

TREE CLIMBING BULLSNAKES

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On 18 May, 1979, I observed and photographed two Bullsnares (Gopher Snake) (*Pituophis melanoleucus sayi*) climbing a large Plains Cottonwood (*Populus deltoides*) in Dinosaur Provincial Park, Alberta. Both snakes were relatively large adults measuring approximately 1.3 m in length. The tree had a large, single vertical trunk (48 cm in diameter) with two large lateral branches coming off from the main trunk some 3.5 m from the ground.

Both snakes climbed by going straight up one side of the tree. Vertical locomotion was accomplished by lateral undulatory movements utilizing the broad, scaly ridges of the deeply

furrowed bark as contact points. During the climbing process the head and anterior trunk of each snake remained lifted from the tree, sliding back and forth over the bark in search of appropriate contact points (Fig. 1). The climbing process was relatively slow, but effective.

The first snake to climb the tree reached the dorsal surface of the base of one of the large lateral branches and stopped. Approximately five minutes later the second snake arrived at the base of the tree and climbed to the same point as the first snake, following essentially the same path. The two snakes remained in proximity on the base of the branch, often somewhat intertwined (Fig. 2), for approximately one hour before descending to the ground.

Inasmuch as mating of the Bullsnares occurs at this time of year,^{1 2} it is possible that the first snake to climb the tree was a female, and that the second snake was a male following the scent of the female. Thus, mating behavior might have been involved in this tree climbing observation.

Both Stebbins and Klauber reported that snakes in this genus are good climbers and have been observed at considerable heights in trees searching for the eggs and young of birds, but did not describe the mode of locomotion utilized or the growth forms of the tree trunks climbed.^{3 4} Therefore, this observation is of importance as it established a method of locomotion used by Bullsnares to climb trees, a specific type of tree that can be climbed, and a possible reason for climbing trees in addition to seeking food. Also, to my

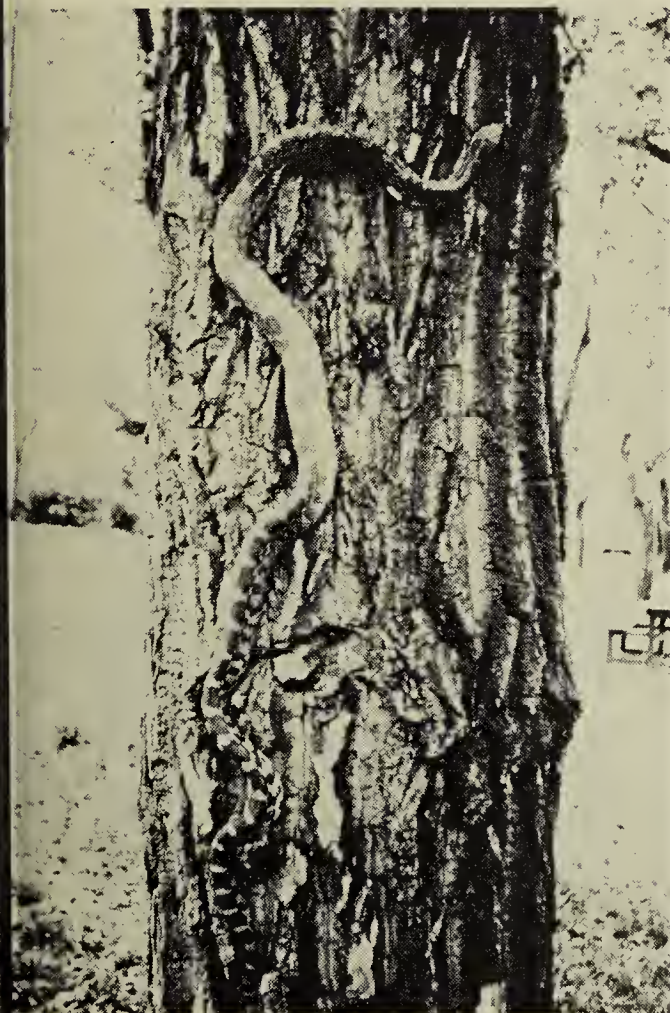


Figure 1. Bullsnares climbing cottonwood.



Figure 2. Two Bullsnakes in cottonwood.

knowledge it is the first report of Bullsnakes climbing trees in this area.

¹FITCH, H. S. 1970. Reproductive cycles in lizards and snakes. Museum of Natural History, the University of Kansas Press, Lawrence, Kansas, Misc. Pub. No. 52. 247 pp.

²PENDLEBURY, G. B. 1972. The Bullsnake a misunderstood friend. *Dinny's Digest* (Calgary Zoological Society, Calgary) 2(1):16-19.

³STEBBINS, R. C. 1954. Amphibians and reptiles of western North America. McGraw Hill Co., Toronto. 528 pp.

⁴KLAUBER, L. M. 1947. Classification and ranges of the Gopher Snakes of the Genus *Pituophis* in the western United States. *Bulletin of the Zoological Society of San Diego*, San Diego, California No. 22. 81 pp.



Dinosaur Provincial Park, Alberta.

Wayne Lync