

PROGRESS REPORT IV

2007



Appleton, R. (2006)

Evaluating the conservation status of the threatened Andean bear (*Tremarctos ornatus*) in Sierra de Portuguesa, Venezuelan Andes: Designing a management strategy.

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ACTIVITIES UNDERTAKEN

Statistical Consulting - Colorado State University and Visit to the Denver Zoological Foundation. Denver - Colorado, EEUU / February 2007.

This visit was set up to establish the first contact with Dr Jim zumBrunnen from the Statistics Department at Colorado State University, and to formally present a project report to the Denver Zoological Foundation. A total of 2 meetings were carried out at Colorado State University, and plans for future consultancy were developed. An oral presentation of the project's up-to-date results was conducted at the Denver Zoological Foundation. Additionally, the Principal Investigator (PI) visited the Rocky Mountains National Park carnivore complex baseline study of the Denver Zoological Foundation together with Dr Dave Augeri.

Field-data entry, GIS database generation and identification of botanical samples. Wildlife Research Group - University of Cambridge, UK / March – December 2007.

After the Principal Investigator's (PI) returned to Cambridge, a database on Microsoft Office Access 2003 was developed for data entry. A total of 75% of the data collected was entered on the database and this process will be finished by February 2008. In parallel, 7 hard-copy maps 1:100,000 from the Instituto Geográfico de Venezuela Simón Bolívar were digitized by Venezuelan personnel, to generate a comprehensive GIS database for Sierra de Portuguesa. This process was finished on April, and the layers generated were verified by the PI. All the botanical samples collected during fieldwork were sent to the Herbario Nacional de la UNELLEZ (PORT) for identification, after being processing and prepared. Results on this regard are expected by March 2008. Additionally, during this period a series of talks regarding the project were given at the Wolfson Wildlife Society - Science Colloquium, the Conservation Science Group – Department of Zoology, University of Cambridge and at the Science and Conservation Seminars of Institute of Zoology, London Zoological Society.

Action Plan for Andean-bear conservation in Venezuela (2006-2016). Venezuela / June 2007

After a long wait and years of hard work, the final version of the Action Plan for Andean-bear conservation in Venezuela was published the 24th of June 2007^[1, 2] (Figure 1). This document presents an up-to-date review of the Andean-bear conservation status in Venezuela and summarizes the actions required towards its preservation during the next 10 years. It reflects the joint effort of Fundación para la Defensa de la Naturaleza (FUDENA), Universidad Simón Bolívar, Fundación Andígena, the Wildlife Research Group-University of Cambridge, and Red Tremarctos, that sponsored by Lafarge-WWF Canada, the Houston Zoo-Fundación Andígena, Universidad Simón Bolívar and Red Tremarctos, gathered in two different workshops an important number of governmental bodies, researchers, students and organized communities to evaluate all aspects involved with the species long-term survival. This product was long awaited and we are certain that it will power

our efforts to ensure the preservation of the most emblematic creature within the Andes mountain range. Currently, we are looking for interested organizations that could contribute to the application of this document, and that could sponsor its English translation.

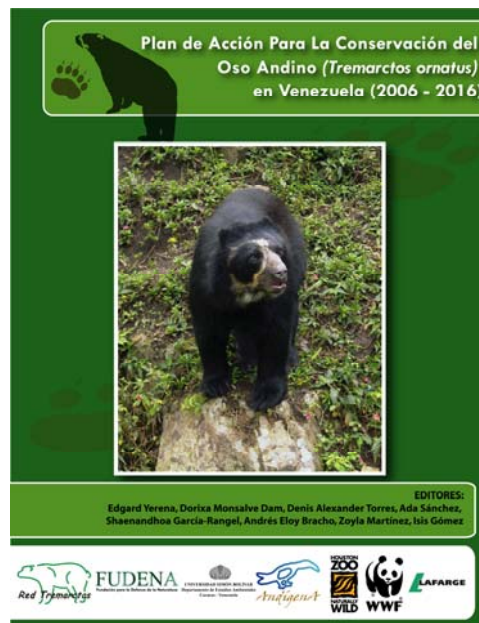


Figure 1.- Cover page: Action plan for Andean bear conservation (2006-2016)

To download the document please visit:

http://andigena2.iespana.es/proyecto_oso_andino/publicaciones_divulgativas/Plan_Accion_Oso_Andino_Vzla_2006-2016_FINAL.pdf

For an English summary:

García-Rangel, S.; Yerena, E.; Monsalve Dam, D.; Torres, D., Bracho, A.E.; Martínez, Z. and I. Gómez. 2007. Action Plan for Andean-bear conservation in Venezuela (2006-2016). International Bear Newsletter 16 (4): 18-22p.

http://www.bearbiology.com/fileadmin/tpl/Downloads/IBN_Newsletters/IBN_November_2007.pdf

Andean-bear habitat availability assessment

Wildlife Research Group - University of Cambridge, UK / September 2007

The analysis of Andean-bear habitat availability across Sierra de Portuguesa carried out from December 2004 to April 2005 was updated with data collected during the 2006 field-season. Preliminary results showed that the habitat available (322.12km², 7.22% of Sierra de Portuguesa) is limited, divided into 169 fragments, and encroached by human activity. The altitudinal range was found to be narrow and possibly restricting the remaining individuals to mountain tops. A total of 50% of the habitat available is currently protected within national parks, but their spatial configuration is risking further fragmentation. In general, levels of fragmentation across Sierra de Portuguesa were high and modulated by

fragments $\geq 5\text{km}^2$. The species may be absent in some patches, and individuals and groups could be isolated.

The results from this analysis were presented at the 18th International Conference on Bear Research and Management in a poster titled: Andean-bear habitat availability assessment across Sierra de Portuguesa, Venezuelan Andes, using remote-sensing, GIS and landscape ecology (Figure 2)^[3]. Finally, a brief presentation of the Venezuelan Andean-bear Action Plan mentioned above was given by the PI at the Bear Specialist Group meeting that took place during this conference.



Figure 2: a) Photo by Marco Enciso M.D. Principal Investigator and Marco Enciso during the poster session at the 18th International Conference on Bear Research and Management. b) Bear Specialist Group Meeting at the 18th International Conference on Bear Research and Management.

GRANTS AWARDED DURING 2007

Table 1.- Balance of the expenses covered by the funds received from the Rufford Small Grants. A total of 400£ remains to be used for PI training given time restrictions during 2007's activities. The PI request the RSG for permission to spend this funding during the 2008 period.

Item	Amount £
Travel expenses	300
Living expenses	2,950
PI training	200
GIS database generation	300
Book supplies	250
Thesis production	100
Total	4,100

REFERENCES

1. Yerena, E., D. Monsalve Dam, D.A. Torres, A. Sánchez, S. García-Rangel, A.E. Bracho, Z. Martinez, and I. Gómez, *Plan de Acción para la Conservación del Oso Andino (Tremarctos ornatus) en Venezuela (2006-2016)*. 2007, Venezuela: Fundación AndígenA, FUDENA, Universidad Simón Bolívar. 60.
2. García-Rangel, S., E. Yerena, D. Monsalve Dam, D. Torres, A. Bracho, Z. Martinez, and I. Gómez, *Action plan for Andean-bear conservation in Venezuela (2006-2016): Executive Summary*. International Bear News, 2007. **16**(4): p. 18-22.
3. IBA. *18th International conference on bear research and management*. 2007. Monterrey, México.