



COLORADO

Parks and Wildlife

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To: The Colorado Parks and Wildlife Commission

From: Krista Heiner, Regulations Manager

Subject: Division response to HSUS petition to prohibit trapping in Colorado

The Humane Society of the United States (HSUS) petitioned the Commission to amend regulations in Ch. W-3 to prohibit taking wildlife using all traps, including live cage or box traps. HSUS argues that a full trapping ban is necessary to comply with Colorado law and that swift fox (*Vulpes velox*) are particularly vulnerable to trapping. Because these arguments involve matters within the Division of Parks and Wildlife's expertise, we offer the following information to inform the Commission's decision on HSUS's petition.

Furbearer trapping as authorized by Commission regulation is consistent with the Colorado Constitution. Furthermore, the Commission has responsibly regulated trapping since Constitutional Amendment 14 was approved by voters. Regulated trapping is also consistent with the North American Model of Wildlife Conservation. Finally, all available data indicate that swift fox populations in Colorado are sustainable. For these reasons, the Division recommends the Commission deny the petition.

Colorado Law

The Commission's regulations allow hunters to use live traps, limited to cage or box traps, to take furbearers in limited circumstances. See Ch. W-3, #302-#303. HSUS argues these regulations are inconsistent with Amendment 14 to the Colorado Constitution, which provides: "It shall be unlawful to take wildlife with any leghold trap, any instant kill body-gripping design trap, or by poison or snare." Colo. Const. art. 18, § 12b(1); see also § 33-6-203(1), C.R.S. (implementing Amendment 14).

Amendment 14 does not expressly prohibit all traps, but only certain trap designs—namely, leghold traps and instant kill body-gripping traps. Colo. Const. art. 18, § 12b(1). Nevertheless, HSUS argues the amendment "was clearly intended to prohibit recreational and commercial killing of wildlife using all traps, including box traps." At least one court has rejected this argument. See *Sinapu v. Colo. Wildlife Comm'n*, No. 06CV8933, Order (Denver Dist. Ct. April 10, 2008).



Swift Fox

HSUS argues that swift fox are easily trapped and vulnerable to extirpation in Colorado. Although the species has no heightened legal protection, the Division has long participated in swift fox conservation efforts and closely monitored Colorado's swift fox population. The best available evidence indicates swift fox occupy a high percentage (71-87%) of suitable habitat in Colorado and the swift fox population is stable.

The swift fox is not federally listed, and the species is not on Colorado's endangered, threatened, or nongame wildlife list. In Colorado, swift fox are classified as "furbearers," § 33-1-102(17), C.R.S., and hunters with a small game or furbearer license may take swift fox from November through February, Ch. W-3, #304(B), #323(A). Among the lawful methods of taking swift fox are live traps, limited to cage or box traps. Ch. W-3, #303(E)(4).

Despite the absence of heightened legal protection, the Division participates in the Swift Fox Conservation Team (SFCT).¹ The SFCT has adopted a Conservation Assessment and Conservation Strategy (CACs), with the goal of maintaining or restoring range-wide swift fox populations to ensure long-term species viability (Dowd Stukel 2011). As part of its contribution to the CACS (Kahn et al. 1997), the Division monitors the status of swift fox in Colorado every five years. The next scheduled monitoring survey will be in 2021.

These surveys and other occupancy studies confirm that swift fox have consistently occupied a high percentage of suitable shortgrass prairie habitat in eastern Colorado. Specifically, Finley et al. (2005) estimated 82% occupancy in 1995; Martin et al. (2007) estimated 71% occupancy in 2004; and CPW estimated 87% occupancy in 2011 (Stratman 2012) and 85% occupancy in 2016 (Stratman 2017). In short, occupancy does not appear to have changed significantly since 1995. Notably, the Commission did not authorize a swift fox harvest from 1995 to 2009, which suggests post-2009 harvests have not decreased swift fox occupancy.

Occupancy estimates do not reveal species abundance or provide population estimates. However, the Division can roughly estimate swift fox abundance by applying densities recorded in the literature to estimates of occupied habitat in Colorado. In CPW's most recent survey, Stratman (2017) estimated that swift fox

¹ The Division, along with other several other state, tribal and federal agencies, formed SFCT in 1994. At that time, the United States Fish and Wildlife Service was evaluating a petition to list the swift fox under the Endangered Species Act. The swift fox has not been a candidate for listing since 2001, but the Division has continued to participate in the SFCT.

occupied 33,696 km² of eastern Colorado short-grass prairie in 2016. Range-wide, observed swift fox densities vary from 7-110 swift fox/100 km² (Fitzgerald et al. 1983, Harrison et al. 2002). In northern Colorado, Fitzgerald et al. (1983) recorded swift fox densities of 20-40/100 km² in poor habitats and densities of 70-110/100 km² in better conditions.² The literature suggests swift fox density on Colorado's eastern plains is high (Fitzgerald et al.1983). But assuming a conservative density of 18-30 swift fox/100 km² (Shauster et al. 2002, Fitzgerald et al. 1983, Fitzgerald and Roell 1995, Fitzgerald 1997) with a mid-point density of 24/100 km² in occupied habitat, a projection of approximately 8,000 swift fox could be put forth for Colorado.

Taking this projection a step further, the Division can estimate an annual sustainable harvest rate. For Colorado's swift fox population, the Division believes an annual harvest rate of up to 15% is sustainable. Assuming a conservative population density of 24/100 km², this results in an annual harvest of 3.6/100km² (approximately 1,200 animals total). The Division has therefore set an annual harvest density threshold of 3.6 swift fox per 100km².

The Commission has allowed swift fox harvest since 2009. Following the inception of harvest, the Division used annual surveys to monitor the harvest but the available licensing structure made it difficult to estimate swift fox harvest totals with precision. Hunters may lawfully take swift fox (and other furbearers) with either a small game or furbearer license. Surveying every license-holder in this large pool was impractical, so the Division surveyed a sample. However, getting a representative sample was difficult (only a small proportion of small game and furbearer license-holders hunt swift fox), so the survey harvest estimates were highly variable and imprecise.³ Because harvest surveys resulted in imprecise estimates, the Division stopped conducting them after 2015 and has proposed changing the license structure to allow better harvest estimates.

An informal method of estimating swift fox harvest is inspecting pelts at the annual Trappers and Predator Hunters Association fur sale, which is the only fur sale in Colorado. The number of pelts varies significantly from year to year, but from 2009 to 2020 an average of 175 swift fox pelts were offered for sale each year—a small fraction of the sustainable harvest rate.

Despite the lack of precise harvest estimates, the occupancy and density studies described above indicate a widespread and stable swift fox population in Colorado. Indeed, Colorado's robust swift fox population has allowed the Division to help other SFCT members reestablish the species by providing donor animals for transplant. For example, from 2003 to 2006 CPW provided swift fox to Badlands National Park in

² The latter is one of the highest documented densities in the swift fox range.

³ The high 2015 estimate that HSUS cites in its petition is a good example of this variability and imprecision.

South Dakota, and in 2009 and 2010 CPW provided animals to the Oglala Sioux on the Pine Ridge Reservation. An informal indicator of high swift fox density in Colorado is the time required to fulfill these donor requests—in one case, it took only two nights for the Division to capture the donor animals requested.

This evidence indicates swift fox are widespread in Colorado's shortgrass prairie habitat and the population is stable in Colorado.

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