

## Summary Report on Selected Outreach Activities

University of Arizona

IAA: 4500052885

May 31, 2015

*Funded by the U.S. Fish and Wildlife Service*

### ***Interviews***

At the initiation of the project, the project team (Svancara and Vanasco) conducted a series of nine key informant interviews. Key informants are individuals considered particularly knowledgeable about the research topic of interest, in this case rancher's views about wildlife management and conservation. All key informants were active ranchers with diverse backgrounds who were widely looked to as leaders in the ranching community at the time of the interviews. A detailed review of the interview methods and findings can be found in the forthcoming publication by Svancara et al. in *Rangelands* (accepted but publication date not yet set at the time of this report).

Generally, the project team found the interview process instructive for the planning of subsequent outreach activities. It provided use with important context, which allowed us to improve the content of the rancher survey and workshops. Specifically, the interviews gave us the first indication of the complexity and diversity of views in the ranching community toward wildlife, conservation, and the endangered species act and seeded a number of questions for the survey on these topics. In addition, the interviews provided the basic data needed to conduct a Q method-based assessment of subjectivity in the ranching community – phrases and sentences about wildlife management, conservation, and ranching in the rancher's own words.

*Lessons Learned:* We recommend the use of interviews in the future for projects with similar goals. The interviews provided a starting point for our thinking and helped to ensure future activities were based in some knowledge of the attitudes and concerns of the ranching community and not our biases about what these concerns should be. The ranchers we interviewed, as well as ranchers that participated in the project at later stages, expressed their appreciation that we were taking the time to develop a clear understanding of their views.

It would be difficult for the US Fish and Wildlife Service (FWS) to conduct a series of such interviews on its own. Our sense was that the key informants, while they knew that we were funded by the FWS to conduct, felt more comfortable frankly expressing their views to a neutral third-party like the University of Arizona than directly to the FWS.

### ***Survey***

We conducted a survey of the entire ranching community in and surrounding the jaguar critical habitat boundaries. This included all ranches south of Interstate 10 in Pima, Santa Cruz, and Cochise Counties, Arizona and the southern portion of Hidalgo County in New Mexico. A summary of the survey findings was provided to the FWS at the rancher workshops. Additional analysis of survey data is underway. This analysis will result in one or more publications about rancher's attitudes toward wildlife and landscape conservation, the Endangered Species Act, the impacts of the jaguar

critical habitat designation, and interest in conservation incentive programs. We will share these publications with the FWS when they become available.

The overall response rate for the survey was 41%. Given the survey was anonymous and we were unable to provide an incentive to respondents, we consider this response rate a success. Respondents were well stratified geographically and demographically and there is no apparent non-response bias.

The survey itself was an effective tool for gathering information from the ranching community, though was not in and of itself an outreach tool. However, the survey provided context for subsequent outreach and conversations with ranchers. By conducting the survey, the ranching community understood that we were interested in hearing from them and were interested in learning about the results and participating in subsequent outreach activities. Like the interviews, the survey also helped to frame these outreach activities.

*Lessons Learned:* Conducting a survey requires a significant investment of time and resources. Steps to putting the survey in the field included development and testing of questions, gaining institutional and government approvals for the survey, constructing a database of the sample population, design of the survey, preparing notification and reminder letters, printing and mailing all materials, tracking responses, entering data from responses and quality checking data, and data analysis. In this case, the survey was worth the effort because it provided important data to help shape the rancher workshops and improve our understanding of rancher attitudes and preferences on a number of issues. However, due to the effort required, a survey should only be used where there are not other ways to acquire desired data.

In our case, the federal government approval process was also a significant hurdle in the completion of the survey. The time required for federal approvals should be realistically considered in the timeline for future projects.

### ***Workshops***

We held a total of four workshops over the course of the winter and spring of 2015. Three of these workshops were identical and focused on jaguar critical habitat and conservation incentive issues. The fourth workshop focused on mountain lion and jaguar depredation issues. A comprehensive review of the results of the workshops can be found in the workshop report submitted separately to the FWS. Publications based on the data gathered at the workshop are also under development and will be shared with the FWS when they are completed.

*Expert Presentations:* The workshops included a series of expert presentations, including presentations on the results of the rancher survey, the Endangered Species Act, conservation incentives, and jaguar and mountain lion depredation issues. Based on workshop evaluations, participants found the presentations on the Endangered Species Act and depredation issues to be the most useful, though they also appreciated learning about the results of the survey. The expert presentations were used to set context for the workshops and quickly cover issues that did not lend themselves to a facilitated discussion.

*Q Methodology:* At the three identical workshops focused on critical habitat and conservation incentives, we conducted an exercise with the participants called Q Methodology. In the workshop evaluations this activity was frequently called out as a particularly satisfying part of the day, while no evaluations expressed a negative view of the exercise. A detailed description of Q Methodology is

provided in the workshop report. Briefly, it is a process used to determine the range of views in a community about a single topic, in this case ranching and conservation.

*Facilitated Discussions:* The final component of the workshops was a series of facilitated discussions. At the three identical workshops, the discussion focused on opinions about the development of a conservation incentives program in southern Arizona and New Mexico. At the depredation workshop, the discussion focused on current issues ranchers are facing with depredations and management approaches and needs. The discussion at all four workshops was vibrant and wide-ranging. We used the discussions as a means of gathering data about attitudes and concerns in a semi-structured format. Such an approach allows for the emergence of new views that we had not previously considered.

*Lessons Learned:* We developed an intentional and progressive sequence of activities at the workshops: educational presentations followed by interactive exercises and facilitated discussions. We found that this process worked very well for keeping the workshop participants engaged in the workshops throughout the day. The evaluations of the workshops were universally positive and specifically called out participants appreciation for the activities and facilitated discussions. Most participants reported that they had learned new information at the workshops. For future efforts, we recommend following a similar progression of establishing key facts about the issue and then engaging the participants with appropriate activities and discussions.

The specific topics selected for the workshops and the presentation of information and data was based on the results of our interviews and surveys. We recommend using a data-supported process for developing workshops. By using data from previous outreach efforts as a guide, it is more likely the workshop will directly and actively engage the participants. This is especially important in the case of workshops that will involve an interactive or discussion element. If a workshop agenda and content does not speak to the participants, a discussion can easily fall flat and leave participants with a negative impression of the hosting agency.

During the discussion portion of the workshop, we both actively facilitated to promote dialogue between participants and provided participants with alternative means for having their voice heard in the form of color-coded notecards that were collected following the workshop. Judging by the number of notecards turned in by participants following at the end of each workshop, we think this was an important technique for ensuring all voices were heard.

Finally, we made a specific effort to limit the participation of agency personnel. This was done to keep the focus on ranching, ranchers, and their specific interests. In addition, we feel that participants are more likely to speak freely in workshop settings if the agency or agencies that regulate them are not present.

### ***Publications***

We produced three publications in the course of the project. Several additional publications are under development. These publications are available to the general public through *Rangelands* journal or the University of Arizona Extension.

*Payment for Ecosystem Services in Southern Arizona and Southwestern New Mexico:* This University of Arizona Cooperative Extension publication reviews the range of payment for ecosystem services programs currently available to ranchers in the region. It is freely available on the Cooperative Extension Website and the Udall Center Jaguar Project website.

*The effects of Federal policies on rangeland ecosystem services in the Southwest United States:* This article will appear in an upcoming issue of *Rangelands* (date to be determined). It reviews the impacts of existing Federal government policies on the provision of ecosystem services from public and private lands in the Southwestern United States, with a focus on land management laws.

*Jaguar critical habitat designation causes concern for Southwestern ranchers:* This article will appear in an upcoming issue of *Rangelands* (date to be determined). It reviews the results of the interview process conducted at the beginning of the project and how this data was used to frame our work.