Memorandum

To: Superintendent, Organ Pipe Cactus National Monument, Ajo, Arizona

From: Field Supervisor

Subject: Reinitiation–Biological and Conference Opinion for the International Boundary Vehicle Barrier on the Organ Pipe Cactus National Monument

This memorandum is in response to your November 24, 2003, request for reinitiation of formal consultation on the proposed International Boundary Vehicle Barrier on the National Park Service’s (NPS) Organ Pipe Cactus National Monument (OPCNM), located in Pima County, Arizona. In the July 24, 2003, Biological Opinion (BO) (U.S. Fish and Wildlife Service 2003), the Fish and Wildlife Service (Service) evaluated effects of the proposed actions on the Sonoran pronghorn (Antilocapra americana sonoriensis, pronghorn), lesser long-nosed bat (Leptonycteris curasoae yerabuenae, bat), Quitobaquito pupfish (Cyprinodon eremus), and cactus ferruginous pygmy-owl (Glaucidium brasilianum cactorum, pygmy-owl), in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq., ESA). Reinitiation of consultation is requested because changes are proposed in the action that may alter the effects to the cactus ferruginous pygmy-owl [50 CFR 402.16(c)]. The possible impacts from these changes in the proposed action are addressed in this Reinitiated Biological Opinion for all four species that were addressed in the BO. Concurrence for the determination on the Quitobaquito pupfish and its critical habitat is addressed in the Appendix.

This biological opinion was prepared using information from the following sources: your November 24, 2003, request for reinitiation for formal consultation, U.S. Fish and Wildlife Service 2003, Biological Assessment-International Boundary Vehicle Barrier (U.S. National Park Service 2003), and other sources of information as detailed in the consultation history. A complete administrative record of this consultation is on file at the Phoenix, Arizona, Ecological Services Field Office.
CONSULTATION HISTORY

- October 23, 2003: An e-mail was sent to us from NPS asking if the changes to the proposed actions would be feasible as it relates to impacts on the pygmy-owl.
- October 30, 2003: Telephone conversation between our offices discussing general and detailed information of the changes to the proposed action and possible conservation measures for the pygmy-owl.
- November 6, 2003: An e-mail detailing our recommendations for conservation measures to minimize the impacts on the pygmy-owl from the changes in the proposed action.
- November 24, 2003: Memorandum from your office requesting reinitiation of formal consultation, which included a description of the changes to the proposed action and conservation measures to limit the impacts to the pygmy-owl.
- December 4, 2003: An e-mail to your office documenting discussions regarding clarification of the Habitat Segments that may be impacted.

BIOLOGICAL OPINION

DESCRIPTION OF PROPOSED ACTION

The proposed action remains the same as described in the BO, except changes are proposed to the construction schedule (Pages 6 and 7 of the BO) and associated Conservation Measures #3 and #4 (Page 83 of the BO). NPS proposes an alternative construction schedule, with new conservation measures, as described below. Including the original and alternative construction schedules as part of the proposed action will allow NPS flexibility in the installation of the barrier. If the alternative construction schedule is not implemented, then installation of the barrier will proceed as detailed in the original construction schedule on Pages 6 and 7 of the BO, along with Conservation Measures #3 and #4 in the BO.

Original Construction Schedule As Described In The BO

Summarily, activities will not occur in suitable pygmy-owl habitat during the pygmy-owl breeding season if surveys have not been conducted. The construction schedule was proposed as being implemented in phases with the appropriate conservation measures.

- Phase 1: Construction from October 2003 to approximately March 2004, from Sonoyta Hills (Monument Hill) at KM 20.8 East, eastward to the area of Blankenship Ranch (KM 10.5 east). Construction in areas of suitable pygmy-owl habitat (e.g., between Lukeville and Monument Hill) will take place outside the breeding season (breeding season is February 1 to July 31).
If activities may occur in high and moderate quality (suitable) habitat during the breeding season (February 1 to July 31) during Phase 2 or Phase 3, NPS will conduct surveys in, and within 400 meters of, high and moderate quality habitat in the project area of those Phases prior to the onset of construction activities.

- **Phase 2**: Phase 2 construction will take place from the monument’s southeastern corner (KM 0.0 east) to the eastern end of Phase 1 construction - the area of Blankenship Ranch (KM 10.5 east). NPS currently estimates that Phase 2 construction would begin no sooner than July 30, 2004. NPS will complete intensive ‘one-year’ pygmy-owl surveys during the survey season of 2004 (January 1 to June 30). NPS will conduct a total of six visits, with four of these visits conducted between February 15 and April 15. The visits will be spaced at least 15 days apart.

- **Phase 3**: Phase 3 construction will extend from the monument’s southwestern corner (KM 23.3 west) to the western slope of Monument Hill (KM 0.0 west). NPS currently estimates that Phase 3 construction would begin in mid-2005. NPS will complete the two-year survey protocol for project clearance as presented in the “Cactus Ferruginous Pygmy-owl Survey Protocol”, January 2000.

**Proposed Alternative Construction Schedule**

The NPS proposes a second alternative to move people, vehicles, equipment, and materials through suitable pygmy-owl habitat areas during the breeding season, but without conducting surveys prior to these movements. These movements through suitable habitat would be done in order to install the barrier in areas of unsuitable habitat during the pygmy-owl breeding season.

As originally planned, the project contractors are expected to start work at Monument Hill in early December and work eastward to Lukeville (Phase 1). As per the BO (U.S. Fish and Wildlife Service 2003, page 83) they will construct through Habitat Segment 3 (Figure 1) before the onset of the pygmy-owl breeding season. The contractors will then continue construction eastward toward Habitat Segment 2 (Phase 2). In the event the contractors reach Habitat Segment 2 before surveys are completed in May-June, the NPS would like to be able to have the contractors leapfrog eastward, and resume construction in the long stretch of unsuitable habitat that lies between Habitat Segment 2 and Habitat Segment 1 at OPCNM’s southeastern corner. Under this scenario, during the breeding season there would be no project construction in Habitat Segment 2, but project-related traffic would pass through this area. Construction itself would not take place in Habitat Segment 2 until surveys were complete.

Similarly, NPS has an offer from the U.S. Army, Joint Task Force Six (JTF6), to construct several miles of the vehicle barrier during the 2004 breeding season. Due to the construction of Phase I and II being awarded to a private contractor, the only place where JTF6 could work in early 2004, outside of suitable pygmy-owl habitat, is between Habitat Segment 6 (Quitobaquito area) west to Habitat Segment 7. In order to access that area of unsuitable pygmy-owl habitat, JTF6 may need to move through the areas of potential pygmy-owl habitat during the breeding season from Lukeville to past Quitobaquito, during the breeding season. Project-related
vehicular traffic would be allowed to pass through all or portions of Habitat Segments 4, 5, and 6 during the breeding season, before pygmy-owl surveys are completed.

Project-related traffic through the habitat areas would likely include any of the following: backhoe, bobcat, drill rig, water truck, welding truck, forklift, cement truck, tractor-trailer trucks, and full-size or crew-cab pickup trucks. Up to two cement trucks may move through the area per day. Alternatively, a small portable cement-mixing plant may be moved through the habitat area(s) once, staged in the non-habitat construction area(s), and then moved back out, after construction is completed.

Proposed Alternative Conservation Measures

If the alternative construction schedule is implemented, it would result in increased activity levels, and therefore potential disturbance of any resident pygmy-owls, above existing levels. The NPS is proposing that, if the alternative construction schedule is followed, the following additional measures be included as part of the proposed action to minimize activity-related disturbance of pygmy-owls.

These measures apply to all activities that may occur in suitable habitat and within 400 meters of suitable habitat.

1. Daily transport of equipment and personnel will only occur once in the morning to the site and once in the afternoon from the site (two times per working day).
   a. These transports will occur at approximately the same time in the morning and afternoon in order to allow any pygmy-owls in suitable habitat to adapt to predictable disturbance.
   b. These transports will move as one group (always in sight of the vehicle in front).

2. All improvement of roads needed for barrier implementation will occur outside the breeding season.

3. Transport of large equipment (such as water trucks, concrete trucks, cranes, large bulldozers, and other heavy equipment), if necessary, will occur:
   a. No more than two times per week.
   b. Only from three hours after sunrise to two hours before sunset to avoid the most active times for pygmy-owls.

4. Installation of the barrier in unsuitable habitat will only occur more than 400 meters from suitable habitat.
LESSER LONG-NOSED BAT (Leptonycteris curasoae yerbabuenae)

Status of the species, environmental baseline, and cumulative effects remain the same as described in the BO. Because the proposed action will result in the same or similar impacts (no impacts to roosting bats and same or similar impacts to food sources), the effects of the action will remain the same as in the BO. Therefore, proposed changes to the OPCNM vehicle barrier project do not change our previous conclusion that the proposed action is not likely to jeopardize the continued existence of this species; nor do we anticipate any incidental take.

SONORAN PRONGHORN (Antilocapra americana sonoriensis)

STATUS OF THE SPECIES

The status of Sonoran pronghorn remains similar as described in the BO, except that recovery actions described in the Status of the Species have progressed. The semi-captive breeding facility has been constructed, and we are hoping to populate the facility with five Sonoran pronghorn from Sonora, Mexico, within the next month.

ENVIRONMENTAL BASELINE

The environmental baseline is similar as described in the BO, except for the completion of three biological opinions, all dated August 6, 2003. The three opinions are:

• Marine Corps Air Station-Yuma in the Arizona Portion of the Yuma Training Range Complex (consultation number 02-21-95-F-0114R4).

• Luke Air Force Base Use of Ground-Surface and Airspace for Military Training on the BMGR (consultation number 02-21-96-F-0094).

• Western Army National Guard Aviation Training Site Expansion Project (consultation number 02-21-92-F-0227).

All three of these biological opinions determined that the proposed actions are not likely to jeopardize the continued existence of the Sonoran pronghorn or result in incidental take. Conservation measures included, depending on the biological opinion, seasonal and access restrictions, continued participation in recovery actions, and conducting or participating in research/monitoring projects.

EFFECTS OF THE PROPOSED ACTION

Effects to pronghorn from the proposed action will result in the same possible impacts as described in the BO. The proposed action will not result in any additional habitat or auditory/visual disturbance to Sonoran pronghorns above what was already anticipated in the BO.
**Cumulative Effects**

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Analysis of cumulative effects remains unchanged from the BO.

**Conclusion**

Proposed changes to the OPCNM vehicle barrier project do not change our previous conclusion that the proposed action is not likely to jeopardize the continued existence of the Sonoran pronghorn.

**Incidental Take Statement**

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. “Take” is defined as to harass, ham, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is defined 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 (50 CFR 17.3). “Harass” is defined 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 (50 CFR 17.3). 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 ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

**Amount or Extent of Take Anticipated**

Since the proposed action will result in the same project effects as described in the BO, we do not anticipate incidental take of Sonoran pronghorn as a result of the proposed action.

**Conservation Recommendations**

No additional conservation recommendations beyond what is described in the BO are recommended.

**Cactus Ferruginous Pygmy-Owl (Glaucidium brasilianum cactorum)**

**Status Of The Species**

The status of the pygmy-owl remains the same or similar to that described in the BO.
ENVIRONMENTAL BASELINE

The environmental baseline of the pygmy-owl remains the same as described in the BO.

EFFECTS OF THE PROPOSED ACTION

Implementing the proposed action will result in the same possible impacts to the pygmy-owl and its proposed critical habitat as described in the BO, except that there may be additional auditory/visual disturbance to pygmy-owls during the breeding season. In a change to the proposed action as analyzed in the BO, NPS proposes to move people, vehicles, equipment and materials through suitable pygmy-owl habitat areas during the breeding season, but without conducting surveys prior to these movements. These movements through suitable habitat would be done in order to install the barrier in areas of unsuitable habitat during the pygmy-owl breeding season. Implementing the new proposed action may result in disturbance to owls that may be in the general area [up to 1/4 mile (400 meters)]. Very few surveys have been implemented in the project area. Considering that some of the areas along the barrier route are suitable habitat for nesting and foraging, and pygmy-owls nest elsewhere at OPCNM, it is not unlikely that these areas may be used by pygmy-owls in some years. Moving vehicles and equipment through occupied habitat may disturb any owls in the area. NPS has proposed additional conservation measures as part of the proposed action that will reduce or eliminate the likelihood of impacting reproduction. These include restrictions on timing and number of movements through suitable habitat, and distance from suitable habitat in which barrier installation can occur.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Our analysis of cumulative effects remains unchanged from the BO.

CONCLUSION

After reviewing the current status of the pygmy-owl, the environmental baseline for the action area, the effects of the proposed NPS action, and the cumulative effects, it is our biological opinion that the proposed action is neither likely to jeopardize the continued existence of the pygmy-owl nor result in destruction or adverse modification of proposed critical habitat. Our rationale for this finding is described in the Conclusion section of the BO, and we modify our rationale with the following:

• NPS has proposed additional conservation measures that significantly reduce the effects of the proposed action on the pygmy-owl. These measures, described in “Proposed Changes to the Proposed Action” above, apply to all activities that may occur in suitable habitat and within 400 meters of suitable habitat.
INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA 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 defined 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 (50 CFR 17.3). “Harass” is defined 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 (50 CFR 17.3). 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 ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

Amount or Extent of Take Anticipated

We do not anticipate the proposed action will incidentally take any pygmy-owl based on the current project description and prompt implementation of the proposed conservation measures.

CONSERVATION RECOMMENDATIONS

No additional conservation recommendations beyond what is described in the BO are recommended.

DISPOSITION OF DEAD OR INJURED LISTED ANIMALS

Upon locating a dead, injured, or sick listed species initial notification must be made to the FWS's Law Enforcement Office, Federal Building, Room 8, 26 North McDonald, Mesa, Arizona [telephone: (480) 967-7900] within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible condition. If feasible, the remains of intact specimens of listed animal species shall be submitted to educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, the information noted above shall be obtained and the carcass left in place.

Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Injured animals should be transported to a qualified veterinarian by a qualified biologist. Should any treated listed animal survive, the Service should be contacted regarding the final disposition of the animal.
REINITIATION NOTICE

This concludes reinitiation of formal consultation and conference on the proposed vehicle barrier at OPCNM. As provided in 50 CFR § 402.16, reinitiation 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 affect 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 reinitiation.

You may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if critical habitat for the cactus ferruginous pygmy-owl is designated. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the project and no further Section 7 consultation will be necessary.

Thank you for your cooperation and assistance throughout this consultation process. Any questions or comments should be directed to Mark Crites (520) 620-7513 or Jim Rorabaugh (602) 242-0210 (x238).

/s/  Steven L. Spangle

cc:  Regional Director, Fish and Wildlife Service, Albuquerque, NM (ARD-ES)
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     Peter Ruiz, Director of Natural Resources, Tohono O’odham Nation, Sells, AZ
     John Kennedy, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
LITERATURE CITED


APPENDIX

CONCURRENCE

QUITOBAQUITO PUPFISH (*Cyprinodon eremus*)

Status of the species and environmental baseline remain the same as described in the Appendix of the BO. Since the new action will result in the same impacts (no anticipated adverse impacts with implementation of the conservation measures as described in the Appendix of the BO), the effects of the action and cumulative effects will remain the same as in the Appendix of the BO. Therefore, we conclude that the proposed project is not likely to adversely affect the Quitobaquito pupfish or critical habitat.
Figure 1. Cactus ferruginous pygmy-owl habitat segments, International Boundary Vehicle Barrier project area, Organ Pipe Cactus National Monument, Arizona. Kilometer tics marks originate at
Figure 1, Continued. Cactus ferruginous pygmy-owl habitat segments, International Boundary Vehicle Barrier project area, Organ Pipe Cactus National Monument, Arizona.
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