CENTER for BIOLOGICAL DIVERSITY Because life is good.

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 30, 2010

William H. Clay, Deputy Administrator
USDA APHIS Wildlife Services
4700 River Road, Unit 87
Riverdale, MD 20737

Ken Salazar, Secretary of the Interior
U.S. Dept. of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

Sixty-Day Notice of Intent to Sue the U.S.D.A. Animal and Plant Health Inspection Service (APHIS), Wildlife Services program, and the U.S. Fish and Wildlife Service Pursuant to the Endangered Species Act Re: Predator-control activities that may take endangered jaguars (*Panthera onca*) and ocelots (*Felis pardalis*).

Dear Deputy Administrator Clay and Secretary Salazar,

The USDA Animal and Plant Health Inspection Service's ("APHIS") Wildlife Services division is hereby notified that the Center for Biological Diversity intends to file suit, pursuant to the citizen suit provision of the Endangered Species Act ("ESA"), 16 U.S.C. § 1540(g), to challenge APHIS Wildlife Services': (1) failure to avoid jeopardy to the endangered jaguar (*Panthera onca*) in continuing to rely on the December 6, 1999 amendment to the June 22, 1999 Biological Opinion concerning program activities that may affect the jaguar; (2) failure to consult with the Fish and Wildlife Service over program activities that may affect the ocelot (*Felis pardalis*) in Arizona; (3) failure to timely reinitiate and complete consultation with the U.S. Fish and Wildlife Service ("FWS") regarding the impacts of program activities on the jaguar and ocelot; and (5) continued authorization and implementation of activities that may affect jaguars and ocelots prior to the reinitiation and completion of consultation.

The Center for Biological Diversity also intends to file suit, pursuant to the ESA citizen suit provision, 16 U.S.C. § 1540(g), to challenge FWS' (1) failure to timely reinitiate and complete consultation concerning USDA APHIS Wildlife Services' ongoing program activities that may affect the jaguar and the ocelot and (2) failure to use the best available scientific and commercial data available in issuing the June 22, 1999 Biological Opinion and December 6, 1999 amendment.

II. Requirements of the ESA

Section 7 of the ESA requires USDA APHIS Wildlife Services ("Wildlife Services" or

"WS"), in consultation with FWS, to "insure" that any action authorized, funded, or carried out by the agency is not likely to (1) jeopardize the continued existence of any threatened or endangered species or (2) result in the destruction or adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2). "Action" is broadly defined to include all activities or programs of any kind authorized, funded, or carried out by federal agencies, including actions directly or indirectly causing modifications to the land, water, or air; and actions intended to conserve listed species or their habitat. 50 C.F.R. § 402.02. Wildlife Services' program is an ongoing agency action pursuant to Section 7 of the ESA.

For each federal action, Wildlife Services must request from FWS whether any listed or proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. If listed or proposed species may be present, Wildlife Services must prepare a "biological assessment" to determine whether the listed species may be affected by the proposed action. *Id*. The biological assessment must generally be completed within 180 days. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12(i).

If Wildlife Services determines that its proposed action may affect any listed species or critical habitat, the agency must engage in formal consultation with FWS. 50 C.F.R. § 402.14. To complete formal consultation, FWS must provide Wildlife Services with a "biological opinion" explaining how the proposed action will affect the listed species or habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. Consultation must generally be completed within 90 days from the date on which consultation is initiated. 16 U.S.C. § 1536(b)(1)(A); 50 C.F.R. § 402.14(e).

If FWS concludes that the proposed action "will jeopardize the continued existence" of a listed species, the biological opinion must outline "reasonable and prudent alternatives." 16 U.S.C. § 1536(b)(3)(A). If the biological opinion concludes that the action is not likely to jeopardize the continued existence of a listed species, and will not result in the destruction or adverse modification of critical habitat, FWS must provide an "incidental take statement," specifying the amount or extent of such incidental taking on the listed species, any "reasonable and prudent measures" that FWS considers necessary or appropriate to minimize such impact, and setting forth the "terms and conditions" that Wildlife Services must comply with to implement those measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i).

In order to monitor the impacts of incidental take, Wildlife Services must monitor and report the impact of its action on the listed species to FWS as specified in the incidental take statement. 16 U.S.C. § 1536(b)(4); 50 C.F.R. §§ 402.14(i)(1)(iv), 402.14(i)(3). If during the course of the action the amount or extent of incidental taking is exceeded, Wildlife Services must reinitiate consultation with FWS immediately. 50 C.F.R. § 401.14(i)(4).

The reinitiation of formal consultation is required and must be requested by Wildlife Services or FWS if (1) the amount or extent of taking specified in the incidental take statement is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the action is modified in a manner that causes an effect to the listed species or critical habitat that was not considered in

the biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the identified action. 50 C.F.R. § 402.16.

After the initiation or reinitiation of consultation, Wildlife Services is prohibited from making any irreversible or irretrievable commitment of resources with respect to the agency action which may foreclose the formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d).

Section 9 of the ESA and its implementing regulations prohibit the unauthorized "take" of listed species. 16 U.S.C. § 1538(a)(1); 16 U.S.C. § 1533(d); 50 C.F.R. § 17.31. "Take" is defined broadly to include harming, harassing, trapping, capturing, wounding or killing a protected species either directly or by degrading its habitat. *See* 16 U.S.C. § 1532(19); *Center for Biological Diversity v. Bureau of Land Management*, 422 F. Supp. 2d at 1127 n. 7. Taking that is in compliance with the terms and conditions specified in a biological opinion is not considered a prohibited taking under Section 9 of the ESA. 16 U.S.C. § 1536(o)(2).

III. The 1999 Jaguar Biological Opinion and Amendment

On June 22, 1999, FWS completed a biological opinion for its nationwide animal damage control activities for their affects on the jaguar. Animal damage control activities with the potential to take jaguars include trapping, snaring, poisoning and pursuing with hounds. The biological opinion reached a nonjeopardy conclusion and its incidental take statement included five mandatory reasonable and prudent measures to be implemented through fifteen mandatory terms and conditions. On December 6, 1999, FWS issued an amendment to the previous biological opinion, consisting in large part of a modification of the definition of "occupied habitat" and insertion of maps delineating "occupied range" and occupied habitat – areas in which the terms and conditions apply.

The amended biological opinion limited Wildlife Services' operations within *occupied range* and *occupied habitat* of the jaguar. Occupied range was defined as "the geographic boundaries of the Sierra Madrean archipelago within Arizona and New Mexico, and include all lands within the Arizona counties of Cochise and Santa Cruz, and Pima east of Organ Pipe Cactus National Monument, Pinal east of State highway 77 south of the Gila River, and Graham and Greenlee south of the Gila River, and in New Mexico, Hidalgo County" (Dec. 6, 1999 amended biological opinion, p. 4).

Occupied habitat consists of areas within occupied range within the counties of Hidalgo, Cochise, Greenlee and Graham delineated on a series of 1:100,000 scale topographic maps included as part of the amended biological opinion, and in part also annotated in the amended biological opinion. Occupied jaguar habitat was only delineated for "those areas where [Wildlife Services] has an on-going program related to predator control activities" (p. 2), suggesting that in the areas proximate to the delineated occupied habitat the agency conducted and/or planned to conduct ongoing activities – even though jaguars can reasonably be expected to use them. That conclusion is bolstered in a Nov. 12, 1999 letter from Wildlife Services district supervisor Alan

May to Bruce Palmer of FWS: "[T]he lines we drew are along section lines, and in some cases take in the very tips of hills which you may consider jaguar habitat. Approximately five sections of deeded land on the Cowan's ranch remain in 'occupied habitat' on our map. I am reasonably certain that Mrs. Cowan will still not be satisfied with this. The areas remaining in 'occupied habitat' are for the most part, very rough country with limited access. Mike and Brandon have never worked these areas for coyote damage management, and don't expect to." [See Appendix I]

The amended biological opinion's annotation of the maps of occupied habitat was organized by county, as follows.

Hidalgo County, NM. Occupied habitat consists of the Animas, Guadalupe and Peloncillo mountain ranges due to their contiguity "with the major mountain complex of the Sierra San Luis in Mexico" (p. 3) Additionally, occupied habitat was delineated along portions of Foster and Clanton draws, Animas Creek, and one of its unnamed tributaries, along with a half-mile radius on either side of the center of those stream channels, in recognition of their riparian values to jaguars. Other areas were excluded, including the following mountain ranges for separate reasons: "The Smuggler Hills, and Pyramid and Tank mountains are not included in this habitat delineation due to sparse vegetation, relatively low topographic relief, and limited extent of rugged areas. The Alamo Hueco, Big Hatchet, and Little Hatchet mountains were not included due to the lack of habitat connectivity to other mountain ranges and to appropriate habitat in Mexico" (p. 3). The amended biological opinion describes some areas immediately outside of delineated occupied habitat: "The habitat boundaries sometimes provide only narrow buffers to the mountains and in some cases even cross over the mountain toe slopes. However, this occurs in areas which are generally dominated by grasslands which extend up the slope of the mountains." (p. 3).

Cochise County, AZ. Only the Peloncillo Mountains are included as occupied habitat. "Other mountain ranges in Cochise County would be considered jaguar habitat, but delineation is not necessary due to the lack of on-going WS' activities in these areas" (p. 3).

Greenlee County, AZ. Occupied habitat consists only of "the Peloncillo Mountains extending from the southern-most end of the county north to the Gila River" (p. 3).

Graham County, AZ. The Peloncillo and Pinaleno mountains are delineated as occupied habitat. "Major areas of the Gila Valley, San Simon Valley, upper Sulphur Springs Valley, and Whitlock Valley are not included in this habitat delineation. The Whitlock Mountains are also not included as jaguar habitat due to their relatively small size and isolation" (p. 4).

The terms and conditions describing the limitations on Wildlife Services' activities within occupied range and occupied habitat, as well as more generally, are as follows (underlining in original):

- Animal damage control activities which may possibly adversely affect the jaguar authorized by WS within the occupied range of the jaguar shall require identification of

the target animal to species before control activities are carried out. IF the identified animal is a jaguar, that animal shall not be subjected to any control actions, and the Service and appropriate State wildlife agency contacted immediately.

- Within the occupied range of the jaguar, leghold traps shall be restricted to rubber padded (or equivalent) traps with a jaw spread equivalent to a #3 Victor or smaller (maximum jaw spread to 5.25 inches). Traps with a maximum jaw spread of less than 4.75 inches do not have to be rubber-padded. Trapping within occupied habitat of the jaguar shall only be conducted on a limited, case-by-case basis. The Service shall be notified by WS prior to the use of traps within occupied habitat of the jaguar. All traps within occupied habitat with have a maximum jaw spread of 4.75 inches or greater are to be checked daily, and the WS Specialist must have appropriate equipment on-hand to release a jaguar unharmed. The daily check requirement can be met by use of remote transmitters that signal whether a trap has been sprung. Traps with a maximum jaw spread less than 4.75 inches used within occupied habitat do not have the requirement of daily trap checks. Trap baits used within occupied habitat shall not include fish oils.
- The use of neck snares within the occupied range of the jaguar shall not include occupied habitat of the jaguar, and shall be limited to agricultural/grassland habitats only, avoiding riparian corridors.
- If, within occupied habitat of the jaguar, a mountain lion or black bear is the offending animal, dogs will be a first choice if conditions are appropriate, to target the animal rather than less selective methods of control. If a jaguar is inadvertently chased and/or treed by the dogs, the dogs shall be called off immediately once it is realized the animal is a jaguar.
- Foot snares shall only be used within occupied habitat of the jaguar on a limited, case-by-case basis. The Service shall be contacted by WS prior to the use of foot snares within occupied habitat. Foot snares shall only be used at confirmed lion or bear kills at fresh prey remains. When foot snares are used in occupied habitat they must be checked daily, and the WS agent must have appropriate equipment on-hand to release a jaguar unharmed. The daily check requirement can be met by use of remote transmitters that signal whether a trap has been sprung.
- The use of M44s within the occupied range of the jaguar shall not include occupied habitat of the jaguar, shall be limited only to agricultural/grassland habitats avoiding major riparian corridors, and shall be baited only with fetid meat attractants (which felids generally avoid) and shall not include fish oils.
- If the presence of a jaguar is confirmed within the vicinity (50 miles) of on-going or planned animal control activities, WS shall immediately contact the Service to review what control activities are being implemented where, and if additional measures are necessary to protect the jaguar.
- If any WS activities result in the capture, injury, or death of a jaguar, the Service and appropriate State wildlife agency must be contacted immediately, and all WS activities using similar capture methods within the occupied range of the jaguar must by immediately curtailed while consultation with the Service is reinitiated. If a jaguar is inadvertently captured, the WS agent, using best professional judgement [sic], should determine the condition of the animal (giving special attention to weather conditions,

potential for heat stress, and any injuries) and if the jaguar is in eminent [sic] threat of further injury or mortality, it shall be immediately released. If the jaguar appears in satisfactory condition, the WS agent shall immediately initiate communication to the Arizona Game and fish Department, Service, and New Mexico Department of Game and Fish as appropriate, to ascertain expected response time for personnel permitted to tranquilize and radio-collar the jaguar (as provided for under the Jaguar Conservation Strategy). If this response time would require the animal to be confined for a period of more than 24 hours, result in additional injury, or threaten its life, the jaguar is to be released immediately.

- WS cooperators within the occupied range of the jaguar shall be informed by WS by letter that take of jaguar, including harm, injury, and harassment, is prohibited under the Act and could result in prosecution. Also, provide information, as available, on the identification of jaguar sign, and other information regarding the conservation of the species.
- Any animal damage control activities authorized or carried out by WS shall be conducted only after all appropriate permits (e.g., Federal, State, or other) have been obtained.
- WS, in coordination with the Service and, if possible, the Jaguar Conservation Team and appropriate State wildlife agency, shall as soon as practical (but within three days) investigate all credible reports of jaguars within the vicinity (50 miles) of any active animal control activities which may affect the jaguar. The investigations shall include appropriate field collection of data. WS is encouraged to coordinate these investigation [sic] with the appropriate State wildlife agency and Jaguar Conservation Team, and use the procedures for investigating observations and possible depredation by jaguar developed under the Jaguar Conservation Strategy. Any access to private land in order to complete an investigation shall require the permission of the land owner. The investigation and reporting to the Service may be accomplished through the cooperative efforts of the Jaguar Conservation Team.
- WS will cooperate with the Service and, if possible, the Jaguar Conservation Team and appropriate State wildlife agency, to investigate any reports of jaguars in occupied range. The investigation and reporting to the Service may be accomplished through the cooperative efforts of the Jaguar Conservation Team.
- A detailed report of each jaguar observation investigation conducted by WS shall be provided to the Service and the Jaguar Conservation Team within 30 days of the occurrence of each incident.
- An annual monitoring report shall be submitted to the Service by December 31 of each year, covering the previous fiscal year (October through September), detailing any and all animal damage control activities conducted within occupied habitat of the jaguar.
- All WS employees who conduct predator damage management activities within occupied range of the jaguar shall be trained by experienced personnel to identify jaguars and jaguar sign, on procedures for recording and reporting jaguar observations, on appropriate release techniques for jaguars which may be caught in snares or traps, and on identification of livestock depredations that may be caused by jaguars. Training will be conducted in coordination, if possible, with the appropriate State wildlife agency and Jaguar Conservation Team. Updated training will be conducted as new information on

the jaguar becomes available.

IV. Significant New Information Since the 1999 Biological Opinion and amendment

Subsequent to the 1999 amended biological opinion, significant new scientific information has emerged about jaguar use of habitats, the affects of capture on jaguars, and the importance of United States habitats to conservation of jaguars. The new information is found in the following reports published or made available since 1999, arranged chronologically:

- Miller, B. A. Rabinowitz, and C. Lopez. 2000. Review of jaguar conservation strategy. Unpublished memo from the Jaguar Conservation Team's scientific advisory group to the Jaguar Conservation Team's habitat subcommittee. (Appendix II)
- Sierra Institute. 2000. Jaguar habitat in southern Arizona and New Mexico: a report to the habitat committee of the Jaguar Conservation Team. T. Povilitis and C. Johnson, eds. Field Studies Program in Arizona, University of California Extension, Santa Cruz. (Appendix III)
- Hatten, J.R., A. Averill-Murray, and W.E. Van Pelt. 2002. Chracterizing and mapping potential jaguar habitat in Arizona. Nongame and Endangered Widllife Program Technical Report 203. Arizona Game and Fish Department, Phoenix, Arizona. On-line at http://www.azgfd.gov/pdfs/w_c/jaguar/characterizing_mapping.pdf. (Appendix IV)
- Menke, K.A. and C.L. Hayes. 2003. Evaluation of the relative suitability of potential jaguar habitat in New Mexico. New Mexico Department of Game and Fish. Santa Fe, New Mexico. (Appendix V)
- Robinson, M.J. 2006. Habitat for jaguars in New Mexico. Contract report to Arizona Game and Fish Department. Center for Biological Diversity. Silver City, New Mexico. On-line at: http://www.azgfd.com/w_c/es/documents/Jaguar.NMHabitatReport.CBD.200601.Final.pdf. (Appendix VI)
- Bradley, C. 2006. "Suitable jaguar habitat in Arizona based on selection criteria." Habitat Subcommittee of the Jaguar Conservation Team. Map. (Appendix VII)
- Van Pelt, W.E., Potential jaguar habitat in Arizona and New Mexico: Summary of Work and Recommendations of the Jaguar Habitat Subcommittee of the Jaguar Conservation Team. 2006. On-line at: http://www.azgfd.com/w_c/es/documents/JAGHABSummaryReport.20060413.Final.pdf. (Appendix VIII)
- American Society of Mammalogists. 2007. Conservation of jaguars in North America. Journal of Mammalogy, 88(6):1574-1575. (Appendix IX)
- McCain, E. B. & J. L. Childs. 2008. Evidence of resident jaguars (*Panthera onca*) in the southwestern United States and the implications for conservation. Journal of Mammalogy, 89(1):1-10. (Appendix X)

Information in these post-amended-biological-opinion documents invalidates the delineation of jaguar *occupied range* and *occupied habitat*, as used in the amended biological opinion, and suggests that a broader and more inclusive zone of protection for jaguars will be necessary to

minimize take of jaguars.. Furthermore, the fate of the jaguar known as "Macho B," who died in March 2009, 12 days after being captured in a wire snare, indicates that within this broader zone, the measures outlined in the fifteen terms and conditions above are not sufficient to minimize risks to jaguars. And the new information suggests that allowing take of even a single jaguar, as the amended biological opinion's incidental take statement permits, undercuts the goals of the Endangered Species Act and is at odds with the conservation requirement of the act.

Jaguar use of habitats. Considerable evidence has developed since 1999 indicating that jaguars readily use grasslands, areas with sparse vegetation, areas with relatively low topographic relief, and areas with limited ruggedness -- the habitat qualities that were used to exclude "the mountain toe slopes" adjoining the Peloncillo Mountains, and the Smuggler Hills, and Pyramid and Tank mountains from delineation as occupied habitat in Hidalgo County. The new information about jaguars' use of grasslands and areas with sparse vegetation, and relatively low topographic relief also indicates that the Alamo Hueco, Big Hatchet, and Little Hatchet mountains are not lacking habitat connectivity to other mountain ranges or to appropriate habitat in Mexico; rather, grasslands, areas with sparse vegetation, and/or gently sloping terrain separate these mountains from other habitats, such as the Animas and Peloncillo Mountains. Accordingly, the Alamo Hueco, Big Hatchet and Little Hatchet mountains should be delineated as occupied habitat.

The same new information applied in Graham County, indicates that areas of the Gila Valley, San Simon Valley, upper Sulphur Springs Valley, and Whitlock Valley should also be delineated as occupied habitat. Finally, that information indicates that relatively small montane areas can serve as jaguar habitat when combined with adjoining grasslands, open areas, and/or gentle terrain, and thus that the Whitlock Mountains are not in fact isolated for jaguars and should be delineated as occupied habitat as well.

Furthermore, information that was not aggregated and analyzed in 1999 indicates that jaguars are likely to roam in the United States in the counties that are within jaguar *occupied range* but outside of the counties in which *occupied habitat* has been delineated. And beyond that, post-1999 information indicates that jaguars are likely to roam in the United States outside of occupied range, as well.

Several papers have appeared since the 1999 amended biological opinion that shed light on jaguar habitat use. The Jaguar Conservation Team's ("JCT") habitat subcommittee began working in 1998 to develop and refine criteria for what would constitute jaguar habitat in Arizona and New Mexico. As part of this exercise, the subcommittee consulted with the JCT's Scientific Advisory Group. The Scientific Advisory Group responded with a memo dated 10/25/2000, by Brian Miller, Alan Rabinowitz and Carlos Lopez (Appendix II) which included this remark: "It is likely that any animals [i.e. jaguars} dispersing into the U.S. will be young males. That demographic group can travel through just about any kind of habitat."

The habitat subcommittee revised its draft criteria in response to the scientists' feedback. The subcommittee's final criteria for identifying suitable jaguar habitat included the following two criteria:

> Based on Brown and Lowe (1980) habitat associations, the area must be in the Semi-desert Grassland, Plains and Great Basin Grassland, Subalpine Grassland, Interior Chaparral, Madrean Evergreen Woodland, Great Basin Conifer Woodland, Petran Montane Conifer Forest, Petran Subalpine Conifer Forest, Chihuahuan Desertscrub, Arizona Upland Sonoran Desertscrub, or Great Basin Desertscrub. Areas in the Lower Colorado River Sonoran Desertscrub, Mojave Desertscrub, and Alpine Tundra are not considered jaguar habitat.

And:

> Areas with continuous row crop agriculture over an area greater than 1 square mile and any agricultural crop areas immediately adjacent to those areas are not considered adequate habitat. Areas with human residential development in excess of 1 house per 10 acres are not considered jaguar habitat. Areas developed for industrial purposes or a combination of industrial and residential development that create a footprint equal to or greater than 1 house per 10 acres are not suitable jaguar habitat.[1]

The inclusion of sparsely vegetated deserts and grasslands as criteria for identifying potential jaguar habitat is based on historic records of the presence of jaguars in these types of habitats (and the exclusion of residential, industrial and row crop areas reflects, in part, jaguars' historic absence from developed areas). In Arizona, 56% of all jaguar sightings that have been labeled as Class 1 (physical evidence) and Class II (firsthand account from a reliable source) occured in scrub grasslands in southeastern Arizona, and only 44% in other habitats.[2] In Texas, jaguars also used grasslands and areas with gentle terrain. Comanches on the southern Great Plains of Texas, far from mountains, used jaguar skins, as attested by a German naturalist who saw them wearing jaguar skin quivers along the San Saba River in Texas as well as observing Delaware Indians in San Antonio selling pelts from two locally-killed jaguars for $18 apiece. In 1853, on the Canadian River in northern Texas, near the 100th Meridian, an Army Lieutenant reported "a large tiger." In 1905, Vernon Bailey, working for the Fish and Wildlife Service's predecessor agency Bureau of Biological Survey, recorded details of jaguars killed throughout Texas, including areas of the Great Plains, and in 1911, Bailey recorded another jaguar killed the previous year near London, Texas – also on the plains. John James Audubon mentions a jaguar encounter "on the head waters of the San Marco." And Spencer F. Baird recorded a "vast number" of jaguars in the "fertile valleys and tablelands of the Lower Rio Bravo, Nueces, and other Texan rivers." A jaguar was also killed, and its pelt reported, sometime prior to 1938 on the plains of northeastern New Mexico.[3]

Between 2002 and 2006, the JCT's habitat subcommittee developed a set of maps of potential jaguar habitat in Arizona and New Mexico, with accompanying reports summarized in

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1 Robinson, M.J. 2006. Habitat for jaguars in New Mexico. Contract report to Arizona Game and Fish Department. Center for Biological Diversity. Silver City, New Mexico. On-line at: http://www.azgfd.com/w_c/es/documents/Jaguar.NMHabitatReport.CBD.200601.Final.pdf; pp. 9-10.

2 Hatten, et al, p. 14.

3 Robinson, 2006, pp 3-4, 6.

a final report.[4] The first such map and report, prepared for the subcommittee by the students and faculty of the Sierra Institute Field Studies Program in Arizona (University of California Extension, Santa Cruz, CA).[5] The Sierra Institute report was included as part of the package of maps and summary analysis in the subcommittee's final report to the JCT.[6] The Sierra Institute report utilized much the same criteria as the habitat subcommittee was coalescing around, with the exception that applicable vegetative biomes were not listed. The Sierra Institute report found that "primary jaguar habitat" included the following "mountain ranges, associated canyons, riparian areas and major washes and wash complexes" –

- Baboquivari Mts.-Alter Valley washes
- Mountains and highlands surrounding the lower Santa Cruz River
- Cienega Creek area and adjacent mountains
- Santa Catalina and associated mountain ranges to the southeast
- Upper Aravaipa Valley and nearby mountain ranges
- Chiricahua Mts. And associated ranges
- Southern Peloncillo Mts. with San Bernadino and Animas Valley wash complexes
- Central Arizona-New Mexico Mts. (Black River north to San Francisco Mts. and east to Leopold Wilderness-Mimbres Mts.)
- Animas Mts. and nearby ranges

"Examples of important connecting habitat (corridors) include" –

- Agua Verde Creek-Davidson Canyon (connecting Santa Rita and Rincon Mts.)
- San Pedro River and associated washes (connecting Santa Catalinas and Galiuro Mts., for example)
- Dos Cabezas Mtns. (connecting Chiricahua and Pinaleno Mtns.)
- Northern Peloncillo Mtns. (connecting the central Arizona-New Mexico Mts. with the borderlands area)
- San Simon wash complexes (connecting adjacent east and west mountain ranges.)[7]

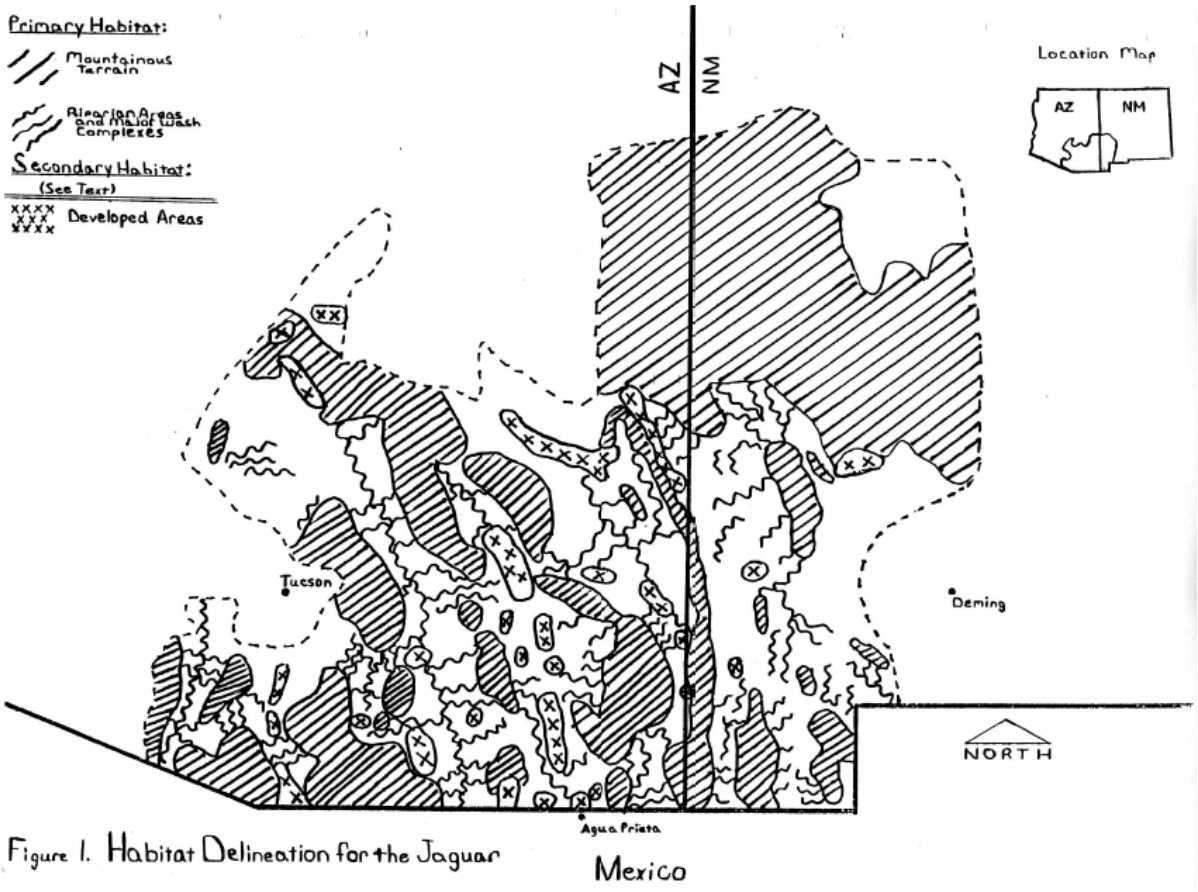
The Sierra Institute map of jaguar habitat is depicted below (Figure 1):

4 Van Pelt, W.E., Potential jaguar habitat in Arizona and New Mexico: Summary of Work and Recommendations of the Jaguar Habitat Subcommittee of the Jaguar Conservation Team. 2006. On-line at: http://www.azgfd.com/w_c/es/documents/JAGHABSummaryReport.20060413.Final.pdf.

5 Sierra Institute. 2000. Jaguar habitat in southern Arizona and New Mexico: a report to the habitat committee of the Jaguar Conservation Team. T. Povilitis and C. Johnson, eds. Field Studies Program in Arizona, University of California Extension, Santa Cruz..

6 Van Pelt, W.E., 2006.

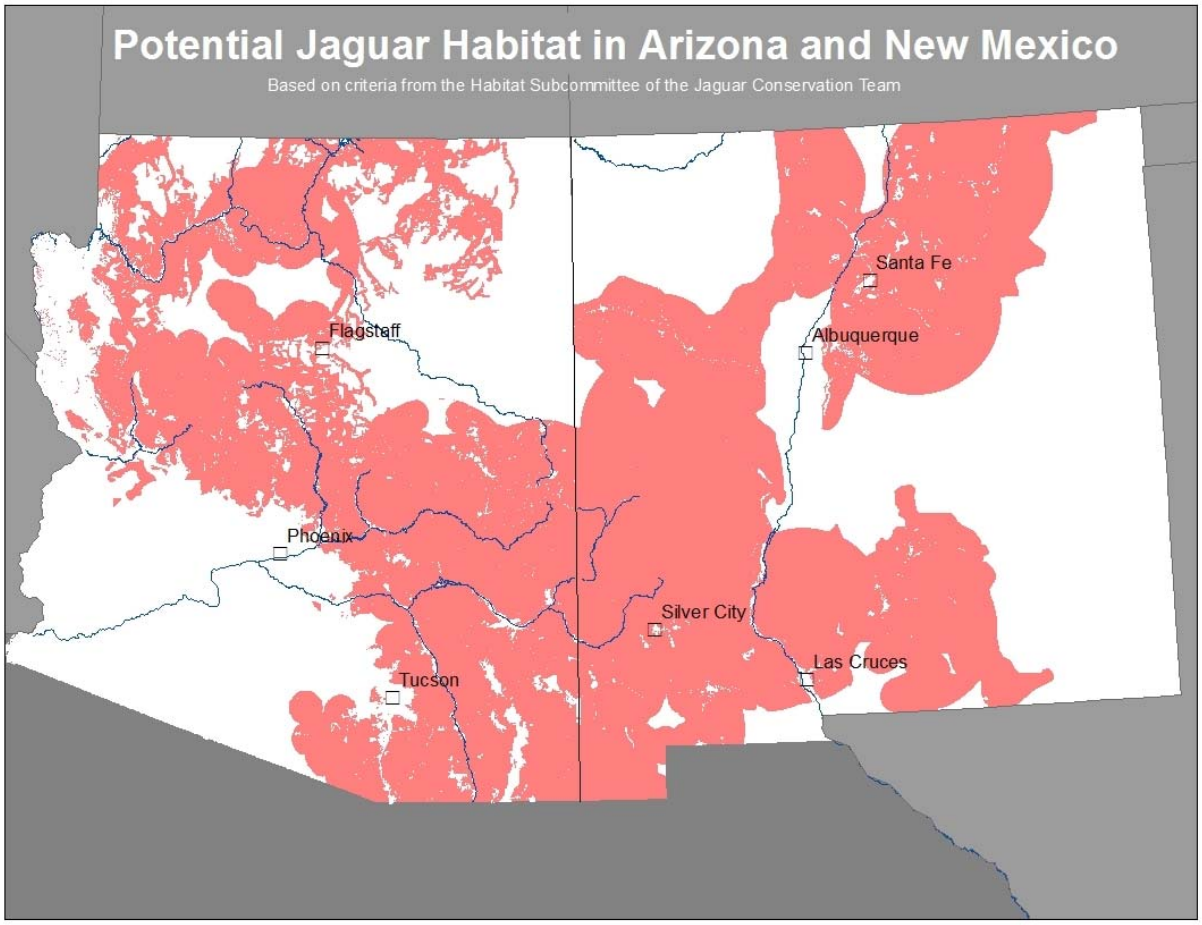
7 Sierra Institute, 2000.



[Figure 1.] Sierra Institute. 2000. Jaguar habitat in southern Arizona and New Mexico: a report to the habitat committee of the Jaguar Conservation Team. T. Povilitis and C. Johnson, eds. Field Studies Program in Arizona, University of California Extension, Santa Cruz.

Two maps, which combined consist of the bi-state map, below (Figure 2), "strictly apply" the final "habitat criteria approved by the JAGCT."[8]

8 Van Pelt, 2006, p. 7.

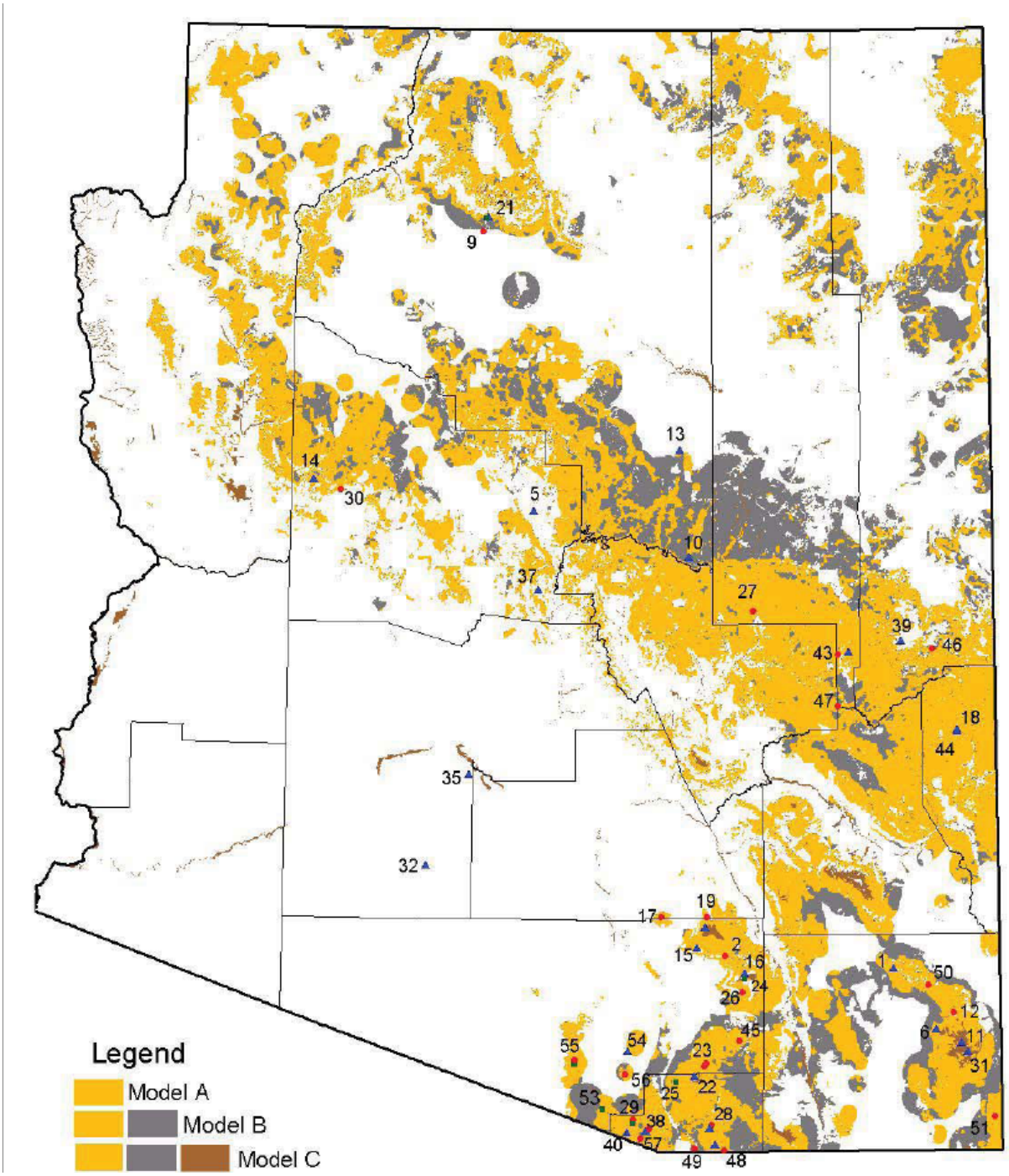


[Figure 2.] Center for Biological Diversity map developed for the Jaguar Conservation Team's habitat subcommittee that depicts potential jaguar habitat according to the criteria approved by the subcommittee.

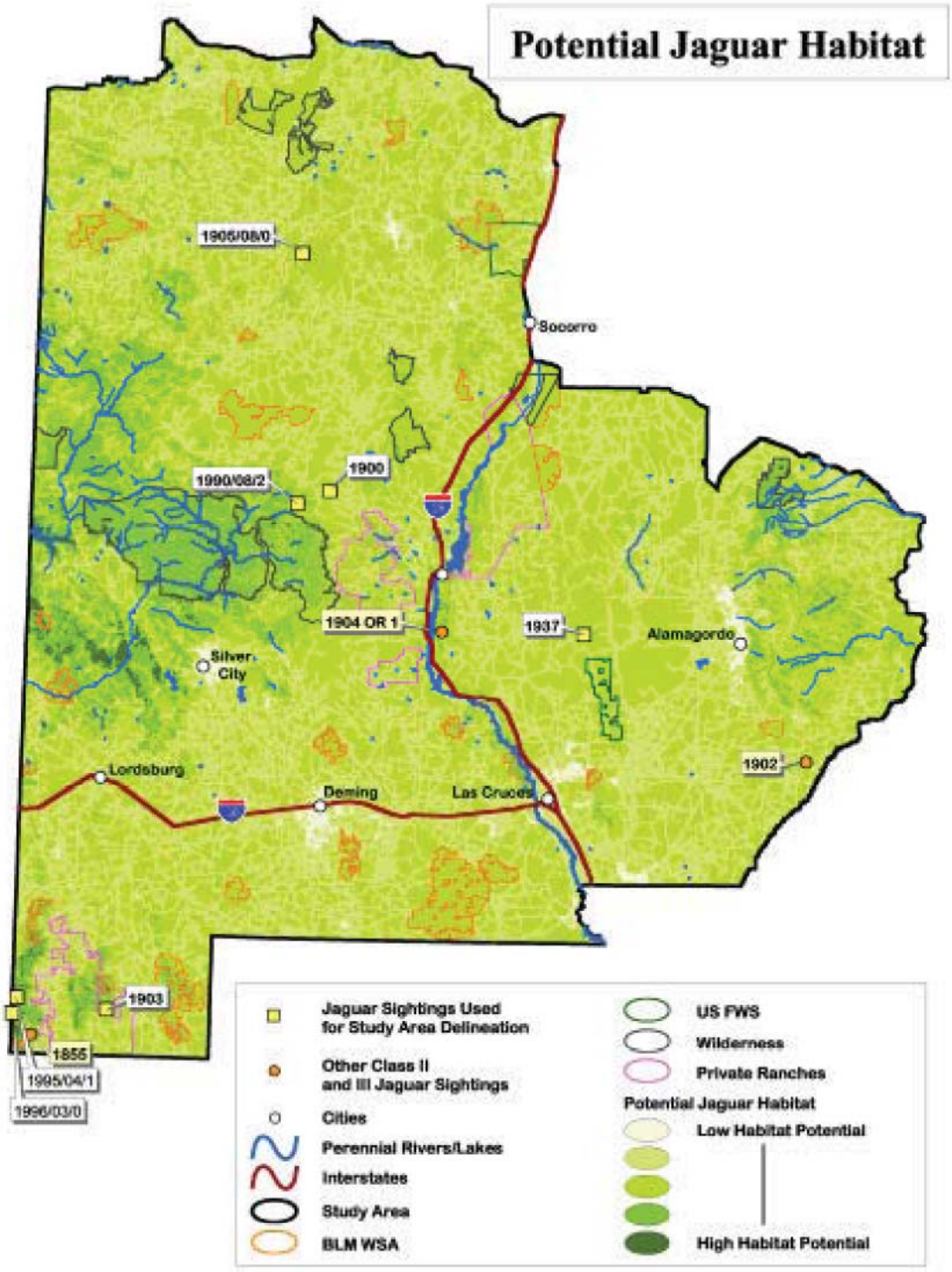
In addition, the New Mexico and Arizona game agencies each developed jaguar habitat maps[9] of their respective states for the JCT habitat subcommittee, each using an "alternative analysis not based on the habitat criteria approved by the JAGCT."[10] These state agency maps of potential jaguar habitat, Figures 3 & 4, below, largely depict subsets of the areas depicted in Figure 2.

9 Hatten, J.R., A. Averill-Murray, and W.E. Van Pelt. 2002. Chracterizing and mapping potential jaguar habitat in Arizona. Nongame and Endangered Widllife Program Technical Report 203. Arizona Game and Fish Department, Phoenix, Arizona. On-line at http://www.azgfd.gov/pdfs/w_c/jaguar/characterizing_mapping.pdf; Menke, K.A. and C.L. Hayes. 2003. Evaluation of the relative suitability of potential jaguar habitat in New Mexico. New Mexico Department of Game and Fish. Santa Fe, New Mexico. On-line at http://www.azgfd.gov/pdfs/w_c/jaguar/JagRpt4%20doc.pdf.

10 Van Pelt, 2006, p. 7.



[Figure 3.] Hatten, J.R., A. Averill-Murray, and W.E. Van Pelt. 2002. Characterizing and mapping potential jaguar habitat in Arizona. Nongame and Endangered Wildlife Program Technical Report 203. Arizona Game and Fish Department, Phoenix, Arizona; p. 21.



[Figure 4.] Menke, K.A. and C.L. Hayes. 2003. Evaluation of the relative suitability of potential jaguar habitat in New Mexico. New Mexico Department of Game and Fish, Santa Fe, New Mexico; p. 22.

A 2008 *Journal of Mammalogy* article identified the known range in the U.S. of the jaguar known as "Macho B" as covering 1,359 km^2, including two mountain ranges and the intervening Sonoran lowland desert of the Altar Valley,[11] thus corroborating that jaguars transit across vast areas in the U.S., including sparsely vegetated and relatively gentle terrain between sky islands.

The new information indicates that grasslands and deserts, among many other habitats, are likely to be used by jaguars. It no longer represents the best available scientific information to maintain, as the amended biological opinion's incidental take statement does, that jaguars are unlikely to be taken in grasslands or desert habitats and therefore undeserving of substantive protections there or in habitats that are accessible to jaguars through traversing grasslands or deserts.

Furthermore, information developed since 1999 indicates that jaguars are likely to be present and affected by Wildlife Services activities within occupied range but in the counties that do not include occupied habitat. Those counties are Santa Cruz, Pima and Pinal. A map in the 2008 *Journal of Mammalogy* article indicates that Macho B inhabited both Santa Cruz and Pima counties.[12]

Finally, the maps and reports developed for the Jaguar Conservation Team's habitat subcommittee all indicate potential habitat for jaguars in Arizona and New Mexico outside of occupied range, most notably in the Gila headwaters and Mogollon Rim regions. In addition, the 2006 Center for Biological Diversity report documents three "Class II" jaguar sightings in and near the Gila National Forest in Grant, Catron and Sierra Counties during the 1990s. Class II records, as defined by the Jaguar Conservation Team, are observations made by a reliable observer and/or accompanied by physical evidence. These records are as follows:

[11] McCain, E. B. & J. L. Childs. 2008. Evidence of resident jaguars (*Panthera onca*) in the southwestern United States and the implications for conservation. Journal of Mammalogy, 89(1):1-10.

[12] McCain & Childs, p. 4.

- August 25, 1990 observation by NM Highlands University biology professor Gerald Jacobi, Ph.D. and Donna Jacobi in the Gila National Forest immediately north of the Aldo Leopold Wilderness;
- 1998 (date unrecorded) observation by Tom and Boe Duffy near the San Francisco River west of the Gila Wilderness;
- May 1999 observation and accompanying plaster cast by John Trewern in the Burro Mountains south of Silver City.[13]

These records indicate jaguar use of Grant, Catron and Sierra Counties – and the likelihood of use of additional habitats in Socorro, Greenlee, Graham, Apache, Navajo and Gila counties, since these counties are in no way delimited by impermeable physical barriers to jaguar travel and are part of (or within easy migration range of) the same landforms that jaguars evidently are already using. The amended biological opinion does not address the presence of jaguars in these areas.

Jaguars are at risk even in occupied habitat. New evidence has emerged that jaguars caught in leg snares are likely to suffer considerable risk, and thus that requiring the WS agent to have appropriate equipment on-hand to release a jaguar in a snare "unharmed," will likely not suffice to indeed keep jaguars from harm. According to a news reports made public after the death of Macho B, three out of four jaguars captured in snares in the U.S. or northern Mexico died shortly thereafter; the fourth is unaccounted for.[14]

Take of even a single jaguar undercuts species recovery. As noted, on October 25, 2000, three members of the Jaguar Conservation Team's Scientific Advisory Group, Brian Miller, Alan Rabinowitz, and Carlos Lopez, sent a memo to the JCT's habitat subcommittee (Appendix II). The memo affirmed that "all individuals of an endangered or threatened species are important whether they exist on the fringe or in the core of the historic range. The important issue is to restore connectivity throughout the range to allow movement between, and survival of, the now isolated animals." The memo further opined that "The ability of an animal to move long distances and return to establish a territory in its original area indicates that habitat in the US may be important to a population of Sonoran jaguars. Even if such habitat is only used for a short period of time, it may allow a dispersing animal to survive until a territory opens in the breeding population."

The American Society of Mammalogists also affirmed the importance of jaguars inhabiting the United States, calling their habitat in Arizona and New Mexico "vital to the long-term resilience and survival of the species, especially in response to ongoing climate change."[15]

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[13] Robinson, p. 8.
[14] Arizona Daily Star, "Four jaguar captures, three deaths." June 14, 2009. (Appendix XI)
[15] American Society of Mammalogists. 2007. Conservation of jaguars in North America. Journal of Mammalogy, 88(6):1574

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(Appendix IX) Under these circumstances, take of a single jaguar in the U.S. must be seen as unacceptably damaging to the prospect of restoring jaguars to these habitats.

V. Consultation is Required on Effects on Ocelots in Arizona

On November 7, 2009, an ocelot was photographed in Cochise County, Arizona.[16] On April 18, 2010, an ocelot was killed on Highway 60 between Superior and Globe, Arizona.[17] The last ocelot before 2009 that was confirmed in Arizona had been killed in 1964.[18] It is evident that ocelots may henceforth be found in portions of Arizona where they may be affected by Wildlife Services' activities, and it is incumbent on Wildlife Services to consult with Fish and Wildlife Service on its program activities in Arizona for effects on ocelots. Such a consultation has not been completed.

The ocelot was listed as an endangered species in the U.S. on July 21, 1982. (47 FR 140). A recovery plan was approved on August 22, 1990, and a biological opinion addressing the effects of Wildlife Services' activities on ocelots in south Texas was completed on August 15, 1997. No biological opinion has been developed for the effects of Wildlife Services' activities on ocelots in Arizona.

VI. Violations of the ESA

Wildlife Services has failed to timely reinitiate and complete the reinitiated consultation with FWS regarding the affects of its activities on jaguars and ocelots, in violation of the ESA. 16 U.S.C. §§ 1536(a)(2), 1536(b)(1)(A), 1536(c)(1); 50 C.F.R. §§ 402.12, 402.14(e), 402.14(i)(4), 402.16.

By allowing, authoring, and implementing animal-killing activities that may affect listed species, prior to the completion of reinitiated consultation with FWS, Wildife Services is violating the ESA. 16 U.S.C. § 1536(d); *Silver v. Babbitt*, 924 F.Supp. 976, 982 (D. Az. 1995) ("An agency must hold action in abeyance until the required consultation is complete"); *id.* at 985 (recognizing that the logging of Mexican spotted owl habitat constitutes a "per se irretrievable and irreversible commitment of resources"); *id*. at 989 (enjoining "all activity" until consultation is complete, and ordering the Forest Service to "defer or suspend all timber harvest activities" until the re-consultation the Forest Plans is complete).

Wildlife Services has further failed to ensure against jeopardy to the jaguar in implementing the 1999 Biological Opinion, as amended, in violation of the ESA. 16 U.S.C. § 1536(a)(2).

FWS has likewise failed to timely reinitiate and complete consultation concerning USDA APHIS Wildlife Services' ongoing program activities that may affect the jaguar and the ocelot.

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[16] Sky Island Alliance press release, at http://www.skyislandalliance.org/; accessed 4/30/2010. (Appendix XII)
[17] Arizona Game and Fish Department press release, at http://azgfd.net/artman/publish/NewsMedia/Arizona-Game-and-Fish-collects-ocelot-found-dead-near-Globe.shtml; accessed 4/30/2010 (Appendix XIII)
[18] U.S. Fish and Wildlife Service. 1990. Listed cats of Texas and Arizona recovery plan (with emphasis on the ocelot). U.S. Fish and Wildlife Service, Albuquerque, NM., pp.7- 8.

FWS has further failed to use the best available scientific and commercial data available in issuing the June 22, 1999 Biological Opinion, as amended.

VII. Conclusion

For the above stated reasons, Wildlife Services has violated and remains in ongoing violation of Sections 7 of the ESA, and FWS has violated and remains in ongoing violation of Section 7 of the ESA. If these violations of law are not cured within sixty days, the Center for Biological Diversity intends to file suit for declaratory and injunctive relief, as well as attorney and expert witness fees and costs. 16 U.S.C. § 1540(g). This notice letter was prepared based on good faith information and belief after reasonably diligent investigation. If you believe that any of the foregoing is factually erroneous or inaccurate, please notify us promptly.

VIII. Identity of the Organization Giving Notice

The name, address, and phone number of the organization giving notice of intent to sue under the ESA is:

Center for Biological Diversity
P.O. Box 710
Tucson, Arizona 85702-0710
Tel: 520-623-5252

Sincerely,

Michael J. Robinson
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cc: Eric H. Holder, Jr., Attorney General
U.S. Department of Justice
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Washington, DC 20530-0001