



# INTERNATIONAL CONSERVATION

# JAGUAR CONSERVATION PROGRAM



Aerial view of Cockscomb Basin

## Highlights

### Total Area

- 249 mi<sup>2</sup>
- 400 km<sup>2</sup>

### 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



Jaguars Track Measurements in Belize

Jaguars and Peccaries in Corcovado National Park, Costa Rica

Monitoring Jaguars in the Cockscomb Basin, Belize

Movements, Habitat and Prey Relations of Jaguars in SE Sonora, Mexico

Jaguar-Livestock Conflict in NE Sonora, Mexico

Subsistence Hunting in the Maya Biosphere Reserve, Guatemala

Jaguar and Prey Monitoring in Belize

Borderlands Jaguar Detection, Mexico/U.S.

Livestock Depredation in the Pantanal, Brazil

Impact of Jaguars at the Rio Platano Biosphere Reserve, Honduras

Jaguar and their Prey, Guatemala

Human-Jaguar Conflict, Belize

U.S. Jaguar Outreach

Jaguars on Private Lands, Venezuela

Rancher Outreach Program, Brazil

The Jaguar Conservation Program is one component of the Global Carnivore Program

## WCS in Belize

The Cockscomb Basin Wildlife Sanctuary measures approximately 400 km<sup>2</sup> 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 both traditional Maya villages and those that have grown up in association with the banana industry on the periphery of the park. The people of these villages 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.



Camera trap photograph of a jaguar at night

## 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. Following several years of camera-trapping in Cockscomb that identified seven resident jaguars, in April 2002 the first-ever density estimate of a jaguar population was completed in the Cockscomb Basin Wildlife Sanctuary. The April survey identified an additional eight jaguars and showed that jaguar density in the Cockscomb is comparable with the highest densities of tigers in India (8.8 individuals/100 km<sup>2</sup>). 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.

## Important Next Steps

- Develop genetic survey techniques using hair and scat;
- Conduct additional 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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## 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

