

ACMS Statistics Seminar

Joanna Mills Flemming
Dalhousie University
Tuesday, October 27
4:00 PM EDT
(zoom link below)



A New Approach To Estimating Population Size For Marine Species

The problem of estimating population size has a long history in statistical ecology. However, the abundance and productivity of highly valuable, severely depleted species remain difficult to assess with standard models. By taking advantage of modern genetics, a new way to estimate abundance (and other key parameters such as mortality rates), the close-kin mark-recapture (CKMR) method, has recently been proposed. It only requires small pieces of tissue, taken from either live or dead animals, and generalizes the standard mark-recapture (MR) approach to use the resulting DNA marks to obtain information about relatedness among individuals in the sample. Here we compare CKMR and MR estimates of population size for brook trout populations and speak to the potential of CKMR going forward.

Zoom Link: <https://bit.ly/2TGt4ix>

Meeting ID: 915 2711 8756

Passcode: sL1025

The Department of Applied and Computational
Mathematics and Statistics

Please visit acms.nd.edu to view the full list of speakers.