

Black-footed Ferret Programmatic Safe Harbor Agreement

Previous studies suggest that a minimum of approximately 75 acres of occupied black-tailed prairie dog habitat or 100–150 acres of occupied white-tailed or Gunnison’s prairie dog habitat are needed to support one female black-footed ferret (Biggins et al. 2006). However, conservative field observations suggest the prairie dog acreage required to support a female ferret may be as much as 225–375 acres depending on prairie dog densities, which vary by species, and other factors including disease and climactic conditions (U.S. Fish and Wildlife Service 2013). Male ferrets have overlapping ranges with female ferrets and do not require additional prairie dog habitat beyond that considered for females (Biggins et al. 2006). These conservative estimates of 225 acres of black-tailed prairie dog occupied habitat and 375 acres of Gunnison’s or white-tailed prairie dog occupied habitat to support one female ferret were used to determine the amount of habitat needed for downlisting and delisting criteria (U.S. Fish and Wildlife Service 2013).

The amount of habitat needed by a black-footed ferret population is directly related to the amount of occupied prairie dog habitat and the density of prairie dogs on that habitat (Biggins et al. 1993). Therefore, prairie dog management can be crucial to ferrets. However, landowner attitudes toward prairie dogs vary greatly and prairie dogs have long been a focus of conflict with agricultural producers (Miller et al. 2007). The principal conflict centers on competition between livestock and prairie dogs for forage, but also includes concern for livestock safety.

Competition for forage between prairie dogs and livestock in some instances—depending on factors such as prairie dog density, rainfall, temperature, and stocking rates—may be a threat to the economic viability of livestock producers. However, competition among herbivores is a complex interaction that varies by livestock operation size, geographic location, vegetation type, biomass productivity, season, and year (Derner et al. 2006, Detling 2006). The complexity associated with this interaction and related ranching concerns have led to ongoing control of prairie dogs in some areas. Successful reintroductions of black-footed ferrets, which depend on healthy prairie dog populations, cannot be sustained without addressing this concern. Judicious and targeted management of prairie dog colonies is necessary to maintain support for the conservation of the ferret from landowners whose ranches provide suitable ferret habitat and from their neighbors.

Prairie dog management can involve either lethal or non-lethal methods. Lethal control of prairie dogs typically includes poisoning or shooting, both of which can limit the number of black-footed ferrets that a site can support (Pauli 2005, Reeve and Vosburgh 2006). Poisoning of prairie dogs is regarded as a major factor in the historical decline of prairie dogs and ferrets (Forrest et al. 1985, Cully 1993, Forest and Luchsinger 2005). Currently, most poisoning is more limited in nature and undertaken by landowners at very localized locations (U.S. Fish and Wildlife Service 2009). Toxicant use on or adjacent to ferret reintroduction sites is of particular concern due to the potential use of toxicants with secondary impacts to non-target wildlife, including ferrets that consume prairie dogs. However, carefully managed and implemented use of specific toxicants with identified