Intraspecific competition among predators: two Checkered Keelback snakes grabbing a single Daudin’s Bullfrog

Predator interference or competition can have a significant impact on how predators interact with one another and how a system expressing it behaves dynamically (Olivares et al. 2011) like the struggle between individuals, for food, territory, and mates (Gause 1934). Particularly, the competition among predators for prey or other resources (Bazykin et al. 1998). Intraspecific competitive interactions between conspecific predators can affect the birth and death rates of their whole population (Turchin 2003).

Antagonistic interactions may also affect predator efficiency in finding and killing prey (Turchin 2003), which can imply the modification of the predator functional response. Predation and competition directly affect trophic relationships among species, which are key in dictating species coexistence (Pimm 1982). Reduced food availability can force previously tropically distinct species to overlap, thereby intensifying competitive interactions (Campos et al. 2011).

The Checkered Keelback Fowlea piscator (Schneider, 1801) is a species known to feed on amphibians, including the Daudin’s Bullfrog Hoplobatrachus tigerinus. In the image, two Checkered Keelbacks are seen predating on a single Hoplobatrachus tigerinus. © Aadit Patel.
1799) is widely dispersed throughout southern Asia where they can be found along rivers, ponds, and paddy fields (Wallach et al. 2014) and is one of the most often found aquatic snakes and possibly the most abundant snake species in India (Whitaker & Captain 2004). At about 1600 h on 23 December 2021 in Kundi village, Valsad, Gujarat, India (20.6647N, 72.9654E), we observed a Checkered Keelback Snake grabbing *Hoplobatrachus tigerinus* (Daudin 1803) in its jaws. On close observation we noticed that there were two Checkered Keelback snakes grabbing and competing for the same prey item. This was a unique observation, which can give insight to conspecific predator interactions within same species of reptiles for food resource.

References


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