

Queen's University
Biological Station
&
Elbow Lake Environmental
Education Centre

Slides from Steve Lougheed,
QUBS Director

Queen's University Biological Station

- Director – Steve Lougheed
- Assoc. Director – Shelley Arnott
- Senior Manager – Sonia Nobrega
- Manager – Aaron Zolderdo (Opinicon)
- Outreach & Teaching Coordinator – Emily Verhoek
- Data & collections manager – Adriana Lopez Villalobos
- Head cook – Veronika Jaspers-Fayer



Queen's University Biological Station

Mandate:

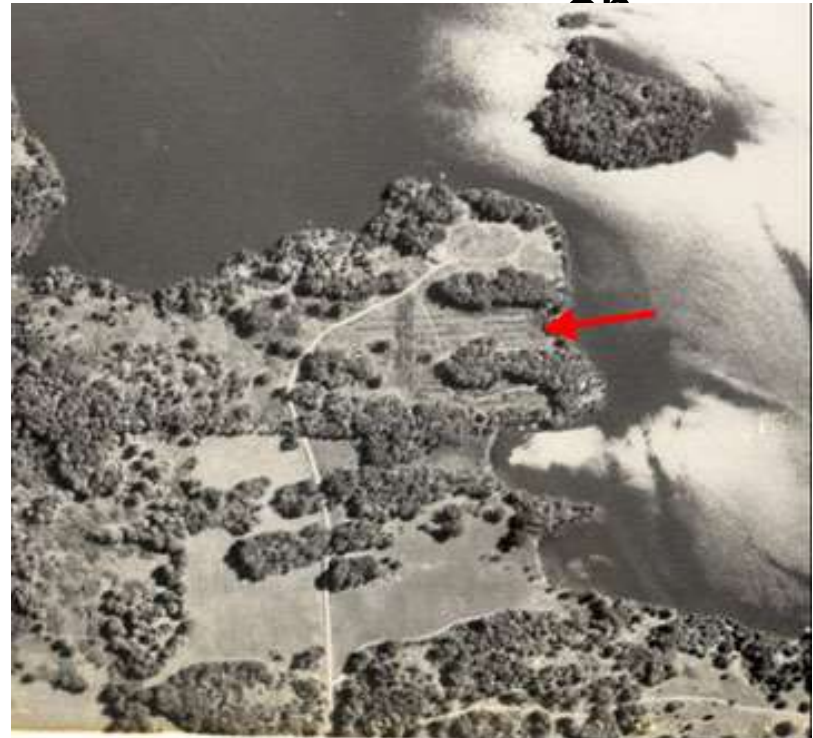
- University teaching
- Environmental & conservation research
- Biodiversity conservation
- Public science & conservation outreach
- Internationalization

Queen's University Biological Station

- Initial property purchased in 1945 (26 ha.)
- Initial objective - provide training for returning veterans in wildlife biology & management
- First year of operation current site 1946



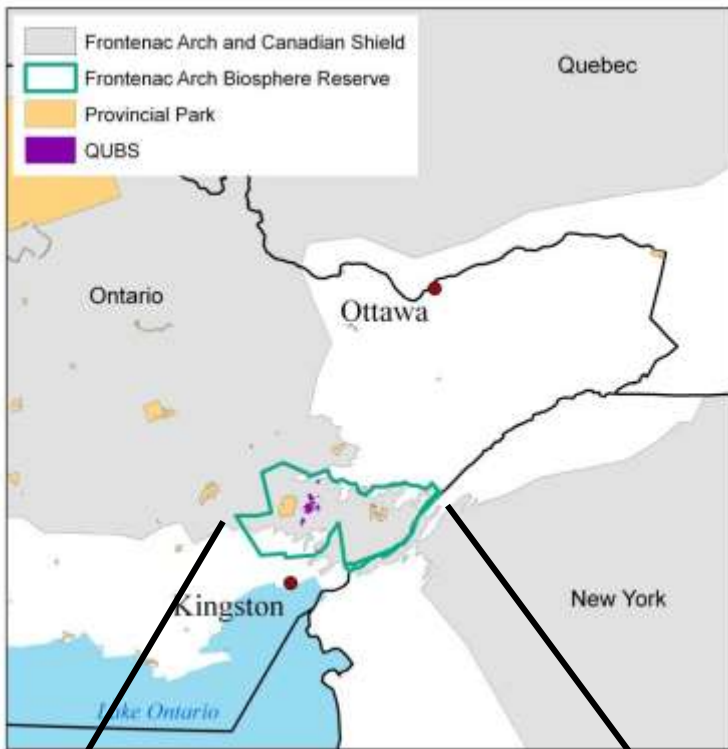
QUBS Lodge & Cabin 1947



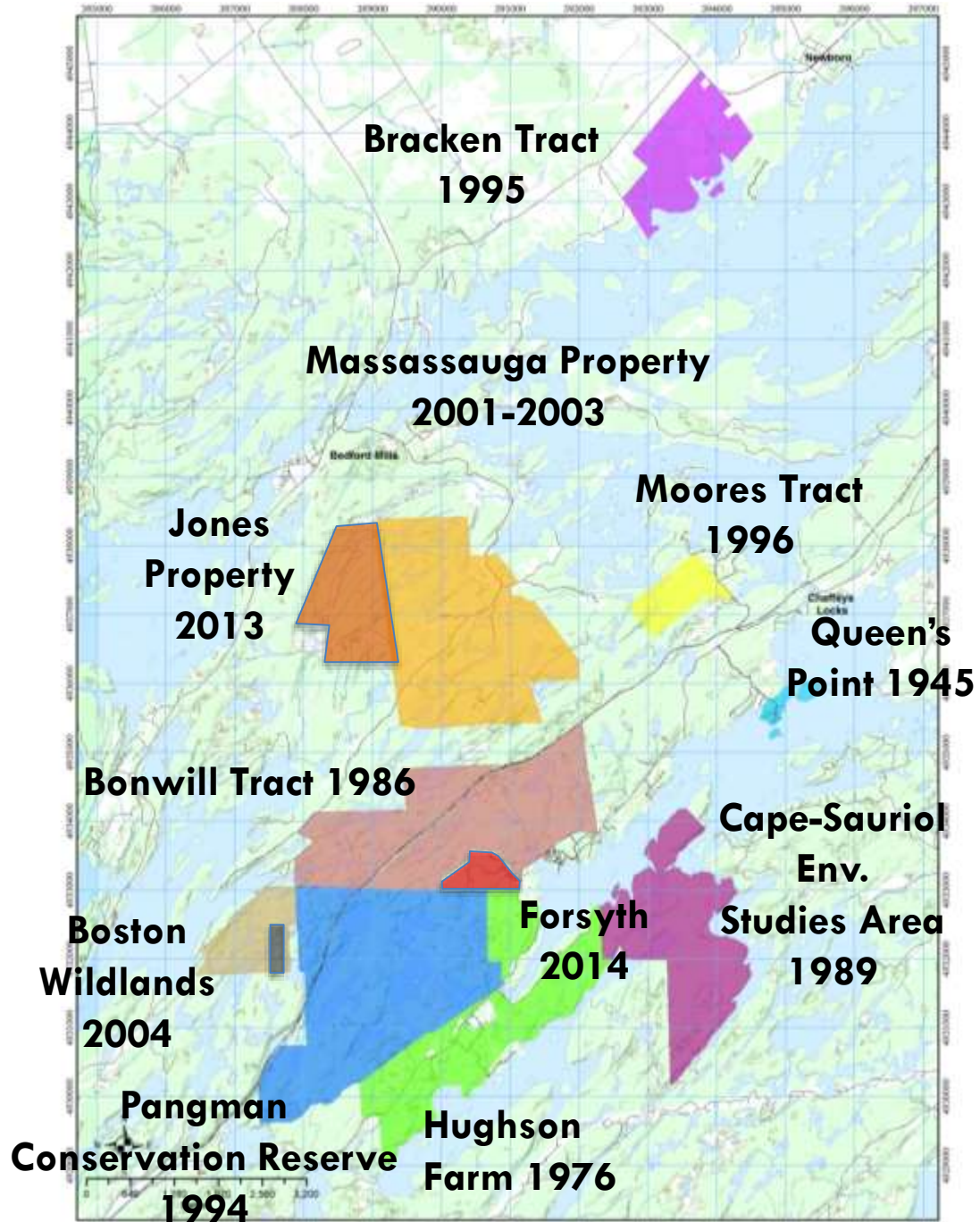
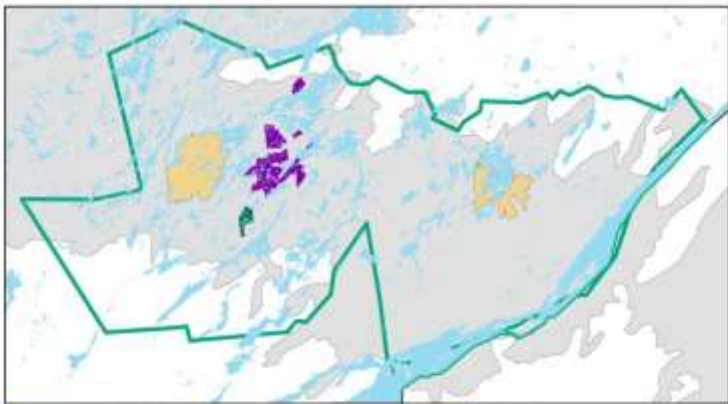
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QUBS Point 1951



Elbow Lake. Partnership
Nature Conservancy of Canada.



QUBS Lands ...

Include:

- 9 entire lakes
- Frontage on 7 other lakes >20 km of shoreline
- Extensive frontage on the Rideau Canal
- More than 34 km² of mixed habitats: streams, swamps, uplands, old fields, mature mixed second-growth forests
- ‘Ghost town’, old mines, homesteads
- Home to many rare and endangered species

QUBS Properties

Biodiverse – a product of the admixture of habitats found on the Frontenac Axis

- 32 species of amphibians & reptiles.
- >200 bird species, > 100 breeding
- > 50 mammal species
- > 30 fish species in L. Opinicon alone
- 185 tree, shrub & vine species.

- allow various kinds of research, e
long-term.



Queen's University Biological Station

Opinicon Campus

- RJ Robertson
Biodiversity Centre
- Dining facilities
- Accommodation for > 90
- Jessie Deslauriers
Centre for Biology with
library, herbarium &
labs
- Workshop
- Boathouse



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Elbow Lake Environmental Education Centre

- 11 Cabins
- Manager's house
- Main pavilion
- Day lodge + games building
- Museum
- Garages



Teaching & Training

- Field Courses – part of OUPFB – emphasizing hands-on in-field instruction
- OUPFB since late 1960s
- Consortium of 14 universities.



Wildlife Ecology & Natural History class at Rock Dunder Photo: Greg Bulte



Fish seining on Lake Opinicon. Dunder Photo: Greg Bulte

Teaching & Training

- International field courses

Aquatic Biodiversity & Environmental Assessment ...
China/Canada Exchange



Teaching & Training

- Curriculum-related field trips and practical field methods (e.g. core ecology courses)



Research

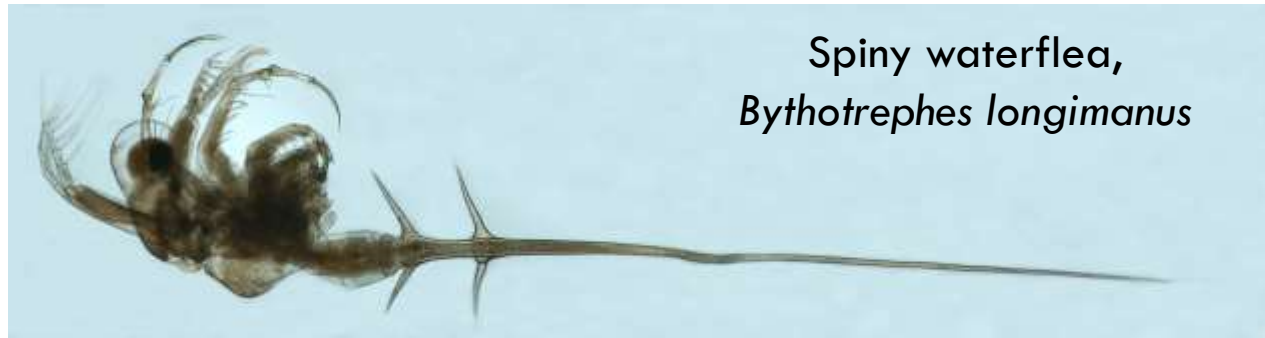
Invasive species



Purple loosestrife,
Lythrum salicaria



Zebra mussel,
Dreissena polymorpha



Spiny waterflea,
Bythotrephes longimanus

Research

Species of conservation concern.



Five-lined skink
Plestiodon fasciatus



Grey Rat Snake
Pantherophis spiloides

Research

Species of conservation concern.



Cerulean Warbler
Setophaga cerulea

Golden-winged Warbler
Vermivora chrysoptera



Other Research



Effects of angling on fish; fish physiology, demography, & ecology. Impact of by-catch on local turtle populations.

Other Research



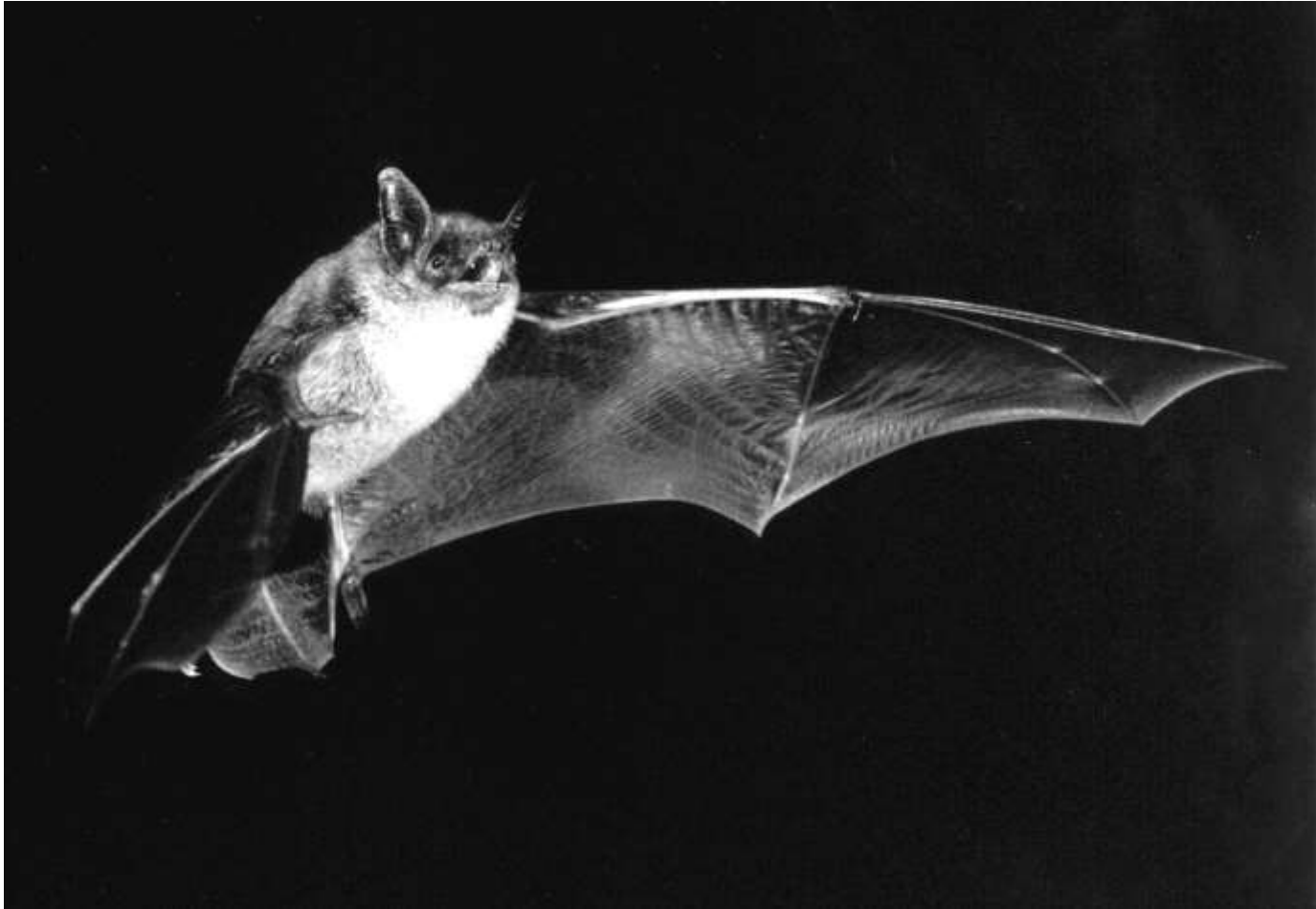
Bluegill,
Lepomis macrochirus



Red-winged blackbird,
Agelaius phoeniceus

Mating systems in vertebrates

Other Research



Bat – moth predator-prey relationships

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Other research



Map turtle ecophysiology, behaviour & conservation

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Other research



Climate change and call phenology.

Outreach

- Eco-Adventure Day Camp
- School field trips
- Annual Open House
- Weekly seminars on a variety of topics
- Field trips with cultural themes
- Workshops on special topics
- Community dinner



