Aggressive Behavior Exhibited by a Swift Fox, Vulpes velox

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Kamler, Jan F., Warren B. Ballard, and Kevin Mote. 2000. Aggressive behavior exhibited by a Swift Fox, *Vulpes velox*. Canadian Field-Naturalist 114(3): 506.

While live-trapping Swift Foxes (*Vulpes velox*) we observed a juvenile male Swift Fox that exhibited aggressive behavior while protecting a juvenile female Swift Fox that had been captured in a wire box trap. Although Swift Foxes are not normally known to be aggressive, our observation demonstrates their ability to exhibit this behavior when protecting other family members.

Key Words: Swift Fox, Vulpes velox, aggressive behavior, protective behavior, Texas.

Swift Foxes (Vulpes velox) are generally considered one of the least aggressive of the canid species in North America (Stewart 1999). This may contribute to their vulnerability to larger canids, as predation by Coyotes (Canis latrans) was found to be the major cause of Swift Fox mortality in several areas of North America (Laurion 1988; Covell 1992; Sovada et al. 1998). The more aggressive Red Fox (Vulpes vulpes) may also dominate and out-compete Swift Foxes (Sovada et al. 1998; Stewart 1999).

Despite the usual nature of Swift Foxes, we observed a juvenile male Swift Fox exhibit aggressive behavior we interpreted as an effort to protect a juvenile female Swift Fox that had been captured in a wire box trap. This observation was made on 17 October 1998, at Rita Blanca National Grasslands (36°22'N, 102°40'W) in Dallam County, Texas. We were trapping Swift Foxes in wire box traps and placing radio-collars on them as part of a study to determine the effects of Coyotes on the ecology of Swift Foxes in the Texas panhandle.

In a vehicle, Kamler approached a wire box trap that had recaptured a juvenile female Swift Fox. The female Swift Fox already had a radio-collar on her, however, another fox that did not have a radio-collar was laying beside her on the outside of the trap. Kamler left and returned shortly thereafter with another box trap to attempt to capture the unmarked fox. Kamler stopped the vehicle approximately 10 m from the captured fox and the unmarked fox quickly ran a short distance away. Kamler got out of the vehicle to place the second box trap next to the captured fox. As he walked towards the captured fox, the unmarked fox ran aggressively towards him. It continued to stay between him and the captured fox, and would walk towards him every time he walked towards the captured fox. Yelling and waving hands caused the unmarked fox to run a short distance

away, however, each time Kamler attempted to approach the captured fox, it would run towards him and attempt to "nip" his feet. After continuous yelling, he was able to set the second trap and capture the unmarked fox. It was a juvenile male that was similar in size to the recaptured juvenile female (2.3 and 2.0 kg, respectively), and they were probably siblings.

Subsequent radio-tracking revealed that both juvenile Swift Foxes remained on the study site, although they rarely were located together. The juvenile male was killed by a Coyote five months after his capture, and the juvenile female continues to be monitored on the study site.

Our observation suggests that Swift Foxes can occasionally be aggressive, particularly when protecting presumed family members.

Acknowledgments

This research project was funded by Texas Tech University and Texas Parks and Wildlife Department. This is Texas Tech University College of Agricultural Sciences and Natural Resources technical publication T-9-849.

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Received 5 October 1999 Accepted 6 December 1999



Kamler, Jan F, Ballard, Warren B, and Mote, Kevin. 2000. "Aggresive behavior exhibited by a Swift Fox, Vulpes velox." *The Canadian field-naturalist* 114(3), 506–506. <u>https://doi.org/10.5962/p.364009</u>.

View This Item Online: https://doi.org/10.5962/p.364009 Permalink: https://www.biodiversitylibrary.org/partpdf/364009

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