

## Butterflies

Prepared by Tom Dodd, June 2011

NABA Butterfly Counts are a program of the North American Butterfly Association to census the butterflies of North America (United States, Canada and partially Mexico). Participants conduct a one-day census during June or July of all butterflies sighted within a 15-mile diameter circle. Upton is entirely within the Blackstone Valley Corridor NABA Butterfly Count and consists of about 12% of the total count area. This count has been conducted from 2001-2009, within a few days of July 12 each year. The number of participants has ranged from 7-22.

There has been a range of 42-54 species (645-5729 individuals) seen on each count day, with a total of 64 species seen over the entire nine year history. The Massachusetts Butterfly Club, a chapter of NABA lists 103 regularly occurring, of 125 butterfly species, in Massachusetts over the entire year. Butterflies have varied life cycles and some species may not be flying at the time of this census. They may be in an egg, larval, or chrysalis stage at the time of the count, or migrate into the state at a later date, and so are not recorded. The count records adults only. Most of the butterflies on the list have been seen in Upton. The exceptions are Pipevine Swallowtail, Hickory Hairstreak, White M Hairstreak, Atlantis Fritillary, and Broad-winged Skipper. Though, this last skipper may be expected to be found in Phragmites stands along the West River.

Notable public open space areas in Upton for butterflies are the Stefans property (fields, meadows, Warren Brook), the Glen Ave public wells and area (wet meadow, alders), Peppercorn Hill (bog, power line, trails), and also along the power line and gas line right of ways that cross through the middle of Upton.

A few notable butterflies that are found in Upton include the Harvester, Bog Copper, Oak Hairstreak, and Baltimore Checkerspot.

The Harvester butterfly is unique in that during its larval or caterpillar stage it is strictly carnivorous while all other butterfly larvae feed on plants. The larvae feed on wooly aphids that can be found on alder shrubs alongside wetlands or streams. They can be found in a few locations throughout town, but a good location is the alders in the vicinity of the Glen Ave well fields. The adult butterfly hasn't been found during the count day due to its uncommon occurrence and possibly because it's not in the adult stage at the time of the count.

The Bog Copper larvae feeds on cranberry plants and so can be found in bog habitats. This butterfly is about the size of a dime when its wings are closed and flies weakly just above the bog surface searching for the cranberry plants to deposit their eggs. These butterflies are found at the graminoid fen (bog) at Peppercorn Hill.

The Oak Hairstreak is state-listed by MA NHESP as Special Concern. It is a small butterfly about the size of a nickel that feeds on oak leaves and catkins in its larval stage. It is not known what species of oak that is used by the butterfly in Massachusetts and it's believed the adults spend much of their time on the treetops. Their range is spotty in Massachusetts and they have only been found a few times in Upton. Their flight period barely coincides with the NABA butterfly count making it a difficult find.

A local colony of Baltimore Checkerspots (**Photo #**) can be found in the upper fields at the former Stefans Farm. The larvae of this butterfly feeds on the native turtlehead, but has recently switched to the introduced English Plantain. In the past, with the right conditions, adults were found flying over fields in southeast Massachusetts in the thousands. In Upton, with the fields reverting to shrubs, they have numbered around 50.

## Appendix x

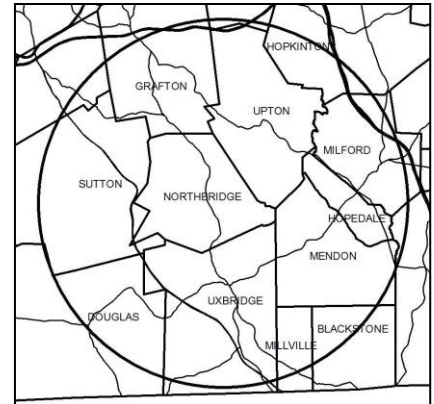
NABA Butterfly Count - Blackstone Valley Corridor

(lat-long coordinates: 42.1167°, -71.6167°)

This is a list of the butterflies found in the count circle during a one-day count period on July 12 (+3 days) from 2001-2009. Butterfly names follow the NABA Checklist of North American Butterflies-2nd Edition ([www.naba.org](http://www.naba.org)). Note that Upton is about 12% of the area and is entirely in the count circle.

The Occurrence scale indicates the likelihood of seeing a species on or about July 12 in the count circle:

- R= rare - 1-5 individuals seen over count history
- U=uncommon – most years average 1-5 individuals
- C=common - most years average 5-20 individuals
- A=abundant - most years average >20 individuals



Butterfly Species	Occurrence
Pipevine Swallowtail	R
Black Swallowtail	C
Eastern Tiger Swallowtail	A
Canadian Tiger Swallowtail	U
Spicebush Swallowtail	C
Cabbage White	A
Clouded Sulphur	A
Orange Sulphur	A
American Copper	A
Bog Copper	R
Coral Hairstreak	U
Acadian Hairstreak	U
Edwards' Hairstreak	U
Banded Hairstreak	C
Hickory Hairstreak	R
Striped Hairstreak	C
Oak Hairstreak	R
White M Hairstreak	R
Gray Hairstreak	U
Eastern Tailed-Blue	A
Summer' Spring Azure	C
Great Spangled Fritillary	A
Aphrodite Fritillary	C
Atlantis Fritillary	R
Silver-Bordered Fritillary	U
Pearl Crescent	A
Baltimore Checkerspot	A
Question Mark	U
Eastern Comma	U
Compton Tortoiseshell	R
Mourning Cloak	U
Milbert's Tortoiseshell	R

Butterfly Species	Occurrence
American Lady	C
Painted Lady	U
Red Admiral	C-A
Common Buckeye	R
Red-Spotted Admiral	U
Viceroy	C
Northern Pearly-Eye	U
Eyed Brown	U
Appalachian Brown	C
Little Wood-Satyr	A
Common Ringlet	R
Common Wood-Nymph	A
Monarch	A
Silver-Spotted Skipper	A
Hoary Edge	U
Southern Cloudywing	R
Northern Cloudwing	R
Horace's Duskywing	U
Wild Indigo Duskywing	C
Common Sootywing	C
Least Skipper	U
European Skipper	A
Peck's Skipper	R
Tawny-Edged Skipper	R
Crossline Skipper	C
Northern Broken-Dash	A
Little Glassywing	A
Delaware Skipper	A
Mulberry Wing	C
Broad-Winged Skipper	U-C
Black Dash	C
Dun Skipper	A