



Arizona Rocks 53

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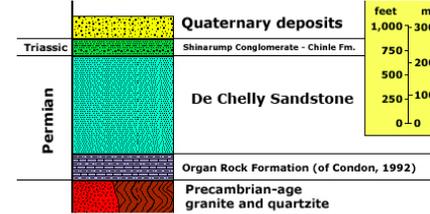
Canyon de Chelly in the Canyon de Chelly National Monument is not spectacular like the Grand Canyon, but the scenery is wonderful and it is an important archeological area. The canyon is formed from a resistant layer of De Chelly Sandstone that gets to be almost 1,000 feet thick. The Sandstone is Permian in age (about 220 million years old). It is across-bedded sandstone with inclined layers and steeply dipping wedges, indicating a desert sand dune deposit. The Defiance Anticline pushed up the sandstone and the canyon was eroded into the uplifted surface. The canyon ends just east of Chinle where the uplift ends (the De Chelly Sandstone plunges underground). The formation beneath the De Chelly is the Owl Rock Formation also Permian in age. It is a red mudstone and sandstone and is stream, floodplain, and tidal flat deposits. It can only be seen at the very canyon bottom in a few places. On the rim of the canyon is a thin layer of the Shinarump Conglomerate a river deposit. It is Triassic in age about 165 million years old. So there is a 50 to 60 million year gap with no rock present between it and the De Chelly.

There are drives with scenic overlooks on the north and south sides of the canyon. Spider Rock, a spectacular spire or chimney, is on the south side. Access to the canyon is limited; White House Ruin is the only place you can hike to the bottom of the canyon. Any other access is only with an organized tour.

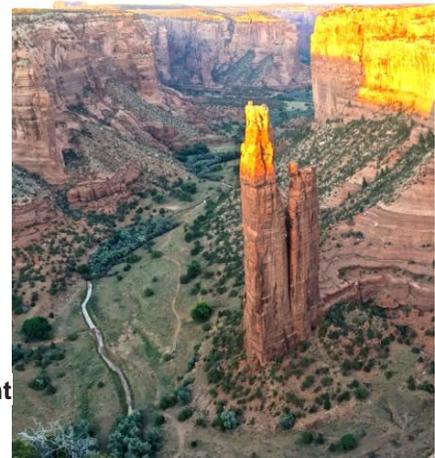
White House Ruins,
 Canyon de Chelly

Stratigraphy of Canyon de Chelly National Monument

Click on any stratigraphic name for more information.



Cross bedding
 in the DE
 Chelly
 Sandstone,
 Canyon de
 Chelly



Spider Rock
 at Sunset,
 Canyon de
 Chelly,
 Cynthia Grant
 photograph.

