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A Case of Predation of the Water Monitor *Varanus salvator* on the Western Snail-eating Turtle *Malayemys macrocephala* (Reptilia: Varanidae & Bataguridae) in Bangkok

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The Water monitor, *Varanus salvator* (Laurenti, 1768), is well known as a scavenger and predator, consuming a wide variety of prey, invertebrates as well as vertebrates (see a.o. Karunaratna et al., 2008; and the compilations on this species' diet made by Gaulke, 1991; Losos and Greene, 1988; Shine et al., 1998; Traeholt, 1994a,b). However, specific documented data on its diet are scarce. We report hereafter for the first time on a predation by the Water monitor on *Malayemys macrocephala* (Gray, 1859) (Testudines: Bataguridae).

Two of us (TB and SS) made a herpetological survey of Lumpini Park, central Bangkok city, in 2006. This park, offered to the Thai population in 1925 by H. E. King Rama VI, is the first public park of Bangkok. Its surface is approximately 58 ha and it includes many man-made ponds, housing aquatic fauna such as *M. macrocephala*. This latter species is very common in central Thailand (see Brophy, 2004), and is the most commonly released turtle species in Thailand. This turtle is widely available in local markets; although it is protected according to Thai laws, it is purchased by people to be later released for religious purposes. Lumpini Park is often chosen by Buddhist people to release those turtles, where they are hence

abundant. Snails, the main food of *M. macrocephala*, are readily available in the park's ponds and allow the turtles to survive. *Varanus salvator* is another commonly observed aquatic animal in the park.

On 29 October 2006, TB and SS observed, at 0725 h, an adult *V. salvator* (ca. 75 cm SVL) swimming in an artificial pond. The observed individual left the water to search for food at the base of a bridge with dense vegetation. It was using its head to forage among the plants where it seized a young *M. macrocephala* (straight carapace length ca. 10 cm). It turned the turtle from its transverse position to a position parallel to the head, widely opened its mouth, and swallowed the whole turtle without biting nor masticating (Figure 1). Immediately after this, it continued to search for more food and found a second, larger, *M. macrocephala* (straight carapace length ca. 20 cm) at direct proximity. In spite of efforts to correctly orientate the turtle's body to swallow it (Figure 2), it was unable to do so and released it, probably due to its too large size. Just following this, it rested and basked at the same place for about ten minutes before going back to swim in the water. The observers did not disturb the monitor during the observations. For the next 15 min, TB and SS surveyed 100 m along the water reservoir and encountered four additional water monitors (SVL from 60 to 75 cm), resting on the bank or swimming. Another visit by TB and SS on 5 November 2006 starting at 0850 h on the same transect allowed the observation of eight individuals of *V. salvator*, whose SVL were from 45 to 80 cm. The abundancy of both *V. salvator* and *M. macrocephala* in Lumpini Park suggests that this predator-prey relationship is locally common, and that monitors might play an important role in locally regulating turtle populations.

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Figure 1. Adult *Varanus salvator* swallowing a young *Malayemys macrocephala* in Lumpini Park, Bangkok



Figure 2. Adult *V. salvator* unsuccessfully trying to swallow an adult *M. macrocephala* in Lumpini Park, Bangkok

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