

Beginning at a point which is the Northeast corner of Township 30 North, Range 1 East of the Gila and Salt River Meridian; thence, West on township line to section corner common to Sections 1 and 2, T. 30N., R. 1 E. and Sections 35 and 36, T.31N., R.1 E.; thence, North on section lines to the 1/4 corner common to Sections 25 and 26, R.31N., R.1E.; thence, N.51°50'W., 26.38 feet to the 0 Mile Monument, identified by a mound of stones, iron pipe with brass cap, said monument lying on the Southwest side of the Tobocobya Spring-Rowe Well Road; thence, N.51°50'W., 6.5 miles to the 6-1/2 Mile monument (every 1/2 mile is monumented); thence, N.51°50'W., 1,192.62 feet to the 6M+58.07 ch monument; thence, N.64°26'W., 1,447.48 feet to the 7 Mile Monument; thence, N.64°26'W., 1,924.56 feet to the 7M+29.16 ch monument; thence, S.62°41'W., 351.78 feet to the 7M+34.49 ch monument; thence, N.51°09'W., 363.66 feet to the 7-1/2 Mile Monument; thence, N.51°09'W., 2,640.00 feet to the 8 Mile monument; thence, N.51°09'W., 1,463.88 feet to the 8M+22.18 ch monument; thence S.67°38'W., 265.32 feet to the 8M+26.20 ch monument; thence, S.67°35'W., 622.38 feet to 8M+35.63 ch monument; thence, S.78°30'W., 288.42 feet to the 8-1/2 Mile Monument; thence, S.78°30'W., 512.76 feet to the 8M+47.76 ch monument; thence, S.64°34'W., 872.52 feet to the 8M+60.98 ch monument; thence, N.45°10'W., 1,255.32 feet to the 9 Mile Monument; thence, N.45°10'W., 670.56 feet to the 9M+10.16 ch monument; thence, N.82°30'W., 419.76 feet to the 9M+16.52 ch monument; thence, S.89°59'W., 888.36 feet to the 9M+29.98 ch monument; thence, N.32°54'W., 658.68 feet to the 9M+39.96 ch monument; thence, N.14°28'W., 2.64 feet to the 9-1/2 Mile monument; thence, N.14°28'W., 1,038.84 feet to the 9M+55.74 ch monument; thence, N.63°50'W., 1,272.48 feet to the 9M+75.02 ch monument; thence, S.85°20'N., 328.68 feet to the 10 Mile monument; thence, S.85°20'W., 1,009.14 feet to the 10M+15.29 ch monument; thence, S.77°54'W., 1,620.30 feet to the 10M+43.84 ch monument; thence, N.45°41'W., 10.56 feet to the 10-1/2 Mile monument; thence, N.45°41'W., 2,325.18 feet to the 10M+75.23 ch monument; thence, N.0°34'W., 314.82 feet to the 11 Mile monument; thence, N.0°34'W., 931.92 feet to the 11M+14.12 ch monument; thence, N.32°50'W., 1,591.92 feet to the 11M+38.24 ch monument; thence, N.68°08'W., 116.16 feet to the 11-1/2 Mile monument; thence, N.68°08'W., 1,388.64 feet to the 11M+61.04 ch monument; thence, N.45°10'W., 1,251.36 feet to the 12 Mile Monument; thence, N.45°10'W., 266.64 feet to the 12M+4.04 ch monument; thence, N.55°27'W., 1,085.70 feet to the 12M+20.49 ch monument; thence, N.58°32'W., 331.32 feet to the 12M+45.02 ch monument; thence, N.45°18'W., 1,204.50 feet to the 12M+63.27 ch monument; thence, N.54°57'W., 1,104.18 feet to the 13 Mile monument; thence, N.54°57'W., 206.58 feet to the 13M+3.13 ch monument; thence, S50°03'W., 1,686.96 feet to the 13M+28.69 ch monument; thence, N.90°00'W., 1,114.08 feet to the 13M+56.88 ch monument; thence, S.82°30'W., 1,339.14 feet to the 13M+77.17 ch monument; thence, N.79°21'W., 186.78 feet to the 14 Mile monument; thence, N.79°21'W., 1,038.84 feet to the 14M+15.74 ch monument; thence, S.78°02'W., 1,496.16 feet to a point on an Indian Service Drift Fence, said point being N.78°02'E., 105 feet from the 14-1/2 Mile monument; thence, North along said Indian Service Drift Fence to a point 1/4 mile from the rim of Grand Canyon; thence, Westerly along a line 1/4 mile from the rim of Grand Canyon, around the Great Thumb Mesa to Ukwalla Point on Coconino Plateau; thence, Westerly along the hydrographic divide between Havasu Creek and an intermittent stream to the North to the base of Beaver Falls on said Havasu Creek; thence Northerly along said Havasu Creek to the Westerly hydrographic

divide between Havasu Canyon and Beaver Canyon; thence, Southwesterly along said hydrographic divide between Havasu Canyon and Beaver Canyon, crossing Yumtheska Mesa to Yumtheska Point on Coconino Plateau; thence, Southwesterly along a line 1/4 mile from the rim of Grand Canyon to the intersection with the East boundary line of the Hualapai Indian Reservation in Section 13, T.32N., R.6W.; thence, North along said boundary line of the Hualapai Indian Reservation to the intersection with the high water line on the South bank of the Colorado River, river mile 164.8; thence, Southwesterly along said high water line on the South bank of the Colorado River passing National Canyon, Mohawk Canyon, and Hells Hollow to the East boundary line of Lake Mead National Recreation Area; thence, continuing along said high water line on the South bank of the Colorado River passing Granite Park Canyon, Diamond Creek, Separation Canyon, Spencer Canyon, Clay Tank Canyon, and Quartermaster Canyon to the intersection with the West boundary line of said Hualapai Indian Reservation, South of river mile 273.1; thence, South along said West boundary line of the Hualapai Indian Reservation to the intersection with the boundary line of Lake Mead National Recreation Area in Section 21, T.30N., R.15W.; thence, Northwesterly along the former boundary line of Lake Mead National Recreation Area to section corner when surveyed common to Sections 2 and 3, T.30N., R.16W. and Sections 34 and 35, T.31N., R.16W.; thence, North along section lines when surveyed to the high water line of Lake Mead (1,221 foot contour); thence, Easterly along said high water line of Lake Mead to a point South of river mile 277.0 of the Colorado River; thence, North to the South line of the North tier or forties when surveyed of Section 30, T.32N., R.15W.; thence, East along the South lines of the North tier of forties when surveyed to the West line of Section 30, T.32N., R.14W.; thence, Easterly keeping South of Snap Point to the rim Tinacanebitts Point, Burnt Canyon Point, Turn Point, Sulcidie Point, and Shivvits Plateau to a hydrographic divide near the section line when surveyed common to Sections 18 and 19, T.31N., R.10W.; thence, Easterly along said hydrographic divide, crossing Mollies Nipple to Parashant Canyon; thence, including Andrus Canyon in T.31N., R.10W. and T.32N., R.10W., along a hydrographic divide on the North side at the mouth of said Andrus Canyon to the rim of Lone Mountain, being a part of the rim of the Inner Canyon of the Grand Canyon; thence, along said rim of the Inner Canyon to the intersection with the East line of Section 9, T.32N., R.8W., formerly the boundary of Grand Canyon National Monument; thence, North on section lines to the North corners common to Sections 3 and 4, T.32N., R.8W.; thence, West on township line to the South corners common to Sections 33 and 34, T.33N., R.8W.; thence, North on section line to the section corner common to Sections 27, 28, 33 and 34, T.33N., R.8W.; thence, West along section line common to Sections 28 and 33, T.33N., R.8W.; to the intersection with the hydrographic divide of the Uinkaret Mountains; thence, Northerly along said hydrographic divide of the Uinkaret Mountains, crossing Mount Emma to the intersection with the section line common to Sections 20 and 29, T.34N., R.8W.; thence, East along sections lines to section corner common to Sections 24 and 25, T.34N., R.8W. and Sections 19 and 30, T.34N., R.7W.; thence, South on range line to the South corners common to T.34N., R.7W. and T.34N., R.8W.; thence, East on township line to the South 1/4 corner of Section 33, T.34N., R.7W.; thence, North along section centerlines to 1/4 corner common to Sections 21 and 28, T.34N., R.7W.; thence, East along section line to the section corner common to Sections 21, 22, 27 and 28,

T.34N., R.7W.; thence, North on section lines to section corner common to Sections 9, 10, 15 and 16, T.34N., R.7W.; thence, East on section line to 1/4 corner common to Sections 10 and 15, T.34N., R.7W.; thence, North on section center line to 1/4 corner common to Sections 3 and 10, T.34N., R.7W.; thence, East on section line to section corner common to Sections 2, 3, 10 and 11, T.34N., R.7W.; thence, North on section line to section corner common to Sections 2 and 3, T.34N., R.7W. and Sections 34 and 35, T.35N., R.7W.; thence, West on township line to section corner common to Sections 3 and 4, T.34N., R.7W. and Sections 33 and 34, T.35N., R.7W.; thence, North on section lines to the Northwest corner of the South tier of forties of Section 27, T.35N., R.7W.; thence, East on the North line of the South tier of forties to the centerline of Section 27, T.35N., R.7W.; thence, North on section centerline to the center of Section 27, T.35N., R.7W.; thence, East on Section centerline to the West line of the East tier of forties of Section 27, T.35N., R.7W.; thence, North on the West line of the East tier of forties to the section line common to Sections 22 and 27, T.35N., R.7W.; thence, East on sections lines to 1/4 corner when surveyed common to Sections 22 and 27, T.35N., R.4W.; thence, North on section centerline to the 1/4 corner when surveyed common to Sections 3 and 10, T.35N., R.4W.; thence, East on section lines to the intersection of the section line common to Sections 2 and 11, T.35N., R.4W. with the rim of a cliff; thence, Northeasterly along said rim to the hydrographic divide located when surveyed in Section 31, T.36N., R.3W. between two intermittent tributaries of the Kanab Creek; thence, Northeasterly along said hydro-Northeasterly into Jumpup Canyon to the junction with Indian Hollow; thence, Southerly into Indian Hollow to the Northeast end of Fishtail Butte; thence, Southwesterly to the crest of the ridge between Fishtail Butte and the canyon rim; thence, Easterly along said ridge to the rim of the canyon; thence, Easterly along said canyon rim to the intersection with the Gila and Salt River Meridian on Two Springs Ridge; thence, South on the Gila and Salt River Meridian to the section corner common to Sections 12 and 13, T.34N., R.1W. and Sections 7 and 18, T.34N., R.1E.; thence, East on section lines to section corner common to Sections 11, 12, 13 and 14, T.34N., R.2E.; thence, South on section line corner common to Sections 13, 14, 23 and 24, T.30N., R.3E.; thence, East on section lines to the intersection of the section line common to Sections 14 and 23, T.30N., R.3E. with the divide between South Canyon and Thompson Canyon; thence, Southwesterly along said divide, including the entire drainage area of Thompson Canyon and Neil Spring Canyon, to the intersection with the upper rim of the Grand Canyon; thence, Northerly along the rim of Marble Canyon and side drainages to Navajo Bridge and the West high water line of the Colorado River; thence, Northerly along said high water line of the Colorado River to the high water line at the mouth of the Paria River; thence, Easterly across the Colorado River to the East high water line thereof; thence, Southerly along said high water line of the Colorado River to said Navajo Bridge and the rim of Marble Canyon; thence, Southerly along the rim of Marble Canyon and side drainages and the rim of Little Colorado River Gorge to the intersection with section line when surveyed common to Sections 32 and 33, T.33N., R.6E.; thence, South on section lines to section corner common to Sections 4, 5, 8 and 9, T.30N., R.6E.; thence, West along section lines to section corner common to Sections 3, 4, 9 and 10, T.30N., R.5E.; thence, South on section line to 1/4 corner common to Sections 9 and 10, T.30N., R.5E.; thence, West on section centerlines to 1/4 corner common to Section



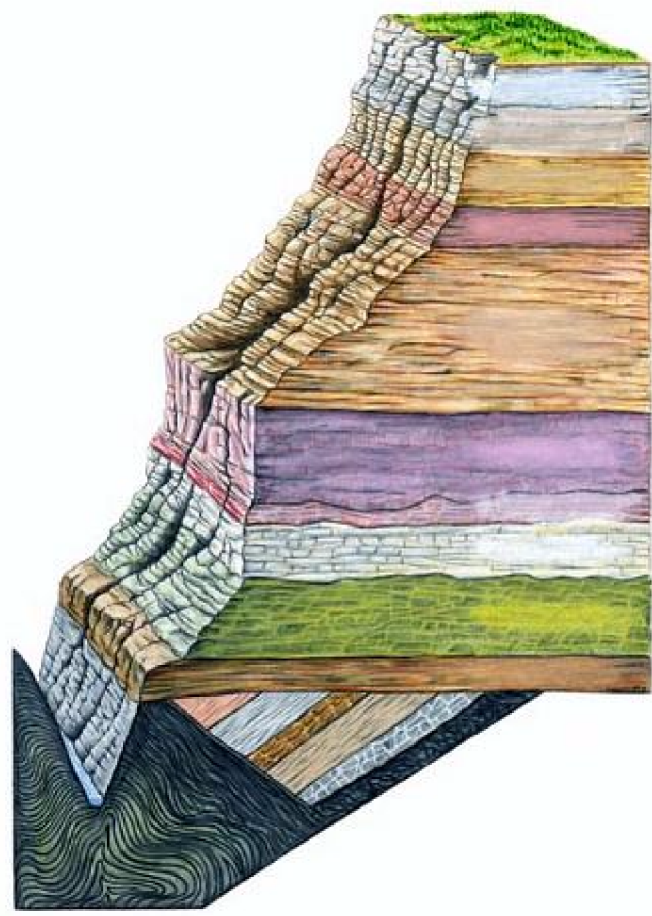
General view of the Grand Canyon. Color applied lantern slide, ca. 1890s. (National Park Service Historic Photograph Collection)

Exposed in the mile (1.5 kilometers) deep walls of the Grand Canyon are rocks which have been deposited in each of the geological eras of the earth's history -- from 2 billion years ago to today. The Grand Canyon is one of the few places on earth where a person can literally walk through time. From various places on either the North or South Rim of the canyon, a person can walk into the canyon observing Cenozoic lava deposits from extinct volcanoes. Skeletons of extinct mammals can also be found in some of its caves. Species of today, which abound in abundant numbers, can also be found. The "Age of Mammals" began 65 million years ago. Proceeding deeper in the canyon, the next geological era is not readily visible, but can be seen from the rim before the walk is started. It is the Mesozoic Era. Mesozoic Era rocks were once 4,000 feet (1,200 meters) to 8,000 feet (2,400 meters) thick in the park, but have all been eroded away. These deposits exhibit the tracks and other fossils of reptiles which roamed the land during the "Age of Reptiles." This era lasted from 65 million to 230 million years ago.

A deeper descent into the canyon finds the layers of the Paleozoic Era. These layers reveal stratified levels of sandstones, shales and limestones containing fossils of seaweeds, primitive shellfish, animals with backbones, armored fish, 4-footed animals (probably amphibians), primitive reptiles and sharks. The Paleozoic Era dates from 230 million to 600 million years ago.

Stepping even deeper into the canyon below the Mesozoic Era deposits are found the schists of the Late and Early Precambrian Eras. They contain no evidence of life and are the remains of volcanoes of 2 billion years ago.

The earth's geological record is vividly and outstandingly exposed in the Grand Canyon region.



A diagrammatic cross-section of the geologic strata of the Grand Canyon. Sierra, Frank/National Park Service (HFC)

7, T.30N., R.5E. and Section 12, T.30N., R.4E.; thence, South on range line to section corner common to Sections 7 and 18, T.30N., R.5E. and Sections 12 and 13, T.30N., R.4E.; thence, West on section line to section corner common to Sections 11, 12, 13 and 14, T.30N., R.4E.; thence, South on section to section corner common to Sections 13, 14, 23 and 24, T.30N., R.4E.; thence, West on section line to the Northeast corner W1/2NW1/4NW1/4 of Section 23, T.30N., R.4E.; thence, South on the East line of W1/2NW1/4NW1/4 of Section 23 to the Southeast corner thereof; thence, West along the South line of the North tier of forties to the section line common with Sections 21 and 22, T.30N., R.4E.; thence, South on section line to section corner common to Sections 21, 22, 27 and 28, T.30N., R.4E.; thence, West on section lines to section corner common to Sections 19 and 30, T.30N., R.4E. and Sections 24 and 25, T.30N., R.3E.; thence, North on range line to section corner common to Sections 18 and 19, T.30N., R.4E. and Sections 13 and 24, T.30N., R.3E.; thence, West on section lines to section corner common to Sections 14, 15, 22 and 23, T.30N., R.3E.; thence, North on section line to section corner common to Sections 10, 11, 14 and 15, T.30N., R.3E.; thence, West on section lines to section corner common to Sections 11, 12, 13 and 14, T.30N., R.2E.; thence, North on section lines to section corner common to Sections 1 and 2, T.30N., R.2E. and Sections 35 and 36, T.29N., R.2E.; thence, West on township line to the Northeast corner of T.30N., R.1E. the point of beginning.



Grand Canyon National Park: Longitude 111°36' - 113°56' W / Latitude 35°43' - 36°45' N



Stone Observation Tower (Desert View Watchtower) framed by branches. Designed by Mary Colter - constructed in 1932. Photographer: M. Woodbridge "Woody" Williams: ca. 1960s.(National Park Service Historic Photograph Collection)

Over 2,000 prehistoric Indian ruins have been recorded in the park. Almost one-half million acres (202,430 hectares) remain to be inventoried, however.

The ruins contain evidence that the earliest human inhabitants of the canyon were gatherers and hunters. Substantiating the belief these early people were hunters is the discovery of small split-twig figurines cached in different caves. The figurines probably symbolized deer or bighorn sheep. In some instances, the figurines have been pierced with small sticks which appear to be spears. The figurines were probably made with some religious significance to ensure successful hunts. Radiocarbon dating has shown some of the figurines to be 4,000 years old.

Evidence reveals later inhabitants (from the Christian period to about A.D. 1150) of the canyon were farmers in addition to being hunters and gatherers. It has also been found that later groups built pueblos (multiple-dwelling) homes of stones and mud mortar.

The ruins of some of these structures remain. The Tusayan Ruin on the South Rim is one of these ruins. It accommodated 20-25 families and is one of the most, if not the most, visited prehistoric ruins in the region today.

Further evidence reveals the inhabitants of the canyon began leaving the area shortly after A.D. 1150. Severe draught conditions are believed to be the reason. About A.D. 1300, however, the draught conditions eased and Southern Pute Indians moved into the North Rim area; Havasupai and Hualapai Indians also moved into the canyon from the Southwest.

Evidence reveals these people lived in the canyon uninterrupted until the 1860's. The Havasupai continue to live in the canyon today, but outside the park boundary. Living in an area inaccessible by vehicle, they pursue many activities in much the same manner as their ancestors. A journey into the Havasupai Reservation in Havasu Canyon of the Grand Canyon is also a walk back into time.

A great significance of the cultural heritage of Grand Canyon is its classic example of human societies to adapt to its severe climatic and physiographic characteristics and lead a successful life.