

**Jaguar Conservation Team (JAGCT)- Habitat Subcommittee Summary Notes**  
Douglas, Arizona  
January 21, 1999

- A. Reviewed last meeting's accomplishments during JAGCT meeting in AM (see JAGCT meeting notes).
  - 1. Draft Habitat Criteria
  - 2. Jaguar Study and Voluntary Cooperative Effort Area maps
  - 3. USFWS involvement with habitat issues
  - 4. USFWS Section 7 definitions and discussion
  - 5. Coordination with Mexico and associated issues
  - 6. Role of Scientific Advisory Group
  - 7. Grazing Criteria for USFS – consider jaguar sightings post-1970
  - 8. Requested input from SAG on research needs (occurrence in Mexico, Habitat, Movement, Population status, and Population structure) – collaring jaguars should be our priority.
  - 9. Borderlands Cats meeting in Albuquerque in October – still no notes
  - 10. Research Opportunities
- B. Opened Habitat Subcommittee meeting at 1:00pm
- C. Introductions
- D. Ground Rules
- E. Handed out meeting agenda and USFS jaguar policy for proposed projects
- F. Finalized last meeting's minutes
- G. Reviewed major resolutions of last meeting
  - 1. Definition of mapped area – named the area Jaguar Study and Voluntary Cooperative Effort Area

2. How will the map be used? What the subcommittee creates for a map may be considered by the USFWS, but is not the only information that they will use when making decisions. The USFWS does participate in subcommittee meetings.
  - a. Proposed project reviews – the USFWS has the lead on section 7 consultations, but would accept input from other sources, including work from the subcommittee. The subcommittee could continue to review projects as outlined in the Conservation Agreement, and can provide comment to the USFWS. The USFWS would still be the decision-making authority on such issues. This input refers to general recommendations, including from the SAG, not site specific, project specific input, which might violate the attorney/client privilege between the USFWS and a project proponent. There is no mechanism set up for groups like ours to participate in the Section 7 process at that level. The group decided to provide recommendations with review from the SAG, as data became available to make those recommendations.
  - b. Guidance Criteria – question about whose document it was – it was drafted by the USFS.
    - i. Question: Are there livestock grazing activities that would lead to an actual jeopardy? Answer: The issue in the document does not relate to jeopardy, it relates to the issue of may affect, not likely to adversely effect, or may likely adversely effect. Jeopardy is the next tier below if there are adverse effects.
    - ii. Q: What is the jeopardy threshold? A: Consultation is triggered by a determination by an action agency of may likely adversely effect. These USFS criteria are helpful to outline when those thresholds are met for any consultation process. The USFWS then takes that consultation, evaluates the effects to the animal, and then depending on a lot of factors, determines if that would contribute to a jeopardy.
    - iii. Q: Are there criteria for may adversely effect involving livestock grazing? A: The inverse of number 1, 2, or 3, would be an adverse effect.
    - iv. Q: Is this additive for 1, 2 and 3? A: Yes, but it is probably written incorrectly.
    - v. Q: Will that be modified?
    - vi. Q: Is this a regional criterion? A: Yes.

- vii. Q: What does “does not reduce the cover,” mean? Is this hiding cover for jaguar? What does it mean, who knows? A: It is something that the Federal action agency can look at and ask the question, do the livestock activities reduce the cover in the riparian area. And then they need to make the determination does that reduction of cover have any substantial effect on that animal.

3. Project updates and funding availability

- a. Raul Valdez and O. Rosas are working on surveys in Mexico, and have found a population within 150 miles of the U.S. border.
- b. Raul Valdez has applied for a Heritage Grant to study jaguar habitat in Mexico and the U.S.
- c. Section 6 money is allocated to the state and the state establishes the spending priorities in the state.
- d. Ben Brown agreed to talk to Beau Turner to find out about funding availability from the Turner Foundation.

H. New comments on draft habitat criteria – SAG and others

- 1. Alan Rabinowitz provided comment that the elevational limit should probably not be considered, because jaguars throughout their range occupy elevations from sea level to 10,000 feet, and that any elevational limits would be encompassed by our habitat type criteria.
- 2. Alan also provided comment that jaguars are probably more dependent upon surface or free water than lions. A surface water component was added to the habitat components, and a 10-mile radius was established around water to simulate the distance that a jaguar can travel in one night. Surface water components would include stock tanks, streams, lakes, wildlife drinkers, windmills, rock dams, and springs.

I. Draft Map discussions

- 1. Sightings, classifications and sighting mapping were discussed briefly.
- 2. Corridors and Movement - We don't look at movement corridors in the criteria. The opening phrase talks about corridors, but there is nothing in the criteria about them. Corridors may not meet all of the criteria, but would still be important to the species. Movement is important and is an aspect that we need to consider, although we may not be able to define a habitat for movement separate from other habitats. Connectivity to Mexico is very important. Connectivity to good habitat further north is probably also important.

- J. Need written is the criteria that corridors are important. Statement: Movement corridors are important aspects of jaguar ecology. Potential movement corridors include mountain ranges and riparian areas. And movement corridors do not have to meet all of the criteria to be important. Maybe we can deal with corridors as a separate issue, how to maintain them, etc. We need to identify as a group where the corridors are, a separate mapping exercise for the group. Just need to identify them, not define them.
- K. There was a question about disturbance factors and houses, and it was decided that abandoned or unoccupied residences would not count. "A regularly occupied house" is what would be considered for the mapping data.
- L. Description of map work: base map for AZ/NM, habitat, jaguar locations.
1. Agreed on using 50 miles from known jaguar locations, and stipple each circle individually, resulting in heavier stippling in areas within 50 miles of more than one location.
- Comments: Leopold documented jaguars in the Colorado River in Mexico, why aren't areas in southwestern Arizona included along the Colorado River. There are no documented jaguars in Arizona from the Lower Sonoran Desert Scrub vegetation-type. And no records other than written accounts in Mexico.
- M. 10 miles within water at least seasonally was used because seasonally areas may be important to jaguars even if the waters are not permanent year-round.
- N. Additional comments on jaguar habitat
1. Recreation will be a bigger issue as human populations in southern AZ/NM grow and people look for places to recreate.
  2. Human use and development and planning will be important down the road.
  3. We may be casting too wide a net for what we are doing with the jaguar now. 50 miles may be too much.
- O. If we narrow it too much, we may be excluding some habitat that may be important to the species in the future, even if habitat restoration is necessary now; we should not discount it. Land use changes on public land need to be considered, if necessary, to protect or restore habitat.
- P. Jaguar locations are terminal points, so we need to allow for some area that a jaguar may have been using. Jaguar locations are not a random sample, they relate to where people are or have been. We need to narrow down our focus, because we can't do much if we are looking at the majority of AZ and a lot of NM. Need to look at prey base and habitat quality.

- Q. Q: How did we get to this map? A: The first attempt with a boundary line and different title was too controversial, and not well enough described.
- R. To address two issues discussed (priority areas and possible areas), we proposed at the last meeting to have two maps. However, with the mapping now under consideration, we can address that by including a layer for areas that we have more confidence as in good condition now.
- S. Mapping Class II jaguar sightings with a 10 or 25 mile radius was suggested.
- T. Mapping corridors with a given width was suggested.
- U. Post 1970 jaguar locations should be indicated by heavier stippling.
- V. Classifying corridors – corridors should be identified and classified to indicate their relative importance for traveling north-south or east-west. It would be a subjective math evaluation, but could be done.
- W. The idea of stippling is a valid approach, because it builds into it a factor of probability. It is an analysis process with data. Just state the criteria and do it, use the best data as a framework. Include a good dose of common sense.
- X. Assignments and due dates for NM map data.
1. New Mexico land status – Bill Moore
  2. New Mexico population data – Ben Brown suggested using Tiger files, which analyze road data. Road data may be able to get at human population.
- Y. Suggestion: look at county plans to see where and when they plan on growing.
- Z. Sarah volunteered to check with their GIS data people to see what they had, and Gary Helbing agreed to look for it in the USFS data.
- AA. Census bureau was suggested, but they probably aren't the best source.
1. Current Section 7 Consultations – none discussed.
  2. Scheduled next meeting for 10am, NM time, April 15, 1999 at the Gray Ranch in Animas, NM

**Meeting closed at 2:30pm**