

Observation of a king cobra attacking a smaller conspecific

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Subjects: King cobra, *Ophiophagus hannah* (Reptilia: Squamata: Elapidae).

Subjects identified by: Sankar Ananthanarayanan.

Location, date and time: Singapore Island: Central Catchment Nature Reserve, edge of MacRitchie Reservoir; 19 May 2018; 0813 hrs.

Habitat: Edge of freshwater lake under a raised boardwalk, flanked by secondary forest.

Observers: Phillip Harrick and others.

Observation: An adult king cobra of about 4 m total length swam beneath the boardwalk (Fig. 1) past the observer, who had initially assumed that the snake was frightened by other people who had noticed it. However, the king cobra emerged from under the boardwalk with another smaller king cobra, of approximately 2 m long, in its jaws. The larger cobra was biting the neck of the smaller cobra and holding it under the water's surface (Fig. 2). The smaller snake attempted to turn around and bite the larger king cobra (Fig. 3) but was unable to do so effectively. After some time, the smaller snake's movements became sluggish. The larger king cobra seemed to perform a 'death roll', twisting its body round and round, apparently to hold the other snake underwater. The observer recorded the interaction of the snakes in video on his mobile phone, but he did not stay to observe the outcome of the attack.

Remarks: As the observer did not stay to view the rest of the event, it is unclear if the smaller snake was eventually subdued and killed. King cobras specialise in feeding on other snakes as well as large lizards. In Singapore, one was found swallowing a gold-ringed cat-snake, *Boiga dendrophila* (Lim et al., 2011), a large one was recently observed attacking a reticulated python, *Malayopython reticulatus* (Ambede, 2015), and another was encountered eating a clouded monitor lizard, *Varanus nebulosus* (Kurniawan et al., 2018). Although cannibalism has been observed in king cobras in captivity (Burchfield, 1977), it is not known if it is the motive of the featured attack. The blood serum of the king cobra has been found to have antihaemorrhagic activity against the venom of other king cobras (Chanhome et al., 2003), suggesting that it may possess some form of immunity against such attempts at cannibalism.

Despite several people viewing the event in relative close proximity, it seems that the snakes had paid no attention to them. The human audience also maintained their distance and did not interfere with the interaction. The featured observation shows that king cobras do not attack people if left un-molested.

References:

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- Kurniawan, A., G. Lee, T. Nasruddin & M.-R. Low, 2018. King cobra feeding on a monitor lizard at night. *Singapore Biodiversity Records*. 2018: 63.
- Lim, K. K. P., T. M. Leong & F. L. K. Lim, 2011. The king cobra, *Ophiophagus hannah* (Cantor) in Singapore (Reptilia: Squamata: Elapidae). *Nature In Singapore*. 4: 143–156.



Fig 1. Larger king cobra swimming towards the observer and the smaller cobra, under the boardwalk.



Fig 2. Larger king cobra biting the other and holding it underwater (screenshot from video).



Fig 3. Smaller king cobra attempting to bite the neck of the larger cobra (screenshot from video).

Photographs and videos by Phillip Harrick