



In this clip from the BBC's "Planet Dinosaur," Episode 1 ("Lost World"), meet *Rugops* (at 2:17 into the video). Believed to be an 8-meter (26-foot) carnivore whose fossilized skull was found in the Niger area of Africa, during 2000—by Dr. Paul Sereno and his National Geographic team—*Rugops* stood around 8-feet (2.4 meters) high at the hip.

Fierce in its own right, *Rugops* is clearly not the most-scary dinosaur when *Spinosaurus*—a 70-meter dinosaur at home in water—is in the neighborhood.

A fish eater, the giant *Spinosaurus*—a theropod dinosaur, bigger than *Giganotosaurus* and *T. Rex*, which once lived in the part of northern Africa we know as Egypt—catches a freshwater *Onchopristis* at the time of year when they are most plentiful.

Rugops—whose name means "wrinkle face"—waits for the considerable remains of the fish which the "Spine Lizard" leaves behind.

With its weak jaw and skull, *Rugops* is not a predator like the Cretaceous-period *Spinosaurus*. Rather, it may be a natural-born scavenger, waiting in the wings for a *Spinosaurus*, for example, to have its fill of a recently caught *Onchopristis*.

Paleontologists believe that living off the scraps of meals killed by another dinosaur could have been enough for a *Rugops*.

In the Jurassic World story, scientists at the park's Hammond Lab created a hybrid dinosaur—known as Indomitus rex—with DNA from four different dinosaurs. Some of that DNA came from Rugops.

What did Rugops contribute to the creation of Indominus rex? Most likely ... a massive, gaping jaw.

I. rex, in other words, isn't getting her killer streak from Rugops.

Rugops was an abelisauroid predator. What does that mean?

We find-out from the <u>abstract for Dr. Sereno's paper</u> which he published on the 7th of July, 2004, with Jeffrey A. Wilson and Jack L. Conrad:

<u>Abelisauroid predators</u> have been recorded almost exclusively from South America, India and Madagascar, a distribution thought to document persistent land connections exclusive of Africa.

Here, we report fossils from three stratigraphic levels in the Cretaceous of Niger that provide definitive evidence that abelisauroid dinosaurs and their immediate antecedents were also present on Africa.

The fossils include an immediate abelisauroid antecedent of Early Cretaceous age (ca. 130–110 Myr ago), early members of the two abelisauroid subgroups (Noasauridae, Abelisauridae) of Mid-Cretaceous age (ca. 110 Myr ago) and a hornless abelisaurid skull of early Late Cretaceous age (ca. 95 Myr ago).

Together, these fossils fill in the early history of the abelisauroid radiation and provide key evidence for continued faunal exchange among Gondwanan landmasses until the end of the Early Cretaceous (ca. 100 Myr ago).

To date, only a single *Rugops* fossilized skull has been uncovered.

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