Research Opportunities

Fossils on National Park Service land may only be collected with an NPS approved research permit (see below). The Geologic Resources Division can assist park staff with identification of research projects that support resource management goals and facilitate cooperative ventures between researchers and parks.

Research Permits

Researchers interested in conducting projects in NPS units should contact the park and review permitting guidelines online:
https://science.nature.nps.gov/research/ac/

Geoscientist-in-the-Park documenting a Precambrian stromatolite at Glacier National Park, Montana.

Student Opportunities

Internships may be available for pay, academic credit, or on a volunteer basis. Contact the Geologic Resources Division or individual parks to explore the possibility of participating in park paleontology projects.
Many paleontological opportunities are available through the NPS Geoscientists-in-the-Parks (GIP) program. The GIP website has more information:
http://www.nature.nps.gov/geology/gip/

Geologic Resources Division
National Park Service
P.O. Box 25287
Denver, CO 80225

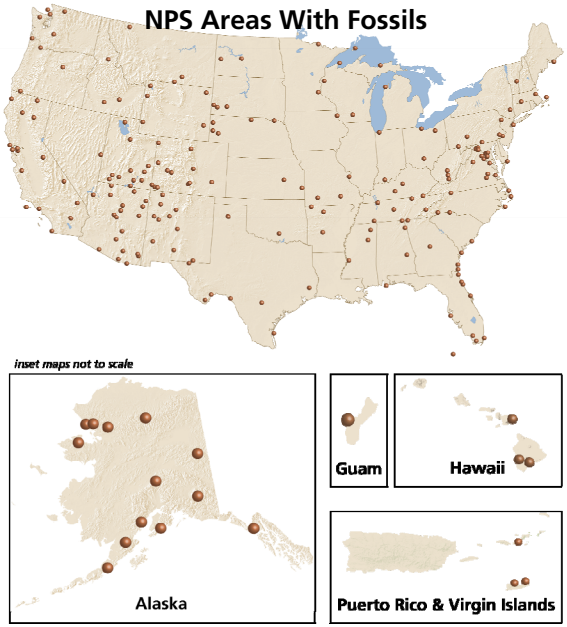
http://www.nature.nps.gov/geology/paleontology

National Park Service
U.S. Department of the Interior

Natural Resource Program Center

Fossils are non-renewable natural resources with great scientific, interpretive, and educational value. Appropriate stewardship of fossil resources ensures their continued value for future generations. It is illegal to collect or remove fossils from any National Park Service unit without a proper research permit.

More than 230 NPS areas preserve fossils. Continuing inventory and documentation efforts increase this number each year.



For More Information

National Park Service Paleontology Program website:
www.nature.nps.gov/geology/paleontology

Many NPS paleontology publications are available online at the above address.

National Fossil Day website:
http://nature.nps.gov/geology/nationalfossilday/

Contact Dave Steensen, Chief, NPS Geologic Resources Division, for more information:
Dave_Steensen@nps.gov; 303-969-2014

Paleontology in the National Park Service

Paleontological resources, or fossils, are any remains of past life preserved in geologic context. Fossils are non-renewable natural resources that record the history of life on Earth, the evolution of ecosystems through time, and evidence of past climate change.

The Geologic Resources Division supports the stewardship, protection, scientific research, museum curation, and public interpretation of fossil resources throughout the National Park System.

Fossils of the National Park Service

The National Park Service recognizes three fossil context categories: in situ (fossils found in rock layers), in museum collections (NPS and other institutions) or in cultural resource contexts (building stones, archeological resources, historic documents, and ethnographic legends).
Fossils are found in at least 230 NPS areas and span more than one billion years of Earth history representing numerous life forms from algae to petrified trees to dinosaurs to mammoths.

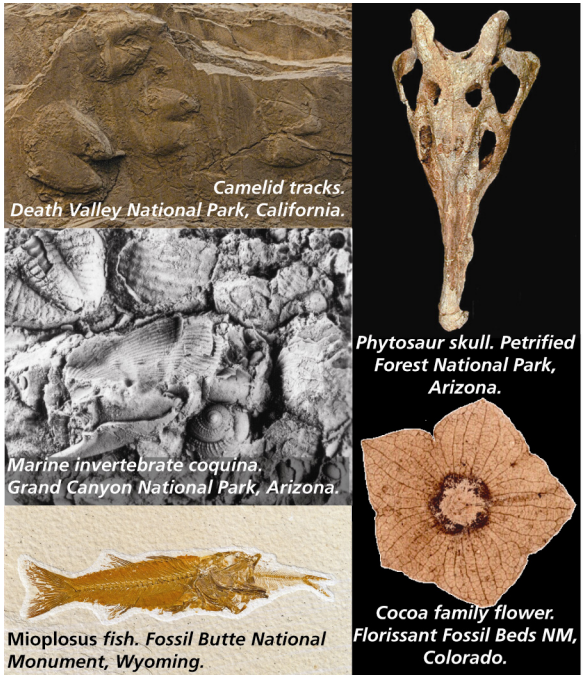
Fossil excavation at Dinosaur National Monument, Colorado and Utah.

Paleontological Resources Preservation Act (PRPA), 2009

The Act directs federal land management agencies to implement comprehensive paleontological resource management programs and authorizes necessary appropriations. It requires the NPS to:

- Develop plans for fossil inventories, monitoring, and scientific and educational use which emphasize coordination with non-federal partners, scientists, and the public;
- Manage and protect paleontological resources using scientific principles and expertise;
- Establish a program to increase public awareness about the significance of paleontological resources;
- Implement the Act's criminal and civil enforcement, penalty, reward and forfeiture provisions;
- Protect information about the nature and specific location of fossils where warranted; and
- Develop and enact regulations in collaboration with other agencies as soon as practical.

The NPS supports this mandate through inventory and documentation, monitoring, education and interpretation, museum curation, and research.



National Park Service stewardship encompasses fossils from every time period and every major type of life.

Inventory and Documentation

In order to more fully document fossil resources, the National Park Service has implemented three inventory strategies:

- **Comprehensive park-specific surveys.** Field-based assessment of fossils and paleontological resource management strategies for one park unit.
- **Servicewide thematic inventories.** Literature review and data mining of documented occurrences of a particular type of fossil Servicewide (e.g. cave fossils, vertebrate tracks, cultural resources).
- **Inventory and Monitoring Network-based inventories.** Literature review and data mining to systematically assess the scope and significance of known or potential fossils for the 270 parks in the 32 NPS Inventory and Monitoring networks.

Parks use this information in science-based decision making to guide fossil resource stewardship. This information can also be used in interpretation and educational programs. Inventory and documentation efforts ensure fossil resources are considered in park planning and operations.

Resource Monitoring

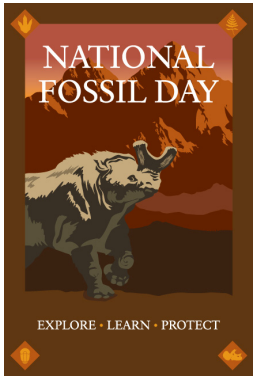
Following inventory and documentation of fossils, a paleontological resource monitoring plan can be developed and tailored for a park's needs. Monitoring activities include periodic evaluation, repeat photodocumentation, assessing and mitigating natural and human impacts to park fossils. The Geologic Resources Division provides technical support to parks or facilitates cooperative projects between other federal, state, or local institutions.

Education and Interpretation

The Geologic Resources Division helps park staff develop scientifically accurate public programs to foster appreciation for and stewardship of park fossils. A variety of paleontology publications are supported by the Division. A new Servicewide Junior Paleontologist Program was initiated in 2010.

The first annual National Fossil Day was held on October 13, 2010 to promote public awareness and stewardship of fossils, as well as to foster a greater appreciation of their scientific and educational values.

The National Fossil Day website also includes Junior Paleontologist Program information:
http://nature.nps.gov/geology/nationalfossilday/



Museum Curation

Curation activities include identification, preparation, cataloging, and storage to ensure fossil collections are accessible to researchers and preserved for future generations.