

National University of Singapore

## **RESEARCH SEMINAR**

## EcoCommons – a unifying platform for ecological research

By Dr Elisa Bayraktarov Griffith University, Australia

Date: 25 October 2023 Time: 1pm SGT

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Host: Dr Ow Yan Xiang For more information: tmsowyx@nus.edu.sg



Recent technologies have enabled consistent and continuous collection of ecological data at high resolutions across large spatial scales. A big challenge now is to find the best available data and to apply appropriate methods to that data. EcoCommons Australia is building a platform to make an increasing number of datasets readily accessible, and to grow the number of scientific workflows that are shared within the research community. EcoCommons includes a huge upgrade of the functionality that has been available in the Biodiversity & Climate Change Virtual Laboratory and the ecocloud platform which together have been used by >7000 people based at over 400 different organizations across >35 countries. Launched in November 2022, EcoCommons provides Virtual Laboratories where you can run and visualize models, for e.g. Species Distribution Models, Climate Projections, Ensemble Modelling, Biosecurity Risk Mapping, Community Modelling, Species Trait Models, with a few clicks of your mouse. EcoCommons also offers streamlined access to species occurrence records and environmental predictors, as well as to large environmental raster datasets in formats that can easily be overlaid with the same extent, resolution and projection. These time saving steps enables you to focus on the most important and hardest part in your work or study: your Science. Here I present an overview of the EcoCommons platform capabilities. I will briefly show you how to access EcoCommons, and how you can design a simple Species Distribution Model and share both data and experiment with other registered EcoCommons users.

## About the Speaker:

Dr Elisa Bayraktarov is an ecologist with a background in environmental monitoring who mobilizes and interrogates data to craft solutions for problems related to threatened species and marine coastal ecosystems. Her research effects real-world impact through close engagement with businesses, NGOs and policymakers. As EcoCommons' Program Manager at Griffith University, Australia, Elisa works with a team of agile software developers (DevOps), scientists, science communicators, trainers and analysts to build EcoCommons as the platform of choice for environmental and ecological modelling. Before joining EcoCommons, Elisa drove the development of Australia's Threatened Species Index at the University of Queensland in close partnership with Birdlife Australia and supported by the Australian Government, all State and Territory governments, and over 30 other conservation and research organizations.

