

# Maritimes Butterfly Atlas

Photo by Denis Doucet

## 2013 Newsletter

### Highlights from the 2012 field season

What a year it has been! There were 7,607 records (2,924 specimens and 4,683 photographs) submitted by 180 participants to the Maritimes Butterfly Atlas (MBA). This is more than double the number of records from either of the first two years (2,994 records in 2010, 3,894 records in 2011), and far exceeds the number of participants (138 in 2010, 139 in 2011).

#### Notable records

##### *New Maritimes' and provincial records*

One new Maritimes and three new provincial records were recorded in 2012. Crossline Skipper (*Polites origenes*), a species never before recorded in the Maritimes, was discovered at two different New Brunswick locations (details below). The first PEI record of Eastern Comma (*Polygonia comma*) was recorded near Grand River by Donna Martin. This record may indicate the presence of a PEI population. Fiery Skipper (*Hylephila phyleus*) was recorded for the first time in New Brunswick (found in Saint John by Jeff Clements, see [http://www.acadianes.ca/journal/papers/clements\\_12-8.pdf](http://www.acadianes.ca/journal/papers/clements_12-8.pdf)). This is only the second Maritimes record for this vagrant; the first was taken at Charlottetown, PEI, in 1947! Lastly, Giant Swallowtail (*Papilio cresphontes*) was discovered for the first time in New Brunswick. Another vagrant, it was found at four different locations (see details below).

##### *Other significant finds*

Dorcas Copper (*Lycaena dorcas*) was found at three locations in Cape Breton by John Klymko and Sarah Robinson. This includes a Dorcas Copper population found at Gracieville, the same location that Rita Viau

photographed a copper that the MBA identified as Salt Marsh Copper (*Lycaena dospassosi*) in 2011 (Rita's discovery was discussed in last year's newsletter). The 2012 field visit by Sarah and John showed that the site does not have suitable Salt Marsh Copper habitat, so Rita's photo has been re-identified as the very similar Dorcas Copper. Dorcas Copper is now known from four atlas squares in Cape Breton, all discovered by MBA surveyors.



*Giant Swallowtail. Photograph by Andrew Macfarlane*

Short-tailed Swallowtail (*Papilio brevicauda*) was photographed near Plaster Rock, New Brunswick, by Roy LaPointe. This is only the second inland location for the species in the Maritimes, the first was found in 2010 near Edmundston by Martin Turgeon.

Bog Fritillary (*Boloria eunomia*) was found at two new locations in New Brunswick (a site near Saint-Quentin recorded by Roy LaPointe, and a site near Saint Leonard recorded by Roy LaPointe, Jim Goltz, and Charles Neveu).

This brings the total number of known New Brunswick locations for Bog Fritillary to eight.

It was also a great year for Eastern Tailed-Blue (*Cupido comyntas*). In the first two years of the MBA there was only a single record of the species. In 2012 there were eight. The species was previously known only from the west and southwest of New Brunswick (all previous records are from along or west of the Saint John River). In 2012 Ken MacIntosh and Sandra Cooper found it near Blackville, and Mary Sabine, Pascal Giasson, and Catherine Higgins found it near Riverside-Albert. Perhaps a Nova Scotia record will be next!



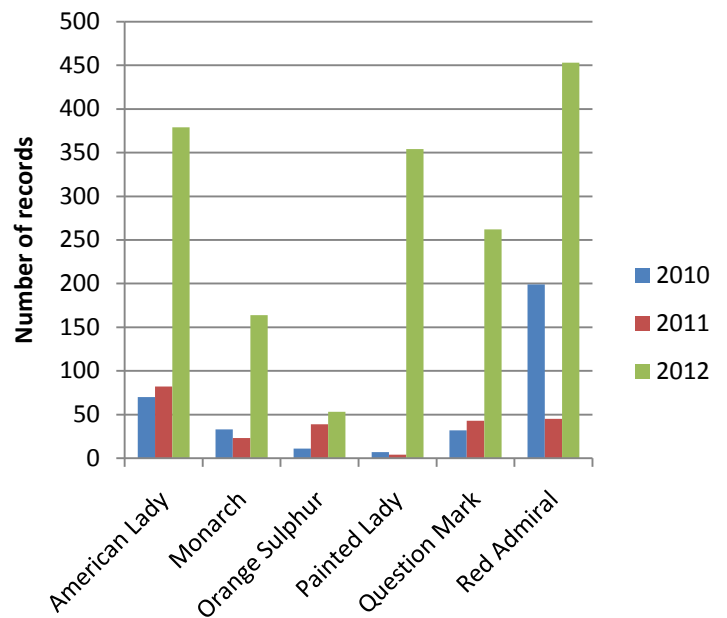
Bog Fritillary - Photograph by Roy LaPointe

Common Buckeye (*Junonia coenia*), a vagrant that has been recorded with greater frequency in the Maritimes in recent years, was reported from two Nova Scotia locations (Brier Island by Ken McKenna, and White Point, Queens County, by Mary Millard-Smith and Christine Noronha), and two New Brunswick locations (Green Mountain, York County, by Gary Stairs, and Machias Seal Island by Ralph Eldridge). The Nova Scotia Common Buckeye records are only the second and third ever for the province.

An American Snout (*Libytheana carinenta*) was found at Advocate, Nova Scotia, by Kathleen Spicer. This is only the second Nova Scotia record and third Maritimes record for this vagrant species.

In 2012 there was an amazing flight of migratory species. American Lady (*Vanessa virginiensis*), Painted Lady (*Vanessa cardui*), Red Admiral (*Vanessa atalanta*), Question Mark (*Polygonia interrogationis*), and Monarch

(*Danaus plexippus*) were all present in very large numbers. Orange Sulphur (*Colias eurytheme*), another migrant, was also present in the highest numbers to since the start of the MBA (see table below for a breakdown of their numbers during the first three years of the MBA).



Number of records for the Maritimes' major migratory species during the first three years of the atlas. 2012 was a phenomenal year for migrants!

### Crossline Skipper - First Maritimes' records

Like most of our skippers, Crossline Skipper is a small butterfly of grassy habitats, although it tends to be favour drier sites. Relatively common in the southern two thirds of Maine, northeast into Washington County, it is a species we hoped would be found during the MBA. In 2012 the species was found at not just one, but two locations! In 2012, Crossline Skipper was found at Douglas by Dwayne Sabine and at Gagetown by Scott Makepeace. At Gagetown several individuals were present, strongly suggesting the species breeds at the location. Crossline Skipper is very similar Tawny-edged Skipper (*Polites themistocles*); a good discussion on their separation can be found here <http://www.massaudubon.org/butterflyatlas/index.php?id=103>.

### Giant Swallowtails invade New Brunswick

With a wingspan sometimes exceeding 11cm, Giant Swallowtail is one of Canada's largest butterflies. Prior to the MBA there was only a single record of the species - a specimen taken near Windsor Junction, Nova Scotia, in

August 1901. In August, 2012, the species was photographed at four different locations in southwestern New Brunswick (Jolicure, Andrew Macfarlane; Canaan Forks, Jean Renton; Coverdale, Marjorie Sharpe; and Grand-Digue, Tim McCluskey).



*Crossline Skipper. Photograph by Peter Hall*

In recent years Giant Swallowtail has greatly expanded its Canadian breeding range. Until recently the only area of Canada where resident populations occurred was in southwestern Ontario east to Hamilton. It is now established east of Lake of Ontario, and it has even started breeding in Quebec. Similar expansions have been documented in the northeastern United States.

The host plants of Giant Swallowtail are native species in the citrus family (Rutaceae). We have no such species in the Maritimes, however breeding could occur sporadically on ornamental species of the family. In 2012, a Giant Swallowtail in Maine was seen ovipositing on Gas Plant (*Dictamnus albus*), an ornamental that is hardy enough to grow in the Maritimes. Serious butterfly gardeners might want to consider adding this plant to their property.

### **Collecting, site selection and timing**

The data from the first three years of the MBA shows a bias toward species of open meadows and fields. Field species like Clouded Sulphur (*Colias philodice*) and Northern Crescent (*Phyciodes cocyta*) have been comparatively well sampled, while forest species like

commas and bog species like Bog Copper (*Lycaena epixanthe*) are comparatively poorly sampled. The early fliers, in particular the elfins, are also undersampled. Certainly data on common field species is welcome, but documenting records for the harder to get species is encouraged.

To maximize the number of species you are encountering it is necessary to visit a variety of habitats over the course of the year. In May and early June, elfins can be encountered in a variety of habitats, including bogs and trails through wet coniferous and dry pine woods. Bogs are also just about the only place you will encounter Jutta Arctic (*Oeneis jutta*) and Bog Copper, the former flies from mid May until the end of June, the latter from mid June to early August. Woodland trails are a great place for the Maritimes' five comma species, as well as Mourning Cloak (*Nymphalis antiopa*) and, if you're lucky, Compton Tortoiseshell (*Roddia vaualbum*) or Milbert's Tortoiseshell (*Aglais milberti*). The best time to find these woodland denizens is in the spring (April through June) and latter half of the summer (August and September), though they are present throughout the season. Grassy margins of woodland roads and trails are also where you will find Common Roadside Skipper (*Amblyscirtes vialis*) and Pepper and Salt Skipper (*Amblyscirtes hegon*). Both these species fly from mid May into July (they are fairly common in New Brunswick, rare in Nova Scotia, and unrecorded but quite possible in PEI). Salt marshes and dunes are where to go for Short-tailed Swallowtail and Salt Marsh Copper. Short-tailed Swallowtail has yet to be recorded from mainland Nova Scotia or Prince Edward Island, but the species is possible anywhere along the coast on PEI and the North Shore of Nova Scotia. It flies from mid June to mid July, then again in late summer.

### **Targeting under-surveyed areas**

Feel like adding a species to a square this afternoon? Well you probably can without travelling too far! The species that have been recorded from 2010-2012 in any atlas square can be viewed on an interactive map at [http://www.ontarioinsects.org/maritimesbutterflyatlas/atlas\\_online\\_mba.html](http://www.ontarioinsects.org/maritimesbutterflyatlas/atlas_online_mba.html) (they can also be accessed through the MBA website). All are encouraged to examine these maps and use them to plan their outings. You might be surprised to see what common species still haven't been

recorded from your home square, and you probably don't have to travel too far to get to a square that has received little to no attention. With only two field seasons left for the MBA, now is the time to fill in those gaps!

**It's not too late to submit old data**

If you have butterfly records you collected in the past it is not too late to submit them! This includes data from the first three years of the MBA, as well as the years prior to the project. All records must be supported by a photo or a specimen. If you have questions about how to submit your data contact John Klymko at [jklymko@mta.ca](mailto:jklymko@mta.ca) or (506) 364-2660.

**Maritimes Butterfly Atlas Funders and Partners**

The MBA is made possible by generous support from Environment Canada's EcoAction Community Funding Program, the Gosling Foundation, the New Brunswick Wildlife Trust Fund, the New Brunswick Department of Natural Resources, New Brunswick Power, and the Atlantic Canada Conservation Data Centre. The project has received in-kind support from the three Maritimes Provinces, Environment Canada, and the New Brunswick Museum.

The MBA is a partner of eButterfly, a North America-wide butterfly records depository (visit [eButterfly.ca](http://eButterfly.ca) for more information). All Maritimes records submitted to eButterfly along with a photograph or specimen are incorporated into the MBA.

**2010-2012 Atlas Participants - Thank You!**

\*= more than 50 records, \*\*= more than 100 records, \*\*\*= more than 250 records, \*\*\*\*= more than 500 records, \*\*\*\*\*= more than 1000 records

Darrell Abolit	Richard Beazely	Larry Bogan	Zac Chipper
Chris Adam***	Jim Bell	Marlene Bolger	David Christie
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Mark Arsenault**	Normand Belliveau	William Bowerbank	Jeff C. Clements
Ronald G. Arsenault	Marilyn Benjamin*	Derek Bridgehouse**	James Clifford
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Rick Ballard	Jo Bishop	Donald Bullock	Elwood Coakes
Dan Banks	Richard Blacquiere	Roger Burrows	Murray Colbo
Greg Barrett***	Bob Blake	Maureen Cameron-MacMillan	David Colville
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Avery Bartels	Sherman Boates	Carl Canning	Sandra Cooper
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Dave Currie*	Cathy Etter	Diane Griffin*	Jeff Klein
Joan Czapaly	Aaron D. Fairweather	Dominique Gusset	John Klymko****
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Daphne Davey	Rick Ferguson	Sam Hackett	Merville Landry
Hennie de Caluwe	Susan Feurtado	Ross Hall	Rosita Lanteigne***
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Tracey Dean	Graham Forbes	Tara Harris*	Roy Lapointe****
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Ronnie d'Entremont	J. Francis	Catherine Higgins	Ann Leadbetter
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Jerome D'Eon*	Troy Frech	Steven Hiltz	Yolande Leblanc
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Clayton D'Orsay	Peter Gadd****	Danielle Horne	Morgan Leyte
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Gerry MacDonald	Max McCosham*	Kimberley Pitts	Hannah Ross
Sam MacDonald	Fritz McEvoy*	Laura Pitts	Josh Ross
Andrew Macfarlane	Kent McFarland	Nelson Poirier	Sue Ross*
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Kathy MacKay	Ken McKenna****	Rejean Pouliot	Mary Sabine**
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Gayle MacLean	Jeffie McNeil	Harold Preston	Ma Sanford
Allan MacMillan	Richard Migneault *	Chuck Priestley	Phil Schappert****
Harriet MacMillan	Marg Millard	Sheila Pugsley	Ted Sears
Janet MacMillan	Mary Millard-Smith	Chantal Raillard	Marjorie Sharpe
Ellen MacNearney	Michael Milligan	Martin Raillard	Colin Silver*
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Ally Manthorne	Annie Morrison	T. Rawlings	Alison Smith
Hughie Manthorne*	Pat Murphy	Jean Renton	M. Jane Smith**
Anne Marsch***	Gary Myers	Diane Richard	Nigel Smith
Don Marsch*	Charles Neveu	Leonel Richard	Judy Smits
Donna Martin***	Christine Noronha	Lewnanny Richardson	Cindy Spicer
Evelyn Martin	Ruth Nymand	John Robart	Kathleen F. Spicer*****
Sonya Martin	Dwaine Oakley	Sue Robertson	G.H. Stairs
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Gillian Mastromatteo	Mike Parks**	Kimberly Robichaud-Leblanc	Richard Stern
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Charles McAleenan	Linda Payzant	Norma Robinson	Judy Stockdale
Donald F. McAlpine	Peter Payzant	Sarah L. Robinson****	Eric Sullivan***

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Jim Taylor**	Cameron Trenholm	Reggie Webster	Jim Wilson
Gisele Thibiodeau	Martin Turgeon**	Sybil Wentzell	Ron Wilson
Tony Thomas*	Katelyn Vandenbroeck	Ann Wheatley	Barry Wright*
Cliff Thornley	Michel Viau	Rick Whitman	Terry Wyman
Stuart Tingley	Rita Viau***	Robert Whitney	Jessica Wysmyk
Maureen Toner	Ron Walsh	Bev Wigney	Bev Yollem
Brian Townsend	Owen Washburn	Heather Wilkes	