Final Report

COMPLEMENTING LOCAL COMMUNITIES BIODIVERSITY CONSERVATION INITIATIVES IN SOUTHERN CEBU, PHILIPPINES

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A final report on the

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2007

Siloy Project
A final report on the COMPLEMENTING LOCAL COMMUNITIES BIODIVERSITY CONSERVATION INITIATIVES IN SOUTHERN CEBU, PHILIPPINES

Supported by

Conservation Leadership Programme
The Wetland Trust

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Complementing Local Communities Biodiversity Conservation Initiatives in Southern Cebu, Philippines

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PROJECT SUMMARY

The field research component of the project started in February 2006 and ended in June 2007. A total of 12 active nests and 13 inactive nests were identified of which 9 of the nest successfully fledged. Two of the nests were closely monitored from the day of hatching up to the day the nestlings fledged. The locations of the nesting territories were plotted on the map and overlaid on the existing forest. This information was used to determine areas where the Black Shamas are concentrated and to identify areas where access and disturbance will be limited.

The conservation awareness activities were implemented both at the local sites and at the national level. A total of six mobile education exhibits depicting the conservation importance of the Black Shama, associated species and habitats were conducted by CBCF in partnership with Alcoy Duaw-Sangyaw Youth volunteers. The project also presented the results of the Black Shama project in the second Philippine Bird festival with a theme “Endemic: only in the Philippines”. Two local volunteers trained by the project participated in the said activity. Added to this, the project also joined the 2nd Alcoy Siloy Festival where the Black Shama mascot was paraded along with the different contenders for the street dancing contest using originally derived steps of the Black Shama behaviour.

As part of the advocacy of the Black Shama project, information generated from the study was used to lobby for the dissolution of the proposed farm-to-market road that would directly lead to the forest and potentially increase the risk of destructive activities in the last stronghold of threatened endemic and native species of Cebu.

The project also trained two forestry students and 3 local forest wardens in monitoring active and inactive nest of understorey birds especially that of the Black Shama. As a result of the training, the trained forest wardens regularly report nesting

activity of birds to CBCF, local organizations where they are a member and the municipal government of Alcoy.

As a post-project activity, the project intends to provide information materials and printed pictures of the Black Shama that can be used by local youth volunteers doing local conservation education activities.

INTRODUCTION

Philippines ranks as one of the top most diverse countries in the whole world (Sttatersfield, 1992, Heaney and Regalado, 1996). The island of Cebu in central Philippines is considered to be one of the endemic subcenter in the Philippines. BirdLife International identified Cebu as an Important Bird Area (IBA). It is the world's most critical Endemic Bird Areas (EBA) in terms of both numbers of threatened endemic species and degrees of threat, with only less than 1% of forest cover in 1987 (Dickinson *et al.,* 1991, Stattersfield *et al,* 1998). It has two threatened endemic species including the Cebu Flowerpecker *Dicaeum quadricolor* and Black Shama *Copsychus cebuensis*. A total of 12 endemic subspecies of birds of which two species are threatened (Streak-breasted Bulbul *Hypsipetes siquijorensis monticola* and Philippine Hanging Parakeet *Loriculus philippensis chrysonotus*). All of these threatened species are distributed across seven forest fragments with forest cover ranging from 30 hectares to 1,200 hectares.

The Black Shama, locally known as "Siloy", was once described as the rarest Shama in the Philippines (Hachisuka 1936). The bird was assumed originally to have inhabited primary forest (Rabor,1959) but with the almost deforestation of Cebu, the bird thrives in a variety of secondary habitats such as scrub and cut-over forests, plantations, and bamboo groves (Gonzales and Rees 1988; Dickinson *et al.*, 1991; Magsalay, 1993; Brooks *et.al*., 1995a; Collar *et al.*, 1999). In 2003 to 2004, a study on population and habitat preferences of the Black Shama funded by Rufford Small Grants for Nature Conservation and Threatened species Program of Haribon Foundation Inc showed that Black Shama prefers forest habitat than plantation and scrubland areas (Jakosalem *et al.,* 2005). Black Shama was also encountered more in valley-bottom forests than on ridge-top forests. The study also attempted to estimate the population density of Black Shama in the largest forest in Alcoy.

The results of the study were presented to the local stakeholders particularly to the local government of Alcoy municipality. The municipal council took pride on the presence of the largest population of Black Shama and the largest forest in Cebu Island

that together with CBCF started the 1st Alcoy Siloy (Black Shama) Festival and allocated annual appropriation for Forest and Wildlife Protection Programme in 2005. Part of the component of the forest and wildlife protection activities is the conduct of regular Black Shama monitoring conducted by trained local volunteers and forest wardens.

The previous projects conducted had initiated the engagement of the local government of Alcoy to implement the Siloy (Black Shama) Protection Program. This project strengthened the collaboration with the different stakeholders in implementing biodiversity conservation project and up scaled the conservation initiatives particularly relating to community-based forest and wildlife protection and conservation awareness. This project also strengthens the capacity of local community partners in implementing biodiversity conservation projects focus on the protection of forest and wildlife as well as in monitoring threatened species. As part of the preparations for threatened species monitoring, this study identified breeding pairs of Black Shama and generated new information on the breeding ecology of the species. A component on conservation awareness targets communities surrounding the critical sites where the Black Shama is located. In addition, the project allocated a significant element on building the capacity of local volunteers in continuing the conduct of local conservation education activities as well as in monitoring population of Black Shama's.

PROJECT SITE DESCRIPTION

The forest in Nug-as has a total area of 1, 036 ha, including scrublands and plantations. It is located within the interior portion of the municipality of Alcoy. It covers about four (4) barangays namely: Nug-as, Atabay, San Agustin and Poblacion.

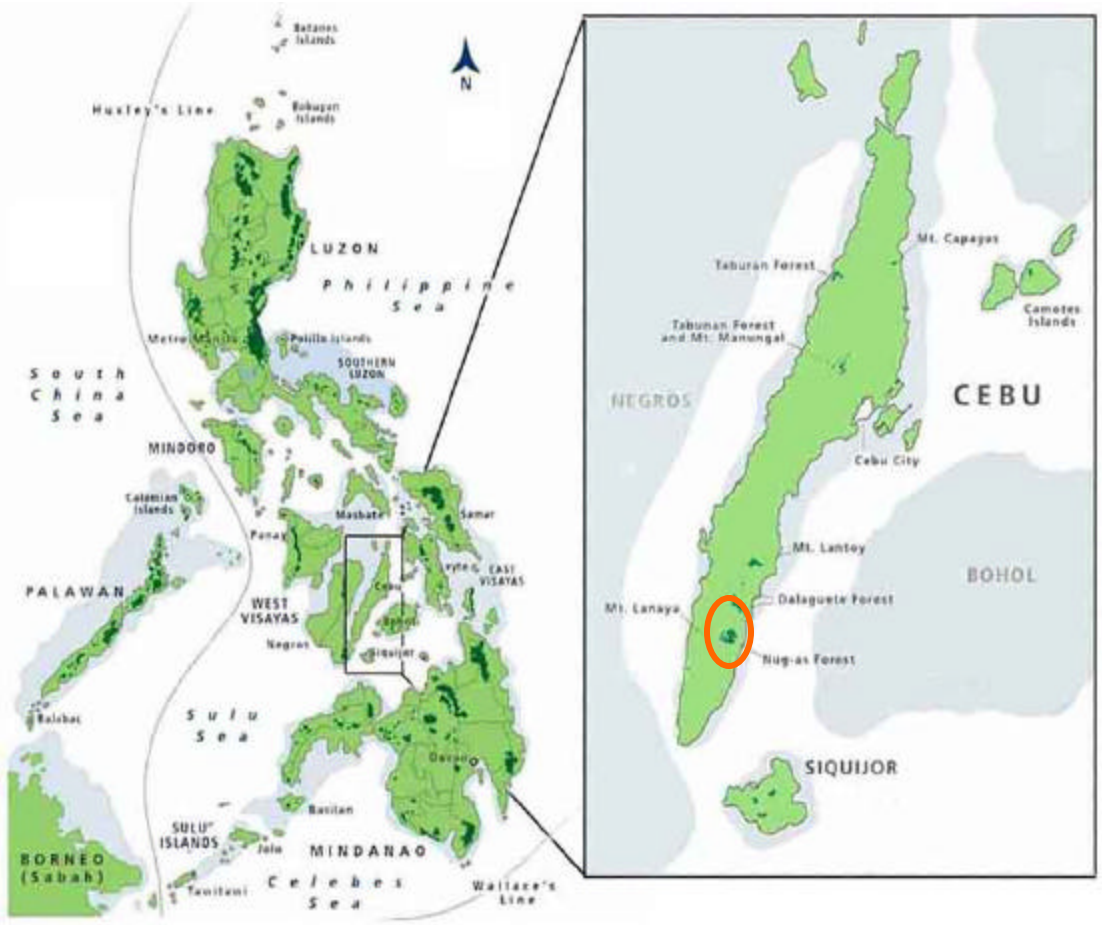
There were two main types of forest in Nug-as secondary lowland forest and scrub at 200-500 m and transitional mid-montane forest above 500 m (Mallari *et al.*, 2001). The canopy of the secondary forest was composed of *Artocarpus* sp., *Syzygium* sp., *Ficus* spp., "Maribuho" or mountain agoho (*Casuarina rumphiana*), bagalunga (*Melia dubia*), binunga (*Macaranga* sp.), Cebu Cinnamon (*Cinnamomum cebuense*) and *Melastoma* sp. Notable indigenous plants include *Palaqium philippense, Canarium, Helicia, Eugenia, Syzygium* and *Ficus* spp. The understorey was filled with ground orchids, herbaceous and woody vines, a variety of ferns, climbing bamboo and rattan

(*Calamus* sp.). Rare plants noted were *Medenilla albiflora,* various epiphytic ferns (i.e. *Asplenium, Platycerium*), pitcher plants and orchids.

Moss cover was almost absent and limited to certain portions of the forest. Decaying logs and dead standing trees were few but twigs and broken branches were abundant. Decaying leaf litter was moderately thick (N=20; range 0.44 cm – 5.3 cm). The substrate is made up of limestone and covers most of the forest floor (n=8; range: 40%-88% of a 10x10 meter plot).

There were several existing trails used by the locals in going to farms and by forest wardens during their daily patrol. There were a total of four farms, averaging half a hectare each, located inside the forest areas. Three of these farms were awarded with Certificates of Stewardship Contracts (CSC is a tenurial/legal instrument awarded by the Department of Environment and Natural Resources to organized local communities with a Community-based Forest Management Agreement). There were no houses inside the forest but a total of 14 households were located near the forest edge.

Fig. 1 Map of Cebu Showing the forest fragments highlighted the Alcoy Forest. (Map © FFI Philippines)



PROJECT OBJECTIVES

The main objective of the project was to conduct ecological observations on the breeding biology of the Black Shama and to use the information generated to develop a community-based conservation programme. This is achieved through the following categories:

Research

- To conduct ecological observation (breeding behavior and nesting behavior) of the Black Shama in Alcoy Forest.

Capacity Building

- To strengthen wildlife monitoring activities of local interest groups through Community Wildlife Identification and Monitoring Training targeting Forest Wardens, Barangay Police and Forest Ranger.
- Provide technical assistance to forest rangers in improving reporting system and integrating monitoring results to Department of Environment and Natural Resources (DENR) and Local Government Units.

Conservation Education/Awareness Raising

- To conduct campaigns and generate support in conservation awareness for the threatened Cebu black Shama
- To strengthen locally-based organized youth groups working for biodiversity conservation and to provide technical and financial support to the youth volunteers.

Fig. 2. Right Nug-as Forest, left a male Black Shama (*C. cebuensis*) (Photo by Godfrey Jakosalem Nug-as Forest; Male Black Shama Nilo Arribas Jr.)

METHODS

RESEARCH

Areas where the Black Shama was reported where visited and surveyed. All dead standing trees, tree hollows and tree holes were investigated for presence of Black Shama nests. The location of nesting trees was marked using Garmin Global Positioning System (GPS). For each nesting tree, the following characteristics were taken: tree species, tree status (dead or alive; standing or lying on the ground; decaying); diameter at breast height (DBH) of tree; nest opening or entrance; depth of nesting platform; height of the lowest part of the entrance to ground. Nest composition and description was also taken.

Nests with Black Shama eggs were monitored and visited briefly to check if the eggs have hatched. Visits were limited and were conducted at least once in three days and extreme caution was exercised when visiting the nests. Observations start as soon as the eggs have hatched. An observation hide was set at least 15-20 meters away from the nest. Observations include the following: number of visits to the nest by the male and female parent, time incurred in the nest during each visit, activity of the parents while in the nest or outside the nest, number of times fecal sacks were removed from the nests as well as behavior towards other species and individual Shamas. Whenever possible food material brought to the nest were identified using a Bushnell 20x by 60x spotting scope. Size of the food material was estimated relative to the size of the bill of the Shama. The day to day development of the young was also documented during brief visits to the nest.

In describing the breeding habitat, features such as stratification, elevation, disturbances, forest size, density of vines and saplings, presence of bamboo, presence of dead standing trees, diameter at breast height of trees within 10-meter distance from the nest were gathered from each study site.

CAPACITY BIULDING

Local forest wardens, out-of-school youth volunteers were trained on field identification and conduct of line transects and point counts methods. Training was also given to forest wardens in analyzing data gathered and in using the information to lobby support for the protection of Shama and its nesting trees. Results of the population monitoring surveys were incorporated in the monthly reports of the forest wardens. The information was consolidated and reviewed monthly to help improve the reporting systems of the forest wardens. The information was later integrated in the municipal

records under the office of the Municipal Environment and Natural Resources Office or by the Environment Officer under the Municipal Agriculture Office.

CONSERVATION EDUCATION/ AWARENESS

Information on the status of the forest, local distribution of the key species of birds (i.e. Black Shama and Cebu Flowerpecker), and general ecological observations was presented during the regular village councils and municipal council meeting. The presentations usually generate interest from local officials on the presence of threatened wildlife in the area. This also updates them on what's going on with the project. This was also the time where the performance of the forest wardens was evaluated and the extent of community involvement to the project is assessed.

School visits were also conducted in collaboration with the local youth organization. Lectures on biodiversity, conservation and importance of species and habitats were presented as main topics for discussion. Photo outputs, activities (participation of the Alcoy annual Siloy Festival or Black Shama Festival) and progress of the project were prominently shown in public places and schools during conduct of exhibits. The results of the study were also presented during the Wildlife Conservation Society of the Philippines (WCSP) symposium, annual forest convention in Alcoy and during the Action Planning workshop for threatened species organized by Threatened Species Program of Haribon Foundation Inc. A scientific paper was submitted to a scientific journal for publication.

PROJECT RESULTS AND OUTCOMES

RESEARCH

Breeding Biology

A study on the breeding biology and nesting habitat selection of the endangered Black Shama (*C. cebuensis*) was conducted from February 2006 to August 2006 and February 2007 to July 2007. From the month of February to August 2006, we found and monitored a total of 26 nest of which 50% were inactive. Of the 13 active nests, nine successfully fledged. All nests were found with inside the forest specifically along the ridge top forest or at the slope.

The nests were built inside dead standing trees with a height ranging from 2 m to 4 m high above ground. Active nests contains two aquamarine blue eggs with blotches of dark moss green but one nest was observed with four Black Shama eggs. Only the female was observed incubating the eggs. The incubation period lasts for 14 days, and we estimated the nestling period to be approximately 16 -18 days. A total of 13 nests were found 8 found with nestlings and 5 were found with eggs and nine were successfully fledge.

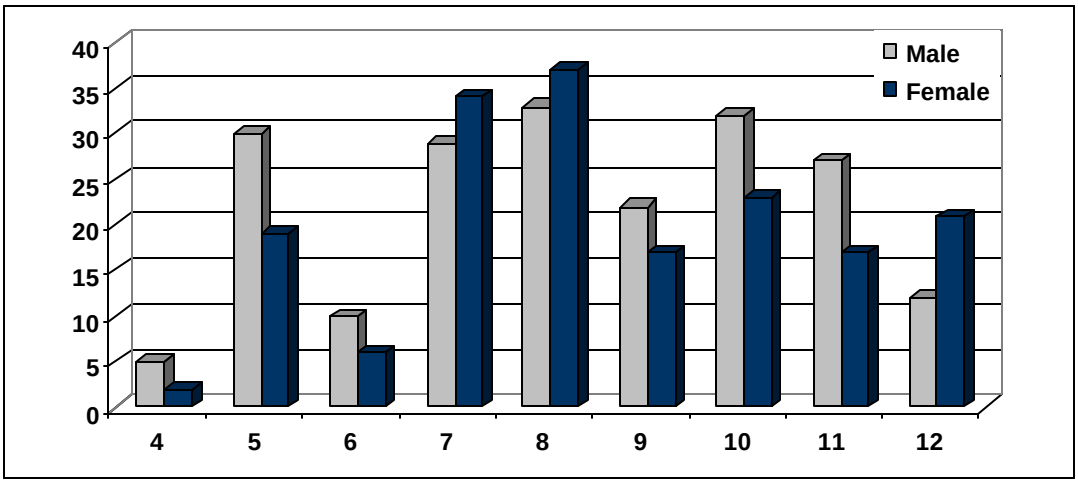
The following sections described the findings of the research study however a separate scientific paper discussing the findings and observations on the breeding biology will be made.

Fig. 3 A Black Shama nest with eggs (Left) and nestlings (Right). (Photo by: Lisa Marie Paguntalan)

A total of four breeding pairs of Black Shama were selected for detailed observations from the time the eggs were laid until the nestlings have fledged. Only one nest with two nestlings successfully fledged. One nest was preyed by a Philippine Coucal *Centropus viridis*, another was parasitized by Brush Cuckoo *Cacomantis variolosus* and the last nest was abandoned by the female Shama and the young died after four days.

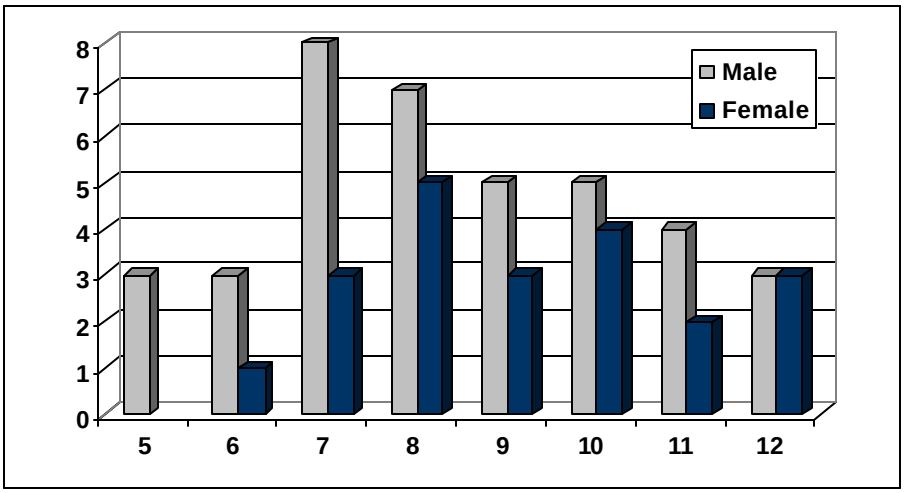
Both male and female Black Shamas were observed feeding and searching for insects and invertebrates in valley-bottom areas and at least 10 meters away from the nest. When approaching the nest, both parents perched on small branches and vines about 2-3 meters away from the nest and makes a soft call before perching on the nest opening. The male Black Shama was observed to bring food for the nestlings more frequently than the female throughout the nestling period (Fig. 4). The frequency of feeding increases as the days progressed and the nestlings grow. The peak feeding frequency was observed from the 5th to 11th day with intervals averaging every 15 minutes for both parents (Fig.4). The pattern appears to coincide with the size of the food material introduced to the nestlings until the day they fledge.

Fig. 4. Feeding frequency by male and female Black Shama.



The male Black Shama was also observed to remove most of fecal sacks from the nest (Fig.5). One observation showed the male Black Shama dropping the fecal sack to at least 50 away meters from the nest. Frequency of removal of fecal sacks peaked on the 7th to 9th day and slowly slowed down until the time the nestlings fledged (Fig.4).

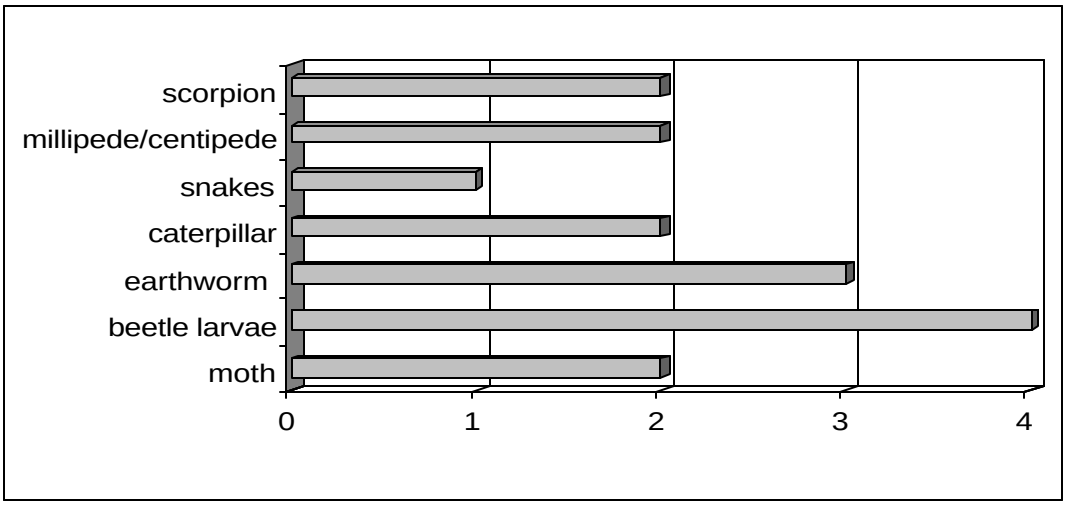
Fig. 5. Frequency of removal of fecal sacks by male and female Black Shama



A large proportion of recognizable food material introduced to the nestlings was mostly invertebrates. Beetle larvae were observed introduced in at least four occasions (Fig.6). In many instances, the food introduced by the parents was not recognizable. On two separate occasions, juvenile Black Shama accompanied by a female Shama was observed twice feeding on termites from a disturbed termite mound and nests of brown

ants. A juvenile male Shama was also observed accompanied by a male adult Shama feeding on termites. Shamas were also observed scratching leaf litter and disturbing ant nests on the ground.

Fig. 6. Observed recognizable food material fed to the Black Shama nestlings



Development of the Young

Black Shamas were born naked with pinkish skin color. The body is curled and is very small. The eyes are closed and the edges of the bill are bright yellow. The nestlings do not make any sound but responds to tapping of wood by opening its bill. On the fourth day, the body has turned completely black but still curled. Feather shafts starts to form on the wings. At this time the nestlings have a more pronounced soft chirping sound. The eyes are still closed but are more pronounced. On the fifth day, feather shafts starts to break from skin. The soft chirping sound can now be heard at least 8 meters away. On the sixth day, the nestlings body lay flat on the nest floor with their gape facing the opening of the nest. The nestlings have grown bigger.

On the seventh day, nestlings can now stretch their necks above or near the nest opening. The top of head, neck, wings, sides and shoulders were covered with feather shafts. The eyes have opened but appear hazy and covered with a thin opaque layer. The nestlings still cannot stand and crouch near the nest entrance. On the ninth day, the nestlings responds loudly to parents call but crouched when approached. The eyes are now clearer.

On the 12th day, the nestlings respond loudly to the parents call. Almost all wing feathers have now opened. The first nestling fledged at 15:05 and the second nestling fledged at 15:25. The fledglings were observed making short hops on twigs and vines in

the understory while parents make soft calls similar to Mangrove Blue Flycatcher's call. The Black Shama parents lead the fledglings some 20 meters away from the nest and then disappear among the vegetation.

On the 15th day, one fledgling was spotted at least 100 meters away from the nest following the male Black Shama. The male Black Shama did not respond to playback calls and instead gives soft whistles urging the fledgling to follow and moved away from us.

Table 1. Development of the Black Shama

Number of days	Characteristics
Day 1	Naked, without feathers; eyes still closed; body is curled and very small; skin color is pinkish; edge of bill is bright yellow; does not make any sounds; responds to tapping of wood by opening its bill
Day 3	Naked, eyes still closed; feathers starts to develop and forms blotches on skin; skin color starts to darken; gives a very soft chirping sound
Day 4	Eyes still closed but is more pronounced; body has completely turned black and still curled; feather shafts starts to form
Day 5	Feather shafts starts to break from skin; eyes still closed but more pronounced; chirping sound is more louder and can be hear 8 meters away
Day 6	Eyes are more prominent; feather shafts a few centimeters longer; chirping sounds are much louder; nestlings position have changed and faced the opening of the nest; nestlings are bigger
Day 7	Nestlings can stretch neck above opening; feather tracts are longer; top of head, neck, wings, sides and shoulders were covered with feather shafts; feathers on the neck are starting to come out; nestlings are dark black in color except for the prominently bright yellow lining of the bill; bills are darker black; eyes have opened but appear hazy and covered with a thin opaque layer; nestlings still cannot stand; nestlings crouching near the nest entrance
Day 8	Feathers have grown longer and darker; nestlings responds loudly to parent's call;
Day 9	Feather shafts on the shoulders opened first; eyes are now clear; nestlings crouched when approached
Day 10	Half of the feathers in the wings have opened
Day 11	Eyes are clear; half of the wing feathers have opened;
Day 12	Almost all wing feathers have opened; responds actively to call by making a chirping sound; can now recognized calls; fledglings fledge at 15:05 and 15:25; followed the parents some 20 meters away from

	the nest; fledglings making short hops on twigs and vines in the understory while parents make calls
Day 15	One fledgling was spotted a 100 meters away from the nest following the male Black Shama; male Black Shama does not respond to playback and gives soft whistles urging the fledgling to follow

Fig. 7 A Black Shama nest (Left) Nest finding with the Siloy Project Team (Right up) A six day old nestlings (Right down). (Photo by: Godfrey Jakosalem)

Nest Characteristics

Nearly all of the nesting dead trees were pioneer species with an average diameter at breast height (DBH) 20 to 35 cm. Entrances of origin of the nest were on the side of the trunk with an average depth of nesting platform average from 3-5 cm. Of the 26 nest located the average height of the lowest part of the entrance to ground 2-3 m (Fig.). The nests were composed of dried leaves of bamboo, palm, fern rhizomes, fungi, small dried leaves of forest trees and spiders web.

Table 2. Tree species utilized by forest birds as nesting habitats with corresponding habitat type where the species is distributed in Nug-as forests.

Plant	Habitat	Bird species
Malaiba	Forest edge, second growth, scrubland	Black Shama, Mangrove Blue Flycatcher, Coppersmith Barbet, Pygmy Woodpecker
Sala	Forest, forest edge, second growth, scrubland	Black Shama, Mangrove Blue Flycatcher, Coppersmith Barbet
Tuang	Forest, forest edge, second growth	Black Shama
Mangungkong White Lauan	Forest, forest edge Forest, forest edge	Black Shama Black Shama
Bamboo	Cultivated areas	Black Shama

CAPACITY BUILDING

Wildlife Research and Monitoring Training

Three separate field course trainings on research techniques and wildlife identification and monitoring were conducted in three separate areas. The first was held in Dalaguete-Argao Watershed Forest Reserve last April 12-14, 2007 where a total of 13 participants composed of forestry teachers, researchers, forestry students and one Protected Areas Superintendent (table 1). The second was organized by Misamis State University – Iligan Institute of Technology and Commission on Higher Education – Zonal Research Department last may May 18 to 28, 2007 in Mt. Timpoong - Mt. Hibok-hibok Natural Park in Camiguin Island where a total of 10 teachers coming from at least nine institutions where trained in research and monitoring techniques (see table 1). The last training was conducted in June 10-12, 2007 in Tabuelan, northern Cebu. A total of five members of Speleo Cebu, a local caving group were trained in techniques on how to identify roosting colonies of bats, estimating roost counts and in properly recording field data (table 1).

Equipped with field experience and new skills gained during the Wildlife Identification Training and field research activities throughout the Black Shama survey, the Cebu State College of Science and Technology are now conducting their own

biodiversity surveys in Argao, one of the key conservation sites of Cebu with little assistance from CBCF.


Fig. 8 Mt. Timpoong - Mt. Hibok-hibok Natural Park field course in Camiguin Island (Photo © Godfrey Jakosalem & Lisa Marie Paguntalan)

Table 3. Number of participants and institutions trained in research techniques, wildlife identification and monitoring.

Name of institution/ Organization	Location/ Area	Number of participants
Xavier University	Cagayan de Oro City, Mindanao	1 (faculty)
T2W Corporation -Consulting, Construction and Engineering Design	Basilan Island	1 (forester)
Arts and Sciences Lourdes College San Pedro College	Cagayan de Oro City, Mindanao Davao City, Mindanao	1 (faculty) 2 (faculty)
Misamis State University -Iligan Institute of Technology	Iligan City – Mindanao	2 (faculty)
University of Immaculate Conception	Davao City, Mindanao	1 (faculty)
Western Mindanao University	Zamboanga City, Mindanao	1 (faculty)
Camiguin Polytechnic State College	Camiguin Island	1 (faculty)
Father Saturnino, Urios University	Butuan City, Mindanao	1 (faculty)
Cebu State College of Science and Technology (CSCST) – Argao Campus	Argao, Cebu	4 (faculty)
Cebu State College of Science and Technology – Barili Campus	Barili, Cebu	2 (faculty)
Cebu state College of Science and Technology – Cebu City (main campus)	Cebu City	2 (faculty)
Community Environment and Natural Resources	Argao, Cebu	I (Protected Area

Office (CENRO – Argao)		Superintendent)
Speleo Cebu Inc.	Cebu City	5 (cavers/ volunteers)
Forestry students of CSCST – Argao Campus	Argao, Cebu	4 (students)
Biology Students of Mindanao State University - Iligan Institute of Technology	Iligan City, Mindanao	2 (students)
Alcoy Forest Wardens Research Component	Alcoy, Cebu	5 (Forest Wardens)
Duaw Sangyaw Youth Volunteers	Alcoy, Cebu	4 (Youth volunteers)
Total number of participants		**40**
Total number of institutions/ organizations		**16**

Community-based wildlife monitoring

A hands-on training on wildlife monitoring techniques was provided in dialect to the forest wardens, students and youth volunteers on identification and recording of data as well as on how to conduct regular monitoring. Some forest wardens served as facilitators and carry out and applied during fieldwork and monitoring of wildlife. Information materials and field guides were provided and translated in the dialect. A monthly review of daily records of the forest wardens were discuss durin g the wardens monthly meeting and verify the records reported by the forest wardens.

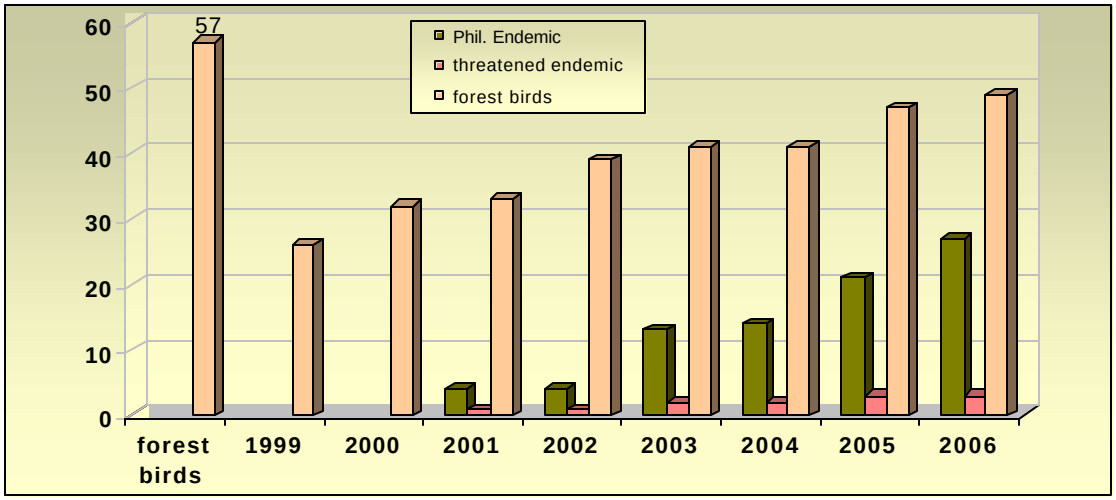


Fig. 9 Comparison on the number of forest birds, Philippine endemic birds and threatened endemic birds recorded by Nug-as Forest Wardens with the total number of forest birds recorded in Cebu.

In figure 9, Alcoy recorded a total of 57 forest birds the table show the records and number of species reported by the forest wardens compared to the total number recorded in Nug-as. The increasing trend can be attributed as the effect of the wildlife monitoring training provided to the wardens and the used of field guide provided in local dialect facilitates for the easier identification of species.

The Forest wardens also assisted in the observations of the breeding behavior of the Black Shama from June to August 2005. Two Black Shama active nests were found in separate areas. It was also the first time the forest wardens have seen the nest and nestlings of the Black Shama. The nest was positioned inside a tree hollow of about 2.5 meters high.

CONSERVATION EDUCATION

In 2004 during the first phase of the Siloy Project, the Duaw Sangyaw Youth Volunteers was identified as one of the key local partners of the project for conservation and awareness activities. Composed mostly of out of school youth, students the volunteers serve as the conservation awareness arm of the project in conducting biodiversity awareness activities.

Lectures on Basic Ecology

A two day seminar-workshop on Basic ecology orientation was conducted by the Siloy Project Team to new set of out-of-school youth volunteers and high school student. The lectures workshop discussed the basic concepts of ecology, biodiversity conservation, importance of forest, carbon cycle water cycle, nutrient cycle and how these processes affects their daily activities. A workshop on identifying biodiversity awareness related activities was also conducted. The plans developed by the participants were monitored after six months to determine whether they have accomplished the plans or not. At least 80% of the identified activities of the volunteers were conducted successfully.

In addition the group was also trained in improving their communication skills as well as in developing topics for presentations. The seminar-workshop was conducted by the project team members in collaboration with the Duaw-Sangyaw Youth Volunteers. A total of 15 out-of-school youth volunteers and 20 high school students actively participated in the seminar-workshop. Out of the 35 trained participants, 15 were able to practice the activities learnt from the training.

Fig. 10 Left, trainees form Nug-as National High School and out of school youth prepared workshop presentation facilitated by Duaw Sangyaw, right, participants presented the results of the workshop (Photo © Godfrey Jakosalem) .

Conservation Education Communications skills Trainer's Training

A workshop on developing conservation education communications skills training was conducted last June 3-4, 2006 for the Duaw-Sangyaw youth volunteers and members of the local science club members in collaboration with the Mobile Education Unit of Fauna and Flora International – Philippines under the Philippines Biodiversity Conservation Education Programme. This is part of the series of trainings designed to build the capacity of organized youth volunteers in conducting biodiversity awareness activities co-funded by North of England Zoological Society – Chester Zoo. The workshop discussed and presented creative ways in making education materials found within the locality as well as designing communication strategies appropriate for local conservation education lectures. A total of 40 participants actively participated in the seminar-workshop where 25 of the participants have applied the techniques learned in their school activities and during community lectures.

Fig. 11 Participants from Duaw Sangyaw Youth Volunteers and Nug-as High School Science Club during the communications skills trainer's training held in N ug-as, Alcoy (Photo © M. Cordova)

School and Community Visits

The Duaw-Sangyaw youth volunteers together with CBCF also conducted biodiversity conservation lectures in public elementary schools, high schools, community councils and local people's organization within the key conservation sites of southern Cebu. A total of six lectures in public elementary and high schools surrounding the largest forest patch of Cebu were conducted in 2006 and an additional three lectures were conducted from January to March 2007.

The lectures discussed the importance of forest and wildlife conservation as well as on the relation of biodiversity conservation and agriculture. Most of the volunteers from the community are engaged in farming and majority of the students came from families primarily dependent on small-scale farming. Topics like the relationship of wildlife and farming with particular emphasis on the role of wildlife as pollinators and pest control never fail to attract the listeners. The strong emphasis on the presence of endemic wildlife in the locality like Cebu Black Shama, Cebu Flowerpecker, Giant flying foxes, Cebu Cinnamon and other unique species during lectures brings pride to the community especially when the species in the forest are found nowhere else in the world except in their place .

Fig. 12 Duaw Sangyaw Youth Volunteers conducting lectures to elementary school and aspiring new members of Duaw Sangyaw. (Photo by: Godfrey Jakosalem)

Mobile Display/Exhibit

A total of three exhibits on the importance of forest, endemic species and conservation activities of the project were displayed in two public elementary schools and three national high schools as well as during special events - e.g. Alcoy Siloy (Black Shama) Festival last August 19-28, 2006 and the Boljo-on town fiesta last November 20-21, 2006. Almost 2,000 locals mostly composed of elementary and high school students visited the exhibits and signed up on the directory.

Table 4. List of school visit and events

Locality (Town)	Name of School/ institution/ event	Number of visitors
Alcoy	Alcoy National high School	400
	Alcoy Central Elementary School	87
	Nug-as Elementary School	61
	San Agustine community fiesta	150
	Alcoy Siloy Festival	1000+
	Nug-as community fiesta	300
Dalaguete	Dalaguete National High School	75
Argao	Cebu State College of Science and Technology – Argao campus Cansuji Elementary School	500 47
	Lamakan Elementary School	55
	Conalum Elementary School	50
Alegria	Lepanto Elementary School	50
	Lepanto Barangay Council	20
Boljo-on	Nangka Elementary School	50
	Boljo-on National High School	55
	Boljo-on town fiesta	450
Cebu City and Cebu Province	Cebu Provincial Tourism Promotion Tour	
	Suroy-Suroy Sugbo 2006	300
	Suroy-suory sugbo 2007	250

Participation in the 2nd Philippine Bird Festival

Fig. 13 Student from different schools in Metro Manila visits the exhibits and tasks to answer some question regarding the endemic bird of Cebu during the 2nd Philippines Bird Festival (Right) and the . (Photo by: Godfrey Jakosalem)

CBCF and two embers of the Duaw-Sangyaw youth volunteers participated in the 2nd Philippine Bird Festival organized by the Wild Bird Club of the Philippines with a theme "Endemik: dito lang sa Pinas" (Endemic: Only in the Philippines) in Crossroad 77 Convenarium in Quezon City, Manila. The festival was conducted to raise a wider awareness on wildlife conservation and promote birdwatching activity. The two-day

festival activities includes film showing, lectures on birdwatching, basic drawing for kids, story telling, face painting, coloring and games. The festival also shows the endemic birds in each island represented by the each organization. CBCF showcased the endemic species and sub spacies of Cebu with special presentation on the ecological behavior of the endangered Black Shama. The Black Shama mascot was entertained the audience during the festival. The CBCF booth was one of the top three highly visited exhibits during the festival.

Alcoy Siloy Festival

The 2nd Alcoy Siloy (Black Shama) Festival organized by the local government of Alcoy with technical support of CBCF and the Siloy Project Team generated much awareness at the local, regional and national level. The week-long festival (August 19-26, 2006) was aired on the regional television and was viewed by almost a million viewers. The highlights of the festival were also captured by the two top newspapers of the Visayas and Mindanao region. The activities largely focused on the protection and conservation of the Black Shama and its habitat and more than ten thousand people participated in the week-long celebration.

Fig. 14 A night of fun and festivities during the 2nd Alcoy Siloy Festival (Right) Shadow play presented by the Duaw Sangyaw Youth Volunteers for Biodiversity (Left) and forest wardens presentation about forest conservation (Photo by: Godfrey Jakosalem)

One of the highlights of the festival was the street dancing contests where participants mimic the movements and courtship of the Black Shama. The winning contingent also participated in the popular "Sinulog Festival" of Cebu City in January 2007 where the contingents won the 1st place category in Sinulog sa Kabataan provincial category and won 3rd place over 25 other contestants from around the country in Sinulog: Free interpretation

category. The contingents also performed during the ASEAN Summit and provincial events generating a wider awareness on the conservation of Black Shama.

As an outcome, at least five local government units have sought the assistance of CBCF in the conservation of natural resources (bats, caves, native plants, forests, rivers, waterfalls, etc.). A number of local festivals in Cebu have also adopted local wildlife as flagship species and focal points in the festivals.

Terrestrial Ecological Youth Camp

The 3rd Annual Terrestrial Ecological Youth Camp with the theme "*Developing Conservation Awareness Among the Youth Through Conservation Education* " hosted by CBCF and Duaw Sangyaw Youth Volunteers Biodiversity in collaboration with the Municipality of Alcoy, Municipality of Dalaguete, Alcoy National High School Nug-as Extension, Dalaguete National High School and the Dalaguete Biodiversity Conservation Management Council was held in Dalaguete National High School and Alcoy National High School Nug-as Extension from October 23 to 29, 2006. The youth camp was primarily funded by BP Conservation Programme with counterpart fund support from the Threatened Species Program of HARIBON Foundation and Columbus Zoo and Aquaria.

A total of 70 2nd year and 3rd year high school students from Dalaguete National High School, Alcoy National High School Nug-as Extension and new members of Duaw-Sangyaw actively participated in the youth camp.

Fig. 15 Registration of participants during 3rd Annual Terrestrial Ecological youth Camp in Dalaguete (right) and a team building exercise 'broken squares' as one of the team building activities during the camp (Photo by: Godfrey Jakosalem)

The 3-day camp was fun filled with a variety of activities e.g. amazing race, who am I?, ecological games, wildlife headdress contest and team building activities. Lecture topic on importance of forest and wildlife, basic ecological concepts highlights the activities of the three-day camp. Before the camp ended, the participants were grouped into five and were tasked to develop a plan of activities that would contribute to biodiversity conservation. It was also decided at this time to schedule the day of monitoring the implementation of each identified plan. At least 75% of the plan made by the students were accomplished a year after the youth camp.

Documentary /Film

A documentary film produced by a national television network (GMA-7) entitled "Siete Paradiso" (Seven Paradise) includes a segment of Alcoy forest as one of the seven paradise. The documentary highlighted the world's critically endangered tree species, the Cebu Cinnamon Tree *Cinnamomun cebuense,* the endangered Black Shama and the community-based project interventions conducted in the area. The people of Alcoy were proud that their forest were filmed and televised nationally. This in turn encouraged other local government units to be involved in conservation activities and to be aware of their biological resources.

Fig. 16 GMA 7 and Apocalypse Points Production team of Center for Environmental Awareness and Education (CEAE) interview (Photo by: Godfrey Jakosalem; LM Paguntalan)

The project team also developed a loose partnership with the Center for Environmental Awareness and Education (CEAE) through its Apocalypse Points Production team. The BP Conservation project forms an integral part of the documentary as the film features the conservation of endemic and endangered species of the Philippines and the efforts conducted by local communities and conservation groups. The documentary was launched during the 16th Annual Wildlife Conservation Society of the Philippines Annual

Meeting in Davao City, Philippines. Copies were also sold $ 4.35 and free copies were distributed to key strategic partners.

ADVOCACY FOR BIODIVERSITY CONSERVATION

"Save Nug-as Forest: stop road opening project"

The municipality of Alcoy is promoting the protection and conservation of Black Shama and Nug-as forest as well as an ecotourism/destination site in southern Cebu. Part of the proposed ecotourism plan is to build a road to facilitate easier access of tourist to the forest. The plan is to build a farm-to-market-road which passes through the forest and tree plantations of KMYLB. The road opening will connect to the community road to the provincial road which gives more problems in the organization's forest protection program as to timber poaching, hunting and agricultural clearings.

The information generated by the Black Shama project was instrumental in lobbying for the dissolution of the proposed Nug-as road. Using distribution records of nests and known territories of the Black Shama and other threatened wildlife produced by the project, CBCF presented the benefits and negative impacts of the road opening project to the forest and wildlife. Since the municipality adopts the Black Shama as the flagship species, we also presented a map showing the territories of the endangered Black Shama, feeding areas the critically endangered Cebu Flowerpecker (*Dicaeum quadricolor*) and the endangered Streaked-Breasted Bulbul (*Ixos siquijorensis monticola*), relative to the location of the proposed road.

Fig. 17. Proposed road opening on forest edge of Mt. Cambudlot. (Photo by: LM Paguntalan)

A position letter detailing the potential positive and negative impacts of the project was presented to the municipal official, the Department of Public Work and Highways (DPWH) and Department of Environment and Natural Resources (DENR). The local partner of CBCF also submitted position letters to the LGU and DENR citing the information generated by the Black Shama Project. The position statements of CBCF and local organizations were also used by DPWH to inform the LGU to reconsider about pushing through with the project because of the negative environmental and ecological impacts as well as the legal issues attached to it. Losing the support of DENR and DPWH, the LGU was forced to reconsider the project and to eventually set aside the idea of building a road to the forest.

Project Results Presentation to Key Stakeholders

The results and findings of the project were presented during the Annual Alcoy Forest Protection Convention participated by the different stakeholders like the Alcoy forest wardens, 4 CBFMA people's organization, local government officials of Alcoy, non-government organizations and Community and Environment and Natural Resources Office (CENRO) – Argao and Department of Environment and Natural Resources region 7. The results of the research project and the consolidated monthly reports of the forest wardens were used as basis for developing biodiversity conservation plans for the Alcoy. The research information also keep the local government updated on the conservation status of threatened wildlife and forest in the area. The project partly funded the 2006 annual Alcoy Forest Protection Convention.

Two scientific papers and a poster presentation of the Black Shama project was presented during the 16th Annual Wildlife Conservation Society of the Philippines (WCSP) annual meeting and symposium held in Ateneo de Davao University, Davao City in Mindanao last April 15-19, 2007. The symposium was attended by nearly 300 participants from 132 different institutions in the Philippines with international representation from major funding donors and scientists involved in conservation work in the Philippines. The papers presented were "*Biodiversity conservation management of forest fragments in Cebu Island, Philippines: key to survival of threatened wildlife in Cebu*" and a paper in title "*Conservation Implication of Fuel wood Gathering in the Availability of the Endangered Black Shama*". A poster presentation in title "*The Breeding Biology of the Endangered Black Shama*" won first place for the Bank of the Philippine Islands Conservation Award for best poster presentation.

The papers on the Siloy Project II were also presented during the Conservation Leadership Programme winner's presentation and the 21st Society of conservation Biology meeting in Port Elizabeth South Africa. The papers were presented "Community-based Biodiversity C*onservation management of forest fragments in Cebu Island, Philippines: key to survival of threatened wildlife in Cebu*" and the Siloy project report in title "Community-based biodiversity conservation management project in Cebu Island, Philippines: Siloy Project II".

Fig. 18 Paper and poster presentation during the WCSP symposium in Davao City (Photo by: Godfrey Jakosalem and LM Paguntalan)

FUTURE PLANS

It is the plan of the project to continue the monthly population monitoring of the Cebu Black Shama and other threatened species of wildlife in Alcoy forests. The plan includes applying for a follow up research grant that will look into the island-wide distribution of the Black Shama including confirming recent and historical records of the species. Formulation of the Black Shama Action Plan is also one of the desired planned activities of the project team. With the information generated from the five-month study on the Black Shama, CBCF plans to conduct ringing activity of the Black Shama to know their territory, feeding, life span, extent of distribution and population counts. We also planned to conduct research studies in other parts of the island where the Black Shama was reported.

The last two projects have been instrumental in implementing research-based conservation work focused on threatened species in the critical forest habitats of Cebu. It is through these projects that we have gained the support of the local government units within Alcoy and the local communities in supporting conservation work. It is the plan of the project team to extend the influence and the initiatives to neighboring municipalities and other key conservation sites in Cebu. The financial, legislative and administrative support

provided by partner local government units will help ensure the continuity of the forest protection programs of key conservation sites in Cebu.

The Siloy Project team is also looking into strengthening the conservation education and awareness activities directed towards threatened species. It is the key to generate more local support and will be one of our priority activities. Creation of core groups for biodiversity conservation targeting student, youth councils and out of school youth will help move the project forward. With the support of the local government units, this group will be able to extend local awareness program to other neighboring communities.

PARTICULAR CHANGES AND SOLUTION FACED

Very little changes were made from the original project proposal. Most of the identified activities of the project were recognized needs and were therefore integrated in the over-all program of activities of CBCF. Instead of three sites selected in the proposal we only focus our study in Alcoy forest as the since it has the largest forest covers and we have limited manpower. New team member was added in exchange for Madelyn Cordova who's on maternity live.

TEAM MEMBERS

Philip Godfrey C. Jakosalem (31) Filipino, Wildlife Biologist. Project Leader Currently works as a Filed Projects Officer of Cebu Biodiversity Conservation Foundation, Inc. (CBCF). He is involved in biodiversity conservation and research activities in Cebu, West Visayas and Mindanao. He was the awardees of Ruffords Small grants Programme in 2003 and 2007 and Haribon Foundation Threatened Species Program. Participated in one month training in bird ringing and mist netting in Wetlands Trust Icklesham, East Sussex, London. Graduate student of University of the Philippines Open University. Responsible for overseeing the project and each team member, Bat identification training, setting-up mist-nets and handling as well as post project activities.

Lisa Marie J. Paguntalan (32) Filipino. Co-Project Leader, Ornithologist a BS Biology graduate of Silliman University in Dumaguete City, Philippines. She received her MSc in Biology from the same University in 2002. She was a Biology faculty member of Silliman University and a Junior Researcher with the Center for Tropical

Conservation Studies in Silliman. She has received the BP Conservation Bronze Award for Negros Threatened Avifauna Project in 2000 and again as a co-project leader for Project Ixos in 2001. She has participated in several wildlife research studies in Negros and Cebu, most of which were in collaboration with the Cebu Biodiversity Conservation Foundation Inc. (CBCF). In addition she has been involved in a number of conservation education activities in the West Visayas. She also presented several scientific symposiums local, national and international. Her research interests include birds and bats. Presently, she's working as Director for research and field operation of Cebu Biodiversity Conservation Foundation (CBCF).

Orlyn B. Orlanes (31) Filipino, Forestrer. MSc. in Environmental Science specializing in Environmental Biology Her experience involves developing and implementing Indigenous Tree Nursery with training in nursery work and field assessments. She has assisted several projects in establishing native forest plots, undertake monitoring and evaluation of such plots and in documenting monitoring activities. She has coordinated a number of surveys with focus on ethnobotany, assessment of existing vegetation cover. She was train in Vietnam on conservation GIS for 3 weeks. She is currently working as the Assistant Director for research and field operation in Cebu Biodiversity Conservation Foundation.

Pedro Villarta (35) Forest Warden lead the committee on research and monitoring of the Nug-as Forest Wardens he also an active member Kapunungan sa Mag-uuma sa Yutang Lasangon Sa Bulalacao (KMYLB Agro Forestry Multi Purpose Cooperative). He is involved several research with CBCF including Siloy Project Phase 1 and Cebu Cimmamon Survey. He is one of the facilitator of several trainings like wildlife identification and monitoring training, basic ecology training and rainforestation trainng.

Maria Estralla Lumayag (20) A forestry student Cebu State College of Science and Technology. She undergo her on-the-job training with CBCF for six months. A student volunteer and was trained in ecological monitoring and wildlife identification, she was involved in some research projects of CBCF like Siloy Project, Cebu Cinnamon Project, Bat Counts Monitoring, Rainforestation plantation monitoring and biodiversity awareness.

Madelyn Cordova (25) Filipino a biology graduate from University of San Jose Recoletos and a Site Coordinator of CBCF. She involve in several biodiversity study in Cebu. She participated several trainings in wildlife research including the 2 week

Field Course Training in Wildlife Research of Haribon Foundation. Will be involved in collecting data and data processing

ACKNOWLEDGEMENTS

We would like to thank **Conservation Leadership Programme** (formerly **BP Conservation Programme) and the Wetlands Trust** for the financial assistance and technical assistance, and the opportunity to conduct the study. We also gratefully acknowledge the technical support and supervision provided by Nigel Collar, Thomas Brooks, Luc Lens, Philip Round, Nick Bealy, Stephen Rumsey, Allan Martin, Stewart Marsden, Aldrin Mallari, William Oliver and David Lee. The support provided by the Wetlands Trust staff, Fauna and Flora International, North of England Zoological Society Chester Zoo, BAT Biodiversity Partnership Fund and the British Embassy.

We would also like to acknowledge the support of the of the Municipality of Alcoy particularly Mayor Antonio Plando; Vice Mayor Nicomedes de los Santos; the Municipal Councilors John Osorio, Catalino de los Santos, Ailee Costen, Pedro Niere, and Rodulfo de los Santos. We also gratefully acknowledge the support given by Barangay Captain (Community Leaders) and Barangay Council (Community Council) of Nug-as, Alcoy, partner peoples cooperative KMYLB, BALAK, SAMPC; Department of Environment and Natural Resources 7, CENRO-Argao Office and Wild Bird Club of the Philippines (WBCP).

Lastly we would like to thank the Forest Wardens and volunteers for helping us all through out the project Teodoro Amaca, Henry Benolirao, Arebalo Amaca, Apolinario Villarta, Fernando Anore, Fe Anore, Reynolds Anore; Roel Getaruellas, Randy Amaca, Leonardo Scientist and the late Daniel Amaca; Duaw Sangyaw Youth Volunteers; Nug-as High School Science Club and there rest of the members; student trainees Dimple Burgus and Brezel their assistance; and lastly Nilo Arribas, Jr. (WBCP Cebu) for the male Black Shama picture.

REFERENCES

Brooks, T., Magsalay, P. Dutson, G. and Timmins, R. (1995a) Forest loss, extinctions and last hope for birds on Cebu. Oriental Bird Club Bull. 21:24-27.

Bibby, C., M. Jones and S. Marsden. (1998). Expedition Field Techniques: Bird Surveys.

Collar, N.J., Mallari, N.A.D. and Tabaranza, B.R. (1999) Threatened birds of the Philippines. The Haribon Foundation/ Birdlife International Red Data Book. Makati City, Philippines: Bookmark, Inc.

Collar, N.J., Crosby, M.J. and Stattersfield, A.J. (1994). Birds to Watch 2: The World List of Threatened Birds. Cambridge, U.K.: BirdLife International (BirdLife Conservation Series 4).

Dickinson, E.C., Kennedy, R.S. and K.C. Parkes. (1991) The Birds of the Philippines. Tring: British Ornithologist's Union (Checklist No.12).

Department of Environment and Natural Resources 7 (1999) Annual Report

Dutson, G. 1993b. Rediscovery of the Cebu Flowerpecker *Dicaeum quadricolor* confirmed. *Oriental Bird Club Bull.* 17:14.

Fredriksson, G.M. and V. Nijman (2004) Habitat Use and conservation status of two elusive ground birds (*Carpococcyx radiatus* and *Polyplectron schleiermancheri*) in the Sungai Wain Protection Forest, East Kalimantan, Indonesian Borneo. Oryx: the international Journal of Conservation. 38:3. Cambridge University Press: London. Pp.297-303.

Gonzalez, J.C.T., A.T.L. Dans, M.dG. Pedregosa, B.A. Portillo and R.V. Villahermosa (1999). Cebu Biodiversity Conservation Project Island-wide Survey of Forest and Fauna and Flora inventory of Selected Sites for Priority Conservation on Cebu Report. (Unpublished)

Gonzalez, P.C. and Rees, C. P. (1988) Birds of the Philippines. Manila: Haribon Foundation for the Conservation of Natural Resources

Hachisuka, M. (1936) Oiseaux rares ou remarquables des Iles Philippines. Oiseau et R.F.O. 6: 185-197, 418-412.

Heaney, L.R. and Regalado, J.C., Jr. (1998). Vanishing treasures of the Philippine Rain Forest. Field Museum, Chicago. 87pp.

Jakosalem, P.G.C., L.M.J. Paguntalan, and O.B. Orlanes-Roxas (2005) Habitat Requirements of the Black Shama *Copsychus cebuensis* (Turdidae)

Kennedy, R.S., Gonzales, P.C., Dickinson, E.C., Miranda, H.C., Jr. and Fisher, T.H. (2000) A guide to the birds of the Philippines. Oxford University Press, New York.

Magsalay, P., Brooks, T., Dutson, G. and Timmins, R. (1995) Extinction and conservation on Cebu. Nature 373: 294.

Mallari, N.A., Tabaranza, B. and Crosby, M. (2001). Key Conservation Sites in the Philippines. Bookmark: Philippines.

Rabor D.S. (1959) The Impact of Deforestation on Birds of Cebu, Philippines. Silliman Journal 11:202-216

Sttatersfield, A.J., Crosby, M.J., Long, M.J. and Wege, D.C. (1998). Endemic Bird

Areas of the World: priorities for biodiversity conservation. Cambridge, U.K. BirdLife International. Conservation Series 7.

Financial Summary Report

As of August 10, 2007

Project Number:	Project No: 203006
Project Name:	COMPLEMENTING LOCAL COMMUNITIES BIODIVERSITY CONSERVATION INITIATIVES IN SOUTHERN CEBU, PHILIPPINES
Grant Recipient:	Philip Godfrey C . Jakosalem
Recipient Address:	Cebu Biodiversity Conservation Foundation, Inc. 18 Diamond St., Gemsville Sudv., Lahug, 6000 Cebu City, Philippines
Project Start and End:	March 2006 to August 2007
Funded by:	BP Conservation Programme

Total Budget	**$11,750**
Received Amount	**$11,738**
Bank Charges/Tax	**$ 12**

Output Summary	**Current Period Expenses**	**Proposed Budget**	**Project to date Expenditures**	**Available Budget**	**Counterpart CBCF**
Pre Project Preparation	$ 1,407	$ 1,407	$ 1,407	0	$1,011
Project Implementation	$ 8,543.32	$ 8,586	$ 8,543.32	0	$2,063
Post Project Expenses	$ 719.68	$ 700	$ 719.68	0	$819
Contingency	$ 1,068	$ 1,069	$ 1,068	0	
Total Expenses	$ 11,738	$ 11,762	$ 11,738	0	$ 3,893
Current Total Expenses	**$11,738**	The equipment and books purchased by the project e.g. binoculars and the Field Guides/ books were given to local partners (Binoculars to Alcoy Forest Wardens and books to the Duaw Sangyaw Youth Volunteers). The 2 pieces of microscope was also donated to Nug-as National High School.			

Note: See attached detailed financial report.

Signed:

Philip Godfrey C. Jakosalem
Field Projects Officer/Project Leader
CBCF

Lisa Marie J. Paguntalan
Director for Field Operations
CBCF

Neil Aldrin D. Mallari
Executive Director
CBCF