

UNITED STATES
DEPARTMENT OF THE INTERIOR
Harold L. Ickes, Secretary
NATIONAL PARK SERVICE
Arno B. Cammerer, Director

FACTS ABOUT GRAND CANYON

GRAND CANYON NATIONAL PARK

The Grand Canyon National Park was established by act of Congress, approved February 26, 1919. It has an area of 1,009 square miles, is 56 miles long, and contains 105 miles of the Colorado River.

THE CANYON

The Canyon is 217 miles long, measured by river course, width from 4 to 18 miles, all in the State of Arizona. It is 10 miles wide at Yavapai Station. The Canyon bottom below Yavapai point is 2,500 feet above sea level, about 4,500 feet below the South Rim and 5,700 feet below the North Rim, making an average depth of about one mile.

Six of the seven climatic belts recognized throughout the world are represented in the Grand Canyon region. They vary from that of desert Mexico at the Canyon bottom to the Arctic-Alpine type of the San Francisco Peaks.

The Canyon was formed by the river cutting down as the land moved upward with the accompanying widening of the Canyon due to the breaking down of the rock walls.

The rock layers in the Canyon walls are remnants of ancient mountains, sea bottoms, river beds and deserts, millions of years old. Fossils in the rocks of the Canyon walls show stages in the development of ancient life from primitive one-celled plants to large lizard-like animals.

THE COLORADO RIVER

This is the second longest river in the United States (about 2,000 miles) and it cuts 19 major canyons along its course. At the gauging station in Grand Canyon the river averages about 300 feet in width, varies from 12 to 42 feet in depth, and flows at a speed of between $2\frac{1}{2}$ and 20 miles an hour. It carries past this station an average of nearly one million tons of sand and silt every twenty-four hours. The river empties into the Gulf of California in Mexico.

The Boulder Dam is 260 miles down stream from the Kaibab Suspension Bridge. The water will not back up into this part of the Canyon. Under the present conditions it is estimated that the reservoir will fill up with silt in from 125 to 200 years.

WILDLIFE IN GRAND CANYON

Animal life in the Canyon includes about 180 species of birds, 60 species of mammals, 25 reptiles, and 5 amphibians. During the growing season both rims and canyon slopes are covered with a great variety of wild flowers.

ANCIENT INDIANS IN GRAND CANYON

About 300 ruins of ancient Indian pueblos have been found on the Canyon rims. Cliff dwellings made by the Indians are found along the lower walls of the Canyon in many places. Especially noteworthy are those along Clear Creek.

INDIANS OF TODAY IN GRAND CANYON

There are four Indian nations living in the Grand Canyon region today. The Navajo, a pastoral people, numbering about 48,000, live in the largest Indian reservation in the United States, just east of Grand Canyon. The Hopi, a pueblo farming people, numbering 2,500, live on three mesas north of the Painted Desert. The

Havasupai, an agricultural people, numbering about 200, live within the park boundaries in Havasu Canyon, west of the Grand Canyon Village. The Paiutes are found to the north.

SCHEDULE OF NATURALIST SERVICES

(Offered by National Park Service without charge.)

I. SOUTH RIM, GRAND CANYON

- Yavapai Observation Station: The story of Grand Canyon told with telescopes and exhibits. Open daily throughout the year. Located on Yavapai Point, 1½ miles east of Grand Canyon Village.
- Wayside Museum of Archeology: The story of early man in the Southwest and his place in earth history told with exhibits. Excavated pueblo ruin nearby. Open daily during summer season. Located 20 miles east of village on Desert View Drive.
- Reference Library: Small collection of books on Grand Canyon region at park administration building. Available for use of visitors upon application to ranger on duty.
- Auto Caravan: Conducted trip along Desert View Drive in which visitors travel in own cars. Daily throughout summer season. Distance 26 miles, one way. Starts 8:30 a.m., in front of public grounds.
- Camp Fire Talk: Subjects include canyon origin, its fossils, animals, Indians, etc., every evening during summer season - see daily schedule on bulletin boards. Starts at 8:30 p.m., at camp fire site in public camp grounds.

II. NORTH RIM, GRAND CANYON

- Museum Exhibit Room: General exhibits illustrating geological and biological features of region. Located in a cabin of Utah Parks Company. Open daily throughout summer season.
- Auto Caravan: Conducted trip along Cape Royal Drive in which visitors travel by company bus or in own cars. Daily throughout summer season. Round trip distance 52 miles. Starts 1:30 p.m., at public camp grounds.
- Nature Walk: Guided walking trip to end of Bright Angel Point. Geological and biological features explained. Every morning throughout summer season. Starts at Grand Canyon Lodge at 9:30 a.m.
- Camp Fire Talk: Subjects include origin, fossils, animals, Indians, etc., of Grand Canyon. Every evening during summer season. 8:30 p.m., at camp fire site in public camp grounds.

AVAILABLE LITERATURE ON NATURAL HISTORY OF GRAND CANYON

(The publications listed below may be purchased through the Grand Canyon Natural History Association at any of the National Park museums or information offices.)

GENERAL

Grand Canyon Country. By Tillotson, M.R., and Taylor, F.J.....	\$1.00
Grand Canyon Nature Notes - a monthly publication covering recent natural history observations and studies in the area -- Per copy.....	.10
Per year.....	1.00

BIOLOGY

Mammals of the Grand Canyon. By Bailey, Vernon..... \$0.30

INDIANS

Aboriginal man in Arizona and his forerunners. By Gladwin, H. S..... .10

GEOLOGY

Guide to Yavapai Station views and exhibits. By Grand Canyon Committee,
National Academy of Sciences, and Carnegie Institution..... .10
Ancient landscapes of the Grand Canyon region. By McKee, Edwin D..... .50

ROAD AND TRAIL GUIDES

Kaibab Trail, South Rim to river..... No Charge
Desert View Drive, South Rim..... No Charge

IMPORTANT REFERENCE BOOKS

(These and others are to be found in the Park Reference Library where they are available for use.)

HISTORY OF REGION

Dellenbaugh, F. S. The Romance of the Colorado River. G. P. Putnam's Sons. 1909.

SOUTHWESTERN ARCHEOLOGY

Kidder, A. V. An Introduction to the Study of Southwestern Archeology. Yale Univ. Press. 1924.

INDIANS OF REGION

Coolidge, Dane, and M. R. The Navajo Indians. Houghton Mifflin Co. 1930.
Hewitt, E. L. Ancient Life in the American Southwest. Bobbs Merrill Co. 1930.
Spier, Leslie. Havasupai Ethnography. Amer. Mus. Natl. Hist., vol. 29, Part 3. 1928.

BIRDS

Bailey, F. M. Birds of New Mexico.

MAMMALS

Anthony, H. E. Field Book of North American Mammals. G. P. Putnam's Sons. 1928.

BOTANY

Armstrong, Margaret. Western Wild Flowers. G. P. Putnam's Sons. 1915.
Clements, F. E., and E. S. Rocky Mountain Flowers. H. W. Wilson Co. 1920.

GEOLOGY

Dutton, C. E. Tertiary History of the Grand Canyon District with Atlas. U. S. Geol. Sur. Mon. 1882.
Noble, L. F. The Shinumo Quadrangle. U. S. Geol. Sur. Bul. 549. 1914.