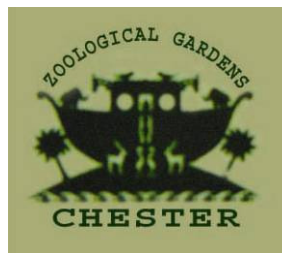
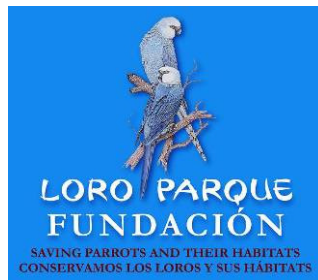




**In-Situ  
Conservation Project  
Phase V**

# **Technical Progress Report**

**June - August 2006**



**By**

**Indira D. L. Widmann, Peter Widmann,  
Siegfried Diaz and Deborah V. van den Beukel  
Puerto Princesa City, Palawan, Philippines**

**October 2006**

## **TECHNICAL PROGRESS REPORT**

**COUNTRY: PHILIPPINES**

**PROJECT TITLE: PHILIPPINE COCKATOO CONSERVATION PROGRAM**  
**In-situ Conservation Project Phase V**

**PROJECT DURATION: June - August 2006**

**PROJECT SITE: Palawan, Philippines**

**PROJECT COOPERATORS:**

**Department of Environment and Natural Resources (DENR)**  
**Municipal Government of Narra, Palawan, Philippines**  
**Municipal Government of Dumaran, Palawan, Philippines**  
**Municipal Government of Rizal, Palawan, Philippines**  
**Culasian Barangay Government, Rizal, Palawan, Philippines**  
**Local Protected Area Management Committees (LPAMC)**  
**Sagip Katala Movement-Narra Chapter, Inc. (SKM-NC, Inc)**  
**Sagip Katala Movement-Dumaran Chapter (SKM-DC)**  
**Palawan Council for Sustainable Development (PCSD)**  
**Concerned agencies and authorities**

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## **EXECUTIVE SUMMARY**

### **Output 1: Stabilization of the cockatoo population Rasa Island, Palawan, through co-management of the protected area.**

1. A total of 39 hatchlings were banded this year of which 37 fledged successfully. This is the most productive breeding season since start of the project.
2. Two additional Tagbanua climbers were recruited as volunteer wardens this breeding season.
3. DENR 4-B Regional Executive Director Paragas presided the 3<sup>rd</sup> regular Protected Area Management Board Meeting of Rasa Island Wildlife Sanctuary in Narra.
4. Focus group discussions in mainland coastal barangays adjacent to Rasa were conducted to heighten awareness of the importance of the Presidential Proclamation declaring Rasa as wildlife sanctuary.
5. The agricultural farming project, a livelihood support to Rasa stakeholders, has continually revolved its capital to accommodate more recipients and pay its bookkeeper from its income.
6. Two prominent national photographers visited Rasa to take pictures of the wild cockatoos as part of their 2007 calendar projects.

### **Output 2: Legal and actual conservation of cockatoos and their habitats in Dumarán Island, Palawan.**

7. A second cockatoo roosting site was located and continuously monitored in Bgy. Bohol in a dense mangrove area.
8. A case is now being filed at the Prosecutor's Office on the illegal cutting of trees within the Omoi Cockatoo Reserve. Wardens in Dumarán are witnesses to the said charge.
9. Occasional reports of illegal cutting of trees outside the PA are on-going but seemingly influenced politically.
10. The municipality of Dumarán featured the Kalabukay (local name of Phil. Cockatoo) during the province-wide Baragatan Festival where municipal officials were dressed up like cockatoos.
11. The yearly Kalabukay Festival in Dumarán was celebrated in June 13-18, 2006 with exciting activities for different target groups.
12. The 1<sup>st</sup> meeting of the Local Protected Area Management Committee (LPAMC) of Dumarán took off in early August in full attendance.
13. A proposal to create a critical habitat under RA 9147 or the Wildlife Act was put forward by KF to protect the remaining patches of forests in Dumarán which is outside of the declared PA.
14. Technical backstopping is needed to improve the municipal-initiated Watershed Rehabilitation Project.
15. Around 215 pupils from Grades four to six were reached by lectures at the Dumarán Central School while 271 students visited the Katala Environmental Education Center (KEEC) library within the reporting period.

### **Output 3: Continuation of nest-protection scheme in Rizal, Palawan in 2006, after termination of CEPF funding (funding from CEPF granted for 2005).**

16. A total of 81 of the mapped nest trees within the Culasian Managed Resource Protected Area (CMRPA) were occupied in the 2006 breeding season. These nest trees were mostly occupied by hill mynas and blue-naped parrots.

17. There was no breeding record this year within the PA; however, one breeding pair was reported in the neighboring barangay. Yet, the hatchlings were already poached when it was checked.
18. The municipality of Rizal has approved adoption of the protected area in Culasian through Municipal resolution 2006-30, making CMRPA the first protected area in the municipality.
19. The 1<sup>st</sup> LPAMC meeting in Rizal was conducted where results of the Southern Palawan Anti-Poaching Initiative (SPAPI) were presented.
20. A survey on residents within the CMRPA was conducted for basic information and profile.
21. Monitoring of Illegal wildlife trade originating from Rizal but not from the CMRPA has resulted to confiscation and court charges.
22. Post project survey results suggest remarkable changes in levels of awareness and knowledge and behavioral changes that potentially could impact positively to general conservation efforts.

**Output 4: Research and monitoring on distribution, habitat requirements and restoration, breeding and feeding ecology and publication of results.**

23. This year's breeding success of 39 hatchlings on Rasa was the most productive since project implementation. There was sufficient rainfall that secured the food supply for the entire season.
24. In Dumaran, breeding was also successful as reflected in the slight increase of counted cockatoos at the roosting site in Lagen.
25. As predicted, a second roosting site which lies in dense mangrove has been located in Dumaran within the reporting period.
26. Cockatoo sightings in Polillo meanwhile are increasing as sampling efforts also increased. Four nest trees have been reported from Patnanungan and one from Burdeos.
27. In Rizal, no cockatoo was reported breeding in the CMRPA but a breeding pair was confirmed in a neighboring barangay.
28. In August, roost count on Rasa reached to 130 birds, the highest number recorded so far.
29. Four fledglings from Rasa were tagged with radio transmitters and were tracked regularly.
30. After fledging, all four birds were tracked in close vicinity to the nest trees with their parents. Later, they joined others in the roosting site and has remained on Rasa within the reporting period.
31. On June 20, one of the tagged birds were found on forest floor on Rasa; probably preyed upon by a goshawk. The intact transmitter was attached to a nestling which did not fledge yet at that time.
32. Most of the PCCP members are co-authors of a paper by Pain *et al.* (2006) on *Impacts of protection on nest take and nesting success of parrots in Africa, Asia and Australasia*, published in Animal Conservation.

**Output 5: Cockatoo surveys and assessments of potential translocation sites.**

33. The translocation project was finally endorsed by the Protected Area Management Board and the local government of El Nido within the reporting period. Other documents are in process for the issuance of the SEP clearance.

34. KF initiated a meeting among partners for the translocation project to finalize extent of participation and other activities to be undertaken.
35. An informal market survey in Cartimar, Manila yielded to one immature cockatoo for sale at 500US\$ a number of blue-naped parrots and hill mynas.

**Output 6: Preparation for a Biodiversity Conservation Center in Narra.**

36. The application for SEP clearance for the center has been lodged at the Palawan Council for Sustainable Development.

**Other highlights**

37. A total of five Palawan hornbill nests were successfully protected this year. Three from Culasian and two from Dumarán protected areas.
38. Seeds of 13 species of food-providing plants were collected from under hornbill nest trees; regurgitated by females.
39. A brown hawk-owl was recorded breeding on a former cockatoo nest. This is first record for Dumarán.
40. The Coral Reef and Evaluation Training in Narra was completed after a year-long series of activities.
41. A mid-year planning workshop was conducted which was participated by all PCCP staff and KF board during which Dr. Sabine Schoppe, the replacement of Peter Widmann, was introduced.
42. Eight meetings/workshops either organized locally or nationally were attended by PCCP staff.
43. Two solar panels were purchased for the use of the center in Narra.
44. Major repairs and maintenance of vehicles and equipment were undertaken within the reporting period.

## ACKNOWLEDGMENTS

We are grateful to the Loro Parque Fundación (LPF), Tenerife, Spain for incessantly supporting the Philippine Cockatoo Conservation Program and to the Partner Donors: North of England Zoological Society/Zoological Gardens Chester (NEZS), Zoologische Gesellschaft für Arten- und Populationsschutz (ZGAP, incl. Fonds Fier Bedrohte Papageien and Strunden-Papageien-Stiftung), and Conservation des Espèces et Des Populations Animales (CEPA), for their trust and generous support. Particular thanks to Wolfgang Kiessling, President LPF, Dr David Waugh, Director LPF, Dr. Roger Wilkinson, Head of Conservation and Science, North of England Zoological Society (NEZS)/Zoological Gardens Chester, Roland Wirth, President ZGAP, Dr. Jean-Marc Lerno, President CEPA and Marc Boussekey, European Coordinator of the PCCP and Secretary CEPA and for facilitating the flow of funds, communication and support from Europe.

The PCCP is indebted to the real players of the project: the wardens and volunteers from Narra, Dumaran and Rizal for their dedication, hardwork and commitment. Without them, the project would not have reaped the good harvests.

To the ever supportive honorable Mayor of Narra, Mayor Lucena D. Demaala and to all members of the municipal council and officials. Special gratitude goes to LPAMC members, Narra for their vigilance and ready attention on Rasa. Equally worth the gratitude is the support of Dumaran Mayor David G. Aurello. To MPDO Agnes Padul, Engr. John Ponce de Leon, R. Aurello, MENRO Magbanua and to all Dumaraños. And lastly to Rizal Mayor Samson I. Degillo, and his wife Claire, as well as Bgy. Captain Reynaldo B. Ong of Culasian for his consistent good cooperation. To all Rizal officials and to Candawaga Capt. Cristopher Gado, Panalingaan Capt. Abdul hamid Mansul, and ABC President Jalil Isani.

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To all visiting tourists, foreign and local, for the generous donations given to the project. To the Narra Youth Organization for Environmental Conservation (NYOFEC), Katala Conservation Club (KCC) and SKM officers and members.



## ACRONYMS

BMS	Biodiversity Monitoring System
CE	Conservation Education
CENRO	Community Environment and Natural Resources Office(r)
CEPA	Conservation des Espèces et Des Populations Animales
CEPF	Critical Ecosystems Partnership Fund
CIDG	Criminal Investigation and Detection Group
CMRPA	Culasian Managed Resource Protected Area
DENR	Department of Environment and Natural Resources
IUCN	International Union for the Conservation of Nature and Natural Resources
KEEC	Katala Environmental Education Center
KFI	Katala Foundation, Inc.
KIEBC	Katala Institute for Ecology and Biodiversity Conservation
LPAMC	Local Protected Area and Management Committee
LPF	Loro Parque Fundación
MENRO	Municipal Environment and Natural Resources Officer/Office
MOA	Memorandum of Agreement
MPDO	Municipal Planning and Development Officer
NIPAS	National Integrated Protected Area System
NYOFEC	Narra Youth Organization for Environmental Conservation
PA	Protected Area
PAWB	Protected Areas and Wildlife Bureau
PASu	Protected Area Superintendent
PCCP	Philippine Cockatoo Conservation Program
PCSD(S)	Palawan Council for Sustainable Development (Staff)
PDAF	Priority Development Assistance Fund
PENRO	Provincial Environment and Natural Resources Office
PESP	Polillo Ecology Stewardship Project
PNOC	Philippine National Oil Company
PNP	Philippine National Police
PWRCC	Palawan Wildlife Rescue and Conservation Center
RA 9147	Republic Act 9147 otherwise known as the Wildlife Protection Act
RIWS	Rasa Island Wildlife Sanctuary
SDENRO	Special Deputy Environment and Natural Resources Officer
SEP	Strategic Environmental Plan of Palawan
SPAPI	Southern Palawan Anti-Poaching Initiative
WPU	Western Philippines University
ZGAP	Zoologische Gesellschaft für Arten- und Populationsschutz

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## INTRODUCTION

### ***The Philippine cockatoo *Cacatua haematuropygia****

The Philippine Cockatoo or red-vented cockatoo *Cacatua haematuropygia* is restricted to lowland forest areas and mangroves in the Philippines. Formerly, it could be found all over the archipelago (Dickinson *et al.* 1991;). Only in the last decades a rapid decline set in, which brought the species to the brink of extinction (e.g. Boussekey 2000a; Lambert 1994). The reasons for the decline of the populations are (e.g.; Collar *et al.*, 1999; Lambert 1994; Widmann *et al.* 2001):

- Habitat destruction, particularly in respect of nesting and food providing trees.
- Persecution as crop pest.
- Poaching for pet trade.
- Potential diseases caused by the introduction of captive birds in the range of wild populations.
- Tropical storms and typhoons

Habitat destruction and poaching are the most important factors threatening the Philippine cockatoo.

Rasa Island, our main project site, presently is the area with the worldwide highest natural density of Philippine cockatoo with at least 97 birds on 8.3 km<sup>2</sup>.

Dumaran Island in northern Palawan holds likely the second-most important cockatoo population in the Palawan Faunal Region, after Rasa. Its mangroves are widely intact, but the lowland forests are heavily degraded.

Culasian in Rizal is one of the main source areas for the illegal wildlife trade in the Philippines. It is outstanding for its still high density of other cavity nesters like hill myna *Gracula religiosa* or blue-naped parrots *Tanygnathus lucionensis* which is brought by the abundance of 'manggis' *Koompassia excelsa*, the tallest tree in tropical Asia. Cockatoos are present in low numbers.

Patnanungan Island, Polillo group of islands in Quezon harbors the only known Philippine cockatoo population in the Luzon faunal region.

Aside from Palawan and Polillo, cockatoos have recently (within the last eight years) reliably only being sighted in Samar and in different locations in the Sulu Archipelago (Fig.1).

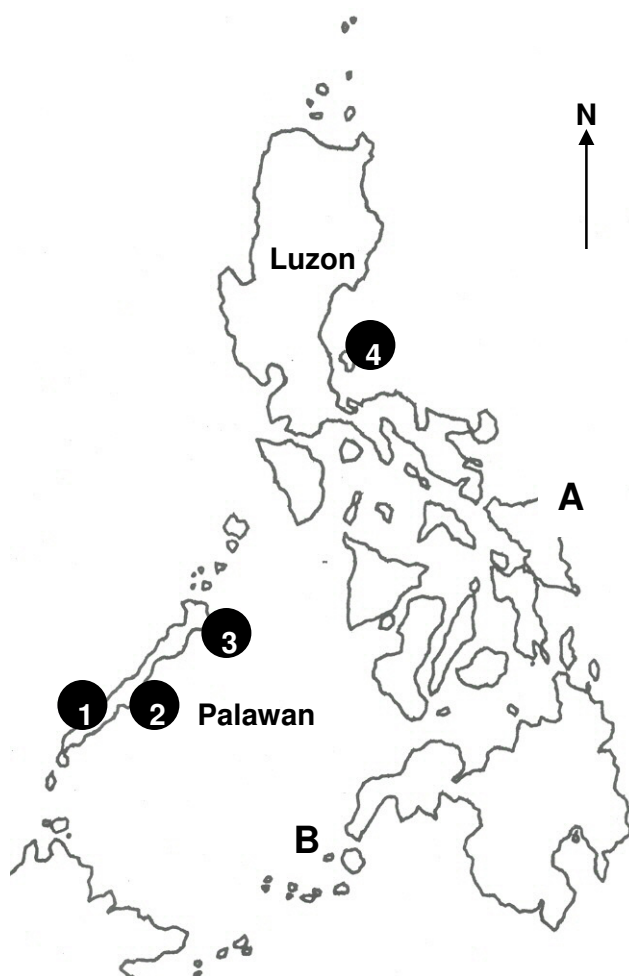
### ***Objective of the Philippine Cockatoo Conservation Program***

Conservation and restoration of the most viable subpopulations of the Philippine cockatoo and their habitats, including associated flora and fauna under involvement of all key stakeholders, resulting in a down-listing of the species from 'Critical' to 'Endangered' within the next six years.

### ***Program Strategy***

The general program strategies are:

- Community-based management of local resources in the framework of Philippine law;
- Capacity-building for local decision-makers to ensure sustainability of the conservation efforts; and,
- Ecosystemic conservation approach with the Philippine cockatoo as flagship species.



**Figure 1.** Map of the Philippines indicating sites of the Philippine Cockatoo Conservation Program for comprehensive nest protection: 1. Culasian Managed Resource Protected Area (proposed), Rizal; 2. Rasa Island, Narra; 3. Omoi and Manambaling Cockatoo Reserves, Dumaran; 4. Patnanungan Island, Polillo group of islands, Quezon. Recent sightings of cockatoos: A) eastern Samar, B) Sulu archipelago.

### ***Deliverables***

- 1. Stabilization of the cockatoo population Rasa Island, Palawan, through co-management of the protected area.**
  - Warden scheme continued.
  - Technical support of Local Protected Areas Management Committee (LPAMC) and Community Environmental Natural Resource Offices (CENRO) continued.
  - Conservation education with focus on youth and key-stakeholders continued.
  - Alternative livelihood for key-stakeholders provided.
  - Lobbying for legal protection of Rasa Island through presidential and/or congressional proclamation continued.
  - Networking with other relevant institutions continued.

- 2. Legal and actual conservation of cockatoos and their habitats in Dumaran Island, Palawan.**
  - Warden scheme institutionalized.
  - Capacity building for local decision makers and law enforcers continued.
  - Conservation education with focus on youth and key-stakeholders continued (this component funded by RARE).
  - Legal protection of Omoi forest patch facilitated.
  - Alternative livelihood for key-stakeholders provided.
  - Experimental habitat restoration initiated.
- 3. Continuation of nest-protection scheme in Rizal, Palawan in 2006, after termination of CEPF funding** (funding from CEPF granted for 2005).
  - Nest protection scheme established.
  - Conservation priority site identified and local protection facilitated.
  - Capacity building for local decision-makers and law enforcers facilitated.
  - Conservation education conducted.
  - Alternative livelihood provided.
- 4. Research and monitoring on distribution, habitat requirements and restoration, breeding and feeding ecology and publication of results.**
  - Comprehensive floral inventories in Rasa and Dumaran initiated and phenological research continued.
  - Systematic testing of propagation and performance of cockatoo-relevant plant species for habitat restoration conducted.
  - Systematic collection of data on breeding and feeding biology continued.
  - Cockatoo population and nest monitoring in project sites continued.
  - Research on fledgling dispersal and survival conducted.
  - Papers submitted for publication to relevant journals.
- 5. Cockatoo surveys and assessments of potential translocation sites.**
  - Survey in El Nido/Calamianes Islands conducted.
  - Survey in Siargao conducted.
  - Technical cooperation with Polillo Ecology Stewardship Project in Polillo continued.
  - Assessment for potential translocation sites continued.
- 6. Preparation for a Biodiversity Conservation Center in Narra.**
  - Negotiations with LGU Narra regarding potential site continued.
  - Potential other donors contacted.
  - Feasibility assessed.

## Description of Project Sites

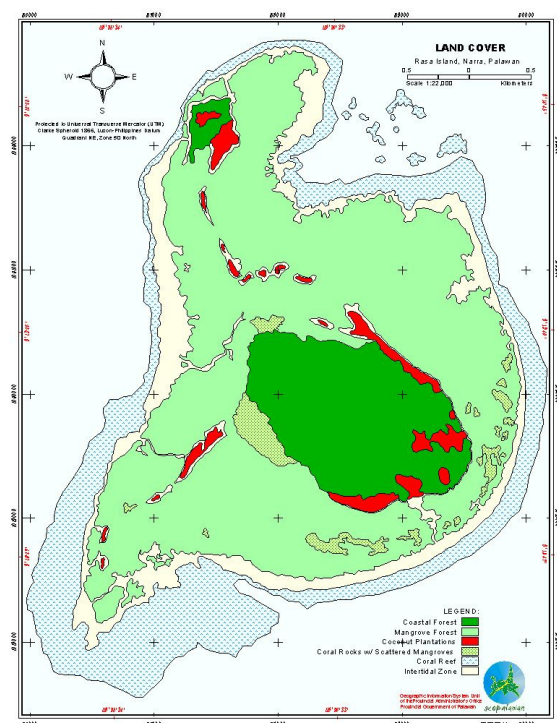
### *Rasa Island, Narra, Palawan*

Rasa is a small coral island of 8.34 km<sup>2</sup> area situated in the Sulu Sea, just offshore of the Municipality of Narra, Palawan, Philippines (Fig. 2). About 1.75 km<sup>2</sup> are covered with coastal forest, mangrove (5.60 km<sup>2</sup>), cultivated areas (predominantly coconut; 0.39 km<sup>2</sup>), 0.60 km<sup>2</sup> are barren or sparsely vegetated sand and coral outcrops.

The island is the pilot site of the program since 1998. Key component of this project site is the wardening scheme which involves patrolling and protection of the birds during and outside the breeding season. This scheme has proven to be efficient. It has more than doubled the population of cockatoos on the island over five years (presently ca. 97 birds).

Rasa Island probably holds the highest population density of Philippine cockatoo that remains in the wild. The world population of Philippine cockatoo was estimated to range between 1,000 to 4,000 individuals (Lambert, 1994). More recent estimates put the number of cockatoos remaining in the wild between 870 and 2,300 (Widmann, 2001). About 70 to 75% of this population is probably found in Palawan (Boussekey, 2000b). This makes Rasa a high priority area for the protection of this species.

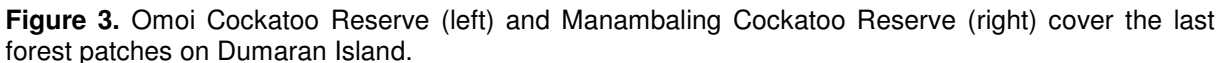
Moreso, not only Philippine cockatoos live on the island, but a variety of other species, with an unusual high percentage of globally threatened and near-threatened taxa (IUCN 2006), considering the small size of Rasa. Note worthy among the 104 recorded bird species are grey imperial pigeon *Ducula pickeringii* and Mantanani scops-owl *Otus mantananensis*. Marine life around Rasa is also diverse with at least three marine turtle species and dugong *Dugong dugon* recorded.



**Figure 2.** Vegetation and land-use of Rasa Island, Palawan, Philippines.

Dumaran is situated in north-eastern Palawan between 10°22' and 10°41'N and 119°28' and 119°55'E. Nine Barangays are situated on Palawan mainland, seven on western Dumaran Island. The island is situated in the Sulu sea and separated by a ca. 7 km wide channel from the mainland.

Dumaran is part of the Laurasian Shelf of northern Palawan (Heaney 1986). The bedrock consists mainly of ultrabasic metamorphites with interspersed limestone possibly of Tertiary origin. Most common soil types are silty clay loams and clay loams in the higher situation and beach sand and hydrosols in the coastal areas, based on estimates of sea levels (Gascoyne *et al.* 1979). Dumaran Island is a typical landbridge island (Widmann, 1998) which was connected several times with mainland Palawan during the Pleistocene glaziations.



Species inventories from the municipality are still incomplete and systematic surveys just started recently. The only ornithological collection on Dumarán Island was conducted in 1921 (Dickinson *et al.* 1991). No historic accounts are available for other taxa. Ornithological surveys conducted by Katala Foundation so far yielded 108 species from the island. A prominent species of conservation concern is the Philippine cockatoo, which can be found with a possibly viable population in the mangroves and forest remnants of Dumarán Island, but apparently not anymore on the mainland. The last remaining forest patches are therefore of global conservation concern. This notion is supported by the recent records of other globally threatened species, particularly the Philippine forest turtle *Siebenrockiella leytensis*.

Other species of conservation concern are Palawan hornbill *Anthracoceros marchei*, Blue-headed racquet-tail *Prioniturus platenae* and Palawan pencil-tailed tree-mouse *Chiropodomys calamianensis*. A yet unidentified shrew species has been caught in one of the last forest patches.

Main forms of land use nowadays is upland and slash-and-burn agriculture ('kaingin'), which is still widespread on the island and affects more and more forested areas on steeper slopes on the mainland. Larger parts of the island are covered by grass-and shrub land and dense stands of bamboo as consequence of this practice. Due to lack of water, irrigation systems and level areas, lowland rice cultivation is very restricted. Permanent forms of cultivation are coconut and cashew plantations. Forest and grass fires are common, particularly during the dry season. Fire is not only used to clear areas for cultivation, but also to further growth of fresh grass for pastures. There is a severe shortage of timber and firewood and consequently illegal logging is widespread.

PCCP currently manages three areas on the island: Omoi and Manambaling Cockatoo Reserves (Fig.3) and the traditional roosting site in Lagan.

### ***Culasian Managed Resource Protected Area (CMRPA), Rizal, Palawan***

The PA is located in the southern portion of Palawan Island in the municipality of Rizal. It is situated in the coastal plain facing the South China Sea, between the coordinates 8°52' to 8°47' N and 117°27' to 117°31' E. The PA comprises 1,954 has. with an additional 300 ha. included if the proposal for the protection of a nearby wetland will be approved.

Detailed geological maps for the area are unavailable. General information of the area is derived from the Geological map of the Philippines (Bureau of Mines 1981). Underlying rocks mainly consist of Oligocene, Miocene and Pliocene marine clastics with single limestone reefs of probably the same age. Coves, mangrove flats and estuaries are characterized by Pleistocene alluvial, fluvial and beach deposits, as well as raised coral reefs. Predominating soil types in the area are Sibul clay and Tagburos clay (Anon. s.a.). The former is mostly restricted to the coastal plains and derived from limestone. It is black and plastic, becoming compact when drying up. Tagburos clay is typical in rolling to hilly terrain. It is dark brown and rich in organic matter. The fine texture of this kind of soil prevents water percolation and results in extensive surface run-off during extended periods of precipitation.

CMRPA ranges from sea level to about 140 m a.s.l. south of Culasian proper. The terrain is flat in the narrow coastal area, and rolling to moderately steep in the remaining portions. The two largest forest areas persist north of the highway near Tagbalogo on an isolated moderately steep hill reaching 120 m a.s.l. and a highly fragmented rolling forest area south of the highway from ca. 20 to 140 m a.s.l. near Darapiton, Malutoc, Balingasag and Tuburon.

Two permanent rivers mark the periphery of CMRPA: Culasian River in the north and Arapitan River in the south. Smaller ephemeral creeks and stagnant water bodies can be found inside the area.

The major terrestrial ecosystem in the proposed PA is lowland dipterocarp forest. Unlike most forests in Palawan, canopy heights are very high, often thirty to forty meters, with "apitong" *Dipterocarpus grandiflorus*, "manggis" *Koompassia excelsa* being the most conspicuous emergent tree species. Other emergents are for example *Dipterocarpus gracilis*, *Dipterocarpus hasselti*, *Intsia bijuga* and *Koordersiodendron pinnatum*.

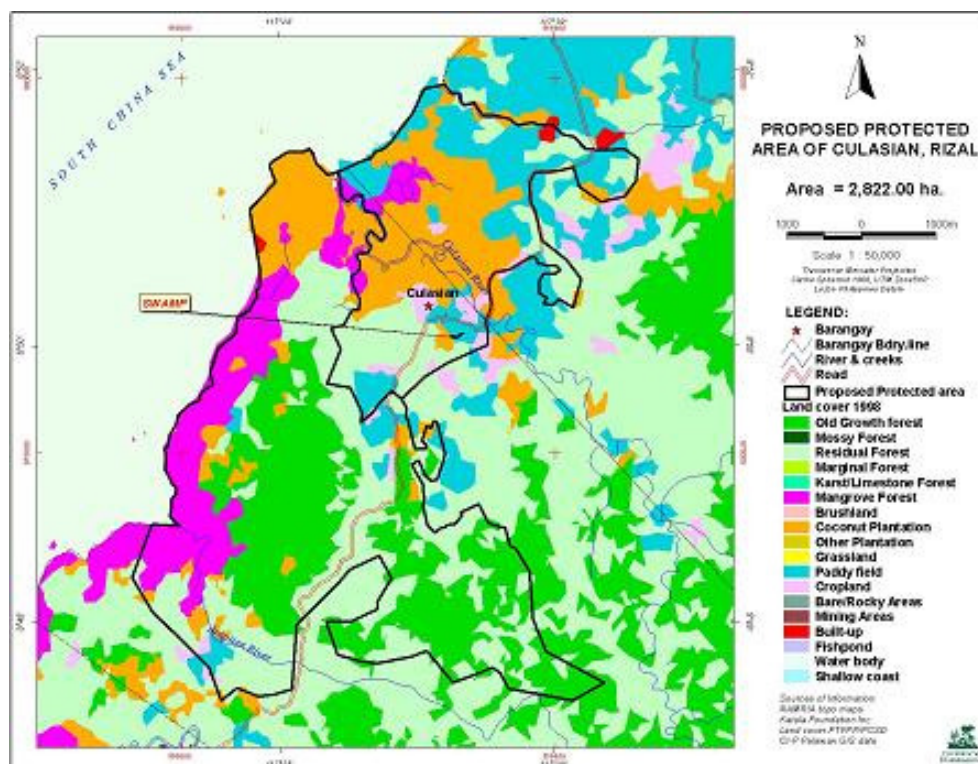
Due to security reasons the floral composition of the mangrove area could not be assessed, but *Rhizophora* spp. and *Sonneratia* spp. seem to be common. Narrow tidal flats are exposed during low tide, particularly in the estuaries of the two larger rivers.

Level areas are dominated by permanent cultivation, mostly irrigated and rainfed rice paddies, permanent cultivation like coconut and pastures. Patches of shrub- and grassland exist particularly along the National Highway. Shifting cultivation is also most common along the roads, but can frequently be found isolated in forested areas, often on steep slopes.



Emergent “*manggis*” and “*apitong*”, isolated in cultivated areas, indicate nest sites of parrots or hill mynas which are ‘owned’ by a poacher, and therefore were not cut during the area was cultivated.

To date, 133 bird species have been recorded within the proposed CMRPA. Among these are six globally threatened and six near-threatened species (IUCN 2006). Of outstanding conservation concern are particularly the larger tree cavity nesters, like Palawan hornbill *Anthracoceros marchei*, all three parrot species of Palawan, Philippine cockatoo *Cacatua haematuropygia*, blue-naped parrot *Tanygnathus lucionensis* and blue-headed racquet-tail *Prioniturus platenae*.



**Figure 4.** Vegetation, land use and boundaries of Culasian Managed Resource Protected Area, Rizal, Palawan.

### ***Patnanungan, Polillo group of islands, Quezon***

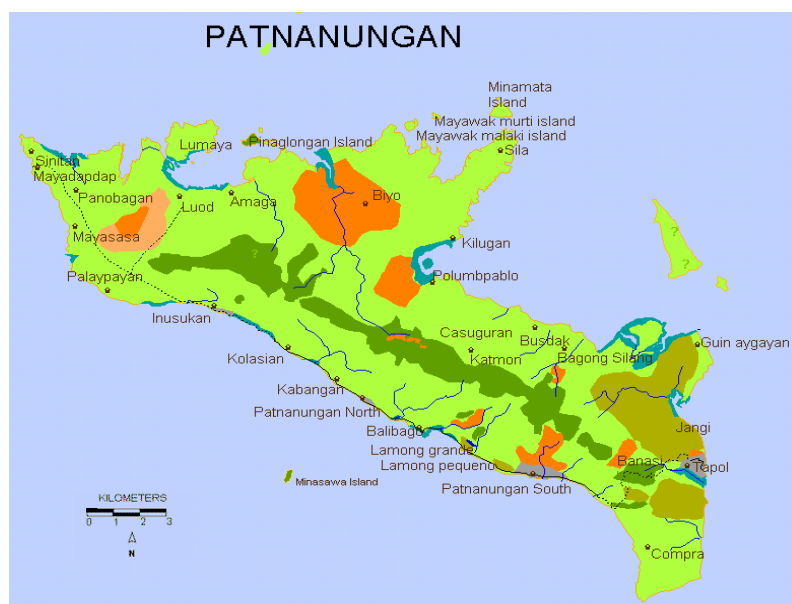
The Polillo group of islands in Quezon is possibly the last area containing a population of the critically endangered Philippine cockatoo *Cacatua haematuropygia*, or ‘Kalangay’ as known locally, in the Luzon faunal region (Gonzalez 1997, Collar et al. 1999, Widmann 2001).

Patnanungan Island is mainly covered with secondary vegetation often interspersed with coconuts. The narrow coastal plains in the south and the more extensive ones in the north are transformed into irrigated rice paddies whenever permanent water-flows could be tapped. Higher terrain was transformed into coconut plantations and exceptionally into grassland, due to repeated burning.

Forests, particularly in the northern and central portion of the island, are frequently transformed into slash-and-burn fields. The small diameter classes of cut trees indicate that rotational periods might be shorter than fifteen years. Principal crops planted are corn, cassava, banana and papaya.

Mangrove exists in protected coves in the north, with representatives of the genera *Bruiguiera*, *Rhizophora*, *Sonneratia*, *Avicennia*, *Ceriops*, *Nypa fruticans*, *Heritiera littoralis*, among others.

Cockatoos persist in very low numbers. No recent observation contained more than two birds at a time. Habitat is seriously degraded and lack of nest trees might be a limiting factor. Poaching for the pet trade is still ongoing, due to insufficient law enforcement, particularly in remote areas.



**Figure 5.** Vegetation and land use of Patnanungan Island (Hampson et al., 2002). Light green: coconut, dark green: forest, blue: mangrove, orange ricefield, light orange: cornfield, olive: grassland, grey: settlement

## Methodologies

Information on the biology and ecology of the cockatoo is gathered through direct observation. On Rasa and Dumaran, movements of the cockatoos can be best observed from a boat, from beaches or coral outcrops. Very dense vegetation on the island considerably hampers visibility on transect walks or point counts.

Monitoring of the population trend on Rasa and Dumaran is done through counting individuals at a traditional roosting site, which is situated in a mangrove area and can be overlooked from a boat. Counts are conducted monthly before sunset on Rasa and daily on Dumaran. Exceptionally, counts are also conducted during dawn before birds leave the roosting site. Whenever possible, counts on Rasa are conducted under similar weather and light conditions. No roosting sites are known from Culasian and Patnanungan.

The core components of all project sites are wardening schemes, usually employing former poachers. Wardens inspect the nest trees starting end of September. During the breeding season, the nest trees are under permanent surveillance. Trees are climbed and nest holes controlled every ten days during that time. For safety reasons, dead or damaged trees are not climbed. Nest trees are characterized through species identification, tree height, diameter at breast height (DBH), height of nest hole, exposition of nest hole, diameter of hole,

diameter at base and depth of cavity. The geographic location of each nest tree is taken with the help of a GPS and marked in a map.

Presence or absence and condition of adult birds, eggs, nestlings or nest predators are noted. Nestlings are weighed with Pesola spring balances and banded with aluminum rings bearing the inscription of the Department of Environment and Natural Resources (DENR), and number (e.g. DENR 0030-06).

Volunteers are detailed in monitoring stations at the mainland coasts of Narra within and outside the breeding season. These volunteers record all sightings of cockatoos and other significant wildlife in the area of assignment. Radio telemetry was employed in 2006 to gather data on dispersal and mortality of fledglings from Narra.

Surveys in unknown areas are based on historical sources or recent information. To initially narrow down the searches, non-formal interviews with key informants (poachers, other forest users, barangay officials, school teachers) are conducted. Surveys aim to identify remnant cockatoo populations or areas which are suitable for translocation.

Herbarium collections are made of key plants in cockatoo habitats, particularly food-providing plants, nest and roost trees. The physical structures of cockatoo breeding habitats are characterized through forest profiles. Phenological information on fruiting and flowering of food-providing trees are systematically collected on Rasa.

Restoration of mangrove is conducted on Rasa through transplanting of nursery grown trees. Experimental restoration of lowland forest habitat is done in on Dumaran. Particularly nest- and food-providing plants for cockatoos are systematically tested for their suitability for reforestation.

Composition of remaining bird communities in project and survey sites is assessed using MacKinnon-Lists and, occasionally, mist-netting. Composition of mammal, reptile and amphibian communities in project sites is assessed through direct observations, mist- and harp-netting, live-trapping (Sherman type and locally-made cage type) and pitfall trapping.

To identify potential cooperators for the projects, livelihood needs, and capacities, stakeholder and SWOT analyses are employed. Participatory planning is done through goal-oriented project planning methodology. Alternative livelihood is provided for key-stakeholders of the cockatoo and the PAs, based on the needs assessments.

Conservation education activities employ the PRIDE approach which uses marketing methodologies to galvanize community support for conservation. This uses the Philippine cockatoo as flagship species in order to cultivate and promote pride among local partners. Proven marketing vehicles like billboards, posters, fact sheets, puppet shows, school and community visits, festivals and media participation are used to deliver relevant and compelling conservation messages.

## RESULTS AND PROGRESS

### ***Output 1: Stabilization of the cockatoo population in Rasa Island, Palawan, through co-management of the protected area***

#### **Wardening scheme**

So far this is the best breeding season ever! A total of 39 hatchlings were banded yet 37 successfully fledged. Please see Output 4 for more details. In August, assessment of the recent breeding season was conducted. Problems and issues which confronted the wardens while on duty during the whole breeding season were thoroughly discussed. Potential problems were also taken up and activities were outlined to prepare for the next season.

The recruitment of two additional Tagbanua climbers greatly helped this breeding season.

Very limited activities were notably done on the island even among claimants. Probably this is because of the opportunities brought by the mining activity on mainland Narra. However, a fish corral established within the perimeters of Rasa Island Wildlife Sanctuary (RIWS), was reported by wardens in late June. The matter was taken considerably by the management board. Wardens meanwhile continue monitoring activities within the boundaries of the PA.

#### **Technical support to the Protected Area Management Board (PAMB) and Community Environment and Natural Resources Office (CENRO)**

Department of Environment and Natural Resources (DENR) Region 4-B Executive Director, Dir. Vicente S. Paragas presided the Protected Area Management Board (PAMB)'s 3<sup>rd</sup> regular meeting on August 28, 2006.

The said meeting was very well attended as it was the first meeting presided by

the RED himself. Among the matters taken were:

- Co-chairmanship of Mayor Demaala to the PAMB;
- DENR through the Regional Office will help facilitate discussions with PCSD on the issue of chairmanship;
- Manual of operations shall be submitted to Regional Office for legal refinement;
- Mr. Alfaro was designated as Acting Protected Area Superintendent (PASu) for RIWS;
- Installation of the Biodiversity Monitoring System (BMS) was tentatively agreed on November.

The PAMB had been instrumental in the operations of the PCCP at Narra. Along with the good and active cooperation with the CENR Office, issues are acted upon and resolved considerably.

#### **Conservation education (CE)**

Focus group discussions were conducted in coastal barangays adjacent to Rasa. In Brgys. Antipuluan and Panacan, KF attended regular sessions to expound on importance of RIWS as protected area (Table 1).

Meanwhile, our contract with the local radio station (RN) has ended in June.

#### **Alternative Livelihood**

Agricultural Farming Project revolves on its own income; in fact, their bookkeeper's service is paid from its income. There are 22 beneficiaries of the project to date.

#### **Ecotourism**

There were two prominent visitors within the reporting period, both considering Rasa Island and the cockatoos for their 2007 calendar projects. Mr. George

Tapan, renowned photographer in the Philippines, represented Air Philippines, a local airline and the team from the Philippine National Oil Company (PNOC).

### **Constraints and measures taken**

- The conduct of an assessment of the recent breeding season is always productive. Problems on nest holes, hatchlings and anything that affects the cockatoos are thoroughly analyzed. Options were discussed to arrest similar problems to occur in the next breeding season.
- Apparently, the Municipal Fisheries and Aquatic Resources Management Committee (MFARMC) through Mr. Acalyan issued a certification to Mr. Reci to establish the said fish corral despite its location is within the boundaries of the RIWS. The PAMB through the Mayor intervened and consulted with the owner and reached an agreement to cease operation of the fish corral by 15<sup>th</sup> September 2006.
- The attendance of RED Paragas as presiding officer during the PAMB's regular meeting was encouraging especially on the decision of retaining the Municipal Mayor of Narra as co-chair of the PAMB. Having a local-based head of the PAMB is of greater advantage for the operations of the PA.
- It is hoped though that, since most of the agenda taken during the said PAMB meeting were held in further consultation and referral to regional office of DENR, matters are given priority by the regional office.

**Table 1.** Information-Education-Communication campaigns, Narra, Rizal, Dumarán, Palawan, Philippines, June – August 2006

<b>Date</b>	<b>Activities Conducted</b>	<b>Location</b>	<b>Audience/Persons Attended</b>
06/05/06	Radio guesting on program “Good Morning Narra” re: World Environment Day celebration	Radyo Natin, Narra	All radio listeners
06/05/06	Biodiversity conservation lecture, film showing, environmental games and distribution of EE materials	Bugtong station, Antipuluan	Residents, children (ca. 25)
06/05/06	Biodiversity conservation lecture, film showing and distribution of EE materials	Matatag II, Panacan, Narra	Residents, estd. 50 adults
06/08/06	Resource mapping and group discussion with claimants and stakeholders of CMRPA	Culasian, Rizal	Estd. 25 adults
06/14/06	“Katala at Buhay Kalikasan” radio program re: project progress and future activities	Radio Natin 96.7, Narra	All radio listeners
06/14-16/06	Leadership workshop	KEEC, Dumarán	15 HS students leaders
06/17/06	Katala Fun Day during Dumarán Kalabukay Festival: envi. games, lectures, puppet show, mascot show, film showing, singing contest	Dumarán, Palawan	Residents: adults and children
06/17/06	Assisted and guided WPU graduate students and professor during visit and interaction with mainland volunteers and visit to roosting site	Rasa Island and mainland Narra	WPU graduate students and professor
06/18-23/06	Attendance and presentation to Zookeepers Association (ZAP) of the Philippines workshop	SBMA, Olongapo City	ZAP members
06/19-23/06	Conduct survey on Kalabukay Festival	Pob., Dumarán	63 respondents
07/05/06	“Katala at Buhay Kalikasan” radio program re: wildlife trading and tourism scheme at Rasa	Radyo Natin, Narra	All radio listeners
07/19/06	“Katala at Buhay Kalikasan” radio program	Radyo Natin, Narra	All radio listeners
07/26/06	Last broadcast of “Katala at Buhay Kalikasan” radio program re: acknowledgement and reminders	Radyo Natin, Narra	All radio listeners
07/30/06	Distribution of EE materials to different barangay representatives during culmination activity of nutrition month	RVM Gym, Narra	Different barangay representatives
08/01/06	School visit re: Lecture on the Philippine cockatoo	Dumarán Elem. School	Grade v pupils
08/02/06	Attendance to Bgy. Panacan Council’s session re: presentation of Rasa Island Wildlife Sanctuary	Bgy. Panacan Hall, Narra	Sangguniang Barangay of Panacan
08/07-09; 14-16; 21-23/06	School visits re: lectures and presentations on biodiversity conservation	Dumarán Elem. School	Grades IV-VI pupils
08/21/06	Attendance to Bgy. Antipuluan Council’s session re: PIC for KIEBC center	Bgy. Antipuluan Hall, Narra	Sangguniang Barangay of Antipuluan
06-08/06	Assistance to Rasa Island visitors	Rasa Island, Narra	Visitors



**Output 2. Legal and actual conservation of cockatoos and their habitats in Dumaran Island, Palawan.**

**Wardening scheme**

An illegal cutting activity inside the Omoi Cockatoo Reserve was reported by wardens in June. This was reported to the local DENR office and the police. Investigations were carried and the case is now filed at the Prosecutor's office in Puerto Princesa City.

Wardens on patrol had verified a possible roosting site in a mangrove area in Bgy. Bohol. However, its proximity to the human settlements might have an impact to the number of roosting birds. Continuous monitoring is being conducted to ascertain the roost site.

A breeding assessment meeting was also conducted on site to address issues and problems during the season.

**Conservation education**

The Municipality of Dumaran participated during the **Baragatan Festival** in Puerto Princesa in June. All municipal officials dressed like Philippine cockatoos paraded and presented a five-minute performance which was contested among municipalities within the province.



**Figure 6.** Dumaran contingent lead by Mayor Aurello during the Baragatan Festival 2007 in PPC. © MPDO, Dumaran

"Kataly", KF's official mascot joined the festivities with the municipality's version of a Philippine cockatoo mascot. This was very well liked by children and adults.



**Figure 7.** "Kataly" the official KF mascot joined another Katala mascot during the Baragatan Festival. © MPDO, Dumaran

*Baragatan Festival* is celebrated yearly in June with the Provincial Government as major convenor/organizer.

**Kalabukay Festival**

The yearly joint celebration of the Kalabukay Festival and Dumaran's Founding Anniversary took off on June 14. Activities outlined this year included seminar on Leadership Skills (for youth), lectures, face painting, tree planting, puppet show and an environmental singing contest.



**Figure 8.** Youth leaders in Dumarán actively participated during lectures. © IDLWidmann

At the Katala Environmental Education Center (KEEC), a total of 271 students visited the library within the reporting period while about 215 pupils from Grades four to six were reached by lectures conducted at the Dumarán Central School.

### Legal protection of Omoi Cockatoo Reserve

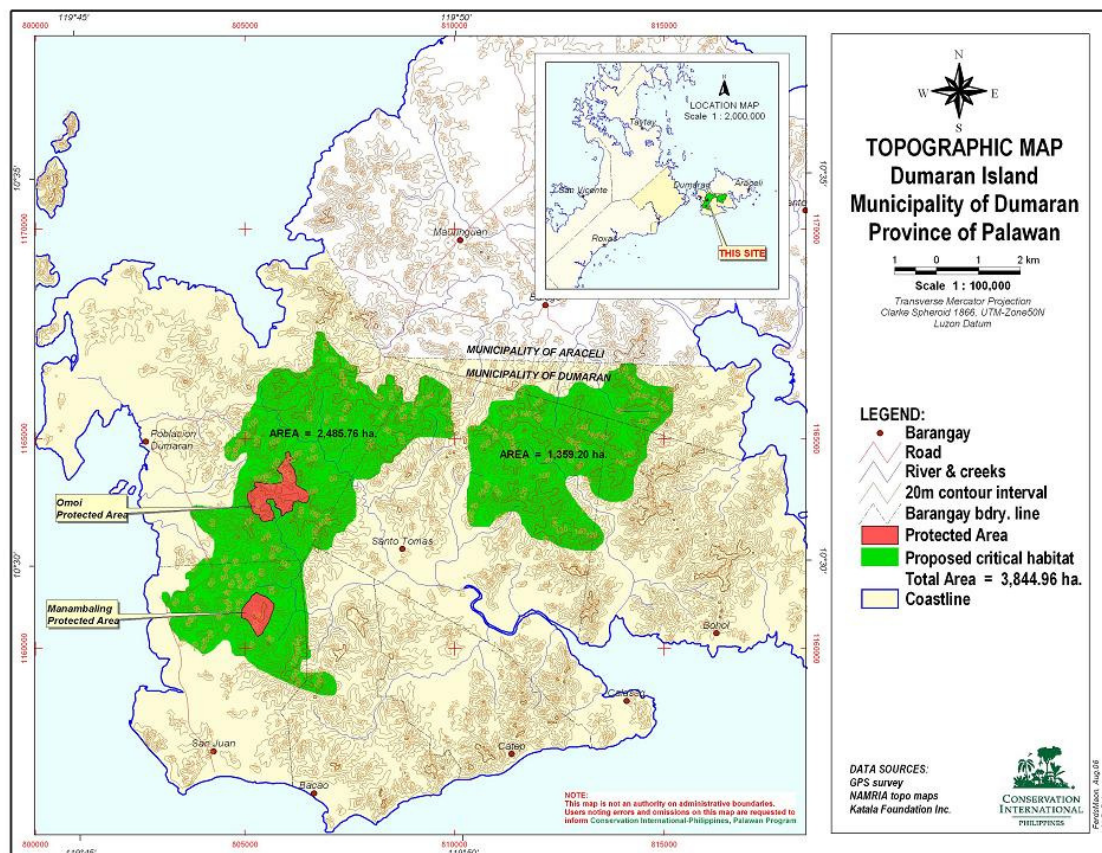
Since the local declaration of the two protected areas in Dumarán, a Local Protected Area Management Committee (LPAMC) was created through municipal ordinance.

The first LPAMC meeting was conducted in August in full attendance. Mayor Aurello presided the said meeting. Peter and Indra presented scientific project results and the results of the pride campaign conducted in the last two years.

Among the highlights of the 1<sup>st</sup> LPAMC meeting were:

- Orientation on the roles and functions of the LPAMC;
- Designation of official designates to the committee; and
- Creation of the Technical Working Group.
- Introduction of Dr. Schoppe as Co-Program Manager for PCCP 2007-2008.

Considering the small size of the two protected areas, KF proposed for a buffer zone that could potentially be declared as critical habitat under RA 9147 or the Wildlife Act. This proposal could also ensure that forest fragments are retained as such before they are converted alienable and disposable by DENR.



**Figure 9.** Map showing the proposed critical habitat connecting the two locally declared protected areas in Dumarán.



## Capacity building

A monitoring visit on the Watershed Project was conducted by PWidmann and SSchoppe. It is very early to assess this municipality-initiated project; however, it is perceptible that technical backstopping on selection of tree species for planting and timing of planting is needed.

## Constraints and measures taken

- The case filed and initiated by local DENR against illegal cutters is one big step ahead. It is hoped that filing the case could somehow serve as a deterrent to similar actions.
- There are still occasional reports on cuttings but there seems to be some political complexity involved in the process.
- The activation of the LPAMC as management and decision making body for the two protected areas is hoped to achieve more milestones in the future provided the committee is guided on the premise of conservation.
- The proposal for a critical habitat declaration under the Wildlife Act has yet to undergo deliberations. But if approved, this most likely could save a number of standing trees outside the PA which are potential nest trees for the cockatoos and other threatened species. The forest patches are so fragmented that a buffer zone is crucial.

## ***Output 3. Continuation of nest-protection scheme in Rizal, Palawan in 2006, after termination of CEPF funding (funding from CEPF requested for 2005)***

### **Nest protection scheme**

A total of 81 of the mapped nest trees were occupied in the 2006 breeding season, mostly by hill mynas (13 nests) and blue-naped parrots (65). Three nest holes were occupied with Palawan hornbills.

Despite cockatoos were observed checking out potential nest holes and cutting twigs in the vicinity, no breeding was recorded this year in the PA. A suspected breeding attempt was reported by wardens however observed a pair around a nest hole which later on got flooded. Upon inspection cockatoo feathers were found inside and a rotten smell was recognized.

However, one breeding pair was reported from a neighbouring barangay. When it was checked by PCCP staff, the nestlings were poached already.

In July, the barangay resolution declaring the Culasian Managed Resource Protected Area was adopted at the municipal level under Municipal Resolution No. 2006-30, making it the first protected area in the municipality.

Discussions and GPS demarcation of the adjacent Candawaga Wetland Reserve have been conducted with claimants and barangay officials. It was agreed that the declaration of the area should be pursued as early as possible.

### **Capacity building for local decision-makers and law-enforcers facilitated**

Like in Dumarán, the 1<sup>st</sup> regular meeting of the Local Protected Area Management Committee (LPAMC) was held. Highlights were:

- Presentation of initial results of the SPAPI project to local counterparts;
- Orientation on the LPAMC's roles and functions;
- Creation of Technical Working Group; and
- Presentation on Fundraising and Proposal Writing.

A survey was conducted among residents within the Culasian Managed Resource Protected Area (CMRPA) to determine basic profiles. Resource mapping within the CMRPA was held with residents actively participating in the activity.



**Figure 10.** Resource mapping with stakeholders of the PA. Photo: R. Cruz

Aside from monitoring the PA itself, also illegal wildlife trade operations are monitored, and, if possible, apprehended. The largest shipment of birds confiscated originated from Rizal (outside of the PA!) consisted of 140 hill mynas and 63 blue-naped parrots, which were destined for Manila.

### Conservation education

Post project survey suggests remarkable results of the CE campaign in Rizal and potentially could impact positively on the general conservation efforts.

Some of these remarkable results were:

*Peoples' perception on importance of wildlife trade issue.* Results suggested a 50% points increase (up from 21% in pre project survey) of the general public who said it is very important.

*People's perception on hunting threatening wildlife.* A 16% points decrease (down from 17% in pre project survey) who said they "don't know" when asked if hunting is threatening wildlife.

38% points decrease of the general public said (down from 59% in pre project survey who said they have not heard about the Wildlife Act) they have not heard about the Wildlife Act.

*Self-reported behaviour.* 36% points decrease (down from 50% in pre project survey) of general public who said they have not done anything to prevent hunting/poaching in their place in the past 6 months.

26% points increase (up from 62%) of the general public have cited correct reasons why we have to protect wildlife from hunting/poaching.

### Constraints and measures taken

- Despite involving the Philippine Armed Forces, the armed poacher band reported by the wardens is still at large. Since the members are considered dangerous, wardens and staff were advised to avoid areas of their activities.

### ***Output 4. Research and monitoring on distribution, habitat requirements and restoration, breeding and feeding ecology and publication of results.***

#### **Comprehensive floral inventories in Rasa and Dumaran initiated and phenological research continued**

Floral inventory of Rasa is still ongoing and the first pictorial documentary was

submitted by the researchers from Western Philippines University.

### **Systematic testing of propagation and performance of cockatoo-relevant plant species for habitat restoration conducted**

Performance of trees planted in the experimental plots were routinely measured during the reporting period.

PCCP-supported reforestation conducted by the Municipality of Dumaran was visited. Seedlings were freshly planted and available planting material was limited. Further backstopping of the activity was requested.

### **Cockatoo population and nest monitoring in project sites continued**

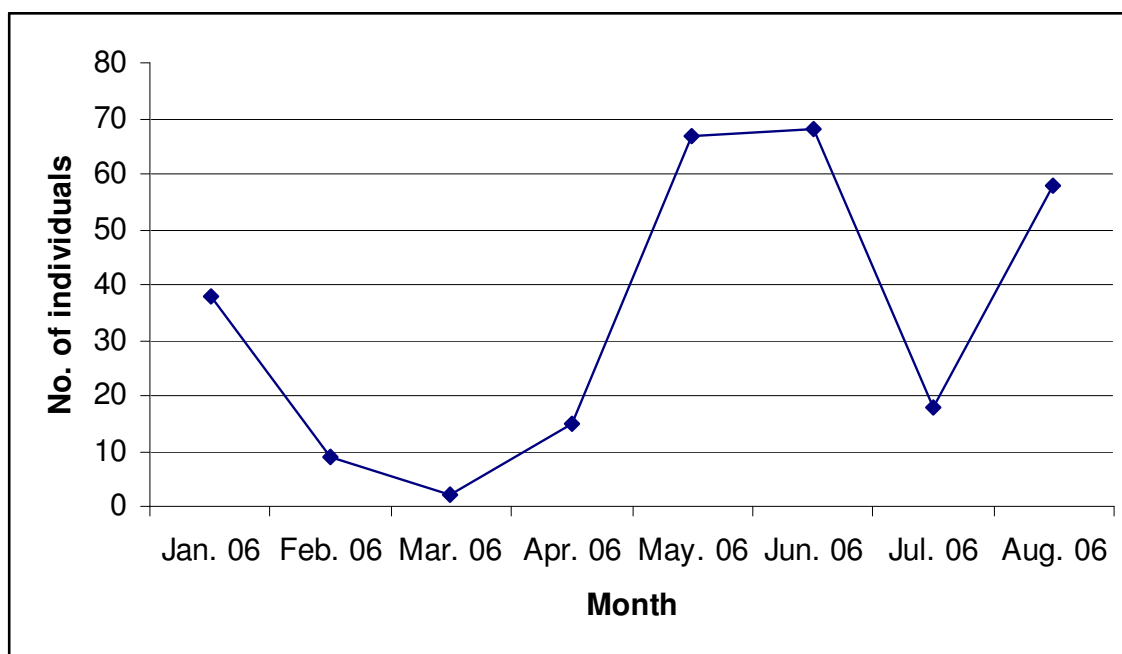
#### Rasa

This year's breeding season was the most productive since the project started in 1998. A total of 39 birds hatched of which 37 fledged successfully (Table 2).

Due to sufficient rain, food supply on Rasa was abundant over the entire breeding season, so that the losses of last year's breeding failure could be more than compensated.

The good fledging success is also reflected in the counts at the traditional roosting site, which reached 130 cockatoos in August. This is the highest number recorded since start of the project (Annex 1).

Numbers of cockatoos foraging on the mainland were fluctuating widely in the reporting period. Maximum numbers for 2007 are given in Fig. 11.



**Figure 11.** Maximum numbers of Philippine cockatoos counted on the mainland opposite Rasa Island on a single day.

#### Dumaran

The successful breeding season in Dumaran is also reflected in a slight increase of counted cockatoos at the

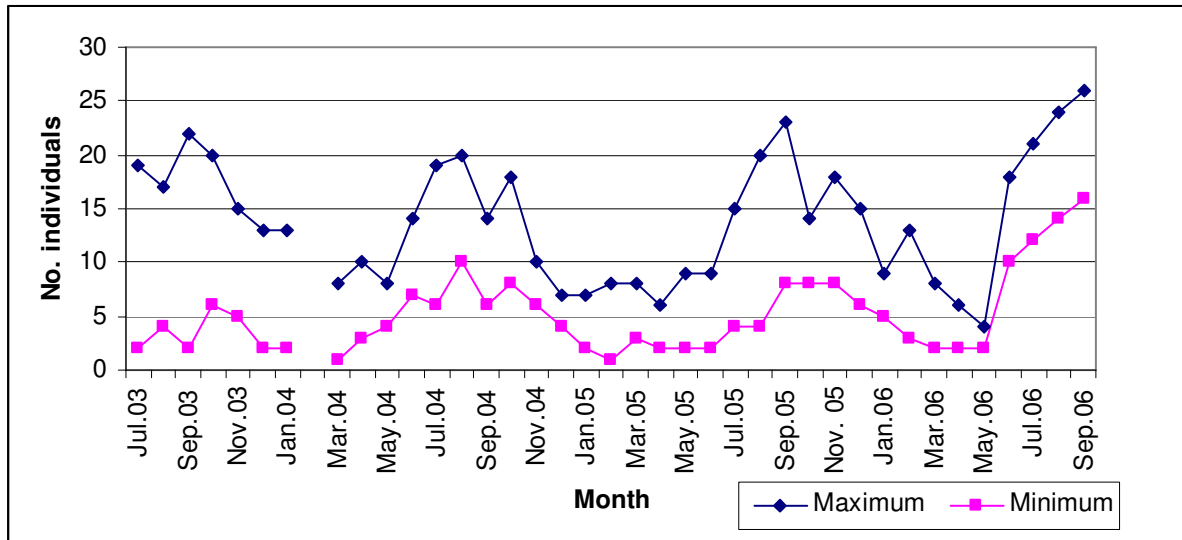
roosting site in Lagan, compared to previous years. In September we recorded the highest count with 26 birds since the start of the project (Figure 12).

Finally we were also able to locate a second roosting site which lies hidden in a dense mangrove area in the southern portion of the island. This roosting site was predicted since cockatoo numbers in the roosting site are fluctuating significantly on a daily basis.

However, mix stands of coconuts within the proximity of the area might pose

disturbance to the birds as residents make use of the coconuts.

First simultaneous counts indicate that the overall number of cockatoos in this area may be slightly higher than 30 individuals. However, more simultaneous counts have to be conducted.



**Figure 12.** Maximum and minimum numbers of Philippine cockatoos counted in the roosting site in Lagan, Dumarán

### Rizal

Please refer to Output 4.

### Polillo

Although monitoring remains difficult (due to non-existence of roosting sites), cockatoo records are in the increase. This is partly due to increased sampling efforts by the wardens. Regular observations are not only made in

Patnanungan, but also in Burdeos. Though most observations only include one or two birds, credible secondary information includes records with up to four birds seen simultaneously. Dans (in litt. 05/2006) assumes a slight increase of the overall cockatoo population from six to ten individuals.

Four nest trees have been reported from Patnanungan and one from Burdeos.

**Table 2.** Banded cockatoo hatchlings on Rasa Island, Narra, Palawan as of August 2006.

<b>Nesting Tree No.</b>	<b>No. Banded</b>	<b>Ring No.</b>	<b>Date of Ringing</b>	<b>Tail (cm)</b>	<b>Weight (g)</b>	<b>Observations upon ringing and important remarks</b>
36	3	DENR 0001-06 DENR 0002-06 DENR 0003-06	05/11	4.0 5.5 6.6	127 327 292	- healthy, with few foods on crop - healthy, with few foods on crop - healthy, with foods on crop
41	3	DENR 0006-06 DENR 0007-06 DENR 0005-06	05/18	3.0 3.0 5.3	236 261 103	- healthy, with few foods on crop, transmitter installed (05/18) found dead (06/20) - healthy, youngest, with few foods on crop - healthy, eldest, with few foods on crop
3	3	DENR 0008-06 DENR 0009-06 DENR 0010-06	05/18	6.8 5.3 4.0	135 141 295	- healthy, eldest, with few foods on crop - healthy, with few foods on crop - healthy, youngest, with few foods on crop
16	3	DENR 0011-06 DENR 0013-06 DENR 0014-06	05/18	6.5 5.0 4.0	174 186 176	- healthy, eldest, with few foods on crop - healthy, with few foods on crop - healthy, youngest, with few foods on crop
38	2	DENR 0015-06 DENR 0016-06	05/24	3.5 3.5	106 305	- healthy, young, with few foods on crop - healthy, old, with few foods on crop; transmitter installed (06/05)
21 t	3	DENR 0017-06 DENR 0018-06 DENR 0019-06	05/24	5.0 3.0 2.1	103 101 306	- healthy, eldest, with few foods on crop - healthy, with few foods on crop; died for unknown cause (06/05) - healthy, youngest, with few foods on crop; transmitter installed (06/05)
07	3	DENR 0020-06 DENR 0023-06 DENR 0040-06	05/26 -do- 05/31	3.5 none 5.5	306 272 330	- healthy, young, with few foods on crop - healthy, old, with few foods on crop - healthy, with foods on crop
06	3	DENR 0024-06 DENR 0025-06 DENR 0027-06	05/26	8.3 7.0 4.5	95 147 284	- healthy, eldest, no food on crop - healthy, with few foods on crop - healthy, youngest, with few foods on crop
39	1	DENR 0028-06	05/26	1.0	223	- healthy, old, with few foods on crop
37	1	DENR 0029-06	05/26	4.5	351	- healthy, old, with many foods on crop
10	2	DENR 0030-06 DENR 0031-06	05/30	7.5 7.0	352 342	- healthy, with few foods on crop - healthy, with few foods on crop
09	3	DENR 0032-06 DENR 0033-06 DENR 0034-06	05/30	6.2 7.3 6.0	270 312 250	- healthy, with few foods on crop - healthy, with few foods on crop - healthy, with few foods on crop
08	3	DENR 0035-06 DENR 0036-06 DENR 0037-06	05/30	10.5 5.0 9.5	290 305 300	- healthy, with few foods on crop, near to fledge - healthy, with few foods on crop - healthy, with few foods on crop
13	1	DENR 0039-06	05/31	5.1	350	- healthy, with few foods on crop
02	3	04-IV-VI blue XII-VI red XXI-VI yellow	05/31	2.5 1.5 none	338 308 270	- healthy, with few foods on crop, transmitter installed (06/22) - healthy, with few foods on crop - healthy, crop almost full of foods
23	2	VI XL violet VI XLI orange	07/10	8.3 9.4	316 341	- both healthy and with foods on crop - transmitter for telemetry was placed on hatchling no. VI XL violet

## Research on fledgling dispersal and survival conducted

Four fledglings were tagged with radio-transmitters before fledging and were tracked initially daily and subsequently in three-day intervals throughout the complete reporting period.



**Figure 13.** Radio-tracking from the project boat. Photo: P. Widmann

After fledging, all four tagged birds remained in close vicinity to the nest trees together with their parents. Only later they were also recorded at the roosting site. This explains why an increase of birds at the roosting site is discernable with a delay of two to three weeks after the majority of birds fledged. Throughout the reporting period all birds remained on Rasa (Annex 2), although larger flocks of cockatoos were recorded to forage on the mainland.

On June 20 remnants (mostly plucked feathers) of one of the tagged birds were found on the floor of the coastal forest. It is assumed that the bird has been killed by a raptor, most likely a crested goshawk. The transmitter could be retrieved intact and was attached to one

of the nestlings which still were not fledged at that time. So the number of effectively radio-tracked birds is five.

## Papers submitted for publication to relevant journals

Two papers were submitted earlier this year as indicated in the last report.

Several PCCP members are co-authors of a paper by Pain *et al.* (2006). *Impacts of protection on nest take and nesting success of parrots in Africa, Asia and Australasia* which was published in 'Animal Conservation'.

Electronic copies as PDF-files are available on request.

## Output 5. Cockatoo surveys and assessments of potential translocation sites.

The translocation project was duly endorsed by the Protected Area Management Board of El Nido-Taytay Managed Resource Protected Area and the local government of El Nido. Prior informed consent certificates were also secured from barangays which might be impacted by the project. All these documents were submitted to PCSDS for evaluation in compliance for the issuance of the SEP clearance.

KF initiated a meeting among partners for the translocation project in August. This was attended by Ten Knots Development Corporation, South East Asian Airlines, Interisland Transvoyager Incorporated, El Nido Foundation and KF with its President. A draft MOA is now on final review and proper permits from concerned agencies particularly from PCSD and DENR are already processed.

The actual translocation is set on the last week of November should weather permit. A zookeeper from Chester Zoo would be most appropriate to assist the project especially in the 1<sup>st</sup> two months.



## Market survey in Cartimar, Manila

On August 17 an informal market survey on illegally traded wildlife with focus on birds and reptiles was conducted in Cartimar. Aside from a number of blue-naped parrots and hill mynas, also one Philippine cockatoo was for sale.

The bird was not on display, but was produced from a storage in the back, upon specific request. The price for the bird which was still immature was given at 25,000 Php (ca. 500 US\$).

## Constraints and measures taken

- Securing necessary permits is a long and inconsistent process due to overlapping mandates of PCSD and DENR. Frequent follow-up on procedures is necessary.

## Output 6. Preparation for a Biodiversity Conservation Center in Narra.

As stated in the previous report, the development of the center in Narra is well ahead of time.

Currently a 2000 sq.m large area is fenced in, and enclosures for turtles and rescued cockatoos from Rasa are in preparation.

Application for SEP Clearance is ongoing.

## Other highlights

### Other remarkable bird records

#### Palawan hornbill *Anthraceros marchei*

Wardens protected three and two nests in Culasian and Dumarán respectively, which were all successful.

Seeds of thirteen species of food-providing plants were collected, which were regurgitated by the sealed-in females. This increases considerably the

knowledge on the ecology of this little-known hornbill species. Many of the seeds germinated in the nursery and will in future be included in habitat restoration attempts.

#### Brown hawk-owl *Ninox scutulata*

First record for Dumarán. Breeding in nest tree formerly occupied by cockatoos.

## Coral Reef and Evaluation Training for stakeholders

The training complements the overall goal of the PCCP in as much as it aims to raise awareness of local stakeholders for the need of continuous monitoring of marine resources and to introduce the participants to the methods that allow laymen to do regular assessments based on which the trainees will be able to evaluate the current status and monitor its development over time.

The training was divided into four modules which were conducted in the span of a year. Varied teaching methods employed included lecture-discussion, demonstration, problem solving, film showing, actual drills and reporting methods.



**Figure 14.** Dr. Sabine Schoppe, trainer, helps out trainees in mapping the location for manta tow survey. © RDolorosa.

## **Mid-year Planning Workshop**

PCCP conducted the mid-year planning workshop in August to assess progress of the past months and to review plans for the remaining period.

The issue on personnel change was also undertaken. Dr. Sabine Schoppe, a KF founding board member and successor of P. Widmann, participated actively during the planning.

## **Relevant seminars, meetings and workshops organized and attended**

- Participatory Mapping inside Protected Area, Culasian, Rizal, June 8, 2006.
- Zookeepers Workshop, Olongapo City, June 18-23, 2006.
- Mangrove Forest Mgt. Issues and Opportunities, sponsored by PCSD, Irawan, Puerto Princesa, June 19, 2006.
- ECAN Reconstitution Workshop, Narra, Palawan, July 3, 2006.
- ECAN / NEB Meeting, Narra, Palawan, July 27, 2006.
- Meeting sponsored by Conservation International for Mt. Mantalingahan Protected Area, Puerto Princesa City, Aug. 4, 2006.
- UNDP-SGP Networking and Linkage Building Meeting, Puerto Princesa City, Aug. 16, 2006.
- ECAN Mapping Workshop, Dumarán, Palawan, Aug. 17, 2006.

- Zookeepers Workshop, Puerto Princesa City, August 31-September 1, 2006.

## **Summary of Presentations:**

- Powerpoint presentation on "Fundraising and Proposal Writing: Learning the basic and practical tips. Presented to LPAMC Rizal, June 26, 2006.
- Powerpoint presentation on "Saving the Katala". Presented during the Zookeepers Workshop, Olongapo City, June 18-23, 2006.
- Powerpoint presentation on "Translocation of Philippine Cockatoos to Lagen Island, El Nido", El Nido PAMB, Palawan, July 13, 2006.
- Presentation of translocation project to Sangguniang Bayan of El Nido, El Nido, Palawan, Aug. 16, 2006.

## **Capital outlay**

Major repairs and maintenance were undergone within the reporting period. The Abukay boat had a major accident which required overhauling of engines and repairs of the hull and keel. Motor vehicles i.e. tricycle and car likewise underwent regular maintenance and workshop visits.

Meanwhile, two solar panels were purchased to be used for the quarantine section of the center in Narra.



## **Planned targets and activities for the next reporting period.**

### **Output 1**

- Routine patrolling of Rasa and mainland by wardens and volunteers.
- Conservation education continued.
- Potentials for declaration of Rasa under congressional proclamation explored.

### **Output 2**

- Routine patrolling of wardens continued.
- Experimental habitat restoration continued.
- Conservation education continued.
- Watershed rehabilitation project, particularly planting schedule, monitored.
- Enrichment planting in experimental plot continued.

### **Output 3**

- Nest monitoring continued.

- Conservation education continued.

### **Output 4**

- Continued monitoring of cockatoo population in all project sites and preparations for the next breeding season.
- Monitoring of plant phenology and floral composition on Rasa continued.
- Field work on dispersal and mortality of cockatoo fledglings on Rasa continued.

### **Output 5**

- Involvement of local DENR personnel in translocation project facilitated.
- Survey in Calamianes group of islands conducted.

### **Output 6**

- Continuation of landscaping as long as weather conditions allow.
- Potentials of cooperation with German Development Corporation (GTZ) explored.

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## Worksheet June – August 2006

KEY PROJECT ACTIVITIES	DATE	INVOLVED PERSON(S)
Rizal trip re: salary disbursement and breeding season 2006 updates	June 1-4, 2006	Rommel
Official trip: Mla: Meetings with Dr. Lim (PAWB), Hon. Zubiri, PAWVI & office purchases	June 3-5, 2006	Peter, Indira
Nursery maintenance and monitoring	June-Sept, 2006	Mike, wardens
Experimental plot monitoring, Dumaran	June-Sept, 2006	Mike, wardens
Bagging of wildlings (15 Taulili)	June 2, 2006	Mike, wardens
Bagging of 41 taulili seedlings	June 3, 2006	Mike, wardens
5 <sup>th</sup> remittance and meeting with R.Deig re: agri. Report	June 3, 2006	Debbie
Radio guesting at Radyo Natin Narra on the program "Good Morning Narra" re: celebration of World Environment Day	June 5, 2006	Debbie, Rommel, Siegfred
Biodiversity conservation lecture, film showing, environmental games and distribution of EE materials at Bugtong Station, Bgy. Antipuluan, Narra	June 5, 2006	Debbie, Rommel
Biodiversity conservation lecture, film showing and distribution of EE materials at Purok Matatag II, Bgy. Panacan, Narra	June 5, 2006	Debbie, Rommel
Installation of radio collar for telemetry to hatchlings with ring no. DENR 0019-06 from nest 21 and 0016-06 from nest 38	June 5, 2006	Siegfred, wardens, E. Alfaro, Peter
Narra staff meeting	June 5, 2006	Debbie, Romel, Fred, Peter
Acquire Katala boat registration from MARINA	June 6, 2006	Glesselle
Mainland cockatoo monitoring	June 6, 2006	Peter, Siegfred
Visit to KIEBC center	June 6, 2006	Siegfred, Peter
Meeting with Capt. Ong re: socio-econ. survey at Culasian, Rizal	June 6, 2006	Debbie, Rommel
Assisted photographer George Tapan re Rasa visit	June 7-9, 2006	Siegfred, wardens, Peter
Visit Candawaga wetland	June 7, 2006	Rommel, Debbie
Socio-economic survey on residents inside Culasian Managed Protected Area (CMRPA)	June 7-9, 2006	Debbie, Rommel
Meeting with SPAPI wardens re: work assignment	June 7, 2006	Rommel, Debbie
CMRPA resource mapping and meeting with claimants and stakeholders at Culasian	June 8, 2006	Debbie, Rommel
Preparation PTPR June-Sept 2006	June 8-12, 2006	Indira
Fixing of new billboard in front of municipal hall	June 11, 2006	Mike, wardens
Inventory of materials on Abukay boat	June 13, 2006	Rommel
Meeting with Vice Amiral Danga	June 13, 2006	Indira, Peter
3 <sup>rd</sup> Kalabukay Festival, Dumaran, Palawan	June 13-18, 2006	KF Staff
Meeting with Intelligence Officer of WesCom re: armed group in Bgy. Culasian, Rizal	June 13, 2006	Rommel, Siegfred
Calamianes Project Meeting with involved staff	June 14, 2006	Peter, Indira
Narra office staff meeting re: schedule on telemetry study	June 14, 2006	SHD, DV, RC and Bojie
Leadership workshop for KCC members, Dumaran	June 14-15, 2006	Glesselle, Sunshine, Mike
"Katala at Buhay Kalikasan" radio program re: progress and future activities	June 14, 2006	Debbie, Rommel
Confirmation of roosting at Bugsuk Island thru CENRO Bataraza	June 15, 2006	Indira
Meeting with PASu Rodriguez, El Nido re: translocation	June 15, 2006	Indira, Peter
Meeting with Narra wardens re: work assignment and updates	June 16, 2006	Siegfred
Katala Fun Day during Dumaran Kalabukay Festival: envi. Games, lectures, puppet show, mascot show, film showing, singing contest	June 17, 2006	Indira, Debbie, Peter, Glesselle, Dumaran staff
Assisted and guided WPU graduate students during visit in Rasa	June 17, 2006	Siegfred, wardens
Attendance and presentation to Zookeepers Association of the Philippines workshop at SBMA, Olongapo City	June 18-23, 2006	Rommel, M. Beleg
Attendance to workshop entitled "Mangrove Forest Management-Issues and Opportunities" by PCSDS	June 19, 2006	Glesselle
Conduct survey on Kalabukay Festival	June 19-23, 2006	Sunshine
Trip to Rizal re: preparations for LPAMC meeting	June 21, 2006	Debbie
Check illegally cut trees at Sitio Camaya, Poblacion	June 21, 2006	Mike, wardens
Tree planting with wardens at the buffer zone	June 21-22, 2006	Mike, wardens
Facilitation of Calamianes documents for SEP issuance	June 21-25, 2006	Indira, Glesselle
Measuring of plants at experimental plots	June 22, 2006	Mike
Monthly cockatoo count	June 23, 2006	Siegfred, wardens
Procurement of statement of accounts from Hotels re: WCSP expenses	June 23, 2006	Glesselle
Assist staff from CENRO Roxas re: investigate illegally cut down trees in Sitio Camaya,	June 24-25, 2006	Mike, wardens
1 <sup>st</sup> Rizal LPAMC meeting and Orientation on Proposal Writing at SB Session Hall, Rizal	June 26, 2006	PW, IDLW, DV, RC
Meeting with I. and P. Widmann re: schedule on telemetry study	June 26, 2006	PW, IDLW, BC, SD, DV
Monthly cockatoo count	June 27, 2006	Siegfred, wardens
Check Bgy. Bohol re: possible roosting site	June 27, 2006	Mike, wardens
Rizal trip re: salary disbursement and nest verification	June 27-29, 2006	Rommel
Meeting with R. Deig re: agri. Farming project financial report	June 28, 2006	Debbie
Monitoring in Manambaling area	June 28, 2006	Mike, wardens
Report writing: SPAPI Progress Report October-March 2006	June 28-29, 2006	Debbie
Coordination with Mayor L. Demaala re: fish corral of Mr. Reci established at Rasa	June 29, 2006	Siegfred, wardens
Official trip to Mla: Congress meeting, office purchases, exhibit printers, medical suppl.	June 29-Jul 2, 2006	Indira, Peter
Narra wardens meeting re: work assignment and updates	June 30, 2006	Siegfred, Debbie
Preparation of PTPR Jan-May 2006	June 2006	Indira, Peter
Assistance to visitors from PNOC to roosting site	July 1, 2006	Siegfred, Danny
School visit re: Lecture on the Philippine cockatoo	July 1, 2006	Sunshine
Coordination with concerned agencies & operatives re: illegal transport of 2 Hill myna on passenger of CBL 2121 and coordination to operatives	July 3-5, 2006	Debbie, Indira

KEY PROJECT ACTIVITIES	DATE	INVOLVED PERSON(S)
Attendance to ECAN Reconstitution Workshop	July 3, 2006	Siegfried
Facilitate request for PAMB Office, Narra	July 4, 2006	Siegfried, Debbie
"Katala at Buhay Kalikasan" radio program re: wildlife trading and Rasa tourism scheme	July 5, 2006	Debbie, Siegfried
Create database for Northern Palawan surveys under BP	July 6-8, 2006	Debbie
Encoding Kalabukay Festival survey questionnaires	July 6-12, 2006	Glesselle
Facilitate activities at KIEBC Center	July 7-9, 2006	Siegfried
School visit re: lecture on the Rasa Island	July 7-9, 2006	Sunshine
Meeting with Vice Admiral Danga	July 7, 2006	Indira, Peter
Submit PTPR July 2006 to May 2007 at Provincial Capitol	July 7, 2006	Glesselle
Meeting with wardens re: activities for the month of July	July 8, 2006	Mike
Facilitate needs re: Rasa Island's flora inventory by L. Sopsop	July 9, 2006	Debbie
Check new roosting site in Bohol	July 10, 2006	Mike, wardens
Banding of hatchlings from nest 23 and installation of radio collar for telemetry to hatchling with ring no. VI-XL violet	July 10, 2006	Siegfried, wardens, E. Alfaro
Reported 1 Hill myna on CBL 5036 and coordinated operatives	July 11, 2006	Debbie, Rommel
Assessment of cockatoo nest trees in Rasa Island	July 11-13, 2006	Siegfried, wardens
Received report re: 4 Blue-naped parrot on passenger of CBL 4021 and informed I. Widmann for coordination to operatives, suspect arrested	July 12, 2006	Debbie
Bagging of 15 amugis and 7 betad	July 12, 2006	Mike, wardens
Meeting with Kamarikutan (venue for exhibition) owners	July 12, 2006	Indira, Peter
Coordination to PWRCC re: verify turn-over of confiscated 4 Blue-naped parrots	July 12, 2006	Rommel, Debbie
Official trip to El Nido: re translocation presentation to PAMB El Nido	July 12-14, 2006	Peter
Coordination with Dr. Donato on reported cockatoo trade	July 13, 2006	Indira
Preparation of tracking map for telemetry study	July 14, 2006	Debbie, Bojie
Encoding Dumarán Socio-economic survey	July 14, 2006	Glesselle
School visit re: Lecture on basic environmental principles	July 14-16, 2006	Sunshine
Assessment of Mantanani scops owl nest in Rasa Island	July 15, 2006	Siegfried, wardens
Visit agricultural bodega and nursery at Malinao II	July 16, 2006	Siegfried
Narra wardens meeting re: work assignment	July 17, 2006	Wardens, Siegfried, Debbie
Roving in and around PA and collect wildlings	July 18, 2006	Mike, wardens
Facilitation of PDAF funds for Narra	July 18, 2006	Indira
"Katala at Buhay Kalikasan" radio program	July 19, 2006	Siegfried, Rommel
SEP clearance application at PCSD re: translocation of 10 rescued cockatoos	July 19, 2006	Glesselle
Meeting with P. and I. Widmann re: updates and future activities	July 19, 2006	Peter, Indira, Debbie
Preparations for panels for Seeds of Life exhibit: with carpenters	July 20, 2006	Peter, Indira
Check roosting site at Bgy. Bohol and get GPS reading	July 20, 2006	Mike, wardens
Meeting with accountant	July 20, 2006	Indira
Meeting with PCSDS Research Team re translocation needs	July 21, 2006	Peter, Indira
Communication to Bgy. Panacan Captain and PNP Narra re: PAMB requirements	July 21, 2006	Debbie
Referred with Dr. Lim (PAWB) Dumarán's A & D application	July 21, 2006	Indira
School visit re: Lecture on basic environmental principles – cont.	July 21-23, 2006	Sunshine
Bagging of seedlings (40 narra seedlings) and repair seed box	July 22, 2006	Mike, wardens
Finalization of breeding season 2006 reports for assessment	July 24, 2006	Debbie
Canvass materials for Seeds of Life exhibition	July 24, 2006	Indira, Peter
Facilitate KIEBC Center zoning clearance from MENRO	July 24-26, 2006	Debbie
Rizal trip: livelihood supplies of wardens, meeting, nest verification in Bgy. Ransang	July 25-31, 2006	Rommel
Received Rizal Municipal Resolution No. 2006-30	July 25, 2006	Rommel
Last broadcast of "Katala at Buhay Kalikasan" radio program	July 26, 2006	Debbie, Siegfried
Coordination to E. Alfaro of DENR-CENRO Narra re: revised IPAF guidelines	July 26, 2006	Debbie
Attendance to ECAN/NEB meeting at SB Session Hall, Narra	July 27, 2006	Siegfried
Distribute invitation re: 1 <sup>st</sup> LPAMC Meeting	July 28, 2006	Mike
Assistance and communication re: resolve conflict with Capt. R. Ong of Culasian, Rizal	July 28-30, 2006	Debbie
Measuring of plants at experimental plots	July 29, 2006	Mike
Monthly cockatoo count	July 29 & 30, 2006	Siegfried, D. Villaruz
Salary disbursement and fix billboard near the wharf	July 30, 2006	Mike, wardens
Meeting with accountant	July 31, 2006	Indira
Meeting with Narra wardens re: updates and work assignment	July 31, 2006	Siegfried, Debbie
Encoding Dumarán Socio economic survey	July 31, 2006	Glesselle
Communication to R. Ubani of DENR-PENRO re: PAMB requirements and Batac case	July 31, 2006	Debbie
Visit and coordination of Provincial Tourism Office staff re: Rasa Island visitors data	July 31, 2006	Debbie
Meeting with P. and I. Widmann re: work and communication	July 31, 2006	Siegfried
Facilitation of requirements for KFI SEC registration update	July-Sept 2006	Indira, Glesselle
Attendance to Bgy. Panacan Council's session re: presentation of RIWS	Aug. 2, 2006	SHD, E. Alfaro, DV, RC
Trip to Dumarán	Aug. 1, 2006	Indira, Peter, Sabine
1 <sup>st</sup> Dumarán LPAMC Meeting	Aug. 2, 2006	IDLW, PW, MP, SD, Sabine
Check watershed project	Aug. 3, 2006	KF staff and LGU, Dumarán
Dumarán Zonal Planning Workshop	Aug. 3-4, 2006	Indira
Follow-up PAMB requirements to PNP and PCSD	Aug. 3, 2006	Debbie
Monitoring visit to experimental plot	Aug. 3, 2006	Peter, Sabine, wardens
Assist wardens in the issuance of birth certificates	Aug. 3, 2006	Debbie
Attendance to meeting with Conservation International Philippines re: Mt. Mantalingahan as proposed protected area	Aug. 4, 2006	Debbie
KF Mid-Year Planning Workshop at Skylight Apartelle	Aug. 7, 2006	KF staff
Meeting with PASu Rodrigues, El Nido	Aug. 7, 2006	Indira, Peter, Fred

KEY PROJECT ACTIVITIES	DATE	INVOLVED PERSON(S)
Communication to Provincial Prosecutor's Office re: A. Jakarya case against R.A. 9147	Aug. 8, 2006	Debbie
Assist Roxas Chief PAWS re: joint affidavit on illegally cut down trees in So. Camaya	Aug. 8, 2006	Mike
Encode timetable for August to December 2006	Aug. 8, 2006	Glesselle
Meeting with CPA R. Ramos re: SKM renewal to SEC	Aug. 8, 2006	Debbie
Assistance to visitors from Philippine National Oil Company for pictorial at roosting site	Aug. 8, 2006	Siegfred
Attend needs re: accidental sinking of Abukay boat	Aug. 8, 2006	SHD, DV, RC, BC
Request map at CI re: Proposed critical habitat in Dumarán	Aug. 9, 2006	Glesselle
Facilitate repair of Abukay boat	Aug. 9-10, 2006	Siegfred, Danny
Communication to applicants for Field Administration Officer re: schedule of interview	Aug. 10-11, 2006	Debbie
Monitoring at Bohol roosting site	Aug. 10, 2006	Mike, wardens
Cockatoo count	Aug. 13, 2006	Siegfred, warden
Narra PCCP/KF staff meeting re: schedule of telemetry	Aug. 14, 2006	SHD, DV, RC, BC
Facilitate SPAPI MOA notarization	Aug. 14, 2006	Debbie
Meeting with wardens re: work assignment and updates	Aug. 14, 2006	Siegfred, Debbie
Facilitate issuance of Mayor's Permit for telemetry study	Aug. 15, 2006	Debbie
Coordination to Capt. E. Lagrada of Bgy. Antipulan re: PIC for KIEBC Center	Aug. 15, 2006	Debbie
Travel to El Nido, Palawan re: presentation of translocation proposal to SB	Aug. 15-18, 2006	Siegfred
KFI Board Meeting with Pres. Zubiri	Aug. 16, 2006	Indira, Peter
Attendance to UNDP-SGP Networking and Linkage Building	Aug. 16, 2006	Debbie
Bagging of seedlings (24 amugis and 8 betad)	Aug. 16, 2006	Mike, wardens
Attendance to ECAN mapping workshop	Aug. 17, 2006	Mike
Meeting with translocation partners: TKDC, SEAIR, ITI, ENF	Aug. 17 & 20, 2006	Indira, Peter
Encode LPAMC minutes	Aug. 18, 2006	Glesselle
Survey at Cartimar, Manila	Aug. 18, 2006	Peter, Indira
Visit to CI Office, CEPF M. Atrigenio and N. Ibuna	Aug. 18, 2006	Peter, Indira
Ground truthing of forest patches at Sitio Luyang, Dumarán	Aug. 18-20, 2006	Mike, wardens
Survey at Hill 394, Subic	Aug. 21, 2006	Peter, Indira
Facilitate needs re: Rasa Island's flora inventory by L. Sopsop	Aug. 20, 2006	Debbie
Bagged 28 ipil, 6 narra and 12 amugis seedlings	Aug. 21, 2006	Mike, wardens
Attendance to Bgy. Antipulan Council's session re: PIC for KIEBC center	Aug. 21, 2006	Debbie, Siegfred
Meeting with R. Deig re: updates on Agricultural Farming Project	Aug. 22, 2006	Debbie
Follow up map at PCSD re: incorporate Capitol generated map to ECAN Map	Aug. 22, 2006	Glesselle
Survey at Bulalakaw area	Aug. 23, 2006	Mike, wardens
Submission of FORD 1 <sup>st</sup> progress report	Aug. 23, 2006	Indira, Peter
Assistance to L. Dangis and M. Batac re: requirements for wardens deputation	Aug. 23, 2006	Debbie
Facilitate repair of wardens campsite at Rasa Island	Aug. 23-25, 2006	Siegfred, wardens
Drafting of report for Convention of Biological Diversity secretariat as requested by DENR-PAWB	Aug. 23, 29-30, 2006	Debbie
Purchase additional supplies for agricultural store	Aug. 24, 2006	Debbie, R. Deig
Facilitation and submission of PICs and other documents for translocation for SEP clearance issuance	Aug. 24, 2006	Glesselle
Communication to Provincial Prosecutor's Office re: A. Jakarya case against R.A. 9147	Aug. 25, 2006	Debbie
Rizal trip re: nest verification, wardens salary disbursement, MOA distribution, etc.	Aug. 25-31, 2006	Rommel
Breeding season 2006 assessment and meeting with wardens	Aug. 27, 2006	KF/PCCP Narra staff, wardens
Interview of applicants for Field Administration Officer	Aug. 28, 2006	KF Board
Assistance to CRM researcher Koki Seki from Hiroshima University, Japan	Aug. 28, 2006	KF Board
Protected Area Management Board for RIWS 3 <sup>rd</sup> regular meeting	Aug. 28, 2006	KF Board
Measuring of plants at experimental plot	Aug. 29, 2006	Mike
Follow up schedule of Technical Working Group (TWG) meeting	Aug. 29, 2006	Mike
Meeting with PWRCC officials re: turtle project	Aug. 29, 2006	Peter, Indira, Sabine
Monthly cockatoo count	Aug. 30, 2006	Siegfred, warden
Meeting with SOLAR shell officials	Aug. 30, 2006	Indira, Peter
Attendance to Zookeepers' Association of the Philippines Workshop at PWRCC, PPC	Aug. 31, 2006	Siegfred, M. Beleg
Salary disbursement and wardens meeting re: possible agenda for TWG 1 <sup>st</sup> meeting	Aug. 31, 2006	Mike, wardens
Preparations for PCCP Proposal 2007-2008	Aug. 2006	Peter, Indira
MOA revisions and other supporting docs for translocation	Aug. 2006	Indira, Peter
Meeting with Dr. Mundita Lim (PAWB) in Puerto	Aug. 31, 2006	Indira, Peter, Sabine
Tracking of cockatoos for telemetry study in Rasa Island and mainland Narra	June-August 2006	Bojie, Siegfred, E. Batac
Lectures at KEEC	June-August 2006	Sunshine
Caring of rescued cockatoos from Rasa Island	June-August 2006	Siegfred, wardens
Facilitate paper trails and NYOFEC activities	June-August 2006	Debbie, Rommel
Bookkeeping and official rounds to PCCP contacts	June-August 2006	Glesselle, Indira
Issuance of certificate of search at Rasa Island, Narra	June-August 2006	Wardens
Monitoring and data gathering on wildlife and nesting trees at Rasa Island, Narra and Dumarán Island	June-August 2006	Siegfred, wardens, Mike, wardens
KEEC Library operations and maintenance	June-August 2006	Indira, Sunshine
Monitoring and patrolling at Rasa Island and mainland coasts of Narra	June-August 2006	Volunteers, wardens
<b>KEY PROJECT ACTIVITIES</b>	<b>DATE</b>	<b>INVOLVED PERSON(S)</b>
Monitoring and patrolling at Omoi & Manambaling Cockatoo Reserves, Dumarán	June-August 2006	Mike, Wardens
Administrative and operational functions of the office	June-August 2006	Indira, Peter, Debbie
Wardens concerns: reports, assignments and payrolls	June-August 2006	Siegfred, Debbie, Indira
Field operations and management	June-August 2006	Peter, Indira

## **ANNEXES**

- Annex 1      Individuals of Philippine cockatoos counted on the traditional roosting site on Rasa Island, Palawan, Philippines.
- Annex 2      Example for tracking map of Philippine cockatoo fledglings on Rasa, Palawan, Philippines.