## NATIONAL MONUMENT

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Adamana Arizona

## THE PETRIFIED FOREST NATIONAL MONUMENT ARIZONA

The deposits called the Petrified Forests of Arizona extend over an area of more than 100 square miles and present great variety both in structure of the log-bearing strata and in characteristics of the petrified wood.

The Arizona fossil forest surpasses in extent, in number of petrified trunks, in richness of coloring and in profusion of variegated chips any other deposits of this kind in the world. The rainbow hues seen in the cross sections of logs and in the fragments that glisten in the sun are responsible for the name by which this tract is best known, the Rainbow Forest.

The reservation contains three principal districts, called the First, Second, and Third Forests. Geologically they belong to the same layer, but erosion has produced different results in the three areas; also does the color and texture of the wood vary considerably, so that a visit to each place is well worth while.

THE FIRST FOREST

ST the smallest of the three, contains sections and fragments of logs that were once bedded in the upper layers of clay and sandstone which have now crumbled away with the exception of

some knolls and spurs. Enough of the sandstone capping remains to indicate the continuity of the original mesa in which the logs were entombed. In this cap rock can be seen many remnants of logs still firmly held in place, awaiting the erosion of coming milleniums, while their ends, divided in many sections, adorn the furrowed slopes below. The fantastically carved escarpments, with banded colors, form a picturesque setting for this deposit.

The Natural Bridge is found about one-half mile to the east. It is a log about 100 feet long, originally incased entirely in sandstone. The crumbling of this stone has exposed the largest part of the trunk and, beginning with a small channel under the central portion, has carved an arroyo under the log, so that the latter now forms a bridge of about 50-foot span.

## THE SECOND FOREST

lies about 2 miles south and a little to the east of the first one. In visiting it one makes a side trip from the main road. This district contains, in addition to the chips and scat-

tered sections that are everywhere abundant, some rather well-preserved logs, a few of which are not entirely uncovered. The striking feature here is a number of logs of yellowish gray color and dull texture, quite a contrast to the more flinty and brightly colored specimens that prevail in the First Forest. This gray petrification shows under the microscope the minutest details of the original wood, and the grain can be readily recognized, even with the naked eye. In fact, it often looks remarkably like ordinary dry wood, and even at a short distance the appearance is deceptive.

## THE THIRD FOREST

HIRD both in size, number of logs, and brilliancy of coloring. Here are found hundreds of logs in a good state of preservation

The west portion of the Third Forest is the place which was directly responsible for the name Rainbow Forest. Here the colors of the wood reach their greatest intensity. The cap rock was partly worn away in the early stages or erosion and many deep ravines trenched through this bed of logs, after which the destructive agencies of weather through many thousands of years have reduced these trees to piles of fragments. The ground in every direction is literally paved with chips of agate, onyx, carnelian and jasper.

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THE SNOW LADY IN FIRST FOREST



EAGLE ROCK IN FIRST FOREST



TWIN SISTERS IN SECOND FOREST



PETRIFIED TREE IN SECOND FOREST



PETRIFIED WOOD IN SECOND FOREST



PETRIFIED WOOD IN RAINBOW FOREST



PETRIFIED LOGS IN RAINBOW FOREST



PETRIFIED LOG IN RAINBOW FOREST



PETRIFIED LOGS IN RAINBOW FOREST



MAJOR DOMO IN RAINBOW FOREST



THE SPHINX



THE PAINTED DESERT