

Macrosystems EDDIE: Teaching Ecological Forecasting to Undergraduates

Wednesday, May 25 12:30-1:30 p.m.

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Please consider providing us feedback to improve our modules!

Serve as a faculty tester for either Module 6 or Module 7 during the 2022-2023 academic year!

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Workshop Description:

Engaging undergraduate students in hands-on ecological forecasting activities translates into a workforce with increased data science, systems thinking, and quantitative skills. This workshop will provide instructors with all materials needed to teach ecological forecasting with stand-alone, modular activities that use publicly-available freshwater datasets from the National Ecological Observatory Network and are delivered through R Shiny apps. Our team has developed four educational modules as part of the Macrosystems EDDIE (Environmental Data-Driven Inquiry & Education) program: Introduction to Ecological Forecasting, Understanding Uncertainty in Ecological Forecasts, Using Data to Improve Ecological Forecasts, and Using Ecological Forecasts to Guide Decision Making. Each module comprises three ~1 hr activities which may be completed all at once or individually. In this workshop, we will provide an overview of the Macrosystems EDDIE ecological forecasting modules to interested instructors and helpful tips for teaching them in your classroom.

Workshop Agenda:

12:30-12:40pm Welcome & [Icebreaker](#)

12:40-12:55pm Introduction to [Macrosystems EDDIE](#)

12:50-12:55pm [Module overviews](#)

- Module 5: Introduction to Ecological Forecasting
 - [Module 5 web page](#)
 - [Module 5 Shiny app](#)
- Module 6: Understanding Uncertainty in Ecological Forecasts
 - [Module 6 web page](#)
 - [Module 6 Shiny app](#)
- Module 7: Using Data to Improve Ecological Forecasts
 - [Module 7 web page](#)
 - [Module 7 Shiny app](#)
- Module 8: Using Ecological Forecasts to Guide Decision-Making
 - [Module 8 web page](#)
 - [Module 8 Shiny app](#)

12:55-1:15pm Guided walk-through of a module

1:15-1:25pm Integrating modules into your course

1:25-1:30pm Closing