

Jaguar Conservation Team (JAGCT)- Habitat Subcommittee Summary Notes
Gray Ranch, Animas, New Mexico
September 22, 1998

A. Introduction

Opening announcements concerning logistics, lunch, and refreshments were made by Ben Brown.

The group thanked Ben Brown for hosting the meeting.

All those attending introduced themselves, and a sign-in list was established for mailing purposes.

B. Handouts

Handouts were passed to the group, including: Meeting Agenda, Last Meeting's Minutes, Jaguar Conservation Agreement (habitat portion), and draft map.

Comments on draft Habitat Criteria developed during the last meeting were received from Tony Povalitis and City of Sierra Vista.

Mike Pruss also received comments forwarded by Ben Brown on jaguar habitat from jaguar researchers.

C. Ground Rules

Ground Rules were agreed upon by the group. They were similar to past JAGCT meetings, ensuring that issues are addressed, not individuals, and that we maintain a professional and cordial meeting, and attempt to achieve consensus. Breaks, lunch, finish time were discussed, and the revised finish time was changed to 2pm to accommodate those that had to leave early.

D. Habitat Sub-committee Assignments - Basis

The group reviewed Review Conservation Team direction for jaguar habitat in the Conservation Agreement.

E. History of the Sub-committee

A brief history of the Habitat Subcommittee and their work was provided by Mike Pruss.

F. Habitat Criteria and the Map

A discussion of the map developed during the last meeting ensued. Map Lines were based on previous sightings, prey density, geographical features, and other criteria. The dashed line represented a general area where we believe the most likely current locations for jaguars would

be. Not everything within that boundary would be considered jaguar habitat. Within that boundary, areas must meet all of the habitat criteria to be considered jaguar habitat.

The line is not carved in stone. The area could be modified, if information warranted it. It is an area we can focus research effort to get the most useful information for the money that is spent. The area is not exclusive, it includes areas that we think are important to movement of jaguars into and out of Mexico as well as areas that may be important to jaguars in the future in Arizona and New Mexico. The area encompasses both riparian and xero-riparian corridor areas as well as habitats that are typical of habitats that jaguars have been found in historically and recently. Not excluding one or the other habitats, but including them all within that boundary.

The line doesn't have any implications under the endangered species act, as far as what we are working on. Whether a jaguar population or an individual exists inside or outside the line, it is protected by the Endangered Species Act.

It was noted that proximity to Mexico and potential migration areas is an important factor if a jaguar population is ever going to be established in Arizona/New Mexico.

Michael Robinson was concerned that some areas that may be important may be eliminated from consideration too early on in the recovery process.

Mike Pruss reminded the group that the line is not immovable, and because it is a best guess, it can change, based on what scientific information and additional sightings become available at later dates. It just provides an area that makes it easier for us, as a group, to focus on the areas that we think are the most critical.

Tony added that there were criteria identified that helped to define this "boundary of focus" that we are looking at. He suggested that those that have questions about them or think that the line should have been drawn a different way to check those criteria and then comment in writing and get those comments back to Mike Pruss. The question of viability was not a purpose for drawing the focus area. Consideration of habitat in Mexico is necessary to draw conclusions about what might be a restored jaguar population or what might be the number of jaguars that constitute a viable population. We are only looking at a small piece of the big picture. The purpose of this is to focus our efforts on the first cut. Looking at the landscape that is here and what is most likely to have jaguars at this point in time.

Steve Spangle (USFWS) added that any recover efforts would have to focus on this part of Arizona and New Mexico. And that most likely, this line will not affect where the USFWS goes with section 7 consultation. The Service needs to look at where there is a fairly decent likelihood that jaguars may occur.

The need for money to conduct studies and select study areas that are reasonable in size was raised by Don Cullum.

Meira emphasized that what brought us to focus on this area was the jaguar and that we should focus on an area where there is a possibility to do something for jaguar.

Tony suggested that it might be a good idea to have a more clear definition of the purpose of this habitat boundary and to keep it separate from anything that the USFWS does.

Steve suggested that the USFWS is not going to go their separate way on jaguar habitat, and that they would also have to use the best information available to make decisions on section 7. As cooperators he suggested working together to define what the USFWS is going to do with section 7.

Bill Boyd made suggestions about the habitat boundary and related an example from California for a bird species involving similar issues.

Mike asked the group if they would be comfortable with a map of the entire states of Arizona and New Mexico showing a shaded gradient from south to north showing where it is more likely and less likely to have jaguars, rather than having a line (solid, dashed or dotted).

Bill Boyd mentioned that the map should be defined not only in terms of where a jaguar is more likely, but what level of confidence of jaguar occurrence there is at any one point.

Craig suggested having a minimum of at least 2 delineations. For planning purposes and guiding research, it would be helpful to have a map that indicates likely habitat that is based on historical distribution and current habitat conditions, and a second category that identifies a higher level of likelihood based on these additional criteria.

Craig also questioned the western boundary and reiterated a request to extend an invitation to the Tohono O'odham to participate on the Conservation Team. He suggested that there is also suitable potential habitat west of the Baboquivari Mountains that has good connectivity to potential source populations in Sonora.

Regarding contacting the reservation, Bill Van Pelt mentioned that we have contacted the representative that we work with on the Sonoran Pronghorn, and he said that he would bring it up with the council and get back to us.

Tony suggested that people who have questions or suggestions on the boundary could review the criteria and comment on the criteria. He questioned the elevational limit at 3,500', and mentioned that in the Sonoran desert region, there may be some suitable habitat not covered by this boundary. He suggested that a clarifying statement be drafted as to the purpose of this habitat boundary and added that the more difficult task will be looking at the most probable habitat within this area. In terms of section 7, he commented that Federal projects could have a regional impact that might not even be within what you might consider primary or probable jaguar habitat. Encouraged using caution with section 7 consultations, recognizing that this is a wide ranging, landscape level species and that things that happen near Sierra Vista could affect down the road the jaguar elsewhere in the region.

Bill Boyd commented in regards to voluntary protection and enhancement with landowners, including safe harbor agreements, and that an area in which to pursue voluntary agreements and

enhancements would be a good purpose of drawing a line where we would concentrate those conservation efforts.

Mike encouraged Bill to write his recommendations and send them to him, and Bill agreed to do that.

Bill reminded the group that the agreement uses language in terms of the map as a basis for evaluating things in regard to jaguar management. If we go back to see that the line is for pursuing voluntary agreements, further define highest priority areas for research so that we can proceed with higher levels of confidence including pursuing possible research in Mexico. It will give more confidence in what you can get out of this. In California with the bird example, we defined sub-regions with priority areas of focus. You are now in the first step in a long term process that will be a cooperative effort. At the same time, you are assembling a significant volume of information, are receiving comments from the SAT, and are maybe helping to define section 7 issues.

Several names for the area were suggested, including "a working boundary, "potential jaguar habitat study area", and "focus area".

No additional comments on the criteria were provided, but additional comments were encouraged via writing to the subcommittee chair (Mike Pruss).

G. Critical Habitat

Mike informed the group that some comments and concerns at the JAGCT meeting revolved around Critical Habitat and Section 7 Consultations, and suggested that it would be good to review what those things are, how they relate to jaguars and jaguar habitat, how they relate to what the JCT is doing, and specifically, how they relate to what the Habitat Subcommittee is doing.

Steve (USFWS) provided information on Critical Habitat. Critical Habitats are areas that meet two criteria: they are essential to the conservation of the species, and they are in need of special management or protection. Conservation means survival and recovery. Critical Habitats are the areas that are most important, and secondly, the areas that are in special need of management and protection. There can be areas that are essential, but are not in need of special management, for instance, a wilderness area or National Park. When an animal is listed, by law, the Service is required to propose critical habitat concurrent with the proposed new species, and the Service is supposed to finalize critical habitat when we do the final listing. If it is not determinable based on not enough data or information, and we do have to do an economic analysis, if we do not have that information, the Service can delay listing it for up to one year. In practice, very rarely does the Service list critical habitat concurrent with a species listing. Critical Habitat is not as high of a priority as getting initial protections in place for individual species. Critical Habitat, when designated, is only applicable to federal actions, just like section 7.

H. Section 7 Consultation

When a species is listed, Section 7 kicks in which prohibits jeopardizing a species. Section 9 also kicks in and involves taking without certain permits.

Section 7 has two basic prohibitions. It is illegal to jeopardize the continued existence of a species, and it is illegal to destroy or adversely modify critical habitat. Definition of jeopardize: appreciable reduction in the likelihood of survival or recovery. Definition of adverse modification of habitat: is an appreciable reduction in value of critical habitat for survival. These two definitions are so close, that there is very little extra protection provided when listing critical habitat. Therefore, Critical Habitat is the lowest priority of their listing budget.

Critical Habitat for jaguar – not prudent. Only when critical habitat is not prudent can they not list it under the Endangered Species Act. There are two prongs to the definition of not prudent. One is a threat that includes vandalism, collection or shooting or some kind of direct taking of the animal. If we determine that that is a threat to its continued existence, then by listing critical habitat we would be basically drawing a roadmap to the animal. That is the argument for jaguar. That determination has not been challenged.

This habitat process is not defacto critical habitat or predetermination of critical habitat, or anything like that.

Steve doesn't think that they will list critical habitat in the future, because it would require a change in philosophy on the listing on critical habitat.

Warner asked the questions what is recovery under a recovery plan, and does that include re-introductions?

Steve responded that it can include re-introductions for extirpated species, such as the Mexican gray wolf, but it doesn't have to. Re-introduction would probably not be a part of jaguar recovery.

A discussion of Mexican jaguar populations, meta-populations, borderlands populations, re-introduction and sky islands followed.

I. Mexican Coordination

Tony asked where we are in regards to collaboration with Mexican biologists and volunteered to help cultivate those relationships.

Ben confirmed that we are working with all the Mexican biologists that there are to work with right now.

Steve (USFWS) offered that they are providing funding for some of the work through NAFTA, and that there are borderlands meetings on jaguars and other species. He confirmed that coordination is ongoing, but could be enhanced.

Bill Boyd suggested that it might be more helpful if there were a summary of each of the Mexican research efforts showing their geographic area, goals of the research, who's involved, level of effort, time frame, types of habitat, movements and other relationships.

Ben provided a brief run-down of ongoing research in Mexico

Steve reiterated that the USFWS has been funding things. Charlie Sanchez is the USFWS international affairs person, and Steve agreed to get the group his number. Steve didn't know how Charlie prioritized things, but we could invite him to the next meeting in January and ask him those questions.

Tony offered to the group that he has students that could run some vegetation transects on this side of the border.

Break for Lunch

J. Section 7 Consultation- Continued

Bill – any time there is a federal action that may affect either the species at hand or the habitat, then it triggers consultation. The federal action agency assesses the affect of their action on the species or critical habitat at hand. They may make a call that it may affect, in which case they come to the USFWS, and we then decide if it will be an adverse affect or not. If it is not likely to adversely affect, then it may be something that may be beneficial. They have to consult even if they are doing good things. Then we consider if the effects are discountable, are the effects very unlikely to occur or the effects insignificant. If it is not likely to adversely effect, then we simply concur with them that it is not likely to adversely effect and go on.

If it is likely to adversely affect, then we go on to formal consultation. And then make the decision is it likely to jeopardize the continued existence. There are two prohibitions under section 7. Prohibition against jeopardizing the continued existence of the species and prohibition against adversely modifying critical habitat. Adverse modification is when an effect, adverse or not, is going to appreciably reduce the likelihood of survival, or the value of that habitat for survival. It can't be just a minor adverse affect, it has to be fairly major. It is the equivalent of a jeopardy opinion. In a non-jeopardy opinion, we then say, ok, its not likely to jeopardize the continued existence of the species, the project can proceed. If it is going to result in the take of the species, then we can give reasonable and prudent measures that are non-discretionary and the agency has to implement reasonable and prudent measures that will minimize the effects of taking. If there is no take involved, the project proceeds unmodified, we give conservation recommendations at our discretion. If an agency says there will be no affect, then they proceed without our involvement.

Don – what type of projects are you talking about, projects on public land?

Steve/Sarah – an action funded, authorized or carried out by any federal agency, including anything done on federal land. On private land, USFWS is not involved unless there is some kind of federal nexus such as the Clean Water Act.

Sarah/Don/Meira/Steve – discussion of consultations and Biological Opinions and what is considered in federal Environmental Assessments. Minor change rule and reasonable and prudent measures and reasonable and prudent alternatives. Aplomado falcon was used as an example. If an agency can't implement the measures are they reasonable and prudent? USFWS can't change the decision, it can only make minor changes to the reasonable and prudent measures or can issue a take statement, however, USFWS can't really stop an action.

Bill/Steve/Sarah – prescribed burns probably will not result in a jeopardy opinion on jaguar. It is difficult to envision a jeopardy opinion on the jaguar. A border barrier, or something of that nature, may be an example that affects jaguar.

K. Programmatic Approach

Gary – Are there any guidance criteria established for the jaguar yet?

Sarah – There is no recovery plan out yet.

Gary – the USFS is operating under some guidance criteria relative to grazing on federal land. Some of the same language of difference between no effect and not likely to adversely affect and others, would probably be common to a lot of actions. So there may be some criteria already out there.

Steve indicated that the Service is working on a programmatic approach with federal agencies for prescribed fire.

Meira thought that it sounded like a good approach, but that it is not very site specific.

Michael Robinson wanted to see a level of detail where the actual level of effects could be measured, as opposed to a series of statements that don't necessarily have anything to do with what is happening on the land.

L. Section 5B Discussion

Mike – Section 5B – a lot of the things in this section are being accomplished through section 7 consultation. We discussed this at our last Habitat Subcommittee meeting, included the issue in our minutes and asked for comments. However, we didn't get any comments. As a subcommittee can we recommend to the JAGCT that this section is not necessary now that the jaguar is listed, and that we could come back to this section if the jaguar is down-listed or de-listed in the future, but that right now it is not very necessary. If you could read it, consider it and provide comments to the jaguar habitat subcommittee we would appreciate it. It is a lot of work that seems to be being accomplished by the USFWS through section 7 consultation.

Steve suggested a cooperative approach by the Habitat Subcommittee and the USFWS to identifying a set of criteria that the Service could use as recommendations when looking at specific projects. Sarah would participate on the subcommittee.

M. Scientific Advisory Committee (SAT) Role

What is the role of the scientific advisory committee? In terms of getting comments back, what will be forwarding to the SAT?

Mike – on big projects we discussed forwarding that information to the SAT for review, It is probably a good idea, but it is not listed in the agreement, so it is a change from what has been agreed upon by the entire group. The subcommittee could suggest any modifications to the JAGCT and see what the membership thinks is a good idea. What we are looking for now is direction from the group that is here.

Bill Boyd suggested that the SAT be asked to consider if larger projects should be submitted to them for review.

Steve emphasized that in no way would this eclipse the somewhat parallel section 7 consultation, because it is a legally mandated process.

Bill Boyd suggested that the SAT could provide input on the quality of the information we have now, the level of scientific understanding that exists on the jaguar, the types of activities that are included in that jaguar agreement and what further information might need to be gathered. What things are reasonably definitive and what things need more research or are unknowns.

Steve and Bill Boyd discussed the final product of the subcommittee as being recommendations, and that no major changes would have to occur in Section 5B.

Bill Boyd added that the purpose of the recommendations would be important to provide to the SAT. Recommendations in the section 7 context would be different than recommendations that might be used to encourage cooperative agreements.

Ben – if we provide a narrower set of guidelines are they really going to be used by the USFS or BLM that already have guidelines that are broad.

Gary – no we wouldn't open that can of worms again.

Michael – two decisions that we are talking about. The land management agencies may affect decisions, which may be fairly broad, and then there is the narrower decision USFWS takes on jeopardy. There might be different criteria.

Gary – Ben was talking about grazing criteria for agency use for no affect or not likely to adversely.

Mike – does the USFS already have those criteria established?

Ben/Gary – yes, relative to grazing.

Boyd/Gary – discussion of criteria and jaguar sightings – post 1970 sightings are considered.

Mike – do other agencies have criteria?

Ben – yes, the BLM (Safford District) is working on theirs.

Mike – we should wait to see what has already been developed so that we are not duplicating effort that has already been done.

Tony – As a habitat based group, when we are considering areas that might be important to jaguars, we have to think about specific criteria like prey densities, security and protective/vegetative cover. When we are thinking about those things a logical offshoot of that would be to turn it around and consider what type of significant activities would reduce those aspects of habitat that we decided are important for jaguar. They go hand in hand. We could provide some guidelines for the USFWS by asking some very straight forward questions. For example how would gas development affect prey density? So we are already dealing with this issue and would just be taking a step in a different direction to provide some guidelines.

Gary – what we come up with is very important. There is more talking among us about jaguars than within agencies.

Tony – we are presuming that riparian, oak woodland, washes, juniper are important areas for jaguar. We can set up a series of questions to determine to what degree that project would lower the quality of the habitat using those specific points.

Michael – species can use a habitat only a little during their life cycle, but that habitat might be absolutely vital to their survival or reproduction or something else. The amount of time they spend in a certain habitat may not tell us how important that habitat is.

Bill Boyd suggested having the SAT sift through what we have some level of confidence in and what we don't and what real world research priorities would be. For example, what could be done on this side of the border and what would absolutely need to be gathered on the other side. They could provide input on where they think we are, and what we need to know about how jaguars use the area in terms of movement and survival. They could provide ideas on field research that would really yield something. With what the subcommittee has done and what the SAT knows, we ought to be able to sort out what is on hand and what is really needed.

Bill Boyd suggested calling the mapped area, the “jaguar study and voluntary cooperative effort area” for the purpose of defining a working conservation planning area within which to focus future scientific research on jaguar movement and use and to potentially pursue voluntary agreements with landowners to enhance opportunities for jaguar.

Bill Boyd's suggested bullet points for next steps were:

1. Ask the SAT for input on information that the subcommittee is reasonably confident of, what you're not confident of, what kind of research is needed, and what types of voluntary agreements might be beneficial or needed?

2. Even with limited knowledge, some basis or roadmap of immediate next steps or work products should be identified.
3. The subcommittee should write down what questions need to be answered?

Bill Boyd agreed to write this up and circulate it.

Michael Robinson left.

Bill Boyd added that section 5B may need another paragraph explaining how information would be provided as recommendations to agencies, because the Service now has authority on jaguar habitat issues. Although to him, there is still a lot of flexibility in the agreement, and it hasn't really changed.

Steve indicated that the subcommittee needs to state clearly the intent of the agreement, and in regard to recommendations on habitat: what habitat is, where it is, and what would be considered an adverse affect on that habitat. These would be recommendations to be used by agencies as they see fit. The Service could also consider them, put as much weight as we see fit into them, and still do our duty under section 7.

The original time frames that were established for the action agencies were discussed. No changes were recommended, as there remains adequate flexibility in the agreement to allow for changes associated with listing.

Bill Boyd indicated that he would like to try to define where we are, and especially what the interaction might be between this group and the SAT group, in terms of sorting out what we have right now.

Wendy – thanked Bill, Sarah, and Steve for taking the time to come down and work with us.

Mike Pruss thanked Ben for providing lunch. A five minute break was offered and taken.

Warner, Bill, Sarah and Steve left to go to the airport.

N. Research Opportunities

Various additional research possibilities were discussed, including Dr. Heraldo Ciballos, UNAM, the national university in Mexico. Ben volunteered to talk to Dr. Ciballos about the various possibilities.

Jeff Williamson asked if the SAT put together a schedule of research that they think needs to be done.

Mike responded that the conservation team has never requested that evaluation from them, but that it is a good idea. Craig was going to be meeting with a few of our SAT members and offered

to ask them to brainstorm for recommendations for research for both short-term and long-term projects

The suggestion was made that we need better information than we have on habitat, movement, social interactions and grouping.

Ben mentioned that he could talk to Beau Turner about doing something with the jaguar. He didn't know if they would be interested or not, but that is the only significant source of money that he knew of in the southwest that is willing to commit funds right now.

Craig mentioned that there are a handful of funding institutions that provide matching grants, including the National fish and wildlife Foundation that currently has an RFP out for 5-6 conservation projects. They particularly like to fund programs where there is a public private partnership such as this where there is an agreement with the state agency, federal agency and private landowners. And what is even more attractive is that there is a bi-national angle here. But again it is a matching funds project, which means that first you get their approval to fund, say 30k, and then you would need to secure 30k from some other area. But we would have to have our priorities in mind. The deadline for submissions was October 6th.

Tony thought that it would be a good idea for this group to come up with some priorities.

Don, and earlier Warner, encouraged input from the SAT for priorities or recommendations.

The following other suggestions were discussed:

- develop a "hypothetical habitat profile".
- need for Mexican location data (Carlos and Dave Brown)
- ask the SAT about how to go about developing a project
- using the GAP map for SW NM and SE AZ, can we use it?
- Find out what information Raul's Mexican student gathers.
- Field trip – "waste of time", "if we are making decisions, we need to know what the habitat looks like"
- Habitat generalizations can be made without collaring a cat.
- We shouldn't foreclose on any options.

Close Meeting

Meeting closed 3:20pm NM time.

Attendance List

Ben Brown	Mike Pruss	Gary Helbing	Tony Povalitis
Steve Spangle	Don Cullum	Judy Keeler	Bill Van Pelt
Sarah Rinkevich	Michael Robinson	Bob Thompson	Reece Woodling
? friend of Reece	Bob Boyd	Warner Glenn	Wendy Glenn
Craig Miller	Jeff Williamson	Cordy Cowan	Meira Gault