Trionyx triunguis (Forskal), a Reptile new to the South West African Fauna

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The soft-shelled turtles of the genus *Trionyx* are found in North America, Asia and Africa. In Africa the genus is represented by a single species, *Trionyx triunguis* (Forskal). This species has a wide range of distribution in tropical and northern Africa. The range is given by Loveridge and Williams (1957) as stretching from Egypt to Kenya on the east coast and from French West Africa to Angola on the west coast. These authors give Benguela as the southern-most record, but Laurent (1964) in revising the reptiles of Angola did not list *T. triunguis*. On two visits to Moçamedes examples of *T. triunguis* were seen in ornamental ponds on the beach front, but their origin could not be ascertained.

During September — October 1969 a joint expedition to southern Angola was undertaken by the State Museum, Windhoek, the South African Museum, Cape Town, and the Instituto de Investigação Cientifica de Angola, Sá de Bandeira. The main purposes of the expedition were to collect small mammals and to extend an ecological survey of the intertidal fauna of rocky shores of South West Africa, but where possible collections of freshwater fish were made as well. During a camp at Foz do Cunene, approximately 7 km inland from the mouth of the Kunene river, nightlines were set to collect fish. The river at this point is about 20 m wide. Two large *T. triunguis* were hooked on these lines. The smaller of the two was still alive when landed and was cut loose, but the larger, which had drowned, was kept.

This is the first record of the species from a river within the South West African area, and is the most southerly record both for *T. triunguis* and for the genus *Trionyx*.

The Kunene river specimen, now in the collection of the State Museum, Windhoek (catalogue number S.M. 5779) (PLATE 1), has a total carapace length of 492 mm and a width of 358 mm. The hard section of the carapace is 264 mm long and 220 mm wide. The width of the head (PLATE 2) is 54 mm, the interorbital width 13 mm, and the eye diameter 14.4 mm. When freshly collected the proboscis from tip to orbit was clearly longer than the orbit diameter, but this unfortunately was not accurately measured at the time of collecting. It is not possible to give an accurate length as the proboscis was damaged and somewhat dehydrated before the specimen reached Windhoek, since the only way to preserve such a large specimen was to inject it with formalin and store it in a polythene bag in cotton-wool moistened with formalin. The tail is short, not projecting beyond the carapace margin posteriorly. The forefeet have the characteristic three sharp crescentic folds of skin on the anterior surface.

The dorsal colour is olive-grey with pale ocelli, most numerous about the neck and anterior edges of the carapace. The underside of the head and neck is pale with a reticulate pattern of dark lines. Very faint brown marbling is visible on the plastron.

The food of this species appears to have been the source of some confusion. Loveridge and Williams (1957) list several authorities who have claimed a vegetable diet, while others have stated it to be carnivorous. Probably it will take any food matter that it can obtain, animal or plant, living or dead. The Kunene river examples were taken on lines baited with fish fillets, but both were taken in a reedy area between large boulders where the fresh-water prawn *Macrobrachium* was common. Villiers (1958) has suggested that the jaws of *Trionyx triunguis* are modified according to the diet. A diet of fish will result in sharp-edged jaws, while a mollusc diet will cause the edges of the jaws to become abraded and a broad masticating surface to develop. The present specimen appears to have sharp jaws, although it is not possible to open the jaws fully without damaging them.

The records of *Trionyx triunguis* given for Angola by Loveridge and Williams (1957) all appear to be from the lower reaches of the rivers. This appears to be the case in the Kunene river as well, as it is unlikely that the presence of a reptile of the size of *T. triunguis* in the higher, better-known sections of the river could have gone unnoticed. Several authors (Duméril, 1860: Villiers, 1958) have recorded examples of the species taken alive at sea several miles from the land. It is probable that it is in this manner that it has spread at least into the drier extremes of its range. Flower (1933) suggested a similar manner of dispersal for it along the Palestine coasts. Along the Palestine coasts the spread is said to be passive, the turtle being swept along by the inshore currents. The inshore currents along the southern Angolan coasts are northerly, however, which suggests that *T. triunguis* will swim actively along the coast. Even with the ability to move from river to river in this manner, the Kunene river is almost certainly the southernmost possible limit of its range on the west coast of Africa, as the next permanent river, the Orange river, is about 1 400 km south of the Kunene.

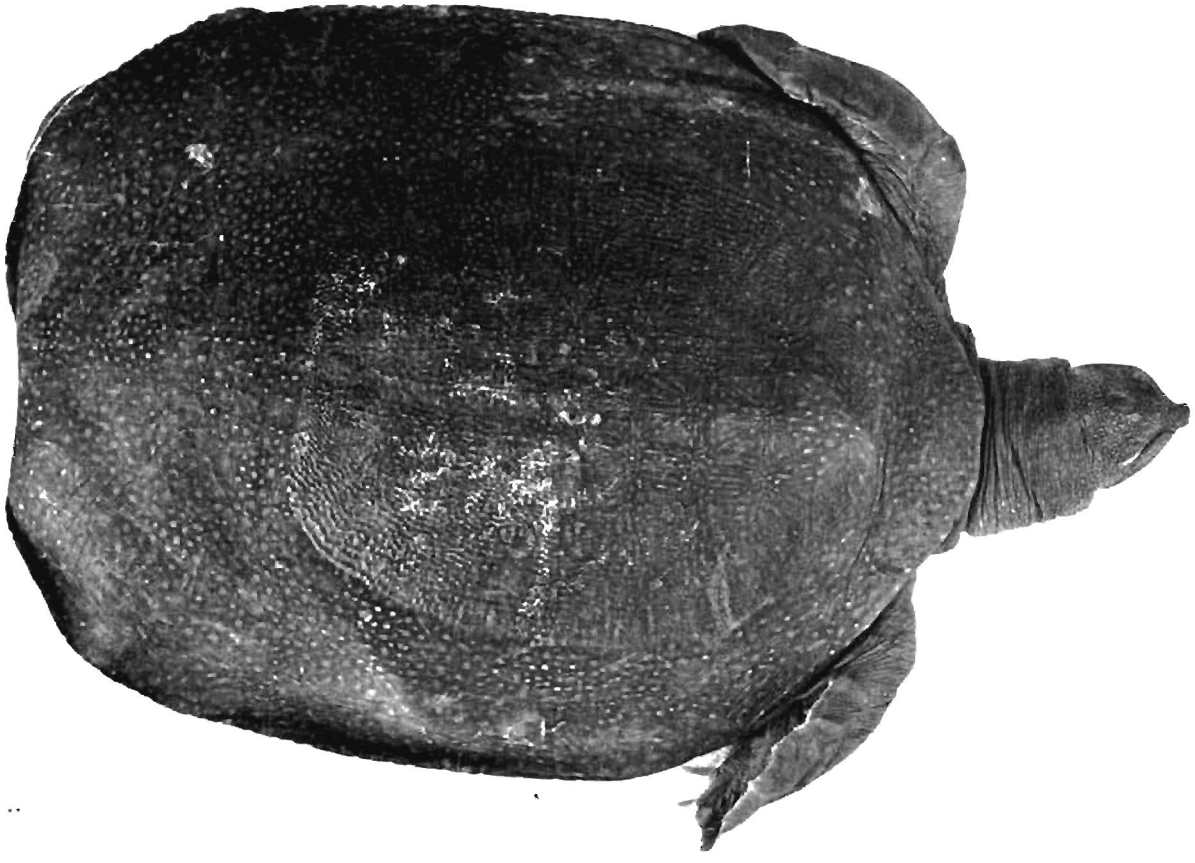

Plate 1. *Trionyx triunguis* (Forskal). Dorsal view.

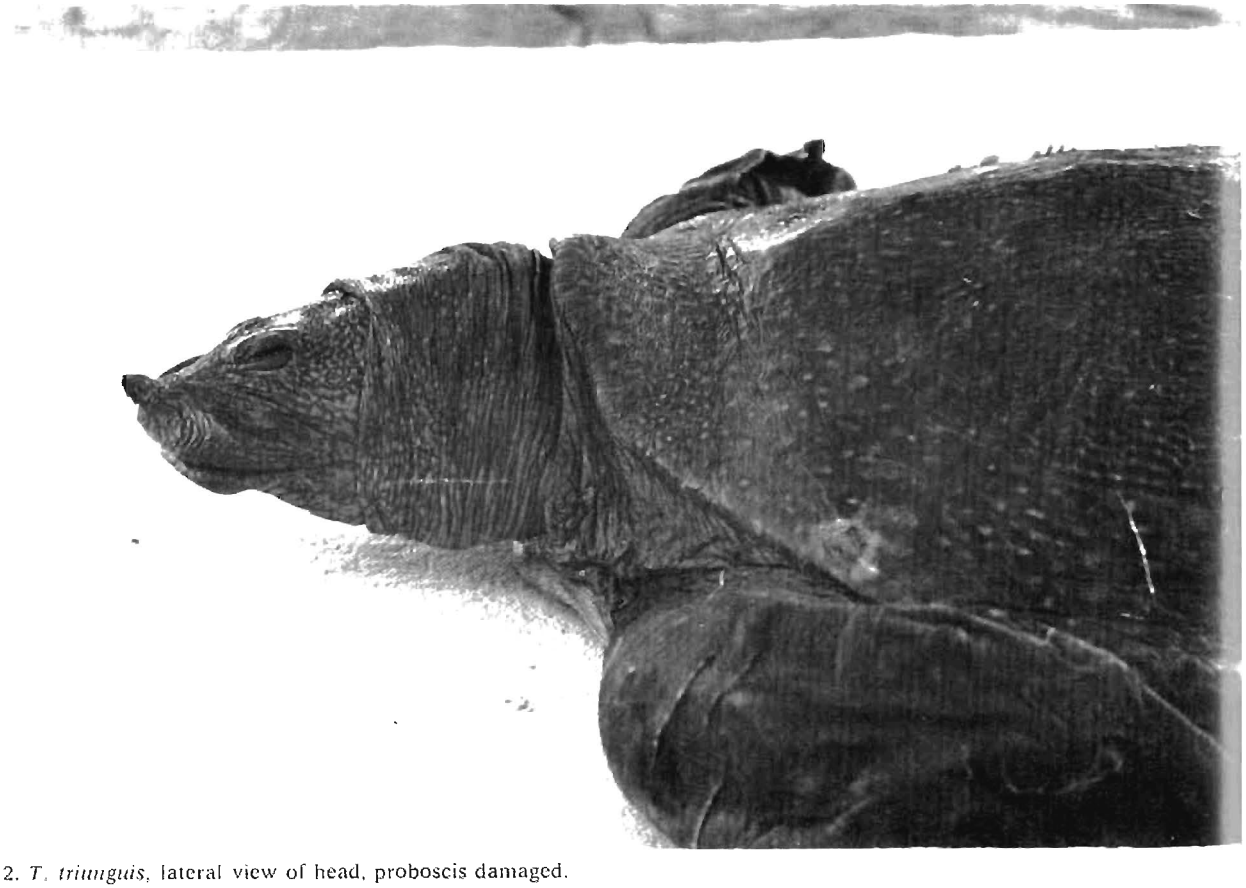

Plate 2. *T. triunguis*, lateral view of head, proboscis damaged.

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