



United States Department of the Interior
FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE
2369 WEST ORTON CIRCLE, SUITE 50
WEST VALLEY CITY, UTAH 84119

In Reply Refer To
6-UT-05-F016
05-1273

August 18, 2005

Memorandum

To: Mary Henry, ARD, Region 6, U. S. Fish and Wildlife Service, PO Box 25486,
Denver Federal Center, Denver CO 80225

From: Henry Maddux, Utah Field Supervisor, Ecological Services, U.S. Fish and
Wildlife Service, West Valley, Utah

Subject: Intra-agency Formal Section 7 Consultation for the Proposed Henrie Ranch Safe
Harbor Agreement in Garfield County

This biological opinion was prepared at the request of the Ecological Services Regional Office of the U.S. Fish and Wildlife Service (Service) as required by the Endangered Species Act of 1973, as amended, for proposed issuance of a section 10(a)(1)(A) incidental take permit for the Utah prairie dog (*Cynomys parvidens*) associated with implementation of a safe harbor agreement. The safe harbor agreement is between Mr. Allen Henrie, the Service and the Utah Division of Wildlife Resources (Division). The Federal action constituting a section 7 nexus under the Act is issuance of an incidental take permit by the Service. This biological opinion has been prepared by the Service in accordance with section 7 of the Act (16 USC 1531, *et seq.*) and Interagency Cooperation Regulations (50 CFR 402).

The threatened Bald Eagle (*Haliaeetus leucocephalus*) is the only other Federally-listed species which may occur in the project area. The Service has determined that the proposed action may affect, but is not likely to adversely affect, the Bald Eagle. No further analysis of impacts to this species is included in this biological opinion.

The Utah prairie dog is federally listed as a threatened species and occurs within Garfield County, Utah. This biological opinion addresses impacts of the proposal to this species and was prepared using information contained in the safe harbor application package prepared by Mr. Henrie. Additional information was obtained from existing Service files and communications among Service employees and representatives from the Division.

Consultation History

On April 1, 2005, the Utah Field Office received a draft Safe Harbor Agreement (Agreement), U. S. Fish and Wildlife Service (Service), Allen Henrie (the Cooperator), Utah Division of Wildlife Resources (UDWR), property (the Property).

BIOLOGICAL OPINION

It is the Service's biological opinion that the proposed issuance of this incidental take permit is not likely to jeopardize the continued existence of the Utah Prairie Dog. No critical habitat has been designated for this species; therefore, no critical habitat will be destroyed or adversely modified by this project.

Description of Proposed Action

The proposed action is the issuance of a 10(a)(1)(A) permit in conjunction with the implementation of a Safe Harbor Agreement (Agreement) covering the 900 acre Henrie Ranch, 12 miles southwest of Panguitch in Garfield County along Highway 143 in Township 35 north, Range 6 east, in portions of sections 8, 17, 18, 19, and 20. This land (the Property) is owned by Allen Henrie and his siblings (the Cooperator). The Utah prairie dog (*Cynomys parvidens*) is the only "covered species" as defined in the Service's final Safe Harbor Policy (64 Federal Register 32717). The Agreement becomes effective upon issuance by the Service of the Section 10(a)(1)(A) enhancement of survival permit (Permit) described in Part 5 of the Agreement, and will be in effect for 15 years. The requested Permit will remain in effect for 40 years. The additional 25 years of Permit duration beyond the term of the Agreement will allow the Cooperator to continue with routine ranching operations without actively maintaining habitat for the covered species; or if individuals of the covered species are taken by routine ranching operations during this time, the Cooperator would not be liable for Section 9 prohibitions on the enrolled property.

This is a cooperative project between the Cooperator, Environmental Defense, UDWR, and the Service. The parties have agreed to work together to restore rangeland health on the Property managed by the Cooperator for the purpose of improving habitat quality for the threatened Utah prairie dog (UPD), and re-introducing a colony of the species to the Property as described in the Safe Harbor Agreement and the Allen Henrie Conservation Plan (Attachment 1 of the SHA). The proposed project will provide a net conservation benefit for the by increasing available habitat and establishing a new colony on private lands.

Upon implementation of the conservation measures identified above, a permit will be issued to authorize routine ranching operations on the enrolled property. It will also authorize the applicant to control UPDs if numbers exceed 53 in spring counts conducted by the UDWR for two consecutive years, or exceed 75 animals in a single spring count. Since the objective of this Agreement, and the expected net conservation benefit, is to establish a new colony, control of prairie dog numbers above this population size will not affect the net conservation benefit provided by the Agreement. Prairie dog take authorized will be determined annually by the Service. Necessary prairie dog control efforts will occur in compliance with the protocol outline in Attachment 2.

Status of the Species/Critical Habitat

The UPD is the westernmost member of the genus *Cynomys*. The species' range, which is limited to the southwestern quarter of Utah, is the most restricted of all four prairie dog species in the United States. As ascertained by Collier (1975), the species distribution was much broader prior to control programs and in the past, extended across the desert almost to the Nevada-Utah state line. At one time, the species was known to occur in approximately 700 sections in 10 areas of southwestern Utah. The total species population was estimated to be 95,000 animals prior to control programs in the 1920's (Turner 1979).

By the 1960's, distribution of the UPD was greatly reduced due to a non-native disease (sylvatic plague), poisoning, drought, and human-related habitat alteration resulting from cultivation and poor grazing practices. Studies by Collier and Spillett (1972) indicated that the UPD had declined or been eliminated from major portions of its estimated historical range. By 1972, they estimated that there were 3,300 UPDs in 37 separate UPD colonies.

Utah prairie dogs presently occur in principal concentrations in only three areas: the Awapa Recovery area, the Paunsaugunt Recovery Area, and the West Desert Recovery Area. The UPD was listed as an endangered species on June 4, 1973 (38 FR 14678), pursuant to the Endangered Species Conservation Act of 1969.

The decreasing trend in UPD counts prior to 1972 appears to have stabilized (Heggen and Hasenyager 1977), though numbers have vacillated greatly (McDonald 1993). Total counts have been as high as 7,400 in the 1989 spring census count (Coffeen 1989) with a low count had of 3,500 animals in 1992, largely due to climatic and disease factors (McDonald 1993). Census counts most likely underestimated the total number of adult animals because only 40 to 60 percent of individual prairie dogs are above ground at any one time (Crocker-Bedford 1975).

Reestablishment of UPD populations on public lands is identified in the Recovery Plan (U.S. Fish and Wildlife Service 1991) to ensure the continued existence of the species. Thus, in 1972, the UDWR initiated a transplant program to move animals from private agricultural lands to areas of historical occupancy on public lands. Over a 31-year period from 1972 to 2002, over 19,561 UPD were translocated to public land sites (Bonzo 2003). Although initial survival has been limited, the number of UPD colonies on public lands has increased. Increases in the known number of active colonies on public land can be attributed to a combination of factors including the translocation program, natural increases and distribution from existing sites, and discovery of previously unrecorded colonies.

In 1994, the Recovery Implementation Team (RIT) was formed, due in large part to the cooperative efforts of federal and state agencies. In 1997, the RIT developed an Interim Conservation Strategy to direct recovery activities including habitat improvement and translocation efforts, as well as direct research activities to further improve conservation and recovery measures. Federal agencies involved in management of the UPD have worked to recover and conserve the UPD and its' habitat using the best available information and adaptive management practices.

Because of the improved status of the species and the population increases on private lands in the Cedar and Parowan Valleys, where UPD numbers climbed from a census count of 627 in 1976 to 3,699 animals in 1982, the UDWR petitioned the Service to remove the UPD from the U.S. List of Endangered and Threatened Wildlife and develop a special rule under section 4(d) of the Endangered Species Act to allow "take" of 5000 animals annually between June 1 and December 31 on agricultural lands in Cedar and Parowan Valleys in Iron County. Upon reviewing all pertinent biological data, the Service determined that the UPD was not currently in danger of extinction and published the Final Rule reclassifying the species to threatened and establishing the special rule on May 29, 1984 (49 FR 22330). In June of 1991, the special rule was revised to include all agriculture land throughout the range of the species and to increase the take from 5000 to 6000 animals annually (USFWS 1991b).

Rangewide spring survey counts conducted by the UDWR in the spring of 2004 reported 4022 adult UPDs (unpublished data, UDWR). Despite the aforementioned public land efforts at establishing new UPD colonies and supplementing existing ones, approximately 68% of UPDs still occur on private and other non-federal lands (unpublished data, UDWR).

Life History

The Utah prairie dog (*Cynomys parvidens*) is one of three species of prairie dogs that live in Utah, all of which are in the subgenera *Leucocrossuromys* or white-tailed prairie dogs. Utah prairie dogs range in color from cinnamon to clay, with dark markings above the eyes and white on the tip of the tail (Pizzimenti, 1975). Adult Utah prairie dogs measure from 12 to 14 inches in length.

One half to two thirds of the adult population of the Utah prairie dog is female (Mackley et al. 1988); the skewed sex ratio is attributed to higher mortality rate in young males (USFWS 1991a). Generally, females give birth to one litter per year, with an average of four young which are born in April after a gestation period of 30 days (Pizzimenti and Collier 1975, Wright-Smith 1978, Mackley et al. 1988). However, Mackley et al. (1988) report that 3% of adult females do not bring a litter above ground each year. Young appear above ground at five to seven weeks of age, are full grown by October of their first year and reach sexual maturity at one year.

Utah prairie dogs forage primarily on grasses and forbs, and tend to select those with higher moisture content (Crocker-Bedford 1976). They often select colony sites in swales where the vegetation can remain moist even in drought conditions (Collier 1975, Crocker-Bedford and Spillet 1981). Vegetation must be short stature to allow the prairie dogs to see approaching predators as well as have visual contact with other prairie dogs in the colony (Collier 1975, Crocker-Bedford and Spillet 1981). Soils need to be well drained for burrow sites. Burrows must be deep enough to protect the prairie dogs from predators as well as environmental and temperature extremes. Utah prairie dogs are found in elevations from 5,400 feet on valley floors up to 9,500 feet in mountain habitats.

Predators on Utah prairie dogs include: badgers, coyotes, raptors, fox, and weasels. In an established prairie dog colony, predators do not make a significant impact; conversely they have a huge impact on translocation sites where an established social system or burrow system is not present.

Utah prairie dog populations are susceptible to sylvatic plague (*Yersinia pestis*), a bacterium introduced to the North American continent in the late 1800's (Cully 1993). There is a limited understanding of the variables that determine when sylvatic plague will impact prairie dog populations. Fleas are the vectors that spread the disease and can be brought into the vicinity of a prairie dog colony by a suite of mammals.

Environmental Baseline

The project falls in the Paunsaugunt Recovery Area which contains 18% of all Utah prairie dogs (UDWR unpublished, 2004). The Paunsaugunt Recovery Area has been experiencing an overall downward trend since 1993 to present. From 1993 through 2004 spring counts on all lands including private and public, decreased from 1,748 to 717 prairie dogs (Division unpublished, 2004).

In 1984, the Service issued a 4(d) rule for Utah prairie dogs which was amended in 1991. The current rule authorizes controlled take of up to 6000 animals annually on private agricultural lands between July 1 and December 31 throughout their range. Authorized take of UPD under the 4(d) is overseen and permitted by the Utah Division of Wildlife Resources and is based on spring counts and annual production of the colony. Although future take under the 4(d) can not be quantified, it is reasonable to assume that some amount would be authorized as needed to control nuisance animals.

Effects of the Action

Currently there are no UPDs on the project site. Establishment of a new UPD colony through implementation of the proposed SHA will result in a net conservation benefit for UPDs. Habitat treatments will improve available habitat by decreasing shrub cover and increasing grasses and forbes available for foraging prairie dogs. Once the habitat treatments meet the vegetation guidelines established by the Utah Prairie Dog Recovery Implementation Team (UDP RIT), UPD will be translocated to the site by the UDWR. Should translocation efforts be successful, the long term benefits of the project include a reduced risk of catastrophic decline by increasing the number of UPD colonies across the landscape and increased plant diversity on the project area which is beneficial to UPDs.

Adverse effects to UPDs could occur upon initiation of translocation of animals to the project area. Animals identified for translocation will be: animals authorized for removal under the 4(d) rule overseen by the State of Utah; those authorized for removal under an approved Habitat Conservation Plan; or those authorized for removal under the UDWR Recovery Permit. During translocation, animals can die from stress or heat exhaustion. UPD will be translocated under approved translocation guidelines to minimize any loss of animals.

In addition to effects from translocation, the permit associated with the Henrie SHA will authorize the lethal and non-lethal removal of UPD, if the translocated colony exceeds 53 individuals in two consecutive spring counts or exceeds 75 in a single spring count, as determined by UDWR. Permit conditions also authorize removal of animals if they become established (as defined in the SHA) outside the treatment area.

At the termination of the permit the cooperators could return the land to baseline which is zero. This could result in the loss of an established colony. However, currently there are no UPD on the site and without this SHA it is unlikely that they would occur there.

Cumulative Effects

Cumulative effects include the effects of future State, tribal or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of ESA. At this time there are no known State, tribal or private actions that are reasonably certain to occur in the action area.

Conclusion

After reviewing the current status of the UPD, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's opinion that the action as proposed is not likely to jeopardize the continued existence of the UPD, and is not likely to destroy or adversely modify designated critical habitat as no critical habitat has been designated. The Service has reached this opinion based on the following reasons:

- 1) The proposed project will have a net conservation benefit to UPD by improving available habitat.
- 2) The proposed project may reestablish a historical colony in private lands and ensure its existence for a minimum of 15 years.
- 3) Utah prairie dogs translocated to the project site are authorized for take under other means such as 4d, approved HCPs and State recovery permits.
- 4) Utah prairie dogs do not currently occur on the SHA land; therefore this effort cannot result in any loss to existing population levels or distribution.

INCIDENTAL TAKE

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Under the terms of Section 7(b)(4) and Section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the Cooperator so that they become binding conditions of any grant or permit issued to the Cooperator, as appropriate, for the exemption in Section 7(o)(2) to apply. The Service has a continuing duty to regulate the activity covered by this Incidental Take Statement. If the Service (1) fails to assume and implement the terms and conditions or (2) fails to require the Cooperator to adhere to the terms and conditions of the Incidental Take Statement through enforceable terms that are added to the Permit or grant document, the protective coverage of Section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Service or Cooperator must report the progress of the action and its impact on the species to the Service as specified in the Incidental Take Statement. [50 CFR §402.14(i)(3)]

Amount or Extent of Take Anticipated

If the translocation is successful, the maximum number of UPDs that may occupy the site under terms of the SHA is 53 animals based on two spring counts or 75 animals based on a single spring count, as determined by UDWR. Take is therefore authorized for any number of animals that exceed these population targets or for any animals that disperse from the treatment area, for the life of the permit. Actual annual take levels are unquantifiable because we are unable to accurately predict the translocation success or subsequent growth rate of the colony. However, take may occur through harm and harassment of UPDs, due to SHA authorization to conduct lethal and nonlethal removal of animals that exceed target population levels or disperse from the treatment area. Take may also occur through normal ranching activities for the life of the permit. Specifically, take may occur through mortality of individual UPDs killed by ranch vehicles both on-road and off-road.

Effect of Take

In the accompanying Biological Opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to this species or destruction or adverse modification of critical habitat as no critical habitat has been designated. The Agreement authorizes incidental take of the covered species, because the species does not currently occupy the property, nor would it be likely to do so without the voluntary measures described in this Agreement.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take of Utah prairie dogs.

1. Measures shall be implemented to prevent Utah prairie dogs from being killed or harmed by any project-related activity.

Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the Act, the Fish and Wildlife Service must ensure implementation of the Henrie Safe Harbor complies with the following Terms and Conditions, which implement the Reasonable and Prudent measure described above.

To implement Reasonable and Prudent Measure number 1, the following Terms and Conditions shall be implemented:

- a) All permits issued to trap and translocate Utah prairie dogs must include must terms and conditions to utilize Service approved translocation guidelines.

REPORTING REQUIREMENTS

Upon locating a dead or injured Utah prairie dog, initial notification must be made within one business day to the Service's Division of Law Enforcement in Cedar City, Utah at telephone (435) 865-0861, the Service's Ecological Services Office at telephone (801) 975-3330, and the Cedar City office of the Utah Division of Wildlife Resources at telephone (435) 865-6120.

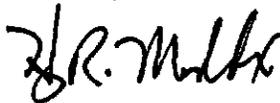
Instructions for proper handling and disposition of such specimens will be issued by the Service's Division of Law Enforcement consistent with the provisions of the Incidental Take Statement. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Dead specimens should be handled carefully to preserve biological material in the best possible state.

RE-INITIATION STATEMENT

This concludes formal consultation on the proposed Henrie Safe Harbor Agreement and associated permit in Garfield County, Utah. As provided in 50 CFR §402.16, re-initiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may impact listed species or critical habitat in a manner or to an extent not considered in this opinion, 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion, or 4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

Thank you for your interest in conserving threatened and endangered species. If you have any questions please contact Elise Boeke at 801-975-3330 ext. 123.

Sincerely,



Henry R. Maddux
Field Supervisor

cc: Teresa Bonzo, Utah Division of Wildlife Resources, Southern Regional Office, 1470
North Airport Road, Cedar City, Utah 84720

Ted Toombs, Ecologist, Environmental Defense, 1100 Valley Road, Boulder, Colorado
80304

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