

U.S. Department of the Interior
National Park Service
Geologic Resources Division



PRESERVING AMERICA'S PALEONTOLOGICAL HERITAGE WITHIN THE U.S. NATIONAL PARK SYSTEM

**Vincent L. Santucci
Senior Paleontologist
National Park Service**

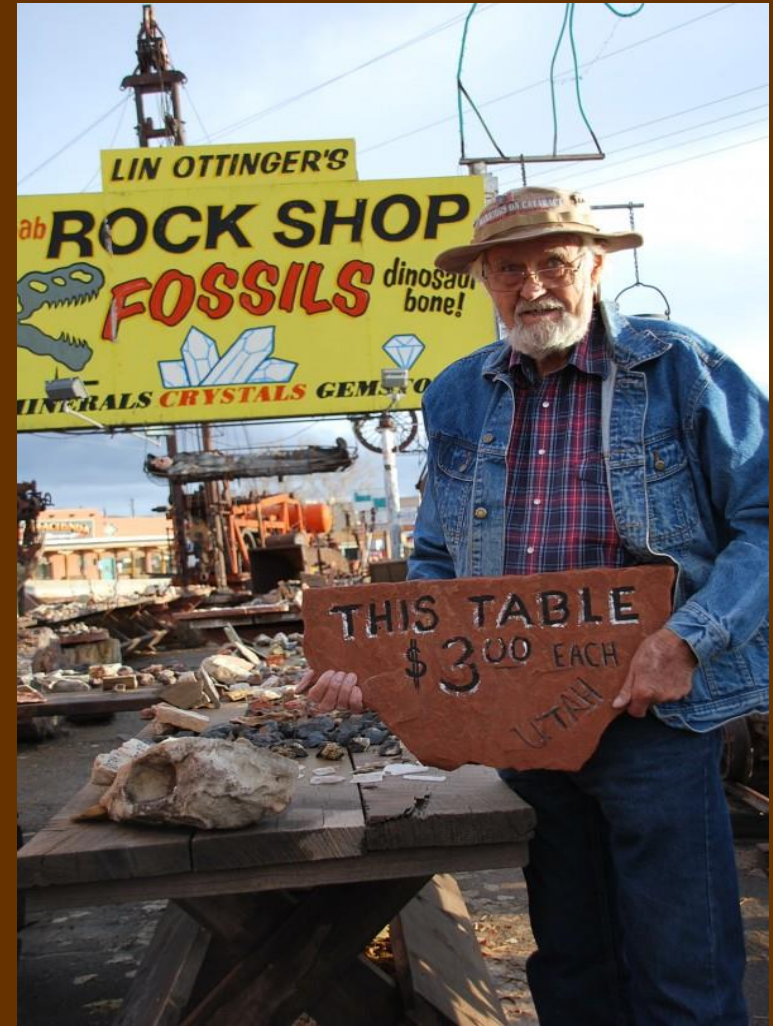
EXPERIENCE YOUR PREHISTORIC AMERICA

PALEONTOLOGICAL HERITAGE

“PALEOHERITAGE”

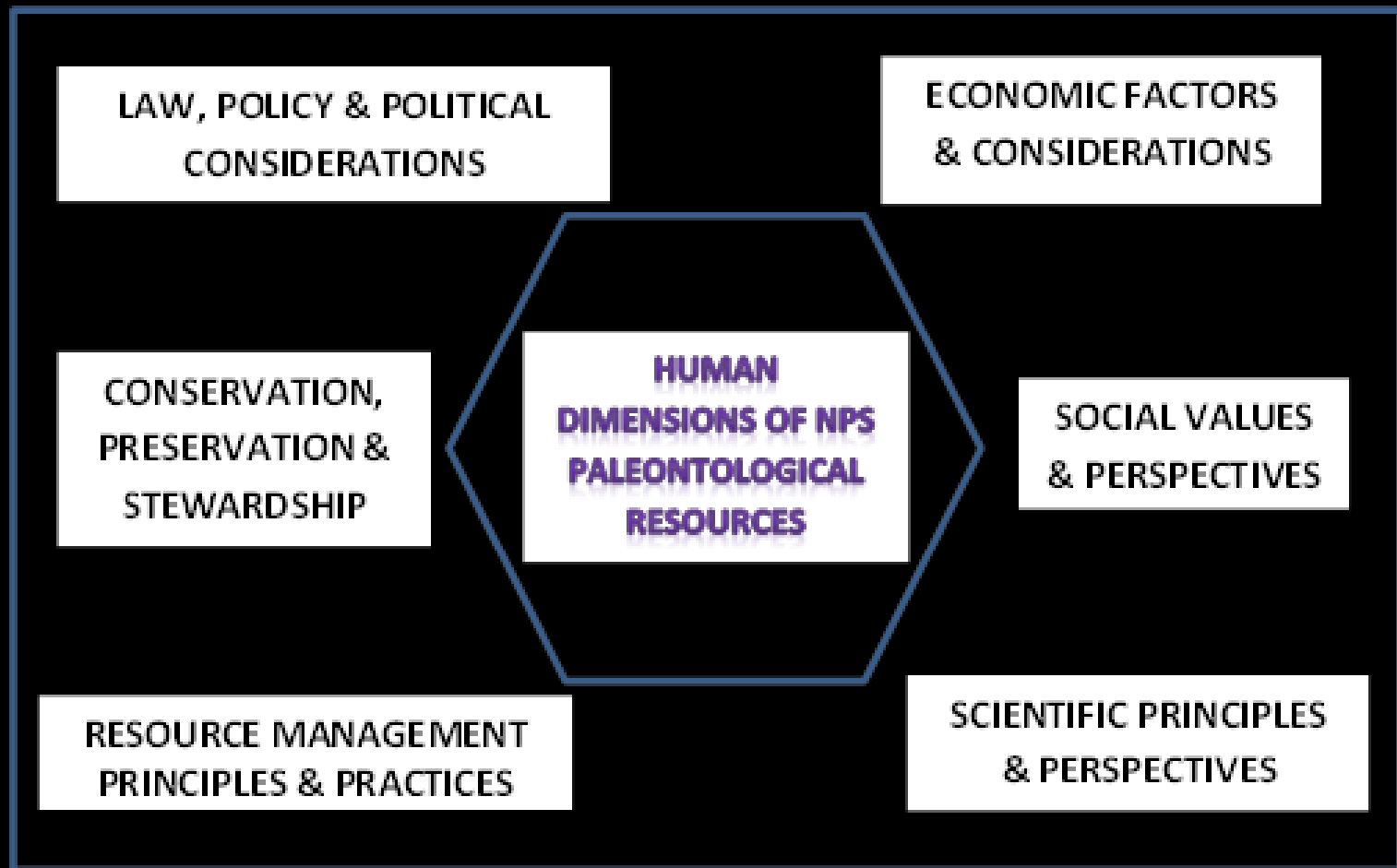
“A term applied collectively to paleontological resources and fossil localities with significant scientific, educational, cultural, historical, aesthetic, recreational, spiritual or other human values.”

WHAT ARE THE RELATIONSHIPS BETWEEN PEOPLE & FOSSILS?



WHAT VALUES DO PEOPLE ASCRIBE TO FOSSILS?

HUMAN DIMENSIONS OF PALEONTOLOGICAL RESOURCES





"... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

- NPS Organic Act, 1916

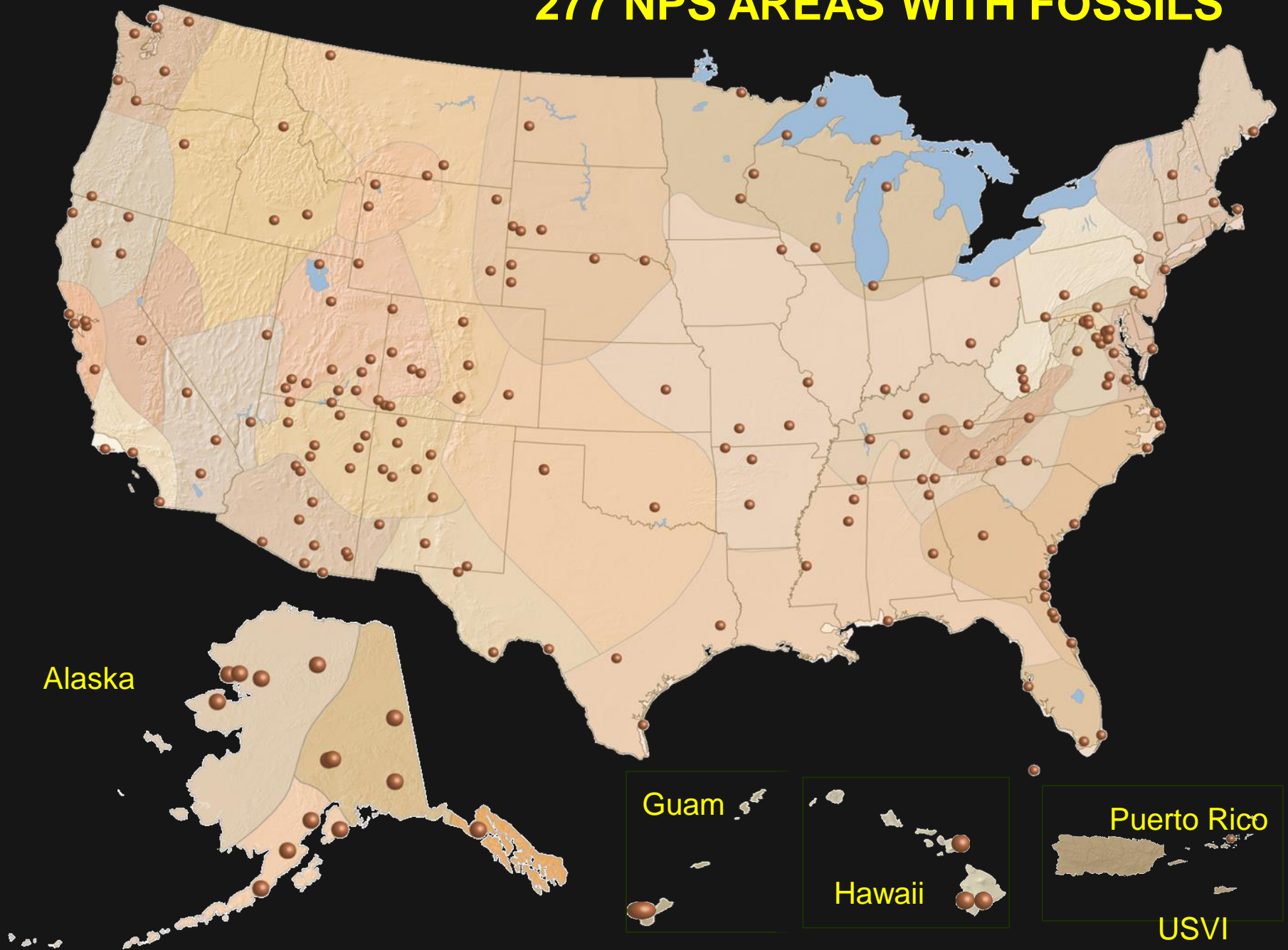


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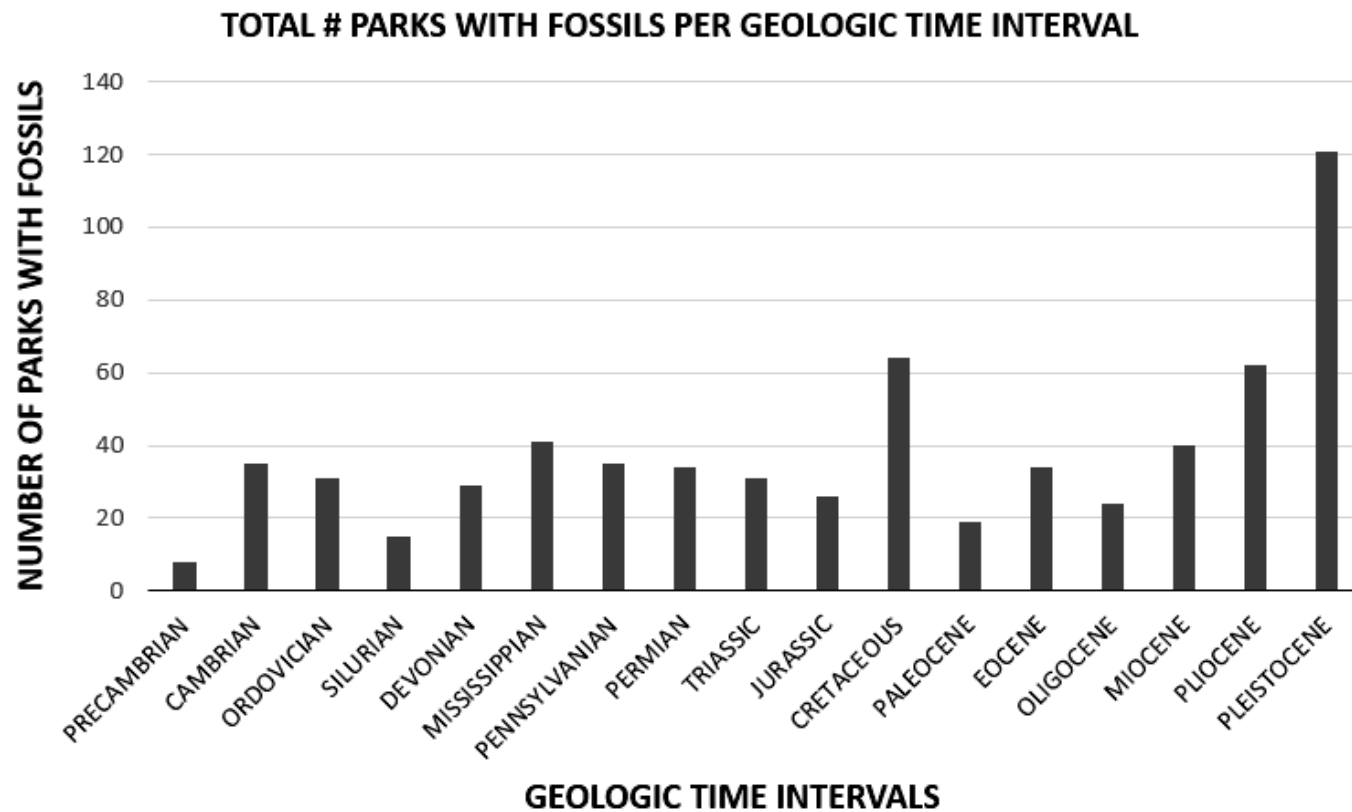
- NPS Organic Act, 1916

The logo for the National Park Service (NPS) Paleontology program. The word "Paleo" is rendered in large, colorful letters: 'P' is orange with a dragonfly, 'a' is grey with a dinosaur skull, 'l' is green with a fern frond, 'e' is blue with a nautilus shell, and 'o' is brown with a trilobite. Below this, "NPS" is in green with a small green shield icon, followed by "PALEONTOLOGY" in green capital letters.

277 NPS AREAS WITH FOSSILS



NPS Fossil & Geologic Time



FLORISSANT FOSSIL BEDS NATIONAL MONUMENT



**FLORISSANT FOSSIL BEDS
NATIONAL MONUMENT**



BADLANDS NATIONAL PARK



**FLORISSANT FOSSIL BEDS
NATIONAL MONUMENT**



BADLANDS NATIONAL PARK



PETRIFIED FOREST NATIONAL PARK



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BADLANDS NATIONAL PARK



PETRIFIED FOREST NATIONAL PARK



GRAND CANYON NATIONAL P

National Natural Landmarks



Federal Laws, Regulations, Policies, Guidance Documents



PALEONTOLOGICAL RESOURCES PRESERVATION ACT

- March 30, 2009
- Public Law 111-011
- 16 U.S. Code §§ 470aaa
- 43 Code of Federal Regulations – Part 49

The law and regulations direct the management of fossils based on “scientific principles and expertise,” and outlines procedures “for inventory and monitoring, and public education programs.”

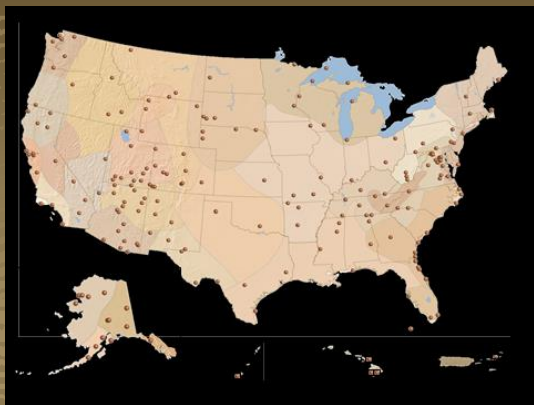
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PROGRAM ADMINISTRATION
RESOURCE MANAGEMENT
INVENTORY & MONITORING
RESEARCH
DATA MANAGEMENT
MUSEUM COLLECTIONS
INTERPRETATION & EDUCATION

LAW & POLICY
RESOURCE PROTECTION
PLANNING
TRAINING
MEDIA RELATIONS
TECHNICAL ASSISTANCE
PARTNERSHIPS

EXPERIENCE YOUR PREHISTORIC AMERICA

Resource Management, Stewardship, & Protection

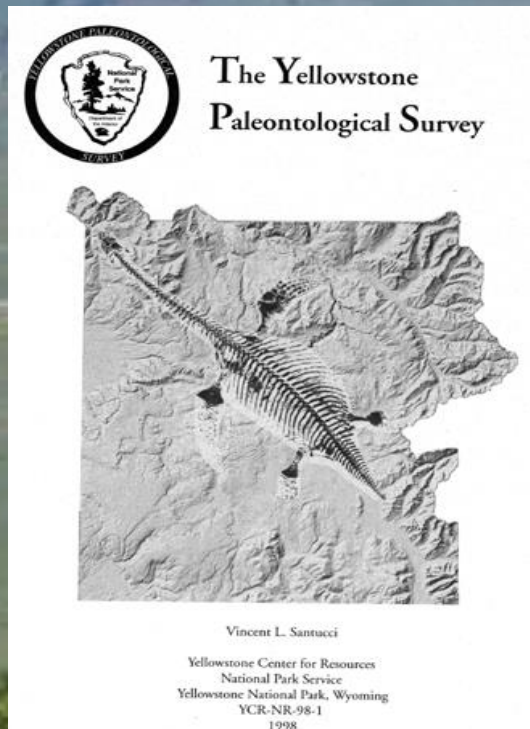


PALEONTOLOGICAL RESOURCES PRESERVATION ACT

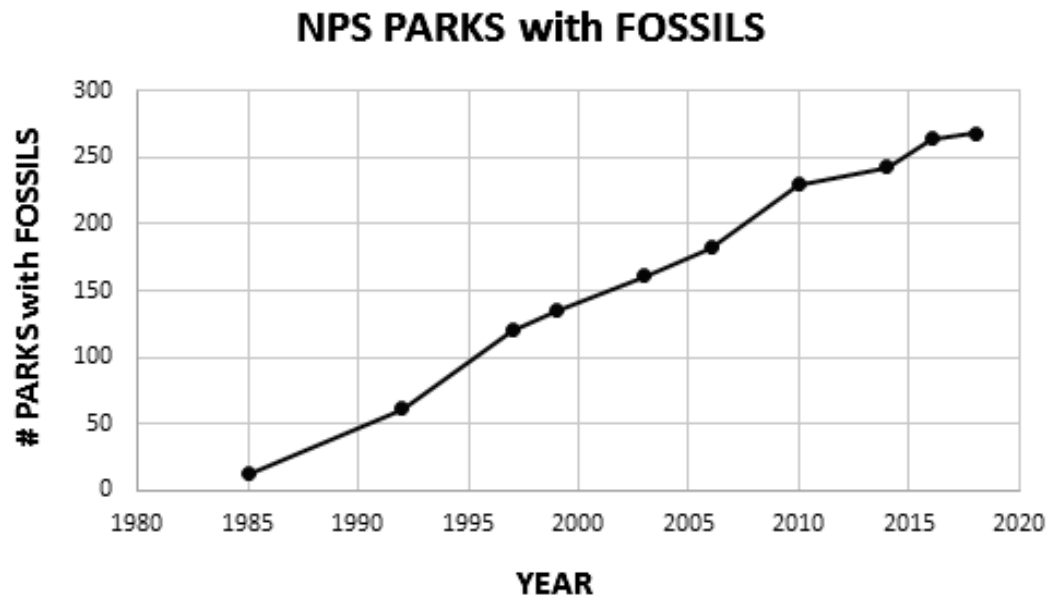
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PALEONTOLOGICAL RESOURCE INVENTORY



277 NPS AREAS WITH FOSSILS



Alaska

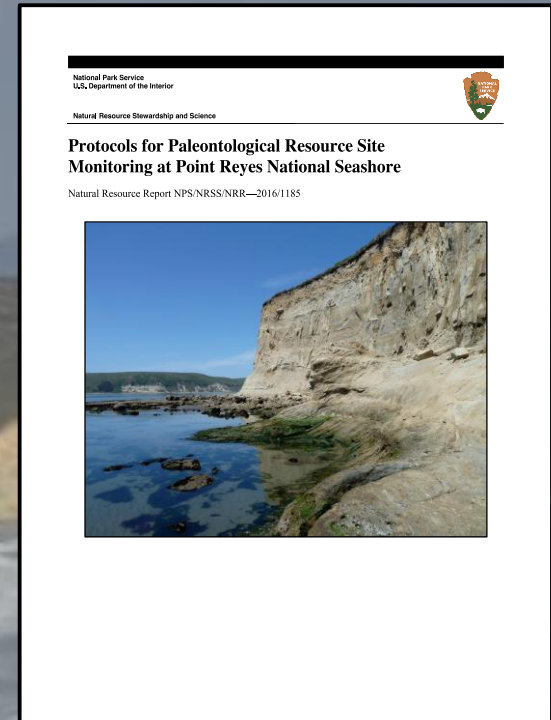
Guam

Hawaii

Puerto Rico

USVI

PALEONTOLOGICAL RESOURCE MONITORING



POINT REYES NATIONAL SEASHORE

Science, Research, Permits, Curation & Collections



PALEONTOLOGICAL RESOURCES PRESERVATION ACT

- March 30, 2009
- Public Law 111-011
- 16 U.S. Code §§ 470aaa

The Secretary shall develop appropriate **plans for the scientific and educational use** of paleontological resources. Any paleontological resource, and any **data and records associated with the resource, collected under a permit, shall be deposited in an approved repository.**

Prehistoric Graveyard



Prehistoric Graveyard



Prehistoric Graveyard



Paleontological Research

- HISTORY OF LIFE & ANCIENT ECOSYSTEMS (EVOLUTION)
- PALEOBIODIVERSITY (PLANTS, INVERTEBRATES, VERTEBRATES))
- CHANGES IN BIODIVERSITY OVER TIME (EVOLUTION / EXTINCTION)
- PROCESSES OF FOSSILIZATION
- RELATIONSHIP BETWEEN FOSSILS AND THE ROCKS THEY ARE PRESERVED
- PALEOECOLOGY AND ANCIENT ENVIRONMENTS
- PALEOBIOGEOGRAPHIC DISTRIBUTION OF LIFE
- INTERACTIONS BETWEEN PREDATORS / PREY
- GEOLOGIC TIME INDICATORS (GEOCHRONOLOGY)
- STRATIGRAPHIC RANGE OF TAXA (BIOSTRATIGRAPHY)

NPS Fossil Collections

NPS PALEONTOLOGY MUSEUM COLLECTIONS

- Total NPS Paleontology Collections: 661,269
- Total Cataloged NPS Paleontology Collections: 620,879
- Total Backlog of NPS Paleontology Specimens: 40,417
- Number of Parks with Paleontology Specimens: 126

NPS HOLOTYPE

- 4876 Total Fossil Holotypes Associated with NPS Areas (Confirmed & Unconfirmed)
- 2314 Confirmed Fossil Holotype Specimens
- 2562 Potential Unconfirmed Fossil Holotype Specimens

MUSEUM REPOSITORIES

- 194 Outside Museum Repositories with Fossils Associated with NPS Areas

Public Education, Interpretation, & Outreach



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NATIONAL FOSSIL DAY: CELEBRATING THE SCIENTIFIC AND EDUCATIONAL VALUES OF FOSSILS

NATIONAL FOSSIL DAY



EXPLORE • LEARN • PROTECT



THE WHITE HOUSE
WASHINGTON

October 12, 2010

I am pleased to send greetings to all those celebrating National Fossil Day 2010.

America's future depends on maintaining our role as the world leader in scientific research and technological development. To achieve this goal, we must prepare today's students to become tomorrow's innovators—in part by teaching them about our past.

Partnerships like National Fossil Day help foster an appreciation of science education and cultivate a love of learning among America's young people. These efforts provide students with an opportunity to explore and discover the wonder of the sciences, inspiring them to dream the solutions of tomorrow and confront the myriad challenges of the 21st century.

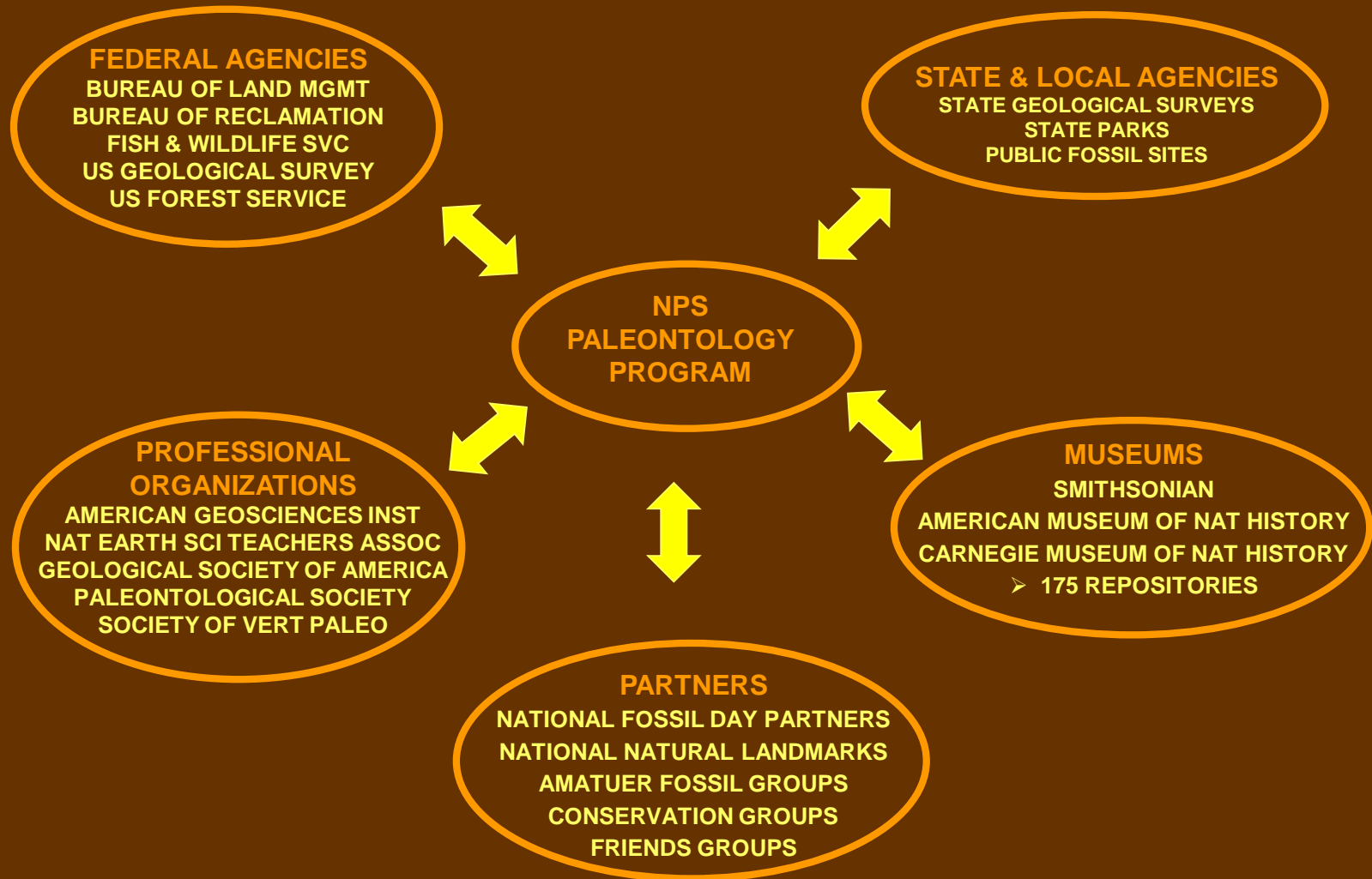
As you celebrate America's prehistoric heritage and promote awareness and stewardship of fossils, I wish you all the best.

A handwritten signature in black ink, which appears to be "Barack Obama", written over a faint circular seal.

PALEONTOLOGICAL RESOURCE EDUCATION



PALEONTOLOGICAL HERITAGE COLLABORATION & PARTNERSHIPS





**“...for the benefit and
enjoyment of future
generations...”**



Thank You!
America's Geoheritage Workshop II:
Planning Committee & Participants

