## **Abstract Submission Guidelines**

## MTRI Biodiversity Conservation Showcase 2025

Prepare abstracts as indicated below and email by October 30 to:

Showcase2025@merseytobeatic.ca

**Title:** bolded and sentence case (only capitalize the first word).

**Authors**: list each author, first name, initials, then last name (e.g., "John R. Smith", not "Smith, John R."). For each author, include a superscript numeral to indicate institution/affiliation, one numeral for each institution/ affiliation. If the presenter is different from the first author, indicate the presenter author in **Boldface**. If the presenter is a student, and wishes to be considered for a student award, please indicate with an asterisk ("\*\*") before their name (see example below).

**Affiliations**: italicized; superscript numeral followed by the affiliation, city, and province. No postal code.

Abstract: background, key methods, results, and conclusions. Maximum 250 words. No references.

**Keywords**: list 4–6 keywords in order of relative importance to the presentation. This information along with the abstract will be used to set themes of the conference program.

**Presentation preference:** indicate your preference for Oral paper, Poster, or Either Oral/Poster.

Oral presenters will have 15 min total (12 min to speak, 3 min for questions).

Posters should be a maximum of 122 cm (48") wide and tall. (Poster boards have a 122 x 122 cm surface for hanging the poster.)

## Formatting guidelines for the abstract:

- All text in 11-point Times New Roman font.
- Normal margin setting at 2.54 cm.
- Abstract sections in single spaced format with a single line between each of the five elements (title, authors, affiliations, abstract, and keywords).
- Microsoft Word format (either ".doc" or ".docx").
- **File name** of abstract submission: first author's last name, followed by the first author's first name, separated by an underscore (e.g., "Smith Jane.doc").

See example on next page. If you have any questions, contact us at:

Showcase2025@merseytobeatic.ca

## Acoustic recognizers for non-invasive citizen science monitoring of Leach's storm-petrel (Hydrobates leucorhous)

\* Linda J. Hutchinson 1,2, John F. Kearney3, Cindy A. Staicer1

Passive acoustic monitoring (PAM) is a non-invasive technique that enables anyone to contribute to the conservation of Species at Risk. The Leach's storm-petrel (Hydrobates leucorhous) is an endangered seabird that breeds on islands and nests in burrows. Of their two main calls, the purr indicates a nesting pair. Since current population monitoring techniques are highly invasive, the species was a perfect candidate for application of PAM and development of acoustic recognizers. In July 2021, we placed 18 AudioMoths in plots of different burrow densities in a storm-petrel breeding colony on Bon Portage Island, NS, Canada. We used Kaleidoscope Pro to create a detector and classifier for purrs and chatters. The detectors performed well, with 84% recall for the chatter. The classifiers, which performed better, were used to extract calls in the entire set of recordings and explore relationships between call rates, burrow density and weather. Call rates were similar throughout the colony, although low rates were associated with high windspeeds. The lack of relationship between burrow density and call rate suggests that PAM is unlikely to replace more invasive methods for monitoring the density of breeding pairs. However, the detectors and classifiers were effective at detecting the presence of multiple birds and breeding pairs. Our results suggest that PAM and automated detection can be valuable tools for noninvasive storm-petrel monitoring, primarily for the purpose of extensive monitoring to identify islands with breeding colonies. These classifiers and detectors can be used by citizen scientists to participate in monitoring this species.

Keywords: Leach's storm-petrel, classifier, detector, citizen science, PAM, SAR

Presentation preference: Poster presentation

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