



Chihuahuan Desert Protection

One of four deserts in the U.S., the Chihuahuan Desert stretches from west Texas, throughout southern New Mexico, southeastern Arizona, and northern Mexico. Historically, the Chihuahuan Desert was dominated by black grama grasslands and was shaped by climate, soil, fire, and herbivory. Desert grasslands feature diverse invertebrate, rodent, bird, plant, and reptile life.

Unfortunately, livestock grazing in this region over the past four centuries has reduced perennial grass cover and caused massive invasion by shrubs such as mesquite and creosote. This process of desertification of Chihuahuan Desert grasslands is potentially irreversible. These impacts have eroded biodiversity, as a variety of plants and wildlife have evolved with arid grasslands and are harmed when these fragile areas are converted to desert shrub or otherwise impoverished by human actions. Among those species imperiled by habitat degradation and wildlife extermination campaigns in the Chihuahuan Desert are the northern aplomado falcon, black-tailed prairie dog, Mexican wolf, jaguar, black-footed ferret, and grassland songbirds.

Aplomado Falcon: Bellwether of the Chihuahuan

The northern aplomado falcon depends on desert savanna habitat, particularly black grama grasslands with scattered tall yucca. With its extensive habitat needs and status on the top of the food chain, the northern aplomado falcon indicates the condition of the Chihuahuan Desert. Tellingly, the aplomado disappeared from the U.S. by the 1950s due to shrub encroachment, elimination of keystone rodents, and pesticide contamination.

Currently, oil and gas development and continued livestock grazing further degrade remaining aplomado falcon habitat. In particular, Otero Mesa (NM) is considered one of the best areas for potential falcon recolonization or reintroduction, but it is targeted by the Bush Energy Plan for fossil fuel extraction. In addition, livestock grazing continues on private and public lands in the Chihuahuan Desert, causing continued desertification of grasslands and the destruction of yucca elata and other tall yucca which aplomados use for nesting. There is cause for hope, however, as breeding by a pair of wild falcons was documented in New Mexico in 2002, for the first time in fifty years.

Black-tailed Prairie Dog

Due to extensive eradication campaigns and sylvatic plague, black-tailed prairie dogs have been significantly reduced in many areas within the Chihuahuan Desert and were extirpated from Arizona by the 1930s. Given the keystone role of this burrowing rodent, other species in the Chihuahuan have disappeared or are severely imperiled by regional prairie dog decline, including the northern aplomado falcon, black-footed ferret, mountain plover, and burrowing owl. In addition, prairie dogs maintain grasslands by clipping shrubs. The elimination of prairie dogs in many areas within the Chihuahuan therefore removed a vital check on shrub encroachment.

Desert Grassland Songbirds

Many birds associated with black grama grassland are increasingly imperiled due to the loss and degradation of their habitat. Among those species at risk from this trend are the Cassin's sparrow, lark sparrow, horned lark, common nighthawk, and eastern meadowlark. Scientists have advocated the preservation of remaining black grama grassland in the Chihuahuan Desert to benefit birds associated with this diminishing habitat type.

Forest Guardians' Advocacy for the Chihuahuan Desert

Forest Guardians has pushed for aplomado habitat protection by both challenging specific land uses that harm falcon habitat, such as livestock grazing and oil and gas development, and by petitioning the U.S. Fish and Wildlife Service for the designation of critical habitat for this rare raptor. In addition, Forest Guardians is promoting the reintroduction of fully protected falcons to New Mexico and therefore opposes the designation of reintroduced falcons as experimental and non-essential.

We have also led a coalition of groups seeking Endangered Species Act (ESA) protection for the black-tailed prairie dog and mountain plover, who merit, but have been denied, ESA listing. Forest Guardians has pressured state and federal agencies to adopt proactive conservation strategies for these species, and we've opposed flawed government policies allowing continued harms against the prairie dog ecosystem.

More broadly, Forest Guardians has a long-standing public lands grazing program, the goal of which is to reduce the ecological harms caused by livestock grazing in the American Southwest. These harms are dramatically apparent on the Chihuahuan Desert landscape. Alongside the invasion of shrubs from livestock grazing, desert rivers and streams – ribbons of life for the majority of the region's wildlife – have been dewatered and degraded to accommodate unsustainable crop and livestock agriculture.

Visit www.fguardians.org or call 505-988-9126 for more information and to volunteer in the Forest Guardians effort to preserve and restore native wildlands and wildlife in the American Southwest. Contact us for scientific citations on the Chihuahuan Desert.