

## Hands, feet and behaviour in *Pinacosaurus* (Dinosauria: Ankylosauridae)

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Structure of the manus and pes has long been a source of confusion in ankylosaurs, owing to the imperfect preservation or complete lack of these parts of the skeletons in most specimens, and the fact that many species appear to have undergone a reduction in numbers of digits and phalanges. New specimens of *Pinacosaurus* from Alag Teeg in Mongolia confirm that the phalangeal formula of the manus is 2-3-3-3-2. However, there are only three toes in the pes, which has a phalangeal formula of X-3-3/4-3/4-X. Importantly, the number of phalanges in the third and fourth pedal digits can vary between either three or four per digit, even within the same specimen. The Alag Teeg site has yielded as many as a hundred skeletons of the ankylosaur *Pinacosaurus*, most of which were immature when they died. Each skeleton is preserved in an upright standing position, with the bones of the lower limbs often in articulation. The remainder of the skeleton, including the upper parts of the limbs, is generally disarticulated and somewhat scattered. Based on the presence of large numbers of juvenile *Pinacosaurus* specimens at Alag Teeg, as well as other Djadokhta-age sites (Ukhaa Tolgod in Mongolia, Bayan Mandahu in China), it seems juvenile *Pinacosaurus* were probably gregarious.

**Key words:** Ankylosauridae, *Pinacosaurus*, manus, pes, Cretaceous, Alag Teeg, Mongolia.

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