Dr. Alex Filazzola from ApexRMS Consulting (and an adjunct prof in Biology) is offering a free in-person workshop on image classification on **November 17th, 2025 from 10:00am – 1:00 pm EST in Collip 112**. (Alex will also be delivering the Movement Monday seminar at the Centre for Animals on the Move, the same day)

This will be an interactive workshop that introduces image classification concepts and workflows for biological applications, using the *ecoClassify* package for *SyncroSim*. *SyncroSim* (https://syncrosim.com/) is an open-science platform for bundling and managing complex models and analysis tools; with packages co-developed by governments and academics, it gives researchers access to trusted, well-documented tools for analysis and modelling.

Audience: This workshop is designed for researchers and students who use image data and want to make image classification easier and more reproducible. No prior experience with SyncroSim or coding is required. The session is intended both for those new to image classification and for those seeking a structured workflow to automate their analyses. This workshop focuses on pixel-based image segmentation, with examples drawn from landscape classification problems (not object detection, like camera trap analysis).

Learning Objectives

- Understand the fundamentals of segmented image classification and common use cases
- Compare major modeling approaches for machine learning (random forest, convolutional neural networks, MaxEnt)
- Build, run, and assess an image classification in SyncroSim using ecoClassify
- Interpret outputs, including confusion matrices, accuracy metrics, and variable importance plots
- Export and share classification results for further use or publication

Topics Covered

- End-to-end workflow of image classification in SyncroSim
- Using ecoClassify to prepare training data, build models, and run predictions
- Understanding accuracy metrics and model diagnostics
- Exploring alternative model approaches and parameter choices
- Publishing outputs through SyncroSim Cloud

What's Included

- 3 hours of live instruction and guided exercises
- Step-by-step follow-along tutorials and activity guides
- Example SyncroSim library and sample datasets
- Setup guides for SyncroSim, ecoClassify, and Conda environment
- Post-event access to slides, datasets, and reference materials

Signup

To secure your spot and get more details, please register before November 10th using the following link: https://store.syncrosim.com/products/image-classification-course-using-ecoclassify-in-person-nov-17th-2025**.**