

The Maritimes Butterfly Atlas (MBA) got off to an excellent start in 2010, with 93 participants submitting 1,120 specimens and 1,343 photographs, for a total of 2,463 records. This total far exceeds the 1,000 or so records that were expected from year one of this five year effort!

In total 74 species were recorded, 84% of the 88 species that have ever been recorded in the Maritimes. Only seven regularly occurring species were missed (Western Pine Elfin, Banded Hairstreak, Early Hairstreak, Eastern Tailed-Blue, Greenish Blue, Meadow Fritillary and Arctic Fritillary). Dorcas Copper was recorded for the first time in Nova Scotia and American Snout was recorded for the first and second time in New Brunswick. Also significant was the first inland record of Short-tailed Swallowtail for the Maritimes, and the documentation of Little Wood-Satyr in Prince Edward Island. Details on these records are provided in the following sections.

A primary focus of the MBA is the documentation of rare species, and the first year was very successful inthat regard¹. The table below lists the number of rare species recorded for each province in 2010, followed by the number of specimens or photographs of these species received.

	NB	NS	PE
Number of rare species recorded	20	20	12
Number of records of rare species	74	95	20

¹ Rare species are those with a provincial rank below S4 (visit <u>http://www.accdc.com/butterflyatlas/Checklist.html</u> for the provincial ranks of Maritime species and rank definitions)

Dorcas Copper – first NS record



Dorcas Copper nectaring at its hostplant, Shrubby Cinquefoil. Photo by David Mazerolle.

Dorcas Copper is found across Canada, however it is always locally common, never wandering far from its host plant, Shrubby Cinquefoil. Prior to the Atlas, Dorcas Copper was only known from the rich fens of Carleton County, New Brunswick (the New Brunswick population is of the subspecies claytoni, also known as Clayton's Copper). On July 21, 2010, Sean Blaney and David Mazerolle discovered a colony of Dorcas Copper at a rich fen near Lake Ainslie, Inverness County, Cape Breton, nearly 500 km from the Carleton County population! The nearest record to this Cape Breton record isn't even in the Maritimes. it is 225 km to the northeast in Newfoundland. Further searches at locations with an abundance of Shrubby Cinquefoil may well reveal more populations of Dorcas Copper in the Maritimes.



American Snout – first and second NB record

The core range of American Snout is from the southern United States to Argentina. In Canada it occurs as a vagrant, though in some years it can be common in extreme southern Ontario where it reproduces on Hackberry. Prior to the Atlas the only Maritime record was a specimen caught in 2004 on Brier Island. In 2010 two American Snouts were documented in New Brunswick: one in Fredericton by Tony Thomas, and one near Edmundston by Richard Migneault.



American Snout, a very rare vagrant. Photo by Richard Migneault.

American Snout is one of a suite of southern vagrants that could show up in the Maritimes. Other vagrants that have previously been recorded in the Maritimes include Little Yellow, Variegated Fritillary, and Common Buckeye (in 2010 there were at least two Maritime sight records of Common Buckeye). Species that may one day be recorded in the Maritimes include Cloudless Sulphur, Large Sulphur, and Long-tailed Skipper. All these species have been recorded as vagrants in Maine.

Short-tailed Swallowtail – first inland Maritime record

The entire world range of Short-tailed Swallowtail is limited to the Gulf of St. Lawrence and Newfoundland. Typically a coastal species, in the Maritimes it is known only from saltmarshes and dunes in Cape Breton and New Brunswick. It does occur inland elsewhere, but so far such records are limited to meadows in Newfoundland and mountainous areas in Newfoundland and the Gaspé Peninsula (there is an erroneous inland record from the Kedgwick, NB, area in Butterflies of Canada). On June 2, 2010, Martin Turgeon collected two specimens of Short-tailed Swallowtail along a road at his camp approximately 19 km north of Edmundston, NB. He also observed several other dark swallowtails that were likely Short-tailed Swallowtail and not the very similar Black Swallowtail. The collection of multiple species indicates there is almost certainly a colony present at the site. The saltwater nearest this site is nearly 100 km to the northeast in Quebec.

This record suggests that Short-tailed Swallowtail may be much more widespread in northern New Brunswick than previously realized. Its proximity to the US border (only 20 km) is also intriguing. Any specimens taken on the other side of the border would represent a new species record for the country!



Specimen of Short-tailed Swallowtail collected by Martin Turgeon near Edmundston, NB, the first inland Maritime record for the species. Photo by John Klymko.

This record also reinforces the importance of adequate documentation, either identifiable photographs or a specimen. The identification of the swallowtail specimens taken at Martin's camp was made months after their capture. Had they not been collected they would likely have been recorded as the much more common Black Swallowtail.



Little Wood-Satyr - new to PEI

Little Wood-Satyr is a very recent arrival in the Maritimes. Although widespread and fairly common in New Brunswick and Nova Scotia, it only arrived in NB in the early 1990s and in NS around 2005. At the outset of the MBA Little Wood-Satyr hadn't been recorded on PEI, although it was certainly expected there. At a spring 2010 presentation in Charlottetown, John Klymko, the MBA director, used Little Wood-Satyr as an example of a species that would likely be discovered in PEI during the course of the Atlas. As soon as the presentation was over, Sonya Martin presented John with two Little Wood-Satyr specimens she had collected at Fortune Bridge, Kings County, PEI, in 2007! In 2010 Little Wood Satyr was recorded at three additional PEI locations by Donna Martin, Danielle Horne, David Dowling, Max McCosham, Joshua Horne, and Jesse Francis. In just four years the species has gone from being completely unknown from the island to being known from four locations and all three PEI counties. It would appear that the species is now widespread and fairly common in all three Maritime provinces.



Little Wood Satyr, a recent PEI arrival. Photo by Denis Doucet.

Website updates

A French version of the MBA website is still under construction. In the mean time, please check out the updated English website (http://www.accdc.com/butterflyatlas/). All species now have a profile page. On it you will find a description with useful identification tips, a labeled photograph, a map with the 2010 data displayed, and other information such as Maritime range and flight time. All 2010 data can also be viewed in tables.

The MBA has also launched an English Google Group (https://groups.google.com/forum/#!forum/maritimesbutterfly-atlas) and blog (http://maritimesbutterflyatlas.wordpress.com/). The Google Group will host discussions about the Atlas and butterflies in general. It is hoped that participants will post their findings and may even coordinate outings. If you prefer, you can read posts without joining. If you want to contribute to the discussion you need a Google account. You can use any email address to create this, just follow the prompts at the address given above. The Blog will feature a post every two weeks or so by the Atlas coordinator detailing some of the more interesting finds of the past two weeks.

It's not too late to submit 2010 data!

If you have data you collected in 2010 it is not too late to submit it! If you have questions on how to submit your data contact John Klymko at <u>jklymko@mta.ca</u> or (506) 364-2660.

Maritimes Butterfly Atlas Funders

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