

## 13.0 A PRELIMINARY LIST OF THE BUTTERFLIES (LEPIDOPTERA) OF NIAGARA REGION, ONTARIO

*Robert Curry*



This list of butterflies is based primarily on fieldwork in study sites designated by the Niagara Peninsula Conservation Authority in the summer of 2007 as part of the Niagara Natural Heritage Areas Inventory (NAI). As it is based almost exclusively on the observations of one researcher (Curry) in this one summer it cannot be regarded as complete. Furthermore, 2007 was an extreme drought year, the second in succession, which doubtless reduced the abundance of butterflies and probably the number of species encountered. In the NPCA Wildlife Summary database there are a few additional records submitted by others during 2007. In addition there are a few more records in the database from earlier years. All these are included to determine status on the following checklist.

### **OTHER SOURCES OF INFORMATION**

Records for number of species not found in 2007 were plotted as dots in Lincoln and Welland counties (now Niagara) maps in *The Ontario Butterfly Atlas* (Holmes et al. 1991). These records dating before 1991 are herein regarded as **historical**.

### **ABUNDANCE DESIGNATIONS**

The Abundance of Niagara butterflies is based on the number of known stations in the region. A station is defined as a population that is separated from any other population by at least one kilometre. For example in some large sites such as Upper 12-Mile Creek or Wainfleet Bog there may be two or even three stations.

The following terms and definitions are used to describe the abundance (area-wide status) of Niagara butterflies.

**Common:** currently known to be present at more than 10 stations.

**Uncommon:** currently known to be present at 5 to 10 stations.

**Rare:** currently known to be present at fewer than 5 stations.

These definitions are quite arbitrary and, no doubt, additional fieldwork would result in more stations being found and the definitions being modified. Nevertheless, they indicate the relative status of each species and point the way to recommendations about habitat preservation for diurnal Lepidoptera in Niagara.



## ONTARIO STATUS

The Natural Heritage Information Centre (NHIC) of the Ontario Ministry of Natural Resources maintains detailed listings of the status of Ontario butterflies. All species are ranked using the following labels:

- S1 extremely rare in Ontario
- S2 very rare in Ontario
- S3 rare to uncommon in Ontario
- S4 common in Ontario
- S5 very common in Ontario
- SNA not ranked – usually introduced or vagrant species

The NHIC provincial rank is indicated for each species on the list.

All S1 to S3 species are considered **Provincially Significant** and are marked as **PS** in the heading of the species accounts.

## SUMMARY OF THE STATUS OF NIAGARA BUTTERFLIES

Common	29
Uncommon	7
Rare	18
Extirpated?	1
<u>Historical</u>	<u>13</u>
TOTAL	68

## RECOMMENDATIONS

- more field surveys are necessary to determine the true status of many Niagara butterflies
- a search of museum collections would find additional records of Niagara butterflies
- search the Toronto Entomologists Association annual summaries of butterflies encountered in Ontario from 1969 to the present



## SPECIES CHECKLIST

**Silver-spotted Skipper [*Epargyreus clarus*]** S4  
Uncommon ---- 7 stations

**Northern Cloudywing [*Thorybes pylades*]**S5  
Historical

**Dreamy Duskywing [*Erynnis icelus*]** S5  
Rare ---- 1 station (Wainfleet Bog).

**Juvenal's Duskywing [*Erynnis juvenalis*]** S5  
Common

**Wild Indigo Duskywing [*Erynnis baptisiae*]** S1 (S3 proposed) PS  
Common. The Wild Indigo Duskywing was until quite recently an uncommon species throughout its eastern North American range. Its native foodplant is Wild Indigo (*Baptisia tinctoria*) but it has adapted to the introduced Crown Vetch (*Coronilla varia*). Consequently, over the past 20 years this species has dramatically extended its range north and east and is found along road embankments and waste places wherever crown vetch is found. While it was found in only three sites in 2007, such waste places were seldom checked and it is no doubt widespread in the region.

**Common Sootywing [*Pholisora catullus*]** S5  
Historical. This is a species of waste places; larval foodplants include Lamb's Quarters. Such habitats were not visited during the NAI so Common Sooty-Wing likely still occurs in Niagara.

**Least Skipper [*Ancyloxypha numitor*]** S5  
Common

**European Skipper [*Thymelicus lineola*]** SNA INT  
Common (introduced)

**Peck's Skipper [*Polites peckius*]** S5  
Common

**Tawny-edged Skipper [*Polites peckius*]** S5  
Historical. Found in dry old fields, a habitat type not common in Niagara. Nevertheless it probably still occurs in a few places.

**Crossline Skipper [*Polites origenes*]** S5  
Historical. Like the previous species it may still occur in dry grassland habitats in Niagara.

**Long Dash [*Polites mystic*]** S5  
Rare ---- 3 stations

**Northern Broken-Dash [*Wallengrenia egeremet*]** S5  
Common

- Little Glassywing [*Pompeius verna*] S5**  
Rare ---- 1 station (Harold S. Bradshaw Memorial Park).
- Delaware Skipper [*Anatryton logan*] S5**  
Uncommon ---- 5 stations
- Hobomok Skipper [*Poanes hobomok*] S5**  
Common
- Broad-winged Skipper [*Poanes viator*] S5**  
Rare ---- 3 stations. The larval food plants are sedges (*Carex* sp.) although there is some evidence that it now feeds on Common Reed (*Phragmites australis*) so it may be more widespread in Niagara (Wormington 2006).
- Dion Skipper [*Euphes dion*] S5**  
Rare ---- 2 stations. This and the following species are both obligate sedge feeders (*Carex* sp.). As sedge meadows are exceedingly scarce in Niagara so are the associated butterflies.
- Black Dash [*Euphes conspicua*] S5**  
Rare ---- 1 station (Upper 12-Mile Creek).
- Dun Skipper [*Euphes vestris*] S5**  
Uncommon ---- 7 stations
- Pipevine Swallowtail [*Battus philenor*] SNA**  
Historical. A rare immigrant.
- Black Swallowtail [*Papilio polyxenes*] S5**  
Common
- Giant Swallowtail [*Papilio cresphontes*] S2(S4 proposed)**  
Rare ---- 1 station (Cement Road Quarry Ponds)
- Eastern Tiger Swallowtail [*Papilio glaucus*] S5**  
Common
- Spicebush Swallowtail [*Papilio troilus*] S4**  
Common
- Cabbage White [*Pieris rapae*] SNA INT**  
Common (introduced)
- Common Sulphur [*Colias philodice*] S5**  
Common
- Orange Sulphur [*Colias eurytheme*] S5**  
Common
- American (Little) Copper [*Lycaena phlaeas*] S4**  
Rare ---- 4 stations

**Bronze Copper [*Lycaena hyllus*] S5**

Rare ---- 3 stations

**Bog Copper [*Epidemia epixanthe*] S4S5**

Extirpated? A once healthy population of this Cranberry feeder existed in the Wainfleet Bog. It may still exist but none was found in the extreme drought year, 2007. A serious attempt should be made to find this species in the bog.

**Acadian Hairstreak [*Satyrium acadicum*] S4**

Rare ---- 4 stations

**Coral Hairstreak [*Satyrium titus*] S4**

Rare ---- 3 stations

**Edward's Hairstreak [*Satyrium edwardsii*] S4(S3 proposed) PS**

Rare ---- 1 station (Haldimand Sloughs)

**Banded Hairstreak [*Satyrium calanus*] S4**

Common

**Hickory Hairstreak [*Satyrium caryaevorum*] S3S4 PS**

Rare ---- 4 stations

**Striped Hairstreak [*Satyrium liparops*] S5**

Uncommon ---- 5 stations

**Eastern Tailed Blue [*Cupido (Everes) comyntas*] S5**

Common. Found in alfalfa fields and waste places.

**Spring Azure [*Celastrina ladon*] S5**

Common. Only found three times in 2007 but spring was advanced and the early flight season was almost over before the majority of field visits took place.

**Summer Azure [*Celastrinaneglecta*] S5**

Common

**Variegated Fritillary [*Euptoieta claudia*] SNA**

Historical. A rare immigrant, it likely occurs in Niagara from time to time.

**Great Spangled Fritillary [*Speyeria cybele*] S5**

Common

**Aphrodite Fritillary [*Speyeria aphrodite*] S5**

Historical

**Silver-bordered Fritillary [*Boloria selene*] S5**

Historical

**Meadow Fritillary [*Boloria bellona*] S5**

Historical

- Harris's Checkerspot [*Charidryas harrisii*]** S4  
Historical
- Pearl Crescent [*Phyciodes tharos*]** S5  
Common
- Northern Crescent [*Phyciodes cocyta*]** S5  
Common
- Baltimore Checkerspot [*Euphydryas phaeton*]** S4  
Rare ---- 1 station (M.J.Oldham [FE-11-00-00-0] in database)
- Question Mark [*Polygonia interrogationis*]** S5  
Common
- Eastern Comma [*Polygonia comma*]** S5  
Common
- Compton Tortoiseshell [*Nymphalis vaualbum*]** S5  
Historical. Periodically irrupts southward so it may re-occur at any time.
- Mourning Cloak [*Nymphalis antiopa*]** S5  
Common
- Milbert's Tortoiseshell [*Nymphalis milberti*]** S5  
Historical. Periodically irrupts southwards from the boreal forest.
- American Lady [*Vanessa virginiensis*]** S5  
Uncommon. A regular immigrant and colonist.
- Painted Lady [*Vanessa cardui*]** S5  
Historical. An irregular, sometimes common, immigrant to Ontario.
- Red Admiral [*Vanessa atalanta*]** S5  
Common
- Common Buckeye [*Junonia coenia*]** SNA  
Rare immigrant that probably occurs annually. Recorded at two stations in 2007.
- White Admiral [*Limenitis arthemis arthemis*]** S5  
Rare ---- 4 stations. This strikingly marked subspecies is much more common northward in Ontario. Consequently, it was surprising to find it at four stations in Niagara. Often called Banded Purple.
- Red-spotted Purple [*Limenitis arthemis astyanax*]** S5  
Common. This is the dominant form in Niagara.
- Viceroy [*Limenitis archippus*]** S5  
Uncommon ---- 6 stations

**Northern Pearly-Eye [*Enodia anthedon*] S4**  
Uncommon ---- 7 stations

**Eyed Brown [*Satyroides eurydice*] S5**  
Rare ---- 3 stations. This is a common species in large parts of Ontario; its larval foodplants are sedges, which explains its rare status in Niagara.

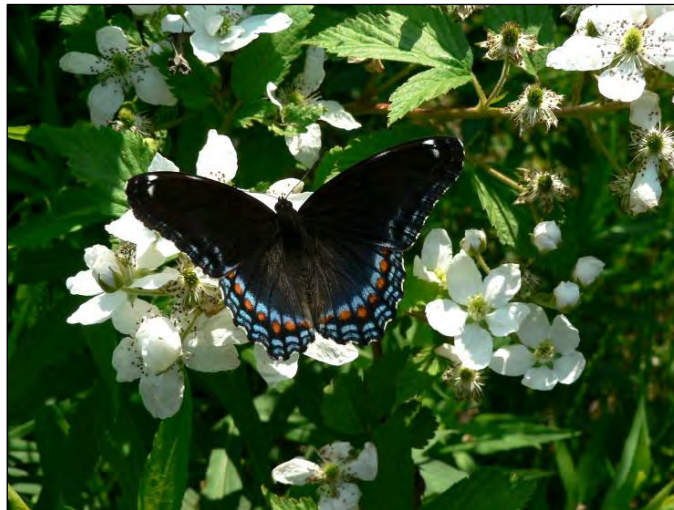
**Appalachian Brown [*Satyroides appalachia*] S4**  
Rare ---- 4 stations. This species, also a sedge feeder, favours more shaded areas and can be found at small patches of sedges along roadside ditches in woodlands.

**Little Wood-Satyr [*Megisto cymela*] S5**  
Common

**Common Ringlet [*Coenonympha tilla*] S5**  
Common

**Common Wood-Nymph [*Cercyonis pegala*] S5**  
Common

**Monarch [*Danaus plexippus*] S4**  
Common



## References

Holmes, A. M., Hess, Q. F., Tasker, R. R., & Hanks, A. J. (1991). *The Ontario butterfly atlas*. Toronto, Ontario: Toronto Entomologists Association.

Natural Heritage Information Centre, Ontario Ministry of Natural Resources. (2009).

*Species list: Lepidoptera*. Retrieved 03/05/10 from

<http://nhic.mnr.gov.on.ca/MNR/nhic/species/listout.cfm?el=iilep&sort=elcode>

Wormington, A. (2006). The Butterflies of Halton Region: A preliminary list. In J. K.

Dwyer (Ed.), *In Halton Natural Areas Inventory 2006. Volume 2.* (). Milton, Ontario:

Conservation Halton.