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University of Pennsylvania



# Institute for Environmental Studies

presents

## Frank W. Davis

Donald Bren School of Environmental Science and Management  
University of California Santa Barbara

### Setting Conservation Priorities: A General Planning Framework and Its Application in California

Conserving land and water resources is usually a costly and contentious process, driven more by urgent needs and opportunities than by strategic analysis and design. The result is that nature reserves in the United States and elsewhere do a poor job of protecting species and ecosystems. Systematic conservation planning is an emergent field that spans the fields of conservation biology and urban and regional planning and is concerned with theory and techniques to improve the scientific basis and cost-effectiveness of conservation efforts. Much of the research in conservation planning has focused on techniques for identifying the minimal land allocations needed to attain stated conservation goals.

In this talk Dr. Davis presents a new conservation-planning framework that combines aspects of land suitability analysis, land use scenarios, and reserve system design. The framework is based on a hierarchy of competing conservation objectives and associated criteria, and uses cost-effectiveness analysis to maximize the overall utility of the conservation system that can be obtained with a fixed budget. The planning approach, which was developed for the State of California's California Legacy Project, is designed to support collaborative processes and negotiation among competing interest groups.

Davis demonstrates these ideas with a case study for conserving terrestrial biodiversity in the Sierra Nevada region of California. Compared to traditional reserve selection approaches, the proposed framework accounts for a broader range of conservation objectives, deals more explicitly with threats, provides substantial flexibility to explore different stakeholder values, and provides a formal basis for setting short-to-mid term conservation priorities.

**Date:** Thursday, March 20, 2003

**Time:** NOON - 1:30 pm

**Place:** Auditorium at Wistar Institute

On Penn's campus: Spruce Street & Penn's 36<sup>th</sup> Street Walkway

**No Food or Drink Permitted in Auditorium**

**NO REGISTRATION REQUIRED**

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