

Department of Mathematics

Spring 2017 Colloquium Series



Spatial capture-recapture: integrating observations and ecological theory

Andy Royle, Senior Scientist at USGS Patuxent Wildlife Research
Center

Thursday, March 23, 2017

Natural Resources Room 101, 4 pm

This talk explores the widespread adoption of new technologies for sampling animal populations such as remote cameras and noninvasive genetics, conceptual and analytic frameworks for analysis of such data have developed rapidly. Spatial capture-recapture (SCR) is one such advance. Unlike classical capture-recapture models, SCR makes use of both temporal and spatial information from individual encounters. Such auxiliary spatial information is informative about many different aspects of spatial population ecology such as resource selection, landscape connectivity and movement.

Andy Royle is a research statistician, in the position of Senior Scientist at USGS Patuxent Wildlife Research Center. He holds a BS in Wildlife Management from Michigan State University and a PhD in Statistics from North Carolina State University (awarded in 1996). At Patuxent, he is engaged in the development of statistical methods and analytic tools for animal demographic modeling, statistical inference and sampling wildlife populations and communities. His current research focuses on hierarchical models of animal abundance and occurrence, and the development of spatial capture-recapture methods and applications. He has authored or coauthored four books on quantitative analysis in ecology including the recent book *Applied Hierarchical Models* (2016, with Marc Kéry).

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To view this poster online, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>

***We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS
building at 3:30 pm on Thursday***