M.Sc. Position to Study Juvenile Lobster Behaviour

Interested in **aquatic animal behaviour**, with practical implications for **sustainable fisheries** and **marine conservation**?

Interested in building expertise in a range of techniques, including field work (snorkeling or SCUBA), Remotely Operated Vehicle use, and machine-learning-assisted video analysis of behavioural observations?

Dr. Russell Wyeth in the Biology Department at St. Francis Xavier University (StFX) is accepting applications for an MSc student to start **Sept 2023 or Jan 2024**.

Our research is focused on building a more detailed understanding of juvenile lobster behaviour. We have developed tripod-mounted underwater camera systems that are effective at recording lobster behaviours in their natural habitat. The cameras provide unprecedented detail over durations far longer (up to 9 h of recording time) than has been achieved in past studies via SCUBA or other methods. To date, we have focused on foraging behaviours of adult lobsters. Our goal now is to shift our focus to juvenile lobsters behaviour and behavioural ecology. Additional observations are planned using a Remotely Operated Vehicle (ROV).

Our primary goal is to establish a baseline data set of juvenile lobster behaviour. The Department of Fisheries and Oceans has recently created a series of marine protected areas in the Southern Gulf of St. Lawrence. The Scallop Buffer Zones exclude scallop dragging, and are designed to protect juvenile lobster habitat. Our behavioural work will establish a baseline for on-going monitoring of juvenile lobsters into the future. The behavioural data will be combined with additional population density surveys to assess the effectiveness of the marine protected areas, to help manage the lobster fishery, and to monitor the possible effects of climate change on the lobster population.

For further information or to apply, contact Dr. Russell Wyeth: rwyeth@stfx.ca