First amphibian ichthyosaur fossil found



An ancient marine reptile with seal-like flippers may have been adapted to life on the land as well as in the sea, scientists believe.

- The 250-million-year-old creature is the first amphibious ichthyosaur known.
- Its relatives were dolphin-like creatures that swam in the oceans at the time of the dinosaurs.
- They are thought to have had terrestrial ancestors, but previously no fossils had come to light marking the transition of ichthyosaurs from land to sea.
- "Now we have this fossil showing the transition," said lead scientist Professor Ryosuke Motani, from the University of California at Davis who reported the discovery in the journal Nature.
- At 1.5 feet long, *Cartorhynchus lenticarpus* was also the smallest known ichthyosaur. Its fossil remains found in Anhui Province, China, date from the start of the Triassic period about 248 million years ago.
- As well as big flippers, *Cartorhynchus* had flexible wrists which would have been essential for movement on the ground.
- While most ichthyosaurs have long beak-like snouts, the new specimen possessed a short nose that may have been adapted to suction feeding.
- Its body also contained thicker bones than other ichthyosaurs. This supports the theory that most marine reptiles that left the land first grew heavier to help them swim through rough coastal waves.
- The animal lived about 4 million years after the worst mass extinction in history, shedding light on how long it took for life on Earth to recover.
- The Permian-Triassic extinction, known as the "Great Dying", wiped out 96% of all species and may

have been linked to global warming.

Prof Motani said: "This was analogous to what might happen if the world gets warmer and warmer. How long did it take before the globe was good enough for predators like this to reappear? In that world, many things became extinct, but it started something new.

"These reptiles came out during this recovery."