Best Practices for Systematic Conservation Planning: A Non-Technical Course

Sam Veloz

Thursday, September 12, 2013 at 9:00 AM - Friday, September 13, 2013 at 5:00 PM (PDT)

A non-technical workshop for managers to learn how to use the results from quantitative spatial analyses to help plan for conservation prioritization in a changing climate. The workshop will focus on species distribution modelling, zonation analyses, and the interactions of both with climate change.

We would like to invite you to an instructor-led workshop where we will present the state of the science for developing and using spatially explicit environmental suitability and spatial allocation analyses to inform the conservation of plants and animals in the context of climate adaptation planning. We will review modeling and prioritization tools and resources (e.g., readily available modeling software, modeling approaches, and data), go over best practices when using these tools to support decision making, and discuss how to understand and account for the uncertainty inherent in climate and species distribution models. We will demonstrate real-world applications of these approaches, as well as their limitations, for developing effective adaptation strategies to address rapid environmental change.

Note that a more technical workshop targeted at GIS analysts and statistical staff will be presented as a separate course - for more information on the Analysts Course please click **here**. These workshops are a collaborative project between Point Blue Conservation Science (formerly PRBO), the UC Davis Information Center for the Environment, the Natural Resource Ecology Center at Colorado State University, and the U.S. Fish and Wildlife Service with funding provided by the CA Landscape Conservation Cooperative.

Key Topics:

Species distribution models

- assumptions, uncertainties, and limitations as they relate to the decision-making process
- approaches and criteria for assessing and developing occurrence and environmental variables
- choosing appropriate parameters and evaluation of results
- model uncertainty and limitations

Conservation planning prioritization

- review prioritization software types and appropriate application examples
- target vs species based approaches
- integrating future uncertainty

Integrating climate change with conservation

- no-analog climates
- invasive species
- landscape connectivity and changing climate

Target Audience and Format:

The target audience for this course includes land managers and management staff. GIS background or experience is not necessary but helpful*. The goal of this course is to enable managers to assess the appropriateness of the data, tools and model output used in conservation and adaptation planning. The course will include a mix of presentations and hands-on instruction. Upon completion, managers will be able to identify which tools are best suited for their decision-making needs and will be able to effectively interpret and select from existing model outputs to support their conservation and adaptation efforts.

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Course Prerequisites:

Participants will be asked to read selected papers prior to course.

Registration Information:

Registration is free but space is limited (60 seats).

Instructors:

- Patrick Huber - Ph.D., Project Scientist, UC Davis
- Jim Quinn - Ph.D., Professor and Director, UC Davis Information Center for the Environment
- Sam Veloz - Ph.D., Spatial Ecologist, Point Blue Conservation Science (formerly PRBO Conservation Science)
- Nick Young - Research Associate, Natural Resource Ecology Laboratory, Colorado State University

For more information, contact Sam Veloz - sveloz@pointblue.org

This workshop is organized and hosted by Point Blue Conservation Science, the UC Davis Information Center for the Environment, the Natural Resource Ecology Laboratory at Colorado State University, and the US Fish and Wildlife Service; funding provided by the California Landscape Conservation Cooperative.