

**F02184114 - Promoting Conservation Through Ecotourism and Education
in Serra Do Urubu Important Bird and Biodiversity Area, Brazil**

Lagoa dos Gatos, Pernambuco, Brazil
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A final report to the Conservation Leadership Programme



From Sociedade para a Conservação das Aves do Brasil - SAVE Brasil

“Conservation of the Serra do Urubu IBA with the local community support”

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Project Partners & Collaborators

We would like to acknowledge the Lagoa dos Gatos Tourism Secretariat which has supported the project in all activities related to the promotion of tourism. The secretary of tourism, Mr. Adeilson Soares was always prompt to help the project team and was also very active in promoting Serra do Urubu IBA in his network.

Other important partners were a wide variety of local schools that were open to the project and to the promotion of visits to Serra do Urubu with the students.

Also of extreme importance and crucial for the project's development was the staff of SAVE Brasil which is the organization responsible for Serra do Urubu IBA's conservation project, that offered all necessary support to this project, with advisory, logistics and funds management.

Section 1:

Summary

The activities proposed to the CLP were successfully completed to accomplish the project purpose: Promote the conservation of the Serra do Urubu IBA through ecotourism, birdwatching and local community awareness. The main activities addressed the four project's objectives: (i) to conduct educational activities (ii) bird monitoring (iii) to conserve and maintain the Serra do Urubu Reserve and (iv) to promote ecotourism. Among the most significant achievements are the 30 educational activities carried out involving 1601 beneficiaries, 4 bird monitoring surveys, with 187 species recorded, including 7 globally threatened species, the installation of basic infrastructure to receive visitors in the reserve (e.g. informative signs along the trails, steps, bridges and handrails), the construction of a visitor center and the conduction of 163 patrolling activities. Also, 54 communication activities were conducted to promote the reserve as an ecotourism destination targeting an estimated audience of 35,942 people. The major impacts were that the Serra do Urubu become an official destination recognized by the State of Pernambuco's Tourism Secretariat, and also the residents are visiting the reserve more frequently – the number of visitors is increasing and this project was very important to contribute to the Reserve's sustainability.

Introduction

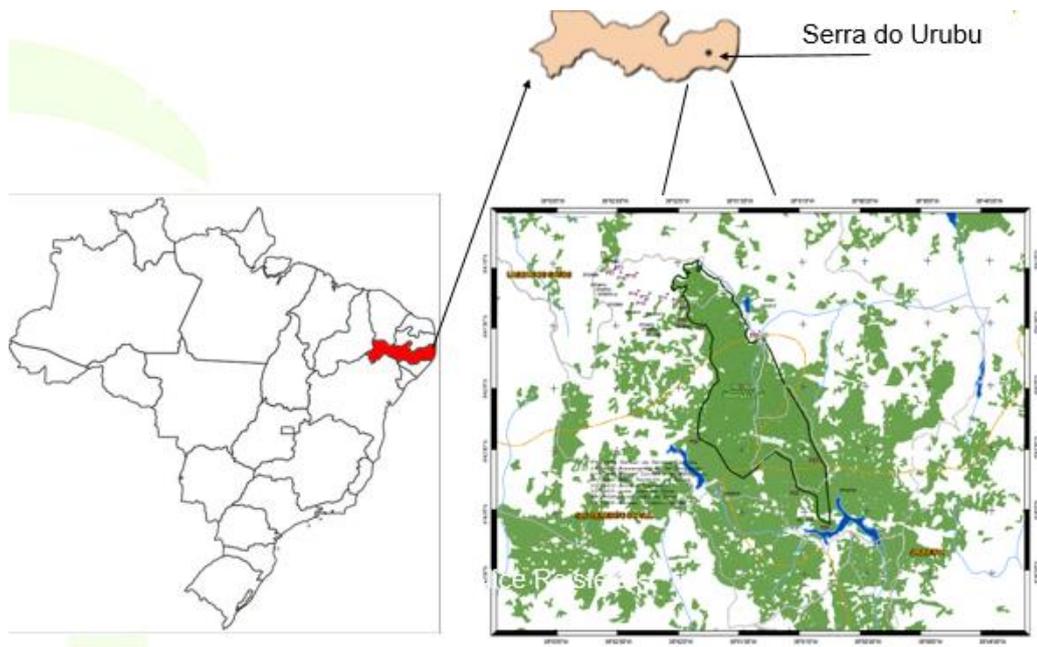
The Brazilian Atlantic Forest is among the most important rainforests in the world. Considered a biodiversity hotspot, it hosts 20,000 plant, 250 mammals, 340 amphibian and 688 bird species. More than 8,000 of these species are endemic and 510 are threatened with extinction. However, less than 11% of its original cover remains intact. In the Northeastern region of Brazil, the scenario is even more critical: the long history of degradation has resulted in less than 2% of the original forests remaining. The Serra do Urubu Forest Complex is one of the largest remaining tracts of montane forest in the state of Pernambuco. Located in a region known as Pernambuco Endemism Center, Serra do Urubu is classified by the Brazilian Ministry of Environment as an area of extreme biological importance and identified by BirdLife International and SAVE Brasil as an Important Bird and Biodiversity Area (IBA) of high priority action.

At Serra do Urubu there are 35 species of mammals, 256 birds, 23 amphibians, 66 orchids, and 39 bromeliads within 18 genera. The area is also home to two of the rarest passerines in Brazil, the Alagoas Foliage-gleaner *Philydor novaesi* and the Alagoas Antwren *Myrmotherula snowi*. In addition, Serra do Urubu is a refuge to other 8 globally threatened birds, and 19 species endemic to the Pernambuco Endemism Center.

The main Municipality in the project area, Lagoa dos Gatos, has approximately 16,000 inhabitants and 54% of the population lives in rural areas. It is among the five municipalities in Pernambuco with the lowest Human Development Index, and also one of the poorest municipalities in Brazil. The fragile social and economic situation directly affects the way the community perceives the environment. People in general are not aware of the global importance of nature, which is seen as a source for unlimited exploitation. Traditionally the forests of Serra do Urubu have been a source of income for local communities providing both timber and charcoal (much of it illegally obtained). The capture of birds for the Illegal trade and poaching also threaten local biodiversity.

In 2004, SAVE Brasil purchased a forest area at Serra do Urubu (Map 1) of approximately 360 hectares named Pedra D'Anta, adjacent to the 630ha RPPN Frei Caneca forest reserve. These areas combined total nearly 1000 ha of protected forests. An office was established in Lagoa dos Gatos and SAVE Brasil has been working on the following activities: environmental education, restoration, Reserve's conservation and management, bird monitoring, tourism promotion and public policy.

Map 1 – Serra do Urubu location and SAVE Brasil's Reserve polygon



The support from the CLP enabled the continuation and extension of the activities under development in the region, in a project that combines conservation and community engagement. Throughout this project it was possible to create a trust relationship with the local community and local government.

Project members

Tatiana Pongiluppi – Biologist pursuing the Master's degree, working for UNDP (United Nations Development Program) as citizen science specialist consultant in Brazil. In the last 8 years I worked in many projects focused on bird conservation at SAVE Brasil. I was team leader of this project.

Alice Crispim Reisfeld – Bachelor in Environmental Management, working for SAVE Brasil since 2013 in many bird conservation projects. My role in the project was focused on environmental education and communication for tourism promotion.

Carlos Otávio de Araújo Gussoni – Biologist, finalizing a post-doctoral degree on Ecology. I have been working with ornithology since I was teenager and my role in the project was bird monitoring.

Maria Cíntia dos Santos – Biologist, Science teacher in local public school. I worked for SAVE Brasil as project assistant for two years and my role in the project was environmental education.

Paula Andrea Rizzutti Prestes - Bachelor's degree in Accounting, worked as financial and administrative supervisor at SAVE Brasil and have helped in the project with the logistics, administrative and financial tasks.

Section 2:

Aim and objectives

Promote the conservation of the Serra do Urubu IBA through ecotourism, birdwatching, patrolling and local community awareness.

Objectives:

1. Develop and implement an education and information dissemination campaign
2. Conduct bird monitoring
3. Maintain and conserve SAVE Brasil's Private Nature Reserve (RPPN Pedra D'Anta)
4. Promote ecotourism and birdwatching in Serra do Urubu

Changes to original project plan

It was not necessary to make any changes in the original project plan.

Methodology

Objective 1: Guided tours to Serra do Urubu were promoted, along with experiences and lectures focusing on birds and their conservation. The activities were held in conjunction with the activities of the Education Center for the Conservation of Serra do Urubu, implemented in the municipality of Lagoa dos Gatos in 2009. In addition to educational activities, meetings were held with local government agencies to establish the foundations necessary for the long-term conservation of Serra do Urubu.

Objective 2: The bird data sampling was carried out during seven field days, every three months, totaling four field visits during the project. Qualitative sampling (observation/direct recording) and

quantitative (Point Counts) were carried out at each field visit, both in SAVE Brasil's Private Nature Reserve (Pedra D'Anta) and in the adjacent forest restoration areas.

During qualitative surveys, all trails defined as sampling areas were covered. Along the route all bird species identified through visual and auditory contact were recorded. For the quantitative survey, the Point Counts method was used (Bibby et al. 1993).

The birds were counted considering a detection radius of up to 50 meters, and the time spent at each point was 15 minutes. The abundance of species was calculated using Relative–Abundance Indices.

Objective 3: This includes the maintenance of the existing structure: caretaker's house, maintenance of trails, fences, internal and access roads, provision of electricity, etc. Constant patrolling (weekly) is necessary to prevent hunting, trapping and illegal timber and charcoal exploitation. It also includes increasing contact with local authorities, engaging with stakeholders and establishing contacts with key players in the region.

Objective 4: SAVE Brasil has been disclosing birding in the reserve locally and nationally. For local advertising, SAVE Brasil sought support by the Lagoa dos Gatos' Secretariat of Tourism. Signposts facilitating the access of visitors to the reserve were installed locally. Maps of trails and a selection of interesting attractions such as large trees, caves, springs and territories of rare and endangered birds were also installed. Nationally, the disclosure of Serra do Urubu as a destination for birdwatching occurred through events in which SAVE Brasil participates, mainly the Birdwatching Fair - Avistar.

Another important communication tool is SAVE Brasil's website and Facebook fanpage, which are being used as channels for disseminating project activities. A brochure promoting ecotourism in the reserve was handed in. As a way of improving the reserve's infrastructure, a visitor center was built, where birdwatchers and other tourists can stay during their visit to the reserve.

Outputs and Results

1. Develop and implement an education and information dissemination campaign

- 24 talks were given at schools involving 1390 students.
- 5 guided tours were promoted in the reserve involving 153 participants. They visited the trails and learned about the forest and its importance through hands on experiences.
- In May 2015 a training course for nature guides was held in Lagoa dos Gatos divided in theoretical and practical classes for 58 participants.

2. Conduct Bird Monitoring

- During the project's period there were four field trips for bird monitoring.
- The data was analyzed quantitatively through the punctual abundance index (ratio of the number of individuals of each species by the number of point counts surveyed).
- 188 bird species (Annex 1) were recorded during the four field trips, which corresponds to almost 75% of the 257 bird species recorded in the area. 7 from the 11 globally threatened bird species were recorded during the monitoring. Among the most abundant birds are the Blue-backed Manakin, Pale-breasted Thrush and Buff-throated Saltator. Regarding the globally threatened species, only six were recorded through the point counts (Table 1). In the restored area, 37 species were recorded, such as some seed dispersers and pollinators; this corresponds to 79% of the species recorded in this area (47 species).

Table 1 – Globally threatened species recorded through point counts

Nome do Taxon	English Name	Status	IPA
<i>Myrmoderus ruficaudus</i>	Scalloped Antbird	EN	0.275
<i>Phylloscartes ceciliae</i>	Alagoas Tyrannulet	EN	0.145
<i>Touit surdus</i>	Golden-tailed Parrotlet	VU	0.03
<i>Terenura sicki</i>	Orange-bellied Antwren	EN	0.025
<i>Leptodon forbesi</i>	White-collared Kite	CR	0.01
<i>Tangara fastuosa</i>	Seven-colored Tanager	VU	0.01

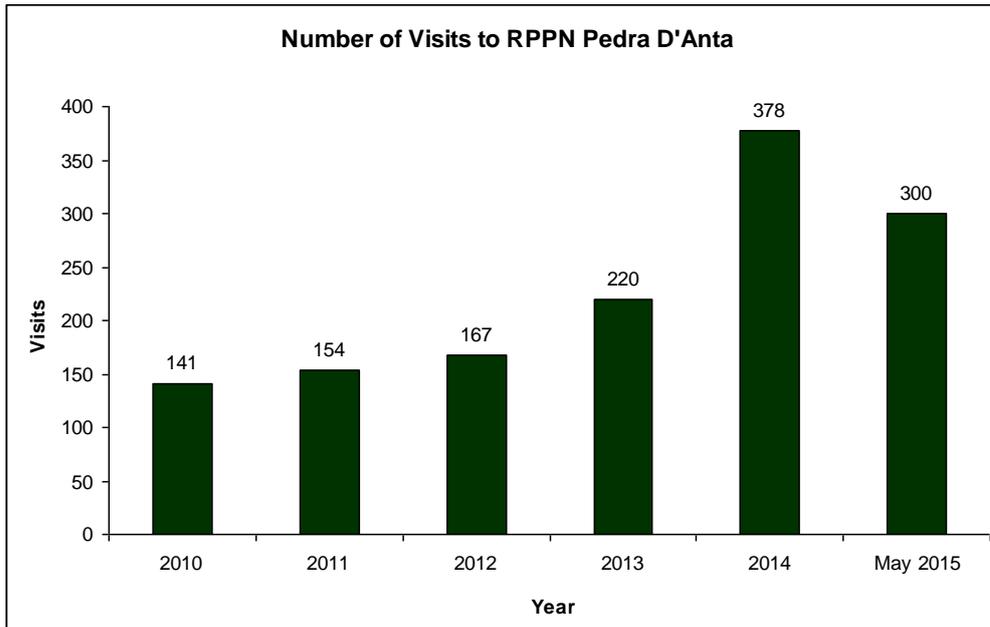
3. Maintain and conserve SAVE Brasil's private reserve

- There were 163 patrolling activities in the Reserve. The park ranger did the patrolling using a standardized form (Annex 2).
- In only 8% of the patrols domestic animals were found and in only one occasion there were signs of poaching.

4. Promote ecotourism and birdwatching in Serra do Urubu

- In May 2014 a website about Serra do Urubu (www.serradourubu.org.br) was created with information about tourism, the Reserve's facilities and options of accommodations in Lagoa dos Gatos.
- A project page was created on Facebook (www.facebook.com/serradourubu).
- 2000 folders about the reserve with information about biodiversity were produced and all of them were distributed in Brazilian Birdwatching Fairs, Ornithological Congress, Lagoa dos Gatos Secretariat of Tourism, Tourist Information booth in Recife Airport and in schools during activities.
- Two talks were given in the Brazilian Birdwatching Fair in São Paulo and Rio de Janeiro. About 100 people attended the talks. Also, some material about Serra do Urubu was shown in SAVE Brasil's booth during the São Paulo event.
- Several structures were installed in the Reserve, such as signs in the roads and in the trails with special information as: agroforestry, forest succession, water cycle, identification of animal tracks, birds and amphibians. Handrails, steps and bridges were also installed in the trails to improve visitors' access to the forest.
- A small center for visitor reception (Annex 3) was built and launched during a visit from SAVE Brasil's Board.
- In 2014, there were 378 visits and in 2015 there were 300 visits until May. This number increased (Figure 1) after the attempt to promote the reserve and it shows us that it was successful and that the reserve has a good potential to be a place for field trips for schools in the region.

Figure 1 – Visits at Reserve along the last years



Communication & Application of results

The project results were communicated to the local government through meetings with the Tourism Secretariat, and for potential donors, through meetings and reports. The results were crucial to create a trust and strong relationship with the local government that was consolidated in a partnership for tourism promotion at Serra do Urubu. Also, they were very important for fundraising for the project, that have had great advances after CLP project's completion, being possible to hire a project coordinator that lives in Lagoa dos Gatos, which is crucial to be more present in the local community and to create basis for the region's long-term conservation.

Monitoring and Evaluation

To monitor and evaluate the activities, the indicators defined in the CLP proposal were continuously measured to be sure that all the goals would be achieved. To help in the monitoring for each objective excel sheets were created including all of the activities conducted, with the transcriptions of the presence list for the educational activities. For the bird monitoring, there were two excel sheets, one for the qualitative and other for the quantitative records. In the communication and tourism promotion activities case, all the events and people reached were included in an excel sheet. The Reserve's visitors sign a guest book to control the number of participants and this book was transcribed in excel sheets also. All of these excel sheets were constantly monitored to check if the proposed activities and number of stakeholders proposed in the project were being achieved. All the qualitative impressions of participants were recorded in reports to keep the memory of stakeholder's interaction with the project.

Achievements and Impacts

The results presented through the bird monitoring and the patrolling activities show that the threats to the forest and avifauna in Serra do Urubu are controlled. In one of the surveyed years, 75% of the bird species that have been recorded in almost 10 years of monitoring were recorded and the seven globally threatened birds were also recorded in this same year. It is important to highlight that a couple

of the globally threatened Orange-bellied Antwren was observed with a chick during the monitoring campaign. This is very good evidence that the reserve is being important for these threatened bird's population. During the patrolling no evidence of illegal logging and charcoal making were found and it has been a pattern in the past years, showing that this activity has ceased. Regarding poaching, one sign was encountered. However, this is a very low impact in one year of monitoring, showing that this activity is reducing. In the past, more signs of poaching used to be found when walking through the reserve's trails.

Also, the community engagement including the local government is increasing. Today we have a partnership with the town's Secretariat of Tourism that is supporting the project and promoting the reserve as a tourist destination and a heritage of Lagoa dos Gatos. Pedra D'Anta Reserve is in the municipality's official website, and they are creating a center for receiving tourists with local guides to help SAVE Brasil to receive tourists at the Reserve. So, the project has a great importance to Serra do Urubu's long term conservation.

Through the educational activities it was possible to show Serra do Urubu to more people in the region, making the reserve better known by residents. Now the community is aware of the Reserve's existence. All of that reflects in the number of subscriptions in the tourist guide training course – there were only 20 vacancies available, but we had to open an extra group so that everyone that was interested was able to attend. The visitor center building is the minimum infrastructure that is important to attract visitors to the reserve. Now the project team has a place to host the visitors with bathrooms and picnic area, which makes the experience at the reserve more comfortable.

All the achievements described here were very important to the conservation of Serra do Urubu IBA, once the visits at the Reserve are increasing; the relationship with the local government and local community is more strengthened and trustful being the basis for the long term conservation in the region.

Capacity Development and Leadership capabilities

The project was very important for capacity development of the team members, once to conduct the activities the team had to contact a wide variety of stakeholders, improving our capacity to adapt our language to talk to different people, our skills of leadership and mentoring to deal with teenagers and children and, specially, our communications skills to promote the reserve as an ecotourism destination.

Also, our project management and fundraising were well developed during this project that gave us hands on experiences to manage the project and to get additional funds to continue the activities.

Section 3:

Conclusion (max 250 words)

The project activities contribute to consolidate the necessary basis for Serra do Urubu's conservation, raising the awareness among the local community and the sense of local pride about the Reserve. The project purpose, that is the conservation of Serra do Urubu IBA, was achieved as we can see in the results of the patrolling activities that shows us that the forest is not suffering pressures and is conserved. It is also confirmed by the bird monitoring, which has registered 75% of the bird species (in one year) recorded along the past ten years. Also, the bird monitoring in the restoration area is giving good signs of colonization of seed dispersers and pollinators, showing that increase in habitat is a good way to reestablish the net of interactions in this forest. The partnership with the local government has been consolidated and it is helping in promoting the Serra do Urubu, both with local residents and

people outside Serra do Urubu region. A Tourism and Sustainability Plan is currently being written for the Reserve, so this document, and one of its purposes is to establish income generation resulting from charging tickets for entrance, which will help with the costs of reserve management. To not discourage visits from locals, their tickets will be less than half of the price paid by visitors from outside of the town, state and country.

Problems encountered and lessons learnt (max 500 words)

- *Which project activities and outcomes went well and why?*
The activities with schools were successful because the project team talked to the school's coordinators before the activities and established a trust relationship with teachers which help to conduct the activities with students. The tourism promotion was good because of the partnership with the local Tourism Secretariat, to keep a close relationship with the local government and shows the benefits that the project can bring to the community, also helping to engage a large scale audience. For the reserve's maintenance activities the patrolling was crucial and it was conducted by the caretaker, who is from the local community and is very passionate about the forest and conservation, which makes a huge difference to conduct this kind of task.
- *Which project activities and outcomes have been problematic and in what way, and how has this been overcome?*
The problematic activities were the guided tours to the reserve and the visitor center building, both due to the rainy season that makes the road to the reserve inaccessible, becoming very difficult to people to get in the reserve. Regarding to the guided tours, during the rainy season instead the project team receive the students at the reserve, the project team went to the schools to raise awareness about the reserve at the scholar environment. In the building case, to transport some materials the project team had to wait for the days without rain.
- *Briefly assess the specific project methodologies and conservation tools used.*
The methods used for bird monitoring were point counts and direct observation, for the education activities were used interpretative trails, planting of saplings of native trees and talks. Regarding communication, the social media and websites were used to promote the reserve online; folders were produced to be distributed in events and locally in tourist spots. The method used for the patrolling at the reserve consisted of periodic visits to different reserve's trails using a standardized form.
- *Please state important lessons which have been learnt through the course of the project and provide recommendations for future enhancement or modification to the project activities and outcomes.*
It is very important to have the local government support to conduct educational and tourism promotion activities.
When working with buildings is very important to maintain a close follow-up with the masons to be sure that all will be as settled previously.
Working with teenagers and children is very different and the language should be adapted, using nature to teach.
For the future it is important to schedule all the guided tours outside of the rainy season because of difficulties in transportation.

In the future (max 200 words)

Beyond the CLP project there are activities that we plan to continue, such as the bird monitoring, the reserve's maintenance, educational activities, tourism promotion, monitoring of restored areas and local government engagement. Also, the project team has raised funds to hire a field coordinator that lives in Lagoa dos Gatos and conducts the activities. Another important activity that should be implemented is to elaborate a diagnosis of the neighbor properties, e. g. if they have forests, what size, if it has documents and if the landowners are interested in selling the land, and for what price. Combined to that we intend to check if they have degraded areas and if they are interested in restoring these areas.

Financial Report

Itemized expenses	Total CLP Requested (USD)*	Total CLP Spent (USD)	% Difference	Details & Justification (Justification must be provided if figure in column D is +/- 25%)	Proposed Spending (Preliminary Report Only)
PHASE I - PROJECT PREPARATION					
Communications (telephone/internet/postage)	1 500.00	1372.49	-9%		
Field guide books, maps, journal articles and other printed materials	200.00	46.08	-77%	There was no need of acquisition of field guides	
Insurance	180.00		-100%	There was no need of insurance because it was paid by other donors	
Visas and permits	300.00		-100%	The visa was not necessary	
Team training					
Reconnaissance					
Other (Phase 1)					
EQUIPMENT					
Scientific/field equipment and supplies					
Photographic equipment					
Camping equipment					
Boat/engine/truck (including car hire)					
Other (Equipment)					
PHASE II - IMPLEMENTATION					
Accommodation for team members and local guides	1 300.00		-100%	these costs were dissolved in Travel line and the balance was transferred to Other (Phase 2) line due to more priority	
Food for team members and local guides	3 000.00	981.15	-67%		
Travel and local transportation (including fuel)	9 270.00	8788.00	-5%		
Customs and/or port duties					
Workshops					
Outreach/Education activities and materials (brochures, posters, video, t-shirts, etc.)	2 000.00	709.09	-65%		
Other (Phase 2)	6 000.00	11729.43	95%		
PHASE III - POST-PROJECT EXPENSES					
Administration	1 250.00	1594.33	28%		
Report production and results dissemination					
Other (Phase 3)					
Total	25 000.00	25 220.57			

Section 4:

Appendices

Annex 1: Bird monitoring list

Species	English Name	Status	Monitoring Period			
			may/14	jul/14	dec/14	apr/15
Tinamidae						
<i>Crypturellus soui</i>	Little Tinamou		1	1	1	1
<i>Crypturellus parvirostris</i>	Small-billed Tinamou		1	1		
Cracidae						
<i>Penelope superciliaris alagoensis</i> ^{CP}	Rusty-margined Guan				1	1
<i>Ortalis araucuan</i>	Speckled Chachalaca		1		1	1
Podicipedidae						
<i>Tachybaptus dominicus</i>	Least Grebe					
Ardeidae						
<i>Tigrisoma lineatum</i>	Rufescent Tiger-Heron		1		1	1
<i>Butorides striata</i>	Striated Heron		1		1	
Cathartidae						
<i>Cathartes aura</i>	Turkey Vulture				1	1

<i>Cathartes burrovianus</i>	Lesser Yellow-headed Vulture		1		1	1
<i>Coragyps atratus</i>	Black Vulture		1		1	1
Accipitridae						
<i>Leptodon forbesi</i> ^{CP}	White-collared Kite	CR	1	1		1
<i>Chondrohierax uncinatus</i>	Hook-billed Kite			1	1	
<i>Geranoaetus albicaudatus</i>	White-tailed Hawk					1
<i>Rupornis magnirostris</i>	Roadside Hawk		1	1	1	1
<i>Pseudastur polionotus</i> ^{ATL}	Mantled Hawk	NT			1	1
<i>Buteo nitidus</i>	Gray Hawk			1	1	1
<i>Buteo brachyurus</i>	Short-tailed Hawk		1			1
<i>Buteo albonotatus</i>			1	1		1
<i>Spizaetus tyrannus</i>	Black Hawk-Eagle			1		1
Rallidae						
<i>Aramides cajaneus</i>	Gray-necked Wood-Rail		1	1	1	1
<i>Laterallus viridis</i>	Russet-crowned Crake				1	
<i>Laterallus melanophaius</i>	Rufous-sided Crake					1
<i>Laterallus exilis</i>	Gray-breasted Crake					1
<i>Porzana albicollis</i>	Ash-throated Crake		1		1	1
<i>Pardirallus nigricans</i>	Blackish Rail			1	1	1
<i>Porphyrio martinicus</i>	Purple Gallinule		1		1	1
Jacanidae						
<i>Jacana jacana</i>	Wattled Jacana		1			
Columbidae						
<i>Columbina talpacoti</i>	Ruddy Ground-Dove		1	1	1	1
<i>Columbina picui</i>	Picui Ground-Dove		1			
<i>Patagioenas speciosa</i>	Scaled Pigeon		1		1	1
<i>Patagioenas cayennensis</i>	Pale-vented Pigeon		1			
<i>Leptotila verreauxi</i>	White-tipped Dove		1		1	1
<i>Leptotila rufaxilla</i>	Gray-fronted Dove		1		1	
<i>Geotrygon montana</i>	Ruddy Quail-Dove		1		1	1
Cuculidae						
<i>Piaya cayana</i>	Squirrel Cuckoo		1	1	1	1
<i>Crotophaga ani</i>	Smooth-billed Ani		1	1	1	1
<i>Tapera naevia</i>	Striped Cuckoo			1	1	
Strigidae						
<i>Pulsatrix perspicillata</i>	Spectacled Owl		1	1	1	1
<i>Strix virgata</i>	Mottled Owl		1			1
Caprimulgidae						
<i>Lurocalis semitorquatus</i>	Short-tailed Nighthawk		1	1	1	1
<i>Hydropsalis albicollis</i>	Pauraque		1	1	1	1
Apodidae						
<i>Chaetura meridionalis</i>	Sick's Swift		1	1	1	
Trochilidae						
<i>Glaucis hirsutus</i>	Rufous-breasted Hermit		1	1	1	1
<i>Phaethornis ruber</i>	Reddish Hermit		1	1	1	1
<i>Phaethornis pretrei</i>	Planalto Hermit		1	1	1	1
<i>Eupetomena macroura</i>	Swallow-tailed Hummingbird		1	1	1	1
<i>Aphantochroa cirrochloris</i> ^{ATL}	Sombre Hummingbird		1	1		
<i>Florisuga fusca</i> ^{ATL}	Black Jacobin				1	
<i>Lophornis magnificus</i>	Frilled Coquette		1			
<i>Chlorostilbon notatus</i>	Blue-chinned Sapphire		1	1	1	1
<i>Thalurania watertonii</i> ^{ATL}	Long-tailed Woodnymph	NT	1	1	1	1

<i>Hylocharis sapphirina</i>	Rufous-throated Sapphire			1		
<i>Hylocharis cyanus</i>	White-chinned Sapphire				1	
<i>Amazilia versicolor</i>	Versicolored Emerald		1			1
<i>Amazilia fimbriata</i>	Glittering-throated Emerald		1	1	1	1
<i>Heliothryx auritus</i>	Black-eared Fairy		1	1	1	1
<i>Calliphlox amethystina</i>	Amethyst Woodstar				1	
Galbulidae						
<i>Galbula ruficauda</i>	Rufous-tailed Jacamar		1	1	1	
Ramphastidae						
<i>Pteroglossus incriptus</i>	Lettered Aracari		1	1	1	
Picidae						
<i>Picumnus exilis pernambucensis</i> ^{CP}	Golden-spangled Piculet		1	1	1	1
<i>Picumnus fulvescens</i>	Tawny Piculet				1	1
<i>Veniliornis affinis</i>	Red-stained Woodpecker		1	1		1
<i>Veniliornis passerinus</i>	Little Woodpecker		1	1	1	1
<i>Dryocopus lineatus</i>	Lineated Woodpecker			1		
Falconidae						
<i>Caracara plancus</i>	Southern Caracara		1	1	1	1
<i>Milvago chimachima</i>	Yellow-headed Caracara		1	1	1	1
<i>Herpethotes cachinnans</i>	Laughing Falcon				1	1
Psittacidae						
<i>Diopsittaca nobilis</i>	Red-shouldered Macaw		1	1	1	1
<i>Forpus xanthopterygius</i>	Blue-winged Parrotlet		1	1	1	1
<i>Brotogeris tirica</i> ^{ATL}	Plain Parakeet		1		1	1
<i>Touit surdus</i> ^{ATL}	Golden-tailed Parrotlet	VU	1	1	1	1
Thamnophilidae						
<i>Terenura sicki</i> ^{CP}	Orange-bellied Antwren	EN	1	1	1	1
<i>Myrmotherula axillaris</i>	White-flanked Antwren		1	1	1	1
<i>Formicivora grisea</i>	White-fringed Antwren		1	1	1	1
<i>Dysithamnus mentalis</i>	Plain Antvireo		1	1	1	1
<i>Herpsilochmus atricapillus</i>	Black-capped Antwren		1	1	1	1
<i>Herpsilochmus rufimarginatus</i>	Rufous-winged Antwren					1
<i>Thamnophilus torquatus</i>	Rufous-winged Antshrike		1	1	1	
<i>Thamnophilus caeruleus pernambucensis</i> ^{CP}	Variable Antshrike		1	1	1	1
<i>Taraba major</i>	Great Antshrike		1	1	1	1
<i>Myrmoderus ruficaudus</i> ^{CP}	Scalloped Antbird	EN	1	1	1	1
<i>Pyriglena pernambucensis</i> ^{CP}	White-backed Fire-eye		1	1	1	1
<i>Cercomacra laeta sabino</i> ^{CP}	Willis' Antbird				1	
Conopophagidae						
<i>Conopophaga lineata cearae</i> ^{ATL}	Rufous Gnateater		1	1	1	1
<i>Conopophaga melanops nigrifrons</i> ^{CP}	Black-cheeked Gnateater		1	1	1	1
Dendrocolaptidae						
<i>Dendrocincla taunay</i> ^{CP}	Plain-brown Woodcreeper		1	1	1	1
<i>Sittasomus griseicapillus</i>	Olivaceous Woodcreeper		1	1	1	1
<i>Dendroplex picus</i>	Straight-billed Woodcreeper		1	1	1	1
<i>Xiphorhynchus atlanticus</i> ^{ATL}	Northern Lesser Woodcreeper		1	1	1	1
Xenopidae						
<i>Xenops minutus alagoanus</i> ^{CP}	Plain Xenops		1	1	1	1
<i>Xenops rutilans</i>	Streaked Xenops		1	1	1	1
Furnariidae						
<i>Phacellodomus rufifrons</i>	Rufous-fronted Thornbird		1	1	1	1

<i>Synallaxis infuscata</i>	Pinto's Spinetail	EN				1
<i>Synallaxis frontalis</i>	Sooty-fronted Spinetail		1	1	1	1
<i>Synallaxis hypospodia</i>	Cinereous-breasted Spinetail		1	1	1	1
<i>Cranioleuca semicinerea</i>	Gray-headed Spinetail		1	1	1	
Pipridae						
<i>Neopelma pallescens</i>	Pale-bellied Tyrant-Manakin					1
<i>Ceratopipra rubrocapilla</i>	Red-headed Manakin		1	1	1	1
<i>Manacus manacus</i>	White-bearded Manakin		1	1	1	1
<i>Chiroxiphia pareola</i>	Blue-backed Manakin		1	1	1	1
Tityridae						
<i>Pachyramphus viridis</i>	Green-backed Becard				1	1
<i>Pachyramphus polychopterus</i>	White-winged Becard				1	1
Platyrinchidae						
<i>Platyrinchus mystaceus niveigularis</i> ^{CP}	White-throated Spadebill		1	1	1	1
Rhynchocyclidae						
<i>Leptopogon amaurocephalus</i>	Sepia-capped Flycatcher		1	1	1	1
<i>Phylloscartes ceciliae</i>	Alagoas Tyrannulet	EN	1	1	1	1
<i>Tolmomyias sulphurescens</i>	Yellow-olive Flycatcher		1	1		
<i>Tolmomyias flaviventris</i>	Yellow-breasted Flycatcher		1	1	1	1
<i>Poecilotriccus fumifrons</i>	Smoky-fronted Tody-Flycatcher		1		1	1
<i>Todirostrum cinereum</i>	Common Tody-Flycatcher		1	1	1	1
<i>Hemitriccus griseipectus</i>	White-bellied Tody-Tyrant		1	1	1	1
<i>Myiornis sp.</i>	Eared Pygmy-Tyrant		1		1	
Tyrannidae						
<i>Hirundinea ferruginea</i>	Cliff Flycatcher			1	1	1
<i>Zimmerius gracilipes</i>	Slender-footed Tyrannulet		1	1	1	1
<i>Euscarthmus meloryphus</i>	Tawny-crowned Pygmy-Tyrant					1
<i>Camptostoma obsoletum</i>	Southern Beardless-Tyrannulet		1	1	1	1
<i>Elaenia flavogaster</i>	Yellow-bellied Elaenia		1	1	1	1
<i>Elaenia spectabilis</i>	Large Elaenia					1
<i>Elaenia mesoleuca</i>	Olivaceous Elaenia					1
<i>Myiopagis caniceps</i>	Gray Elaenia		1			1
<i>Capsiempis flaveola</i>	Yellow Tyrannulet		1	1	1	1
<i>Phyllomyias fasciatus</i>	Planalto Tyrannulet			1	1	1
<i>Attila spadiceus</i>	Bright-rumped Attila			1		1
<i>Legatus leucophaeus</i>	Piratic Flycatcher				1	
<i>Myiarchus tuberculifer</i>	Dusky-capped Flycatcher		1		1	1
<i>Myiarchus ferox</i>	Short-crested Flycatcher		1		1	1
<i>Myiarchus tyrannulus</i>	Brown-crested Flycatcher				1	
<i>Rhytipterna simplex</i>	Grayish Mourner				1	1
<i>Pitangus sulphuratus</i>	Great Kiskadee		1	1	1	1
<i>Myiodynastes maculatus</i>	Streaked Flycatcher		1			
<i>Megarynchus pitangua</i>	Boat-billed Flycatcher		1	1	1	1
<i>Myiozetetes similis</i>	Social Flycatcher		1	1	1	1
<i>Tyrannus melancholicus</i>	Tropical Kingbird		1	1	1	1
<i>Empidonomus varius</i>	Variegated Flycatcher		1		1	1
<i>Myiophobus fasciatus</i>	Bran-colored Flycatcher		1	1	1	1
<i>Fluvicola nengeta</i>	Masked Water-Tyrant		1	1	1	1
<i>Lathrotriccus euleri</i>	Euler's Flycatcher		1	1	1	1
<i>Cnemotriccus fuscatus</i>	Fuscous Flycatcher					1
<i>Contopus cinereus</i>	Tropical Peewee			1		
Vireonidae						

<i>Cyclarhis gujanensis</i>	Rufous-browed Peppershrike		1	1	1	1
<i>Vireo olivaceus</i>	Red-eyed Vireo		1	1	1	1
<i>Hylophilus amaurocephalus</i>	Gray-eyed Greenlet			1	1	
Hirundinidae						
<i>Stelgidopteryx ruficollis</i>	Southern Rough-winged Swallow		1	1	1	1
<i>Progne tapera</i>	Brown-chested Martin		1	1		
<i>Progne chalybea</i>	Gray-breasted Martin				1	
Troglodytidae						
<i>Troglodytes musculus</i>	Southern House-Wren		1	1	1	1
<i>Pheugopedius genibarbis</i>	Moustached Wren		1	1	1	1
Poliopitidae						
<i>Ramphocaenus melanurus</i>	Long-billed Gnatwren		1	1	1	1
<i>Poliopitila plumbea</i>	Tropical Gnatcatcher		1	1	1	1
Turdidae						
<i>Turdus flavipes</i>	Yellow-legged Thrush		1			
<i>Turdus rufiventris</i>	Rufous-bellied Thrush		1	1	1	1
<i>Turdus leucomelas</i>	Pale-breasted Thrush		1	1	1	1
<i>Turdus amaurochalinus</i>	Creamy-bellied Thrush			1		
<i>Turdus albicollis</i>	White-necked Thrush		1		1	1
Mimidae						
<i>Mimus saturninus</i>	Chalk-browed Mockingbird		1	1		1
Motacillidae						
<i>Anthus lutescens</i>	Yellowish Pipit			1		
Passerellidae						
<i>Ammodramus humeralis</i>	Grassland Sparrow		1			
<i>Arremon taciturnus</i>	Pectoral Sparrow		1	1	1	1
Parulidae						
<i>Sethophaga pitiayumi</i>	Tropical Parula		1	1	1	1
<i>Basileuterus culicivorus</i>	Golden-crowned Warbler		1	1	1	1
<i>Myiothlypis flaveolus</i>	Flavescent Warbler		1	1	1	
Icteridae						
<i>Icterus pyrrhopterus</i>	Variable Oriole		1	1	1	1
<i>Sturnella superciliaris</i>	White-browed Blackbird		1	1		
Thraupidae						
<i>Coereba flaveola</i>	Bananaquit				1	1
<i>Saltator maximus</i>	Buff-throated Saltator		1	1	1	1
<i>Tachyphonus rufus</i>	White-lined Tanager		1	1	1	1
<i>Ramphocelus bresilius</i> ^{ATL}	Brazilian Tanager		1	1	1	1
<i>Lanio cristatus</i>	Flame-crested Tanager			1		1
<i>Tangara fastuosa</i> ^{CP}	Seven-colored Tanager	VU	1	1		1
<i>Tangara cyanocephala corallina</i> ^{ATL}	Red-necked Tanager		1	1	1	1
<i>Tangara cayana</i>	Burnished-buff Tanager		1	1	1	1
<i>Tangara sayaca</i>	Sayaca Tanager				1	1
<i>Tangara palmarum</i>	Palm Tanager		1	1	1	1
<i>Tersina viridis</i>	Swallow Tanager		1			1
<i>Dacnis cayana</i>	Blue Dacnis		1	1	1	1
<i>Cyanerpes cyaneus</i>	Red-legged Honeycreeper					1
<i>Chlorophanes spiza</i>	Green Honeycreeper				1	
<i>Hemithraupis guira</i>	Guira Tanager		1	1	1	1
<i>Sicalis luteola</i>	Grassland Yellow-Finch					1
<i>Emberizoides herbicola</i>	Wedge-tailed Grass-Finch		1			1
<i>Volatinia jacarina</i>	Blue-black Grassquit		1		1	1

<i>Sporophila nigricollis</i>	Yellow-bellied Seedeater		1	1	1	1
<i>Sporophila bouvreuil</i>	Capped Seedeater					1
<i>Tiaris fuliginosus</i>	Sooty Grassquit		1		1	
Fringillidae						
<i>Euphonia chlorotica</i>	Purple-throated Euphonia		1	1	1	1
<i>Euphonia violacea</i>	Violaceous Euphonia		1	1	1	1
<i>Euphonia pectoralis</i>	Chestnut-bellied Euphonia				1	
Estrildidae						
<i>Estrilda astrild</i>	Common Waxbill				1	

* Status: CR (critically endangered); EN (Endangered); VU (vulnerable); NT (Near Threatened)

ATL: Endemic to Atlantic Forest; CP: Endemic to the Pernambuco Endemism Center

Relatório de Fiscalização – Estado de Conservação

RPPN Pedra D'Anta

Trilha:

Data: ____/____/____

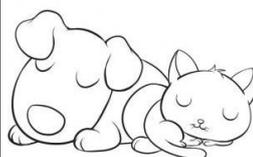
Horário: ____:____

Vestígios:

Caça



Animais domésticos



Retirada de madeira



Captura de animais



Fogo



Outros

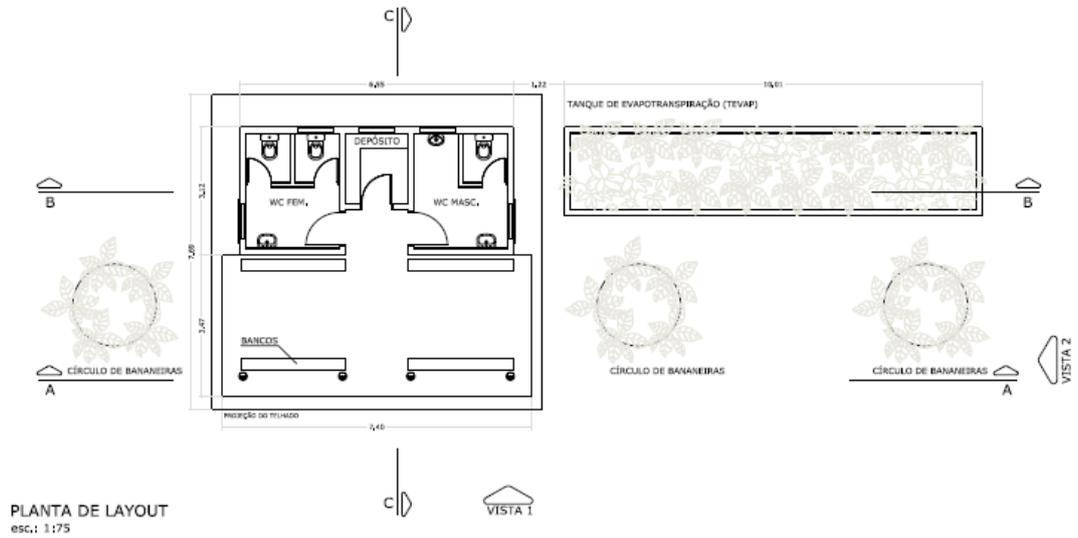
Annex 3: Visitor Center Layout

Centro de visitantes SAVE - RPPN Pedra D'Anta, Lagos dos Gatos, PE

PROJETO EXECUTIVO
PLANTA DE LAYOUT

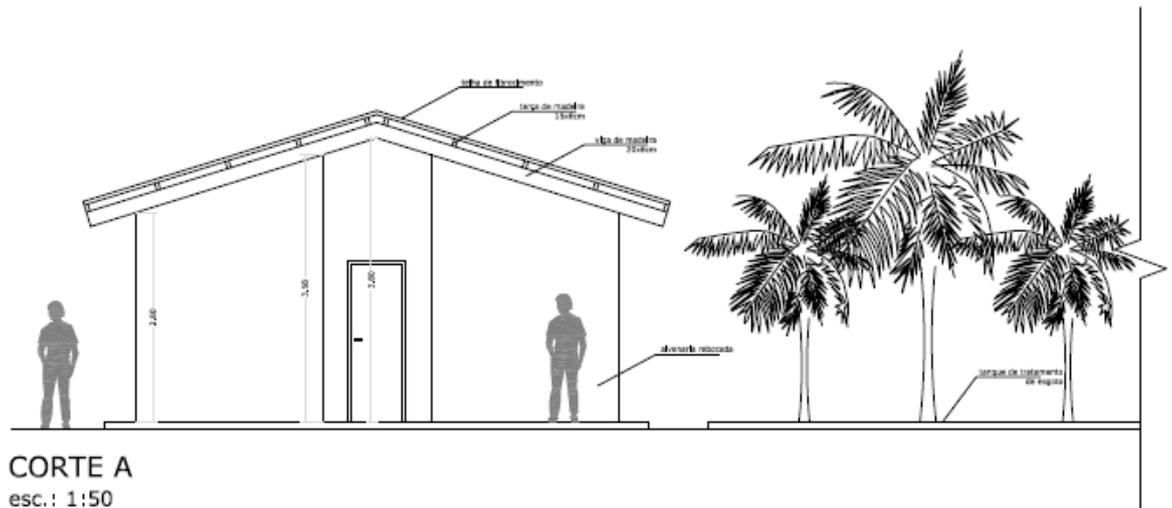
DATA: 18/02/2015 - REV. 01
esc.: 1/75

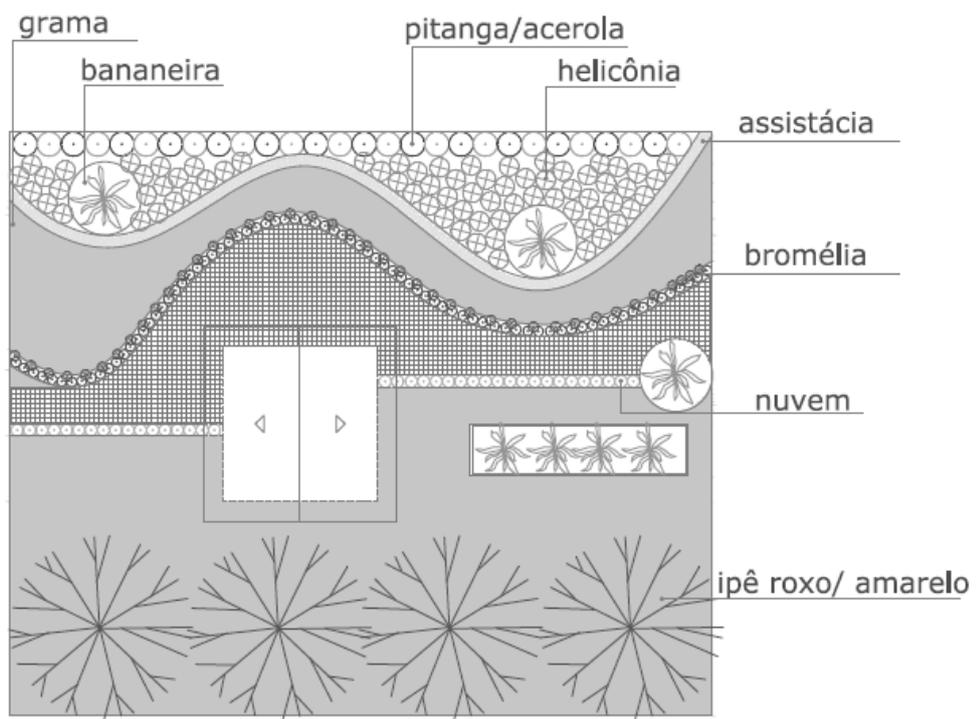
02/09



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ESCALA: 1/200

Annex 4: Activities' pictures



Figure 1: Students at the interpretative trail at the Reserve



Figure 2: Attendees during the practical activity of the training course acquiring knowledge from Zezito, the Reserve's caretaker



Figure 3: Participants of the training course in the forest with the ornithologist Edson explaining about Serra do Urubu's birds



Figure 4: Training course participants planting native species from Atlantic Forest at the Reserve



Figure 5: Steps and handrail installed in the main trail



Figure 6: Bridges in the main trail



Figure 7. Reserve's Visitor Center

Annex 5- CLP M&E measures table

Output	Number	Additional Information
Number of CLP Partner Staff involved in mentoring the Project	3	
Number of species assessments contributed to (E.g. IUCN assessments)	8	
Number of site assessments contributed to (E.g. IBA assessments)	1	
Number of NGOs established	0	
Amount of extra funding leveraged (\$)	106,330	Multiple donors
Number of species discovered/rediscovered	0	
Number of sites designated as important for biodiversity (e.g. IBA/Ramsar designation)	0	
Number of species/sites legally protected for biodiversity	0	
Number of stakeholders actively engaged in species/site conservation management	3	
Number of species/site management plans/strategies developed	0	
Number of stakeholders reached	1601	
Examples of stakeholder behaviour change brought about by the project.	0	
Examples of policy change brought about by the project	1	The creation of the tourist route 104 by the state government that includes the Reserve.
Number of jobs created	3	
Number of academic papers published	0	
Number of conferences where project results have been presented	2	

Bibliography

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Bibby, C.J.; Burgess, N.D.; Hill, D.A. Birds Census Techniques. Academy Press,1993. 257 p

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PROBIO (Projeto de Conservação e Utilização Sustentável da Diversidade Biológica Brasileira), 2004. Áreas prioritárias para a conservação, utilização sustentável e repartição de benefícios da biodiversidade brasileira. Ministério do Meio Ambiente, Brasília, Brasil.

Address list and web links

An annotated list of useful names, addresses and websites

www.savebrasil.org.br

www.serradourubu.org.br

www.ebird.org (bird lists of visitors can be consulted)

<http://lagoadosgatos.pe.gov.br> (Municipality of Lagoa dos Gatos)

<http://datazone.birdlife.org/site/factsheet/serra-do-urubu-iba-brazil> (BirdLife International's webpage for Serra do Urubu IBA)