ENDANGERED SPECIES MANAGEMENT PLAN FOR THE NORTHERN APLOMADO FALCON (*Falco femoralis septentrionalis*) at **White Sands Missile Range, New Mexico**

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14. ABSTRACT

The Northern Aplomado Falcon (*Falco femoralis septentrionalis*) is a federally-endangered species that have been periodically documented on White Sands Missile Range (WSMR). To ensure compliance with the Endangered Species Act, Army Regulation 200-3 requires an installation prepare an Endangered Species Management Plan (ESMP) for endangered species occurring within its lands or waters. This ESMP outlines goals, objectives, and management strategies for management of the falcon as a listed endangered species, but with a 10(j)/NEP designation in New Mexico and Arizona. There have been three documented sightings of aplomado falcons on WSMR. The primary threat to falcons is poorly understood, but believed to be degredation of habitat by desertification. This ESMP describes the biology and ecology of the aplomado falcon, and the threats that this species faces.

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ACRONYMS

BLM	Bureau of Land Management
DDT	Dichloro-diphenyl-trichloroethane
DoD	Department of Defense
ESA	Endangered Species Act
ESMP	Endangered Species Management Plan
INRMP	Integrated Natural Resources Management Plan
NEP	Nonessential Experimental Population
NMDGF	New Mexico Department of Game and Fish
USFWS	United States Fish and Wildlife Service
WSMR	White Sands Missile Range

EXECUTIVE SUMMARY

The northern aplomado falcon (*Falco femoralis septentrionalis*) is a medium-sized falcon that historically occupied desert grassland areas in southern Texas, southern New Mexico, and southeastern Arizona. Once considered common in these areas, populations declined rapidly after the 1930's (Hector 1987). By the late 1950's the northern aplomado falcon was considered extirpated from the United States. In 1986 the aplomado falcon was listed as an endangered species under the Endangered Species Act of 1973, as amended. In July 2006 the U.S. Fish and Wildlife Service (USFWS) published the final rule to establish a Nonessential Experimental Population (NEP) in New Mexico and Arizona in accordance with section 10(j) of the Endangered Species Act. This White Sands Missile Range (WSMR) Endangered Species Management Plan (ESMP) was created in accordance with Army Regulation 200-3. This plan provides a summary of the biological and ecological knowledge of the species, a description of management goals for WSMR, and the steps necessary for achieving those goals.

Biologists working under the direction of the Environmental Stewardship Division have conducted rangewide surveys at WSMR since a confirmed sighting in 1991. From 1997 to present, surveys were conducted along seven permanent routes on WSMR. No aplomado falcons were detected until 2005 when a juvenile aplomado falcon was documented in the northwest region of WSMR. In August 2006, eleven northern aplomado falcons were released by the USFWS, The Peregrine Fund, and Turner Endangered Species Fund at the Armendaris Ranch approximately 40 miles West of WSMR.

Threats to the aplomado falcon are not clearly understood, however the leading causes may be loss of habitat to desertification from various land use practices, use of DDT, and the historic over-collection of birds and their eggs. The USFWS issued a recovery plan for the aplomado falcon in 1990. The recovery plan describes actions necessary for the delisting of the aplomado falcon, including: to evaluate, monitor, and minimize threats to extant populations, and reestablish the aplomado falcon in the U.S. The objectives and actions in this ESMP are consistent with the actions outlined in the USFWS recovery plan to de-list the aplomado falcon.

Recommendations put forth in this ESMP will not impact testing or training on WSMR. With the NEP designation, WSMR is in a unique situation to facilitate the reintroduction of this species to historic grasslands in the Chihuahuan Desert. These actions are intended to facilitate recovery of the species and removal of the aplomado falcon from the endangered species list, precluding interference with the WSMR mission indefinitely.

ENDANGERED SPECIES MANAGEMENT PLAN FOR THE NORTHERN APLOMADO FALCON (*FALCO FEMORALIS SEPTENTRIONALIS*) AT WHITE SANDS MISSILE RANGE, NEW MEXICO

CHAPTER 1 – INTRODUCTION

The northern aplomado falcon (*Falco femoralis septentrionalis*) is a medium size falcon that historically occupied desert grassland areas in southern Texas (TX), southern New Mexico (NM), and southeastern Arizona (AZ) (Hector 1987). Once considered common in these areas, populations declined rapidly after the 1930's (Hector 1987). By the late 1950's the northern aplomado falcon was considered extirpated in the United States.

Biologists working under the direction of the White Sands Missile Range Environmental Stewardship Division have conducted rangewide surveys at White Sands Missile Range (WSMR) since a confirmed sighting of the falcon in 1991 (WSMR 2003). From 1997 to present, surveys were conducted along seven permanent routes on White Sands Missile Range (Figure 2-2). No aplomado falcons were detected until 2005 when a juvenile aplomado falcon was documented along Harriett Route in the northwest region of WSMR. We conducted three months of follow-up surveys, and the falcon was not detected again.

Legal, Regulatory, and Policy Considerations

Prompted by its possible extirpation from the U.S., severe pesticide contamination in eastern Mexico, and evidence of population declines in northern Mexico, the northern aplomado falcon was afforded protection as a federally-endangered species in 1986 (Kiff *et al*. 1978, Shull 1986). Critical Habitat has not been designated for the falcon. The State of New Mexico listed the northern aplomado falcon as endangered in 1990 (NMDGF 1990).

In July 2006 the U.S. Fish and Wildlife Service (USFWS) published the Final Rule to reintroduce the northern aplomado falcon to New Mexico and Arizona, and to change its status to a nonessential experimental population (NEP) as defined by section 10(j) of the Endangered Species Act (ESA) of 1973 as amended (USFWS 2006a). Under the NEP designation, WSMR is no longer required to consult with the USFWS regarding proposed actions that may affect the aplomado falcon, and Critical Habitat can not be designated for the falcon. WSMR is only required to "confer" with the USFWS if a proposed action is likely to jeopardize the continued existence of the species, and it is extremely unlikely that a WSMR proposed action could ever jeopardize the species due to stable populations in Texas and Mexico.

In support of aplomado falcon conservation and recovery, both the Army Garrison at WSMR and the Installation Management Agency (now Installation Management Command) submitted letters of support to the USFWS supporting the NEP designation (Appendix A). WSMR is poised to implement projects supporting recovery of the species, including reintroductions of aplomado falcons in suitable habitat within or adjacent to the WSMR boundary.

The United States Fish and Wildlife Service Northern Aplomado Falcon Recovery Plan

The ESA [Section 4(f)] requires the Secretary of the Interior to develop and implement recovery plans. In 1990 the USFWS published the Northern Aplomado Falcon Recovery Plan (Keddy-Hector 1990) that includes objectives and management actions deemed necessary to ensure the conservation and survival of the species. The plan set forth the following six actions as necessary for the recovery of the northern aplomado falcon:

1. Evaluate, monitor, and minimize all threats including pesticides (and other contaminants) to extant populations – The following actions are mandated:
   - Determine the distribution and size of populations
   - Monitor fledgling success and investigate population dynamics of these falcons in eastern Mexico
   - Determine the degree of shell thinning and levels of pesticide contamination

- Monitor residue levels in prey species and identify principal sources of contamination
- Reduce contaminant levels in the food of aplomado falcons.

2. Identify, Maintain, and improve habitat – The following actions are mandated:
   - Identify the habitat requirements of northern aplomado falcons in Mexico
   - Locate areas of suitable habitat for aplomado falcons
   - Protect existing habitat
   - Maintain and improve existing habitat.

3. Reestablish the northern aplomado falcon in the U.S. and Mexico – The following actions are mandated:
   - Evaluate potential release sites
   - Prepare sites for release of nestlings
   - Develop a breeding management plan for maintenance of a genetically diverse captive population
   - Develop release techniques and conduct releases
   - Conduct follow-up studies of survival, hunting success, and habitat selection of released falcons
   - Assist artificially established populations
   - Monitor and reduce harmful levels of pesticides in released falcons and their prey.

4. Conduct studies of habitat requirements, physiological ecology, and behavior of wild falcons – The following actions are mandated:
   - Study juvenile dispersal and seasonal movements of adults
   - Refine knowledge of nest platform requirements
   - Evaluate and minimize human disturbance at nests.

5. Enhance public support for this recovery effort through educational programs – The following actions are mandated:
   - Prepare educational materials
   - Distribute educational materials
   - Give oral presentations.

6. Encourage national and international cooperation and coordination in carrying out these objectives – The following actions are mandated:
   - Promote exchange of information between involved government agencies, non-government organizations, and biologists
   - Develop and implement effective international habitat protection and law enforcement efforts.

Overview of the White Sands Missile Range Endangered Species Management Plan

The intent of this Endangered Species Management Plan is to:

- Present background information on the northern aplomado falcon, including ecology, known distribution, and potential habitat;
- Discuss current and potential threats to the species;
- Define overall conservation goals, specific management objectives, and prescribe management actions;

This ESMP is consistent with the WSMR Integrated Natural Resources Management Plan (INRMP; WSMR 2001) and the Northern Aplomado Falcon Recovery Plan (Keddy-Hector 1990).

CHAPTER 2 – SPECIES INFORMATION

This section provides a description of the northern aplomado falcon, including taxonomy and morphology, and information on the known distribution, abundance, habitat characteristics, ecology, life history, and threats to survival of the species in the wild.

Taxonomy and Morphology

Three subspecies of aplomado falcon are currently recognized: the northern aplomado falcon (*Falco femoralis septentrionalis)*, halcón perdiguero (*F. f. pichinchae* (Chapmen)) of western South America, and halcón plomizo (*F. f. femoralis* (Temminck)) in the remaining portions of South and Central America (Keddy-Hector 1990, 2000). The subspecies are differentiated by size and color. *Falco. f. femoralis* is slightly smaller and tends to be darker dorsally, but may intergrade with *F. f. septentrionalis*. The belly band of *F. f. femoralis* is usually complete with only a slight mid-ventral narrowing. *Falco f. pichinchae* is larger, darker, and has buffier underparts than *F. f. femoralis*, and has a belly band that is narrow or incomplete mid-ventrally (Blake 1977).

PHOTOGRAPH 2-1. NORTHERN APLOMADO FALCON

Aplomado falcons are a medium-sized falcon, approximately 35-45 cm (14-18 in) in length and have a wingspan ranging from 78-102 cm (31-40 in) (Keddy-Hector 1990, 2000). Sexual dimorphism does occur and the female tends to be larger than the male. Adults have a steel-gray dorsal plumage ("aplomado" is Spanish for steel-gray), with a dark belly band or "cummerbund" separating a white to buffy upper breast and a cinnamon to rufous belly (Photograph 2-1). Distinguishing adult field marks include bold face markings and long, narrow banded tails. The long wings and white trailing edge are easily distinguished while the aplomado falcon is in flight. Adult females often retain dark streaks on the breast. Juveniles are similar to adults, except for browner upper parts and dark streaking on a buff-colored breast.

Distribution and Abundance

The historic distribution of the northern aplomado falcon in the U.S. included the grasslands and savannas of Trans-Pecos Texas, southern New Mexico, and southeastern Arizona (Hector 1987, Keddy-Hector 1990). In Mexico, the range historically extended along the east coast from Tamaulipas to Yucatán, and along the west coast in lowlands from Sinaloa and Nayarit to Oaxaca (Hector 1985, Keddy-Hector 2000). Aplomado falcon distribution within the interior of Mexico is not well understood (Young *et al*. 2002). However, aplomado falcons do occur in Chihuahua and possibly in Coahuila (Macías-Duarte *et al*. 2004, Montoya *et al*. 1997, Young *et al*. 2002). No records from Sonora or Nuevo Leon exist.

Little is known about the migration patterns of the aplomado falcon. However, observations during winter and evidence of nesting activity suggest that aplomado falcons are year-round residents in the southwest U.S. and eastern Mexico (Keddy-Hector 2000). Although little is known about their actual status in western Mexico, they are regarded as winter residents or vagrants there (Keddy-Hector 2000).

Current populations of aplomado falcons in the U.S. are limited to a reintroduced population in southern Texas and a few birds in southern New Mexico at the northern extent of the Chihuahua, Mexico population (Cade *et al*. 1991, Meyer and Williams 2005, Young *et al*. 2002) (Figure 2-1). The first documented nest in New Mexico since 1952 was located south of Deming, New Mexico in 2000 (Meyer and Williams 2005). Juveniles were successfully fledged from this breeding territory in 2002. An increase in sightings in New Mexico in 2005 could be due to natural reestablishment of the falcon from Chihuahua, from aggressive reintroductions in west Texas over the last three years by The Peregrine Fund, or (most likely) from both factors.

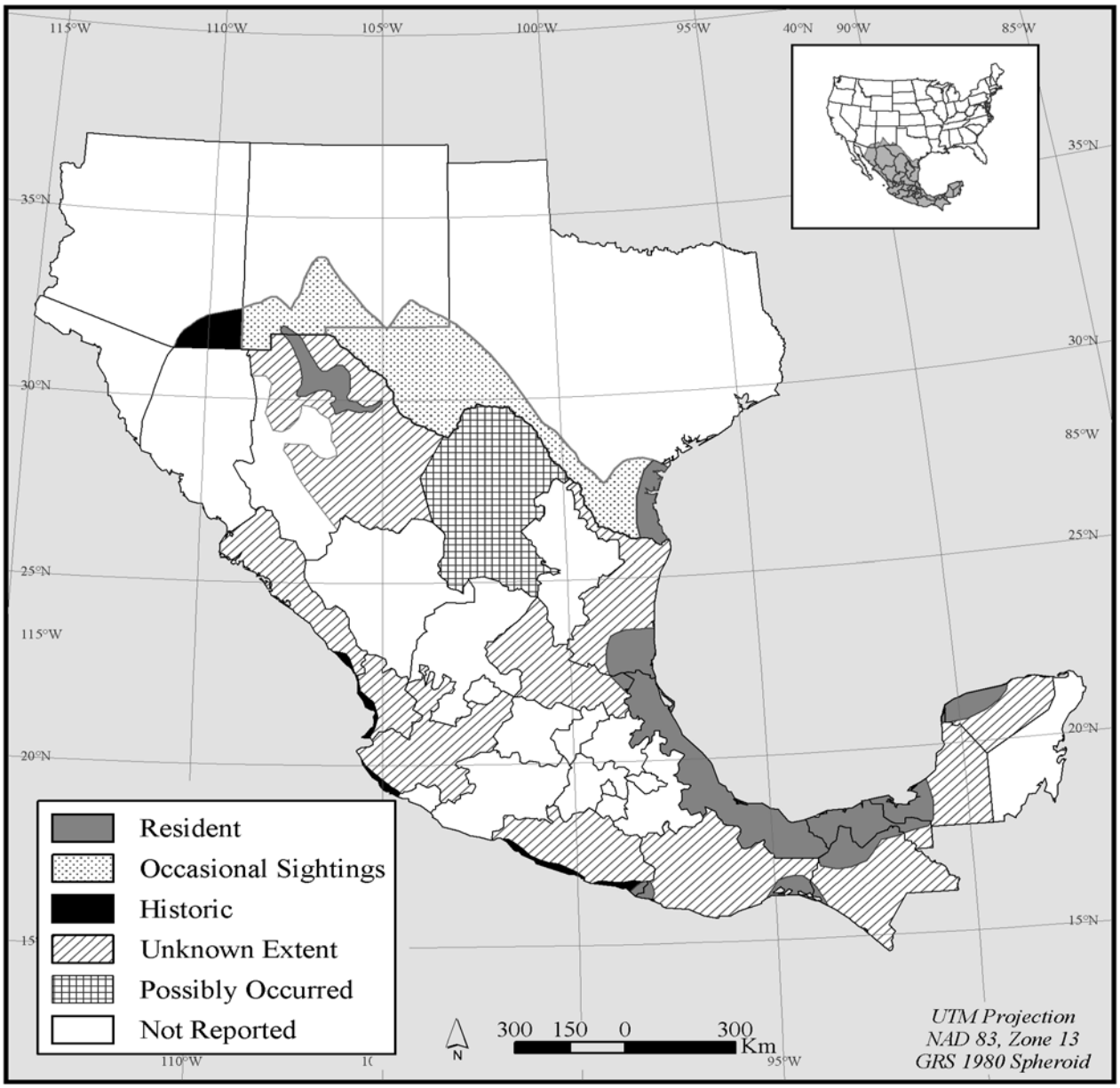

FIGURE 2-1.
DISTRIBUTION OF THE NORTHER APLOMADO FALCON IN THE UNITED STATES AND MEXICO FROM YOUNG *ET AL*. (2002)

Predictive modeling conducted by Young *et al*. (2005) estimated that roughly 10% of WSMR (226,595-ac; 91,700-ha) consisted of moderate to highly suitable habitat. The majority of habitat in these two categories was predicted to occur within the Stallion Range in northwestern WSMR (Appendix B). According to the WSMR vegetation coverage maps (Muldavin and Melhop 1992) there are approximately 197,860 ha of grasslands within WSMR (Figure 2-2).

There have been three observations of falcons within the WSMR boundary since 1992. The most recent sighting was in the Stallion Range area in August of 2005 (Figure 2-2) (D. Burkett, per. Comm.) The previous two sightings in 1992 and 1995 were in the east-central area of WSMR (D. Burkett, A. Montoya, pers. Comm.)

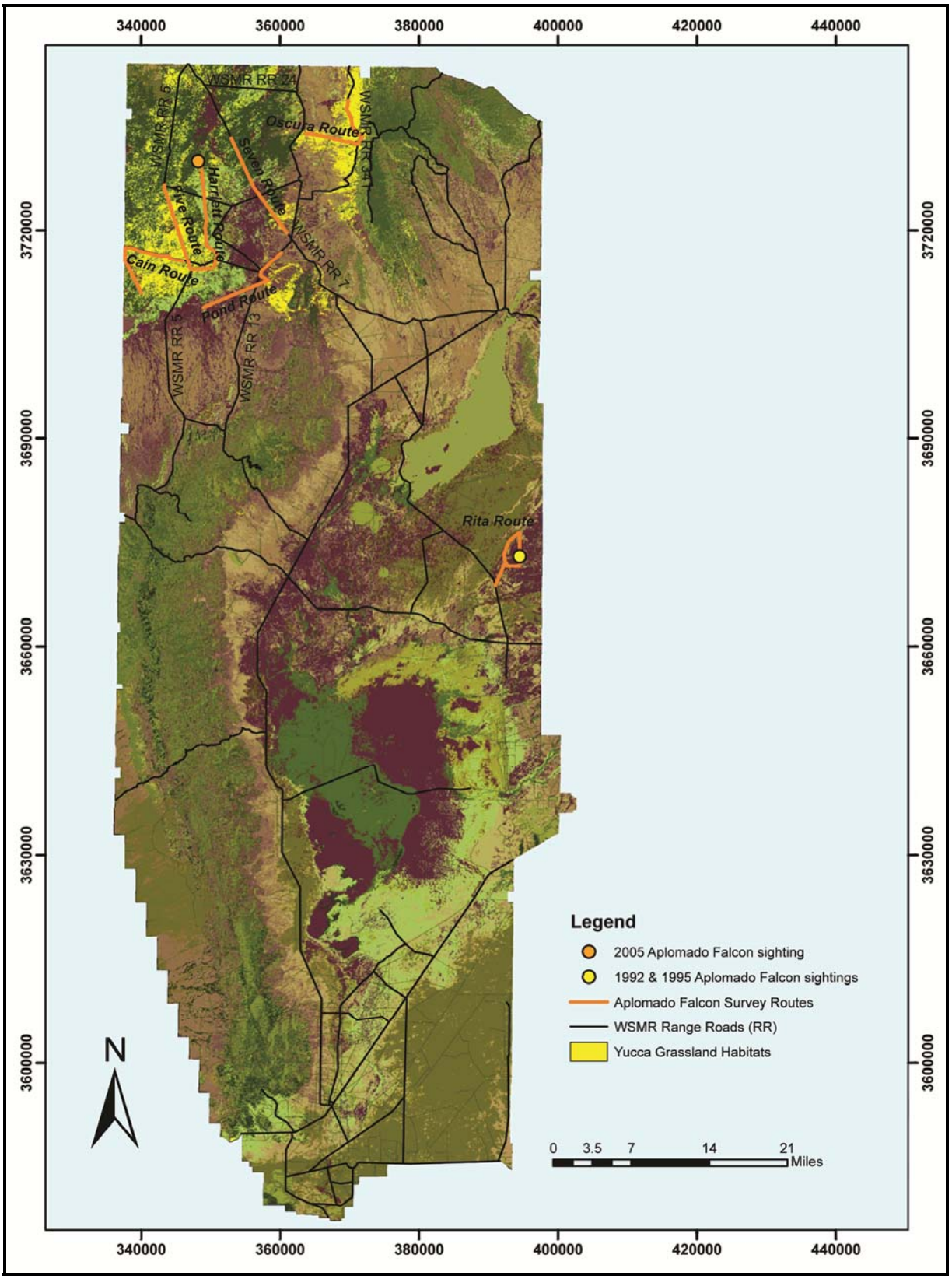

FIGURE 2-2.
WSMR VEGETATION COVERAGE HIGHLIGHTING YUCCA GRASSLAND HABITATS (MULDAVIN AND MEHLHOP 1992).

Aplomado falcons have been associated with desert grasslands, coastal plains, and tropical savannas containing scattered mesquite, yucca, oaks, acacias, or palms in the U.S. and Mexico (Keddy-Hector 1990, Keddy-Hector 2000, Macías-Duarte *et al*. 2004, Montoya *et al*. 1997, Perez 1995, Shull 1986). Historical accounts indicate that aplomado falcons were found in open areas (Hector 1987). Macías Duarte *et al*. (2004) and Keddy-Hector (1986, 2000) hypothesized that shrublands, woodlands, or wetlands in close proximity to open areas provided an important habitat component for nesting falcons.

Food Habits

Aplomado falcons primarily feed on birds and insects, but may also feed on small rodents, bats, and lizards (Hector 1985, Keddy-Hector 2000, Macías-Duarte et al. 2004). Common prey species found in the diets of aplomado falcons include: Mourning dove (*Zenaida macroura*), White-winged dove (*Zenaida asiatica*), Northern Mockingbird (*Mimus polyglottos*), Meadowlarks (*Sturnella* spp.), and Great-tailed Grackle (*Quisicalus mexicanus*) (Hector 1985, Macías-Duarte *et al*. 2004).

Prey species are usually pursued in direct flights from observation posts, while soaring, or while flying at a fast pace above shrubs or through dense trees (Hector 1985, Keddy-Hector 2000). Prey caught by aplomado falcons are usually caught in mid-air or forced to the ground and pursued on foot (Hector 1985). Aplomado falcons are known to hunt cooperatively and often hunt in pairs (Hector 1985, Ligon 1961, Keddy-Hector 2000).

Reproductive Biology

Nesting occurs from March to June in Northern Chihuahua and New Mexico (Montoya *et al*. 1997). Average clutch size ranges from 2.6 – 2.8 eggs and brood size from 1.6 – 2.4 (Hector 1981, Montoya *et al*. 1997, Macías-Duarte *et al*. 2004). Fledgling success in Mexico were shown to be .53 - .94 (Macías Duarte *et al*. 2004, Montoya *et al*. 1997). Both sexes participate in incubation of the eggs and the incubation period lasts 31-33 days (Keddy-Hector 2000, Macías-Duarte *et al*. 2004, USFWS 2003).

Aplomado falcons typically use stick nests made by other avian species (Hector 1987, USFWS 2003). Nests have been found in soap-tree yucca (*Yucca elata*), Torrey yucca (*Y. torreyi*), and honey mesquite (*Prosopis glandulosa*) (USFWS 2003, Young *et al*. 2002). Nest height averaged 270 cm (106 in.) above ground level in north-central Mexico (Montoya *et al*. 1997).

Threats to Aplomado Falcons

Reasons for the decline of aplomado falcon populations in the U.S. and Mexico have been difficult to determine (Hector 1987). Several causes have been discussed but none have been substantiated as the direct cause of extirpation of falcons from the U.S. and population declines in Mexico. The primary cause suggested to have contributed to population declines and extirpation of falcons from the U.S is from the conversion of desert grasslands to shrubland. Habitat loss has been exacerbated by heavy grazing (USFWS 2003). Intense grazing pressure has facilitated the degradation of optimal falcon habitat by promoting shrub encroachment onto desert grasslands (Hector 1987, Shull 1986, Buffington and Herbel 1965). The increase of shrubs and a decrease in grassy ground cover may have eliminated habitat for the falcon's prey species (Hector 1987).

Other factors contributing to population reduction are historical use of pesticides including DDT throughout the species range and the continued use of DDT in northern Mexico. Over-collection of birds and their eggs in the nineteenth and early twentieth century may have contributed to the decline of local aplomado falcon populations (Kiff *et al*. 1980).

CHAPTER 3 – CONSERVATION GOALS AND MANAGEMENT OBJECTIVES

Conservation Goals for the Aplomado Falcon

WSMR supports recovery of the aplomado falcon in New Mexico and has developed the following conservation goals to comply with the ESA and the Northern Aplomado Falcon Recovery Plan (Keddy-Hector 1990).

Goal 1: Environmental Compliance.

With the NEP designation, compliance with the ESA requires WSMR to confer with USFWS as if the falcon is a Proposed Species (a species proposed for listing as Threatened or Endangered under the ESA). WSMR is only required to confer with USFWS if a proposed action is likely to jeopardize the continued existence of the species. WSMR is also required to report "take" of any aplomado falcons, although there are no criminal or civil penalties for incidental (accidental) take. Intentional take is not permitted, and could prompt criminal or civil penalties.

Goal 2. Falcon Recovery.

The ESA (Section 2) states that "all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." Section 7(a)(1) declares that "All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act."

WSMR is a member of the interagency Aplomado Falcon Working Group, and will cooperate with federal, state, and private organizations to recover the aplomado falcon in southern New Mexico. Recovery efforts will include reintroduction efforts at or adjacent to WSMR, and grassland habitat conservation and restoration when compatible with the military mission.

Goal 3: Population Monitoring.

WSMR will continue rangewide surveys for the aplomado falcon in moderate to highly suitable habitat. Rangewide surveys are conducted only by authorized individuals via an Endangered Species Permit from the U.S. Fish and Wildlife Service. An annual report is required by 15 December each year. In the event that an aplomado falcon is detected, follow-up surveys and nest surveys will be conducted.

Management Objectives for the Aplomado Falcon

Each management objective is consistent with the WSMR military mission, the WSMR INRMP (2001), and the Northern Aplomado Falcon Recovery Plan (Keddy-Hector 1990). The primary military mission of WSMR is to provide quality testing, evaluation, research, and other technical services to the Army and the Department of Defense (DoD). WSMR strives to ensure that the armed services of the United States have the best military equipment possible by providing high quality services in a cost-effective manner.

Management strategies and actions developed to accomplish objectives are detailed in Chapter 4. Techniques used to assess progress towards meeting these objectives are described in Chapter 5.

Objective 1: Contribute to recovery of the falcon by supporting reintroduction efforts

Rationale: WSMR is a member of the interagency Aplomado Falcon Working Group, and will cooperate with state, federal, and private organizations to reintroduce the falcon. WSMR will support the reintroduction processes within or adjacent to WSMR. With NEP designation, there is no potential for the presence of the aplomado falcon to conflict with the military mission because incidental take is authorized. The ultimate goal of reintroduction efforts is to increase population size, subsequently recovering the species and eliminating conflicts with the military mission indefinitely.

Objective 2: Contribute to recovery of the falcon by conserving grassland habitat

Rationale: Over 226,000-ac in the Stallion area of WSMR have been identified as habitat considered moderate to highly suitable for aplomado falcons (Young *et al*. 2005). WSMR will conserve and restore grasslands in an effort to increase habitat for grassland species, including the falcon. Restoration and conservation of grasslands is also a goal of the WSMR INRMP (2001), and will occur when compatible with the military mission.

CHAPTER 4 – MANAGEMENT STRATEGIES AND ACTIONS

To meet the management objectives put forth in the previous chapter, WSMR land managers must implement strategies and actions under each scenario.

Objective 1: Environmental Compliance.

WSMR is required to "confer" with USFWS as if the falcon is a Proposed Species. We will initiate conference with the USFWS if our actions are likely to jeopardize the continued existence of the species. We will report "take" (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of any aplomado falcons. We are also required to submit an annual report to the USFWS regarding surveys conducted under our endangered species permit.

Objective 2: Falcon reintroductions and monitoring.

The U.S. Fish and Wildlife Service Final Rule established aplomado falcons in New Mexico to be Nonessential Experimental Populations (USFWS 2006a). The Rule also established a Monitoring Program for the Northern Aplomado Falcon in New Mexico and Arizona (USFWS 2006b). WSMR recovery actions will include:

a) Construction, maintenance, and use of a release site for captive aplomado falcons. Release sites will be placed in or adjacent to moderate to highly suitable aplomado falcon habitat in areas that will not interfere with WSMR range activities and missions, or with the mission of adjacent landowners.

b) Release sites will be selected based on appropriate habitat, potential threats from predators, prey availability, and logistics for release-site attendants.

c) A release site will consist of portable and temporary wood structures, including one or two hack (release) towers, and an observation blind.

d) Each site will release from 5 to 20 sub-adult aplomado falcons, and releases will be conducted only by individuals authorized by the U.S. Fish and Wildlife Service to conduct such activities.

e) Monitoring of falcons on WSMR that were released at WSMR or on adjacent lands, to include rangewide surveys, radio-telemetry, nest site monitoring, and habitat surveys. Monitoring will be conducted only by individuals authorized by the U.S. Fish and Wildlife Service to conduct such activities.

f) Release site personnel will comply with all WSMR security requirements, roadblocks, and evacuation procedures.

Objective 3: Conserve and restore grassland habitat.

Over 226,000-ac in the Stallion area of WSMR have been identified as habitat considered moderate to highly suitable for aplomado falcons (Young *et al*. 2005). WSMR will conserve and restore grasslands in an effort to increase habitat for grassland species, including the aplomado falcon. Restoration and conservation of grasslands is also a goal of the WSMR INRMP (2001), and will occur when compatible with the military mission.

CHAPTER 5 – MONITORING PLAN

Objective 1: Continue rangewide surveys, three times each year (February, May, and August), for aplomado falcons along seven permanent survey routes.

Objective 2: Implement monitoring strategies set forth in the Monitoring Plan for Reestablishment of the Northern Aplomado Falcon in New Mexico and Arizona (USFWS 2006b; Appendix C).

Monitoring strategies for the reintroduction of the aplomado falcon are grouped into two categories: short and long-term tiers. Short-term monitoring will primarily be focused on selection of hack sites and monitoring birds at the hack site. Long-term monitoring will focus on rangewide surveys for the presence of aplomado falcons. Long-term monitoring will also include any research other than that required under short-term monitoring.

Short-term monitoring:

Releases:

- Employees of The Peregrine Fund will monitor birds at each hack (release) site during and after each release period.

Post Release:

- Annual surveys to locate released birds will be conducted under the direction of the White Sands Environmental Stewardship Division.

Long-term monitoring

- Biologists authorized by the USFWS shall continue to conduct surveys in suitable habitat and in areas that have not been previously or recently surveyed using methods outlined in the Interim Survey Methodology for the Northern Aplomado Falcon in Desert Grasslands (USFWS 2003).
- WSMR will provide long-term investigation and monitoring results via annual reports to the USFWS, and at the completion of any individual study. Reports will contain: maps of surveyed areas, completed survey data forms, a narrative of the results and any observations of interest, photographs documenting falcons and/or habitat, and GIS files compatible with USFWS geographic information systems.
- Data appropriate to aplomado falcon management will be shared among the USFWS, The Peregrine Fund, Bureau of Land Management (BLM), the Department of Defense, New Mexico and Arizona State Game and Fish Departments, and the Turner Endangered Species Fund.

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APPENDIX A

WSMR and Army Headquarters Comment Letters to USFWS

DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON WHITE SANDS
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

MAR 0 8 2005

REPLY TO
ATTENTION OF
Office of the Garrison Commander

Susan MacMullin, Field Supervisor
New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, NM 87113

Dear Ms. MacMullin:

I am writing to support the proposed rule to establish a nonessential experimental population of northern aplomado falcons in New Mexico and Arizona, published 9 February 2005 (70 FR 6819). White Sands Missile Range supports the recovery of this endangered species, once common in the Chihuahuan desert grasslands of southern New Mexico. We believe that a nonessential experimental population is a critical step to expedite recovery of this species. Natural recolonization from populations in Mexico and Texas is unlikely and could take decades at best.

The reintroduction of a nonessential experimental population to southern New Mexico is compatible with the military mission of White Sands Missile Range. While allowing for recovery of the falcon, there are no penalties in the unlikely event of unintentional take and there is no requirement for restrictions to land use. This designation will relieve the burden of consultation requirements currently associated with this endangered species.

We look forward to continuing our participation in the interagency Northern Aplomado Falcon Working Group, and to being a part of the conservation and recovery of the northern aplomado falcon. Our Point of Contact for this species is Ms. Trish Griffin, Wildlife Biologist, Environmental Stewardship Division, (505) 678-2029.

Sincerely,

Donald E. Gentry
Colonel, US Army
Commanding

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-0600

REPLY TO
ATTENTION OF

Environmental Programs Directorate

07 APR 2005

Ms. Susan MacMullin, Field Supervisor
U.S. Fish and Wildlife Service
New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, New Mexico 87113

Dear Ms. MacMullin:

This letter conveys the Army's support to establish a non-essential experimental population of the northern aplomado falcon (*Falco femoralis septentrionalis*) in New Mexico and Arizona (70 FR 6819, February 9, 2005). The use of the Endangered Species Act, Section 10(j) rule allows the Army to provide for conservation required to help recover this species, while maintaining the needed flexibility to accomplish our military missions at White Sands Missile Range, New Mexico and Fort Bliss, Texas.

Our installation and headquarters staffs have worked cooperatively for several years to help provide a reasonable approach to conservation of this species while maintaining the ability to conduct our missions. I appreciate the US Fish and Wildlife Service listening and responding to our concerns.

The Army has a significant challenge to carry out national security requirements under Title 10 of the US Code and our Endangered Species Act responsibilities. I believe we can do both when provided the flexibility under the Section 10(j) rule.

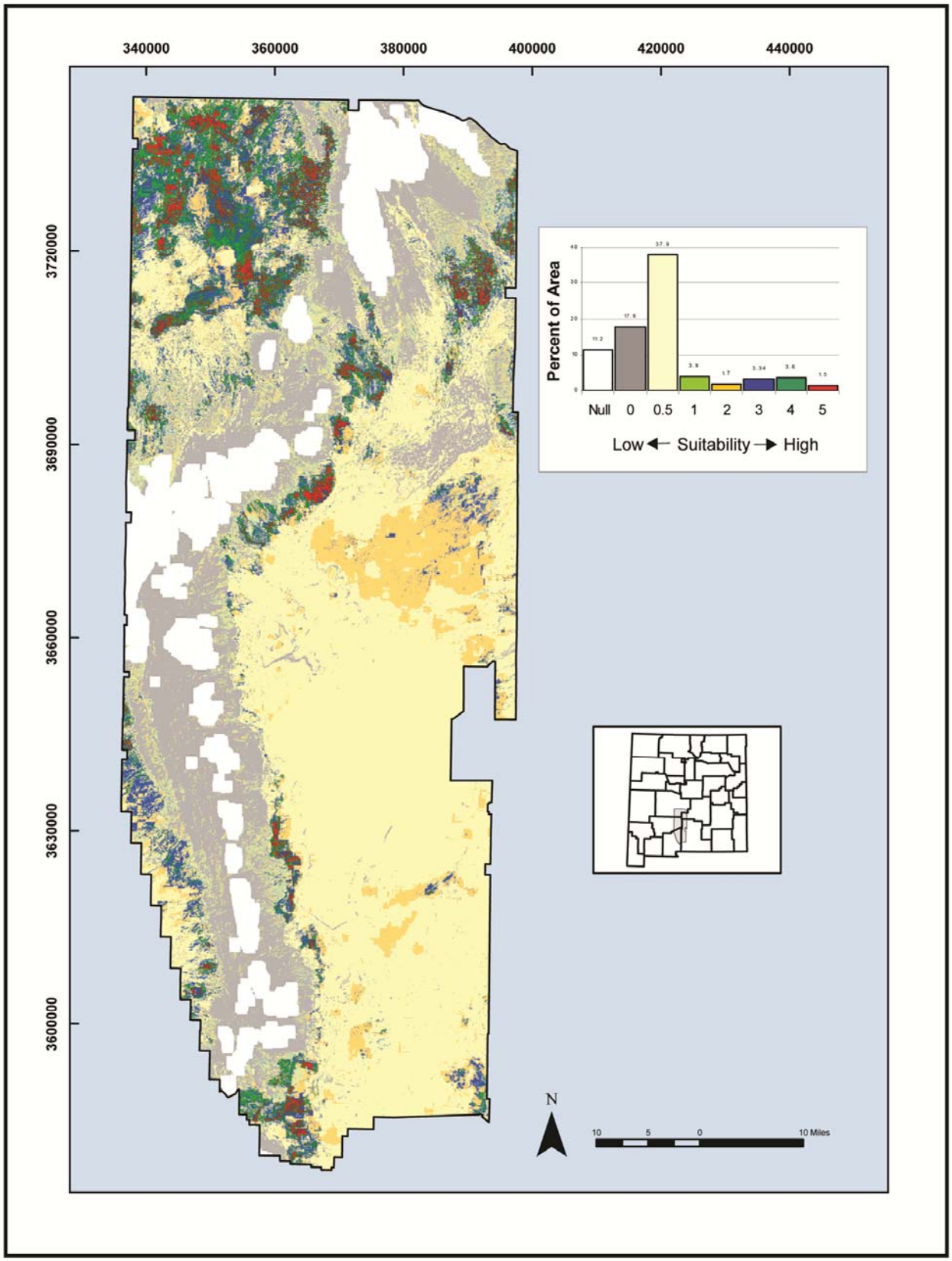
My staff consultant for this action is Mr. Bill Woodson, (703) 601-1962.

Sincerely,

Christopher E. Schuster
Colonel, U.S. Army
Director, Environmental Programs

APPENDIX B

Predicted Habitat Suitability for the
Northern Aplomado Falcon Based on Young et. al. 2005



Predicted WSMR Habitat Suitability for the Northern Aplomado Falcon Based on Young *et al*. (2005)

APPENDIX C

Monitoring Plan for Reestablishment of the Northern Aplomado Falcon *(Falco Femoralis Septentrionalis)* in New Mexico and Arizona