



Arial view of Cockscomb Basin

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MONITORING JAGUARS IN THE COCKSCOMB BASIN

Argentina

Belize

Bolivia

Brazil

Costa Rica

Guatemala

Guyana

Honduras

Mexico/U.S.

Nicaragua

Panama

Peru

Venezuela

The Cockscomb Basin Wildlife Sanctuary measures approximately 400 km² and is one part of a large protected area complex in the south of Belize that includes the Bladen Nature Reserve and the Chiquibul National Park. Together, these areas protect more than half a million acres of broadleaf tropical forest. Historically, WCS's Alan Rabinowitz was the first to lobby for the protection of Cockscomb in the mid 1980's and the area was declared a Jaguar Reserve in 1985 following his 1983-4 study of these cats. In the mid 1990's, WCS reintroduced a howler monkey population to the park and continues to sponsor research in the park on jaguars and their prey.

The Human Aspect

The country of Belize may contain one of the greatest strongholds for jaguars in Central America: the Cockscomb/Chiquibul/Bladen protected area complex. This magnificent cat is still found in large numbers throughout the country. However, the growing human population of Belize may put people at odds with the jaguar. The park is ringed by traditional Maya villages, those that have grown up in association with the banana industry on the periphery of the park, and cattle ranches. Local people conduct both subsistence and commercial hunting within the protected area. One village has received considerable benefits from tourist revenues and employment within the park; such benefits need to be shared with others. The problems of jaguar depredation on livestock are also increasing.

Highlights

Total Area

- 249 mi²
- 400 km²

Habitat Types

- Lowland tropical moist forest

Wildlife Present

Birds

- Scarlet macaw
- King vulture

Mammals

- Jaguar
- Tapir
- Ocelot
- Howler monkey
- Spider monkey
- White-lipped peccary

Plants

- Black orchid
- Giant tree ferns
- Mahogany

WCS involvement

- Since 1980





Camera trap photograph of a jaguar at night

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Threats

The jaguars of Cockscomb are primarily threatened by two human activities – cattle ranching and hunting for bushmeat. On three sides of Cockscomb, cattle ranchers have plans to or are already clear-cutting the rainforests to make room for cattle. These ranchers tend to shoot jaguar on sight due to the belief that the jaguar will kill their cattle. In many areas, local villages compete with jaguars for food species such as peccaries, paca and tapir, denuding the forests of prey for the jaguar, a condition which exacerbates the conflict between jaguar and cattle ranchers.

WCS Activities

Jaguar are difficult to monitor because of their cryptic nature, large home range sizes, low population densities and the difficulties imposed by the habitats in which they are found. Recent efforts to develop a range-wide approach to jaguar conservation have brought to light an almost complete lack of reliable population data for jaguar. The first-ever density estimate of a jaguar population was completed in the Cockscomb Basin Wildlife Sanctuary in 2002 and annual surveys have been conducted since then to follow population trends. These surveys have shown that jaguar density in the Cockscomb is comparable with the highest densities of tigers in India (8.8 individuals/100 km²). With the best known population in the world, the WCS Jaguar Program is using the area as a proving ground for survey techniques that can be used throughout the jaguar's range. The WCS Cockscomb Jaguar Project is also starting to work with cattle ranchers and the Belize Forest Department to address the issue of problem jaguar on the periphery of the park.

Important Next Steps

- Develop genetic survey techniques using hair and scat;
- Continue population surveys as part of a long-term monitoring plan;
- Monitor the abundance of prey species within the complex;
- Address the poaching issue within the parks;
- Develop a jaguar-livestock outreach program for southern Belize

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Contacts

Linde Ostro/ Scott Silver
WCS Research Fellows
Email: lostro@wcs.org
ssilver@wcs.org
Phone: 718.220.6891 Ostro
718.271.3622 Silver

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
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