

White-tailed Prairie Dog (*Cynomys leucurus*)

Species Status Statement.

Distribution

White-tailed prairie dog occurs in grasslands and shrublands, in basins and mountain valleys in four western states. Wyoming has the largest percentage of the species' range (62% of the total) followed by Colorado (21%) and Utah (16%). This prairie dog also inhabits a small area of Montana (Seglund et al. 2006). In Utah, white-tailed prairie dog inhabits the eastern and northeastern counties (Lupis et al. 2007). A review of the historical range of white-tailed prairie dog in Utah, in comparison with its contemporary distribution, found no major long-term reduction of this species' distribution. This review also documented recolonization of some areas previously considered extirpated (Oliver 2016).

Table 1. Utah counties currently occupied by this species.

White-tailed Prairie Dog	
CARBON	GRAND
DAGGETT	RICH
DUCHESNE	SUMMIT
EMERY	UINTAH

Abundance and Trends

Disease greatly influences white-tailed prairie dog populations. Year to year populations can vary but long-term population levels are stable in Utah (Lupis et al. 2007, UDWR data). To assess trends in white-tailed prairie dog populations, Utah has followed an occupancy-based monitoring protocol. Monitoring began in 2008 with field surveys repeated in 2011, 2014, and 2016. Occupancy estimates were relatively stable with no statistically significant declines or increases noted (Hersey et al. 2016).

Additionally, prairie dogs receive more intensive monitoring in Uintah County, as part of the black-footed ferret recovery effort. Managers there estimate population levels in the colonies on a yearly basis (Biggins et al. 1993). Data from these surveys show the yearly fluctuations of the populations but a stable long-term population.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

White-tailed prairie dogs generally prefer flat terrain (<30% slope) with deep, well-drained soil to build burrows. Burrows need to be deep enough for prairie dogs to build hibernacula to survive

cold winter months. White-tailed prairie dogs eat grasses and forbs, and prefer vegetation types that are open and short. Shrub species associated with prairie dog habitat include fourwing saltbush, shadscale, sagebrush, and greasewood. Where shrubs occur in the colonies, they are generally short and sparse to allow for visual surveillance for predator avoidance and intra-specific social interaction (Lupis et al. 2007).

Threats to the Species

Sylvatic plague is the single most important limiting factor for white-tailed prairie dog. Sylvatic plague is an Old World pathogen, first documented in American mammals in California in 1908 (Barnes 1993). It has since spread eastward from this area to South Dakota and Texas (Seglund et al. 2006). During epizootic events, 85 – 96% of prairie dogs in the affected colonies can die from the disease. The infection rate among white-tailed prairie dogs can be slightly lower than in other prairie dog species, because of this species' lower social interactions and more dispersed colonies (Anderson and Williams 1997). White-tailed prairie dog evolved with periodic drought conditions so impacts are generally low. However, cumulative impacts of drought and other factors (exotic annual grasses and forbs) can affect prairie dog populations.

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

Medium
Disease – Alien Organisms
Droughts
Oil and Gas Drilling

Rationale for Designation.

Although white-tailed prairie dog still occupies much of its historical range, individual colonies are smaller in area and population, and more isolated. This increases the vulnerability and severity of sylvatic plague and drought conditions. The impacts of these threats may last longer and be more severe with the smaller, isolated colonies. White-tailed prairie dog was petitioned for listing under the Endangered Species Act first in 2002. An initial listing decision of not warranted was vacated after a lawsuit. The courts required the United States Fish and Wildlife Service (Service) to conduct another review of the species, and in December 2017, the Service again determined this species not warranted for listing. Maintaining Sensitive Species status for white-tailed prairie dog will help ensure continued active state management.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. White-tailed prairie dog is currently managed both as a non-game wildlife species, and as an agricultural pest species. As such, private landowners can control nuisance prairie dogs year-round. Recreational shooting is also permitted from June 16 to March 31. ESA listing could complicate efforts to control nuisance prairie dogs on private lands. Recreational shooting would likely be prohibited. White-tailed prairie dog habitat in Utah has a high degree of overlap with BLM-authorized oil and gas leases, and ESA listing could increase restrictions and environmental review of oil and gas exploration and production. ESA listing could also affect development of cities found in its range (e.g. Vernal, Roosevelt, Price), as has long been the case with Utah prairie dog in Southwestern Utah.

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