

**UTAH PRAIRIE DOG
CYNOMYS PARVIDENS**



**IN THE OFFICE OF ENDANGERED SPECIES
U.S. FISH AND WILDLIFE SERVICE
UNITED STATES DEPARTMENT OF INTERIOR**

**PETITION TO THE U.S. FISH AND WILDLIFE SERVICE TO
RECLASSIFY THE UTAH PRAIRIE DOG AS AN ENDANGERED SPECIES
UNDER THE ENDANGERED SPECIES ACT,
16 U.S.C. § 1531 ET SEQ. (1973 AS AMENDED)**

PRIMARY PETITIONER

**FOREST GUARDIANS
312 MONTEZUMA AVE. SUITE A
SANTA FE, NEW MEXICO 87501
(505) 988-9126**

3 FEBRUARY 2003

ADDITIONAL PETITIONERS:

**CENTER FOR NATIVE ECOSYSTEMS
P.O. Box 1365
PAONIA, COLORADO 81428
(970) 527-8993**

**SOUTHERN UTAH WILDERNESS ALLIANCE
1471 S. 1100 E.
SALT LAKE CITY, UTAH 84105
(801) 486-3161**

**ESCALANTE WILDERNESS PROJECT
285 WEST 200 NORTH, P.O. BOX 652
ESCALANTE, UTAH 84726
(435) 826-4778**

**BOULDER REGIONAL GROUP
PO Box 1455
BOULDER, UTAH 84716**

**TERRY TEMPEST WILLIAMS
HC 64 Box 3710
CASTLE VALLEY, UTAH 84532**

**PETITION PREPARED BY:
NICOLE J. ROSMARINO, PH.D.**

**WITH ASSISTANCE FROM:
ERIN ROBERTSON, CENTER FOR NATIVE ECOSYSTEMS**

Executive summary

Petitioners are requesting FWS reclassify the Utah prairie dog to Endangered status under the ESA. This prairie dog species has been listed since the ESA was passed in 1973. It was originally listed as Endangered, but was downlisted to Threatened in 1984, in response to a delisting petition from the State of Utah.

The Utah prairie dog is a full species, and is a member of the prairie dog genus, which comprises five species. All five species are considered keystone, meaning they play inordinately important roles in the ecosystems where they exist. The Utah prairie dog is very geographically restricted, limited to a few counties in southwestern Utah.

Historical acreage of this prairie dog species has been drastically reduced, from 448,000 acres to only 6,977 acres across their range, a decline of 98.4%. Utah prairie dog populations have dwindled from 95,000 UPDs historically to a census count of only 4,217 in 2001. There are three recovery areas delineated for the species: the West Desert, Paunsaugunt, and Awapa Plateau. Declines continue across all three recovery areas.

In the West Desert Recovery Area, only 3,240 UPDs were counted in 2001, down by over 1,200 prairie dogs from the previous year. Between 2000 and 2001, one out of three prairie dogs disappeared from public lands in the West Desert. Some 78% of UPDs in the West Desert are located on private lands, which have also experienced massive declines in recent years: from 3,501 in 2000 to 2,540 in 2001, a decrease of some 27.5%. Since 1989, almost one out of every three prairie dogs on private lands in this recovery area is gone.

On U.S. Bureau of Land Management (BLM) sites classified under a recent conservation strategy, eleven of fifteen sites have been extirpated or are marginal, small, or declining populations. One of the remaining complexes has moved onto private land and the other is the Adams Well Demonstration Site. While the agencies may consider the Adams Well site a successful example of the efficacy of translocation, 1,200 Utah prairie dogs have been translocated to that site, yet only 60 UPDs have been counted there as of Spring 2002. Unclassified sites have not flourished, either. Rather, six are extirpated, marginal, small, or declining. On state lands in the West Desert, nearly one out of every two prairie dogs has disappeared over the past eight years of census data. These site-specific accounts form a bleak story of UPD complex decline and extirpation, which stands in contrast with the supposed stronghold West Desert federal lands represent for the future of the Utah prairie dog.

In the Paunsaugunt Recovery Area, the 2001 census count was 735 prairie dogs on all land ownerships. This is the lowest count across all years of census data except 1979 and 1990 (a year in which no counts were conducted on private land). Over 75% of UPDs in the Paunsaugunt are on private lands, versus 16% on federal lands. This is a substantial decrease from 1991-1992 when 42-46% of UPDs in this recovery area were on federal lands. Of the two UPD sites on BLM land in the Paunsaugunt, both have marginal or small populations. On all eight complexes on USFS land in the Paunsaugunt, UPD populations are extirpated, marginal, have lower populations than in the past, and/or are likely to face recurring plague epizootics in light of past population crashes. Both Utah prairie dog complexes in Bryce Canyon National Park are marginal or declining. There has also been a dramatic decline of prairie dogs on state lands in this recovery area, from 154 prairie dogs counted in 1994 to only 58 prairie dogs recorded in 2001. The 2001 count of 557 UPDs on private land was lower than that recorded for every year after 1984.

The depressed state of Awapa Plateau populations has been acknowledged as dangerously low since at least 1995. The downward spiral has accelerated, as the 2001 spring census indicated only 208 UPDs, down from 353 counted in 1998, and 369 censused in 1996. Out of the seven UPD sites on BLM lands in the Awapa Plateau, all are extirpated, marginal, small, or declining. Out of the five UPD sites on the Dixie National Forest, all have been extirpated or are extremely marginal. All four Utah prairie dog complexes on the Fish Lake National Forest are either extirpated or marginal. The sole UPD complex on National Park Service (NPS) land in the Awapa Plateau has disappeared. Both complexes on state lands in the Awapa Plateau have been marginal since 1991. The one prairie dog site on land owned by the Utah Division of Wildlife Resources (UDWR) has likely been extirpated. In addition, on the Awapa Plateau, there has been a drastic decrease in prairie dogs on private lands. In 2001, the census count on private lands was 68 UPDs, down from every year from 1985-2000. The 2001 census count was only 23.3% of the count the prior year, and a mere 8.7% of the census two years prior. Only three complexes on the Plateau had steady increases from 1984-2002 or 1991-2002, versus thirteen sites showing declines and 8 sites likely extirpated.

Contrary to a theory in vogue among the agencies involved in UPD recovery planning, the severe imperilment of Utah prairie dogs is not explained away by metapopulation theory, under which UPD complexes comprise a metapopulation, with some complexes disappearing while other complexes appear. This theory would not explain why new colonies and complexes are not flourishing at a rate sufficient to replace established colonies and complexes that disappear, nor can it legitimate the anthropogenic threats which are cumulatively devastating populations of this species.

Census counts remain at levels approximating those found before downlisting. As of Spring 2001, census counts are not much higher, and are in some years lower, than the census counts before the downlisting. In fact, 2001 total population counts were lower than 1983 and 1984 counts in the Paunsaugunt and Awapa Plateau Recovery Areas. Even more alarmingly, 2001 population counts were exceeded by 1976 counts on Paunsaugunt private lands and the total count for that recovery area; and 2001 counts were exceeded by 1977 counts on Awapa Plateau private and federal lands and the total count for that recovery area.

In addition, the historic range of UPDs has been greatly reduced, due to the intersection of eradication programs, habitat destruction, and disease. The reductions in range continue to the present. From 1976-1995, UPDs have been mapped on 27,647 acres, a decrease of 93.8% from their historic range. The most recent calculation of occupied acreage – in 1995 – indicated that UPDs had declined an additional 74.8%. The UPD has been reduced from 448,000 acres to only 6,977 acres across their range, a decline of 98.4%. Of the 6,977 acres reported occupied in 1995, only 31% were publicly owned. Of the 20,670 unoccupied acres, 49% were federal lands, and 26% were state lands.

An explanation for the faltering population status of this long-time veteran under the ESA is that the species continues to be threatened by all five factors considered under the statute:

- **Habitat destruction:** includes conversion to municipal development; livestock overgrazing (which causes brush encroachment, noxious weed proliferation; fire suppression, soil impacts, destruction of riparian areas, with which UPDs are associated); oil and gas development; and road mortalities, off-highway vehicles (OHVs), and recreation impacts on public lands. Isolation and fragmentation impacts accompany this degradation of habitat, thereby increasing prairie dog susceptibility to inbreeding and disease.

- Overutilization: Both illegal and permitted shooting of the species continues. Not only does the shooting reduce UPD populations, but it may result in behavioral changes – including mass exodus – that exacerbate the direct effects of shooting.
- Disease: Sylvatic plague, is a catastrophic threat to Utah prairie dogs. With no natural immunity to the disease, whole complexes of Utah prairie dogs can be eliminated in short order. For instance, plague was documented in a complex in the West Desert and reduced that complex from 95 UPDs in spring 1999 to only 3 UPDs by June of that year. A complex in the Paunsaugunt suspected of having plague was reduced from 190 UPDs in 1994 to only 10 UPDs the following year. It is not even clear if UPDs will recover, given the threat of plague alone. Any additional limitations on UPDs – e.g., the permitted and unpermitted loss and degradation of habitat, shooting, and poisoning – intersect with plague to present a tremendous cumulative set of threats against this already beleaguered and geographically-restricted species.
- Inadequacy of regulatory mechanisms: All indications suggest that the downlisting of the UPD to Threatened in 1984 was premature. Neither census counts prior to UDWR's filing the petition, nor those prior to FWS's downlisting decision, justify diminished protection for the species. Contrary to the ESA, the 1984 downlisting action by FWS appears to be based on political, and not biological considerations.

The downlisting action made possible a special 4(d) rule that allowed shooting of UPDs. The current 4(d) rule, issued in 1991, allows take of 6,000 UPDs per year throughout the prairie dog's range. From 1985-2000, some 14,002 UPDs have been taken (primarily shot) under this program. Moreover, take of UPDs under the special 4(d) rule should be considered along take occurring under habitat conservation plans (HCPs) and under the massive translocation program.

Habitat conservation plans have resulted in take of 129.1 acres of UPD habitat and 293.9 UPDs under the Iron County HCP from 1998-2000, with additional take from many developers opting to proceed with destruction of UPD habitat without relocating prairie dogs. Iron County growth rate between 1990-2000 was 62.5%. In addition, at least seven small-scale HCPs were developed in the 1990s and provided for the destruction of 103.49 acres of UPD habitat and 362 UPDs in Iron and Garfield Counties.

- Other natural or man-made factors: Translocation, although part of the "recovery" strategy, must be considered a massive form of take. Some 19,193 prairie dogs were translocated from private lands to public sites from 1972-2000. Yet, as of Spring 2002, there were only 25 UPD towns with more than 10 individuals on public lands. Counts of UPDs on public land indicate that, in 1989, there were 2,482 UPDs censused across the three recovery areas, versus 885 counted in 2001. Despite the translocation of 1,200 UPDs to Adams Well, the latest census count indicates only 60 prairie dogs at the site.

Considered across time and cumulatively, permitted take of UPDs has been staggering. Under the Special 4(d) rule, Iron County HCP, small-scale HCPs, and translocation, there has been a take of almost 34,000 UPDs. This tally does not include illegal poisoning and shooting or the impacts of plague.

This take is based on a faulty perception among the agencies of UPD reproduction rates. The Recovery Plan, habitat conservation plans, and other planning documents include the perspective that UPDs experience “population explosions” every spring and these documents – even the Recovery Plan itself – refer to UPDs as nuisance animals in need of control. Consequently, permitted take, according to these documents, are economically necessary and will not impact UPD survival.

However, recent scientific findings indicate that UPDs, in fact, experience low reproduction rates. Survivorship in the first year of females and males is less than 50% for the Utah prairie dog. Given that prairie dogs are not sexually active until after their first year, less than half of UPDs live long enough to copulate. Survivorship of adults in subsequent years is even lower. In addition, reproductive females wean, at maximum, only one litter per year. The percentage of males that copulate as yearlings is 49%, and the percentage of yearlings copulating as females is 100%. After copulation, only 67% of reproductive female UPDs wean a litter. The mean litter size for those females that wean offspring is 3.88. Females may lose their young before they are born or weaned to abortion, genetic defects, disease, predation, and infanticide. Infanticide results in the partial or total elimination of approximately 15% of UPD litters.

Planning documents continue to perpetuate the myth that UPDs are prolific and are nuisance animals and erroneously assume that UPDs can recover through massive translocation to poor quality habitat on federal land. UPD recovery planning has therefore resulted in a steady erosion of the protections provided to the Utah prairie dog under the ESA.

Although the vast majority of UPDs are located on private lands, and public lands complexes continue to blink out, the UPD recovery program completely ignores the need to conserve UPDs on private lands. This is likely due to the continued perception among government agencies of prairie dogs as nuisance animals, rather than as a keystone species badly in need of vigorous, aggressive recovery actions. Not welcome on private lands and disappearing on public lands overwrought with ecologically destructive land uses, the Utah prairie dog is stuck between a rock and a hard place, where it’s hard to burrow.

Not only are private lands off-limits for UPD recovery, the prairie dog recovery program has hamstrung the ability of federal lands to serve conservation goals. High quality relocation sites that are “too close” to private lands have been eliminated from the pool of habitat management and UPD restoration site candidates. Further, the U.S. Forest Service and Bureau of Land Management systematically fail to consider the damaging impact of livestock grazing on UPDs and therefore do not ensure that habitat conditions for UPDs are improving.

It is time for a fundamental paradigm shift in the Utah prairie dog recovery program. That shift cannot occur while the UPD is listed as Threatened, with provisions for take via shooting, translocation, and habitat destruction. Further, whatever the causes of the Utah prairie dog’s faltering recovery, it is clear that the Utah prairie dog biologically merits reclassification to Endangered status. Under the ESA, listing decisions must be based solely on biological considerations. FWS must therefore expeditiously designate the Utah prairie dog as an Endangered species.

This prairie dog faces extinction, and its protections under the ESA must be substantially upgraded to honor the spirit and purpose of the Act. The continued imperilment of the Utah

prairie dog is not the fault of the Endangered Species Act. Rather, it should be attributed to the poor and irresponsible implementation of the ESA by federal and state agencies. An upgrade to Endangered status would better ensure that the ESA's many useful protections could be fully honored and the recovery of this species could be effected. The long period of poor implementation of the ESA in regard to this prairie dog species must come to a close, and the statute should be fully implemented to ensure the survival and recovery of the Utah prairie dog.