

Jaguar Conservation Team Report  
PVA Workshop in Cuernavaca, Mexico on November 21-24, 2006  
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The purpose of the meeting was to conduct a Population Viability Habitat Analysis for the country of Mexico. This conference was a direct result of recommendations that came out of the 2005 Jaguar Congress, which was also attended by members of JAGCT and JAGWG. The workshop was facilitated by the IUCN Conservation Breeding Specialist Group. The analysis used the software program VORTEX to analyze different parameters for the model. Ultimately the workshop process generates extinction risk assessments based upon information on the life history, population dynamics, ecology, and history of the populations.

The first day of the meeting participants became familiar with the Vortex model and broke into different worktables to begin assembling the information necessary for the model. Throughout the workshop the different tables would report on their progress for their portion of the analysis. Bill Van Pelt and Roberto Aguilar, Conservation Director at The Phoenix Zoo, participated in the table looking at jaguar populations and where were they located as they relate to the Jaguar PREP.

Meeting participants gave presentations on their area of expertise with jaguars. I gave a presentation on the Department's effort to facilitate jaguar conservation through the Jaguar Conservation Team and our monitoring efforts through the Jaguar Detection Project. I was asked about the proposed border fence and possible impacts to contributing jaguar conservation. On the last day I was interviewed by television and newspaper reporters about the United States participating in jaguar conservation and the possible impacts a fence could have on conservation efforts.

The first challenge faced by the Table was defining the areas with jaguar populations. It was agreed it was important to maintain populations throughout their range in Mexico. However, threats and their impacts to the populations were different for the 5 Regions identified by the Table. The region closest to the United States was the Sonoran-Sinaloa Region. Unlike other areas in Mexico, direct mortality due to killing has the greatest impact to jaguars in this Region followed by drought and habitat loss. However, loss of habitat was the overall greatest threat identified for the species throughout Mexico. It was also determined that jaguars in northern Mexico have much larger home ranges than those found further south like in the Yucatan Peninsula. Types of habitat loss identified included development, conversion to crops, and hurricanes.

Once the areas were identified and causes of extinction (impacts to the populations), the Vortex model was used to run different scenarios to reduce or arrest the extinction rate and maintain a population for 100 years in the different Regions. It was determined the female mortality rate in this Region, especially Sonora, was much too high and reducing this factor would greatly contribute toward stabilizing the Regional population. Running the Vortex model determined a population size of approximately 180 animals were

needed to maintain the population for the 100 year period. Another key element for Sonoran-Sinaloa Region is to maintain the connectivity to other populations to the south.

The primary recommendation coming from the workshop was that each Region would need to develop a management plan that will contribute toward the overall goal of maintaining jaguars throughout their range in Mexico. While some of the Regions were able to identify leads to start the Regional plan process, one for the Sonora-Sinaloa Region was to be determined at a later date. Timing of the workshop influenced the presence of some of the invited participants. It was discussed to bring this issue up at the Trilateral Committee meeting in May 2007 if an individual is not identified by that date.