

Conservation Information

Other important species colonize prairie dog habitat as well. Over 200 vertebrate species can utilize it at some point in their life cycle given conditions remain optimal and natural. Some species are more successful within prairie dog colonies than elsewhere, and the burrowing owl (*Athene cunicularia hypugaea*) is one who depends on prairie dog colonies for their survival.

Burrowing owls use prairie dog towns as foraging habitat and breeding grounds. These owls are ground-dwellers that nest in old or empty prairie dog burrows, and show strong preference for active colonies over abandoned fields. Fledgling success is higher, and predation is lower, making prairie dog habitats like this one important in maintaining burrowing owl numbers in Colorado.

Colorado's black-footed ferret (*Mustela nigripes*), listed as an endangered species by the US Fish and Wildlife Service, is a habitat specialist and depends solely on prairie dog colonies for survival. Over 90% of its diet consists of prairie dogs, and ferrets use prairie dog burrows as their sole source of shelter. This close association with prairie dogs is a significant reason for its decline. From the late 1800's to 1960, the numbers of prairie dogs and their habitat were drastically reduced by habitat loss from the conversion of native prairie to cropland, by poisoning, and by introduced disease. The North American ferret population declined with it as a result. The more we destroy crucial prairie dog habitat for human development, the more likely we are to lose those species dependent on that habitat. And that loss is forever.

The Celestial Seasonings prairie dog preserve helps provide a connection between other prairie dog habitats in the area. Connections between habitat areas are critical from a biological perspective. Connectivity helps reestablish populations in the event of a population decline and allows the exchange of genetic information between colonies. In natural, non-urbanized habitat, prairie dogs disperse 2-3 kilometers (1-2 miles) and sometimes as far as 6 kilometers (4 miles). In Boulder County, prairie dog habitat areas are separated by urban development, roads, active agricultural land, water bodies and other obstructions that impede their dispersal. But some obviously manage to succeed and reestablish in other colonies. Considering that the dispersal patterns of prairie dogs in Boulder County have been altered due to urban developments, roads and other obstructions, the ideal distance between habitat areas, as outlined in Boulder County Parks and Open Space Prairie Dog Habitat Element of the Grassland and Shrubland Management Policy, should be kept at a maximum of 3 kilometers (1.8 miles) based on known dispersal distances of prairie dogs in the wild. This is a conservative estimate given the dangers that prairie dogs face when trying to disperse in our urban habitats, and one in which the anticipated outcome will be that more dispersing prairie dogs will arrive safely to other colonies within that range. Since this habitat sits between other prairie dog habitats within the area, it acts as a crucial connecting habitat to others within the 3 kilometer dispersal range.