Foundation Document Overview
Petrified Forest National Park
Arizona

Contact Information
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Petrified Forest National Park, in a remote area of northeastern Arizona, contains one of the largest and most colorful concentrations of petrified wood in the world (some petrified logs of ancient conifer species measure more than 190 feet). The park is renowned for its multihued badlands of the Chinle Formation that are part of the Painted Desert of Arizona. The Puerco River Valley and the Rainbow Forest are also among the park’s distinctive geographic areas.

Initially proclaimed a national monument in 1906 by President Theodore Roosevelt, Petrified Forest was redesignated as a national park in 1962. In 1970 Congress designated more than 50,000 acres in the park as one of the first NPS wilderness areas. Passage of the 2004 Petrified Forest National Park Expansion Act increased the authorized park boundary by approximately 125,000 acres.

The park’s remarkable geological formations (the Late Triassic Chinle Formation and the more recent Late Miocene / Early Pliocene Bidahochi Formation) contain fossilized evidence of ancient environments within sedimentary rock layers. The colorful badland hills, flat-topped mesas, and sculptured buttes of the Painted Desert are primarily made up of Chinle Formation deposits formed by fluvial (river-related) processes occurring between 225 and 205 million years ago. The dramatic setting of mesa cliffs and escarpment rimrock is a result of the geologic processes of uplift and erosion, with resistant sandstone and lava caprock overlying more easily eroded layers of clay and shale.

In stark contrast to the high, arid grassland environment that characterizes the park today, the humid tropical climate that existed during the Late Triassic supported dense vegetation, giant reptiles and amphibians, early dinosaurs, fish, and many invertebrates. The landscape was then dominated by the winding waterways of a vast river system. More than 700 paleontological sites have been identified in the park, and it is possible to learn more about the Late Triassic here than anywhere else in North America.

The park also contains a wide range of significant cultural resources that document thousands of years of human history. More than 1,000 American Indian prehistoric sites have been recorded in the park including small campsites, lithic and ceramic scatters, pictographs and petroglyphs, house structures and large pueblo sites. Traces of historic trails used by explorers, wagon trains, and even an experimental US Army camel train provide evidence of Euro-American explorations. For the Hopi Tribe, the Pueblo of Zuni, the Navajo Nation, and other contemporary tribes, the park contains places and resources that connect them to their cultural heritage.

Historic buildings and structures include the Painted Desert Inn at the edge of the Painted Desert, a Pueblo Revival structure and national historic landmark. The national register-listed Rainbow Forest Historic District, with buildings constructed primarily by the Civilian Conservation Corps during the early 1930s, served as an early visitor contact area and headquarters for the park. The Painted Desert Community Complex (the main park headquarters area) was one of the most ambitious projects of the NPS Mission 66 development program (1956–1966); the historic district is listed in the national register and is under consideration for national historic landmark designation.

Visitors to the park have multiple opportunities to experience immense vistas and colorful landscapes that showcase the dynamic interplay of light and shadow on geologic formations. The 28-mile park road offers overlooks with long-distance vistas of the Painted Desert and access to hiking trails, picnic areas, and the designated wilderness.
### Purpose

The purpose of Petrified Forest National Park is to preserve and protect globally significant fossils, including petrified wood, nationally significant prehistoric and historic resources, as well as scenic values, in order to foster scientific research, public understanding, and enjoyment.

### Significance

Significance statements express why Petrified Forest National Park resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and systemwide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

- The park has one of the largest and most colorful deposits of mineralized fossil wood in the world.

- Petrified Forest National Park preserves the most comprehensive record of Late Triassic vertebrate evolution in North America. No other park possesses such an uninterrupted stratigraphic record, number of fossils, history of research and collection, and opportunity for radiometric dating of the period.
• Petrified Forest National Park contains a complex array of archeological resources that illustrate a continuum of more than 10,000 years of human land use. Regional patterns of settlement, trade, and migration create a diversity of nationally significant cultural sites and features that are still important to modern American Indians.

• Modern transportation corridors, including US Route 66, that follow prehistoric routes influenced historic use of the area. A century of park service stewardship is reflected in the collection of nationally and regionally significant historic resources.

• The area of Petrified Forest National Park has been a research environment for more than 100 years, leading to discovery of new paleontological species and their evolution, deeper understanding of prehistoric land use, and a record of ancient and modern climate change. Research provides opportunities for public outreach and education.

• Petrified Forest contains the largest example of protected native grassland in the southern Colorado Plateau region. This arid shortgrass prairie preserves habitats for a variety of flora and fauna and provides refuge for several animals of concern, such as pronghorn and Gunnison’s prairie dogs.

• Petrified Forest National Park provides unparalleled opportunities for visitors to explore a unique, engaging landscape of badlands, grasslands, and escarpments. These opportunities range from accessible frontcountry to rugged trail-less backcountry.

• Petrified Forest National Park is the first national park to have lands designated as part of the national wilderness preservation system. The clear air and expansive, colorful landscapes create distinctive scenic vistas. The park offers opportunities to experience an unusual variety of resources in an untrammeled setting, as well as exceptional challenge and solitude for visitors.
Fundamental Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance.

- **Paleontological Resources.** Diverse paleontological resources in the Chinle Formation at Petrified Forest National Park include one of the largest and most colorful deposits of mineralized fossil wood in the world, as well as exceptionally well-preserved fossilized ecosystems and some of the oldest dinosaur bones in North America. The clear stratigraphic sequence tells the story of species extinction, evolution, and climate change from 225 to 205 million years ago and leads to discoveries of important new species and new knowledge of Late Triassic environments.

- **Geological Resources.** Petrified Forest National Park contains some of the best exposures of Late Triassic terrestrial rocks and strata in the world. Ancient sedimentary environments are clearly represented in the exposed, extensive Chinle Formation, while modern erosional forces actively shape the rugged badlands topography and sculpt features such as arroyos, plateaus, buttes, hoodoos, and escarpments, as well as overlooks of the Painted Desert.

- **Archeological Resources.** Petrified Forest National Park shows evidence of more than 10,000 years of continuous use and occupation, from Paleo-Indian to modern American Indian cultures. Resources include hunter-gatherer sites and early large pithouse villages, thousands of documented petroglyphs, and one of the most diverse arrays of ceramics in the United States, demonstrating the importance of the area as a crossroads of trade routes and cultural exchange.

- **Research and Museum Collections.** Petrified Forest National Park has been a research environment for more than 100 years and possesses an expansive museum collection and a voluminous bibliography of scientific studies. Numerous holotypes and voucher specimens of fossil plants and animals, and a huge depth of archeological collections, make the museum and archives at the park an invaluable repository. The park’s unique paleontological and archeological settings provide limitless potential for further scientific study and important new discoveries.
Fundamental Resources and Values

- **Wilderness and Scenic Values.** High quality clean air and expansive, colorful landscapes create distinctive vistas at Petrified Forest National Park, such as of the spectacular Painted Desert. Night skies remain largely unpolluted by unnatural light, visibility often exceeds 100 miles, and the natural soundscape retains a high degree of integrity. The park was among the first in the nation to have lands designated as wilderness, and today it protects the wilderness character of more than 50,000 acres for appropriate scenic, recreational, scientific, educational, conservation, and historical uses.

- **Public Enjoyment.** With very few places that visitors cannot go, Petrified Forest National Park provides a range of opportunities to experience the vibrant natural and cultural landscape of the Painted Desert. Driving tours and scenic overlooks, accessible trails, rugged wilderness, and diverse interpretive programs all enhance public enjoyment of the park.

- **Biological Resources.** The park protects the outstanding ecological values of a rare high desert / shortgrass prairie ecosystem, as well as ephemeral water resources and vast badlands, preserving habitat for a variety of flora and fauna and providing refuge for several animal species of concern.

Petrified Forest National Park contains other resources and values that may not be fundamental to the purpose and significance of the park, but are important to consider in management and planning decisions. These are referred to as other important resources and values.

- **Historic Resources.** Many of Petrified Forest National Park’s historic resources exemplify key elements in the story of trade, exploration, and tourism in the southwest, from early expedition routes to the iconic Route 66. The park preserves several historic properties listed in the National Register of Historic Places related to these critical transportation corridors as well as the Painted Desert Inn (a national historic landmark) and other developed areas. The Painted Desert Community Complex (the main park headquarters area) was designed by renowned architect Richard Neutra and developed as part of the NPS Mission 66 building program of the mid-20th century.

- **Nonhistoric Facilities.** The park contains a wide array of nonhistoric facilities and infrastructure (e.g., roads, trails, bridges, utilities, and other structures) that are vital to ongoing park operations. Park managers proactively plan, design, and manage these facilities in a manner that best exemplifies environmental stewardship and promotes cooperative partnerships to achieve operational needs.
Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all of the park significances and fundamental resources and values.

• With one of the largest and most colorful deposits of mineralized fossil wood in the world, as well as a globally significant fossil record of the Late Triassic, the Petrified Forest elicits a sense of wonder and discovery that invites enjoyable learning.

• The richly fossiliferous exposures of the Late Triassic Chinle Formation in Petrified Forest National Park constantly yield new specimens, new data, and new knowledge of the past that continually enriches understanding of the world.

• The tranquil yet evocative scenic vistas of Petrified Forest National Park compel contemplation of the connections between self, place, and time.

• The continuing importance of the park’s heritage resources to associated people—the abundant evidence of use and occupancy in what might seem to some an uninhabited land—offers opportunities to explore the powerful and complex concept of “homeland.” Major tangible elements of this theme are presented below. This list is in order of importance, but is not exhaustive.
  - High concentration of thousands of petroglyphs and dozens of pictographs
  - More than two dozen solar calendars
  - An unusually diverse array of ceramics (type sherd collection, which is a representative collection of artifacts for use in instructing interpreters and in interpretive programs)
  - Well-preserved pithouse villages (with examples of earliest use of pottery)
  - Ranching history
  - The 35th parallel transportation corridor
    - Prehistoric trade routes
    - Beale Camel Trail
    - Overland Stage Route
    - Whipple Expedition Route
    - immigrant routes to California
    - Santa Fe Railroad
    - stagecoach stops
    - Civilian Conservation Corps and Works Progress Administration (New Deal history)
    - Route 66
    - Interstate 40 corridor (interstate highway system history)
  - The landscape of grassland, steppe, and its native inhabitants protected within Petrified Forest National Park invites contemplation of the value of parks as places of refuge, healing, and rejuvenation.