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News Release

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Rare fossil discovery sheds light on prehistoric crocodile family

Discovery of an unusual fossil on the Isle of Skye could significantly advance scientists' understanding of prehistoric times in the region.

The fossil, from the jawbone of a small crocodile-like creature, was found near Duntulm Castle on the north coast of the island. It is thought to be approximately 170 million years old.

Skye is one of the few places in the world where freshwater crocodile-like fossils from this period, known as the Middle Jurassic, can be found. It will aid scientist's understanding of prehistoric animals of this type.

Scientists examined the structure of the jawbone using high-resolution X-rays. From studying this fossil and others previously found on Skye, they suggest that crocodile-like animals from a family of close crocodile relatives, known as neosuchians, were becoming more diverse on the island's shores at this time.

Scientists cannot assign the fossil to a specific species owing to its incompleteness and size. However, they say that the discovery of further fossils from Skye may be key to classifying this species.

The study is part of an ongoing investigation of Skye's fossil record, led by a consortium including staff and students of the University of Edinburgh in collaboration with scientists across Scotland, called the PalAlba Group.

The work, published in *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, was carried out in collaboration with researchers from Imperial College London, the University of Leicester and the Chinese Academy of Sciences. It was funded by Marie Curie and the Royal Society.

Dr Steve Brusatte, of the University of Edinburgh's School of GeoSciences, said: "This new jawbone is tiny, just a couple of centimetres long, but it is a very important fossil for understanding the prehistoric history of Skye. It belonged to a cute, dog-sized crocodile that would have paddled through the warm lagoons on the edge of a small island, about 170 million years ago."

Ranked among the top universities in the world

Dr Tom Challands, of the University of Edinburgh's School of GeoSciences, said: "Skye is one of very few places on Earth that record such a detailed glimpse into life during the Middle Jurassic. That is why we must protect this Hebridean time capsule and study it in a careful and responsible manner."

Dugald Ross, of the Staffin Museum on the Isle of Skye, said: "Over the last few years PalAlba has done very important work in the area, and the crocodile from Duntulm is one of the many interesting fossils that has been found."

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