



Leaving passages for wildlife where the Interoceanic Highway will cross the Vilcabamba Amboro-corridor.

Progressive Report for the Rufford Innovation Award

Renata Leite Pitman

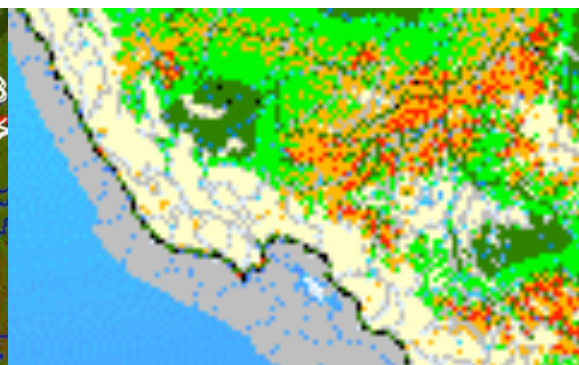
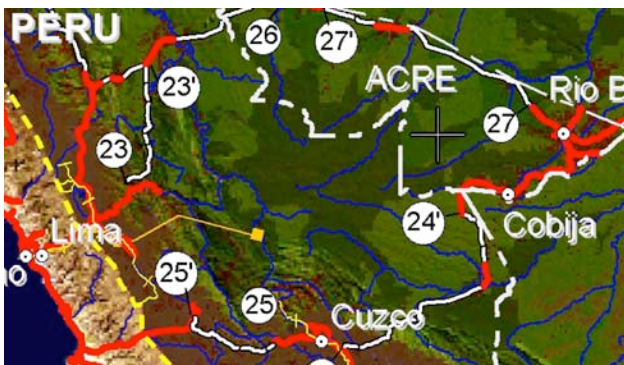
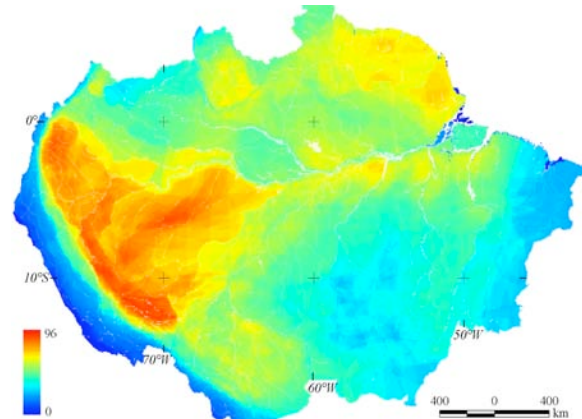
July 2008



Introduction

The Vilcabamba-Amboro corridor, located in the Andes-Amazon region of Peru and Bolivia, is the largest block (30 million ha) of consolidated protected areas in South America (Fig. 1). It is located at the center of mammal diversity in the Amazon basin (Fig. 2). Currently the only road bisecting this corridor is a dirt road that exists since the 20's that links the cities of Cusco and Puerto Maldonado in Peru (Fig. 3) that has minimum impact to the forest and wildlife. This road is now being paved, and migration of people is expected to the area, bringing deforestation and diseases to the wildlife. The habitat conversion has been already predicted isolating wildlife populations and accelerating the process of species extinction (Fig. 4). Because of its size, level of protection, and biodiversity, the Vilcabamba-Amboro corridor represents the best opportunity for large and threatened carnivores long-term conservation in South America, where at least eight species species felids are present (*O. jacobita*, *L. pajeros*, *L. pardalis*, *L. tigrinus*, *L. wieddii*, *P. onca*, *P. concolor* and *P. yagouaroundi*) as well as andean bears (*Tremarctos ornatus*), giant otters (*Pteronura brasiliensis*), bush dogs (*Speothos venaticus*) and short-eared dogs (*Atelocynus microtis*).

Hereafter, I present our monthly activity since the grant was awarded to me. Details of the project in Spanish have been also constantly updated into the project's web page at: http://web.mac.com/renata_leite/Carretera_Interoceana.



October 2007

11th: Grant approved

22th: Renata's participation on a meeting in Lima about projects monitoring the highway.

25th: Meeting with Professor. Bonifacio Poccones Quispe and Professor Carlos E. Carrasco Pocando, from the Ministry of Education – Puerto Maldonado office for

requesting permit to work with schools along the highway from Puerto Maldonado to Masuko. Proposal approved for a work in partnership.

November 2007

Research permits requested for INRENA (National Environmental Institution).

December 2007

Working on an agreement with the National Museum of Natural History in Lima for receiving biological samples.

January 2008

15th: First trench (US\$38,578.00) deposited from Rufford at Renata's account.

February 2008

1-4: 1st trip to the highway.

Main findings: Locals gave good reports of the presence of the Andean cat near Hualla Hualla region. They have reported finding individuals of the species dead.

Locals report Andean bears from Marcapata to San Miguel. We found a hunter who have his house at the border of the highway, at the village of Izcaymbamba, that have 3 skins of bears, that he hunted at this farm, at Capire region (Fig. 1).

At the Amazon region, we got two reports of recent cases of jaguars recent killed because depredation on cattle at the Quincemil region.



Fig 1. Bear skin in a house located in front of the highway.

8-16 Feb: 2nd trip to the highway.

Searching for bear's signs next to the highway. Twenty local people were interviewed and all new about the bears. Five of them have in fact seen the bear, and two reported conflict with bears eating their corn plantation during this year.

26 – 4 Mar 3rd trip to the highway

Visiting the farm of one of the people who reported to have its corn plantation attacked by bears, we found indeed signs of two bears coming to its plantation (Fig. 2). Based on the size of the track they are probably from an adult with a young. This site is only 2 km from the highway.



Figure 2 – Bear track on the left and corn plantation attacked by bears with his owner standing on the right.

March 2008

11 – 20: 4th trip to the highway:

Working with the local family who owns the corn plantation where the bears are visiting and installation of camera traps at the site where the bears are coming to eat corn (Fig. 3). The heavy, continuous rain makes the fieldwork difficult and the operation of the camera traps impossible. The bears returned to the plantation.



Figure 2 – Bear track on the left and corn plantation attacked by bears with his owner standing on the right.

April 2008

31 March – April 10th: 5th trip to the highway: Bear trap installed and baited at the corn plantation (Fig. 3).



Figure 3 – Bear trap on the left and the trap set up with a camouflage at the corn plantation.

8th: Reply from Odebrecht/CONIRSA (companies that are building the road) approving the agreement with us. They will support our work with gasoline and maintenance for our car, and supporting part of the Environmental Education program.

10th: Meeting with the Ministry of Education in Cusco for the approval of our work at the highway's schools located from Cusco to Masuko.

19th Renata travels to Lima.

21st: 2nd Meeting with the Ministry of Transportation to present our proposal and to propose wildlife road signs. The proposal was well accepted and the signs will be implemented at the highway (Figure 4).



Figure 4. Wildlife road signs proposed for the Ministry of Transportation and approved for implementation.

May 2008

16th: Workshop with 30 professors from the Cusco region. 30 schoolteachers attended as well directors and other members of the Ministry of Education. The Frankfurt Zoological Society – Peru send their Environmental Education specialist (Carlos Arevalo and Monica Rieckhof) who did incredible well-done practices regarding road building and importance of predators (Figs. 5 and 6).



Figure 5. Schoolteachers cutting paper roads to find a best placement of a block of forest and practice about food chain.



Figure 6: Results of practice with schoolteacher: were should we build a road?

19th: After a long search for a good used car, we bought a good one (Fig. 7).



Figure 7. A 2006 Toyota Hilux was bought for exclusive use of our project.

22 -25th: 6th trip to the highway. Interviewing farmers and loggers at the highway about their perception about our focal species. We got data from 30 people and documented two jaguars that have been killed recently on the highway and a fresh track right next to the highway (Fig. 8).



Figure 8. A fresh jaguar track right next to the highway and one of the jaguar skins of recent killed animals next to the highway.

June 2008

1-19th: 7th trip to the highway. 42 schools were visited and 700 interviews were conducted with the children from primary and secondary schools about their

perception against our focal species (Fig 9). We are currently entering these in a database and analyzing the results.



Figure 9. Yesenia Apaza, interviewing local kids at the school about their perception about the giant otter.

Roadkills

During our travel we documented 15 roadkills, mainly domestic animals killed at the paved parts of the highway. Up to date, 25% (100 km) of the highway is paved from Cusco to Puerto Maldonado. The wild species killed were two opossum (*Didelphis marsupialis*), one brazilian rabbit (*Silvilagus brasiliensis*), two porcupines (*Coendou bicolor*) and one snake (species not identified).

Educational Material

We are going to use materials that have been previously produced by the Frankfurt Zoological Society, under supervision of the Environmental Education specialist Carlos Arevalo (Fig. 10) and material we are producing specially for the project (Figs. 11 and 12).

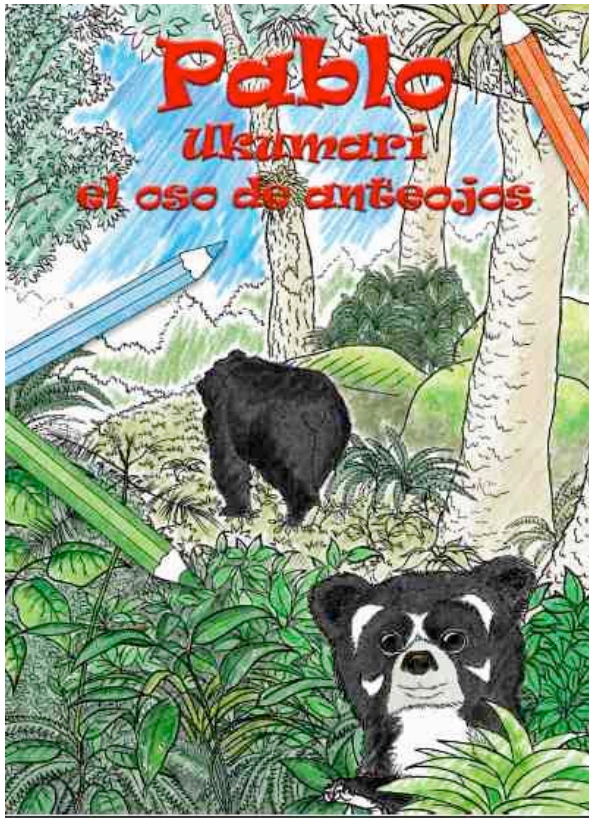


Figure 10. Coloring books about the spectacle bear and giant otter produced by the Frankfurt Zoological Society that we are going to distribute along the highway.



Figure 11. Children history book about the Andean cat and the highway, that I wrote specially for the project with illustrations of Susan Cosineau.



Información sobre el Lobo de Río

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Como ayudar al Lobo de Río

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Como ayudar al Oso de Anteojos

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Como ayudar al Gato Andino

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Información sobre el Jaguar

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Como ayudar al Jaguar

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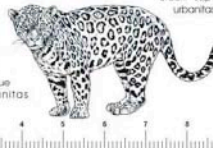


Figure 12. Calendars with information about our focal species.

Involvement of local people

The following people are/have been participating in the project:

Coordination

Natividad Huaman, Biologist from Puerto Maldonado

Jans Huaca, Specialist in Tourism from Puerto Maldonado

Juvenal Silva, Biologist from Cusco

Environmental Education

Carlos Arevalo, Educator from Cusco

Yesenia Apaza, Forest Engenier from Masuco

Jorge Lezama, Educator from Puerto Maldonado

Monica Rieckhof, Educator from Cusco

Research

Joel Mendoza, Biologist from Cusco

Dina Farfan, Biologist from Cusco

Larissa Silva, Biologist from Cusco

Edwin Jurado, Student from Puerto Maldonado

Pedro Romel, , Student from Puerto Maldonado

Wilder Chavez, Specialist in tourism from Cusco

Rene Escudero, Specialist in tourism from Puerto Maldonado

Danilo Jordan, Biologist from Cusco

Oscar Butron,, Veterinary Doctor from Lima

Alliances with Governmental Institutions, NGOs and other institutions:

We got in agreement to work in collaboration with:

Frankfurt Zoological Society (AVISA-PERU)

Ministry of Education

Ministry of Agriculture

Ministry of Transportation

Regional Government

Odebrecht/Conirsa (companies building the road)

San Diego Zoo

Intercooperation/Ecobona