Berlin-Ichthyosaur State Park

Shonisaurus popularis - The Nevada State Fossil

Ichthyosaurs were prehistoric marine reptiles living at about the same time as the dinosaurs. The ichthyosaurs of this quarry were designated *Shonisaurlls popularis* by Dr. Charles Camp, named for the Shoshone Mountain Range in which they were found and for the popular effort of those who assisted in their excavation and protection. Reaching 50 feet in length, they are the largest ichthyosaurs known. Naturally exposed by erosion, the fossils were found in 1928 by Dr. Siemon Muller while completing geological studies in the area. Excavations began in 1954 by Dr. Charles Camp and Dr. Samuel Welles. The fossils were not cleaned to a fine detail, as Dr. Camp desired to display the fossils as found, providing a view of fossil excavations not typically available for observation. There are at least nine different individuals presented in the display. The three most evident specimens are labeled in this virtual-reality view.

Specimen One

1A. Skull

The jaw section of a badly crushed skull. This is the head region of a typical sized animal, which continues through position 1E. Due to parts of the skull not being composed of solid bone, skulls of most ichthyosaurs do not preserve well.

1B. Flipper Bones

These are the three largest bones of the front flippers (humerus, radius and ulna) spreading out on either side of the body. The small bones did not preserve. The flippers of *Shonisaurus* reached over six feet in length.

1C. Vertebrae

The vertebrae, or backbones, from near the center of body. present to the right of position 1C.

1D. Backbones

The vertebral column in the hip area. Rear flippers once spread out to each side. The dark bone, approximately three feet to the left of position 1D, is a femur, the largest bone of the rear flipper.

1E. Tailbones

Vertebrae from the mid-tail region. The remainder of the tail is missing. Originally, the tail possibly reached over 15 feet.

Specimen Two

2A. Femur

Flipper bones lie in nearly life position on either side of position 2B. Positions 2A identify the femurs, the largest bones of the rear flippers.

2B. Tailbones

From position 2B through 2C lie the scattered remains of vertebrae and ribs. The other end of this specimen represents the base of a tail which appears to continue beyond the excavated area.

2C. Shoulder Bones
The front shoulder girdle of one of the smallest ichthyosaurs in the quarry. The large bones of the front flippers are found nearby. Above lie the remains of a skull which has separated into a group of scattered individual skull bones, making its identification as a head difficult.

Specimen Three

3A. Shoulder Bones
The front shoulder region of another ichthyosaur. Most of the body has eroded into Union Canyon and was not found.

3B. Skull
The best preserved skull of this quarry. It lies on its side with the snout pointed towards the walkway. It sits at the base of another skull, with the upper skull to the left and the lower skull to the right. The largest skulls may have reached 10 feet in length.

3C. Lower Jaw
A broken lower jaw; no teeth were found with the specimen.

Text adapted from site brochure, courtesy Nevada Division of State Parks.