

UC SANTA BARBARA

THE *Current*

July 26, 1999

Gail Gallessich

NEW CD MAPS BIODIVERSITY OF CALIFORNIA

Exactly what kind of trees grow in California's Sierra Nevada? Geographers from the University of California, Santa Barbara went camping to find out. How about the vegetation in remote regions of the Mojave Desert? They went camping again.

Hot or cold, high or low, remote or urban, more than 40 researchers covered every region of the state, documenting its unique flora and fauna

over a ten-year period. Besides field work, researchers spent many years analyzing satellite images, aerial photographs and existing maps.

The result is that anyone can now point and click a mouse across a computerized map of California to find the answers to these and many other questions.

A new CD-ROM, for use by individuals, community groups, researchers and educators, and filled with information on plants and animals across the entire state, was produced by the UCSB researchers. It's called the "Gap Analysis of Mainland California" and is available for free. Part of it (the report and digital maps used in the analysis) is also available through the Internet.

The interactive atlas allows the user to explore maps of the distribution of California's wildlife and major plant species, plant communities, and wildlife habitats, and their relationship to land ownership patterns and designated areas managed for biodiversity conservation.

The CD-ROM, available from the California Department of Fish and Game, is the result of many years of collaboration by UCSB geographers with state and federal agencies. Developed as a part of the National Gap Analysis Program (GAP), it represents a geographic approach to planning for biological diversity. The effort is part of an unprecedented, complete national assessment currently organized by state, coordinated by the U.S. Geological Survey, Biological Resources Division. Frank Davis, UCSB geography professor, was the principal investigator on the California project.

"The CD will help those at the grass roots, county and watershed level who are concerned about the management of their resources," said David Stoms, UCSB researcher and project manager. And, the gap analysis will help with statewide and regional planning efforts, according to Stoms.

The report, which is also included on the CD-ROM, states, "As a nation we care deeply about our natural resources, including native species and ecosystems. Over the past century we have instituted many statutes and a large system of public and private conservation lands to protect those resources. Unfortunately, many of our native biota occur largely or completely outside of these protected areas and are increasingly threatened by habitat loss and degradation."

It continues, "Conserving these elements of biodiversity will require an expanded, representative system of biological reserves, combined with the judicious and sustainable use of unreserved lands. To accomplish this we must first identify the "gaps" in the current set of conservation lands and then identify areas that provide the best opportunities for covering those gaps, that is, for protecting the most vulnerable species and habitats in a way that is ecologically sound and cost-effective. . . . Gap analysis functions as a preliminary step to the more detailed studies needed to establish actual boundaries of new conservation areas."

The Internet location for further information about the project is www.biogeog.ucsb.edu/projects/gap/gap_home.html.

Editors: For a color map showing the ten regions used in the California Gap Analysis Project, or for interviews with the UCSB geographers, please contact public affairs at UCSB, 893-2191.

Related Links [California Gap Analysis Project](#)

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.