

New information on scavenging and selective feeding behaviour of tyrannosaurs

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Feeding traces for carnivorous theropod dinosaurs are typically rare but can provide important evidence of prey choice and mode of feeding. Here we report a humerus of the hadrosaurine *Saurolophus* which was heavily damaged from feeding attributed to the giant tyrannosaurine *Tarbosaurus*. The bone shows multiple bites made in three distinctive styles termed "punctures", "drag marks" and "bite–and–drag marks". The distribution of these bites suggest that the animal was actively selecting which biting style to use based on which part of the bone was being engaged. The lack of damage to the rest of the otherwise complete and articulated hadrosaur strongly implies that this was a scavenging event, the first reported for a tyrannosaurid, and not feeding at a kill site.

Key words: Dinosauria, Theropoda, Tarbosaurus, palaeoecology, carnivory, predation, scavenging.

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