Natural Resource Program Center



# Parks for Science The National Park Service welcomes researchers

Cave scientist Anna-Louise Reysenbach collects limestone corrosion residue from the wall of Spider Cave in Carlsbad Caverns National Park, New Mexico. (Copyright 2000, Kenneth Ingham, used by permission)

"Many scientists will be glad to form partnerships with the National Park Service. They will welcome access to the parks, and collaboration with the staff. They will help ... further the primary aims of the Service with support and solid information of the kind needed to solve the complex and accelerated problems."

-E. O. Wilson, Discovery 2000 conference

National parks are treasure houses of our natural wealth and heritage, preserving relatively intact landscapes and communities of plants and animals. The presence of these unique ecosystems makes national parks unparalleled living laboratories. National parks offer researchers priceless opportunities to study unique natural systems and living things, such as coastal wilderness, elusive creatures like mountain lions, and natural processes influenced minimally by human activity.

In addition to facilitating science that benefits society, the National Park Service is increasingly enlisting the skills and talents of research partners to develop the scientific information needed to make effective management decisions. To facilitate these dual responsibilities— "parks for science" and "science for parks"—the National Park Service is striving to make the parks more accessible to scientists through the Natural Resource Challenge program. The following initiatives are designed to help make the parks more friendly and fruitful places for researchers.

#### Provide access to National Park Service data

Researchers will have on-line access to new National Park Service data, including species inventories and park vital signs monitoring data that are currently being gathered throughout the National Park System. Researchers will also be able to review annual research accomplishment reports and related or complementary studies. This information will aid researchers in developing research proposals, testing hypotheses, and analyzing information about the parks.

## Expand partnerships with academic institutions

The National Park Service is expanding partnerships with academic institutions through increased involvement with interagency Cooperative Ecosystem Studies Units (CESUs). CESUs play a



(Top) A bat species is documented at Olympic National Park.

(Bottom) A researcher collects a lichen sample.

broad role as providers of research, technical assistance, and education to federal land management, environmental, and research agencies and their potential partners. Twelve CESUs, involving more than 90 universities, have been established since 1999 and at least five more CESUs are being developed. For information, *www.cesu.org/cesu*.

### **GeoScientists in the Parks**

The GeoScientists in the Parks (GIP) program helps parks address their physical and integrated science needs, including disturbed lands, paleontology, water resources, shoreline change, caves, volcanoes, mineral development, and air quality. Projects include inventories, monitoring, endangered species habitat identification, site restoration, research, and more. Many projects focus on interpreting recent discoveries to park staff and the public.

A GIP participant may provide a service, a product, or both. Parks identify what is needed and request assistance at the appropriate level, which may be undergraduate, graduate, or Ph.D. students; professors; working professionals; or retired professionals. The GIP program manager partners with outside entities to provide funding and to locate potential candidates. Parks often provide housing. While the duration of projects may vary, they usually run for 8–12 weeks. For information, *www2.nature.nps.gov/grd/ geojob/index.htm.* 

### **Facilitate research efforts**

To promote research activities in national parks, a network of 32 research learning centers placed strategically around the nation is being developed through the Natural Resource Challenge. Research learning centers will help parks reach their potential as unparalleled natural laboratories by providing logistical support to researchers. Research learning centers will offer visiting researchers laboratories, office space, and dormitory facilities.

#### Expand outreach to university faculty

The National Park Service is broadening its outreach efforts to university faculty members through the Sabbatical in the Parks program. The program assists in arranging faculty sabbaticals to conduct research that contributes to park management activities and advances science and human understanding. The program maintains a clearinghouse that matches the needs of individual parks units with the research interests of university professors in the biological, physical, social, and cultural sciences. For information, *www.nature.nps.gov/sabbaticals*.

# Streamline the permitting and reporting process

To encourage scientists to pursue research in national parks, the permitting and reporting process has been simplified. The NPS Research Permit and Reporting System is an on-line system that not only simplifies and consolidates permitting and reporting requirements, but also provides timely information about the research needs of individual parks. The system, located at *http://science.nature.nps.gov/research*, allows researchers to:

- review application procedures and requirements,
- apply on-line for permission to conduct fieldwork,
- learn about the research needs of individual parks,
- review previously conducted scientific studies before formulating plans for a new study,
- prepare and submit Investigator's Annual Reports on-line, and
- apply for permit renewals and submit updated annual reports on-line.

The website includes helpful information to ensure that the application process proceeds smoothly, including an overview of the permitting process, processing time requirements, an example of a study proposal, and answers to frequently asked questions. Additionally, the new system allows the public to access the results of research conducted in parks.

As the National Park Service embarks on a new era of "parks for science" and "science for parks," it welcomes researchers to explore national parks as unparalleled living laboratories.

#### For information

www.nature.nps.gov/challenge/nrc.htm.