



Arizona Rocks 62

Text and photos by Ray Grant

Headed north? Here is another place to visit. It is on route 160 about 6 miles before Tuba City (about 78 miles from Flagstaff). Take route 89 north from Flagstaff and turn on route 160 toward Tuba City, at about four miles there is a road and signs for the dinosaur footprints. Parking is free and the area is open to the public, one time when I was there, there was no one else around. Another time, there were local residents wanting to take you on tour. Taking a tour is optional but it is interesting to get one of the guides to show you the area. The total area with the footprint is not very large you can walk around the exposures of the footprints in a fairly short time.

The rock that the footprints are in is the Moenave Formation. It is lower Jurassic in age about 200 million years old. Several sizes of footprints of three-toed dinosaurs have been found. There have been various suggestions about what the species of dinosaurs was that made the tracks. A common suggestion is that the largest tracks were made by dilophosaurus. Dilophosaurus is an Arizona dinosaur whose fossil skeletons have been found nearby in the same age rocks. It walked upright, could grow to 23 feet, and weigh up to 900 pounds, so it is a good candidate for the track maker. It was also a star in Jurassic Park.

Geologists have studied the rocks in the area and made a hypothetical map of the geography in Arizona when the dinosaurs were here. Where the tracks are found the Moenave Formation is fine-grained sandstone deposited by streams flowing north from higher areas in southern Arizona (see map). But not very far away sand dunes were being deposited (Wingate on map) so the climate had to be relatively dry. We won't know all the details

of what it was like, but it is fun to imagine a dinosaur walking along a stream bank looking for dinner and leaving its footprints.



Dinosaur footprints near Tuba City, Arizona

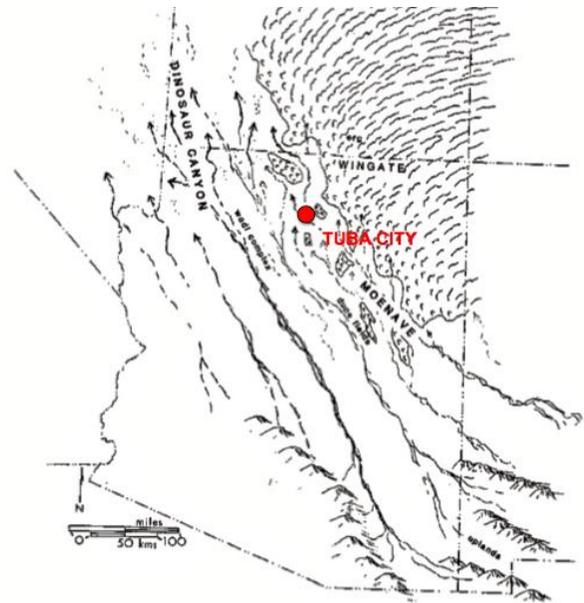


Figure 13. Hypothetical paleogeography during deposition of Moenave Formation and Wingate Sandstone.

Map of Arizona 200 million years ago when the dinosaurs made the tracks (From Triassic and Jurassic Geology on the Southern Colorado Plateau by Ronald Blakey, in Geological Evolution of Arizona, 1989)



Model of dilophosaurus at Pinal Geology and Mineral Museum in Coolidge, Arizona