

Queen’s University Biological Station Species List: Fishes

The current list has been compiled by Dr. Ivy Schoepf, [QUBS Research Coordinator](#), in 2018 and includes data gathered by direct observation, collected by researchers at the station and/or assembled using digital distribution maps. The list is based on a previous list and has been updated using resources from [The Natural Heritage Information Centre](#) (April 2018); [The IUCN Red List of Threatened Species](#) (February 2018) and [iNaturalist](#). Contact [Ivy](#) to report any errors, omissions and/or new sightings.

Based on the aforementioned criteria we can expect to find a total of 40 species of fishes (class: Actinopterygii) present at QUBS. Species are reported using their full taxonomy; common name and status, based on whether the species is of global or provincial concern (see Table 1 for details). All species are considered QUBS residents with the exception of the American Eel (*Anguilla rostrata*), who is a resident non-breeder (*nb*), spending most of its life in freshwater before migrating to the open ocean to spawn.



Figure 1. Largemouth bass (*Micropterus salmoides*) is one of several species of fishes found in lakes across QUBS properties. Researchers from [Prof. Steven Cooke](#)’s lab from Carlton University are studying the physiological correlates of reproduction and fitness in a population of largemouth bass in Lake Opinicon. Photo courtesy of Nick Cairns.

Table 1. Status classification reported for the fishes of QUBS. Global status based on IUCN Red List of Threatened Species rankings. Provincial status based on Ontario Natural Heritage Information Centre SRank.

| Global Status | Provincial Status |
|-----------------------------------|---|
| Extinct (EX) | Presumed Extirpated (SX) |
| Extinct in the Wild (EW) | Possibly Extirpated (SH) |
| Critically Endangered (CR) | Critically Imperiled (S1) |
| Endangered (EN) | Imperiled (S2) |
| Vulnerable (Vu) | Vulnerable (S3) |
| Near Threatened (NT) | Apparently Secure (S4) |
| Least Concern (LC) | Secure (S5) |
| Data Deficient (DD) | Unrankable - insufficient information (SU) |
| Not Evaluated (NE) | Unranked - not yet assessed (SNR) |
| | Conservation Status Rank Not Applicable (SNA) |



Figure 2. Bluegill sunfish (*Lepomis macrochirus*) are another fish species commonly spotted in the lakes at QUBS. A long-term collaborative study between [Prof. Bryan Neff](#) from the University of Western Ontario and [Prof. Rosemary Knapp](#) from the University of Oklahoma aimed at understanding the neurobiology and behavioural endocrinology of this species is currently underway in Lake Opinicon. Photo courtesy of David Sutter.

| Order | Family | Scientific Name | Common Name | Global Status | Provincial Status |
|--------------------|----------------|--------------------------------|----------------------------|---------------|-------------------|
| Anguilliformes | Anguillidae | <i>Anguilla rostrata</i> | American Eel (<i>nb</i>) | EN | S1 |
| Atheriniformes | Atherinopsidae | <i>Labidesthes sicculus</i> | Brook Silverside | LC | S4 |
| Clupeiformes | Clupeidae | <i>Alosa pseudoharengus</i> | Alewife | LC | SNA |
| | Catostomidae | <i>Catostomus commersonii</i> | White Sucker | LC | S2 |
| | | <i>Chrosomus eos</i> | Northern Redbelly Dace | LC | S5 |
| | | <i>Chrosomus neogaeus</i> | Finescale Dace | LC | S5 |
| | | <i>Exoglossum maxillingua</i> | Cutlip Minnow | LC | S1 |
| | | <i>Luxilus chrysocephalus</i> | Striped Shiner | LC | S4 |
| | | <i>Luxilus cornutus</i> | Common Shiner | LC | S5 |
| Cypriniformes | Cyprinidae | <i>Notemigonus crysoleucas</i> | Golden Shiner | LC | S5 |
| | | <i>Notropis anogenus</i> | Pugnose Shiner | LC | S2 |
| | | <i>Notropis bifrenatus</i> | Bridle Shiner | LC | S2 |
| | | <i>Notropis heterodon</i> | Blackchin Shiner | LC | S4 |
| | | <i>Notropis heterolepis</i> | Blacknose Shiner | LC | S5 |
| | | <i>Notropis rubellus</i> | Rosyface Shiner | LC | S4 |
| | | <i>Pimephales notatus</i> | Bluntnose Minnow | LC | S5 |
| | | <i>Pimephales promelas</i> | Fathead Minnow | LC | S5 |
| Cyprinodontiformes | Fundulidae | <i>Fundulus diaphanus</i> | Banded Killifish | LC | S5 |
| | Esocidae | <i>Esox americanus</i> | Redfin Pickerel | LC | S3 |
| Esociformes | | <i>Esox lucius</i> | Northern Pike | LC | S5 |
| | Umbridae | <i>Umbra limi</i> | Central Mudminnow | LC | S5 |
| Gasterosteiformes | Gasterosteidae | <i>Culaea inconstans</i> | Brook Stickleback | LC | S5 |
| | | <i>Ambloplites rupestris</i> | Rock Bass | LC | S5 |
| | | <i>Lepomis gibbosus</i> | Pumpkinseed | LC | S5 |
| | Centrarchidae | <i>Lepomis macrochirus</i> | Bluegill Sunfish | LC | S5 |
| | | <i>Micropterus dolomieu</i> | Smallmouth Bass | LC | S5 |
| | | <i>Micropterus salmoides</i> | Largemouth Bass | LC | S5 |
| | | <i>Pomoxis nigromaculatus</i> | Black Crappie | LC | S4 |
| | | <i>Etheostoma exile</i> | Iowa Darter | LC | S5 |
| Perciformes | | <i>Etheostoma microperca</i> | Least Darter | LC | S4 |
| | | <i>Etheostoma nigrum</i> | Johnny Darter | LC | S5 |
| | | <i>Etheostoma olmstedi</i> | Tessellated Darter | LC | S4 |
| | Percidae | <i>Perca flavescens</i> | Yellow Perch | LC | S5 |
| | | <i>Percina caprodes</i> | Logperch | LC | S5 |
| | | <i>Percina copelandi</i> | Channel Darter | LC | S2 |
| | | <i>Percina shumardi</i> | River Darter | LC | S1 |
| | | <i>Sander vitreus</i> | Walleye | LC | S5 |
| | | <i>Ameiurus natalis</i> | Yellow Bullhead | LC | S4 |
| Siluriformes | Ictaluridae | <i>Ameiurus nebulosus</i> | Brown Bullhead | LC | S5 |
| | | <i>Noturus insignis</i> | Margined Madtom | LC | SU |