



"Big Daddy" camera trapped 300 m. from the research station

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- Argentina
- Belize
- Bolivia
- Brazil
- Costa Rica
- Guatemala
- Guyana
- Honduras
- Mexico/U.S.
- Nicaragua
- Panama
- Peru
- Venezuela

JAGUAR AND PREY MONITORING

WCS in Belize

The Chiquibul Forest Reserve contains a unique geologic formation: a granite bulge through a limestone shelf, creating two distinct yet adjacent habitat types: dense tropical broadleaf forest on limestone soils and relatively open pine forest on granitic soils. While there has been selective logging in the reserve, there has been no hunting for approximately 30 years. Wildlife abounds and is fairly easy to spot in both habitat types, day or night. This area is home to many rare species, most notably the jaguar, Morelet's crocodile, tapir, and scarlet macaw.

The Human Aspect

The Macal River valley in the Chiquibul Forest supports extensive wildlife and the surrounding area is well-known for the natural and ancient Mayan cultural attractions (1000 Foot Falls, Rio Frio cave and Caracol Ruin, to name a few). The beauty of the area attracts thousands of nature visitors. Tourism, especially ecotourism, is the number one industry in Belize. Numerous villages and hundreds of local towns people gain economic benefit from tour guiding and sale of arts and crafts.

Threats

Belize still has a relatively low population size and most Belizeans have never been deep into the Chiquibul Forest. The Guatemalan border, however, is only a stone's throw away and illegal settlements routinely pop up in the reserve resulting in poaching of wildlife and plant resources. The

Highlights

Total Area

- 1,103 mi²
- 1,775 km²

Habitat Types

- Tropical broadleaf forest
- Stands of pine forest

Wildlife Present Birds

- Ocelated turkey
- Scarlet macaw

Mammals

- Jaguar
- Puma
- Ocelot
- Black howler monkey
- Baird's tapir

Reptiles

- Jumping viper
- Fer de lance
- Morelet's crocodile

Plants

- Mahogany
- Cedar
- Orchids
- Spiny palms

WCS involvement

- Since 1980





One of the few females photographed

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refugee stream, while slow, is steady and if unchecked could represent a serious threat to wildlife in the area. Additionally, international companies see profit in damming the Macal River and this would dramatically alter the hydrology and human use of the area. The proposed Chalillo Dam project is currently a hotly contested issue.

WCS Activities

Jaguars are the largest American felid and least studied of all the great cat species. A camera-trapping project is currently underway to determine densities of jaguars in the Chiquibul Forest Reserve. Jaguar prey species abundances are also being determined from capture rates allowing for an ecological assessment of wildlife populations in the area. Preliminary work has suggested a high number of jaguars and prey species. Pumas and ocelots are also abundant and research here aims to determine what factors permit co-existence of top predators.

The Reserve is located within the Mesoamerican Biological Corridor. It is across the Maya Mountain divide west of the Cockscomb Basin Sanctuary where jaguar research is also being conducted. Through collaboration and communication between the reserves, WCS hopes to develop a better understanding of ecological requirements and habitat use patterns of this elusive carnivore.

Important Next Steps

- Expand camera-trapping survey and establish semi-permanent trapping grids for the purpose of obtaining baseline densities of jaguars from a relatively “healthy” population.
- Conduct reconnaissance and surveys in the habitat surrounding the proposed Macal River dam site.
- Examine the ecology of co-existence of competitive carnivores.

Jaguars are the largest American felid and the least studied of all the great cat species.

Contacts

Marcella Kelly
WCS Research Fellow
Email: makelly2@vt.edu
Phone: 540.231.1734

Kathleen Conforti
Program Coordinator
Jaguar Conservation Program
Email: kconforti@wcs.org
Phone: 718.220.2189

For more information:
www.savethejaguar.com
www.savingwildplaces.com

Wildlife Conservation Society
International Conservation
2300 Southern Blvd.
Bronx, NY 10460 USA
www.wcs.org

Mission

The Wildlife Conservation Society's International Conservation program saves wildlife and wild lands by understanding and resolving critical problems that threaten key species and large, wild ecosystems around the world.

WCS Strategies

- Site-based conservation
- Research
- Training and capacity-building
- New model development
- Informing policy
- Linking zoo-based and field-based conservation

Support this Project!

Donations can be sent to:
The Jaguar Conservation Program at the Wildlife Conservation Society