

Butterflies of Queen's University Biological Station

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The Queen's University Biological Station (N44°33' W76°19') maintains in excess of 3100 ha of wetlands, beaver ponds, lakes, abandoned farmlands, rocky uplands, and large tracts of contiguous forest for research and conservation. QUBS is one of the best places in Ontario for finding provincially and nationally rare butterflies (Order Lepidoptera; Class Insecta). Hoary elfin (*Callophrys polia*), West Virginia white (*Pieris virginiensis*), Olympia marble (*Euchloe olympia*) and Eastern tiger swallowtail (*Papilio glaucus*) all have populations at QUBS. QUBS tracts also support a wide range of more common species.

This checklist contains 95 species of butterflies that are known or expected to occur at QUBS. For each species I have included the scientific and common names following Layberry et al (1998). I have also listed the approximate flight times for each species based on the literature and observations of naturalists at QUBS. Flight times do not necessarily correspond to the number of broods that a species produces annually. For example, Compton tortoiseshell (*Nymphalis vaualbum*) produces only a single brood in mid-summer but has two flight seasons because adults hibernate through winter and emerge again to fly in the spring. There is also a column which lists the larval food plant(s) of each species, when they are known. Very little study or observational work has been conducted on the food plant preferences of butterfly larvae at QUBS, so nearly all such information in this checklist comes from the literature. Finally, I have included a status in the right-hand column that denotes how common a species is at QUBS. Each status is defined as follows:

Abundant – extremely numerous, nearly impossible to miss even to the casual observer.

Common – observed regularly and in good numbers.

Uncommon – requires some effort to locate and may be missed on some outings.

Rare – either of very local distribution or represented by limited observations.

Hypothetical – this species has not been recorded at QUBS but it is expected to occur. Please report any species in this category.

Thanks to John Poland, Daniele Mitchell and Bruce Ripley for providing recent species reports. Additional information on distribution and abundance of dragonfly species at QUBS and the surrounding area comes from the *Checklist of Butterflies of Kingston* (Kingston Field Naturalists 2008; <http://kingstonfieldnaturalists.org/checklists/butterflies.pdf>), *The Ontario Butterfly Atlas* (Holmes et al 1991), *Butterflies of Canada* (Layberry et al 1998), the Natural Heritage Information Centre database (<http://nhic.mnr.gov.on.ca>) and the Global Biodiversity Information Facility (<http://gbif.org>).

Please report errors, omission, sightings information and suggested status changes to Mark Andrew Conboy (mconboy@lakeheadu.ca).

	Scientific Name	Common Name	First Flight	Subsequent Flight(s)	Larval Food Plants	QUBS Status
	Hesperiidae	Skippers	<hr/>			
	Pyrginae	Pyrgine Skippers				
<input type="checkbox"/>	<i>Epargyreus clarus</i>	Silver-spotted skipper	early June - late July	---	Fabaceae	Uncommon
<input type="checkbox"/>	<i>Thorybes pylades</i>	Northern cloudywing	late May - July	---	herbaceous Fabaceae	Common
<input type="checkbox"/>	<i>Erynnis icelus</i>	Dreamy duskywing	mid May - late July	---	<i>Betula, Populus and Salix</i>	Common
<input type="checkbox"/>	<i>Erynnis juvenalis</i>	Juvenal's duskywing	mid May - late June	---	<i>Quercus</i>	Abundant
<input type="checkbox"/>	<i>Erynnis martialis</i>	Mottled duskywing	mid May - late June	---	<i>Ceanothus americanus, C. ovatus and Rhamnaceae</i>	Rare; at least one old record
<input type="checkbox"/>	<i>Erynnis lucilius</i>	Columbine duskywing	early May – mid June	early July - mid Aug	<i>Aquilegia</i>	Common
	Heteropterinae	Intermediate Skippers				
<input type="checkbox"/>	<i>Carterocephalus palaemon</i>	Arctic skipper	early June - mid July	---	Poaceae	Common
	Hesperiinae	Branded Skippers				
<input type="checkbox"/>	<i>Ancyloxypha numitor</i>	Least skipper	late June - early July	Aug – Sept	Poaceae	Common
<input type="checkbox"/>	<i>Thymelicus lineola</i>	European skipper	mid June - mid July	---	Poaceae	Abundant; introduced
<input type="checkbox"/>	<i>Hesperia leonardus</i>	Leonard's skipper	Aug - Sept	---	perennial Poaceae	Uncommon
<input type="checkbox"/>	<i>Hesperia sassacus</i>	Indian skipper	Early June - early July	---	Poaceae	Common
<input type="checkbox"/>	<i>Polites peckius</i>	Peck's skipper	late June - late July	---	Poaceae	Common

<input type="checkbox"/>	<i>Polites themistocles</i>	Tawny-edged skipper	mid June - mid July	---	Poaceae	Common
<input type="checkbox"/>	<i>Polites origins</i>	Crossline skipper	late June - mid Aug	---	Poaceae	Uncommon
<input type="checkbox"/>	<i>Polites mystic</i>	Long dash	mid June - late July	---	Poaceae	Common
<input type="checkbox"/>	<i>Wallengrenia egeremet</i>	Northern broken dash	late June - early Aug	---	Poaceae	Uncommon
<input type="checkbox"/>	<i>Anatrytone logan</i>	Delaware skipper	mid July - mid Aug	---	Poaceae	Hypothetical
<input type="checkbox"/>	<i>Poanes hobomok</i>	Hobomok skipper	late May - mid July	---	Carex	Abundant
<input type="checkbox"/>	<i>Poanes viator</i>	Broad-winged skipper	late June - mid Aug	---	Carex	Uncommon
<input type="checkbox"/>	<i>Euphyes dion</i>	Dion skipper	late June - July	---	Carex	Uncommon
<input type="checkbox"/>	<i>Euphyes bimacula</i>	Two-spotted skipper	late June - July	---	Carex	Uncommon
<input type="checkbox"/>	<i>Euphyes vestries</i>	Dun skipper	late June - mid Aug	---	Carex	Common
<input type="checkbox"/>	<i>Amblyscirtes vialis</i>	Common roadside skipper	early June - mid June	---	Poaceae	Common

Papilionidae Swallowtails

Papilioninae Swallowtails

<input type="checkbox"/>	<i>Papilio polyxenes</i>	Black swallowtail	late May - late June	mid July - Aug	Umbelliferae	Uncommon
<input type="checkbox"/>	<i>Papilio cresphontes</i>	Giant swallowtail	late May - July	late July - early Sep	<i>Ptelea trifoliata</i> and <i>Zanthoxylum americanum</i>	Rare; 1 record; recent range expansion in area
<input type="checkbox"/>	<i>Papilio glaucus</i>	Eastern tiger swallowtail	late May	Aug	<i>Fraxinus</i> , <i>Liriodendron tulipifera</i> , <i>Prunus</i> , and <i>Ptelea trifoliata</i>	Uncommon
<input type="checkbox"/>	<i>Papilio canadensis</i>	Canadian tiger swallowtail	late May - late June	---	<i>Fraxinus</i> , <i>Populus</i> , <i>Prunus</i> and <i>Salix</i>	Common

Pieridae Whites & Sulphurs

Pierinae Whites & Marbles

<input type="checkbox"/>	<i>Pontia protodice</i>	Checkered white	June - July	August - Sep	Brassicaceae	Hypothetical; occurs north and west of QUBS; should be looked for in old fields
<input type="checkbox"/>	<i>Pieris oleracea</i>	Mustard white	late April - mid Sep	---	Brassicaceae	Common; may be declining throughout its range in Canada
<input type="checkbox"/>	<i>Pieris virginiensis</i>	West Virginia white	late May - early June	---	<i>Lathraea</i>	Uncommon; QUBS is one of the most reliable sites in Ontario for this species
<input type="checkbox"/>	<i>Pieris rapae</i>	Cabbage white	late April - mid Oct	---	Brassicaceae; including domestic garden plants	Common; introduced
<input type="checkbox"/>	<i>Euchloe Olympia</i>	Olympia marble	late May - early June	---	Brassicaceae	Uncommon

Coliadinae Sulphurs

<input type="checkbox"/>	<i>Colias philodice</i>	Clouded sulphur	May - late Oct	---	Fabaceae	Abundant
<input type="checkbox"/>	<i>Colias eurytheme</i>	Orange sulphur	May – Nov	---	Fabaceae	Abundant
<input type="checkbox"/>	<i>Colias interior</i>	Pink-edged sulphur	June - early Sep	---	<i>Vaccinium</i>	Undetermined
<input type="checkbox"/>	<i>Eurema lisa</i>	Little yellow	June – Sep	---	Fabaceae	Rare; at least 2 old records; should be looked for in good migration years

Lycaenidae Gossamerwings

Miletinae Harvesters

<input type="checkbox"/>	<i>Feniseca tarquinius</i>	Harvester	late May - early June	July and Aug	<i>Prociphilus tessellatus</i> aphids on <i>Alnus</i>	Uncommon
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Lycaeninae		Coppers				
<input type="checkbox"/>	<i>Lycaena phlaeas</i>	American copper	June - Sep	---	<i>Rumex acetosella</i> and <i>R. crispus</i>	Rare
<input type="checkbox"/>	<i>Lycaena hyllus</i>	Bronze copper	mid June - mid Sep	---	<i>Rumex crispus</i> , <i>R. orbiculatus</i> and <i>Polygonum</i>	Common
<input type="checkbox"/>	<i>Lycaena epixanthe</i>	Bog copper	mid June - mid July	---	<i>Vaccinium</i>	Hypothetical; should be looked for in bogs
Theclinae		Hairstreaks				
<input type="checkbox"/>	<i>Satyrium acadicum</i>	Acadian hairstreak	early July - mid Aug	---	<i>Salix</i>	Uncommon
<input type="checkbox"/>	<i>Satyrium titus</i>	Coral hairstreak	late June - late Aug	---	<i>Quercus</i> and Rosaceae	Uncommon
<input type="checkbox"/>	<i>Satyrium edwardsii</i>	Edward's hairstreak	late June - Aug	---	<i>Quercus</i>	Hypothetical
<input type="checkbox"/>	<i>Satyrium calanus</i>	Banded hairstreak	early July - late Aug	---	<i>Carya</i> , <i>Juglans</i> and <i>Quercus</i>	Common; numbers can fluctuate annually
<input type="checkbox"/>	<i>Satyrium caryaevorum</i>	Hickory hairstreak	early July - early Aug	---	<i>Carya codiformis</i> , <i>Crataegus</i> , <i>Fraxinus americana</i> , <i>Juglans cinerea</i> and <i>Quercus rubra</i>	Uncommon
<input type="checkbox"/>	<i>Satyrium liparops</i>	Striped hairstreak	mid June - mid Aug	---	<i>Quercus</i> and shrubs of Rosaceae	Uncommon
<input type="checkbox"/>	<i>Callophrys grynea</i>	Juniper hairstreak	late May - June	---	<i>Juniperus virginiana</i>	Hypothetical
<input type="checkbox"/>	<i>Callophrys augustinus</i>	Brown elfin	early May - mid June	---	Ericaceae	Uncommon
<input type="checkbox"/>	<i>Callophrys polia</i>	Hoary elfin	May - early June	---	<i>Arctostaphylos uvaursi</i> and <i>Epigaea repens</i>	Uncommon and local
<input type="checkbox"/>	<i>Callophrys henrici</i>	Henry's elfin	late May - early June	---	<i>Prunus</i> , <i>Rhamnus frangula</i> and <i>Vaccinium</i>	Rare
<input type="checkbox"/>	<i>Callophrys niphon</i>	Eastern pine elfin	late May - early June	---	<i>Pinus banksiana</i> and <i>P. strobus</i>	Common
<input type="checkbox"/>	<i>Strymon melinus</i>	Grey hairstreak	April - end of Sep	---	<i>Comptonia peregrina</i>	Uncommon in some locations near QUBS

<input type="checkbox"/>	<i>Erora laeta</i>	Early hairstreak	mid May - mid June	---	<i>nuts of Corylus cornuta and Fagus grandifolia</i>	Rare
	Polyommatae	Blues				
<input type="checkbox"/>	<i>Everes comyntas</i>	Eastern tailed blue	June - Oct	---	Fabaceae	Common
<input type="checkbox"/>	<i>Celastrina ladon</i>	Spring azure	late April – early June	---	<i>Prunus, Vaccinium and Viburnum</i>	Abundant
<input type="checkbox"/>	<i>Celastrina neglecta</i>	Summer azure	July - early Sep	---	<i>Ceanothus americanus, Cornus, Spiraea and Viburnum</i>	Abundant
<input type="checkbox"/>	<i>Celastrina serotina</i>	Cherry gall azure	June	---	mite galls on <i>Prunus</i>	Hypothetical
<input type="checkbox"/>	<i>Glaucopsyche lygdamus</i>	Silvery blue	early June - early June	---	Fabaceae; often introduced species	Abundant
<input type="checkbox"/>	<i>Plebejus saepiolus</i>	Greenish blue	mid May - mid July	---	<i>Trifolium hybridum</i> and <i>T. repens</i>	Hypothetical; occurs north of QUBS
	Nymphalidae	Brushfoots				
	Argynniae	Fritillaries				
<input type="checkbox"/>	<i>Euptoieta claudia</i>	Variegated fritillary	May – Oct	---	<i>Linum, Plantago, Sedum and Viola</i>	Hypothetical; rare migrant in Eastern Ontario
<input type="checkbox"/>	<i>Speyeria Cybele</i>	Great spangled fritillary	late June - Sep	---	<i>Viola</i>	Common; may be declining throughout its range
<input type="checkbox"/>	<i>Speyeria aphrodite</i>	Aphrodite fritillary	July – Aug	---	<i>Viola</i>	Uncommon
<input type="checkbox"/>	<i>Speyeria atlantis</i>	Atlantis fritillary	June – Aug	---	<i>Viola</i>	Rare
<input type="checkbox"/>	<i>Boloria eunomia</i>	Bog fritillary	mid June - Aug	---	<i>Viola</i> and <i>Salix</i>	Hypothetical; should be looked for in bogs
<input type="checkbox"/>	<i>Boloria selene</i>	Silver-boardered fritillary	late May - Sep	---	<i>Viola</i>	Uncommon
<input type="checkbox"/>	<i>Boloria Bellona</i>	Meadow fritillary	May onward	Aug	<i>Viola</i>	Common

	Melitaeinae	Checkerspots & Crescents				
<input type="checkbox"/>	<i>Chlosyne gorgone</i>	Gorgone checkerspot	early May - late June	---	<i>Aster</i> and <i>Rudbeckia hirta</i>	Hypothetical; should be looked for in old fields and hydro corridors
<input type="checkbox"/>	<i>Chlosyne nycteis</i>	Silvery checkerspot	early June - mid July	---	Asteraceae	Hypothetical; should be looked for near streams and wetlands
<input type="checkbox"/>	<i>Chlosyne harrisii</i>	Harris's checkerspot	June – July	---	<i>Aster umbellatus</i>	Common in certain locations
<input type="checkbox"/>	<i>Phyciodes tharos</i>	Pearl crescent	May onward	late July - Sep	<i>Aster ciliolatus</i> and other <i>Aster</i>	Common
<input type="checkbox"/>	<i>Phyciodes cocyta</i>	Northern crescent	mid June - mid July	early Sep	<i>Aster</i>	Common
<input type="checkbox"/>	<i>Phyciodes batesii</i>	Tawny crescent	June onward	---	<i>Aster</i>	Hypothetical
<input type="checkbox"/>	<i>Euphydryas phaeton</i>	Baltimore checkerspot	mid June - early Aug	---	<i>Chelone glabra</i>	Uncommon; marshes, fields and along open streams where its larval foodplant grows
	Nymphalinae	Anglewings & Allies				
<input type="checkbox"/>	<i>Polygonia interrogationis</i>	Question mark	late May - early July	late July - mid Sep	<i>Humulus lupulus</i> , <i>Ulmus</i> and <i>Urtica</i>	Common; numbers can fluctuate from year to year
<input type="checkbox"/>	<i>Polygonia comma</i>	Eastern comma	April - mid Oct	---	<i>Humulus lupulus</i> , <i>Ulmus</i> and <i>Urtica</i>	Common
<input type="checkbox"/>	<i>Polygonia faunus</i>	Green comma	April – May	July - Sep	<i>Alnus</i> , <i>Betula</i> , <i>Salix</i> and <i>Vaccinium</i>	Hypothetical; occurs just north of QUBS
<input type="checkbox"/>	<i>Polygonia progne</i>	Grey comma	late March - Oct		<i>Ribes</i>	Common; may be declining in Ontario
<input type="checkbox"/>	<i>Nymphalis vaualbum</i>	Compton tortoiseshell	late March – June	July - Aug	<i>Betula</i> , <i>Populus</i> and <i>Salix</i>	Common; numbers can fluctuate from year to year

<input type="checkbox"/>	<i>Nymphalis antiopa</i>	Mourning cloak	mid March - May	June - late Oct	<i>Cetlis occidentalis,</i> <i>Populus, Salix</i> and <i>Ulmus</i>	Abundant
<input type="checkbox"/>	<i>Nymphalis milberti</i>	Milbert's tortoiseshell	April – Oct		<i>Urtica</i>	Common
<input type="checkbox"/>	<i>Vanessa virginiensis</i>	American lady	May onward	June - Sep	Asteraceae	Common; migrants expected every year
<input type="checkbox"/>	<i>Vanessa cardui</i>	Painted lady	May onward	June - Oct	Asteraceae	Rare in most years; numbers of migrants fluctuate from year to year
<input type="checkbox"/>	<i>Vanessa atalanta</i>	Red admiral	June – Sep	---	<i>Laportea canadensis</i> and <i>Urtica</i>	Common; numbers can fluctuate from year to year
<input type="checkbox"/>	<i>Junonia coenia</i>	Common buckeye	June – Sep	---	<i>Plantago</i> and Scrophulariaceae	Rare; 1 record; should be looked for in old fields and along roadsides; migrant
	Limenitidinae	Admirals				
<input type="checkbox"/>	<i>Limenitis arthemis</i>	White admiral	June – Sep	---	<i>Populus, Prunus, Quercus</i> and <i>Salix</i>	Common
<input type="checkbox"/>	<i>Limentitis archippus</i>	Viceroy	mid June - Sep	---	<i>Populus</i> and <i>Salix</i>	Common
	Satyrinae	Satyrs & Wood-Nymphs				
<input type="checkbox"/>	<i>Enodia anthedon</i>	Northern pearly-eye	late June - early Aug	---	woodland Poaceae	Abundant
<input type="checkbox"/>	<i>Satyrodes eurydice</i>	Eyed brown	mid June - early Sep	---	<i>Carex</i>	Common
<input type="checkbox"/>	<i>Satyrodes Appalachia</i>	Appalachian brown	late June - early Aug	---	<i>Carex</i>	Uncommon; wet meadows and sedge patches
<input type="checkbox"/>	<i>Megisto cymela</i>	Little wood-satyr	early June - late July	---	Poaceae	Abundant

<input type="checkbox"/>	<i>Coenonympha tullia</i>	Common ringlet	late May - early July	---	Poaceae	Abundant
<input type="checkbox"/>	<i>Cercyonis pegala</i>	Common wood-nymph	late June - early Sep	---	Poaceae	Common
<input type="checkbox"/>	<i>Oeneis chryxus</i>	Chryxus arctic	mid May - mid June	---	Poaceae	Rare
	Danainae	Milkweed Butterflies				
<input type="checkbox"/>	<i>Danaus plexippus</i>	Monarch	June – Oct	---	<i>Asclepias incarnata</i> , <i>A. syriaca</i> and <i>A. tuberosa</i>	Common; number of migrants can fluctuate from year to year