

# Western Region

*Vegetation and Floristics of Pinnacles National Monument* is a 113-page publication, Tech. Report No. 34 from the CPSU at U/CA Davis. Authors William Halverson and Ronilee Clark surveyed 87 sites for physical features of habitat and the composition and structure of vegetation, described 13 plant communities, and analyzed the amount of ground disturbance caused by pig rooting. The California buckeye woodland (67%) and blue oak woodland (39%) were the most disturbed.

The Hawaii Environmental Education Assn. (HEEA), organized to foster increased effectiveness of EE in Hawaii, has elected officers, is incorporating and applying for nonprofit status. Chief Interpreter Kim Sikoryak (HALE) and Research Scientist Chuck Stone (HAVO) are directors; Stone is president. A catalog of EE programs in the state has been prepared and breakfast meetings to encourage networking were held on four islands in October.

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A manuscript, *Alteration of Native Hawaiian Vegetation: Effects of Humans, Their Activities and Introductions*, has been submitted to U/HI Press for publication. Authored by Linda W. Cuddihy and Charles P. Stone, both of HAVO, the book reviews the changes in native Hawaiian vegetation from the arrival of Polynesian settlers to the present day. Effects of forestry, whaling, animal and plant introductions, fires, agriculture, and urbanization on native vegetation are among the subjects. The book will be available in Spring 1990.

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Kalaupapa National Historic Park hosted an October meeting of NPS scientists, resource managers, and adjacent landowners to revise the resource management plan for the park. The principal issues and feral animal control, alien plant control, endangered species conservation, and aquatic resource protection. Management options are constrained by Hansen disease patient rights, cultural resource concerns, and a significant native forest that is a state natural area reserve within the park.

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The final draft of the WR's Natural Resource Monitoring Program Development Plan on "how to develop a diagnostic ecological monitoring program" has been sent to all task force members. This plan was a product of the Inventory and Monitoring Initiative Workshop hosted by Channel Islands NP last September. Copies of the draft plan may be had from Marcia Schramm, Channel Islands NP Research Division, 1901 Spinnaker Drive, Ventura, CA 93001.

We also have completed our second printing of the *Channel Islands NP Natural Resource Monitoring Handbook* and are distributing them to interested park personnel. You may request copies of the handbook at the address above.

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A scoping session was held at the Univ. of Nevada, Las Vegas (UNLV) Nov. 6-8, 1989, to assist Lake Mead NRA in identifying and prioritizing research and resource management needs. Gary Davis, Channel Islands NP, led the discussion of the step-down process. The session was attended by WRO scientists, UNLV faculty, Lake Mead resource managers, and members of the Desert Research Institute. Plans are to hold scoping sessions for Joshua Tree and Death Valley in the near future.

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David Parsons, research scientist at SEKI, who recently was named a regional contact for global climate change issues, represented NPS at a national meeting to pursue the use of existing long-term ecological research sites as focal points for new efforts to study predicted impacts of changing climate. The meeting, held in Denver Nov. 14-17, was organized by the National Academy of Sciences and the National Science Foundation LTER program. SEKI was the only NPS area invited to participate.

Dave Parsons and Thomas Stohlgren had a paper published in *Madrono* (Vol. 36:154-168) on "Effects of Varying Fire Regimes on Annual Grasslands in the Southern Sierra Nevada of California."

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The SEKI research and resources management staffs participated in the October California Wilderness Conference in Vaslia, CA. Presentations were by Dave Parsons, on giant sequoia ecology; by David Graber, on research ethics in wilderness; by Nathan Stephenson, on global climate change; by Tom Nichols, on fire management, and by Harold Werner on bear management.

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Thomas J. Stohlgren (CPSU, U/CA Davis) recently published two papers in the book: *The California Chaparral: Paradigms Reexamined*, edited by S.C. Keeley (Natural History Museum of Los Angeles County Science Series No. 34, Los Angeles, CA; 1989). The first paper, co-authored by Philip W. Rundel (UCLA) and David Parsons (SEKI), "Stable Population Size Class Distribution in Mature Chamise Chaparral," investigated the population attributes and ecosystem processes that influence chamise chaparral. Chamise (*Adenostoma fasciculatum*) is the dominant shrub species in California and in the foothills of Sequoia and Kings Canyon NPs. The second paper, "Fire and Demography," co-authored by Jon E. Keeley (Occidental College), and Paul H. Zedler and Charles A. Zammit (San Diego State/U), discusses evidence contrary to the current paradigm that 20 year fire return intervals are necessary for chaparral persistence.

Stohlgren also published a paper in *Environmental Management* (1989, Vol. 13(4):485-491) on "Effects of Herbage Removal on Productivity of Selected High-Sierra Meadow Community Types." Co-authors were Parsons and Steve DeBenedetti (PINN). The study documented that long-term intensive herbage removal was detrimental to three subalpine meadow community types in Sequoia and Kings Canyon NPs.