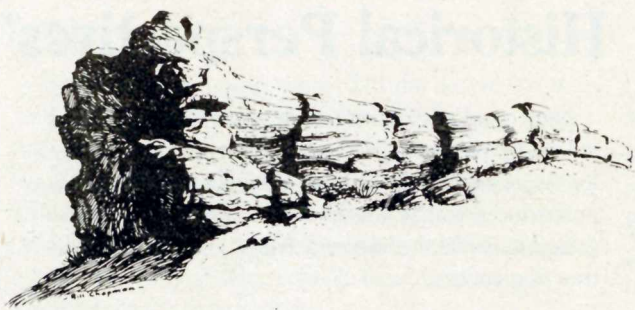




Petrified Forest Press

A Publication of the Petrified Forest Museum Association

Come Explore Petrified Forest National Park

200 million year-old mineralized logs, layered hills of multi-colored sand, bizarrely eroded landscapes and ruins of ancient Indian villages make Petrified Forest National Park a truly unique and memorable place to visit. This publication describes many of the features of Petrified Forest National Park, points of interest and the facilities available so you can plan an interesting and enjoyable trip.

Petrified Forest National Park is a day use park, and as such, there are no regularly scheduled activities or public tours. Sightseeing, photography and backpacking are all done on a self-guided basis.

As you read through this publication and plan your trip you'll probably wonder what the weather will be like. The most consistent characteristic of weather in

northeastern Arizona, and in fact most of the desert southwest, is that it is unpredictable, particularly in the spring and fall. However, you can generally anticipate cold winter days and nights; a cool and windy spring; hot summer days with low humidity and cool nights; cool autumn days with cold nights. Summer thunderstorms bring about 40% of the precipitation the area receives. Rain and snow are sporadic throughout other seasons. Snow usually melts off during the morning hours, but may stay on the ground for several days if there is a cold spell. Despite its unpredictable aspects, most people find the weather in northeastern Arizona marvelous.

As you travel through the park resist the temptation to remove even small pieces of petrified wood or other

items of historical interest such as pottery shards. Taking small pieces home as souvenirs may seem harmless, but multiply that by the thousands who visit the park each year from around the nation and the world and eventually all but the most massive pieces of petrified wood will be removed.

If you would like a piece of petrified wood as a special souvenir of your trip to the petrified forest, specimens are available from commercial sources in and near the park. This petrified wood, usually cut and polished, is from the same geologic formation but is gathered from private land.

A final warning: For your own safety, do not climb on large pieces of petrified wood. They can be very sharp and inflict serious injury.

Park Facilities and Services

At both the north (off I-40) and south (off U.S. 180) entrances to the park are visitor's centers where you can obtain detailed information about the park. The visitor's centers are staffed with trained personnel who can answer any questions you might have.

At the **Painted Desert Visitor's Center** (north end) you can see a film illustrating how the petrified wood in the park became mineralized. **The Painted Desert Inn**, on the edge of the Painted Desert, provides descriptive and interpretive displays of the archeology, paleontology, geology and other aspects of the park.

The Rainbow Forest Museum and Visitor's Center (south end) has exhibits of outstanding petrified wood specimens as well as displays depicting the geologic and human history of the area.

There are several picnic areas in the park but no overnight accommodations or RV facilities. Only wilderness backpack camping is allowed within the park. Accommodations and camping areas within a one hour drive of the park are listed elsewhere in this publication.

Painted Desert Oasis: Restaurant, gift shop, service station. Open daily except Christmas. Hours approximate the park's hours.

Rainbow Forest Lodge: Giftshop, snack bar. Open daily except Christmas. Hours approximate park's hours. (Lodge is a historic name, no lodging is available.)

Restrooms: (H) — Handicapped access with assistance; (S) — Seasonally open, inquire at entrance station October - April.

Painted Desert Visitor's Center (H), Painted Desert Oasis, Painted Desert Inn (H) (S), Chinde Point Picnic Area (S), Puerco Ruins (H) (S), Agate Bridge (S), Rainbow Forest Museum, Rainbow Forest Lodge (H)

Picnic Areas: Chinde Point — Open all year, sheltered tables, restrooms closed in winter; Rainbow Forest — Open all year, sheltered tables, water in museum or lodge, restrooms in museum.

Fees

\$1.00 entrance fee (Golden Age, Golden Eagle and Golden Access passes accepted)

Hours of Operation*

Petrified Forest National Park

October 1, 1983 - April 1, 1984	8 am - 5 pm
April 1 - May 31, 1984	7 am - 6 pm
June 1 - September 4, 1984	6 am - 7 pm
September 4 - 30, 1984	7 am - 6 pm
October, 1984 - April 1985	8 am - 5 pm

Painted Desert Visitor's Center (North end of Park off I-40)

October 1, 1983 - April 1, 1984	8 am - 5 pm
April 1 - May 31, 1984	7 am - 6 pm
June 1 - September 4, 1984	6 am - 7 pm
September 4 - 30, 1984	7 am - 6 pm
October 1, 1984 - April 1985	8 am - 5 pm

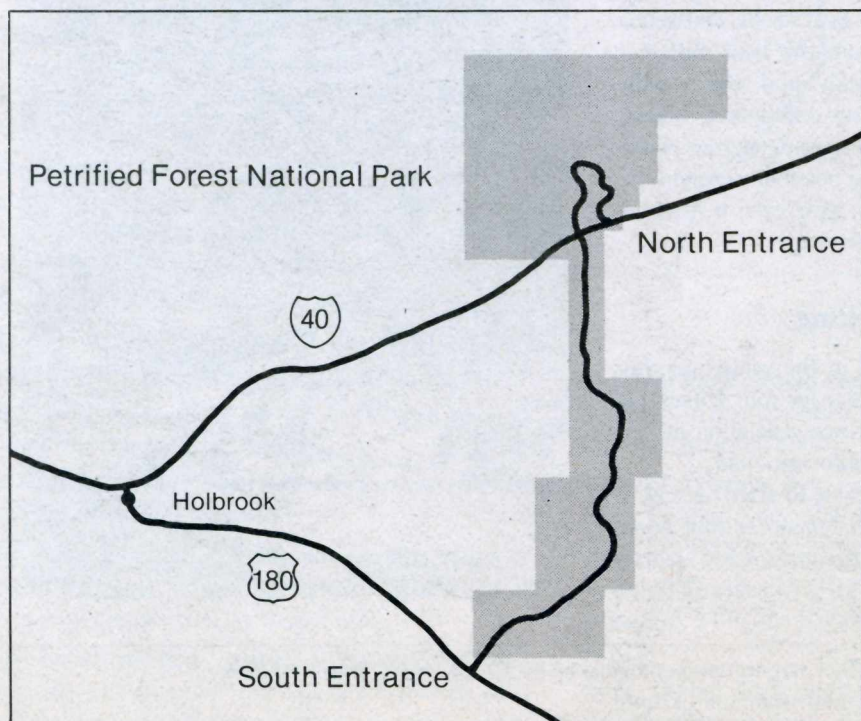
Painted Desert Inn (at Kachina Point)

June, July, August 1984	8 am - 5 pm
Occasionally operates on extended hours, check to verify upon arrival	

Rainbow Forest Museum (South end of Park off U.S. 180)

October 1, 1983 - May 31, 1984	8 am - 5 pm
June 1 - September 4, 1984	7 am - 7 pm
September 4 - April 1985	8 am - 5 pm

*Note: With the exception of the Navajo Indian Reservation, Arizona remains on Mountain Standard Time all year long.



Historical Perspectives

Geology

Since nobody knows precisely what happened 200 million years ago, geologists must speculate based on clues they discover such as fossils of extinct plants and animals.

Scientific evidence indicates that the area which is now the Petrified Forest National Park was once a low-lying swampland with ponds, bogs and marshes that were traversed by rivers and streams that floated in fallen trees from surrounding ancient mountains. Because the trees washed from great distances, most were stripped of branches and limbs and much of their bark.

These logs piled in log jams and became mired in the mud of the swamps. Eventually, the logs were covered by sand and silt and were buried for millions of years. Normally the logs would decompose, however several complex conditions, which occur only in the rarest of circumstances, prevented this and the logs mineralized.



Later geologic activity such as earthquakes, and volcanoes pushed up the soft sediments in which the logs were imbedded. The soft, clay-like beds, when exposed to erosional forces of wind and water disintegrated to reveal the harder petrified logs and petrified tree fragments.

Archeology

In the scope of geologic time the presence of humans in this area is a split second. The earliest verifiable occupation occurred between 300 and 600 AD. These people lived in the Flattops area and made simple stone tools and crafted plain pottery vessels. They hunted the animals in the area, gathered wild food and lived in dwellings called 'pit houses', shallow dug-out structures lined with stone and covered with branches and brush.

Their culture advanced as is indicated by slightly more sophisticated pit houses with grain storage areas in the Twin Buttes area. The Twin Buttes people made

a wider variety of stone tools, and began to decorate some of their pottery. Shell jewelry indicates trading had been established with residents of other areas.

As the culture advanced, larger permanent communities were established such as the one at Puerco Ruin. This village was built by people of one of the most advanced cultural groups in the southwest, the Anasazi.

The Anasazi built large permanent dwellings of stone and mud masonry with storage and ceremonial chambers. They used special agricultural techniques such as terracing and irrigation to make the most efficient use of the scant water supply. Their tools and pottery reflected a more complex culture as did evidence of complex ceremonial activity.

The Anasazi culture was at its peak between approximately 1100 AD and 1400 AD. Then, it is speculated, changing weather patterns and perhaps over-use of the fragile land forced the Anasazi to abandon their villages and farmland. Where the Anasazi went is the great mystery of Southwestern archeology.

Legacy of Destruction and Preservation

Although Spanish explorers of the 1500's mentioned the Painted Desert, it was not until the middle of the 19th century that petrified wood was recognized or described. Once documented, word of the Petrified Forest spread quickly.

When the railroad arrived in the area, the Petrified Forest became a major attraction. Petrified wood was carried off in great quantities, including one large log that was shipped to the National Museum in Washington, D.C. (where it remains today).

People began to dynamite the logs in search of amethyst and other crystals they occasionally contained. Alarmed by the rapid and thoughtless destruction of so rare and remarkable a natural resource, the citizens of the territory of Arizona petitioned the government for protection of the Petrified Forest in the 1890's.

In December of 1906 President Theodore Roosevelt set aside the Petrified Forest as the nation's second national monument. Over the years the monument was increased to its present size and in 1962 was designated a national park.

Day Hiking and Wilderness Backpacking

Backpacking and day hiking are permitted in the Petrified Forest National Park. In fact the best way to truly enjoy the wonder and solitude of the park is to depart from one of the trail heads and explore the wilderness on your own. Day hiking requires no permit if you exit the park before closing. However if you plan to camp in the wilderness a free permit must be obtained one hour before park closing at either visitor's center or entrance stations. Backpackers must depart at either Kachina Point or Flattops trailheads. There are no established or marked trails in the wilderness areas.

Onyx Bridge and the Black Forest are favorite destinations of backpackers in the Painted Desert portion of the park and Puerco ridge is good hiking in the southern part of the park.

Preparing for a Safe Trip

If you plan on backpacking, *be sure to bring plenty of water* — at least one gallon (3.8 liters) per person per day. Start your return trip *before* half your water is gone.

Desert hiking can be most enjoyable in the spring

and fall but be prepared for the sudden weather changes. Even if the weather is warm and pleasant when you start out, bring warm clothing and protective gear in case of sudden storms.

If you're hiking in the summer months, rest frequently, watch for symptoms of heat stroke, and wear a hat to protect your head from the heat. Summer thunder showers build quickly and roll rapidly through the desert, drenching unprepared hikers. Such a soaking makes hypothermia (dangerous lowering of body temperature) a real possibility even in the middle of summer. Bring rain gear even if it seems totally unlikely that you will use it.

Horsepacking

Horsepacking is permitted in the wilderness, but you must provide feed and water for your horses. Do not let them graze on the scarce vegetation as it is damaging to the fragile desert environment.

Pressed pellet feed is preferable to grain because it provides more complete nourishment for your horse and does not compete with native grasses and plants if spilled.



Warning: Federal law prohibits removal of petrified wood or any other natural, archeological or historical objects from the park. Violators are subject to fine, imprisonment of both.

A Look at Desert Life

While the high grassland desert (elevation, 5400 feet, 1650 meters) of the Petrified Forest National Park may appear barren, desolate and devoid of life, quite the opposite is true. It is filled with many species of plants, animals, and insects — all specially adapted to the desert climate.

Despite its rugged appearance, the desert is really quite fragile. Grasses and plants have specialized root systems or leaves to utilize the tiny amounts of moisture available. They take many years to develop to maturity because of long period of drought-induced dormancy.

The animals too have adapted to the desert. Frost and dew are sometimes the only source of moisture so many animals depend on the fluids stored in plants such as cactus. Perhaps the most remarkable example of desert adaptation is the Kangaroo Rat, an animal which, through a complex metabolism and super-efficient urinary system, actually manufactures water from totally dry food sources.

The plants and animals are as much a part of the Petrified Forest National Park as any of the scenic wonders, however it takes more time and patience to observe and enjoy wonder on that scale.



Area Services and Transportation

Outside the south entrance to the park is a gift/rock shop, service station and food services. Cutting and polishing of petrified wood can be seen at the rock shop.

Holbrook, Arizona: Motels, restaurants, camping, groceries, service stations. Contact Chamber of Commerce (86025) for additional information.

Navajo, Arizona: Motel, restaurant, camping

Chambers, Arizona: Motel, restaurant

Commercial Airlines: Phoenix, Arizona (200 miles, 320 kilometers southwest); Albuquerque, New Mexico (220 miles, 352 kilometers east); Flagstaff, Arizona (120 miles, 192 kilometers west)

Rental Cars: Cars available at airports listed above and the following independent dealers: Tate Ford, Holbrook (602) 524-6268; Heward Motors, Holbrook (602) 524-2266

Train: Amtrak serves Winslow, Arizona or Gallup, New Mexico

Commercial Bus Service: Greyhound and Continental Trailways buslines serve Holbrook on a daily basis; there is no public bus transportation to the park.

Commercial Park Tours: The only tour is conducted by Mr. Roy Baker, 503 W. Arizona, Holbrook, Arizona (602) 524-6535. Tours are at 8 am and 12 noon daily.

Surrounding Attractions in Northeastern Arizona

(A) Canyon de Chelly National Monument — Deep canyons shelter prehistoric pueblo Indian ruins. Also one of the last strongholds of the Navajos against the U.S. cavalry. Camping, hiking, tours. Contact: Superintendent, Canyon de Chelly National Monument, Box 588, Chinle, Arizona, 86503.

(B) Hubbell Trading Post National Historic Site — Active, authentic trading post. Tours of homes, demonstrations of Navajo crafts. Contact: Superintendent, Hubbell Trading Post National Historic Site, Box 150, Ganado, Arizona, 86505.

(C) El Morro National Monument — Inscription Rock, hundreds of inscriptions including flowing script of 17th century Spanish explorers etched in stone. Camping, self-guiding trails. Contact: Superintendent, El Morro National Monument, Ramah, New Mexico, 87321.

(D) Walnut Canyon National Monument — Cliff dwellings built in shallow caves about 800 years ago. Self-guiding trails and museum. Contact: Superintendent, Walnut Canyon National Monument, Route 1, Box 25, Flagstaff, Arizona, 86001.

(E) Sunset Crater National Monument — A volcanic cinder cone formed around 1100 AD. Contact: Superintendent, Sunset Crater National Monument, Route 3, Box 149, Flagstaff, Arizona 86001.

(F) Wupatki National Monument — Ruins of red sandstone pueblos built around 1065 AD. Contact: Superintendent, Wupatki National Monument, Tuba Star Route, Flagstaff, Arizona 86001.

(G) Lyman Lake State Park — Fishing, camping

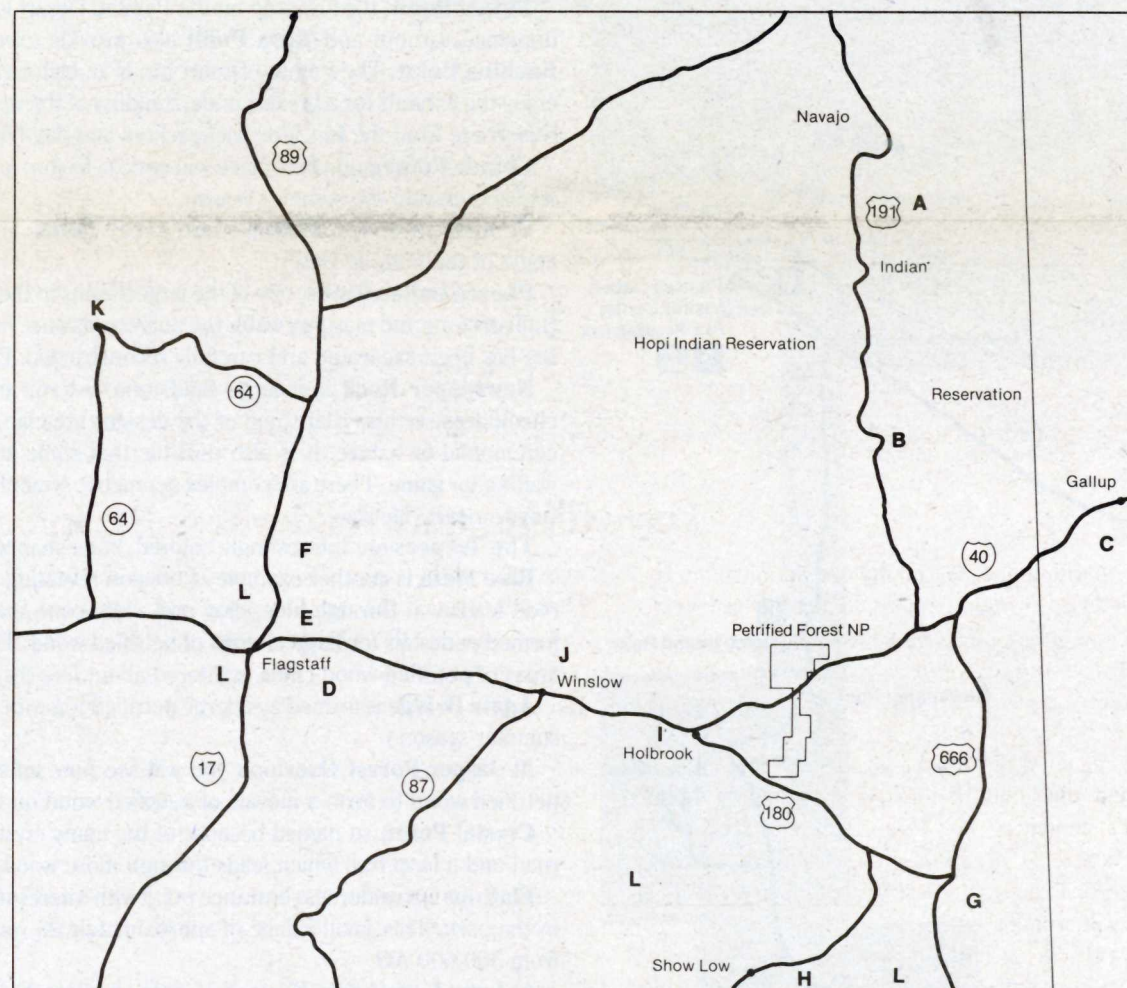
(H) Show Low Lake County Park — Camping, hiking, boating, fishing

(I) Cholla Lake County Park — Fishing, boating, camping, picnicking, swimming

(J) Little Painted Desert County Park — picnicking, hiking

(K) Grand Canyon National Park: Contact: Superintendent, Grand Canyon National Park, Grand Canyon National Park, Arizona 86023.

(L) Coconino and Apache/Sitgreaves National Forests — Office of Information, 517 Gold Ave. SW, Albuquerque, New Mexico 87102.



Sources of Information

National Park system areas in Southern Arizona: Southern Arizona Office, 1115 North 1st Street, Phoenix, Arizona, 85004.

State of Arizona: Arizona Office of Tourism, 3507 North Central, Suite 506, Phoenix, Arizona, 85012, (602) 255-3618.

National Forests: USDA Forest Service, Office of Information, 517 Gold SW, Albuquerque, New Mexico 87102

Hopi Indian Reservation: Hopi Tribal Council, Kykotosomovi, Arizona, 86039.

Navajo Indian Reservation: Navajo Tribal Office, Window Rock, Arizona, 86515.

Chambers of Commerce: (Accommodations, food, recreation, camping, etc.)

Holbrook-Petrified Forest: 324 Navajo Blvd., Holbrook, Arizona, 86025.

Winslow: 501 West Third, Winslow, Arizona, 86047

Flagstaff: 101 West Santa Fe, Flagstaff, Arizona 86001

Show Low Arizona: Show Low, Arizona 85901.

Gallup: 103 West 66 Ave., Gallup, New Mexico, 86309.

A Park With Three Parts

Encompassing 147 square miles (381 kilometers) the Petrified Forest National Park can be considered to have three areas of interest that roughly correspond to the north, central and southern geographic areas of the park. In the northern portion of the park, the most prominent attraction is the Painted Desert; fascinating archeological sites are found in the central area of the park; and, in the southern end of the park, is the largest concentration of petrified wood.

A 27-mile (48.2 kilometer) drive with numerous turnouts and observation points and links the portions of the park.

The Painted Desert

The largest part of the park, north of Interstate-40 has a 6-mile (9.6 kilometer) scenic loop drive through the colored hills of the Painted Desert.

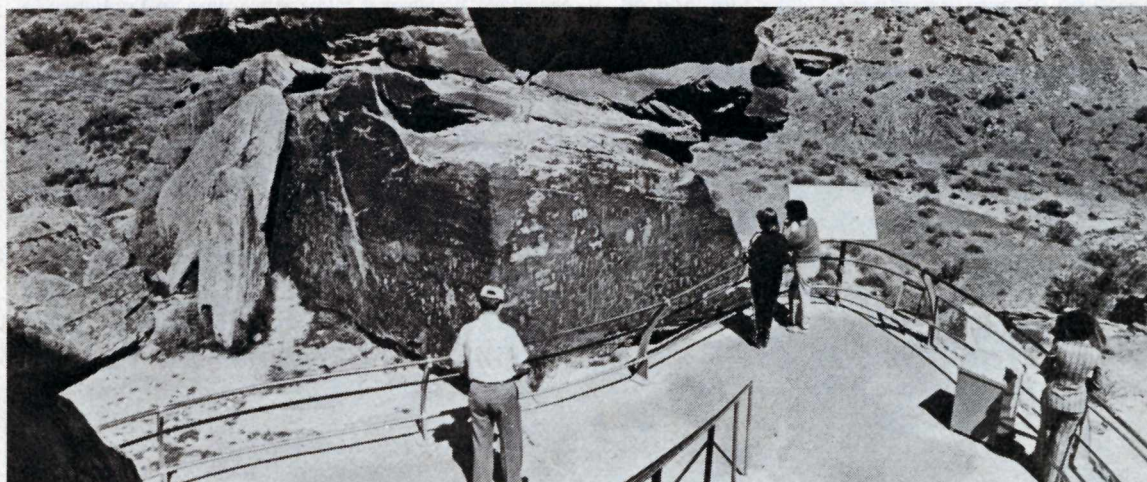
The best time to view the Painted Desert (and photograph it) is in the early morning or late afternoon. At this time, while the sun is rising or setting, the colors appear most vivid. Colors are less intense during mid-day. If you are fortunate enough to visit the park after a rain storm, you will see the colors at the peak of their intensity.

Archeological Sites

The majority of the archeological sites are located in the central portion of the park. Here you will find Indian ruins dating from approximately 300 AD to 1400 AD that reflect the progression of a culture from semi-nomadic hunters to sedentary farmers with advanced agricultural skills and a complex ceremonial society. In association with these archeological sites are rocks on which the Indians carved symbols and figures.

Petrified Wood Sites

While petrified wood can be found scattered throughout the entire park and beyond, the largest and finest specimens are found in the southern portion of the park. Here you will see not only petrified wood fragments, but also large petrified logs. In addition there are other interesting geologic formations in the area.



A Trip Through Petrified Forest National Park

This summary guide is listed for entrance at the north end of the park. If you enter from the south (off U.S. 180) read from the end to the beginning of the guide.

Tiponi Point, the first stop on the Painted Desert loop is considered a real preview of the Painted Desert. An unnamed turnout and **Tawa Point** also provide excellent views before you reach the Painted Desert Inn at **Kachina Point**. The Painted Desert Inn is an historical building and no lodging is available. However, stop and enjoy the exhibits for a greater understanding of the park's scenic wonders. Some of the best views of the Painted Desert are from the Inn. For backpackers and day hikers, wilderness access is near the Inn.

Chinde Point might be a place you choose to stop for a picnic. There are sheltered tables, water and restrooms available during the summer season.

Pentado, Nizhoni, Whipple and Lacey Points are all observation areas, each provides a unique view and angle of the Painted Desert.

Puerco Indian Ruins, one of the largest ruins in the park, was occupied from approximately 1000 to 1300 AD. Built of stone and masonry walls, the pueblo was once home to a peak population of about 75 people. The ruin you see has been excavated and carefully reconstructed. Please stay off the walls to insure its preservation.

Newspaper Rock is a large sandstone outcrop etched with symbols and figures called petroglyphs. Archeologists surmise that some of the designs are clan symbols, others hunting symbols and some perhaps are ceremonial in nature. It is also possible that some are simply 'doodles' etched by Indians passing time while waiting for game. There are complex geometric symbols as well as animal and human figures in various sizes from tiny to nearly life-size.

The Teepees are interestingly colored, cone-shaped hills.

Blue Mesa is another example of erosion revealing long-buried petrified wood. A 3-mile (4.8 kilometer) loop road leads you through blue, gray and white cone-shaped hills. Many of the hills, wrinkled with erosion, have formed pedestals for large chunks of petrified wood. The 3/4-mile (1.2 kilometer) Blue Mesa trail winds through areas of petrified wood chips, scattered about like the remains of an ancient woodpile.

Agate Bridge is formed by a large petrified log with both ends imbedded in a ravine. (Restrooms open during summer season.)

At **Jasper Forest Overlook** you will see how softer clay-like soils erode away around the harder pieces of petrified wood to form a mosaic of petrified wood on the desert floor and hills.

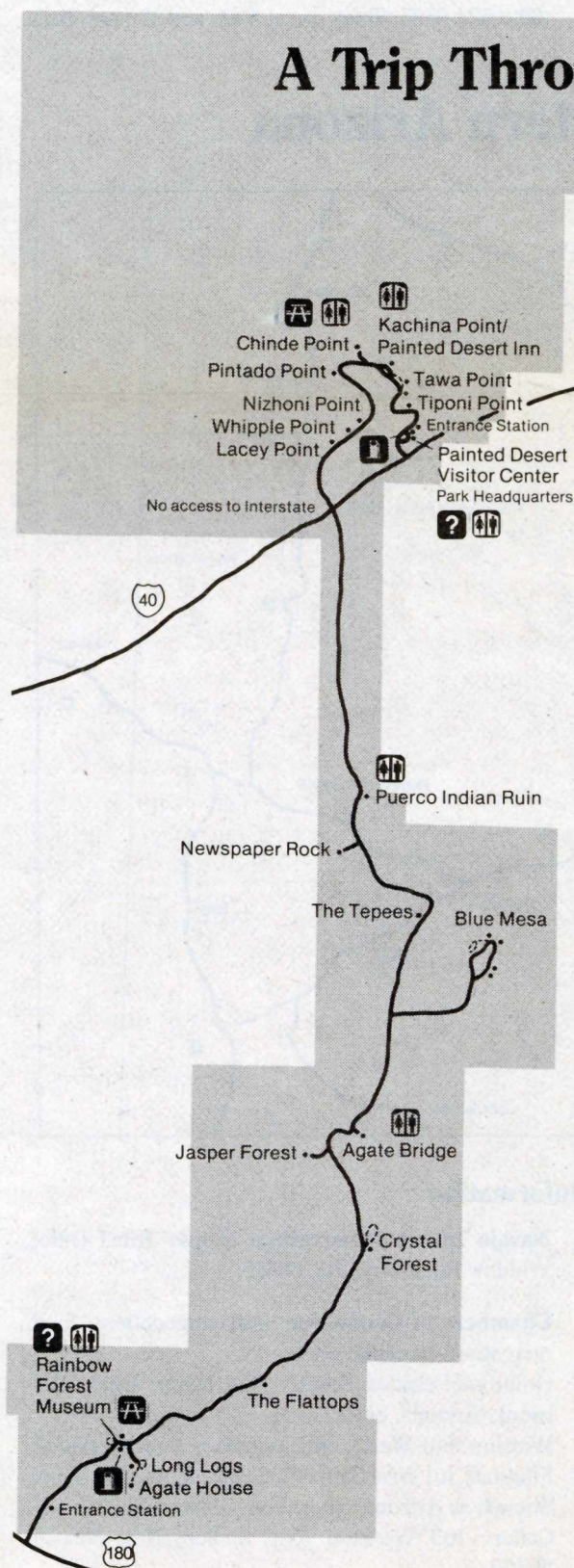
Crystal Point, so named because of the many crystals once found there, has petrified wood visible from the road and a loop trail which leads through more wood.

Flattops is a wilderness entrance point with interesting geologic formations, petrified wood and the oldest ruins in the park. This small village of approximately 25 round and oval-shaped 'pit houses' were probably occupied from 300-600 AD.

At **Long Logs/Agate House** a 1/2 mile (.8 kilometer) loop trail leads to some of the longest (up to 170 feet, 30 meters) petrified logs in the park. A side trail, 1/4-mile (.4 kilometer) one way, leads to Agate house, a small 7 room structure that dates from 1150 AD.

When exiting the park, the **Rainbow Forest Museum** will probably be your last stop (or first stop if entering from the south). The exhibits will provide extensive information about the geology and archeology of the area.

You can also examine the giant petrified log 'Old Faithful', one of the finest (and most photographed) specimens of petrified wood in the park.



Petrified Forest Press is published by the Petrified Forest Museum Association, a non-profit, non-government organization established to assist in the interpretive programs at Petrified Forest National Park. Proceeds from sales of publications and color slides are used to support research and educational activities, to purchase special equipment and in many other ways to compliment the services of the National Park Service. Please address comments to: Petrified Forest Museum Association, Box 277, Petrified Forest National Park, Arizona 86028. Editors: Terry Maze, Virginia Snyder



Park Administration: The National Park Service, U.S. Department of the Interior administers the park. For further information contact the Superintendent, Petrified Forest National Park, Petrified Forest National Park, Arizona 86028, (602) 524-6228