'Bizarre' triceratops relative unearthed

New horned dinosaur named after amateur finder.

Boer Deng

04 June 2015



A dinosaur with a strange halo of bony spikes has been unearthed from a Canadian river bed.

The new species, *Regaliceratops peterhewsi*, is named after the regal crown of spikes at the back of its skull, and after Peter Hews, the man who discovered its fossilized remains near the Oldman River in southeastern Alberta.

"On one level it's really neat," says Hews, an oil-and-gas geologist and amateur fossil hunter, of his namesake. "On another it feels a bit like a strange identity theft."

Scientists from the Royal Tyrrell Museum in Drumheller, Canada, report in *Current Biology*¹ that the dinosaur lived around 68 million years ago and belongs to a group of horned dinosaurs called chasmosaurines.

Melding of opposites

The chasmosaurines, which include *Triceratops*, generally have small nose horns but large eye horns and frills. A different group of horned dinosaurs called centrosaurines have the opposite. *Regaliceratops* has the horn set-up of a centrosaurine, but it lived 2 million years after the animals died out. Other aspects of its skull are more characteristic of the chasmosaurines.

Caleb Brown, a palaeontologist at the museum and co-author of the paper, says the animal looks "bizarre" and is the first to show evolutionary convergence in horn-like structures between different horned-dinosaur subfamilies.

"We knew right away that it was going to be important" because it looked so different from other dinosaurs from the region, says Brown.

Researchers spent two summers digging up the fossil after Hews spotted what looked like a rhino horn sticking out of a grey slab in 2005. The fossil was airlifted to the museum by helicopter, and researchers took 18 months to chip it free from the surrounding rock. Brown and his colleagues nicknamed the specimen 'Hellboy' because of its arduous unearthing and preparation and its resemblance to a comic-book character of that name.

"It has been a decade-long story," Hews says of the naming. "But then, these guys have been lying around for millions of years, so I suppose another ten years probably doesn't make too much of a difference."

References

1. Brown, C. M. & Henderson, D. M. Curr. Biol. http://dx.doi.org/10.1016/j.cub.2015.04.041 (2015).