

UNSUCCESSFUL ATTEMPTS BY BULLFROGS TO EAT TOADS

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Abstract.--Rana catesbeiana were observed attempting to eat Bufo on two separate occasions. In both instances the frogs regurgitated the toads. Our observations demonstrate that adult venom-covered Bufo are unpalatable to R. catesbeiana.

Dickerson's (1931) statement that the bullfrog (Rana catesbeiana) will eat any moving object that he can swallow or partially swallow has been widely accepted. On two separate occasions we have observed R. catesbeiana unsuccessfully attempting to eat male Bufo. The senior author placed an adult male Fowler's toad, Bufo woodhousei fowleri, into a 20 gallon aquarium (arranged so that two-thirds of the bottom was under water) housing three adult bullfrogs, two males and one female. Almost immediately the toad was swallowed by the female bullfrog. Approximately one minute later the bullfrog regurgitated the toad whose anterior end was covered by white slime (presumably parotoid secretions). This same toad was then seized by one of the males and immediately dropped. Ten minutes later three more B. w. fowleri were placed in the tank and all bullfrogs made several more unsuccessful attempts to swallow toads. In an independently observed situation the junior author watched a large R. catesbeiana ingest an adult male B. a. americanus. The bullfrog quickly regurgitated the slime covered toad. Although none of the bullfrogs that we observed were able to retain a toad, they appeared to be otherwise little affected by the toad secretions.

Brown (1974) reported that parotoid secretions of adult B. woodhousei (B. w. woodhousei, Brown, pers. com.) and B. valliceps immobilized large R. catesbeiana. Brown (1974) also pointed out that Bufo have only rarely been found in the diet of bullfrogs. Our observations support Brown's (1974) suggestion that adult venom-covered Bufo are unpalatable to R. catesbeiana.

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LITERATURE CITED

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