

BIOLOGICAL OPINION SUMMARY
Mt. Lemmon Ski Valley Expansion Project

Date of opinion: May 22, 1997

Action agency: U.S. Forest Service, Coronado National Forest, Santa Catalina Ranger District, Tucson, AZ

Project: Mt. Lemmon Ski Valley Master Plan

Location: Pima County, Arizona.

Listed species affected: Mexican spotted owl (*Strix occidentalis lucida*) (threatened). Critical habitat for the Mexican spotted owl has been designated but has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus USFWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1997); no conferences or consultation is required.

Biological opinion: The Service concludes that the proposed project to expand the Ski Valley resort on Mt. Lemmon adversely affects Mexican spotted owls but is not likely to jeopardize the continued existence of the Mexican spotted owl.

Incidental take statement:

Anticipated take: *Exceeding this level may require reinitiation of formal consultation.* The Service anticipates the non-lethal take (harassment) of the nesting pair of the Ski Valley Protected Activity Center (PAC) through the permanent modification of habitat within the PAC that contributes to the feeding, breeding, and sheltering of the owl pair.

Reasonable and prudent measures: *Implementation of these measures through the terms and conditions is mandatory.* Two reasonable and prudent measures were provided as follows: 1) Minimize disturbance to the owls from increased human presence due to use of the new ski lift; and 2) Minimize adverse effects of the proposed action on the Ski Valley PAC.

Terms and conditions: *Terms and conditions implement reasonable and prudent measures and are mandatory requirements.* Terms and conditions are as follows: 1) Restrict use of the beginners ski lift to the winter use (December 1 - April 15), with no off season use of the chair lift of access to the chair lift corridor; 2) Remove no more than 12 trees greater than 9 inches dbh; 3) Leave all felled trees across the chair lift corridor to discourage hiking and off-road vehicle use of this corridor; and 4) maintain a vegetation free corridor by other means than application of herbicides.

Conservation recommendations: *Implementation of conservations recommendations is discretionary.* Two conservation recommendations are provided as follows: 1) Annually monitor the nesting success of the Ski Valley PAC using standardized protocols; and 2) Create a database to track cumulative disturbances to Mexican spotted owl PACs on Mt. Lemmon including the Ski Valley PAC for monitoring of habitat quality and quantity and adverse effects over time due to human disturbance.



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Fish and Wildlife Service



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In Reply Refer To:

AESO/SE
2-21-96-F-384

May 22, 1997

Mr. Tom Quinn
District Ranger
Santa Catalina Ranger District
Coronado National Forest
5700 N. Sabino Canyon Road
Tucson, Arizona 85750

Dear Mr. Quinn:

The U.S. Fish and Wildlife Service has reviewed the information provided by the Coronado National Forest, Santa Catalina Ranger District regarding the proposed Mt. Lemmon Ski Valley expansion project located in Pima County, Arizona. Your November 12, 1996, request for consultation was received on November 14, 1996. This document represents the Service's biological opinion and concurrence on the effects of that action on the Mexican spotted owl (*Strix occidentalis lucida*) in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended, (16 U.S.C. 1531 et seq.).

This biological opinion is based on information provided in the November 12, 1996, biological assessment, additional information provided via one fax on May 8, 1997, and three additional faxes on May 14, 1997, numerous telephone conversations between the Forest Service and the Service, one field investigation, and other sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the Mexican spotted owl or the effects of the proposed activity on the owl or other species. A complete administrative record of this consultation is on file in this office.

The Forest Service, with verbal clarification and confirmation from Deborah Bieber, Wildlife Staff on the Santa Catalina Ranger District, on May 15, 1997, indicated that no effect determinations were made by the Forest Service on the six actions (multi-story observation tower on Radio Ridge, west-side chair lift for Heidi's run, remodeled base facility, new sewage disposal facility, spring development, and facilities for additional water storage). The Forest Service provided may affect but is not likely to adversely affect determinations for the *development of the maintenance facility and beginners chair lift. The Service has determined that the proposed project will not jeopardize the continued existence of the species.*

Critical habitat for the Mexican spotted owl has been designated but has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus USFWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1997)); consequently, no conferencing or consultation is required.

BIOLOGICAL OPINION

CONSULTATION HISTORY

On March 7, 1996, Service personnel visited the proposed project site with staff from the Coronado National Forest, Santa Catalina Ranger District. The Forest Service submitted a Biological Assessment and Evaluation, (BAE) and letter on April 19, 1996, requesting concurrence on two may affect but is not likely to adversely affect determinations for actions associated with the Mt. Lemmon Ski Valley expansion project and their effects on the spotted owl. The April 19, 1996, letter indicated that the Forest Service requested formal consultation to be initiated if the Service did not concur with a may affect, not likely to adversely affect determination. On November 12, 1996, the Forest Service provided the Service with a letter amending the original project description and including an increase in the number of trees to be cut as a result of the development of the proposed beginners chair lift. The Forest Service provided may affect but is not likely to adversely affect determinations for the development of the revised beginners chair lift and the maintenance facility.

On May 13, 1997, the Forest Service provided the Service with a letter in response to a request for clarification regarding some of the history regarding the development of Ski Valley and the projected usage resulting from the proposed expansion project. Additional information was received via one fax on May 8, 1997, and three additional faxes on May 14, 1997

DESCRIPTION OF PROPOSED ACTION

The proposed project consists of development of additional facilities within and adjacent to the Mt. Lemmon Ski Valley permit area. The Mt. Lemmon Ski Valley permit area consists of 188 acres on the north facing slope of Radio Ridge and northeast flank of Mt. Lemmon (T11S, R15E, SE 1/4 of NE 1/4 and SE 1/4 section 26; SW 1/4 section 25; NE 1/2 of NE 1/4 section 35; NW 1/4 of NW 1/4 of NW 1/4 section 36), Pima County, Arizona. It is located on the Santa Catalina District of the Coronado National Forest approximately 30 miles northeast of Tucson, Arizona. Elevations range from approximately 8,200 feet in the drainage of upper Sabino Creek to over 9,000 feet at the top of Radio Ridge. The permit area presently contains a double chair lift, one tow-rope lift, 10 ski runs, support buildings, and concessions. The Mt. Lemmon Ski Valley permit area includes mixed conifer forest, aspen groves, and riparian forest.

There has been considerable confusion over the scope of the proposed beginners chair lift. According to the original project description, as described in the April 19, 1996, BAE there are two existing towlines in upper Sabino Creek east of the base of the existing chair lift. These towlines will be replaced with a 600 foot-long, single chair lift. The upper terminus of this lift will be located a few meters east of the existing chair lift at the 8370 foot contour and will run across and down the slope to the east. The lower terminus of the single chair lift will be near the eastern terminus of the existing beginner towline. Construction of the beginner lift will not require clearing any trees. However, the April 19, 1996, BAE indicated that construction of the ski runs associated with this lift would require clearing of no more than eight trees.

The proposed project in the November 12, 1996, BAE and as clarified by Deborah Bieber in a May 15, 1997, telephone call was modified as follows:

The beginner's chair lift will remove twelve trees instead of eight. Trees to be removed are as follows:

Species	Number Removed	dbh (inches)
Douglas-fir	6	24, 25, 30, 32, 35, and 46
White fir	5	28, 29, 31, 37, and 38
White pine	1	39

Ms. Bieber clarified that the trees will be removed to allow the construction of the chair lift and not to expand the beginner's ski, run as stated in the original project description.

STATUS OF THE MEXICAN SPOTTED OWL - Rangewide

The Mexican spotted owl was proposed for listing on November 4, 1995 (56 CFR 56344) and listed as threatened on March 16, 1993 (58 FR 14248). Critical habitat for the owl was designated on June 6, 1995 (60 FR 29914). The proposed project is within critical habitat; however, since critical habitat for the Mexican spotted owl has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus FWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1997), no consultation is required for critical habitat for this species.

The Mexican spotted owl was originally described from a specimen collected at Mount Tancitaro, Michoacan, Mexico, and named *Syrnium occidentale lucidum*. The spotted owl was later assigned to the genus *Strix*. Specific and subspecific names were changed to conform to taxonomic standards and became *S. o. lucida*). The American Ornithologists' Union currently recognizes three spotted owl subspecies, including the California (*S. o. occidentalis*), Mexican (*S. o. lucida*), and Northern (*S. o. caurina*) spotted owls. The Mexican spotted owl is mottled in appearance with irregular white and brown spots on its abdomen, back, and head. The spots of the Mexican spotted owl are larger and more numerous than in the other two subspecies giving it a lighter appearance. Unlike most owls, spotted owls have dark eyes. Several thin white bands mark an otherwise brown tail.

The Mexican spotted owl is distinguished from the California and northern subspecies chiefly by geographic distribution and plumage. The Mexican spotted owl has the largest geographic range of the three subspecies. Its range extends from the southern Rocky Mountains in Colorado and the Colorado Plateau in southern Utah southward through Arizona and New Mexico, and discontinuously through the Sierra Madre Occidental and Oriental to the mountains at the southern end of the Mexican Plateau.

Using starch-gel electrophoresis to examine genetic variability among the three subspecies of spotted owls, Barrowclough and Gutierrez (1990) found the Mexican spotted owl to be distinguishable from the other two subspecies by a significant difference in allelic frequency at one locus. They concluded that this genetic variation, which suggests prolonged geographic isolation of the Mexican subspecies, indicates that the Mexican spotted owl may represent a species distinct from the California and northern spotted owls.

Although the range of the owl covers a broad area of the southwestern United States and Mexico, much remains unknown about the species' distribution within this range. This is especially true in Mexico where much of the owl's range has not been surveyed. Information gaps also appear for the species' distribution within the United States. It is apparent that the owl occupies a fragmented distribution throughout its United States range corresponding to the availability of forested mountains and canyons, and in some cases, rocky canyon lands.

The primary administrator of lands supporting owls in the United States is the Forest Service. According to the Mexican Spotted Owl Recovery Plan (Recovery Plan), 91 percent of owls known to exist in the United States between 1990 and 1993 occur on land administered by the Forest Service (USDI 1995). The majority of known owls have been found within Region 3 of the Forest Service, which includes 11 National Forests in New Mexico and Arizona. Forest Service Regions 2 and 4, including two National Forests in Colorado and three in Utah, support fewer owls.

The range of the Mexican spotted owl in the United States has been divided into six recovery units (RUs) as discussed in Part II.B. of the Recovery Plan (USDI 1995). An additional five RUs were designated in Mexico. While the Recovery Plan provides distribution, abundance, and density estimates by RU, there is currently no reliable estimate of the numbers of owls throughout its entire range due to the limited information currently available. Owl surveys conducted from 1990 through 1993 indicate that the species persists in most locations reported prior to 1989, with the exception of riparian habitats in the lowlands of Arizona and New Mexico, and all previously occupied areas in the southern States of Mexico (USDI 1995). Increased survey efforts have resulted in additional sightings for all RUs.

Fletcher (1990) calculated that 2,074 owls existed in Arizona and New Mexico in 1990 using information gathered by Region 3 of the Forest Service. Fletcher's calculations were modified by McDonald *et al.* (1991), who estimated that there were a total of 2,160 owls in the United States. However, these numbers are not reliable estimates of current population size for a variety of statistical reasons. While the number of owls throughout the range is currently not available, the Recovery Plan (USDI 1995) reports an estimate of owl sites based on 1990-1993 data. An owl "site" is defined as a visual sighting of at least one adult owl or a minimum of two auditory detections in the same vicinity in the same year. Surveys from 1990 through 1993 indicate one or more owls have been observed at a minimum of 758 sites in the United States and 19 sites in Mexico. The greatest concentration of known owl sites in the United States

occurs in the Upper Gila Mountain (55.9 percent), followed by the Basin and Range-East (16.0 percent), Basin and Range-West (13.6 percent), Colorado Plateau (8.2 percent), Southern Rocky Mountain-New Mexico (4.5 percent), and Southern Rocky Mountain-Colorado (1.8 percent) RUs. Minimum total numbers in the United States range from 777 individuals assuming each known site was occupied by a single owl, to 1,554 individuals assuming each known site was occupied by a pair of owls.

Past, current, and future timber-harvest practices in the Region 3 of the Forest Service, in addition to catastrophic wildfire, were cited as the primary factors leading to listing of the spotted owl as a threatened species. Fletcher (1990) estimates that 420,000 hectares (1,037,000 acres) of habitat were converted from suitable to capable. Of this, about 78.7 percent, or 330,000 hectares (816,000 acres) was a result of human activities, whereas the remainder was converted naturally, primarily by wildfire. Other factors which have or may lead to the decline of this species include a lack of adequate regulatory mechanisms. In addition, the Recovery Plan (USDI 1995) notes that forest management has created ecotones favored by great horned owls, and there is as a result an increased likelihood of contact between spotted owls and great horned owls. Increases in scientific research, birding, educational field trips, and agency trips are also likely to increase. Finally, there is a potential for increasing malicious and accidental anthropogenic harm, and the potential for the barred owl to expand its range, resulting in competition and/or hybridization with the spotted owl.

STATUS OF THE MEXICAN SPOTTED OWL - Recovery Unit

The proposed project occurs within the Basin and Range-West RU. This RU is dominated by Madrean elements, and includes numerous mountain ranges such as the Chiricahua, Huachuca, Pinaleno, Bradshaw, Pinal, Santa Catalina, Santa Rita, Patagonia, Santa Teresa, Atascosa, Mule, Drought, Peloncillo, Mazatzal, and Rincon Mountains. Vegetation within the RU ranges from desert scrub to semi-desert grassland in the valleys, and upwards in elevation to montane forests. Montane vegetation includes interior chaparral, encinal woodlands, Madrean pine-oak woodlands at low and middle elevations, and ponderosa pine, mixed-conifer, and spruce-fir forests at higher elevations. Within the Basin and Range-West RU, the majority of the owls occur in the isolated mountain ranges in encinal oak woodlands, mixed-conifer and pine-oak forests, and rocky canyons.

Federal lands encompass 36% of this RU, and are mostly administered by the Bureau of Land Management and the Forest Service, with a small portion managed by the National Park Service. The dominant land use activity is recreation, and includes hiking, birdwatching, camping, off-road driving, skiing, and hunting. Livestock grazing also occurs in low and middle elevations.

ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and

private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

On the Coronado National Forest, past and present Federal, State, private, and other human activities that affect this RU include past timber sales, fuelwood gathering activities, cattle grazing, development of recreation sites, and road construction and maintenance activities.

The Forest Service has formally consulted on approximately 183 timber sales and other projects in Arizona and New Mexico since August 1993. These projects have resulted in the anticipated incidental take of 59 owls. In addition, the Bureau of Indian Affairs has consulted on one timber sale on the Navajo Reservation which resulted in an anticipated take of four Mexican spotted owls, and a highway reconstruction which resulted in the anticipated incidental take of two Mexican spotted owls. The Federal Highway Administration has consulted on one highway project that resulted in an undetermined amount of incidental take.

EFFECTS OF THE ACTION

According to Forest Service records the first known observations spotted owls in the Ski Valley area was in 1960, when J. Marshall heard a male spotted owl. In 1989, an adult was found roosting, and a pair and one fledgling were heard. Locations of this pair were used in designation of the Mt. Lemmon Management Territory (#0505010) in 1989. The management territory was converted to the Ski Valley Protected Activity Center (PAC) in 1995. Presence of a pair has been confirmed from 1990 through 1995, with reproduction confirmed for 1992 only. Surveys were not conducted in 1996 due to a lack of funding.

According to information provided by the Forest Service, all construction of the project will be done outside of the nesting season. The beginner's chair lift will be approximately 600 feet long and will transect approximately 250-300 feet of currently forested area within the Ski Valley PAC (D. Bieber, pers. comm. 1997) and result in the cutting of 12 trees over nine inches dbh. Specific management guidelines developed in the Recovery Plan provide for the protection of occupied and unoccupied habitat with the goals of protecting conditions and structures used by spotted owls where they exist and setting other stands on a trajectory to becoming replacement nest habitat or habitat for foraging and dispersal (USDI 1995).

The construction of the beginner's chair lift will create a new human caused intrusion into the Ski Valley PAC. This will result in a loss of habitat characteristics required by the Mexican spotted owl. The PAC will have a net loss of habitat that could support the feeding, breeding, and sheltering of owls. However, this impact will be somewhat moderated in that the chair lift, once constructed, will only be used from December 1 - April 15. In many winters because of poor snow conditions it may be open for a shorter season. The known nesting location lies approximately 0.50 miles west of the lower terminus of the proposed beginner's chair lift.

The proposed use of the chair lift (December 1 - April 15) does overlap with the spotted owl's breeding season of March 1 - August 31. In the most extreme years, when snow was present and the chair lift in operation through April 15, there is a potential for human caused disturbance impacting the nesting owl pair through the operation of the chair lift. However, the Service believes that this potential is minimized by the fact that in those years where the snow pack would provide for skiing until April 15, it is highly likely that nesting would be pushed later into the season because of weather and other natural factors.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local 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, as amended.

In past biological opinions, it has been stated that, "Because of the predominant occurrence of the owls on Federal lands, and because of the role of the respective Federal agencies in administering the habitat of the owl, actions to be implemented in the future by non-Federal entities on non-Federal lands are considered of minor impact." However, there has been a recent influx of harvest activities on non-Federal lands. Much of the non-Federal lands being harvested are adjacent to or within National Forests (i.e., private inholdings). These activities reduce the quality and quantity of owl nesting, roosting, and foraging habitat and could cause disturbance to breeding owls. All forests throughout the State could be impacted, which could result in adverse cumulative effects in the future.

CONCLUSION

After reviewing the current status of the Mexican spotted owl, the environmental baseline for the action area, the effects of the proposed action, and cumulative effects, it is the Service's biological opinion that the construction and operation of the Mt. Lemmon Ski Valley beginners chair lift, as proposed in the biological assessment and amendment to the biological assessment, is not likely to jeopardize the continued existence of the Mexican spotted owl. Critical habitat for the Mexican spotted owl has been designated but has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus USFWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1997), and no consultation is required for critical habitat at this time.

INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species

by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as 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 any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the applicant. 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 a prohibited taking 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 implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Forest Service has a continuing duty to regulate the activity covered by this incidental take statement. If the Forest Service (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

The Service anticipates the Mexican spotted owl pair and their reproductive viability in the Ski Valley PAC could be taken as a result of the construction and operation of the proposed beginner's chair lift. The incidental take is expected to be in the form of harassment through the incremental loss of the capacity of the PAC to provide adequate feeding, breeding, and sheltering for the birds. The incidental take level will be considered to have been exceeded if more than 12 trees in excess of nine inches in diameter at breast height (DBH) are cut within the Ski Valley PAC to develop the beginner's chair lift. In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species.

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the Mexican spotted owl.

1. Minimize disturbance to the owl and adverse effects to the habitat in the Ski Valley PAC by limiting use of the area.
2. Minimize adverse impacts to habitat within the Ski Valley PAC area.

In order to be exempt from the prohibitions of section 9 of ESA, the (agency) must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. The following terms and condition is necessary for implementation of Reasonable and Prudent Measure 1:

- 1.1 Restrict the use of the beginners ski lift to the winter use (December 1 - April 15); no off ski season use of the chair lift or access to the chair lift corridor is to be permitted.

The following terms and conditions are necessary for implementation of Reasonable and Prudent Measure 2:

- 2.1 No more than 12 trees over nine inches DBH may be cut during the development of the beginners chair lift.
- 2.2 All trees felled in the development of the beginners chair lift and its corridor will be left on the ground unless they conflict with the safe operation of the chair lift. These downed trees will provide for small mammal habitat and owl foraging, thereby minimizing the loss of suitable foraging habitat within the Ski Valley PAC.
- 2.3 Use of herbicides to maintain the beginners chair lift corridor is prohibited.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. With implementation of these measures the Service believes that incidental take through harassment to the Mexican spotted owl pair of the Ski Valley PAC will be minimized. If during the course of the action, the incidental take level is exceeded, the Forest Service must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

CONCURRENCES

The proposed action at Ski Valley involves seven actions in addition to the beginner's chair lift, including a multi-story observation tower on Radio Ridge, a west-side chair lift for Heidi's run, a maintenance facility, a remodeled base facility, a new sewage disposal facility, a spring development, and facilities for additional water storage. The proposed project falls within the range of the threatened Mexican spotted owl and is adjacent to the Ski Valley PAC (# 0505010).

The Service has reviewed the information provided by the Forest Service, the Recovery Plan (USDI 1995), and the best available scientific and commercial information and provides the following concurrences:

1. Because they would occur outside of spotted owl PACs in previously disturbed areas, the Service concurs with the no effect determinations on the development of the west-side chair lift for Heidi's run, the remodeled base facility, the new sewage disposal facility, and the spring development.
2. The Service does not concur with the no effect determination on the development of the multi-story observation tower. While no trees would be cut and the construction area is already disturbed, this action takes place within the Ski Valley PAC and as such is an unnatural intrusion. However, the Service does not believe that this action is likely

to adversely affect the integrity of the PAC and its ability to provide the habitat characteristics necessary for the well-being of the owl pair.

3. The Service does not concur with the no effect determination on the development of the facilities for additional water storage because it may require the clearing of up to 0.2 acres of forest. While this is not taking place within the Ski Valley PAC, the Service believes that nearly all of the forested habitat would be categorized as Protected Area under the guidelines identified in the Recovery Plan (USDI 1995) for the owl. The Service believes that with protection such areas could grow into suitable replacement nesting or foraging habitat for the owls. While this action may affect the owl, the Service does not believe that it is likely to adversely affect the integrity of the PAC and its ability to provide the habitat characteristics necessary for the well-being of the owl pair.
4. The Service concurs with the Forest Service's determination of may affect but is not likely to adversely affect on the development of the maintenance facility.

As discussed in the attached opinion, the Service did not concur with a determination of may affect, not likely to adversely affect determination for development of the beginner's chair lift and completed formal consultation at the Forest Service's request.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of ESA directs Federal agencies to utilize their authorities to further the purposes of ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- (1) The Service recommends that the Forest Service continues to annually monitor the nesting success of the Ski Valley PAC using standardized protocols identified in the Recovery Plan (USDI 1995).
- (2) The Forest Service should create a data base to track cumulative disturbances to spotted owl PACs including the Ski Valley PAC in an effort to monitor habitat quality and quantity as it is impacted by human and natural caused disturbances over time.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

Mr. Tom Quinn

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This concludes formal consultation on the proposed development of the Mt. Lemmon Ski Valley beginners chair lift outlined in your requests of April 19, 1996, and amended on November 12, 1996. 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.

Thank you for your consideration of threatened and endangered species and we apologize for the delay in completing this consultation. For further information please contact Ms. Mary Richardson of this office. Please refer to the consultation number 2-21-96-I-384, in future correspondence concerning this project.

Sincerely,



Sam F. Spiller
Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (GM:AZ)(AES)
Forest Supervisor, Coronado National Forest, Tucson, AZ
Field Supervisor, Fish and Wildlife Service, New Mexico Ecological Services Office,
Albuquerque, NM (Attn: Sarah Rinkevich)

Director, Arizona Game and Fish Department, Phoenix, AZ

Literature Cited

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