ICHTHYOSAURS

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Ichthyosaurs (Greek for "fish lizard") were large marine reptiles that thrived during much of the Mesozoic era; based on fossil evidence, they first appeared approximately 250 million years ago (MYA) and at least one species survived until about ninety MYA, into the Late

There are more than 50 Ichthyosaur genera and they varied in size from 3 to over 55 feet in length. (Genera is a way biologists group similar species together. It is the first part of a species name. The picture to the left shows three different species, but they are all of the genus Shastasaurus.)

During the early Triassic Period, ichthyosaurs evolved from a group of unidentified land reptiles that returned to the sea, in a development parallel to that of the ancestors of modern-day dolphins and whales. They were particularly abundant in the later Triassic and early Jurassic Period, until they were replaced as the top aquatic predators by another marine reptilian group, the plesiosaurs in the later Jurassic and Cretaceous Period. In the Late Cretaceous ichthyosaurs became extinct for unknown

> Platypteriaius kiprjanov³

Platypterigius species have been found in Texas. Ichthyosaur parts including vertebrae and teeth have even been found in Travis County. They lived in Texas during the early Cretaceous Period, around 100-110 million years ago.

Ichthyosaurs probably used their forefins (front flippers) to maneuver during swimming, as in living fishes, dolphins and whales. The limb skeletons went through a drastic modification as ichthyosaurs evolved. You can clearly see it by plotting the shape of the forefin skeleton along the family tree of



We can make the following observations about the evolution of forefin skeletons in ichthyosaurs: (1) The lower arm bones became shorter and shorter along the family tree, although there are exceptions; (2) The finger bones also became shorter and shorter, and eventually became disk-shaped; (3) The number of finger bones increased early in the evolution; (4) The thumb disappeared at one point, and then additional digits (light blue) appeared on both sides of the remaining fingers. ⁴

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Society included Anning in a list of the ten British

women who have most influenced the history of

science.¹

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