

REGIONAL HIGHLIGHTS

Mid-Atlantic Region

The Region welcomes several new Resource Managers: Denise Cook, formerly superintendent of Natural Bridges National Monument, joins the Regional Office staff as a Natural Resource Manager responsible for air, water, and rare and endangered species; Ken Stevens, formerly Resource Specialist at Bandolier National Monument, is the new Resource Manager at New River Gorge National River; and Carl Zimmerman, formerly Resource Manager at Gulf Islands National Seashore, is the new Resource Manager at Assateague Island National Seashore.

The Region's resource managers met at Virginia Tech last spring to discuss regional resource management issues and RMPs, followed by a Social Science Short Course that examined the application of social science to park management. Topics included carrying capacity, visitor management, tourism, park economic impact, and park neighbors.

* * *

Virginia Tech CPSU Leader Jeff Marion participated in an international workshop on visitor carrying capacity, held in Belize, Central America and sponsored by the World Wildlife Fund. He gave a paper, "Tourism impacts to protected areas: Procedures for the development of monitoring programs," and took part in a panel on similar topics at the First World Congress on Tourism and the Environment, also held in Belize.

* * *

Copies of 2 papers presented to the Northeast Recreation Research Conference, "Trail inventory and assessment approaches applied to trail system planning at Delaware Water Gap NRA" and "Campsite impact management: A survey of NPS backcountry managers" are available from Jeff Marion at NPS/CPSU, Virginia Tech/Dept. of Forestry, Blacksburg, VA 24061-0324.

* * *

The Region has established Geographic Information System technical support agreements with Penn State University and NC/State University. The 2 schools will help the Region's parks develop and operate ATLAS-GIS and GRASS-based GIS programs. NCSU recently hosted a regional planning session attended by Regional Office, park, and university staff, to begin development of a work plan.

* * *

Intensive long-term research conducted by UVA scientists has documented the acidification of streams in Shenandoah NP. Acidity levels are approaching the biologically critical level of 6.0 in 1 stream and have exceeded this level in another. Chronic acidification has been documented from analysis of weekly samples from these streams, beginning in 1979. A significant new research program to record, analyze, and predict biotic responses to the acidification has begun. An integrated multidisciplinary analysis of chemical/biotic linkages will be used to examine fish community responses to stream acidification.

* * *

Research to develop I&M protocols for vertebrate surveys in parks has been initiated at Penn State U. This research will evaluate existing literature, develop or modify existing I&M protocols, and field test recommended protocols on selected MAR parks. Protocols will be organized by management information needs: presence/absence, relative abundance, and species distribution.

* * *

Two Mid-Atlantic Region employees recently took part in an exchange with Russian NPs through a joint effort of the NPS Office of International Affairs, Delaware Water Gap NRA, and the Student Conservation Association. Maria Burks, superintendent at Fredericksburg and Spotsylvania County Battlefields National Military Park, and Elizabeth Johnson, Chief of Research and Resource Planning at Delaware Water Gap, traveled to Vodlozero NP to assist with park planning, development, and operational issues. The newly created park encompasses 1.5 million acres of rivers, lakes, bogs, and virgin forest within which are hidden the remnants of historic and prehistoric civilizations of both the Karalia and Archangelsk regions of Russia (bordering Finland).

Pacific Northwest

"The contribution of sociology to biodiversity research and management" is the title of an article in **Biological Conservation** (1992, 62, 161-170), by Gary E. Machlis, NPS/CPSU at U/ID in Moscow, ID and professor in the departments of Forest Resources and Sociology. Like all scientific and environmental issues, Machlis notes, biodiversity is partially a socially constructed problem. Case study and comparative multinational data suggest that the causes of biodiversity decline are a largely socio-economic, and solutions will require interdisciplinary approaches. The paper discusses how sociology can make contributions to biodiversity research and management, including (1) better understanding and management of habitat change; (2) improved research and decision-making methodologies; (3) development of a theoretical synthesis; and (4) analysis of the social organization of conservation and conservation biology.

* * *

An expansive exhibit on the discovery of fossils and the ongoing management of paleontological resources of John Day Fossil Beds NM is on display this year at the High Desert Museum 6 miles south of Bend, OR. Recent finds at John Day include a new rodent, the size of a modern ground squirrel; a mouse-deer and two canid species, including one that may represent a new species.

A new dating procedure, being used at the Berkeley Geochronology Center in California, shows promise of being able to date prehistoric samples of volcanic tuff to an accuracy of within 100,000 years. This methodology (called the single-crystal laser fusion argon/argon method) should help paleontologists like Ted Fremd (at

John Day) figure out how all the species being found fit together chronologically.

* * *

A 5-year effort to evaluate the potential for the Cascade Range of Washington to support a viable population of grizzly bears has concluded that a probable population of 10 to 20 bears does inhabit the Cascades. Numerous sightings and observations of tracks have occurred, and a GIS evaluation of habitat has led the USFWS to determine the population is "recoverable." With the Washington Dept. of Wildlife as the lead, the USFS, NPS, USFWS, and the Government of British Columbia are working together in this project as a subgroup of the Interagency Grizzly Bear Committee.

For more information, contact Kathy Jope at (206)553-5670.

National Capital Region

The Region recently joined with the Michigan State University Pesticide Research Center and the MI/State/U Foundation in sponsoring the 1992 International Dutch Elm Disease workshop, "Recent Approaches to the Dutch Elm Disease Problem." The last Dutch elm disease conference was held in 1981; in the interim, considerable progress has been made in cellular and molecular approaches to understanding and controlling the disease. The workshop brought together from around the world old and new generations of Dutch elm disease researchers, so that acquaintances could be made and both old and new information shared.

Forty-five participants from 6 countries attended. Sessions covered conventional approaches to disease management, principally breeding for resistance; application of the pathogen toxin to elm tissue cultures for rapid selection of resistant trees; and molecular approaches for characterizing the host and the pathogen. Workshop proceedings will be published.

Awards were presented by Dr. Gordon Guyer, president of MI/State/U, to 3 retired researchers: Dr. Hans M. Heybroek, Institute for Forestry and Nature Management Research, Wageningen, Netherlands; Dr. Richard Campana, Department of Botany and Plant Pathology, University of Maine; and Dr. Francis W. Holmes, Shade Tree Lab, University of Massachusetts. Each award was an inscribed plaque made from a cross section of a limb of the 165 year old Adam's Elm, removed from the White House grounds in 1991. The agencies sponsoring the workshop received similar plaques.

The National Capital Region and MI/State/U are working through a Cooperative Agreement on molecular and biochemical aspects of Dutch elm disease management. Dr. Mariam B. Sticklen of the MI/State/U Pesticide Research Center, and Dr. James L. Sherald of the National Capital Region's Center for Urban Ecology, are program managers.

* * *