

Ischigualasto

Ischigualasto is a geological formation and a natural park associated with it in the province of San Juan, north-western Argentina, near the border with Chile. The Ischigualasto Provincial Park is located in the north-east of the province (30° S 68° W), and its northern border is the Talampaya National Park, in La Rioja, both of which belong to the same geological formation.

The Ischigualasto Formation contains Late Triassic (Carnian) deposits (230 million years before the present), with some of the oldest known dinosaur remains, which are the world's first with regards to quality, number and importance. It is the only place in the world where nearly all of the Triassic is represented in an undisturbed sequence of rock deposits. This allows for the study of the transition between dinosaurs and ancient mammals; research is ongoing.

The arid badlands around the formation are known as *Valle de la Luna* ("Valley of the Moon") due to their rugged, otherworldly appearance. In the Carnian this area was a volcanically active floodplain dominated by rivers and had a strongly seasonal rainfall. Petrified tree trunks of *Protojuniperoxylon ischigualastianus* more than 40 meters tall attest to a rich vegetation at that time. Fossil ferns and horsetails have also been found.

Rhynosaurs and cynodonts are by far the predominant findings among the tetrapod fossils in the park. Dinosaurs comprise only 6% of the findings, but these include early samples of the two major lineages of dinosaurs (ornithischians and saurischians). The carnivorous archosaur *Herrerasaurus* is the most numerous of these dinosaur fossils. Another important putative dinosaur with primitive characteristics is *Eoraptor lunensis*, found in Ischigualasto in the early 1990s.

The first paleontological description of Ischigualasto was performed in 1930. In 1941 the area was surveyed, resulting in the finding of 70 species of fossil plants. The region received the name *Valle de la Luna* for the first time in a 1943 publication by the Automóvil Club Argentino.

The first cynodont (reptile with mammalian features) in the area was described in 1946 by Dr. A. Cabrera of the University of La Plata, after being sent some fragments by a geologist doing coal prospections on behalf of the state coal company. Academic works and geological surveys came slowly until 1958, when Dr. Alfred Romer, a Harvard University expert in ancient mammals, leading an expedition, discovered the richness of the fossil deposits. In his diary he wrote: *It is the delight of all vertebrate paleontologists, to get up in the morning, leave the tent and find themselves surrounded by the most extraordinary fossil cemetery ever imagined.*

In 1970 Ischigualasto was entrusted to the University of San Juan, and a year later, was declared a Provincial Park, thanks in part to Dr. William Sill (Ph.D., Geology, 1965, Harvard) who was dedicated to preserving the history of the fossil record there. Dr. Sill,

an American paleontologist and university professor, was labeled "El Gringo de los Huesos" by President Carlos Menem.

Together with the Talampaya National Park, Ischigualasto was declared a World Heritage Site by UNESCO in 2000.

Talampaya National Park

Talampaya National Park is a national park located in the east/centre of La Rioja Province, Argentina. It was designated a provincial reserve in 1975 and in 1997 was declared a national park.

The park covers an area of 2,150 km², at an altitude of 1,500 m above mean sea level. Its purpose is to protect important archaeological and palaeontological sites found in the area. It has landscapes of great beauty, with flora and fauna typical of the mountain biome.

The park is in a basin between the Cerro Los Colorados to the west and the Sierra de Sañagasta to the east. The landscape is the result of erosion by water and wind in a desert climate, with large ranges in temperature - high heat by day and low temperature at night, with torrential rain in summer and strong wind in spring.

In the park can be found: The dry bed of the Talampaya River, where dinosaurs lived millions of years ago - fossils, whilst not as interesting as Ischigualasto, have been found here; The Talampaya gorge and its rock formations with walls up to 143 m high, narrowing to 80 m at one point; The remains of indigenous peoples' settlements, such as the petroglyphs of the Puerta del Cañón; A botanical garden of the local flora at the narrow point of the canyon; Regional fauna, including guanacos, hares, maras, foxes and condors.

In 2000, UNESCO declared the park a World Heritage Site.

Source: -- Wikipedia [<http://www.wikipedia.org>]