

**Project No. PSF 2008-15**  
**Monitoring the Wattled Curassow in Bolivia**

**Interim Technical Report**

**1. Overview**

The Wattled Curassow (*Crax globulosa*), considered Vulnerable of Extinction by IUCN/ BirdLife International, was believed extinct in Bolivia until its rediscovery by Asociación Armonía in 2001. The single known population in Bolivia is restricted to *várzea* (seasonally inundated) forest along a small tributary of the Río Beni (Dpto. Beni). Estimated at less than 140 individuals, this last remaining Wattled Curassow population in Bolivia is considered to be critically threatened.

Through community education and outreach Armonía has achieved the active participation of four local indigenous Tacana communities in efforts to save the Wattled Curassow, including a self-imposed community ban on hunting and other resource extraction within the forest inhabited by the curassow. Significantly, the communities recently declared an area of 1,500 km<sup>2</sup>, which holds the entire known Bolivian population of Wattled Curassow, as the Tacana III Indigenous Territory. The communities aim to protect the area as a Wattled Curassow conservation reserve, supported by sustainable ecotourism. The conservation of this primary forest ecosystem will protect not only the Wattled Curassow but also other threatened species such as the endangered endemic Beni Titi-Monkey, jaguar, tapir, giant armadillo, white-lipped peccary and black caiman.

The Wattled Curassow remains critically threatened, in spite of the growing conservation commitment of the local communities, by the impacts of illegal logging operations – habitat loss and, most importantly, indiscriminate hunting by loggers. While the majority of local residents support a ban on timber extraction, the people live in conditions of extreme poverty and it is, therefore, understandable that some will be tempted by the short-term monetary gain offered by unscrupulous logging companies. A management plan for the Indigenous Territory, including environmental monitoring, is urgently needed to ensure sustainable use of natural resources and to aid the conservation of threatened species, in particular the Wattled Curassow. Experience shows that wildlife monitoring can very effectively be carried out by indigenous biologists, given appropriate training, and that their involvement leads to greater community commitment to biodiversity conservation.

The goal of the present project is to support the indigenous communities in their management of the Tacana III Indigenous Territory, specifically for the protection of the Wattled Curassow and the conservation of the biodiversity of a vital primary forest ecosystem.

**2. Objectives**

**Objective 1. Train a team of four community biologists in methods of Wattled Curassow and environmental monitoring.**

**Activity 1. One participatory workshop in each of four indigenous communities to present basic concepts of environmental monitoring.**  
(Completed)

The project was presented initially in a workshop attended by representatives of the four communities that form the Tacana III Indigenous Territory (San Marcos, Zoraida, Nuevo Reyes, Monte Rey). Workshop participants (28) then presented the project to their communities. Additional information on environmental monitoring was presented when the project team visited each community to conduct local knowledge surveys.

**Activity 2. One training workshop in monitoring methods for community biologists.** (Not yet started)

An initial training workshop was not held because hands-on training *in situ* was determined to be more cost-effective. Instead of the initial training workshop, a workshop on data interpretation will be held at the end of the project period.

**Activity 3. Four 21-day field expeditions to train community biologists.** (In progress)

One 23-day field expedition has been undertaken. Four community biologists received training and practice in map reading, compass and GPS use, and in line-transect and point-count survey methods. The training was led by two experienced community biologists from San Marcos who have worked extensively with Armonía on previous investigation projects. At the end of the expedition the trainees were evaluated; two scored a good level of understanding and ability, and two a satisfactory level. Further training and practice is planned to consolidate the skills learned by the new community biologists.

No other field expeditions have been undertaken to date for two reasons: 1) only two areas for Wattled Curassow have been identified and 2) one of the areas is most easily accessed by boat and river levels will not be sufficiently high to reach this site until January or February.

**Objective 2. Determine the present distribution and habitat use of the Wattled Curassow in the Tacana III Indigenous Territory.**

**Activity 1. One participatory workshop in each of four indigenous communities to map Wattled Curassow distribution based on local information.** (Completed)

To collect local information on the Wattled Curassow, community members with extensive forest experience were interviewed. Of the ten people interviewed, six reported having seen the species. Most reports were from the Río Negros area, the only Wattled Curassow site presently known; however, two people reported sightings from a second area, Arroyo Chuto.

**Activity 2. Field expeditions to ground truth community-produced distribution maps and collect baseline data on habitat use.** (In progress)

One 23-day field expedition was carried out in August-September to survey the Río Negros area. The Arroyo Chuto area has not yet been surveyed because the site is most easily accessed by boat during the rainy season. The expedition to this site will be undertaken when the river level is sufficiently high (January- February).

Inspection of a potential area identified previously (Aguas Negras) was found not to have suitable Wattled Curassow habitat.

**Objective 3. Estimate the size of the Wattled Curassow population in the Tacana III Indigenous Territory.** (In progress)

**Activity 1. Field expeditions to census Wattled Curassow.** (In progress)

A Wattled Curassow census was completed in the Río Negros area in August-September. Four individuals were recorded by the line-transect sampling method and nine individuals by the point-count sampling method. Censuses of medium to large-sized mammals and birds recorded 69 birds (5 species) and 141 mammals (13 species).

A census of Wattled Curassow and other wildlife will be undertaken in the Arroyo Chuto area in January-February.

**Objective 4. Evaluate the conservation status of the várzea forest in the Tacana III Indigenous Territory.**

**Activity 1. Collect baseline data on habitat conservation status.** (In progress)

Baseline data on the conservation status of the várzea forest in the Río Negros area has been collected. In addition, an evaluation was made of the várzea forest contiguous to the area inhabited by Wattled Curassow. This inspection, conducted by boat, documented illegal logging activities in two areas. A census (by boat) of medium to large-sized mammals, birds and reptiles recorded 2323 birds (30 species), 1049 reptiles (3 species) and 17 mammals (6 species).

The conservation status of várzea forest in the Arroyo Chuto area will be evaluated in January-February.

**Objective 5. Develop a Wattled Curassow-Environmental Monitoring Plan and Methods Manual for the Tacana III Indigenous Territory.**

**Activity 1. Design a Wattled Curassow-Environmental Monitoring Plan.** (In progress)

A field expedition to ground truth community-produced distribution maps, census Wattled Curassow, and collect baseline data on habitat use and habitat conservation status has been completed in one of the two areas identified by local residents. The second site will be surveyed in January-February.

**Activity 2. Produce a Monitoring Methods Manual for community biologists.** (Not yet started)

This activity will be initiated in January.

### 3. Outcomes

Good progress has been made toward achieving the original project goal to support the local indigenous communities in their management of the Tacana III Indigenous Territory, specifically for the protection of the Wattled Curassow and the conservation of the biodiversity of a vital primary forest ecosystem. Local stakeholders are aware of the importance of environmental monitoring and four new community biologists have achieved a satisfactory to good skill level in wildlife monitoring methods. The local knowledge survey identified a potentially new site for Wattled Curassow; this site will be surveyed in January-February. Census data collected to date provide strengthen the existing baseline for Wattled Curassow monitoring and also for monitoring the impacts of tourism activities and subsistence hunting. Finally, the presence of illegal logging operations in two new areas, in spite of the creation of the indigenous territory, substantiates the urgent need to build local stakeholder capacity to manage and protect the indigenous reserve.

Progress to date in relation to the original expected outputs of the project is summarized as follows.

Expected outputs	Progress to date
Twenty community members knowledgeable of basic concepts of environmental monitoring.	A workshop was held with participation by 28 local stakeholders, including representatives from the four communities that form the Indigenous Territory.
Four community biologists trained in methods of Wattled Curassow and environmental monitoring.	Four community members received training and practice in field survey methods and the use of maps, compass and GPS, during a 23-day field expedition.
Baseline data on distribution, habitat use and population size of the Wattled Curassow in the Tacana III Indigenous Territory.	<ul style="list-style-type: none"> <li>- Baseline data have been collected at Río Negros, one of two Wattled Curassow sites identified by local residents.</li> <li>- Wattled Curassow censuses recorded four individuals by the line-transect sampling method and nine individuals by the point-count method.</li> <li>- Censuses of medium to large-sized mammals and birds recorded 69 birds (five species) and 141 mammals (13 species).</li> </ul>
Map of distribution and habitat use of the Wattled Curassow	<ul style="list-style-type: none"> <li>- Local knowledge surveys identified a new potential site for Wattled Curassow. This site will be surveyed in January-February.</li> <li>- Six of the 10 people interviewed in the local knowledge survey reported Wattled Curassow observations.</li> <li>- Inspection of the Aguas Negras area (previously considered a potential site) found it to not have appropriate Wattled Curassow habitat.</li> <li>- Ten sampling points were established to validate the vegetation map being developed to map more precisely the habitat use of the</li> </ul>

	Wattled Curassow.
Baseline data on the conservation status of the <i>várzea</i> forest in the Tacana III Indigenous Territory	<ul style="list-style-type: none"> <li>- Baseline data were collected at one of two Wattled Curassow sites identified by local residents.</li> <li>- Evaluation of <i>várzea</i> forest contiguous with the area inhabited by Wattled Curassow confirmed illegal logging operations in two new areas.</li> <li>- A census (by boat) of medium to large-sized mammals, birds and reptiles recorded 2323 birds (30 species), 1049 reptiles (3 species) and 17 mammals (6 species).</li> </ul>
Key sites for conservation action identified	One key site is known: Río Negros. A potential second site will be evaluated in January-February.
Wattled Curassow-Environmental Monitoring Plan and Methods Manual for the Tacana III Indigenous Territory.	The survey of the Arroyo Chuto area in January-February will complete the fieldwork required to design the monitoring plan and methods manual.

#### 4. Unexpected results

- Project operation costs are greater than anticipated due to high inflation and unfavourable changes in the USD-Boliviano currency-exchange rate since the original budget was proposed.
- The identification of a potential Wattled Curassow site accessible only during the rainy season necessitated a modification of the original project timeline. For this reason, we would like to request a two-month extension in order to complete our original project goal. The original project period proposed was June 2008 – May 2009, and we request an extension of the project period to July 2009.

#### 5. Next steps

<b>Activities:</b>	<b>Months</b>
▪ Field expedition to survey the Arroyo Chuto area.	January - February 2009
▪ Data analysis and map production.	January - April 2009
▪ Generate Monitoring Plan and Methods Manual.	April - May 2009
▪ Workshop on data interpretation	June 2009
▪ Present results to local and regional stakeholders.	June 2009
▪ Produce final reports.	July 2009