Public Attitudes and Knowledge of the Black-tailed Prairie Dog: A Common and Controversial Species

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Black-tailed prairie dogs (Cynomys ludovicianus; hereafter, prairie dogs) are native to the short-grass prairie region of North America from Mexico to Canada (figure 1). According to government documents (64 Federal Register 57 at 14426–14427), before the 19th century expansion of the United States, prairie dogs inhabited millions of acres of the Great Plains and lived in huge colonies west of the Missouri River. Settlement of the Great Plains and the transformation of vast areas from native grassland to tilled farmland forever changed the prairie ecosystem and prairie dog habitat.

Over the course of the last century, the habitat range of the prairie dog shrank by nearly 99 percent (Dolan 1999, Kotliar et al. 1999). Among the causes of shrinkage is poisoning: Livestock operators began extensive poisoning of prairie dogs around 1880, and the federal government began subsidizing prairie dog poisoning in 1915, quickly making it an institutionalized practice for federal, state, tribal, and county governments (Dunlap 1988). Prairie dog numbers have been further reduced by disease (i.e., sylvatic plague \(\text{Yersinia pestis}\); Barnes 1993), drought, urban sprawl, cultivation and grazing practices, and recreational shooting.

Because of the controversy over the status of the species, much of the recent research on prairie dogs explores the extent and nature of competition between prairie dogs and cattle for forage and the economic justifications for prairie dog control (O’Meilia et al. 1982, Collins et al. 1984, Uresk and Paulson 1989, Mulhern and Knowles 1995). There is also an ongoing scientific debate about whether prairie dogs are a keystone species and the extent to which they fulfill functions not duplicated by other species (Stapp 1998, Kotliar et al. 1999). Incomplete and emerging scientific understanding of prairie dogs and their relation to a changing ecosystem fuels not only these debates but also a public policy controversy (Gerhardt 2000). The outcome of this debate may guide policy-making for other widespread but threatened species.

Many researchers and environmentalists consider the management and conservation of prairie dogs to be vital not only for the survival of the prairie dogs but also for the effective conservation of a large number of other grassland species, including predators such as the black-footed ferret \(\text{Mustela nigripes}\), ferruginous hawk \(\text{Buteo regalis}\), and burrowing owl \(\text{Athene cunicularia}\) (Knopf 1993, Miller et al. 1996, Kotliar et al. 1999). The National Wildlife Federation, Predator Project, and Biodiversity Legal Foundation petitioned the federal government to acknowledge the declining numbers of prairie dogs and recognize their importance to the prairie ecosystem by determining that the black-tailed prairie dog is a threatened species (64 Federal Register 57 at 14425).

In 2000 the US Fish and Wildlife Service (FWS) found (under section 4[b] of the Endangered Species Act) that list-