

National Museum of Scotland play key role in dinosaur find

The earliest and most complete dinosaur skeleton ever found in Scotland has finally been extracted from the base of a cliff on the Isle of Skye, after it was first spotted over 50 years ago.

The “globally very rare and important” fossil has been formally identified as an ornithopod dinosaur, a plant-eating group that included later dinosaurs such as Iguanodon, Parasaurolophus and Edmontosaurus.

Analysis of the bone structure shows that the animal, which would have been roughly the size of a pony, was at least eight years old when it died around 166 million years ago, in the Middle Jurassic.

The dinosaur, found near Elgol, in the south of the island, is one of the earliest known ornithopod body fossils, as they became far more prominent in the later Cretaceous period.

The fossil was first discovered in 1973, making it Scotland’s earliest recorded dinosaur find, but was not fully identified at the time.

It remained uncollected until a team led by [Dr Elsa Panciroli, NERC Independent Research Fellow at National Museums Scotland \(NMS\)](#) returned to the site in 2018 to undertake its extremely

challenging extraction from the rock.

While the Elgol dinosaur is preserved only in fragments compared to some specimens found elsewhere, researchers have identified part of the spine, ribs and hip bones.

The new description of the Elgol dinosaur is published in the Earth and Environmental Science Transactions of the Royal Society of Edinburgh (EESTRSE).

Dr Panciroli said: "Although it was found in 1973, the people who originally saw it didn't realise the significance of it. It was also extremely difficult to get at, in a really difficult place on the shore.

"This fossil was sticking out of a very large boulder, which was just above the high tide line on the shore so it was very difficult to get at because it was tidal in the first place but also just really awkward – you couldn't just stand and look at it, you had to climb up just to see it."

She added: "This was a really challenging extraction, in fact we'd previously felt it was too difficult to collect the fossil, but I thought it was really important to study it.

"I was able to persuade the team to give it a try. It took a lot of hard work from a lot of people, but we did it – finally we can confirm and publish Scotland's first recorded and most complete dinosaur, and that makes it all worthwhile."

The difficult excavation was made possible with the support of a specialist team from Research Casting International, based in Canada.

A local crew from Elgol's Bella Jane Boat Trips piloted the rigid inflatable boat and a dinghy to the shore at the foot of the cliff, where the specimen was loaded and taken back to port.

Dr Stig Walsh from NMS said: "This is a wonderful addition to

the rapidly growing set of Jurassic finds from the Isle of Skye which are enabling us to learn more and more about the rich ecosystem of the time.

“We’ve known there were dinosaurs there for a while, most obviously from the famous footprints at An Corran, Brother’s Point and Duntulm and from individual bones, but it’s exciting to see a more complete, if still partial, skeleton.

“We’re delighted to add it to the other amazing finds now in the National Collection.”

Skye is known as Scotland’s “Jurassic island” – the only place in Scotland from which fossil dinosaurs have been found, and famed for discoveries from the Middle Jurassic period, around 170 million years ago.

Jurassic period finds so far include dinosaur bones and trackways, including those of the meat-eating Megalosaurus and the earliest turtles known to have lived in water, found embedded in a block of rock on the Strathaird peninsula.

Other recent Jurassic discoveries from Skye include the description of adult and juvenile mammals of the same species, *Krusatodon*, which revealed that they grew more slowly than mammals today, and the world’s largest Jurassic pterosaur fossil, *Dearc sgiathanach*.

Professor Rob Ellam, Editor of *EESTRSE*, said: “Having this exceptional piece of work on the Elgol dinosaur – both Scotland’s earliest and most complete dinosaur fossil – in the pages of *Transactions* is a highlight for the journal.

“It is a privilege to be able to publish in *EESTRSE* a world-class study led from Scotland which illustrates why the Scottish palaeontological community is held in such high esteem.”



