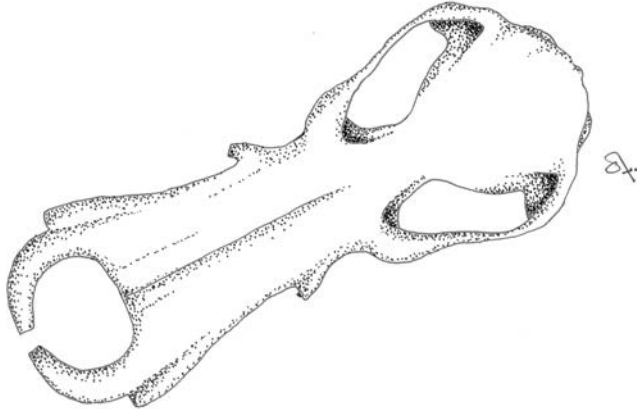


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ANCESTRY AND EVOLUTION



'The living platypus, sole survivor of a group that was once widespread, shows all the signs of having crept too far out on its thinning branch of the tree of life. In the past 15 million years alone, it has changed from a robust, toothed mammal spread over much if not all of Australia, into a small, toothless creature confined to a few east-coast river systems'.

MIKE ARCHER (1995)

The fossil record seems to suggest that the platypus is the sole survivor of a previously more diverse group of platypus-like monotremes that has occupied aquatic habitats in Australia, South America and probably Antarctica from at least as early as 120 million years ago (early Cretaceous).

The platypus family

Platypuses have teeth as nestlings but these are replaced by horny grinding pads made of keratin soon after the young leave the nesting burrow and begin to consume food from the bottom of the river. However, before these teeth are lost they are very distinctive, having a unique pattern of ridges and grooves on their chewing surfaces and six separate roots. In 1971 in the southern Simpson Desert area of South Australia, where today