they determined an appropriate course to follow, are difficult questions. Perhaps more easily explained were the 31 American Ladies noted on May 5 in Newburyport as they followed the Merrimac River (M. Lynch). While the MASSLEP post was not clear on whether the butterflies were heading upstream or down, it appears that they were simply aligning their flight with a distinct, linear geographical feature.

By late May, numbers of American Ladies reported had declined markedly, and while some reports continued to comment on migrants (e.g., 23 noted in Foxboro by B. Cassie on June 8-10, with some individuals moving north), fewer observers were noting (or at least reporting) coordinated directional movements. By mid-June, numbers of this species had fallen low enough so that it was no longer conspicuously abundant. And, perhaps surprisingly, the robust spring movement of American Ladies, and their widely reported reproductive activity, failed to produce notably large numbers of this species later in the year. While American Ladies were present in the state, sometimes in significant numbers, for the remainder of the season, their distribution became quite patchy, and the maximum numbers reported never rivaled the numbers noted in May. This species was absent from many MASSLEP posts in July, August, and September, or reported only in very low numbers. Numbers recorded on mid-July Fourth of July Butterfly Counts were generally modest (e.g., 79 on the Martha's Vineyard count, 24 on the Northern Essex County count, and 42 on the Blackstone Valley count). On an annual coastal migrant count conducted in the fall in Westport and South Dartmouth, the maximum single-day count of American Ladies in 2001 was only 11, compared with 51 in 2000 and 28 in 1999. But, as the rest of this article will show, the dearth of American Ladies was barely noticed because their spring influx proved to be just the first course of a very large meal.

Red Admiral

Even more so than American Ladies, Red Admirals are notorious

for huge variations in numbers. This is also a species known to stage large-scale migrations, one of which was well documented by A.E. Brower (1958). In June 1957, Brower and other observers noted the sudden onset of Red Admirals moving in large volume (as high as 500 per hour across a 20-foot front) across a front dozens of miles wide in Maine. While numbers rapidly declined from these peaks, Brower comments that numbers remained higher than usual into August. In Massachusetts in 2001, the Red Admiral migration may or may not have produced such high densities of butterflies, but it quite certainly exceeded the 1957 Maine flight in duration and extent.

The 2001 season actually began inauspiciously for this hardy migrant; we are unaware of any early April reports, and it was not until a couple of days after the American Lady migration began that this species appeared in the state in significant numbers. Through most of May, scattered Red Admirals attracted little attention among the hordes of American Ladies, but by the end of May, the relative abundance of these species had reversed. On June 1, an observer on Martha's Vineyard (M. Pelikan) reported ladies and admirals passing through a small yard in Oak Bluffs at a rate of "one every several minutes," with about two thirds of the butterflies observed being Red Admirals. Over the following days, many more reports appeared on MASSLEP of good numbers of admirals. In many cases, the butterflies were migrating north or northeast (e.g., 16 migrants in three hours in West Bridgewater, reported on June 1 by B. Cassie; 47 in Ipswich, reported on June 5 by S. Stichter). But in many cases, some or all of the Red Admirals observed were lingering near or ovipositing upon nettle, as was the case with about 80 individuals reported from Marshfield on June 1 (D. Furbish). As with American Ladies, the highest numbers of admirals were reported from the coast, but there was no shortage of inland reports: for example, P. Weatherby reported "many" from Williamstown on May 28, T. Gagnon reported 41 from Mt. Greylock on June 6, and T. Moore reported 14 from Grafton on June 13, either migrating "with a purpose . . . [or] pausing to nectar."

While it appeared that one peak of the Red Admiral migration came in early June, numbers continued well above average into late July, when a second peak became evident. Some of this increase reflected the arrival of another wave of migrants (e.g., 143 reported heading north on July 7, by M. Lynch). But many individuals in this second bloom of admirals were probably of local origin: for example, on July 4, B. Cassie reported "lots of Red Admirals hatching out from the nettle patches" in Brookline, while Roger Pease, examining the floodplain on the east side of the Connecticut River for about 1.1 miles, found "a zone of Wood Nettle (with) hundreds of thousands of leaves sewn or folded together for the entire 1.1 miles. However, there were almost no caterpillars left

and very few adults.” The Blackstone Valley Fourth of July count produced 146 Red Admirals, and this species was the most numerous butterfly found on the Martha’s Vineyard count, with 489 individuals tallied.

By the end of July, numbers had declined sharply, despite reports such as S. Stichter’s observation of “lots” of Red Admiral larvae, plus a few adults, along the Parker River in Essex County on August 1. Many reports indicated that the summer’s influx of Red Admirals made it into northern New England (most notable was an estimated 6000+ larval nests reported by B. Cassie and R. Hildreth from Maine’s Petit Manan Island on August 23). And although late summer and autumn reports were generally unremarkable in Massachusetts, northern populations apparently produced a good southern migration: numbers reported by the Westport migration count were substantial, peaking with 137 individuals on October 3.

Perhaps the most puzzling aspect of the July Red Admiral migration was the apparent arrival of thousands of individuals from over open ocean. While the rates of arrival observed at any one point seem unremarkable, amazing estimates of total numbers emerge if one assumes uniform arrival over an extended front. John Price of New York reported Red Admirals coming ashore on July 5 on east-facing Marconi Beach on the Outer Cape, riding a light easterly wind at the rate of about two per minute over a 50 yard front. Assuming the same rate of arrival over five miles of beach, this figure extrapolates to a total of around 100,000 butterflies over a five-hour period! Also on July 5, B. Cassie and his Park School summer students saw 100+ Red Admirals flying west over George’s Island, just off the northern tip of Hull., in a two-hour period at midday. On July 15, M. Pelikan reported 50 Red Admirals in about an hour, arriving from the southeast on the Vineyard’s south shore over an observed front estimated, fairly precisely, at 100 yards. Extrapolated on the assumption of a uniform arrival rate along roughly 20 miles of Vineyard south shore, this works out to a rate of about 17,000 butterflies per hour! (Oddly, this movement ended as soon as the prevailing northwest wind gave way to a southerly sea breeze; it could not be determined whether the halt in arrivals meant that all the individuals out at sea had come ashore, or if the butterflies were oriented to fly into the wind and incoming individuals reversed their direction when encountering the wind shift.) In each of these cases, there is no land for thousands of miles in the direction from which the butterflies were arriving. While Williams (1965) suggests that butterflies can fly over open water for several hundred miles under their own power, and well over a thousand miles if aided by favorable winds, trans-Atlantic arrival for these Red Admirals seems inconceivable. But if they originated in North America, one is left with the

questions of how they came to be over open ocean in the first place, and how they found their way back to land once they got there.

Painted Lady

The Painted Lady is, in most years, by far the rarest of our Vanessas. And certainly Bay State observers came up with little evidence early in the season that 2001 would be any different. But in April, reports from the southwestern United States suggested that an awesome movement of these butterflies was heading north, with perhaps hundreds of millions of butterflies involved. Williams (1965) suggests that Painted Ladies arriving from Mexico essentially repopulate the United States each year; so, given the millions of butterflies that were on the move in the Southwest, it was seemingly just a matter of time before Massachusetts experienced a wave of these beautiful insects.

The first 2001 Bay State report for this species that we are aware of came on April 26, from New Salem (D. Small). But this species was reported only sparingly through May, and even reports that might have attracted attention in normal years (e.g., 10 on Mt. Greylock on June 6, noted by T. Gagnon and others) seemed to pale in comparison to the voluminous numbers of American Ladies and Red Admirals. The 2001 season continued as a good but by no means astonishing one for Painted Ladies through June, July, and most of August (the Vineyard Fourth of July count, for example, produced a fine count of 18); but as August began to draw to a close, numbers of Painted Ladies in the state spiked dramatically. As was the case with the second peak of Red Admirals, both local eclosers and migrants may have been involved. The first inklings of a Painted Lady bloom came from inland observers (for example, C. Kamp reported six very fresh individuals in Princeton on August 26). But perhaps more so than in the case of the other Vanessas, the September Painted Lady phenomenon was primarily coastal. A Vineyard observer (M. Pelikan) on August 30 noted nine Painted Ladies on a single butterfly bush in Oak Bluffs (just one week after finding a total of only three Vanessas during several hours in the field); daily counts on the Vineyard were routinely on the order of 40 individuals during the first half of September, often with no special effort being made to find butterflies, and single-location counts were routinely between 10 and 20 individuals. K. Haley noted 20+ Painted Ladies in Marblehead on September 9. The Westport migrant count noted about 80 on September 2 and 118 on the next day. Westport numbers peaked at 216 on September 9, and the scale of this event can be measured by comparing this figure to the previous two years' single-day highs: six in 2000, three in 1999! Many of these individuals were presumably

migrants, but few reports gave any indication of strongly coordinated movement by this species.

Late Vanessas

As Painted Lady numbers declined with the waning of September, Massachusetts observers might reasonably have assumed the excitement was over. After all, they had enjoyed an excellent American Lady flight, two excellent Red Admiral flights, and a superb Painted Lady flight. But it ain't over until it's over, and after a fairly quiet (but generally very mild) autumn, a striking little blip of late-season nymphalids was noted. An observer in Westport (B. Cassie) got December off to a good start with four Painted and two American Ladies on the first of the month. All were in immaculate condition. Ensuing reports came mainly (perhaps exclusively) from the coast, where ocean temperatures moderate the late autumn chill: a Red Admiral was noted at Westport on December 5 (M. Champagne), and on the same day, one American and two Painted Ladies, plus a single Red Admiral, figured among the five butterfly species noted on Martha's Vineyard (M. Pelikan). A single Painted Lady was still alive in Oak Bluffs on December 10 (M. Pelikan), nectaring on wild mustard on the morning after a moderate frost. And finally, birders on Cape Ann, Essex County, noted a butterfly that was apparently a lady (although not identified to species) on December 16 (fide M. Lynch). Thus, at the end of a remarkable season for Vanessas, the Bay State produced the latest sightings on record for all three of our species in this genus: a remarkable end to a remarkable year.

References

Brower, A.E. 1958. A Flight of Red Admiral Butterflies Across Maine. *Maine Field Naturalist* 14(2): 37-39.

Williams, C.B. 1965. *Insect Migration*. London: N.N. Collins.

The authors are especially grateful to the participants of the MASSLEP mailing list. We have attempted to credit all individuals whose reports are directly cited in this article, but many other reports were considered in assessing the 2001 Vanessa flights, and we gratefully acknowledge the contributions made by these observers.

Checkerspot Farm - A Success Story by Madeline Champagne

(from conversations with Tor Hanson and Laurie Christiana)

In North Truro, close to Provincetown at the end of Cape Cod, is a dry meadow area known as Twinefield - where bits of twine can still be found in the dirt, from the times when local fishermen spread their nets over the fields so that they could work on them, and kept the fields open by burning. For many years Tor Hanson has been studying and loving the Twinefield area, and watching the free areas disappear, as the land turns to residential.

One day in the spring of 1999, Laurie Christiana and Kathy Williams were checking out their property, which encompasses about one acre. The house foundation had been poured. Out of the nearby woods popped Tor, whom they had heard about from the local people as "The Butterfly Man." At that time, Laurie and Kathy didn't know much about butterflies. Tor engaged them in conversation, and pointed out the large areas of English Plantain on their land where there was a population of Baltimore Checkerspot butterflies. He showed them the caterpillars which were then on the plants. He explained about the larval host plant and the Baltimore Checkerspot life cycle - adults fly in late June and early July, and the caterpillars that emerge from the eggs in mid-July grow slowly, spend the winter as small caterpillars, and then come up in May when the plants grow again.

After learning about the Baltimore Checkerspots, Laurie and Kathy changed their plans for the location of their wood shed, and have kept most of the backyard natural. Blue-stemmed grass and English Plantain are predominant, and there is also milkweed and Butterfly weed. Rabbits foot Clover attracts Eastern Tailed-Blues. Bushy (Tartarian) honeysuckle protects the yard from high winds, and attracts Red Admirals and Mourning Cloaks. Along a fence is a vegetable garden, bordered by coreopsis - one kind of flower they have planted for the butterflies - which is in bloom when the Baltimore Checkerspot adults emerge.

Laurie and Kathy have enjoyed three seasons of Baltimore Checkerspots and other species, and they will be living in harmony with the butterflies for years to come. The story of Checkerspot Farm started with Tor's dedicated interest in butterflies and the environment. It continues with Laurie's and Kathy's efforts and concerns. In these times of typically careless development, it is heartwarming to know of such a success story.

Cover artwork by Annalise Nurme, a third grade student at The Park School, Brookline.