

Looking for opportunities to protect the jaguar (*Panthera onca*) in Santa Cruz, Bolivia

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In the Department of Santa Cruz, 75% of the territory is used for forestry and cattle ranching. Acknowledging that these activities represent favorable land use options for the conservation of biodiversity, WCS has been implementing investigations focusing on the conservation status of the jaguar and its conflict with humans.

Using camera trap census on cattle ranches and in areas with certified forestry operations, we are investigating the density and space use of this important species, as well as others like *Puma concolor*, *Leopardus pardalis*, *L. wiedii*, *Tapirus terrestris*, *Priodontes maximus* and *Procyon cancrivorus*. Jaguar density in these areas range from 4.2 to 5.6 jaguars/100km2.

We also visit cattle ranches of different sizes (300 - 90.000 ha and 50 - 12.000 heads of cattle) and interview ranchers in different ecosystems like the Chiquitania (mosaic of semi deciduous Forest and shrubby savannah), Chaco and Pantanal to understand jaguarrancher conflict and the perception about livestock losses due to jaguar predation; 87% of the ranches practice extensive cattle management and the majority has



Female jaguar feeding on a calf on a cattle ranch, study about conflict with cattle



Female jaguar photographed during a systematic camera trapping study in the chiquitano forest

reported problems with jaguars attacking livestock.

Hunting reports of the last four years state a total of 347 jaguars and 230 pumas killed on 85 ranches.

Additionally, on a selected cattle ranch, for various years we have been evaluating the predation of cattle by jaguars, as well as other causes of death. Based mainly on the reports of births and deaths made by the cowboys and administrators of the ranches, of a total of 1559 deaths registered during 16 years, 47% were caused by jaguar and puma attacks; of those, 76% affected cattle up to one year of age. The ranches plan to implement management practices that can minimize these losses.

[ARTICLE]

Jaguar and prey monitoring in the South American Llanos, Vichada-Colombia

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The South American Llanos are an important and unique ecosystem with a historical past of land use mainly for extensive cattle ranching, petroleum extraction and extensive agricultural activities. In Colombia, the oriental llanos occupy approximately 27.15 % of the national territory, covering six departments (political division) and two National Protected Areas (Villareal-Leal & Maldonado Ocampo 2007). The entire ecoregion, shared between Venezuela and Colombia, is considered as an important area for conservation and development. For the jaguar, the Colombian oriental llanos are considered to be among the number one priorities for census, ecology and conservation status studies.



Typical view of the Colombian Llanos, Vichada Department. (Foto: JFGonzalez-Maya 2008)

With about 310,000 km2 it is considered to retain viable jaguar populations, but with severe threats to their persistence (Sanderson et al. 2002). Bojonawi is a 4,680 ha private reserve located inside the El Tuparro Biosphere Reserve and is part of the Civil Society Reserves Network. More precisely, the area is located on the Orinoco River edge, between the Negro and Verde streams, and is connected with open savanna in the south; the closest town is Puerto Carreño (Vichada Department capital). The habitat is mainly composed of savannah (about 85%), with some patches of gallery forests with different sizes along the main water courses (Fundación Omacha, 2008).

The project's aim is to determine the population status and basic ecology of the jaquar and its prey in the area, starting in the reserve and expanding to the entire network. The methodology will consist of two main activities: 1) Satellite Telemetry on jaguars and selected prey species throughout the area and 2) transect surveys and camera-trapping in the forest patches and some selected savannah areas, where 30 camera-trap stations will be established in a nested sub-set sampling scheme in order to cover more than 100 km2 with the Minimum Convex Polygon (Gonzalez-Maya 2007, Gonzalez-Maya et al., in press, Schipper et al. 2007, Gonzalez-Maya et al. 2007), the sampling will be realized during a period of three months (in both wet and dry season), while other ecological aspects will be measured. We will sample two areas of the network in order to make accurate density estimations. The study will estimate absolute jaquar density and distribution, home range, activity patterns, prey abundance, diet and main regional threats for the persistence of jaquar populations in the long term. This study represents the first systematic effort to evaluate jaguar status in the Colombian Llanos, and is expected to provide enough information for conservation planning and species preservation on a regional scale. Previous studies in the area have reported the presence of the species, as well as several prey species, in a relatively good state of conservation; also, pumas, ocelots, jaguarundis and other felid species have been reported and are also focus of the project. It is important to highlight that NGOs and governmental alliances are one of the best options and opportunities to generate reliable information on endangered species and ecosystems. Fundación Omacha, ProCAT Colombia and CI Colombia are key partners of the present project and the results are expected to have a significant impact on conservation of the region and important species such as the jaguar.

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In the late afternoon we went boating and found the tracks of a jaguar that seemed to have crossed the river Três Irmãos a short while ago. On a nearby beach, we found more tracks coming out of the water and leading towards the forest. We continued slowly around a river bend and suddenly there it was!! Sitting on the river bank and watching us with curiosity. It was amazing!

Três Irmãos River - Northern Pantanal - Mato Grosso/Mato Grosso do Sul state limits - Brazil Regina Ribeiro, Wildlife observation guide brasisre@gold.com.br August 2008

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"Our mission is to promote the conservation of the jaguar, its natural prey and habitat throughout the species geographical range, as well as its peaceful coexistence with man through research, management and conservation strategies."

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