# Maritimes Butterfly Atlas

## 2016 Newsletter Highlights from the 2015 field season

The final field season of the Maritimes Butterfly Atlas (MBA) has come and gone. The 2015 field season was a last minute addition to the MBA (initially the project was scheduled to end in 2014). However, we are pleased to report that this did not result in a diminished number of records submitted - 2015 had the third highest records total of any atlas year! So thank you to everyone who kept up their survey effort.

There were 6,800 photographic and specimen records submitted from the 2015 field season by 128 observers. Over the six years of the project about 34,500 records were submitted by about 460 volunteers (final values are still being determined as a few records are still being submitted).

#### **Notable records**

#### New provincial records

The first Nova Scotia record of Variegated Fritillary (*Euptoieta claudia*) was found by Ron Wilson in Berwick on August 3, 2015. This was also the first Variegated Fritillary record of the Atlas period.



Variegated Fritillary - Photograph by Ron Wilson



Eastern Tailed-Blue - Photograph by Ken MacIntosh

On August 5, 2015, another was found by John Klymko on Grand Lake near Minto, New Brunswick. Variegated Fritillary occurs in the Maritimes as a vagrant or stray from areas further south. There are several pre-Atlas records from New Brunswick, including breeding records.

On September 4, 2014, Mark Arsenault found the first Prince Edward Island record of Eastern Tailed-Blue (*Cupido comyntas*) (this 2014 record was submitted in 2015 so it is reported for the first time here). This species has been discussed a lot during the course of the atlas period because of its apparent rapid range expansion into much of the Maritimes. At the project outset, Eastern Tailed-Blue had only been recorded in western New Brunswick, with records from Fredericton, Woodstock, and Grand Manan. During the course of the project, the species was recorded from sites throughout New Brunswick, and the first ever records were submitted for Nova Scotia and now Prince Edward Island. Whereas many "new" provincial records are of species that were probably long present but previously overlooked in a jurisdiction (the first Maritimes record of Crossline Skipper [*Polites origenes*] in New Brunswick from 2012 and the first Nova Scotia record of Twospotted Skipper [*Euphyes bimacula*] in 2013 are good examples of that), these new records of Eastern Tailed-Blue appear to be indicative of an ongoing range expansion. It seems very unlikely the species was simply overlooked in the past in all the new areas it is being reported from - it is a fairly showy species that is found in weedy habitats so it would surely have been picked up if it was at all as common historically as it is now.

Over the six years of the MBA there have been two species added to the Maritimes species list: Ocola Skipper (Panoquina ocola) [2014, New Brunswick] and Crossline Skipper [2012, New Brunswick] and 7 species added to provincial lists: Dorcas Copper (Lycaena dorcas)] [2010, NS], American Snout (Libytheana carinenta) [2010, New Brunswick], Eastern Comma (Polygonia comma) [2012, PE], Fiery Skipper (Hylephila phyleus) [2012, New Brunswick], Giant Swallowtail (Papilio cresphontes) [2012, New Brunswick], Eastern Tailed-Blue [2013, NS], and Two-spotted Skipper [2013, NS]. In 2014, the first Maritimes record for European Peacock (Inachis io) was found in Halifax, but the butterfly was most likely not of wild origin.

#### Other significant finds

Roy LaPointe found the first MBA record of Greenish Blue (*Plebejus saepiolus*) on June 27,



Greenish Blue- Photograph by Roy LaPointe



Baltimore Checkerspot - Photograph by Phil Schappert

2015, at the St. Leonard Airport in northwest New Brunswick. Greenish Blue was once common across northern New Brunswick - in Ferguson's The Lepidoptera of Nova Scotia, published in 1953, the species is described as abundant north of the Miramichi in early July. It was later described as "apparently rare" in Thomas' A Preliminary Atlas of the Butterflies of New Brunswick (published in 1996). Thomas' summation appears to apply today. The decline of Greenish Blue has been noted from elsewhere in the east - only one has been reported from Maine in the past decade during the Maine Butterfly Survey (there are historic records from eight townships), and it has disappeared from central Ontario. The cause of the decline from what is the southeastern edge of the species' range is unclear.

2015 was a really good year for Baltimore Checkerspot (*Euphydryas phaeton*) in Nova Scotia. In the first five years of the MBA there were eight Nova Scotia records from seven atlas squares. In 2015, there were 13 records from 10 atlas squares, including seven new square records.

#### Next Steps for the Project

John Klymko, the director of the MBA, is continuing to work with the Maine Butterfly Survey to publish the results of the two projects in a collaborative book. The first step is finalizing the dataset of MBA records, and a dataset of records collected prior to the atlas period. Once this is done work will begin on compiling species accounts, which will comprise the bulk of the book. It is anticipated that the book will be published in the next few years.

### It's not too late to submit old data, but it needs to be in soon!

Any butterfly records you collected in the past that are supported by either a photograph or a specimen are of interest to the MBA. This includes data from the atlas period (2010-2015) as well as the years prior to this. If you have questions about how to submit your data contact John Klymko at jklymko@mta.ca or (506) 364-2660.

There have been deadlines declared in the past, but this one is for real. If you have data that you'd like incorporated in this project it must be submitted no later than July 31, 2016.

#### What to do with future butterfly records

Going forward participants are encouraged to continue submitting photographic records to eButterfly (see e-butterfly.org). If you're not an eButterfly user, then you can still submit records to the Atlantic Canada Conservation Data Centre. However, at this point we're only interested in records of rare and uncommon species (anything

with a provincial S-Rank of S1 to S3, see accdc.com/mba/en/checklists.html).

Hopefully the MBA will be repeated in the future, perhaps in 20 year increments like the Maritimes Breeding Bird Atlas. Repeating the intense level of surveying of a proper atlas will create another snapshot of butterfly distribution against which the results of the first MBA can be compared.

#### **MBA Funders and Supporters**

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, TD Friends of the Environment Foundation, the Prince Edward Island Department of Environment, Energy and Forestry and the Atlantic Canada Conservation Data Centre. The project has received in-kind support from the three Maritimes Provinces, Environment and Climate Change Canada, and the New Brunswick Museum.



accdc.com/mba/index-mba.html





New Brunswick Museum Musée du Nouveau-Brunswick





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#### 2010-2015 Atlas Participants - Thank You!

\*= more than 50 records, \*\*= more than 100 records, \*\*\*= more than 250 records, \*\*\*\*= more than 500 records, \*\*\*\*\*= more than 1000 records, \*\*\*\*\*= more than 2000 records

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