## **Queen's University Biological Station Species List: Amphibians**

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 created by Prof. Gabriel Blouin-Demers and QUBS director Prof. Stephen C. Lougheed, 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 17 species of amphibians (class: Amphibia) present at QUBS. One species, which historically occurred in the area, but has been extirpated (*e*), have also been included in the list for completeness. Species are



**Figure 1**. Spring Peepers (*Pseudacris crucifer*) calls are an integral part of the QUBS soundscape. Researchers from <u>Prof. Stephen C. Lougheed</u>'s lab from Queen's University have been researching spatial variation associated with arboreal calling behaviour in these fascinating amphibians. Photo courtesy of <u>Dr. Grég Bulté</u>.

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 unless otherwise stated.

**Table 1. Status classification reported for the amphibians 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)	
<b>Extinct in the Wild (EW)</b>	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.** While spotted salamanders (*Ambystoma maculatum*) can be found in suitable habitat across QUBS properties, their similarly handsome cousins, Eastern Tiger salamanders (*Ambystoma tigrinum*), have completely disappeared from much of their historical range, including Canada and are now considered extinct in Ontario. Photo courtesy of <u>Prof. Stephen C. Lougheed</u>.

Order	Family	Scientific Name	Common Name	Global Status	Provincial Status
Anura	Bufonidae	Anaxyrus americanus	American Toad	LC	S5
		Hyla versicolor	Gray Treefrog	LC	S5
	Hylidae	Pseudacris crucifer	Spring Peeper	LC	S5
		Pseudacris maculata	Boreal Chorus Frog	LC	S5
		Lithobates catesbeianus	American Bullfrog	LC	S4
	Ranidae	Lithobates clamitans	Green Frog	LC	S5
		Lithobates palustris	Pickerel Frog	LC	S4
		Lithobates pipiens	Northern Leopard Frog	LC	S5
		Lithobates septentrionalis	Mink Frog	LC	S5
		Lithobates sylvaticus	Wood Frog	LC	S5
Caudata	Ambystomatidae	Ambystoma maculatum	Spotted Salamander	LC	S4
		Ambystoma tigrinum	Eastern Tiger Salamander (e)	NE	SX
		Eurycea bislineata	Northern Two-lined Salamander	LC	S4
	Plethodontidae	Hemidactylium scutatum	Four-toed Salamander	LC	S4
		Plethodon cinereus	Eastern Red-backed Salamander	LC	S5
	Proteidae	Necturus maculosus	Mudpuppy	NE	S4
	Salamandridae	Notophthalmus viridescens	Eastern Newt	LC	S5