

**Jaguar Habitat Subcommittee Meeting**  
**August 30, 2004**  
**Albuquerque, New Mexico**  
**Final Summary Notes**

**Meeting Opened** – ca. 13:00 MDT; after completion of the morning JAGCT work session and lunch

**Attendance:** Bill Van Pelt, Dave Parsons, Michael Robinson, Judy Keeler, Levi Klump, Dusti Becker, Tony Povilitis, Chuck Hayes, Wally Murphy, Craig Miller, Scotty Johnson, Sarah Rinkevich, Terry Johnson, Stuart Leon.

**Purpose-** Work session for finalizing the potential jaguar habitat report prepared by the New Mexico Department of Game and Fish.

Bill Van Pelt opened the discussion by reviewing the process the Jaguar Habitat Subcommittee (JAGHAB) went through for developing habitat criteria to be used in the habitat modeling exercise (Task 5A). In December 1998, a draft criteria list was developed by JAGHAB and was forwarded to the Jaguar Scientific Advisory Group (JAGSAG) for review. The JAGSAG suggested dropping elevation from the criteria, which was done.

At this point, it was suggested by meeting participants that a historical review of the habitat criteria process was not needed and the meeting should proceed with how the *Draft jaguar habitat criteria 1/21/99* were applied in the habitat mapping effort. However, it became apparent that sometime between January 1999 and April 1999 a second draft was developed and the transcription from the first to second was incomplete. The major differences were the elimination of some habitat associations (Subalpine grasslands, Petran Subalpine Conifer Forest, Chihuahuan and Arizona Upland Sonoran Desert scrub, except in the latter case, for riparian areas or major washes) and a given distance from water (within 10 miles of water). Furthermore, it did not appear as if the April 1999 criteria went to the Habitat Committee for acceptance.

A possible explanation for the error was discussed. Unfortunately, during the time period when the Habitat Committee was seeking approval from JAGSAG the Chair, Mike Pruss, left the Department and the chair transferred to Bill Van Pelt. Unaware that the committee had not approved the April 1999 criteria, Bill sent it to the JAGSAG for approval thinking it was the most recent version. The JAGSAG agreed with the elements in the April criteria and recommended using a terrain ruggedness index.

At this point of the meeting, it was pointed out that the Arizona report was forwarded by the JAGHAB to JAGSAG and Conservation Team for its review and approval. The only divergence from the 1/21/1999 draft jaguar criteria was the habitat type subalpine grasslands. It was pointed out that this habitat type encompassed only a small area and would not change the Arizona report very significantly. NMDGF asserted that the 1/21/1999 draft jaguar habitat criteria were used in their analysis. It was recommended that JAGSAG

should be contacted regarding this habitat type. However, it was decided that a better approach would be to periodically evaluate the criteria or when new information becomes available to substantiate a new habitat type, a recommendation to change the criteria would be forwarded. It was also noted that since the establishment of habitat criteria, a northern population of jaguars was identified in Mexico. Habitat data collected there should be considered in more precisely determining habitat within the United States

At this point of the meeting it was requested to specifically review comments sent from members of the Habitat Sub committee. The Center for Biological Diversity requested to go first.

The first item discussed was the use of documented jaguar occurrences for analysis. The CBD in its written and verbal comments asserted that four documented jaguar sightings were unnecessarily eliminated from the analysis. Two were class II sightings (Trewen and Duffy) the third was from "Otero County." The fourth was the Springer sighting. This sighting included a skin and a location that the jaguar was taken "near Springer". It was reported in a peer-reviewed journal, *Journal of Mammalogy* by J.E.Hill in 1942. NMDGF argued that since David Brown and Carlos Lopez-Gonzalez reviewed this sighting, they believed that Hill did not actually examine the skin, but was told about the occurrence, it was a third-hand report. However, CBD and others countered nothing reduced the validity of the report by Hill not seeing the skin. It was pointed out other citations including those used in the Arizona analysis, were based on occurrences with similar types of information.. NMDGF did not necessarily question to validity of the presence of the specimen in its analysis, but had eliminated it and the Otero County observations because of imprecision of the location from where the jaguar was taken. The specimen's location as being near Springer (which is located within plains grasslands of northeast New Mexico") was apparently based on the location of the collection containing the jaguar skin. The skin apparently did not belong to the person who collected the specimen, and had no associated information from the person who killed the jaguar regarding the location where it was killed. Instead of introducing questionable locality data into its analysis, NMDGF eliminated this observation from its habitat analysis due to the inability to reliably plot its location.

At this point, Dave Parsons volunteered to go to the library and obtain a copy of the manuscript so everyone at the meeting could review it for discussion. Dave returned with the article and distributed it to the group. The article by Hill, who headed a team of biologists from the American Museum of Natural History, stated that "A jaguar was killed some years ago near Springer; its skin is now in the collection of Mr. Waite Phillips." The second sentence of this eight page article also credits Phillips, a local rancher, with substantial assistance: "Here the cooperation of Mr. Waite Phillips . . . enabled the expedition during two months to make a survey of the mammalian fauna of the southern Sangre de Cristo Range, and adjacent high plains." Furthermore, "near Springer" is no more vague geographically than many similar references used in mapping jaguar occurrences. Springer is bounded by other small towns – Colmor, approximately eighteen miles to the

south; Miami, twelve miles west; Taylor Springs, six miles east; and Toril, three miles to the north. If the jaguar had been killed closer to any of these, a different name would have been passed down. In addition, Springer sits astride the Cimarron River, which could have supported possible habitat for a jaguar. Upon review, it was agreed upon by the group that this occurrence should have been included in the analysis.

The next item discussed was the positive value assigned by New Mexico to the Madrean Evergreen biotic community. New Mexico stated the reason for this positive value was for management purposes. By ranking habitat types, it assisted with identifying and prioritizing areas for conservation measures, which was also done in the Arizona report (page 24). New Mexico also weighted prey distribution and water distance for the same reason, even though weighting criteria, prey availability, (relative) distance to water, nor perennial (as opposed to seasonal) availability of water were part of the criteria.

It was stated that New Mexico did not really come out and state what was potential habitat. The Center for Biological Diversity, in its written and verbal comments, along with other participants pointed out that the New Mexico report did not identify potential habitat, which was the purpose articulated in the Jaguar Conservation Agreement for undertaking the entire mapping endeavor. During discussions it was pointed out the New Mexico report states: "We did not attempt to establish a threshold for suitable vs. unsuitable potential habitat." New Mexico felt it did in Figure 9 but it prioritized areas for management. It was pointed out in the Arizona report, the habitat was first identified statewide and then an area for conservation measures was identified second. Several participants believed the New Mexico report should follow this process as well.

The next item discussed was the criteria of distance from water. It was stated that both the Arizona and New Mexico reports changed this criteria from within 10 miles to within 10 kilometers. However, both the Arizona and New Mexico report evaluated habitat within 10 miles (16 km) of water. In Arizona, the analysis determined that 100% of the occurrences were within 10 kilometers of surface water. It was also pointed out some occurrences were not used in Arizona because they did not meet the water criteria. Also, all water sources such as the Colorado River were used. However, New Mexico stated most of their occurrences were further than 10 kilometers. It was stated that the data should dictate the distance from water. In Arizona, it may be 10 kilometers but in New Mexico it may be 20 kilometers. This was affirmed in the JAGSAG response to the JAGHAB's September inquiry that modeling of potential habitat using the general categories should continue. The group agreed that the states needed to ensure their analyses considered any waters within 10 miles of a jaguar occurrence.

The final topic discussed was the criteria based upon human impacts (cities, row crops etc). Because New Mexico was having difficulties finding a GIS cover that depicted this information (e.g., determining where densities of houses were greater or less than 1 per 10 acres), they decided to use road densities as an index for identifying human-impacted areas

in their report, similar to how AGFD had used boundaries of cities as towns as an index to human activity in their jaguar habitat analysis. It was pointed out by using road densities as a negative habitat feature was considered and rejected during the discussions establishing the criteria. The group discussed a possible alternative that would identify these areas such as nighttime satellite imagery.

It was also pointed out during the habitat discussion that we are behind on our duties as identified in the Conservation Assessment and Strategy. Some meeting participants voiced their frustration about not moving ahead with identifying potential threats to potential jaguar habitat and demanded that a meeting is called in the near future to begin working on this task, especially since the Arizona report has been reviewed and accepted by the JAGSAG and JAGCT. Delays in completing these reports have put the JAGCT way behind schedule.

Other participants felt proceeding to identify potential threats in the U.S. was presumptuous based on current knowledge of known jaguar habitat. They also felt identifying additional threats would only serve to entangle stakeholders in burdensome regulations that might prohibit good faith conservation efforts for jaguar in the future. It was also noted that it was the intent of the Conservation Team to base their decisions on sound science and that was one reason the group was having a hard time accomplishing some of the CA's recommendations.

It was recommended that the Conservation Team take a trip to Mexico to visit with the scientists and view the currently occupied jaguar study area.

It was recommended that the New Mexico report be redone using the established criteria and incorporating the comments made during the meeting. However, New Mexico informed the group the earliest it could work on the report would be July 2006 due to the lack of funds available or programmed at this time. The Center for Biological Diversity, volunteered to assist with developing the GIS layers for New Mexico. It was discussed that the report needed to come from the NMDGF but the CBD could be a contractor. Although anyone can conduct an independent analysis, the commitment in the Conservation Agreement is to have it come from the wildlife department. Terry Johnson also volunteered looking into possible funding, Department personnel, and possibly contracting Jim Hatten for a collaborative rewrite of the report.

**Action Items:**

- 1. A letter from the JAGCT chair Terry Johnson needs to be drafted identifying the need to redraft the New Mexico report and outline the offer of the Center for Biological Diversity and the Arizona Game and Fish Department.**

2. **Bill will check with Jim Hatten on the availability of various GIS layers such as nighttime satellite imagery and the possibility of using him as a consultant or actual contractor for the New Mexico report.**
3. **Michael Robinson was to check on the availability of the CBD GIS person over the next six months to assist with developing GIS layers.**
4. **Terry and Bill will explore possible funding mechanisms and other resources to assist with effort.**
5. **Bill is to convene a Habitat Committee meeting to begin working on other elements of the Conservation Agreement such as threat identification. Bill will attempt to find a place in Wilcox, AZ.**