

New 96-million-year-old pterosaur found in Queensland hailed as Australia's most-complete winged-reptile discovery

The Australian Age of Dinosaurs Museum (the Museum) today announced the discovery of *Ferrodraco lentoni*, a new genus and species of ornithocheirid pterosaur from western Queensland, Australia. The fossilised bones were recovered from a sheep station located near the northeastern margins of the Winton Formation, a geological deposit that is approximately 96 million years old.

The paper naming the new pterosaur, available at <u>www.nature.com/articles/s41598-019-49789-4</u>, was published on Thursday 3 October at 4pm BST (Friday 4 October at 1am AEST) in *Scientific Reports* – an open-access online journal published by *Nature*.

The pterosaur specimen was discovered by grazier Bob Elliott on Belmont Station, near Winton, in early 2017. The new site is located 8km from where the holotype skeleton of *Savannasaurus elliottorum*, a unique species of sauropod dinosaur, was discovered in 2005. Mr Elliott, who has been involved with the Museum since childhood, brought the specimens to the Australian Age of Dinosaurs Museum Laboratory where they were identified as belonging to an ornithocheirid pterosaur.

The pterosaur site, which is located on the bank of a small creek, was excavated by staff and volunteers from the Museum in June 2017. Although the fossils were fragile and widely scattered, two weeks of sifting through the deposit, using a combination of dry and wet sieving techniques, produced the remains of the most-complete specimen of an ornithocheirid, and of any pterosaur, discovered in Australia to date.

Ferrodraco lentoni (Lenton's iron dragon) is the third Australian pterosaur to be named, with all three named species coming from western Queensland. The specimen was nicknamed Butch after the late Mayor of Winton, Graham 'Butch' Lenton who died several months after the discovery. The species' name *lentoni* was chosen in recognition of his staunch support of western Queensland's regional communities.

The research on *Ferrodraco* is being spearheaded by Australian Age of Dinosaurs Museum palaeontologist Adele Pentland as part of her PhD in vertebrate palaeontology through Swinburne University of Technology. According to Ms Pentland, who has extensively researched Australia's pterosaurs, the skeleton of *Ferrodraco* is exceptionally well preserved and comprises five partial vertebrae, eight limb bones, a large portion of the jaw, skull and crest, and 40 isolated and partial teeth.

"With a wingspan of around four metres, *Ferrodraco* would have been an apex aerial predator around 96 million years ago," Ms Pentland said. "At this time the Winton region was on the southern shores of an inland sea and was globally positioned about where Victoria's southern coastline is today."

Pterosaur fossils are exceptionally rare in Australia and *Ferrodraco* is the first pterosaur to be named from the Winton Formation. According to Ms Pentland only 15 fragmentary pterosaur specimens had been described from the entire continent prior to the discovery. "With a total of 30 bones preserved, or 10% of *Ferrodraco's* skeleton, the number of pterosaur bones reported from Australia has now tripled" she said.

Based on the shape and characteristics of its jaws, including crests on upper and lower jaw and spike-shaped teeth, Ms Pentland and colleagues have identified the specimen as an ornithocheirid, a group of pterosaurs that is also known from Brazil and England.

Ferrodraco lentoni joins several significant dinosaur specimens at the Australian Age of Dinosaurs Museum including *Australovenator wintonensis*, Australia's most-complete carnivorous dinosaur, and bones from the large sauropod species *Savannasaurus elliottorum* and *Diamantinasaurus matildae*. Co-founder of the Australian Age of Dinosaurs Museum, David Elliott OAM, describes the new discovery as one of the Museum's most exciting accessions. "The Winton area has produced the majority of Australia's large dinosaur fossils so presenting a significant pterosaur skeleton alongside the giants with which it co-existed is a huge bonus for science, education and regional tourism," he said.

The fossilised remains of *Ferrodraco* – Butch to his friends – are on display at the Australian Age of Dinosaurs Museum, which is located 25km from Winton township in western Queensland.