

Feeding patterns and 3D-reconstruction of the keeled box turtle *Cuora mouhotii* (Gray 1862).

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Geoemydids, especially the genus *Cuora* with its 12 species, comprise aquatic, semiaquatic and terrestrial species. One of those terrestrial species is *Cuora mouhotii*. It is listed in the IUCN red list for threatened species, because of trade (pets, traditional chinese medicine) and destruction of its habitat. It occurs in south China up to central Vietnam and in north east India. Its habitats are subtropical broadleaf forests with a thick undergrowth where they can hide. The existing knowledge lacks information about its ecology in the wild. This study examines the feeding mechanism of terrestrial food ingestion and manipulation with hard (snail) and soft (fruit) food. Differences in the manipulation phase, because of the snail shell, are expected. Furthermore, the feeding patterns in water are examined. It is likely, that the secondarily terrestrial species is able to feed underwater with a form of suction feeding, carried out by the hyoid complex. Additionally, a micro CT-scan of the head region will be scanned by the Vetmed, which is reconstructed afterwards by using the program AMIRA. The data will be compared with other *Cuora* species and could give conclusions if the head shows any adaptations for manipulating hard food. For the investigation, the Zoo Schönbrunn kindly provides 4 individuals for highspeed kinematography. The animal for the micro CT-scan is provided by the Naturhistorische Museum.