workshops and seminars, assist with organizational development, and compile information on current park management issues.

#### PUBLICATIONS

The CPSU shares information with scientists, resource managers, and the public through its publications. Please write or call us if you would like a copy of one of the recent articles below:

An evaluation of the attitudes of National Park Service field personnel toward the Denver Service Center, D.R. Johnson and C.M. Wilson

Bringing people in: the social context of ecosystem management in the National Parks and wilderness areas, D.R. Johnson

The effects of work schedule and employment status on the organizational commitment and job satisfaction of full versus part time employees, T.W. Lee and D.R. Johnson

Designing and implementing comprehensive long-term inventory and monitoring programs for National Park System lands, D.G. Silsbee and D.L. Peterson

Ecosystem management for parks and wilderness, J.K. Agee and D.R. Johnson

Global environmental change in mountain protected areas: consequences for management, D.L. Peterson, A.W. Woodward, E.G. Schreiner, and R.D. Hammer

Sensitivity of subalpine forests in the Pacific Northwest to global climate change, D.L. Peterson

#### FOR MORE INFORMATION, CONTACT:

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National Park Service



Cooperative Park Studies Unit



# University of Washington

#### College of Forest Resources

# **Cooperative Park Studies Unit Activities**

#### ► RESEARCH

The University of Washington Cooperative Park Studies Unit (CPSU), established in 1970, is the first University-based research unit of the National Park Service. CPSU scientists study the biological and social aspects of resource management issues in the national parks of the Pacific Northwest and elsewhere. The CPSU directs several longterm studies and consults with national park staff on scientific issues of immediate concern to management. Many CPSU research efforts involve cooperation with other agencies and institutions, such as the USDA Forest Service and U.S. Environmental Protection Agency.

The CPSU encompasses two major program areas - biology and social science - that address various aspects of natural and human resource issues in the national parks:

#### **Biology Program**

• Effects of Global Climate Change on National Park Resources: Future changes in temperature and precipitation could affect the distribution and abundance of plant and animal species in the ecosystems of Pacific Northwest parks. We are studying how a changing climate will alter the condition of terrestrial and aquatic ecosystems and how these dynamic systems can be managed. • Ecology and Growth of Subalpine Forests in the Pacific Northwest: We are studying a wide range of factors related to the growth, distribution, and establishment of subalpine trees and alpine meadows in the Pacific Northwest. Several species and sites are being evaluated at parks throughout the region.

Inventory and Monitoring Planning in National Parks: We are developing an analytical approach to assist park resource managers in writing long-term plans for monitoring the condition of natural resources. This approach will insure the best use of park personnel and funds in collecting data vital to achieving resource management objectives.

#### Social Science Program

Study of Subsistence Uses of Alaska Units of the National Park System: We are examining customary and traditional subsistence use by rural residents in Alaska, as well as customs affecting resource harvest in parks. Historical trends of subsistence use by Native Americans and others are being analyzed, and future resource demands will be estimated.

Study of Noncompliant Visitor Behavior in Outdoor Recreation Areas: Visitors who violate regulations can damage natural resources and endanger other visitors and wildlife in national parks. We are conducting a national inventory of damage to park resources caused by noncompliant behavior and are testing the effectiveness of various approaches as deterrents to noncompliant behavior. Use of Social Psychological Measures to Evaluate Backcountry Trip Quality: Visitors to the backcountry of national parks have a range of expectations and perceptions of their visits. We are evaluating psychological measures of solitude and other measures of wilderness trip quality for the Limits of Acceptable Change planning model, using Mount Rainier National Park as a case study.

## ► EDUCATION

CPSU scientists Darryll Johnson and David Peterson participate in the educational programs of the University of Washington on a regular basis. Classroom teaching focuses on upper-division and graduate courses. CPSU scientists teach Forest Biology, Forest Soil Properties, Dendrochronology, and Sociology of Leisure and Outdoor Recreation, and participate in several other courses and seminars. They also chair graduate student committees and participate as faculty members on divisional and University committees.

## ► OUTREACH

Applying research results to the practical management of biological and cultural resources is one of the CPSU's primary roles. We interact with staff members of national parks on a regular basis to provide scientific information needed for decision-making, planning, and policy development. CPSU scientists also share technical information with park resource managers, teach at