Dragonflies of Queen's University Biological Station

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Springtime darner (*Basiaeschna janata*). Pangman Tract near Lindsay Lake. May 2009. Photo: Mark Andrew Conboy.

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. The unique interdigitation of sub-boreal and Carolinian ecotypes combined with a wide variety of habitats makes QUBS and its environs one of the most biologically diverse regions of Ontario and an excellent location for studying and watching odonates (Order Odonata; Class Insecta).

This checklist contains the scientific and common names of 89 species of dragonflies in 6 families that are known or expected to occur at QUBS. For each species I have included a status in the right-hand column. 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.

Undetermined – status is unclear either because the species is part of a cryptic



Common baskettail (*Tetragoneuria cynosura*). Hughson Farm Tract near Darling Bay. May 2009. Photo: Mark Andrew Conboy.

complex or data is deficient. Species in this category may be assigned to any of the above categories in a future edition of the checklist. Reports of species in this category would be helpful in determining its true status.

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

A number of individuals have contributed to an earlier version of this checklist: Dave Bell, Wanda Cook, Kelvin Conrad, Mark Forbes, Nancy Gerrish and Barb Hilder. Daniele Mitchell and Bruce Ripley have provided recent species reports. Additional information on distribution and abundance of dragonfly species at QUBS and the surrounding area comes from specimens deposited in the station museum, the *Checklist of Damselflies and Dragonflies of Kingston* (Kingston Field Naturalists 2008; http://kingstonfieldnaturalists.org/ checklists/dragon-damselflies.pdf), the *Ontario Odonata Atlas* (Natural Heritage Information Centre 2002; http://nhic.mnr.gov.on.ca/odonates/atlas.html) and *Odonata of Canada and Alaska* (Walker and Corbet 1953, 1975).

Please report errors, omission, sightings information (especially of rare and hypothetical species) and suggested status changes to Mark Andrew Conboy (7mc19@queenssu.ca).

Aeshnidae - Darners

□ Boyeria vinosa □ Basiaeschna janata □ Aeshna canadensis □ Aeshna tuberculifera □ Aeshna verticalis □ Aeshna umbrosa □ Aeshna clepsydra □ Aeshna constricta □ Aeshna eremita □ Aeshna interrupta □ Anax junius □ Gomphaeschna furculata □ Nasiaeschna pentacantha □ Epiaeschna heros □ Oplonaeschna armata	Fawn darner Springtime darner Canada darner Black-tipped darner Green-striped darner Shadow darner Mottled darner Lance-tipped darner Lake darner Variable darner Common green darner Harlequin darner Cyrano darner Swamp darner Riffle darner	Common Common and widespread Common and widespread Common and widespread Hypothetical Uncommon Common Undetermined Hypothetical Rare Common Rare Rare Hypothetical Hypothetical Hypothetical
☐ Hagenius brevistylus	Dragonhunter	Common
☐ Ophiogomphus rupinsulensis	Rusty snaketail	Uncommon
☐ Ophiogomphus anomalus	Extra-striped snaketail Riffle snaketail	Hypothetical
☐ Ophiogomphus carolus		Hypothetical
☐ Gomphus graslinellus	Pronghorn clubtail	Hypothetical
☐ Gomphus quadricolor	Rapids clubtail Harpoon clubtail	Hypothetical
☐ Gomphus descriptus	<u> </u>	Hypothetical
☐ Gomphus borealis	Beaverpond clubtail Ashy clubtail	Hypothetical
☐ Gomphus lividus ☐ Gomphus exilis	Lancet clubtail	Hypothetical Common and widespread
☐ Gomphus spicatus	Dusky clubtail	Common and widespread
☐ Gomphus brevis	Mustached clubtail	Hypothetical
☐ Gomphus fraternus	Midland clubtail	Hypothetical
☐ Arigomphus furcifur	Lilypad clubtail	Common
☐ Arigomphus cornutus	Horned clubtail	Common
☐ Dromogomphus spinosus	Black-shouldered spinyleg	Uncommon
☐ Stylogomphus albistylus	Eastern least clubtail	Hypothetical
☐ Stylurus notatus	Elusive clubtail	Hypothetical
□ Stylurus scudderi	Zebra clubtail	Hypothetical
☐ Stylurus spiniceps	Arrow clubtail	Hypothetical
□ Stylurus amnicola	Riverine clubtail	Hypothetical
□ Progomphus obscurus	Common sanddragon	Hypothetical

Cordulegasteridae - Spiketails Rare and local □ Cordulegaster obliquus Arrowhead spiketail ☐ Cordulegaster maculata Twin-spotted spiketail Rare and local □ *Cordulegaster diastatops* Delta-spotted spiketail Rare and local **Macromiidae** - Cruisers □ Didymops transversa Stream cruiser Common and widespread □ *Macromia illinoiensis* Swift river cruiser Hypothetical Corduliidae - Emeralds ☐ *Epitheca princeps* Prince baskettail Common and widespread ☐ Epitheca cynosura Abundant and widespread Common baskettail □ *Epitheca spinigera* Common and widespread Spiny baskettail \square *Epitheca canis* Beaverpond baskettail Uncommon ☐ *Helocordulia uhleri* Uhler's sundragon Rare ☐ Neurocordulia yamaskanensis Stygian shadowdragon Hypothetical □ *Dorocordulia shurtleffi* American emerald Abundant and widespread Racket-tailed emerald □ Dorocordulia libera Abundant and widespread ☐ Somatochlora kennedvi Kennedy's emerald Hypothetical □ Somatochlora walshii Brush-tipped emerald Hypothetical Williamson's emerald Hypothetical ☐ Somatochlora williamsoni ☐ Somatochlora albicinta Ringed emerald Hypothetical ☐ Somatochlora cingulata Lake emerald Hypothetical □ Somatochlora tenebrosa Clamp-tipped emerald Hypothetical Ski-tailed emerald Hypothetical ☐ Somatochlora elongata ☐ Somatochlora minor Occelated emerald Hypothetical ☐ Somatochlora forcipata Forcipate emerald Hypothetical ☐ Somatochlora incurvata Incurvate emerald Hypothetical Hypothetical ☐ Somatochlora franklini Delicate emerald ☐ Williamsonia fletcheri Ebony boghaunter Hypothetical **Libellulidae** - Skimmers □ *Nanothemus bella* Elfin skimmer Locally abundant ☐ *Celithemus eponina* Halloween pennant Abundant and widespread Calico pennant Abundant and widespread ☐ *Celithemus elisa* Four-spotted skimmer ☐ *Libellula quadrimaculata* Common □ Libellula julia Chalk-fronted corporal Abundant ☐ Libellula luctuosa Widow skimmer Common

Libellulidae – Skimmers (continued)

□ Libellula pulchella	Twelve-spotted skimmer	Common
☐ Libellula incesta	Slaty skimmer	Uncommon
□ Libellula lydia	Common whitetail	Common
☐ Erythemis simplicicollis	Eastern pondhawk	Common
\square Pachydiplax longipennis	Blue dasher	Common
☐ Sympetrum vicinum	Yellow-legged meadowhawk	Abundant
☐ Sympetrum costiferum	Saffron-winged meadowhawk	Hypothetical
☐ Sympetrum semicinctum	Band-winged meadowhawk	Hypothetical
☐ Sympetrum internum	Cherry-faced meadowhawk	Abundant
☐ Sympetrum obtrusum	White-faced meadowhawk	Abundant
☐ Sympetrum rubicundulum	Ruby meadowhawk	Uncommon and local
\square Sympetrum danae	Black meadowhawk	Hypothetical
🗆 Leucorrhinia frigida	Frosted whiteface	Common
☐ Leucorrhinia intacta	Dot-tailed whiteface	Abundant and widespread
□ Leucorrhinia proxima	Red-waisted whiteface	Uncommon
☐ Leucorrhinia hudsonica	Hudsonian whiteface	Locally common
☐ Leucorrhinia glacalis	Crimson-ringed whiteface	Rare and local
□ Traemia lacerata	Black saddlebags	Rare (1 record)
□ Traemia onusta	Red-mantled saddlebags	Hypothetical
\square Pantala flavicans	Wandering glider	Rare (1 record)
☐ Pantala hymenea	Spot-winged glider	Hypothetical