

Biology Seminar

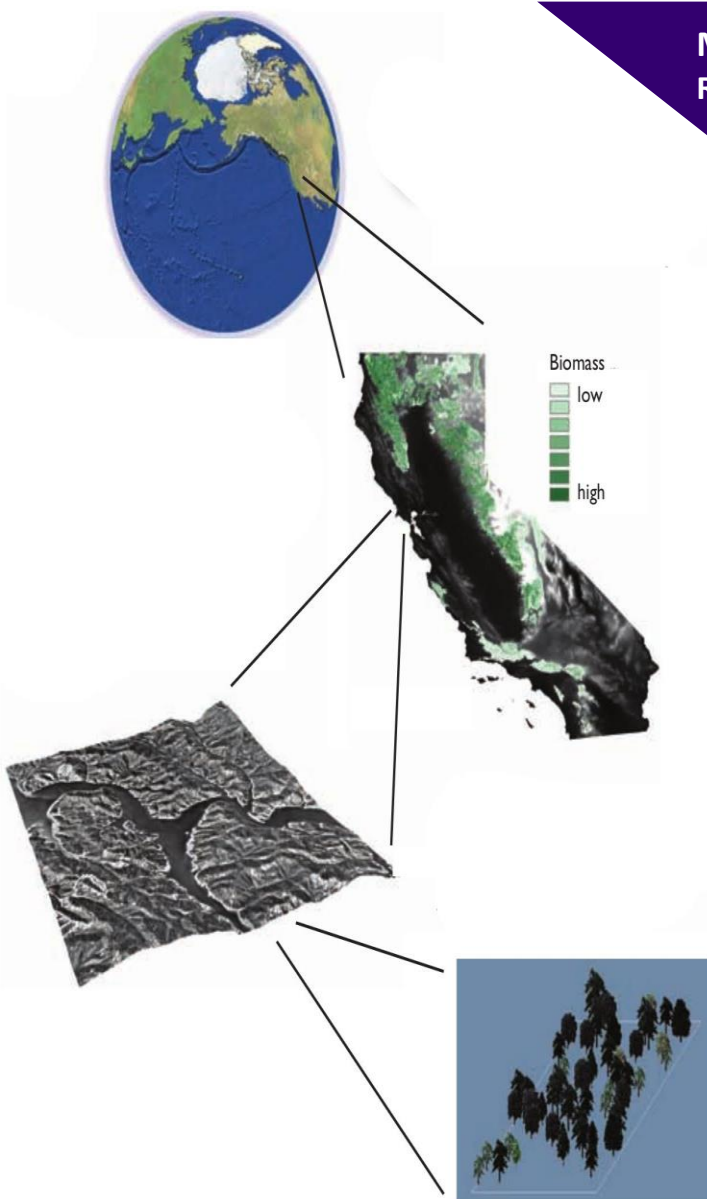
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Ecological forecasting: past, present, and future

Monday, November 7, 2016 | 12:00pm HCK 132
Refreshments at 11:45am



How predictable is nature? This question is central to ecology, regardless of whether the goal is to comprehend nature from an empirical perspective, to seek a more general theoretical understanding, or to provide practical insight into the management of natural systems. In the first part of this talk (Past) I introduce the PaleON project and discuss how millennial-scale hindcasts of the Northern US are being used to reconstruct presettlement conditions and validate terrestrial ecosystem models. In the second part (Present) I introduce the PEcAn project, which aims to inform ecosystem science, policy, and management with the best available data and models. The mission of the PEcAn team is to develop and promote accessible tools for reproducible terrestrial ecosystem modeling and forecasting. In the third part (Future) I present a first-principles analysis of the predictability of dynamic ecological systems and discuss research directions in predictability across ecology.

