# Massachusetts Butterflies



Fall 2013, No. 41

Massachusetts Butterflies is the semiannual publication of the Massachusetts Butterfly Club, a chapter of the North American Butterfly Association. Membership in NABA-MBC brings you American Butterflies, Butterfly Gardener, Massachusetts Butterflies, and our spring mailing of field trips, meetings, and NABA Counts in Massachusetts. Regular NABA dues are \$30 for an individual, \$40 for a family, and \$60 outside the United States. Send a check made out to NABA to: NABA, 4 Delaware Road, Morristown, NJ 07960. An "MBC only" membership is \$15, and includes a subscription to Massachusetts Butterflies and all club mailings. Send a check made out to Massachusetts Butterfly Club to our club secretary, address below.

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#### From the Editor

The Summer of 2013 will be remembered for a lot of things, most especially by many of us for the good number of butterfly field outings and reports, camaraderie with fellow butterfliers, and some fascinating and often exciting developments in our butterfly fauna. There were some great sightings this year, and many, many excellent photos were shared by our increasingly talented and prolific group of photographers. A few of these are printed here in the journal, but it is only a very small selection; many more can be found on some of our members' web sites.

This was the "Year of the...", in many cases: The Year of the Sachems, when it seemed they turned up everywhere in southeastern Massachusetts, as though they were a normal, common member of our butterfly fauna, instead of a species that was rare in the state until just a few years ago. The Year of the White M Hairstreak, with multiple reports from a number of new spots. The Year of the Red-banded Hairstreak—still rare, but it was only a few years ago when they were essentially unheard of. And, also, the Year of the Lack of Monarchs. Monarch numbers fluctuate year to year, but the Northeast has been almost Monarch-free this year, leading to a lot of speculation about their population overall, though who knows what next year will bring? The only sure thing is that next year will be different than this year, but with its own excitement!

Another summer of memories, then, to carry us through the winter—memories of fields and sunshine and laughing with friends. Thanks to all for your excellent field work, your careful reports, and your fantastic photos. Keep 'em coming!

Bill Benner, Editor

#### **Zabulous Summers**

By Karen Parker

(Editor's Note: Zabulon Skippers, <u>Poanes zabulon</u>, have historically been a rare but regular species in Massachusetts. According to the club's records, beginning with 1997, there are 20 sightings total for the three years from 1997 through 1999. All of these are confined to the lower Connecticut Valley, and 15 of the 20 were submitted by Tom Gagnon. Most of these records are from Fannie Stebbins Wildlife Management Area in Longmeadow, which has been the traditional spot in Massachusetts for seeing this species. In fact, it isn't until 2005 when there is a record from elsewhere in the state other than the southern Connecticut Valley. One was seen in Petersham by Steve Moore and Barbara Volkle on June 25, 2005, and not until 2008 did the eastern part of the state report in with one at Allens Pond in Dartmouth, seen by Lauren Miller.

But in 2000, something significant happened in the Massachusetts Zabulon Skipper world—Karen Parker started contributing Zabulon records to the MA Butterfly Club. She had begun seeing and then reporting Zabulon Skippers from her own backyard in East Longmeadow. From 2000 through 2011, there are 147 records of Zabulon Skipper in the club's database, and 62 of those were contributed by Karen. She had "adopted" these skippers, and has since taken advantage of her luck in hosting a resident population in her yard by observing and enjoying and wondering at their behavior at every opportunity, every summer, all summer long.

Then, beginning in 2011, and especially in 2012 and 2013, the next big event in Massachusetts Zabulon history occurred—they were suddenly everywhere! For 2012 alone, there are 128 Zabulon records in the club's database, scattered from around the state. Karen contributed 15 of these, meaning that other folks saw and reported Zabulons in Massachusetts 113 times in 2012, compared to the TOTAL of 105 non-Karen-Parker sightings for the entire period from 1997 through 2011. 2012 was an exceptional year for many species of butterflies in Massachusetts, and Zabulons were certainly one of them. And based on preliminary 2013 records, this Zabulon invasion has continued unabated. Only time will tell whether this is a temporary condition, or whether Zabulons are now an established part of our statewide butterfly fauna. The website www. butterfliesofmassachusetts.net provides an excellent summary of Massachusetts' Zabulon Skippers.

Clearly, Karen has taken these skippers "under her wing". She has been as excited as any of us to see this explosion of Zabulons, which has meant not just many more sightings throughout the state, but also many more individual Zabulons in her garden! Karen decided she wanted to share some of that excitement, so, here in her own words are some of her thoughts and observations from the past two summers. The journal is the club's journal, by and for the members, so we are very grateful to get such submissions, and we welcome more. —Bill Benner)

On April 28, 2012, I started the Zabulon records off very early with an unexpected sighting of a male on a tree branch in my backyard in East Longmeadow. While the first male sighting was in April, the first female wasn't spotted until May 11, and that was only a fleeting look at best. I felt much more certain about the female seen on May 21, when there actually may have been two. This was very encouraging for me, as in the past I've had many seasons where I've only seen a grand total of two female Zabulons all season long.

The butterflies continued to emerge. In May I saw some every week, though not every day. In June, the pattern was very much the same, except that a whole week was missed almost in the middle of the month. In July 2012 I didn't see any Zabulons at all, until the 23, which is a whole month after my previous sighting of two males on June 23; this must have been the start of the second generation. The sightings continued in very much the same pattern as in May to June, where I saw some every week, but not every day. I also saw more females during this time period, than I saw from May into June. I had initially thought that it would be the other way around, so this information was very surprising to me. There were several days that I actually saw two, and one day that I was pretty sure that I had actually spotted three females in a single day. My largest total find for males and females combined in 2012 was on August 21—seven males and two females found in one day. My last sighting day was on September 2, with a probable male Zabulon skipper determined from Zabulon-type behavior.

Overall, I saw more Zabulons in the summer of 2012 compared to my previous cumulative yearly totals in my area combined. I found more individuals in different places overall at home than I have ever found before. Female numbers increased dramatically in 2012.

The 2013 Zabulon butterfly season was wonderful with a large increase

in the general population especially in females. Possibly because of this expansion, I got to witness something that I'd never seen before. In the past, I'd seen both sexes of the Zabulon Skippers, the brown and white female and the yellow and brown male. I'd even seen the male open behind the open female, but the mating rituals were something I'd never seen before. On May 31 2013 I got to see a good part of this right in my lower garden. There was a female Zabulon there with not just one male, but with two of them there trying mate with her!

At first the female opened up her wings and then began to flutter them rapidly. The first male—as well as the second, who mimicked the actions of the first for a while just as if it were choreographed—opened up his wings as well and zigzagged behind the female back and forth. Then, the first male fluttered his wings and went to the right of the female. The second male also fluttering its wings went right up behind her but no mating ever occurred that I could see, and eventually they split up. Both males came back but separately, and tried several times each, but nothing came of it, unfortunately.



Zabulon Skippers (*Poanes zabulon*), Foxboro, MA, 6/1/12, Madeline Champagne



Zabulon Skipper male, *Poanes zabulon*, on Buddliea, 8/27, 13, Bruce de Graff



Zabulon Skipper female, *Poanes zabulon*, on Red Clover, 9/7/13, Bruce de Graff

I had many other opportunities to observe what seemed to be pre-mating rituals. The zigzag pattern of the male after the fluttering of the female's wings and then the fluttering wings of the male happened every time. Sometimes the male went right or left of the female with his wings fluttering. There was one occasion where I saw the male land almost directly in front of the female before the pre-mating ritual began. Still, it didn't seem to make a difference. Sometimes I saw attempts made both in the morning and afternoon of the same day, or multiple attempts made between the same individuals. Still no luck. I also saw the males after the females on the ground and then the two flew away to a higher vantage point like a shrub or tree. No matter how many of these rituals I watched, I never saw an actual mating take place, which was disappointing. I'm hoping that next season I will be able to see the actual mating behavior occur.

The past two years have been time filled with many new findings and many happy hours spent out in the field watching these fascinating butterflies. In short, I would say that I had some pretty Zabulous summers!



Owlet Caterpillars of Eastern North America (David L. Wagner, Dale F. Schweitzer, J. Bolling Sullivan & Richard C. Reardon) -A Review

#### by Don Adams

When asked to do this review, it was with some misgivings that I agreed to take on the task. For years, I have possessed all the previous books by David Wagner, including those written in concert with others, and these all have become 'bibles' for me on their respective subjects. When my copy of this new work of 8 x10 inches and over 550 pages arrived in the mail, and I simply thumbed through the pages, my fears that giving due justice to this effort would be totally beyond my abilities became amplified.

Early in the 'Introduction' section, however, my misgivings faded somewhat when I read that, "An overreaching goal was to prepare a guide that could serve as a portal into the world of Lepidopterology ... for those without training in biology." After going through this book more carefully I can say that, to this end the authors were totally successful. Although the treatments given on numerous and complex topics presented therein are apt to satisfy ... "Ph.D. entomologists with training in systematics", this work will present as well enormous new insights and appreciation, amongst all of us with no other credentials than being 'dedicated amateurs', for this diverse range of lepidoptera we may have virtually ignored previously.

The moth species treated in this work are found from the eastern seaboard westward to the hundredth meridian, and represent four families--Erebidae, Euteliidae, Nolidae and Noctuidae--under the superfamily Noctuoidea, which authors say may comprise up to 75,000 species worldwide. In this book, 461 of these are described with detailed text on descriptions, habitats, estimated ranges, and larval host plants. Best of all, from my point of view, are the amazing photographs of both larvae and adults. Nonetheless, it's

important important to point out that the authors freely admit that, in spite of the immense scope of this work, it is a work in progress, with much yet to be learned and written on "ranges, phenologies, food plants and...salient features which would prove diagnostic."

The 'Introduction' sub-topics, beginning with "Larval Diets" and extending to "Overwintering Larvae and Pupae", mirrored these subjects treated as well in *Caterpillars of Eastern North America* by the same author. Given the overall scope of this considerable work, some may find it disappointing then for me to say that this short section was one of my favorites. Of course, this viewpoint is influenced substantially by my personal experience of over 50 years of raising Leps as an amateur. However, it is because of this experience that I understand, as the authors clearly did, that to make more than the most cursory of observations or studies of these insects, one requires at least some basic knowledge and skills in rearing caterpillars. Following this was a fascinating segment on "Natural Enemies" which focused on an overview of these moths' parasites, parasitoids, and predators.

The remaining Introduction sub-topics discuss classification, nomenclature and other useful points for using this book, as well as information about identification, which the authors indicate will involve a 'learning curve'. The next 500 plus pages are devoted to the more than 800 species of noctuid moths described therein. The main feature of each description begins with amazing and beautiful photographs of the final instar caterpillars, and includes detailed text features ("Recognition") to aid in identification. Most also include equally superb photographs of the adult moths, both natural and pinned. Text also includes discussion of range, host plants and other interesting features, and even rearing notes in some instances.

This book clearly contributes significantly to filling what has been a large gap in our North American Lep literature for decades. Even if your interest in moths remains secondary to butterflies, in my view, this book is a must-have.



Common Wood-Nymph, (*Cercyonis pegala*), Williamsburg, MA, 7/21/13, Carol Duke

The Bee is not afraid of me.

I know the Butterfly.

The pretty people in the Woods

Receive me cordially—

The Brooks laugh louder when I come— The Breezes madder play; Wherefore mine eye thy silver mists, Wherefore, Oh Summer's Day?

--Emily Dickinson

# **2013 NABA Butterfly Counts**

#### Compiled by Tom Gagnon

Added to the following charts are several butterflies that are new to our lists for the 4th of July counts. Sachems were found on the Bristol County, Brewster and Martha's Vineyard counts in GOOD NUMBERS. Found on our earliest count (North Worcester, June 29th) were three species that were probably at the tail end of their flight period: Juvenal's Duskywings 5, Indian Skipper 1, and a Spring Azure (*marginata* form).

Monarchs were few and far between with double digits on only ONE count, the Northampton Count. Most of the counts only recorded 1, 2 or 3!

The North Berkshire count was the tale of one mountain, Mt. Greylock. Terri Armata was on the North side of the mountain in the Williamstown area and had a terrific count--29 species—while 2 other parties were on the South and East sides of the mountain in off and on drizzle and struggled to find 10 species. Central Berkshire recorded their first White-M Hairstreak while South Berkshire reported the only Gray Commas this year. Also they reported in with 18 people on their count, the highest number by far of any of the counts. Central Franklin count had the only Hoary Edge and Hickory Hairstreaks, plus a nice count of 64 Banded Hairstreaks, helping to make their count the highest total at 51 species. The Northampton count checked in with the most individuals and a whopping 12 Monarchs.

Moving further East, the North Worcester Count was held a little earlier than usual and thus recorded some early butterflies already mentioned. Best butterfly reported on the Concord Count was a Variegated Fritillary. The North Essex County count had

extreme heat the day of their count, and counters had to cut short their day in the field. The Blackstone Corridor recorded nice numbers of skippers.

Sachem country checked in with Bristol County (9), Martha's Vineyard with 10, and the Brewster Count with 19!

Falmouth checked in with 1 Edwards Hairstreak, Truro Count with the most Striped Hairstreaks at 6, plus 2 Edwards, BUT, Martha's Vineyard really out did themselves with 75 Edwards Hairstreaks and the ONLY Painted Lady of the count.

A big THANK YOU to all those that helped to make these 4th of July Counts very special. It is CITIZEN SCIENCE at its very best.

Tom Gagnon, Florence, Massachusetts (Vice-President West)

Editor's Note: The Butterfly Count Program is administered by the North American Butterfly Association, 4 Delaware Rd, Morristown, NJ 07960. Official reports for all counts held in the U.S., Canada and Mexico are available from NABA for \$11.00 for members, \$16.00 for non-members, plus \$2 S/H; request from naba@naba.org. The unofficial tallies for Massachusetts counts are reported here.



Total												
Northern Berkshire		1			2			19	25	11		
Central Berkshire		27		4	1		29	44	56	29		
Southern Berkshire		22		15		1		42	121	26		
Central Franklin		13		22		16		187	176	52		
Northampton		21		36		7		342	204	97		
Northern Worcester		8		16	2	2		90	43	28		
Concord		8		5				14	9	2		
Northern Essex		16		18		2		33	36	13		
Blackstone Corridor		14		24		13		11	48	21		
Bristol				3		7		9	1	2		
Falmouth				4		14		4	7	29		
Brewster		3		8		3		183	5	120		
Barnstable												
Truro				8		8		11		8		
Martha's Vineyard		8		8		5		52	41	56		
	Pipevine Swallowtail	Black Swallowtail	Giant Swallowtail	Eastern Tiger Swallowtail	CanadianTiger Swallowtail	Spicebush Swallowtail	Mustard White	Cabbage White	Clouded Sulphur	Orange Sulphur	Cloudless Sulphur	Harvester

Total												
Northern Berkshire			5		1							
Central Berkshire	14				3			1	13			6
Southern Berkshire			20		1				3			
Central Franklin			64	2	5				73		356	22
Northampton			3				2		21			
Northern Worcester			10		1				3			
Concord			1		1				18			
Northern Essex			13		3				13			1
Blackstone Corridor			15		1				13			
Bristol									2			1
Falmouth		1	2						5			
Brewster					1		5		15			1
Barnstable												
Truro		2			6				80		8	5
Martha's Vineyard		75	2				1		15			19
	Acadian Hairstreak	Edwards' Hairstreak	Banded Hairstreak	Hickory Hairstreak	Striped Hairstreak	Oak Hairstreak	Juniper Hairstreak	White M Hairstreak	American Copper	Bronze Copper	Bog Copper	Coral Hairstreak

Total													
Northern Berkshire	1	2				6	4			10		3	8
Central Berkshire		8		27		48	1	3				112	45
Southern Berkshire		20		10		88	8	2		4		23	33
Central Franklin	4	61		26		70	26		4			7	25
Northampton	1	25		33	1	20			27			338	7
Northern Worcester		15	1	2		23	2		8			1	
Concord	5	9		4	1	9						35	
Northern Essex		4		4		84			4			13	37
Blackstone Corridor	6	48		5		57						11	234
Bristol	1	5		1		7			2			172	
Falmouth	15	18										40	
Brewster		9										66	
Barnstable													
Truro	2	7										2	
Martha's Vineyard	7	11		1								10	
	Gray Hairstreak	Eastern Tailed-Blue	'Spring' Spring Azure	'Summer' Spring Azure	Variegated Fritillary	Great Spangled Fritillary	Aphrodite Fritillary	Atlantis Fritillary	Silver-bordered Fritillary	Meadow Fritillary	Harris' Checkerspot	Pearl Crescent	Baltimore Checkerspot

Total													
Northern Berkshire	2				1					8			
Central Berkshire					2					20			
Southern Berkshire		3	2		13				3	55			
Central Franklin	3	5	\		10		3			66	1	3	
Northampton							3		12	77			
Northern Worcester		4			1		1			19			1
Concord	1	4					5		3	28		3	
Northern Essex		3			7		5		1	16			
Blackstone Corridor		1			3		1			30			
Bristol							1		2	2			
Falmouth							1		7				
Brewster	2								5	4			
Barnstable													
Truro					1		2		1	14			
Martha's Vineyard								1	6	23			
	Question Mark	Eastern Comma	Gray Comma	Compton Tortoiseshell	Mourning Cloak	Milbert's Tortoiseshell	American Lady	Painted Lady	Monarch	Silver-spotted Skipper	Hoary Edge	Southern Cloudywing	Northern Cloudywing

					1			ı				
Total												
Northern Berkshire						2	4		7	3	9	1
Central Berkshire				4			3		2	4	13	
Southern Berkshire						1	2		31	1	8	3
Central Franklin					7	2			1	3	8	2
Northampton			1	20	34	8	2		20	26	2	
Northern Worcester		5	1			1	693	1	5			8
Concord			2	42	14					3		
Northern Essex						5			1		3	
Blackstone Corridor			12	3	5	5	14		1	1	13	4
Bristol			6	18		10			7			
Falmouth			3	12								
Brewster				1		2			5	1	1	
Barnstable												
Truro							3				3	
Martha's Vineyard				2		3			9	1	19	1
	Dreamy Duskywing	Juvenal's Duskywing	Horace's Duskywing	Wild Indigo Duskywing	Common Sootywing	Least Skipper	European Skipper	Indian Skipper	Peck's Skipper	Tawny-edged Skipper	Crossline Skipper	Long Dash

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Total												
Northern Berkshire	14	23		2					2			18
Central Berkshire	86	96		22	6			8	2			245
Southern Berkshire	26	23		4	40			31		1		90
Central Franklin	20	25		31	2	1		1	1	5		54
Northampton	37	9		2	10			12		2		62
Northern Worcester	2	28				8						
Concord	8	3		14	17			2		2		4
Northern Essex	33	5		8				1		2		3
Blackstone Corridor	18	46		46	16			3		8		31
Bristol	65		9					10				10
Falmouth	17											
Brewster	22		19					24				4
Barnstable												
Truro	47			6				4				35
Martha's Vineyard	39		10					6				102
	Northern Broken Dash	Little Glassywing	Sachem	Delaware Skippeer	Mulberry Wing	Hobomok Skipper	Zabulon Skipper	Broad-winged Skipper	Dion Skipper	Black Dash	Two-spotted Skipper	Dun Skipper

Summary	No. of Individuals	No. of Species	No. of Participants	Party Hours	Date	Compiler	
Northern Berkshire	758	31	5	14	7-13	Tom Tyning	
Central Berkshire	1,320	39	10	27	7-20	Tom Tyning	
Southern Berkshire	1,840	45	18	47	7-12	Rene Laubach	
Central Franklin	1,548	51	13	54.5	7-6	Mark Fairbrother	
Northampton	1,953	43	9	39	7-21	Mark Fairbrother	
Northern Worcester	1,084	37	n/a	n/a	6-29	Carl Kamp	
Concord	363	36	13	15	7-13	Dick Walton	
Northern Essex	420	36	7	12	7-5	Howard Hoople	
Blackstone Corridor	1,026	40	7	35.75	7-6	Tom Dodd	
Bristol	409	29	3	5.5	7-21	Mark Mello	
Falmouth	213	20	6	7	7-20	Alison Robb	
Brewster	555	28	3	12	7-27	Alison Robb	
Barnstable							
Truro	317	27	3	n/a	7-13	Alison Robb	
Martha's Vineyard	579	31	4	14	7-20	Matt Pelikan	





Zabulon Skippers (*Poanes zabulon*), East Longmeadow, MA, 5/25/13, Karen Parker



Harvester (*Feniseca tarquinus*), Lower Mystic Lake, Medford, 8/7/13, Sue Cloutier

Least Skippers, (Ancyloxypha numitor), Bolton, MA, 6/10/13, Bruce de Graff





Gray Hairstreak (*Strymon melinus*), 7/6/13, Dawn Puliafico

Atlantis Fritillary (*Speyeria atlantis*), Berlin, NH, 6/25/13, Tom Murray





American Copper (*Lycaena phlaeas*), Florence, Northampton, MA, 5/21/13, Frank Model



Acadian Hairstreak (*Satyrium acadica*), Horn Pond Mountain, Woburn, MA, 6/29/13, Frank Model



Benner/Wicinski garden, Whately, MA, 6/2/13



Black-eyed Susans (*Rudbeckia* cv.) and Zinnias, Benner/Wicinski garden, Whately, MA, 8/7/13

#### Butterfly Gardening 101: Western Massachusetts Bill Benner and Joe Wicinski

We have been gardening for butterflies, hummingbirds, and other pollinators for nine summers in our home in the Connecticut Valley. We live at 560 feet, in the low eastern foothills of the Berkshires, as they first begin to climb west out of the Connecticut River Valley. Our property is an east, south, and west-facing mosaic of rocky outcrops, rich loam, sandy fill, and damp to wet swamp in a mixed deciduous/white pine/hemlock woodland. Light varies from partly to mostly sunny during the day, to full shade in some spots. We have many garden beds, some terraced, many dug out of the lawn. Other areas of lawn we leave unmowed, or have dug up once, then scattered pre-mixed seed packages of "butterfly mix", then left them go wild and become "meadow beds". To date, we have seen 57 total species of butterflies in our yard, and we average more than 40 species each year.

Our garden year starts in late winter. We mulch the many flower beds annually beginning in late March or early April, as soon as the snow melts and before most of the perennials have started to sprout. We use compost as mulch, 3 or 4 inches worth every year, from Bear Path Farm, right up the road from our house (www.bearpathfarm.com); they will deliver their excellent compost to many parts of the state. We occasionally weed out the meadow beds in the early spring, every few years, removing those plants that we know will take over (e.g. some of the goldenrod), and/or contribute little to pollinators (e.g. ground-ivy), and then sprinkle them thinly with mulch as well. We also get aged chicken manure from a generous friend every year or two to spread thinly over the all of the beds, including the meadow gardens, in the winter. Chicken manure is like gold for the garden, if you can get it; sheep manure is supposed to be almost as good, because the sheep chew their cud so finely that they grind up all of the unwanted seeds.

Our garden composting, along with the spring cleanup of the beds and the pruning of apples and blueberries, begins the outdoor gardening year for us. But work on the garden has already begun inside, where we set up racks with lights in late winter to start many of our seedlings indoors. This is greatly preferable to trying to start them on windowsills, where they tend to become leggy and lopsided. The do-it-yourself metal shelving units were bought at Home Depot, while the wire decking (shelves) and shop lights were purchased from Loew's. The lights hang from each metal grid shelf by short chains and eye hooks to illuminate the shelves below, and they're all on inexpensive timers from the hardware store. Plastic seed starting cell packs, and the ProMix® we use to start the seedlings, were purchased in bulk from Hadley Garden Center; the sturdy plastic waterproof trays in which they fit came from Gardener's Supply Company (www.gardeners.com).

Some of the perennial seeds need to be cold-stratified. This process starts in December or January and involves taking the seeds and sowing them in moist ProMix in a small flat with a cover (we use the covered rectangular plastic containers that spring mix and other salad greens come in from the grocery store). (You can also mix the seeds with a small amount of moistened vermiculite in a plastic baggie.) Then, refrigerate them for 60 to 90 days. Check periodically to make sure they aren't moldy. Spraying them right after sowing with a light spray of properly mixed RootShield<sup>©</sup> (available from garden catalogs or stores) helps to prevent mold (this product works well as an initial watering for all seed plantings, to help prevent damping-off). After 60 to 90 days, bring out under light at room temperature and germinate normally. This makes a huge difference in germination rates; you will be lucky to get 10% germination for milkweeds, for example, if you just plant the seed at room temperature, whereas with cold stratification, it approaches 100% with fresh seed. Bill Cullina's book Wildflowers: A Guide to Growing and Propagating Native Flowers of North America (2000, New England Wildflower Society), is an excellent resource for starting native plants from seed, with specific requirements listed for each genus and a wealth of other information.

Once we are done with composting, or while we are doing it, we

start moving and dividing those established perennials that we need in other spots. Some of the perennial seedlings can go into the ground then as well, but most need to be grown up over the summer in larger-sized cell packs or small pots, and planted out in September. (For these plants, we generally incorporate some perlite into the ProMix when we put them into larger pots outdoors in the spring, about 4:1 Pro-Mix to perlite, which helps to improve drainage in the pots and seems to give the plants a larger root system by fall.) Once danger of frost is past (around Memorial Day for us), everything else goes out into the beds—seedlings from our growing shelves; plants we've ordered from mail-order places; and plants we've bought locally. From that point on, it's weeding and watering as needed, though the weeding is much reduced by having the beds mulched, and the watering isn't as necessary for many of the well-adapted native plants, unless drought becomes severe.

In no particular order, here are some more thoughts about gardening for pollinators, and practical tips which have worked for us:

Don't be too overzealous when it comes to weeding and tidying up. Some flower beds need to be kept weed-free, or their plants will be overwhelmed. But "weeds" are also your friends, when gardening for wildlife. For example, some weeds act as host plants for butterfly caterpillars: Lamb's Quarter for Common Sootywing; Queen-Anne's-Lace for Black Swallowtail; aster spp. for Pearl Crescents. Rich Cech's and Guy Tudor's book, Butterflies of the East Coast: An Observer's Guide (2005, Princeton University Press), will give you lots of good information about host plants for our butterflies. Weeds also provide structure and hiding places for innumerable small creatures. When pruning branches and weeding and cleaning up, making brush piles around the edges provides great wildlife habitat. And speaking of cleaning up, we don't do a fall clean-up at all. All of those dead stems and leaves and seedheads provide winter food and cover for the insects, birds and other wildlife, as well as for the overwintering stages of many of those pollinators we are trying to attract and protect. Spring is our major

cleanup time, and also the time we prune back overzealous trees and shrubs so that we still get light into the garden.

Avoid pesticides and herbicides. This includes lawn treatments—we make no attempt to have a weed-free lawn. That means the American Coppers we love are in the yard on the Sorrel, and the Dandelions are there for the early spring butterflies to nectar. We hand-pick pests when possible—Japanese Beetles and slugs/snails come to mind. Planting disease-resistant varieties (e.g. mildew-resistant Zinnias) helps. It is worth mentioning here that many nursery plants available from the local "big box" or other bargain stores have been treated with systemic insecticides, such as neonicotinoids. This happens before the retailer ever sees them, and the pesticides can persist in the plant for many weeks, sometimes as long as the whole growing season. Buy your plants from growers who are not using any of these chemicals, if it's possible to know this, or you will be harming the very insects you are trying to attract.

Consider saving seeds and starting your own seedlings. It might save money (that's debatable, given what we've spent on shelves and lights for the seedlings), but it does allow you to grow locally-adapted plants, and continue growing plants that might not otherwise be so easy to find. Importantly, you will also know that your plants are pesticide-free.

Try new things. Some of our favorite plants are things that we didn't necessarily think would pan out, but they end up doing well in our microclimate. There are a number of websites and nurseries specializing in pollinators where you can order things to try, both plants and seeds. A few examples we have ordered or bought from include: The New England Wildflower Society's Nasami Farm (or Garden in the Woods) (www.newfs.org; local and excellent); Select Seeds (www.selectseeds.com; also good for more locally adapted plants, since they are in Connecticut); Prairie Moon Nursery (www.prairiemoon.com); Digging Dog Nursery (www.diggingdog.

com); Almost Eden (www.almostedenplants.com); High Country Gardens (www.highcountrygardens.com); Vincent Gardens (www.vincentgardens.com); Niche Gardens (www.nichegardens.com); Goodwin Creek Gardens (www.goodwincreekgardens.com); Swallowtail Garden Seeds (www.swallowtailgardenseeds.com).

Don't forget to grow some things that you just plain like. Some of our plants are things that were favorites from our childhood gardens. We love Echinaceas, so we have lots; they are great butterfly plants. We like trying new Salvias. The hummingbirds ignore some of them, but others are surprisingly successful, and some plants we thought were tender have unexpectedly overwintered. Four O'Clocks are an old-fashioned favorite that happen to be good for sphinx moths as well; they self-seed well once you have them.

Flowers are necessary in a garden, but trees, shrubs, and vines are also important. They are sometimes host plants (*e.g.* oaks for hair-streaks; pines for elfins; spicebush and pipevine for swallowtails). Just as importantly, they also provide structure and cover—crucial for butterflies and hummingbirds and many other pollinators.

Plan to have things blooming from earliest spring through frost. For example, the native Bluets will form a carpet of pale sky blue in early spring, when little else is blooming yet, and the small elfins use them readily. Native Eastern Columbine, *Aquilegia canadensis*, starts blooming almost exactly at the same time the first hummingbirds appear, and is one of that pollinator's favorite early nectar sources. Asters and goldenrods are great late summer and fall insect nectar plants. We use a combination of annuals and perennials, natives and non-natives, to try to keep nectar (and color!) in the garden throughout the seasons. And don't forget the nighttime pollinators too—the Four-O'Clocks and Nicotiana spp. attract a variety of sphinx moths in the evening as it is getting dark, and have a great fragrance as well.

Herb gardens are dual-purpose, with herbs for eating, drying, etc., and for hosting butterflies and caterpillars: Parsley, Dill, and Fennel for Black Swallowtails; Rue (*Ruta arvensis*) for Giant Swallowtails, an exciting new addition to our Massachusetts butterfly fauna; mints for their tiny flowers that hairstreaks seem to like.

Deadheading helps to extend the blooming season for a lot of plants. The extent to which we do this depends on the plant. Echinaceas don't get deadheaded at all, since we know how much the goldfinches like the seeds. Buddleias get rigorously deadheaded, to keep them blooming and to keep them from setting seeds that might be invasive. Don't be too vigorous with the deadheading, at least toward the end of the season, for the plants from which you'd like to save seeds.

Try not to fight too much with your microhabitats. Here, we have wetland, dry rocky soil, and deep garden loam, sometimes within a few feet of each other! It's best to plant those plants that prefer sun in the sunny spots, and moisture lovers in the wetter places, etc. This sounds obvious, but the desire to try to put things where they'd rather not be can be subtle and insidious, and has multiple times required later moving things around. But, we also try to leave some of the volunteers where they have come up, especially in the spring when we are doing our major clean-up and mulching. Plants end up in places we wouldn't have thought of, and often do really well there; we mow around the clumps of Butterfly-weed that have seeded themselves into the remaining lawn, for example. One of the more difficult learning curves has been recognizing all of the plants' leaves as they come up in the spring, both the established plants and the volunteer seedlings. Our method largely has been to leave any seedlings/sprouts that look unfamiliar until they get big enough to ID.

Speaking of moving things, don't be afraid to move and/or cull if you need to. We hate to kill things or throw them away, so we usually move the failures to some new (often more marginal) location. Sometimes that works, and often it doesn't, and we end

up discarding it anyway, or it just dies out. And if a plant, even one we really want, keeps dying out on us after a few tries, best to reluctantly give that up and try something else.

Finally, take the time to enjoy the garden! It's easy to look around and find plenty of things that need doing, and the work can seem never-ending. But don't forget to get a good book and sit in a chair under a tree—read, watch butterflies, snooze, relax.

The following annotated list of pollinator plants in our garden includes most of those that we grow, or that grow here without any help from us. Many are planted and carefully tended; some are volunteers; others we need to keep tightly reined or they try to take over. The list generally includes only those species that are used by butterflies, though we grow many hummingbird-pollinated plants as well. There is also more information on butterfly gardening via links on the club's web page: www.massbutterflies.org.



American Copper (*Lycaena phlaeas*) on Black-eyed Susan, 7/12/13, Whately, MA, Bill Benner

#### **Native Perennials**

# Black-eyed Susan Rudbeckia cv. (probably 'Goldsturm')

Present in many places in the garden when we moved in. Excellent nectar source. Hardy, easy-to-grow perennial with a long mid- to late-summer blooming period; very colorful in the garden. Loved especially by Pearl Crescents, and many bees. Spreads by seeds and runners; we transplant these to cultivate, and give many away.

# Blazing-Stars Liatris spp.

The Liatris prairie natives grow well in our sandy, drier spots. The native species are not invasive and are very beautiful, and the butterflies really like them. We grow *L. spicata*, *L. pycnostachya*, *L. borealis*, *L. aspera*, and *L. ligulistylis*. Grown from seeds.

#### Blanket Flower Gaillardia cvv.

Like all the composites, good for nectar. Possible host plant for Buckeye? Mostly grown from seed, though we've purchased a few plants.

#### Sneezeweed Helenium cv.

Another composite that gets some butterfly use, but prone to mildew for us.

#### **Bee Balms:**

Monarda didyma 'Jacob Cline'
Monarda didyma 'Raspberry Wine'

#### Wild Bergamot Monarda fistulosa

*M. didyma* is mostly for hummingbirds, though Spicebush Swallowtail uses it for nectar. *M. fistulosa* is an outstanding butterfly nectar source in midsummer, swarming with skippers and other butterflies, as well as bumblebees and other pollinators. One of the top 5 when in bloom. *M. fistulosa* spreads readily from seed, and will need to be weeded out if it comes up where you don't want it.

# Purple Coneflower Echinacea purpurea cvv.

Another outstanding midsummer nectar source. One of the top 5. Grown from seed, but we have also bought garden cultivars.

#### Cardinal Flower Lobelia cardinalis

# Great Blue Lobelia Lobelia syphilitica

Cardinal Flower is another primary hummingbird magnet that is also loved by Spicebush Swallowtails. Great Blue Lobelia is beloved by bumblebees, but we have seen skippers use it. From seed.

Viola spp.:

Labrador Violet Lance-leaved Violet Common Blue Violet Sweet White Violet

All of the violets serve as possible host plants for fritillaries. Sweet White Violets form a large, spreading patch in the lowest, wettest area of our garden, and have hosted Silver-bordered Fritillary caterpillars for us. White M Hairstreak and elfins also nectar on these tiny white flowers, which bloom in spring at the same time as the Bluets. All of the violets propagate themselves from seed, and were here when we moved in; they spread readily.

#### Moss Phlox Phlox subulata

The early spring butterflies occasionally use this carpet of flowers during its early bloom period. Easy to grow in a rock garden; spreads.

#### Asters Aster spp.

Excellent late summer and fall nectar. New England Aster is especially good, but also prone to mildew in our damp garden, so we sometimes spray with fungicide early in the season. Some of the cultivars of New England and New York Asters are bought plants; our woods and edges are also full of native species.

# Butterly Weed Asclepias tuberosa Purple Milkweed A. purpurea Swamp Milkweed A. incarnata

All of the milkweeds are good nectar sources as well as hosts for Monarchs. Common Milkweed (A. syriaca) is too invasive, unless you have a large open meadow—we only tried it once, then spent two years eradicating it, from only one plant! A. tuberosa is well-behaved; especially loved in our garden by the large fritillaries. A. incarnata is prone to attack by aphids and Swamp Milkweed Beetles, but is well-liked by skippers and others. A. purpurea is a great plant, much like Common Milkweed, but not invasive. We propagate all of these mainly from saved seed (requires cold-stratification) though A. tuberosa also self-seeds around the garden and lawn.

#### Anise-Hyssop, Agastache anisata

#### Agastache 'Black Adder' (cv. of A. anisata)

Most of the Agastaches we have are hummingbird plants (*A. rupestris*), but this species (*A. anisata*) is a 6 foot tall insect magnet for many weeks throughout the summer. Our 'Black Adder" plants are bought plants. The species, Anise-Hyssop, also grows from seed prolifically throughout the garden, and needs to be weeded out where it isn't wanted. The 'Black Adder' is worth searching for.

#### Hollyhocks and other mallows Malva cvv.

We grow these in the hope of someday seeing a Common Checkered Skipper. Hey, you never know...we thought Giant Swallowtail was far-fetched when we first planted Rue!

# Goldenrod Solidago spp.

A mainstay for fall butterflies. Propagates itself from seed; this grows in the unmowed "field" patches that we have scattered throughout the garden.

#### Cup-Plant Silphium perfoliatum

Skippers especially use this, and it is always covered with bees. Bought plants.

#### Wild Lupine Lupinus perennis

Potential host for Frosted Elfin, though seeing one is highly unlikely away from their known colonies. Propagated from locally collected seeds.

#### Culver's Root Veronicastrum cv.

Great nectar source for pollinators and small butterflies in mid to late summer, even though it only blooms for a few short weeks; our Gray Hairstreak sightings have often been on these flowers. Bought plant. Best staked or it sprawls.

#### Bluets or Quaker Ladies Houstonia caerulea

Excellent nectar source for elfins in the spring. Makes a beautiful spring ground cover when happy, via self-seeding, as long as you are not too quick to mow it down in the spring.

#### Pickerel-Weed Pontederia cordata

Excellent nectar source in midsummer in our permanently wet stream/ditch. Locally collected plants.

# Ironweed Vernonia noveboracensis

#### Joe-Pye Weed Eupatorium purpureum

I lump these together because they grow together in our garden. Good mid to late summer nectar plants, growing well in the wetter marshy area where it self sows.

# Boneset E. perfoliatum

All of the Eupatoriums are good nectar sources, and though this one doesn't seem quite as popular for us as some of the other plants in the yard, it still gets some use.

#### Mountain-Mints Pycnanthemum

We have both Narrow-leaved (*P. tenuifolium*) and Broad-leaved Mountain-Mint (*P. muticum*), but *P. muticum* is the much better of the two as a nectar plant for us. It is particularly attractive to the smaller butterflies—skippers, hairstreaks, etc. It is also very attractive to pollinating wasps! It spreads by creeping rootstock, so site it carefully; it also reseeds. From seed collected from local plants.

# Pussytoes Antennaria sp.

Host plant for American Lady. Bought plants. Not long-lived in the garden for us, where we tend to overwater and overfertilize it. Prefers poor soil.

#### Toothwort Dentaria diphylla

Host plant for West Virginia White, growing in the wet swampy area in the back of the yard.

## Turtlehead Chelone glabra

Another plant in the wet swampy area; host plant for Baltimore Checkerspot. This and the above Toothwort appeared on their own in the wet areas of the yard, though they are scattered and grow in low numbers. We also have a pink-flowered cultivar of Turtlehead (probably the alien *C. lyoni*), but this does not seem to be used by butterflies.

## Native Trees, Shrubs, and Vines

# Wild Cherry Prunus serotina

Host plant for Tiger Swallowtail, Coral Hairstreak, as well as Cecropia and Polyphemus moths. Present in our woods.

#### Beach Plum P. maritima

Excellent early spring nectar source for elfins and other early butterflies. Red Admirals seem to really like this. Purchased plants. You need two different clones if you want plums.

#### White Pine Pinus strobus

Host plant for Eastern Pine Elfin.

#### Elms Ulmus spp.

Alternate host for Mourning Cloaks.

#### Beech Fagus sp.

Theoretically a host for having Early Hairstreak in the yard—if the trees ever get big enough to have flower buds, and if hell freezes over.

#### Hackberry Celtis occidentalis

Host plant for Question Mark, as well as the Emperors, and (if we're someday lucky!) American Snout. Purchased 3 saplings.

#### Azaleas and Rhododendrons:

#### Rhododendron viscosum

R. calendulaceum

R. atlanticum

P. nudiflorum

Rhododendron cvv.

#### Mountain-Laurel Kalmia latifolia

All of the rhododendrons and azaleas, but especially the Mountain-Laurel and the large purple-flowered rhododendrons, are used for nectar by Tiger Swallowtails when they bloom in June. Most of the Rhododendrons were purchased, but large stands of Laurel are native to the yard.

#### Spicebush Lindera benzoin

#### Sassafras Sassafras albidinum

Both are host plants for Spicebush Swallowtail (as well as Promethea moth). Both were collected locally.

# Witch Alder or Dwarf Fothergilla Fothergilla gardenii

Good early spring nectar source. Purchased plant.

#### Buttonbush Cephalanthus occidentalis

Excellent nectar shrub for a partly to mostly shady wet area. This is fairly easy to grow, shade tolerant though does OK in full sun, overall an outstanding shrub for the midsummer butterfly garden. Purchased plants.

#### Steeplebush Spirea tomentosa

A garden volunteer that we didn't plant. The insects like it,

though it's not an outstanding butterfly plant.

#### Dogwood Cornus florida

The azures possibly oviposit on the buds, and the Silver-spotted Skippers seem to particularly like this tree for basking and sortie perches. Mature tree present in garden at purchase.

#### Blueberry Vaccinium cvv.

Blueberries can host Striped Hairstreak, and we have had one on our blueberries.

#### Summersweet Clethra alnifolia

# Clethra 'Ruby Spice'

#### Clethra "16 Candles"

Clethra, or Summersweet, is a wonderful shrub for summer nectar for butterflies. Highly recommended, very fragrant, likes moisture but tolerates normal garden soil as well as partial shade. Purchased plants—and we will be purchasing more.

#### Willows Salix spp.

Host trees/shrubs for Mourning Cloaks. Pussy Willow is attractive in the spring.

#### Alder Alnus sp.

Theoretical host for Harvesters, though we have yet to see woolly aphids or Harvesters on our alders.

# Bottlebrush Buckeye Aescula parviflora

Produces wands of white flowers in mid-summer, used by insects as well as hummingbirds.

#### **Non-native Perennials:**

#### Wild Mustard Brassica rapa

Both a host and a popular early spring nectar source for Cabbage Whites. More a biennial than a perennial. Not necessary to plant this, as it grows wild in most disturbed areas, but good to leave some when weeding in the spring.

# Blue False-Indigo Baptisia australis

We have a small but thriving population of Wild Indigo Duskywings on our cultivated Baptisia, even though we only have a couple of large plants.

#### Oriental Lily cvv.

Day-Lily Hemerocallis cvv.

Swallowtails use the lilies and daylilies regularly for nectar, burying themselves in the blossoms.

#### Dandelion Taraxacum officinale

Very popular and welcome nectar source for early spring butterflies. We make no attempt to "control" these in the yard, and the butterflies appreciate it.

#### Johnny-Jump-Up Viola tricolor

We have watched Variegated Fritillary (rare in our yard) oviposit on these. Once you have these in the garden, it's a matter of recognizing and leaving the small plants during spring weeding.

# **Mints and Catnips:**

Nepeta mussinii

N. cataria

Mentha cvv.

The mints are invasive and need to be carefully sited, but their small flowers are used by Gray and other hairstreaks. Peppermint is terribly invasive in our wetland, however, and can't be recommended. Siberian Catmint, *N. mussinii*, is a good mid-spring nectar source when relatively few other things are blooming; it self-seeds nicely amongst the rocks.

# Red-clover Trifolium pratense

#### White Dutch Clover T. repens

Good nectar source for skippers. We leave some Red Cloveraround the edges of the garden; Dutch clover is in the lawn.

# Grasses Poa and other spp.

We leave some unmowed around the edges for skippers and satyrids. For example, we have found Northern Pearly-eyes ovipositing on some clumps next to the pergola.

#### Sedum 'Autumn Joy'

Present when we moved in. Blooms in late summer, gets some good butterfly use, and especially loved by bees and other native pollinators.

#### Tall Phlox cvv.

Swallowtails, especially Spicebush, really like this as a nectar source. Be sure to buy mildew-resistant varieties.

# Yellow and Orange Hawkweeds Hieracium sp.

These come up as "weeds", but we leave them where they grow

if we can. The butterflies, especially whites and sulphurs, seem to like them. There are multiple species, some native, some alien; we're not sure what we have.

#### Stinging Nettle Urtica dioica

Host plant for Red Admiral. We leave it when it won't be in the way (like in the wood edges along the driveway).

# Ox-eye Daisy Chrysanthemem leucanthemum

A popular nectar source in late spring, that blooms during a lull in flowering, so that it is very welcome. Spreads quite easily (almost weedy) from seed; some rebloom if cut after first blooming.

#### Chrysanthemum cv.

We have a very late blooming (October into November) single large pink daisy-like variety that is very hardy, though it tends to spread, and can be prone to mildew. Very popular nectar source for the latest Monarchs, etc., at the tail end of the season.

#### Ragged Robin Silene flos-cuculi

This naturalized European invasive is amazingly popular with butterflies for nectar during its spring blooming period, even though it is quite weedy in our garden. Spreads aggressively from seed. Banned in CT as a noxious invasive, but present in our garden when we moved in, and impossible to eradicate. Probably not recommended to add this if you don't already have it.

#### Rue Ruta arvensis

We have just three plants of this rounded, small shrubby perennial, but every year for the past few years they have attracted female Giant Swallowtails to lay their eggs. If you plant it, they might come! Self-seeds readily, so we give away seedlings each spring.

# Dill Anethum graveolens

# Fennel Foeniculum vulgare

Both of these herbs are very attractive to Black Swallowtails, and we regularly find their caterpillars on them. Self-seed prolifically; Fennel is also half-hardy.

#### Canna Canna indica

We plant the wild Indian-Shot, with its smaller red flowers than the big showy hybrids, primarily for the hummingbirds—but this is also the host plant for Brazilian Skipper. Again, you never know!

# Queen-Anne's-Lace Daucis carota

Non-native host for Black Swallowtail. Though they seem to like the fennel, parsley, and dill best, we still find caterpillars on the stray Queen-Anne's-Lace plants. Easy to leave where they grow in the unmowed "meadow" areas.

# Ground-Ivy, or Lizzie-Run-Under-The-Hedgerow, or Creeping Charlie, or Gill-Over-The-Ground *Glechoma hederacea*

This plant is invasive and impossible to eradicate, and is NOT recommended if you don't have it—but if you do, you'll find that the early spring butterflies and bumblebees use it readily for nectar, since it begins blooming very early.

#### **Annuals**

#### Four-O'Clocks Mirabilis jalapa

We do not see butterflies on these, but we grow them because they were a favorite childhood plant, and because they attract sphinx moths. They self-seed regularly; you can also dig up the big tubers (carefully! they break easily...) in the fall after frost and store them like dahlia tubers over the winter in a cool but frost-free place.

#### Tall Verbena Verbena bonariensis

One of the top 5 nectar sources in the garden—the more you have room for, the better. Self-seeds prolifically. Learn to recognize the seedlings in the spring, because they are somewhat late to germinate, though they grow quickly. We have to leave some patches of garden unmulched in the spring to be sure of getting a crop of these to transplant, as they won't come up through mulch or compost.

#### Mexican Sunflower Tithonia

Another excellent nectar source. If you overfeed these, however, you'll get huge plants (some of ours are over 12 feet tall in 2013!) but fewer flowers.

#### Zinnia cvv.

Another of the top 5 nectar plants. Easy to grow from seed, sown directly into the garden after frost has passed.

#### Sunflowers cvv.

These are good nectar plants for pollinators, and though we don't see butterflies on them commonly, skippers will use them.

#### Pot-Marigold Calendula cv.

Used by some butterflies (e.g. Eastern Tailed-Blue, Pearl Crescent) for nectar. Grown from seeds started early.

#### Coreopsis cvv.

Skippers especially use these for nectar, mostly in the early summer. Included in butterfly-mix seed packs; reseed themselves.

#### Ageratum Ageratum haustonianum

Gets some butterfly use. Mainly grown because we like them.

# Parsley Petroselinum crispum

Food plant for Black Swallowtail; easy to grow from seed sown directly into the garden in early spring.

# Flowering Tobacco Nicotiana cv.

Truthfully, we don't see butterflies at these, but the sphinx moths love them, and we grow a large patch as an "evening garden". They self-seed prolifically once you have them in the garden, and can be transplanted where needed.

#### Nasturtium cvv.

Host plant for Cabbage Whites. (Hey, they need love too...)

#### Lantana cvv.

This is a great butterfly plant! We buy nursery-grown plants, though we have started to worry whether they have been pre-treated with neonicotinoids or other systemics before we get them.

# English Plaintain Plantago lanceolata

Alternate host for Baltimore Checkerspot, though we don't have them breeding in our yard (yet).

#### Lamb's-Quarter Chenopodium album

Host for Common Sootywing, which we do see in the yard in small numbers. We deliberately try to leave some of these, even though they are weedy.

#### Sorrel Rumex acetosella

Host for American Copper. Requires vigorous weeding among the rock gardens where we don't want it, but it survives in many spots, including in the drier, sandier lawn areas.

#### Non-native Trees, Shrubs, and Vines

#### Weigela Weigela cv.

Another spring-blooming shrub that is well-used by Tiger Swallowtails for nectar. Plant present when we moved in.

#### Dutchman's-Pipe Aristolochia serpentaria

A hardy, shade-tolerant vine that is a host plant for Pipevine Swallowtail. Worth growing in a corner somewhere—or let it climb 50 feet up into the trees!

#### Butterfly-Bush Buddleia davidii

One of the best butterfly attractants; needs regular deadheading. Top 5 plant. Bought plants, but we also have had a rare volunteer seedling or two. We carefully deadhead to prolong flowering and prevent seeds, then prune it close to the ground in early spring.

#### Buddleia alternifolia

The favorite nectar source for Milbert's Tortoiseshell in our garden. We have only one of these shrubs, but we almost always see one or more Milbert's on it sometime during this plant's late-spring bloom. Used by all of the other butterflies as well; just as popular with them as the common *B. davidii*. Available from nurseries. Unlike the common Butterfly-Bush, this Buddleia blossoms on last



Giant Swallowtail (*Papilio cresphontes*) on Zinnia, West Whately, MA, 8/7/12, Bill Benner

#### Submission of Articles, Illustrations, and Season Records

We encourage all members to contribute to *Massachusetts Butterflies*. Articles, illustrations, photographs, butterfly field trip reports, garden reports, and book reviews are all welcome, and should be sent to the Editor by August 30 for the Fall issue, and January 15 for the Spring issue.

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

#### **Contributions**

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

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Massachusetts Butterflies has been published continuously since 1993. Previous issues are viewable at <a href="http://www.massbutterflies.org/club-publications.asp">http://www.massbutterflies.org/club-publications.asp</a> after a three-year time lag. Print copies may be ordered for \$6 each, if still available. Send a check made out to Massachusetts Butterfly Club to our secretary, Barbara Volkle, at the address on the inside cover.





Bog Copper male, (*Lycaena epixanthe*), Lake Wyola, Montague, 7/8/13, Frank Model



Juniper Hairstreak (*Callophrys gryneus*), Canton, MA, 7/30/13, Bruce de Graff