



Technical Progress Report

January - December 2015



With contributions from



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Puerto Princesa City, Palawan, Philippines
January 2016

TECHNICAL PROGRESS REPORT

COUNTRY: PHILIPPINES

PROJECT TITLE: PHILIPPINE COCKATOO CONSERVATION PROGRAMME
In-situ Conservation Project

PROJECT DURATION: January to December 2015

PROJECT SITES: Palawan, Philippines

PROJECT COOPERATORS:

Department of Environment and Natural Resources (DENR)
Municipal Government of Narra, Palawan, Philippines
Municipal Government of Dumarán, Palawan, Philippines
Municipal Government of Balabac, Philippines
Bgy. Pandanan Government, Balabac, Palawan, Philippines
Local Protected Area Management Committees (LPAMC)
Protected Area Management Board-RIWS (PAMB-RIWS)
Palawan Council for Sustainable Development Staff (PCSDS)
Jewelmer Corporation Inc.
Iwahig Prison and Penal Farm (IPPF)
Concerned agencies and authorities

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Contents

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 5 |
| ACKNOWLEDGMENTS..... | 11 |
| ACRONYMS | 13 |
| INTRODUCTION | 14 |
| THE PHILIPPINE COCKATOO <i>CACATUA HAEMATUROPYGIA</i> | 14 |
| OBJECTIVE OF THE PHILIPPINE COCKATOO CONSERVATION PROGRAM | 15 |
| PROGRAM STRATEGY | 15 |
| DELIVERABLES..... | 15 |
| DESCRIPTION OF PROJECT SITES..... | 16 |
| RASA ISLAND, NARRA, PALAWAN..... | 16 |
| DUMARAN ISLAND, DUMARAN, PALAWAN | 17 |
| PANDANAN ISLAND, BALABAC | 19 |
| METHODS | 20 |
| RESULTS AND PROGRESS | 22 |
| OBJECTIVE 1: CONSERVATION OF COCKATOO POPULATION ON PANDANAN AND BUGSUK ISLANDS, BALABAC ..22 | |
| <i>Research on conservation-related aspects of cockatoo biology on Pandanan and Bugsuk continued, with focus on factors influencing breeding success and foraging ecology</i> | 22 |
| <i>Warden scheme continued and other activities</i> | 27 |
| <i>Constraints and measures taken</i> | 28 |
| OBJECTIVE 2: CONSERVATION OF COCKATOO POPULATION ON RASA ISLAND, NARRA | 28 |
| <i>Galing Pook Awardee 2015</i> | 28 |
| <i>Research on conservation-related aspects of cockatoo biology on Rasa continued, with focus on factors influencing breeding success and foraging ecology</i> | 29 |
| <i>Warden and mainland volunteer scheme continued</i> | 34 |
| <i>9th Katala Festival and other conservation education activities for stakeholders</i> | 36 |
| <i>Cooperation with DENR</i> | 41 |
| <i>Advocacy in respect to impacts and perpetrations in cockatoo habitats continued</i> | 42 |
| <i>Constraints and measures taken</i> | 44 |
| OBJECTIVE 3: CONSERVATION OF COCKATOO POPULATION ON DUMARAN ISLAND, DUMARAN..... | 44 |
| <i>Research on conservation-related aspects of cockatoo biology on Dumaran continued, with focus on factors influencing breeding success and foraging ecology</i> | 44 |
| <i>Warden scheme continued</i> | 48 |
| <i>Buffer zone restoration around existing cockatoo reserves and creation of forest corridor connecting the two existing cockatoo reserves continued</i> | 49 |
| <i>12th Kalabukay Festival and education activities continued</i> | 49 |
| <i>Constraints and measures taken</i> | 50 |
| OBJECTIVE 4: EDUCATION AND RESEARCH AT THE KATALA INSTITUTE..... | 52 |
| <i>Captive management of Philippine Cockatoo and other highly threatened species continued through employment and training of zookeepers and volunteers</i> | 52 |
| <i>Landscaping with native species propagated in the Katala nursery continued</i> | 53 |
| <i>Educational trail, enclosures and visitors facilities upgraded</i> | 55 |
| <i>Internship and visitors</i> | 58 |
| <i>Constraints and measures taken</i> | 59 |
| OTHER HIGHLIGHTS | 59 |
| OTHER REPORTED WILDLIFE WITHIN THE REPORTING PERIOD | 59 |
| COOPERATIONS | 60 |

| | |
|--|-----------|
| AWARDS AND RECOGNITIONS AND MEDIA MILEAGE..... | 60 |
| CONFERENCES AND WORKSHOPS ATTENDED, PRESENTATIONS DONE IN CONFERENCES..... | 61 |
| PERSONNEL AND EQUIPMENT STATUS..... | 65 |
| IMPLICATIONS FOR FURTHER WORK..... | 65 |
| LITERATURE | 66 |
| ANNEXES..... | 67 |

EXECUTIVE SUMMARY

Objective 1: Conservation of cockatoo population on Pandanan and Bugsuk Islands, Balabac

- Thirteen nests were eventually occupied, which yielded 38 eggs. Two eggs were later found to be rotten, and another four got lost for unknown reason. First hatchlings were already recorded by end of January. Of the 32 hatchlings, 31 were banded and fledged successfully.
- In June one adult mummified cockatoo was retrieved from a nest which was at the same time frequented by two adult birds.
- Losses of eggs and nestlings in this site are proportionately lower than in the two other sites. Reasons for this could be that no mite infestations were as yet recorded, and trees can be better protected against ground predators and the food availability for adults and hatchlings alike. No hatchling so far had to be rescued because of insufficient feeding.
- At the end of the breeding season, and particularly in the month of May, cockatoo numbers were rapidly increasing on the roost site. They reached a peak in July with 233 individuals counted. This is for the third consecutive year another increase and the highest number of cockatoos recorded since start of the project!
- At the roosting site in Malinsuno from May onwards, newly fledged cockatoos were recorded during afternoon and morning roost visitation. Cockatoo with 2014 and 2015 leg bands were already documented at Malinsuno Island while feeding on young and mature fruit of Malungay *Moringa oleifera*.
- A White-bellied sea-eagle disturbed the roosting site resulting to very low minimum numbers were recorded in September but this recovered. No attempt of hunting was observed. High numbers in September on evenings or mornings without disturbance were still close to 200 birds.
- In February during monitoring visit we received secondary information of ten to twelve cockatoos roosting in Beach Casuarina on the southern tip of Bugsuk which lies just east of Pandanan.
- *Sonneratia alba* is a staple diet for cockatoos in Pandanan, due its availability almost all year round. Feeding was reported in most mangrove areas within Pandanan, and also from the southern tip of Bugsuk. Two neighbouring islands were also monitored, sightings of cockatoo by locals is rare and numbers also is low with only 8 cockatoos in Bahayan Island while no cockatoo reported in Caradango Island.
- A new feeding record is on the bright red pulpy fruits of an unidentified vine, which locally is called Tontun-karwang. Herbarium specimens need to be collected for further identification.
- Community patrols and monitoring yielded several newcomers/transients to the island. At all times, they were reported to barangay. Background check was also done to help ascertain the purpose of their visits. Illegal activities which included mangrove cutting, round timber collection, timber poaching and trading, tan barking, unregulated collection of marine resources including those threatened species, illegal fishing methods, etc. were brought to the attention of the barangay.
- Project monitoring/visitation was done by Chester Zoo personnel, one of PCCP's main sponsors. Ringing of two young cockatoos was witnessed by the visiting guests assisted by PCCP staff. Council meeting and interactive conversation between visitors and wildlife wardens also highlight their project visit.

Objective 2: Conservation of cockatoo population on Rasa Island, Narra

- The best highlight was the awarding of the Philippine Cockatoo Conservation Program (PCCP) in Narra as one of the Ten Galing Pook Awardees of 2015 from 16 finalists all over the Philippines.
- Apart from the cash prize of PhP 100,000.00 (€1,964) which the Mayor committed to afford for the Katala Institute improvements, the local government of Narra has earmarked a total of PhP 500,000.00 (€9,822) for 2016 that will include the provision of yearly incentives for the wardens, the Katala Festival celebration and funds for the preparation of the parking area at the KIEBC.
- Birds are now staying close to nest trees year-round, and groups of up to eight individuals could be encountered during nest tree controls even outside of the breeding season. During synchronized roost counts also nest trees are checked in the evening, and some birds sleep near the nest holes, including outside of the breeding season.
- Nest controls in March yielded first records of laid eggs. Slightly more cockatoos initiated breeding in 2015 with 37 pairs, compared to 2013 with 35. A total of 76 eggs have been laid, and the trend of decreasing egg numbers per pair continues, possibly as reaction to the overall increasing cockatoo population.
- Eleven eggs were lost, nest predation, possibly through monitor lizard was suspected in one case. At least three eggs were found rotten during nest controls. A total of twenty-one nestlings died with the leading causes being mite infestation, despite nests being sprayed before the onset of the breeding season. Second cause was suspected predation by monitor lizards (2 cases).
- By August, 44 nestlings were banded and fledged successfully.
- A nestling weighing only three grams was rescued in April, whose sibling succumbed to mites. It was transferred to Katala Institute (KI), where it was placed in a newly acquired incubator and successfully raised to fledging age. Unfortunately it succumbed to a respiratory tract infection in August, while being kept in an outdoor flight aviary. Two older hatchlings were rescued in early May due to massive mite infestation, the birds were successfully treated and hand-raised in KI, and released back to Rasa where they connected to the wild flock immediately.
- Roost counts on Rasa remain logistically challenging, but are occasionally rewarding, when large numbers can be counted in several sites simultaneously. Lowest number of birds was recorded during the breeding season in March and April with 194 birds respectively (maximum simultaneous number taken from several counts within the same month). Highest numbers were reached in November with 283 birds.
- Cockatoos roosted on the mainland in August almost on a daily basis with up to 70 birds, just opposite of Rasa. They slept on the mainland on ten and six days respectively in September and October, with up to 80 birds roosting at the same time.
- Despite fears of an imminent drought, number of cockatoos foraging on the mainland did not increase significantly compared to previous years. The largest cumulative number of birds in a single station since project start was recorded in January with 136 birds (compared to 134 birds in August 2014). Overall patterns of mainland foraging remain unpredictable, except that birds exclusively chose to cross over the shortest distance from island to mainland during strong monsoon winds.
- On February 18, a cockatoo could be observed feeding on fruits of Horseradish Tree which was blind on one eye. The bird did not seem to be hampered by this disability

and detecting food, manipulating it, as well as flying did not seem to pose any difficulties for this individual.

- Competition of cultivated Horseradish Trees is increasing between people and cockatoos in Narra (as reported in PTPR 2/2014). Luckily, KFI was able to purchase a piece of land of 1,800 m² right in the center of the foraging area on the coast opposite of Rasa Island with funds provided by the Stadtholding Landau, Germany.
- In June, the 9th Katala Festival was successfully celebrated with nearly 2,000 students and teachers in attendance. This year's festivities launched Municipal Resolution No. 2015-2501 declaring June as the Katala Awareness Month in Narra.
- In February, Katala the mascot joined the festivities during the MIMAROPA Athletic Meet which Narra hosted. Narra uses the Philippine cockatoo as inspiration for the official logo of the competitions among Region 4-B provinces.
- PCCP partners from Chester Zoo and ZGAP visited this year along with WWF guests and four film teams on Rasa Island.
- The engagement of DENR this year for PAMB and for Rasa was remarkable through the leadership of PASu Rhodora Ubani. Repainting of the birdwatch tower and signages were provided by DENR. Starting March 2015, five of our mainland volunteers are now under their payroll as green guards. DENR also funded the purchase of a second hand boat that services the PCCP wardens.
- We disputed the presentation of the PCSD on the alleged forest cover change on Rasa Island. We presented and submitted our data based on satellite, aerial still and drone video images and our own ground observations. The PAMB sent letter to PCSD asking to rectify the misclassification. BMB-DENR responded and NAMRIA positively rectified the alleged forest cover change.
- PCCP and PAMB submitted position papers to authorities asking for Rasa Island Wildlife Sanctuary's inclusion to the proposed Enhanced National Integrated Protected Area System Bill which provides the *enbanc* declaration of all protected areas under NIPAS Law.

Objective 3: Conservation of cockatoo population on Dumaran Island, Dumaran

- Three breeding attempts were recorded on Dumaran Island in 2015. A total of seven eggs were laid, of which three were found to be rotten. Four nestlings fledged successfully, but only two were banded.
- As in previous years, roost counts are lowest during the early year with onset of the breeding season, and highest afterwards. Lowest counts in 2015 were two birds in May, highest 19 individuals in September and October respectively.
- Flocks of up to eight individuals could be observed all over the project site, including in settled area. Outside of the breeding season birds typically forage on *Moringa* (right) and in the *Sonneratia* stands near the roost site before transferring to feeding areas farther away.
- The record of consumption of white flowers of *Diospyros multiflora* (Ebenaceae) is a new record for the species.
- On September 21, 2015, additional two birds were released. A supplemental feeding station was established again, and movements of birds were intensively monitored. From the first day after the release, both birds interacted with the wild flock, but did not join them on the roost site. Supplemental food was readily accepted, but wild food was tried within the three days after release. By early October visits to the feeding

station decreased and by end of this month birds were completely self-reliant in finding natural food sources. Both birds are well as of the time of reporting.

- Most kaingin cases (slash and burn) were noted first quarter of the year and areas cleared varied from half a hectare to four hectares. These issues were brought to LPAMC and deliberated. Ocular inspection together with PNP and Bantay Dumaran were conducted. Measurements were taken. No DENR station is near the island municipality hence cases are not filed despite reports submitted.
- Artificial nest boxes were installed by wardens at the last quarter of the year using local materials and driftwoods.
- Repair of the KEEC was completed and bio fence was established.
- Planted trees at the buffer of the Omoi Cockatoo Reserve were monitored and measured. Indigenous palms and rattan were planted at boundaries. Farmer co-operators failed to underbrush or clean planted areas because of extreme dry conditions.
- The Kalabukay Festival 2015 marked it's 12th year anniversary in June 19 hence the theme "Isang dosenang pagpupugay alay sa Kalabukay" (a dozen years of tribute for the Cockatoo). Mayor Pablico led the celebrations along with ca 520 adults and kids alike.
- A follow up longitudinal survey on Knowledge, Attitudes and Perceptions and Practices (KAPP) was conducted in May to June. This was funded by RARE in the amount of PhP 25,960.00 to assess the PRIDE campaign conducted in 2005.

Objective 4: Education and research at the Katala Institute

- In total 11 cockatoos were turned over this year to the center. Three were rescued from Rasa Island as two were severely attacked by mites and one which was undernourished due to lack of food supply brought about by dry months. Two others were from mainland Narra of which one had beak and head injury while the other was severely undernourished. Birds were treated, given medications and food was closely monitored.
- Of the six birds from Narra, three died; two were already released to the wild in Dumaran Island in September with PAMB endorsement and PCSDS transport documents.
- Five other cockatoos were confiscated by PCSDS and turned over to KI. Three were from Bataraza and two from WESCOM area in Puerto Princesa. The latter is tamed and not fit for release.
- We anticipated the effects of El Nino this year hence prepared for the following: re-release aviary was cleaned, repainted and improved; clinic was equipped with additional hatchling boxes for rescued birds; hand puppet fabricated and medicines were stocked.
- The center currently holds ten cockatoos of which three will go to Jurong Bird Park in Singapore as their application for loan for captive breeding is already being processed by DENR and PCSDS.
- In June, we received the biggest confiscation of the Palawan Forest Turtle with 3,831 Palawan Forest Turtles *Siebenrockiella leytensis*, 168 Southeast Asian Box Turtles *Cuora amboinensis*, 25 Asian Leaf Turtles *Cyclemys dentata*.
- As of December, we hold 2,940 tree seedlings in the nursery. Many seedlings of Parina, Malunggay and Balindadagat were planted around KI. We had given out nearly 500 seedlings to private individuals from Narra who support our project.

- A field house was funded by Wildlife Reserves Singapore, as well as LPF and Funding Partners.
- The information hut “pavilion” construction lagged a bit this year because of lack of manpower from the municipality to implement the project. This project is greatly financed from the municipality’s counterpart funds for the center.
- The signage of the center has been completed and gate construction commenced late this year and would be completed first quarter of 2016.
- From March 9 to 29 a German vet.-med. student, Ms. Christine Hoos, from the University Giessen volunteered in KI to develop sample protocols for blood intestinal and ecto-parasites of cockatoos under simple field conditions as prevail in all KFI field sites.

Other highlights:

Other reported wildlife within the period

Blue-naped Parrots *Tanygnathus lucionensis* IUCN: Near threatened

- The species is clearly benefiting from nest protection of cavity nesters in our project site. In 2015 alone, 207 birds hatched on Pandanan Island. The species is also common and regularly reproducing in Dumarán, where seven birds fledged from four nests.

Blue-headed Racquet-tail *Prioniturus platenae* IUCN: Vulnerable

- The species is doing well in all project sites. Breeding records are rare from Pandanan and Rasa, probably because in these sites the species prefers inaccessible mangrove areas, but regular from Dumarán, where the species nests in dry forests, and seven birds fledged successfully from four nests. Immature birds were recorded yearly from all sites in 2015.

Cooperations

- In March, the GIZ-PAME funded project “Realising Biodiversity Services and Values of Rasa Island Wildlife Sanctuary” started its implementation. This project goal is to avoid unsustainable resource use within Rasa Island Wildlife Sanctuary and destructive development in the impact zone of Rasa and to sustain ecological services and values. The total GIZ-PAME funds is PhP 1,121,420.
- In April, Indira secured funding for the repair of the old Katala mascot and fabrication of a new Katala mascot through the RARE Alumni Funds. Total fund is PhP 70,320.00.
- On July 28 to August 5, Peter, Indira and Rene were invited to Sumba, Indonesia to participate in the Project Planning Workshop for the Sumba Cockatoo Project in Sumba, Indonesia.
- On October 16, we organized together with the Palawan Council for Sustainable Development Staff (PCSDS) a workshop to help develop the Wildlife Management Program for Palawan.

Awards, Recognitions, Media Mileage, Conferences and others

- On April 18, Indira and Peter received the Values Award 2015 conferred by the JCI Peacock Palawan for their exemplary dedication and commitment to environmental conservation. Junior Chamber International (JCI) is a civic organization affiliate to Jaycees International.

- On Sept. 1, PCCP Narra won as one of the Galing Pook Awardees for 2015. See Narra Objective.
- On Sept. 14-19, Peter and Indira was afforded “Species Champions this year by the European Association of Zoors and Aquaria (EAZA).
- On Nov. 16, KFI was given Plaque of Appreciation by the Iwahig Prison and Penal Farm (IPPF) for its efforts to help education the inmates about wildlife conservation.
- PCCP staff participated in several conferences, workshops where they made presentations and promoted the PCCP and its funding partners to include: Parrots Symposium, Philippine Birdfest, etc.
- On Dec. 17-19, we held our Wardens Refresher’s Course 2015 in Puerto Princesa City with all PCCP and PFTCP wardens and staff sharing experiences and learning new methodologies and techniques. Costs were shared by PCCP, PFTCP and a part from the Heidelberg Zoo.
- Two additional staff were hired to assist in education activities and other research.
- Service boat for Rasa was completely destroyed after strong winds and rain battered the boat while dry docking. While service boat in Pandanan underwent repair. KEE Center in Dumaran also underwent repair and was completed.

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 für Bedrohte Papageien and Strunden-Papageien-Stiftung), ZooParc de Beauval and Conservation Association (Association Beauval Conservation et Recherche) for their trust and generous support. Particular thanks to Wolfgang Kiessling, President LPF, Dr. David Waugh, Director LPF, Scott Wilson and Dr. Roger Wilkinson, Heads of Conservation and Science and his team at the North of England Zoological Society (NEZS)/Zoological Gardens Chester, Jens-Ove Heckel, President ZGAP, Roland Wirth, Rene Wuest, and Eric Ruivo.

We also are grateful to Dr. Jens-Ove Heckel, Director of Zoo Landau in der Pfalz, the Stadtholding Landau in der Pfalz and Freizeitbad La Ola for helping us realize the Reforestation Projects.

We are also indebted to Christine Shank from the USA for her commitment to support our project. In particular for her financial assistance for our attendance to the Parrots Symposium in Brazil. Thanks also to the Parrots International headed by Mark and Marie Stafford.

Special thanks to Dr. Sonja Luz from Wildlife Reserve Singapore for her financial assistance for the Katala Institute.

We also would like to acknowledge Heidelberg Zoo through Simon Bruslund and Sandra Reichler for the small grant in support to PCCP.

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

To the honorable Mayor of Narra, Madame Lucy Demaala and members of the municipal council and officials in particular MPDO Fellizar. Special gratitude goes to PAMB members, Narra for their vigilance and ready attention on Rasa. We are grateful for the support of Mayor Medwin Publico in Dumarán. We would like to thank Dumarán MPDO Agnes Padul, Municipal Administrator Arnel Caabay and all Dumareños. Special gratitude goes to Mayor Shuaib J. Astami of Balabac and his council, Bgy. Captain Violeta Gabinete and her able council of Bgy. Pandanan, Balabac for their assistance and cooperation. We thank as well the families of wildlife wardens from Pandanan.

We are grateful to the DENR personnel: Dir. Theresa Mundita Lim from the Biodiversity Management Bureau (BMB) formerly Protected Areas and Wildlife Bureau, Josefina de Leon, Anson Tagtag, Nemi Lita, and to the DENR Region IV-B Executive Director and his staff; PENRO Juan dela Cruz, PASu Rhodora Ubani, Vivian Soriano, and Suzy Gamotia of PENRO Office, CENRO-Narra satellite office staff, CENRO-Bataraza office and Roxas CENRO and staff.

Equally we are grateful to PCSDS particularly to Executive Director Nelson Devanadera, Atty. A. Villena, Dir. Matulac, B. Lagrada, R. Fuentes, A. Marcaida, R. Roque, A. Marcaida, and C. Carorocan and all staff involved in our implementation.

We thank Governor Jose Pepito C. Alvarez, Vice Governor Dennis Socrates and the Provincial Council members.

Our deepest gratitude goes to Erwin and Debbie van den Beukel for their generosity.

We also thank the local government of Bgy. Antipuluan for their support. Thanks also to the SKM officers and members. Likewise to the indigenous peoples of Pandanan and Bugsuk Brgy. Captain Pastor Alfaro and all those who helped us in our visits in Bugsok. We appreciate the assistance of Melinda de Luna from Jewelmer Corporation.

Thanks to the Western Philippines University (WPU) partners in particular Dr. R. Dolorosa, Dr. E. Baaco and Dr. L. Sopsop; and PWRCC Director Veronica de Guzman, Dr. G. Rebong and Salvador “Dong” Guion from Palawan Wildlife Rescue and Conservation Center (PWRCC) for our collaboration.

To all visiting tourists, foreign and local, for their generosity and support, thank you very much.

We are thankful to the PFTCP team headed by its Director, Dr. Sabine Schoppe and partners assisting in the maintenance of our assurance colony and of activities related to the repatriated *S. leytensis*: ZGAP, ZGAP-DGHT, Ocean Park Conservation Foundation, Turtle Survival Alliance, Office of Puerto Princesa City Mayor, Betterplace, Kadoorie Farm and Botanic Garden, LGU of Dumarao and Roxas, TRAFFIC SEA, DENR and line agencies.

Our heartfelt gratitude goes to Siegfred Diaz (SD), Rene Antonio (RA), Mike Plazos (MP), Angeles Guion-Satioquia (AGS), Sheen Hanjin Arib and assistant keeper Angelo Satioquia, Anna Agullo and Regine Salut for their services and assistance provided to the project. We also thank PFTCP volunteers for their time and kind assistance. We are equally grateful to KFI board and supporters.

ACRONYMS

| | |
|---------|--|
| BMB | Biodiversity Management Bureau (formerly PAWB) |
| CE | Conservation Education |
| CENRO | Community Environment and Natural Resources Office(r) |
| DENR | Department of Environment and Natural Resources |
| ELAC | Environmental Legal Assistance Council |
| ENIPAS | Enhanced National Integrated Protected Area System |
| IUCN | International Union for the Conservation of Nature and Natural Resources |
| KEEC | Katala Environmental Education Center |
| KFI | Katala Foundation, Inc. |
| KI | Katala Institute |
| LGU | Local Government Unit |
| LPAMC | Local Protected Area and Management Committee |
| LPF | Loro Parque Fundación |
| MENRO | Municipal Environment and Natural Resources Officer/Office |
| MOA | Memorandum of Agreement |
| PA | Protected Area |
| PAMB | Protected Area Management Board |
| PASu | Protected Area Superintendent |
| PCCP | Philippine Cockatoo Conservation Program |
| PCSD(S) | Palawan Council for Sustainable Development (Staff) |
| PENRO | Provincial Environment and Natural Resources Office |
| PFTCP | Philippine Freshwater Turtle Conservation Program |
| PNP | Philippine National Police |
| PTFCF | Philippine Tropical Forest Conservation Foundation |
| 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 |
| WPU | Western Philippines University |
| ZGAP | Zoologische Gesellschaft für Arten- und Populationsschutz |

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.

Since 1888 Katala Foundation Inc. (KFI) implements the PCCP in the Philippines. Comprehensive conservation projects in this phase are currently undertaken in three sites in Palawan (Fig. 1): Rasa Island (Narra), Dumaran Island (Dumaran), Pandanan and Bugsuk Islands (Balabac). The two former sites contain by now protected areas declared on municipal or higher levels, specifically established to include the cockatoo populations. The Pandanan site is predominantly owned by Jewelmer Corporation, with which KFI has a Memorandum of Agreement for the conservation of the species.

We estimate that between 640–1,120 Philippine Cockatoos exist in the wild (assuming few populations have been overlooked in recent surveys of historical locations, and 100-150 individuals survive in the Sulus, for which only incomplete information is available).

The single-most important Philippine Cockatoo population on Rasa is secured under presidential proclamation as “Rasa Island Wildlife Sanctuary” since February 2006, in addition to local legislations. Highest population count was 317 individuals in 2014. Pandanan, holds possibly the second-most important population with at least 220 birds (up from 80) individuals.

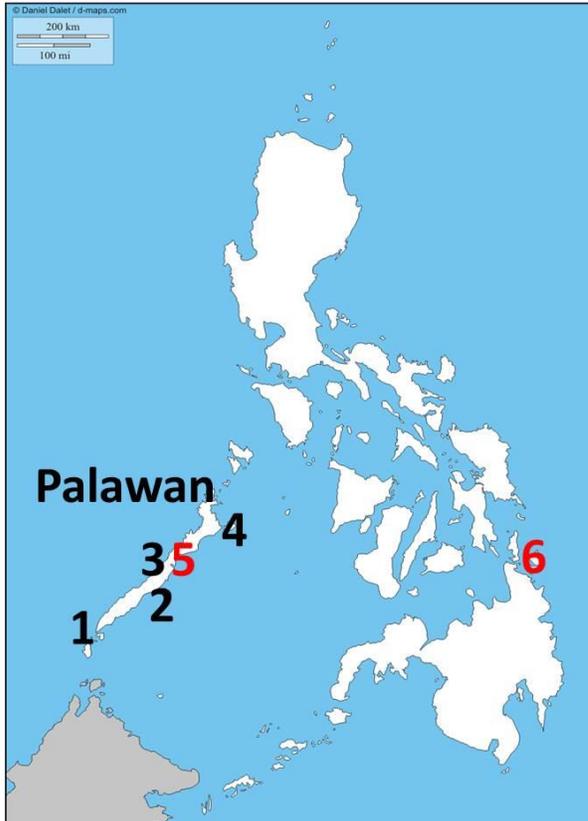
With these three project sites in Palawan, it is estimated that between a third to half of the remaining wild population is currently covered in PCCP projects. Cockatoo populations are stable or increasing in all sites, and improved legal conservation could be achieved (e.g. through creation of cockatoo reserves). However, law enforcement by state agencies remains weak and pressure on these areas is rather increasing (migrant influx to Palawan, mining, planned large-scale projects, like biofuel plantation or coal plant).

Warden schemes remain the single-most important tool to assure the short-term survival and recovery of the species, whereas lobbying, conservation education, habitat restoration and reintroduction, as well as provision of alternative livelihood options are important for the long-term improvement of the frame conditions for cockatoo conservation in the Philippines.

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' through reversing its population decline and under consideration of the precautionary principle.

Program Strategy



The main strategy of the programme is to conserve *in-situ* the most important subpopulations of the Philippine cockatoo through adopting participative methods.

The general program strategies are:

- Management of local resources in the framework of Philippine law;
- Capacity-building for local decision-makers and key stakeholders 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: 1. Pandanan, Balabac; 2. Rasa Island, Narra; 3. Katala Institute, Narra; 4. Omoi and Manambaling Cockatoo Reserves, Dumarán; 5. Iwahig Prison and Penal Farm, Puerto Princesa; 6. Kangbangyo and Poneas Islands, Del Carmen. Black: project sites covered in this report; red: other PCCP sites

Deliverables

Objective 1: Conservation of cockatoo population on Pandanan and Bugsuk Islands, Balabac

- Warden scheme on Pandanan and Bugsuk Island continued and extended to adjacent mainland.
- Monitoring of cockatoo population and habitat on Pandanan and Bugsuk Island continued.
- Conservation education in Pandanan Island and adjacent mainland continued.
- Research on conservation-related aspects of cockatoo biology on Pandanan and Bugsuk continued, with focus on factors influencing breeding success and foraging ecology.

- Advocacy in respect to impacts and perpetrations in cockatoo habitats, particularly networking with local stakeholders, particularly Jewelmer Corporation, the largest private landowner, continued.

Objective 2: Conservation of cockatoo population on Rasa Island, Narra

- Warden and mainland volunteer scheme continued.
- Members of Protected Areas Management Board in the management of the Philippine Cockatoo and Rasa Island Wildlife Sanctuary capacitated and meetings facilitated.
- Conservation education for stakeholders continued.
- Research on conservation-related aspects of cockatoo biology on Rasa continued, with focus on factors influencing breeding success and foraging ecology.
- Advocacy in respect to impacts and perpetrations in cockatoo habitats continued.

Objective 3: Conservation of cockatoo population on Dumaran Island, Dumaran

- Warden scheme continued.
- Members of Local Protected Areas Management Committee in the management of the Philippine cockatoo, as well as Omoi and Manambaling Cockatoo Reserve assisted and capacitated.
- Research on conservation-related aspects of cockatoo biology on Dumaran continued, with focus on factors influencing breeding success and foraging ecology.
- Buffer zone restoration around existing cockatoo reserves continued.
- Creation of forest corridor connecting the two existing cockatoo reserves continued.
- Advocacy in respect to impacts and perpetrations in cockatoo habitats continued.

Objective 4: Education and research at the Katala Institute for Ecology and Biodiversity Conservation

- Captive management of Philippine Cockatoo and other highly threatened species continued through employment and training of zookeepers and volunteers.
- Landscaping with native species propagated in the Katala nursery continued.
- Educational trail, enclosures and visitors facilities upgraded.
- Proposal submission to other potential donors continued.

Description of Project Sites

Rasa Island, Narra, Palawan

Rasa is a small coral island of 8.34 km² land area situated in the Sulu Sea, just offshore of the Municipality of Narra, Palawan, Philippines (Fig. 2). About 1.75 km² are covered with coastal forest, mangrove (5.60 km²), cultivated areas (predominantly coconut; 0.39 km²), 0.60 km² are barren or sparsely vegetated sand and coral outcrops. In February 2006, the island became a Wildlife Sanctuary through Presidential Proclamation 1000 and since a Protected Area Management Board is functioning as management body for Rasa Island Wildlife Sanctuary (RIWS). In 2008, RIWS was chosen as Top 13 Bird Watching Sites in the Philippines by the Department of Tourism.

The island is the pilot site of the program since 1998. Due to intensive poaching, only 23-25 Philippine cockatoos were left on the island then. Key component of this project site is the warden scheme which involves patrolling and protection of the birds during and outside the breeding season. This scheme has proven to be efficient and lead to dramatic recovery of the Philippine Cockatoo population as of to date. As of 2014, 317 cockatoos have been simultaneously counted on roost sites on Rasa and adjacent mainland.

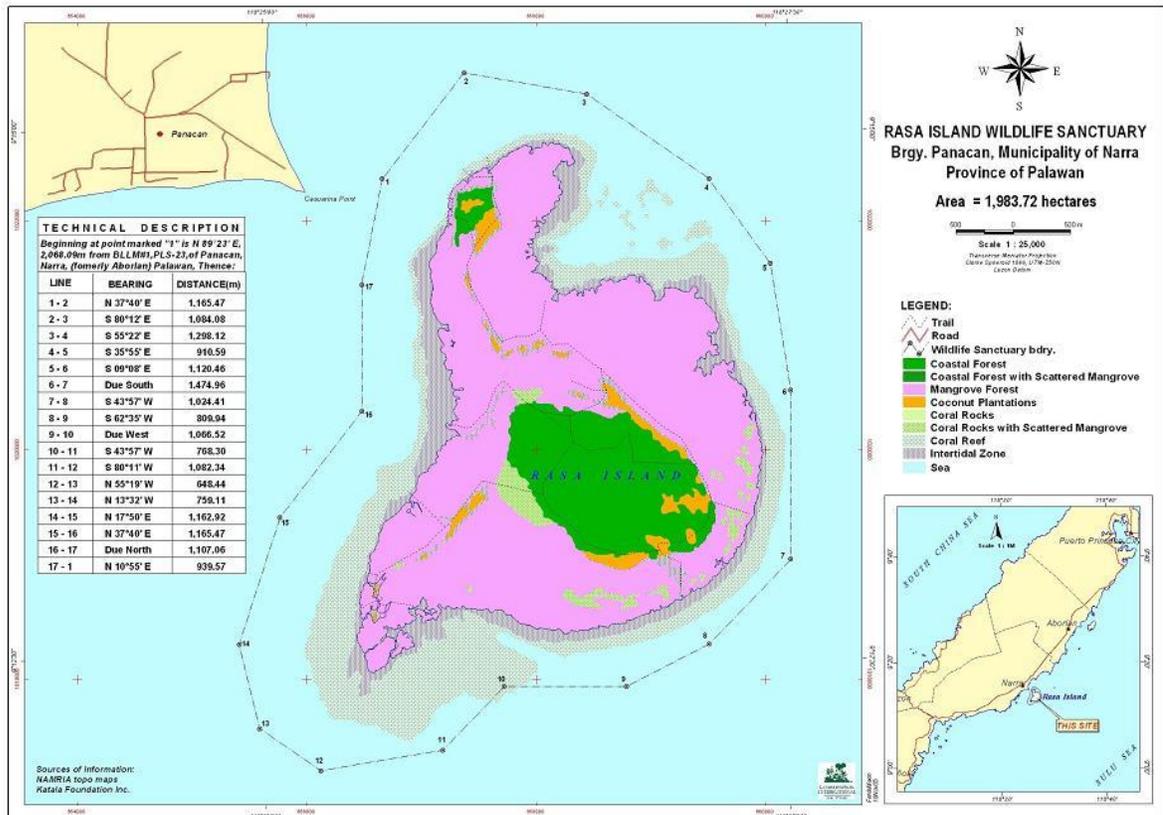


Figure 2. Vegetation cover of Rasa Island Wildlife Sanctuary, Palawan, Philippines

Rasa Island probably therefore 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 640 and 1,120. About 75% of this population is found in Palawan.

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 2015), considering the small size of Rasa. Noteworthy among the 112 recorded bird species are Red-headed Flameback *Chrysocolaptes erythrocephalus* (EN), Grey Imperial-pigeon *Ducula pickeringii* (VU) and Mantanani Scops-owl *Otus mantananensis* (NT).

Dumaran Island, Dumaran, Palawan

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

Pandanan Island, Balabac

Pandanan Island in Bgy. Pandanan belongs to the north easternmost municipality of Balabac in Palawan (Fig. 4). Coastal forests are dense and stock on flat limestone originating from elevated coral reefs. Large trees in the coastal forest are mostly deciduous and widely spaced due to water stress during the dry season. The understory is very dense with abundant vines. Emergent trees comprise the genera *Dipterocarpus*, and *Ficus*. A narrow rim of beach forest with *Erythrina*, *Calophyllum* and *Barringtonia* is present. The dense coastal forest cover is as well protected because the large portion of the island is privately-owned and entries are monitored by private guards. Coconuts are the major crop grown in the coastal areas and shifting cultivation including lowland rice, corn, and root crops inside forested areas are common land use forms. Extensive mangroves are thriving.

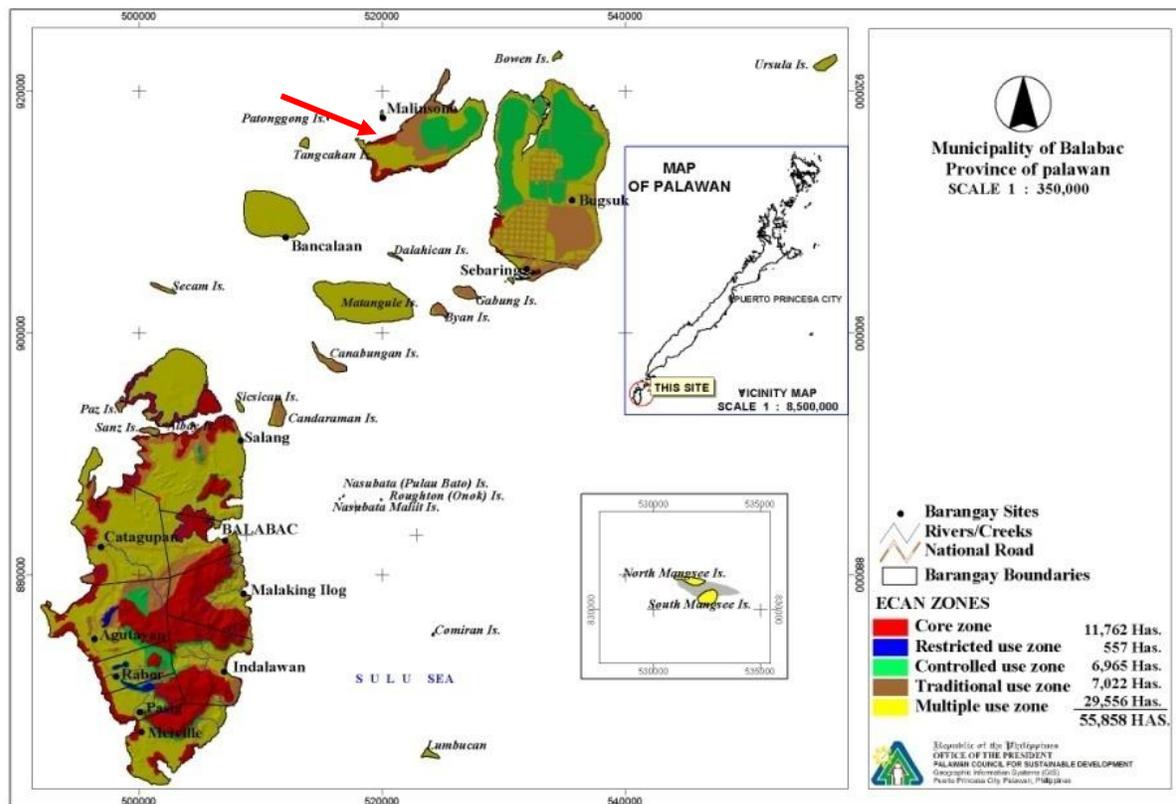


Figure 4. Location map of Pandanan Island indicated by red arrow (Map Source: PCSDS).

So far, 91 bird species have been recorded in Pandanan and adjacent Malinsuno. Among these are six globally threatened and six near-threatened species (IUCN 2015). Of outstanding conservation concern are particularly the larger tree cavity nesters, like Palawan Hornbill, all three parrot species of Palawan, Philippine Cockatoo, Blue-naped Parrot and Blue-headed Racquet-tail, and other conservation relevant species like Grey Imperial-pigeons and Mantanani Scops-owl (Widmann *et al.* 2008). The first and only record for the Philippines of a Fairy Pitta *Pitta nympha* comes from Malinsuno as a result of the conservation project.

The implementation of the warden scheme recruiting cockatoo poachers resulted in significant increases of the cockatoo population in the first years of project implementation, comparable to those of the early stages on Rasa Island. In recent surveys, roosting site is at a coconut plantation in Malinsuno Island just across Pandanan Island.

Methods

The Philippine Cockatoo Conservation Programme (PCCP) employs an ecosystemic and community-based approach to biodiversity conservation using the Philippine cockatoo as its flagship species. The main components of the program are nest protection or warden schemes; scientific researches on feeding, biology and ecology of the Philippine Cockatoo and other threatened species; identification, protection and management of key conservation sites; conservation education; habitat restoration; and capacity building. Researches on the Philippine Cockatoo include distributional surveys, rescue of individual birds, reintroduction and translocation assessments, and captive management for conservation education and conservation breeding for later reintroduction.

Information on the biology and ecology of the cockatoo is gathered mainly through direct observation. On Rasa, 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. On Dumaran and Pandanan movements are observed through wardens monitoring and patrols at protected areas and roost sites.

Monitoring of the population trend on Rasa, Dumaran and Pandanan is done through counting individuals at a traditional roost site. A traditional roost site is situated in a mangrove area on Rasa and can be observed from a boat while in Dumaran a privately-owned coconut plantation serves as the roost site bordering close to a mangrove area. On Balabac, at least two roosting sites are presently monitored; one in Malinsuno Island and the other on Pandanan Island. Counts are conducted monthly either before sunset on Rasa and Balabac islands and daily on Dumaran. Counts are also conducted during dawn before birds leave the roost site. Whenever possible, counts on Rasa are conducted under similar weather and light conditions.

The core component in all project sites is the warden scheme, employing former poachers as wildlife wardens. Wardens inspect and verify existing and potential 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, and 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 or electronic balance and banded with aluminum rings bearing the inscription of the Department of Environment and Natural Resources (DENR), the number and year (e.g. DENR 0001-15).

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.

Surveys to find remnant cockatoo populations 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, and 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 and Dumarán.

Larger-scale restoration of lowland forest habitat is currently done in Dumarán. Particularly nest- and food-providing plants for cockatoos are systematically tested for their suitability for reforestation. MS Access and excel programs are used for analysis.

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. The approach conducts pre and post project surveys to assess changes in levels of knowledge, awareness and behavior among target audience by using control groups. Survey Pro is used for analysis on changes over time. 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.

Relevant trainings and seminars are conducted to help capacitate local partners in conservation. Cross visits to Rasa and other project sites are encouraged to facilitate exchange of experiences, lessons learned and good practices to boost morale of local partners and reinforce knowledge.

Please refer to each output for particular methodologies used in achieving results.

Results and Progress

Objective 1: Conservation of cockatoo population on Pandanan and Bugsuk Islands, Balabac

Research on conservation-related aspects of cockatoo biology on Pandanan and Bugsuk continued, with focus on factors influencing breeding success and foraging ecology

Breeding

Ten nests that were monitored in December 2014 had indications of occupancy (feces, freshly cut twigs) and eggs were recorded in two nests towards the end of the month. Thirteen nests were eventually occupied, which yielded 38 eggs. Two eggs were later found to be rotten, and another four got lost for unknown reason. First hatchlings were already recorded by end of January. Of the 32 hatchlings, 31 were banded and fledged successfully. One mummified hatchling was found in the first week of March in a nest containing two older siblings, which were apparently well.

In June one adult mummified cockatoo was retrieved from a nest which was at the same time frequented by two adult birds.

Losses of eggs and nestlings in this site are proportionately lower than in the two other sites. Reasons for this could be that no mite infestations were as yet recorded, and trees can be better protected against ground predators by metal flushing, since canopy is not as dense as in Rasa, which allows predators to transfer from one tree to the other from the top. Another important reason is the early start of the breeding season after the monsoon rains, with plenty of food available for adults and hatchlings alike. No hatchling so far had to be rescued because of insufficient feeding.



Figure 5. Banding and examination of nestlings on Pandanan Island (Photos: P. Widmann)

A nest hole that is occupied yearly was lost to strong northeast monsoon winds in December. The branch where the nest hole was located fell 10 meters away from the tree.

One cockatoo nest tree was checked at Bahayan Island, south of Bugsuk. Checking revealed that the nest hole was previously occupied, it contained lots of cockatoo faecal matters and soft feathers. A pair was present in the area during our visitation. Aside from the cockatoo nest, the tree also harbor six more nest holes which were occupied by two threatened bird species; the Hill mynah with four nest holes and two nests of Palawan hornbill. Ongoing occupation is recorded for Hornbill while Hill mynah nests were already empty. High incidence of illegal logging inside the Bahayan Island was recorded during the

visit, where trees were cut into different sizes. Cuttings were estimated being done only around 2 days to one week before the visit. Trail is well established inside the island that's used to haul the sliced lumbers and to the boat.



Figure 6. Mummified adult cockatoo retrieved from nest No. 19 in Pandanan (Photos: R. Antonio)

Roosting

The growing cockatoo population in Pandanan and Bugsuk Islands is reflected in the positive trend in numbers of birds recorded in the roosting site. At the end of the breeding season, and particularly in the month of May, cockatoo numbers were rapidly increasing on the roost site. They reached a peak in July with 233 individuals counted. This is for the third consecutive year another increase and the highest number of cockatoos recorded since start of the project!

At the roosting site in Malinsuno from May onwards, newly fledged cockatoos were recorded during afternoon and morning roost visitation. Cockatoo with 2014 and 2015 leg bands were already documented at Malinsuno Island while feeding on young and mature fruit of Malungay *Moringa oleifera*. Ring numbers were fairly visible. Newly fledged cockatoos can easily be identified by its vocalisation and behaviour.

Very low minimum numbers were recorded in September, when the roost site was virtually deserted on two occasions, with only two birds left. Reason for that was disturbance caused by a White-bellied sea-eagle which was roaming around in this area for a number of days during dusk and dawn, and which created panic reactions among the roosting cockatoos. No attempt of hunting was observed however, and the eagle disappeared after some days. High numbers in September on evenings or mornings without disturbance were still close to 200 birds.

In February during monitoring visit we received secondary information of ten to twelve cockatoos roosting in Beach Casuarina on the southern tip of Bugsuk which lies just east of Pandanan. There is also information on several cockatoo nest trees in the area. In May, another visit was done and monitoring team recorded 10 cockatoos feeding on Pagatpat *Sonneratia alba*. At least 30 cockatoos were monitored roosting by our volunteer days prior to our arrival in the area. Roosting cockatoos were present in the area more than two weeks ago according to our local volunteer. Cockatoos come from extensive forest of Bugsok Island and roost at old coconut trees in Sebaring. Known foraging area like mangrove forest which is predominantly *Sonneratia alba* was visited by wardens, 50-60% of these mangrove trees

were bearing mature fruits which were consumed by cockatoos. Other food providing plants like Malungay *Moringa oleifera* were also checked, but apparently only few plants were recorded. According to locals, most of their plants died due to severe drought. In June, A total of 7 cockatoos were recorded in Sebaring Dos during the three-days consecutive roost site monitoring. Cockatoo roosts in old and tall coconut tree inside the private properties.



Figure 7. Cockatoos arrive in the roost site on Malinsuno usually in flocks of ten or less (Photo: P. Widmann)



Figure 8. Cockatoo roost site on Malinsuno in the early evening (Photo: P. Widmann)

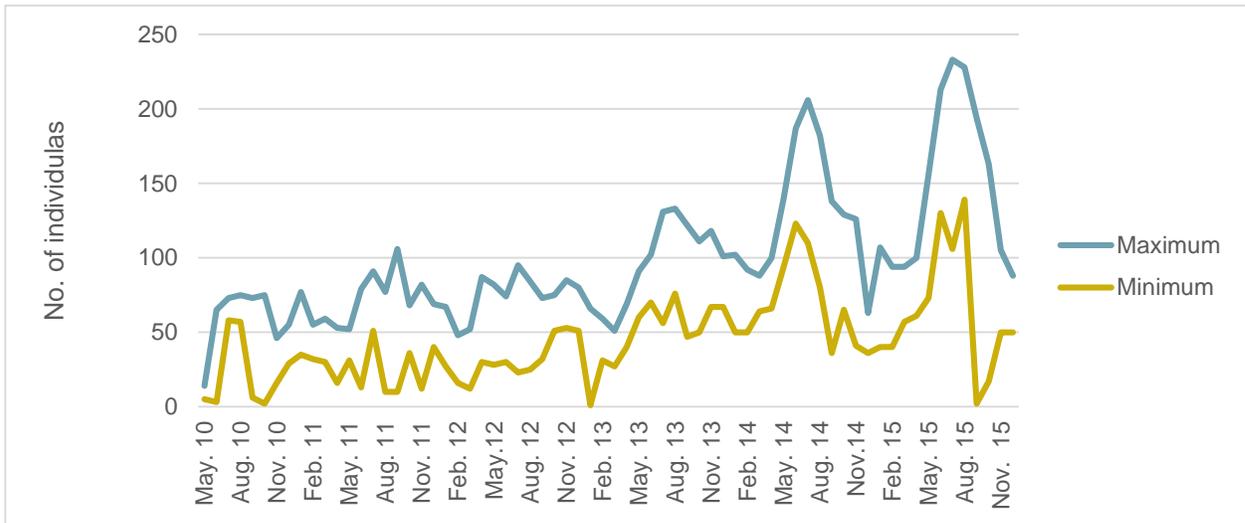


Figure 9. Minimum and maximum numbers of cockatoos roosting on Malinsuno, Balabac, per month

Foraging

Sonneratia alba is a staple diet for cockatoos in Pandanan, due its availability almost all year round. Feeding was reported in most mangrove areas within Pandanan, and also from the southern tip of Bugsuk. Two neighbouring islands were also monitored, sightings of cockatoo by locals is rare and numbers also is low with only 8 cockatoos in Bahayan Island while no cockatoo reported in Caradango Island.

Dry rice is cultivated in small portions of the interior of Pandanan. It is noteworthy that so far no cockatoo raid on crops were reported to KFI.

A new feeding record is on the bright red pulpy fruits of an unidentified vine, which locally is called Tontun-karwang. Herbarium specimens need to be collected for further identification.



Figure 10. Cockatoos feeding on flowers of Palawan Cherry and we observed cockatoos sipping on the last water on banana leaves before flying back to Pandanan Island from Malinsuno roost site. (Photo: R. Antonio)



Figure 11. Flock of cockatoos feeding on Malunggay and leg bands of feeding cockatoos (in red circles) could be seen with the use of binoculars. (Photo: R. Antonio)

Warden scheme continued and other activities

Community patrols and monitoring yielded several newcomers/transients to the island. At all times, they were reported to barangay. Background check was also done to help ascertain the purpose of their visits. Illegal activities which included mangrove cutting, round timber collection, timber poaching and trading, tan barking, unregulated collection of marine resources including those threatened species, illegal fishing methods, etc. were brought to the attention of the barangay. Those allegedly engaged in tan barking were guarded by armed men so apprehension makes it harder. In addition, there is lax to no implementation of laws at the level of barangay because of weak leadership. Coordination with Jewelmer Corporation is also done.

Tagging of trees which were identified for phenology studies was completed. This is part of our Biodiversity Monitoring Stations (BMS) established on Pandanan Island.

Warden's monitoring on nest trees reveal some pairs are already sleeping in nest holes in November however there are very few indications yet of occupation if compared to previous years as manifested by faecal presence and nest cleaning. We took special notes on vegetation and rainfall on the islands in preparation for the El Nino breakout said to extend till 2016 breeding season.

Project monitoring/visitation was done by Chester Zoo personnel, one of PCCP's main sponsors. Ringing of two young cockatoos was witnessed by the visiting guests assisted by PCCP staff. Council meeting and interactive conversation between visitors and wildlife wardens also highlight their project visit.



Figure 12. Dr. Scott Wilson from Chester Zoo joined the banding of cockatoos this year (left). A group picture with wardens, PCCP staff and Chester partners was taken in front of the PCCP field house (right). Photo KFI

Information campaign was limited to grade schoolers from Malinsuno Elementary School and during the Barangay General Assembly within the reporting period. Cockatoo biology and ecology and the concept of co-existence were the main topics of the lectures. Wardens also interacted with school children. An hour for colouring activities. Prizes were given to the pupils.

Constraints and measures taken

- There is lack of political will on the part of the barangay to enforce laws; however our team attempts not to fail in reporting all illegal activities observed. Some officials don't like this. We suggested to the barangay that their fish wardens should be activated to help monitor coastal areas for suspicious entries to the island.

Objective 2: Conservation of cockatoo population on Rasa Island, Narra

Galing Pook Awardee 2015

The best highlight was the awarding of the Philippine Cockatoo Conservation Program (PCCP) in Narra as one of the Ten Galing Pook Awardees of 2015 from 16 finalists all over the Philippines. The award was received by none other than the Municipal Mayor of Narra, Lucena D. Demaala along with her municipal council and the PCCP management in SMX Convention Center in Pasay City on September 1.

Mayor Demaala boasted of long term commitment of international partners like Loro Parque Fundacion as contributing factor to the success of the program during the Q & A before a 16-member panel of judges.

The Galing Pook Awards, which started in 1993, recognizes 10 outstanding local governance programs every year. Over 150 applications were received this year.



“It is remarkable how our protection of this small coral island of Rasa in our municipality rippled to other benefits like protection of the marine resources surrounding the island which is one of the primary sources of our fishery production”, adds Mayor Demaala. She talks in an interview that the LGU of Narra sees the importance to support the project through yearly financial assistance and relevant legislations to promote its conservation.

Figure 13. Snapshots during the Awards Night: Peter and Indira with Mayor Demaala and the entire delegation from Narra during the Awards Night

Apart from the cash prize of PhP 100,000.00 (€1,964) which the Mayor committed to afford for the Katala Institute improvements, the local government of Narra has earmarked a total of PhP 500,000.00 (€9,822) for 2016 that will include the provision of yearly incentives for the wardens, the Katala Festival celebration and funds for the preparation of the parking area at the KIEBC.

The PCCP wildlife wardens were awarded recognition plaques by the municipality during its Annual Palay Festival in October for their valuable dedication and contribution that made the LGU one of the 2015 Galing Pook Awardees.



Figure 14. The billboard constructed by the municipality announcing its victory in this year's Galing Pook Awards (left). PCCP wardens pose with municipal officials during their Commendation Night in the occasion of the Palay Festival in October (right). Photo: KFI

Research on conservation-related aspects of cockatoo biology on Rasa continued, with focus on factors influencing breeding success and foraging ecology

Breeding

Birds are now staying close to nest trees year-round, and groups of up to eight individuals could be encountered during nest tree controls even outside of the breeding season. During synchronized roost counts also nest trees are checked in the evening, and some birds sleep near the nest holes, including outside of the breeding season. During a control in September, four cockatoos were flushed out of a nest hole, indicating that some individuals may even sleep inside the holes.

Nest controls in March yielded first records of laid eggs. Slightly more cockatoos initiated breeding in 2015 with 37 pairs, compared to 2013 with 35. A total of 76 eggs have been laid, and the trend of decreasing egg numbers per pair continues, possibly as reaction to the overall increasing cockatoo population. Eleven eggs were lost, nest predation, possibly through monitor lizard was suspected in one case. At least three eggs were found rotten during nest controls. A total of twenty-one nestlings died with the leading causes being mite infestation, despite nests being sprayed before the onset of the breeding season. Second cause was suspected predation by monitor lizards (2 cases). The latter now exclusively occurs in nest trees in the mangrove since flushing of tree trunks is not feasible in many instances, since the canopy is so dense that monitor lizards can reach nests this way.

A nestling weighing only three grams was rescued in April, whose sibling succumbed to mites. It was transferred to Katala Institute (KI), where it was placed in a newly acquired

incubator and successfully raised to fledging age. Unfortunately it succumbed to a respiratory tract infection in August, while being kept in an outdoor flight aviary. Two older hatchlings were rescued in early May due to massive mite infestation, the birds were successfully treated and hand-raised in KI, and released back to Rasa where they connected to the wild flock immediately.

By August, 44 nestlings were banded and fledged successfully.



Figure 15. Banding of a clutch of two (left); youngest ever rescued hatchling from Rasa (Photos: A. Satioquia)

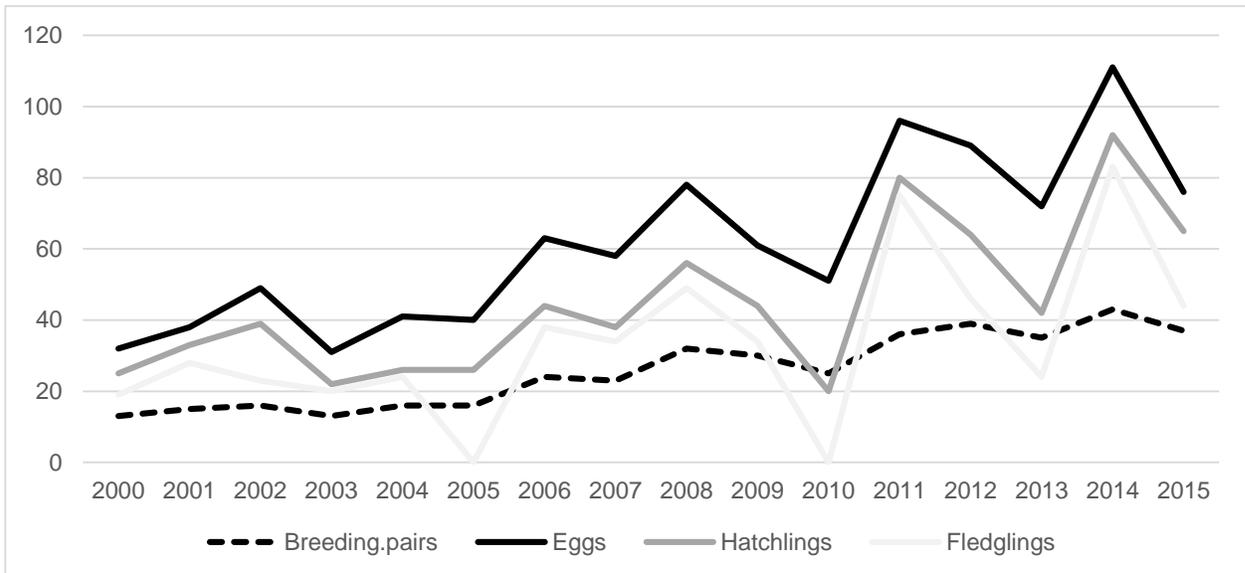


Figure 16. Number of breeding pairs, eggs, hatchlings and fledglings on Rasa Island from 1999 until breeding season of 2015



Figure 17. Number of eggs, hatchlings and fledglings per pair on Rasa Island from 1999 until breeding season of 2015

Roosting

Roost counts on Rasa remain logistically challenging, but are occasionally rewarding, when large numbers can be counted in several sites simultaneously. Lowest number of birds was recorded during the breeding season in March and April with 194 birds respectively (maximum simultaneous number taken from several counts within the same month). Highest numbers were reached in November with 283 birds. Actual numbers probably have been higher, since there were birds also counted on another site, but light conditions were not good, and it cannot be ruled out that birds transferred to the traditional roost site without being detected.

During counts it appeared that some birds were roosting in a temporary site (Lo-oc) on Rasa, and then some or all birds transferred to the traditional roost site. Since this usually happened during dusk, and both sides are quite close, usually only the numbers in the traditional roost site were taken, except under ideal counting conditions (e.g. full moon). The numbers presented in the graph therefore are minimum numbers of roosting birds. It is also not possible anymore to include birds staying near the nesting trees in the counts. Actual number of cockatoos on Rasa therefore are almost certainly higher.

Cockatoos roosted on the mainland in August almost on a daily basis with up to 70 birds, just opposite of Rasa. They slept on the mainland on ten and six days respectively in September and October, with up to 80 birds roosting at the same time.

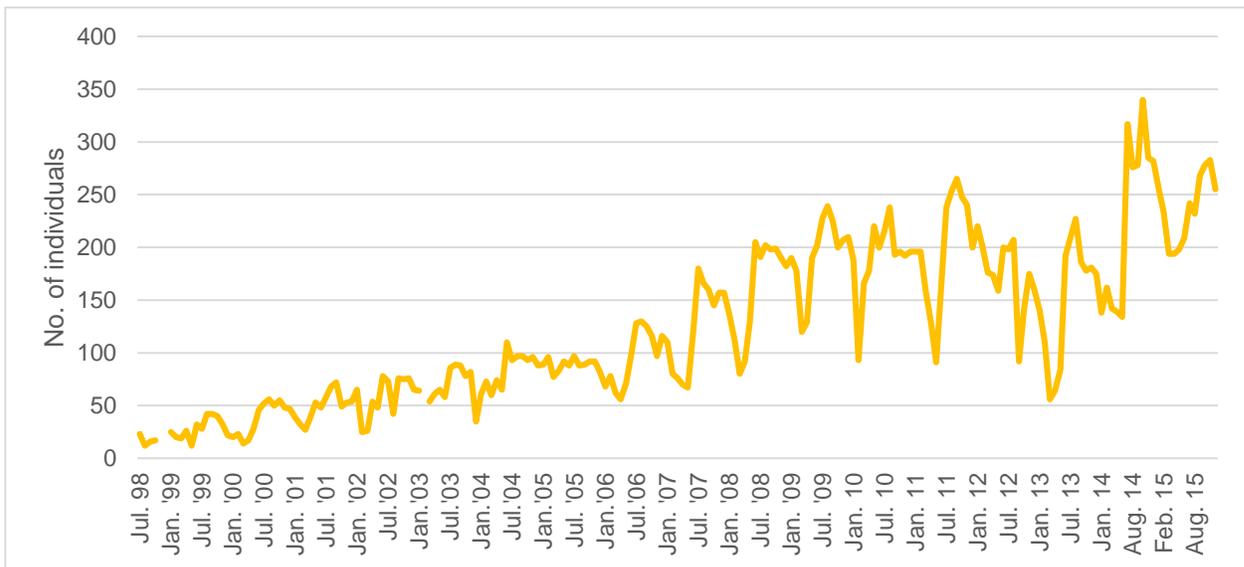


Figure 18. Numbers of cockatoos on simultaneous counts in traditional and transient roost sites in Rasa and adjacent mainland.

Foraging

Despite fears of an imminent drought, number of cockatoos foraging on the mainland did not increase significantly compared to previous years. The largest cumulative number of birds in a single station since project start was recorded in January with 136 birds (compared to 134 birds in August 2014). Overall patterns of mainland foraging remain unpredictable, except that birds exclusively chose to cross over the shortest distance from island to mainland during strong monsoon winds.

There also seems to be a tendency that the radius of the foraging area is expanding, possibly due to the increase of the cockatoo population on Rasa. However, to demonstrate this conclusively many more observation station would need to be monitored than presently is the case, and this is not feasible at the moment.

On February 18, a cockatoo could be observed feeding on fruits of Horseradish Tree which was blind on one eye. The bird did not seem to be hampered by this disability and detecting food, manipulating it, as well as flying did not seem to pose any difficulties for this individual.

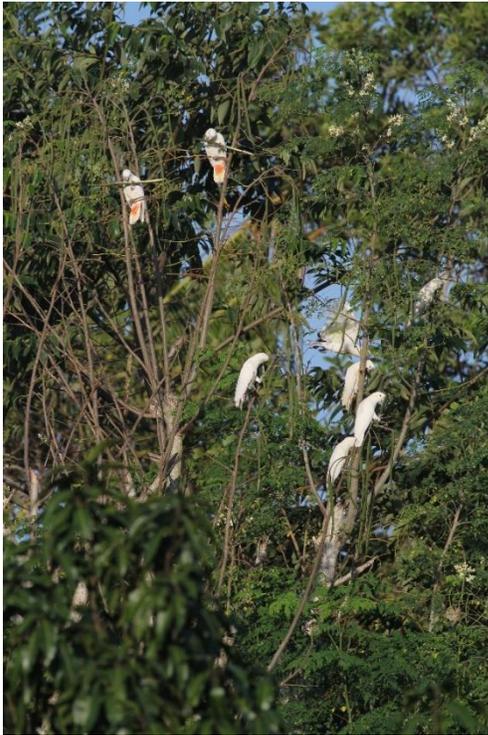


Figure 19. Group of eight feeding on fruits of Horseradish Tree (left); sometimes birds can be approached as close as 5 to 10 m while feeding on the coast opposite of Rasa (Photos: P. Widmann)



Figure 20. Cockatoo with lost eye on the right side, foraging on fruits of Horseradish Tree (Photo: P. Widmann)

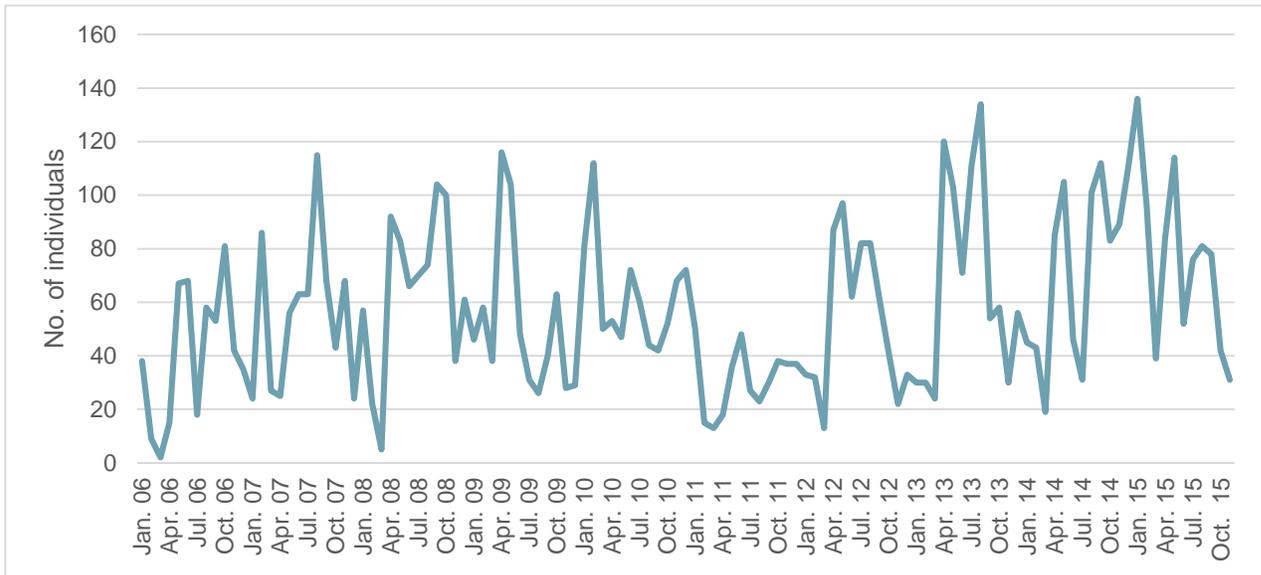


Figure 21. Maximum cumulative daily number of cockatoos transferring from Rasa to the mainland

Competition of cultivated Horseradish Trees is increasing between people and cockatoos in Narra (as reported in PTPR 2/2014). Fortunately, through municipal council’s initiative, plans to effectively implement the massive Malunggay planting throughout Narra has commenced. We hope this will materialize soon. On one hand, KFI was able to purchase a piece of land right in the center of the foraging area on the coast opposite of Rasa Island with funds provided by the Stadtholding Landau, Germany. Existing woody vegetation exists on the plot. Enrichment planting was initiated, with planting stock propagated in the tree nursery in Katala Institute. Focus was on food-providing trees of the cockatoos, particularly Horseradish Trees and Parina. The area was fenced to prevent human encroachment.



Figure 22. Newly purchased plot in Narra which will be developed as feeding ground for cockatoos (Photo: P. Widmann)

Warden and mainland volunteer scheme continued

To prepare for this breeding season with the threat of the El Nino, the following improvements were completed in Rasa by wardens:

- A hanging aviary was prepared and transported to Rasa Island
- A simple hatchlings area with three tailored boxes were constructed and installed
- Campsite area was improved with solar lights provided

- Ten more terracota bowls were always filled with water for supplementation.
- Transport boxes were constructed and distributed in all project sites



Figure 23. Hanging aviary put up on Rasa for birds rescued and released after recovery (left). Transport boxes for rescued birds distributed all in project sites. (Photo: KFI)



Figure 24. Lucito and Bernito discusses their monitoring schedules for each nest (left) at campsite during monthly meetings (right). Nisha from the UK interacted with the wardens during her visit in October (lower right). Fred explains banding to PAMB member Mr. Lepasana from PSU-Narra. (Photo: KFI)

Continuous monitoring of claimed areas was conducted and no expansion was noted in the reporting period. Apart from this, wardens also noted down vegetation status on Rasa for the extended El Nino breakout. In August, strong winds and rains damaged some mangrove stands on Rasa Island. There were also some potential nest trees that were felled during these days.

9th Katala Festival and other conservation education activities for stakeholders

In February, Katala the mascot joined the festivities during the MIMAROPA Athletic Meet which Narra hosted. Narra uses the Philippine cockatoo as inspiration for the official logo of the competitions among Region 4-B provinces (Fig. 25).



Figure 25. The cockatoo inspired MIMAROPA logo for 2015. Photo: LGU Narra

Chester Zoo partners visited Rasa Island and had interaction with wardens in March. Dr. Roger Wilkinson, its outgoing Head of Field Programmes along with successor, Dr. Scott Wilson, met with Mayor Demaala during the visit.

We received partners from the ZGAP Germany who visited Rasa and the Katala Institute in February. Dr. Sven Hammer and Cathryn were very helpful in the discussions particularly on husbandry and maintenance of our center in Narra. We were also visited by WWF personnel Lene and Klaus Topp and company.

We had four film teams on Rasa this year. Two were affiliated with travel programs in national TV and was coordinated by municipal tourism office. One was our own video documentation of PCCP activities while the other in September was a team commissioned by the Senate Committee on Environment to take video footage and interviews with stakeholders of Rasa Island Wildlife Sanctuary. This is pertinent to the

promotional material the Committee planned in support to the Enhanced National Integrated Protected Area System Law that pushes for the inclusion of the five protected areas in Palawan to include Rasa Island to this Bill. During this filming, Indira was interviewed and emphasized on the importance of long term commitment of funding institutions like that of the PCCP in order to achieve its desired goals. Until this writing no copy yet of the said film is given to the PAMB or PCCP. No production yet has been completed as the Bill is still in deliberation at the Bicameral level.

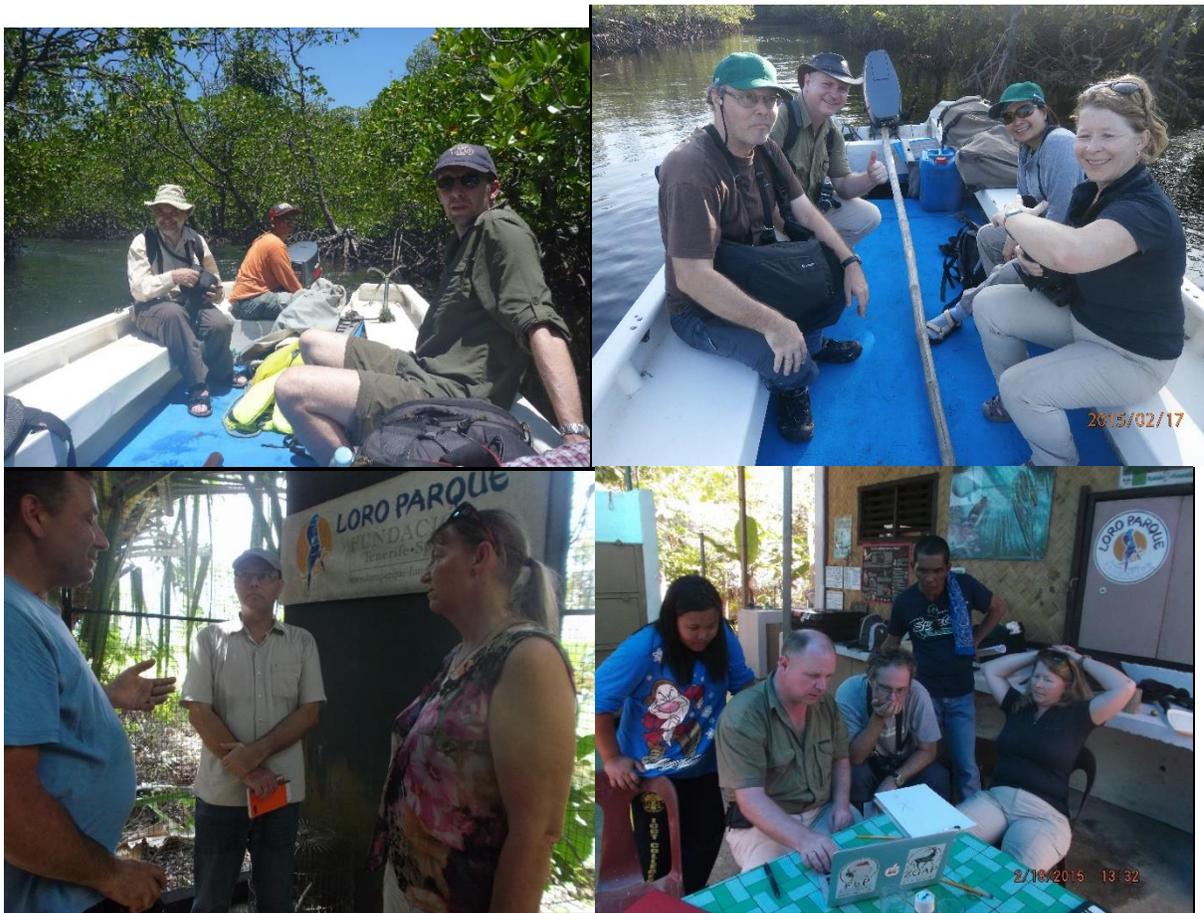


Figure 26. Project partners from Chester Zoo (upper left), ZGAP (upper right) visited this year and visiting guests from WWF (lower left) were entertained by Peter at the Katala Institute where discussion with ZGAP partners (lower right) on enhancement techniques and enclosure designs took place.

“Save the Katala, tell the world!”, this year’s theme resounded the walls of the Narra gymnasium on June 26, 2015 as nearly 2,000 students had fun celebrating the 9th Katala Festival and a mini bird fest. Among the activities were birdwatching, photo exhibit on different behaviors of the Philippine Cockatoo, interactive lectures, environmental chant contest, quiz bee, face painting, origami and coloring. This year’s festivity in Narra was jointly organized by the Katala Foundation with the local government of Narra and the Protected Area Management Board of Rasa Island Wildlife Sanctuary. The members of the Wild Bird Club of the Philippines (WBCP) joined as well and conducted a Teachers’ Lecture-Seminar on Bird Conservation which was double in attendance than expected!

Uniquely added in this year’s Katala Festival was the official launching of the Municipal Resolution No. 2015-2501 declaring June as the Katala Awareness Month in Narra, Palawan! The festivity ended with a Zumba session!

Apart from the successful festival, PCCP Narra continued to reach out to communities with the collaboration of the 4P’s program of the Department of Social Welfare and Development (DSWD). In September we reached ca. 200 adult beneficiaries from two barangays in two

visits. We also joined the October Palay Festival in Narra where Kataly was a hit during the parade.



Figure 27. The official tarp for the festival was displayed in strategic places. Shots of the cockatoo education campaigns done with the 4P's beneficiaries in Narra. Photo: R. Salut and SH. Diaz



PCCP Technical Progress Report

January – December 2015

Katala Foundation Inc.

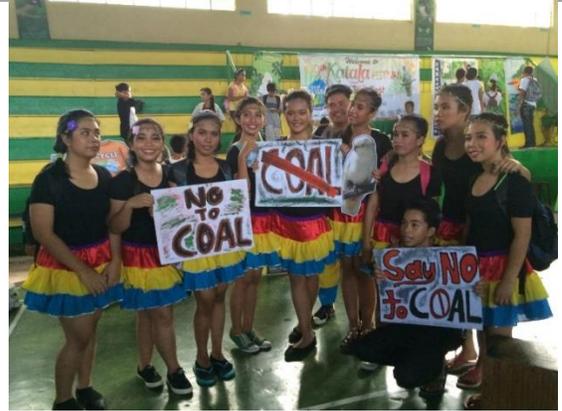




Figure 28. Snapshots of the 9th Katala Festival Narra Palawan which was joined by Wild Bird Club Members of the Philippines. (Photos: KFI, WBCP)

Cooperation with DENR

The engagement of DENR this year for PAMB and for Rasa was remarkable through the leadership of PASu Rhodora Ubani. Repainting of the birdwatch tower and signages were provided by DENR. Starting March 2015, five of our mainland volunteers are now under their payroll as green guards. DENR also funded the purchase of a second hand boat that services the PCCP wardens after our boat could not be saved anymore from the ravages of strong northeast monsoon winds.

PASu Ubani has assured this continuing active engagement of DENR in Rasa Island and this was applauded by LGU Narra and other PAMB members.

The deputation of wardens this year though was not issued as signatory of the deputation order has not been resolved yet at the DENR level.



Figure 29. Signages put up by DENR on Rasa Island Wildlife Sanctuary. (Photos: KFI)

Advocacy in respect to impacts and perpetrations in cockatoo habitats continued

Alleged forest cover change on Rasa Island

During a PCSD-organized PA Palawan Summit on February 11-12 one of the main threats for Rasa presented was an alleged forest loss of ca. 117 ha in Rasa Island Wildlife Sanctuary between 2005 and 2015. The findings were then disputed by Katala Foundation, and updated information was uploaded to the Palawan Knowledge Platform to refute this alleged forest loss. Our data based on satellite, aerial still, and drone video images (Fig. 30), as well as continuous conservation work on the ground (including forest tree inventory and forest profiling), indicate that forest cover in Rasa is intact and no loss has occurred since inception of the Philippine Cockatoo Conservation Program in 1998.

We were informed by GIS staff of PCSDS that the error in forest cover estimate originates in the use of faulty land use data generated by NAMRIA which classified the interior coastal forest on Rasa as forest in 2005 and shrubland in 2010.

Data from the initiative “Global Forest Watch” indicate that forest cover on Rasa Island remains intact between 2005 and 2010, with a very slight increase in the northern portion. This is in line with observations on the ground by KFI. Since 1998 until present, no expansion of existing coconut plantation has been observed. The same could be confirmed on an aerial survey conducted on courtesy of the Provincial Government of Palawan, where extensive photo documentation shows intact coastal forest and mangrove for the protected area.

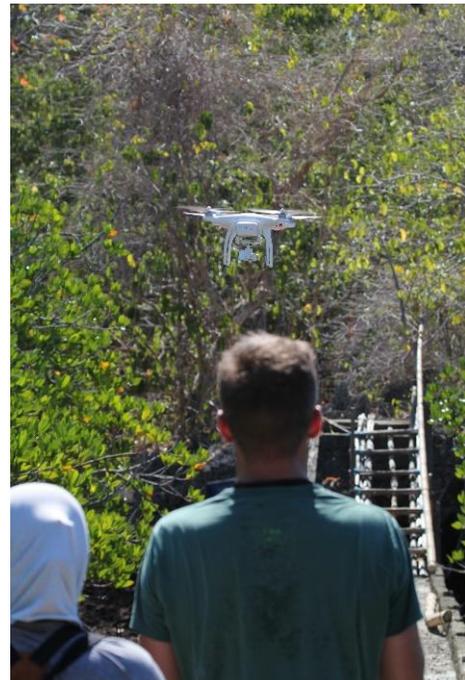


Figure 30. Drone that took video footage of Rasa Island. Photo: KFI

The PAMB of RIWS sent letter to the PCSDS to rectify their map. KFI as well sent letter to DENR through the Biodiversity Management Bureau (BMB). The latter communicated with NAMRIA regarding this matter, and on June 24 Dr. P.N. Tianco clarified that Rasa Island indeed is covered by forest and apologizing for the misclassification (Annex 1).

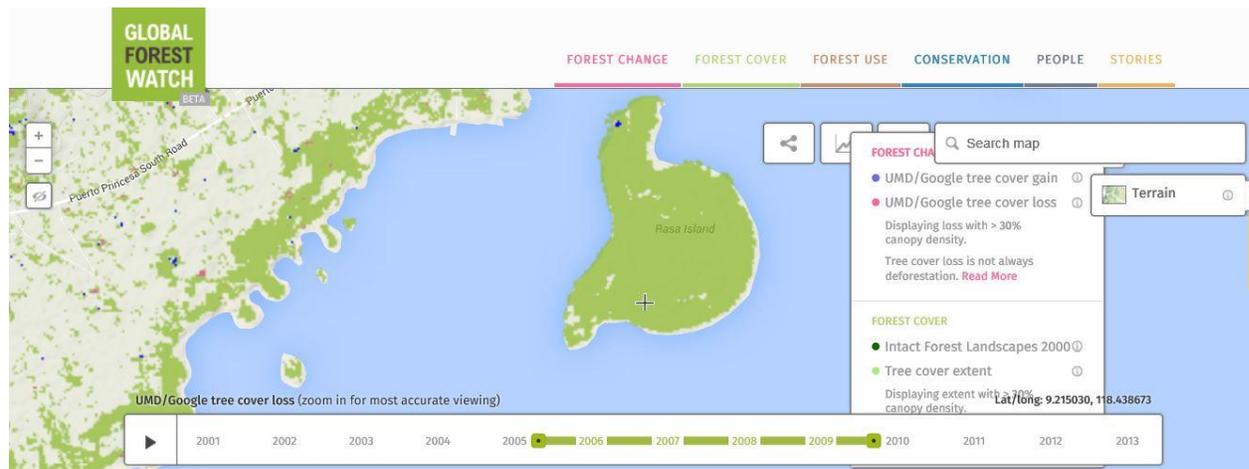


Figure 31. Tree cover extent on Rasa Island between 2005 and 2010 according to Global Forest Watch. The map indicates that forest cover remained the same of this period of time, with a slight increase of cover on the northeastern corner of the island



Figure 32. Aerial view on Rasa showing intact coastal forest and mangrove (left); interior of coastal forest showing emergent forest trees, some without leaves, since the aerial survey was conducted in April during the height of the dry season (right; Photos: P. Widmann)

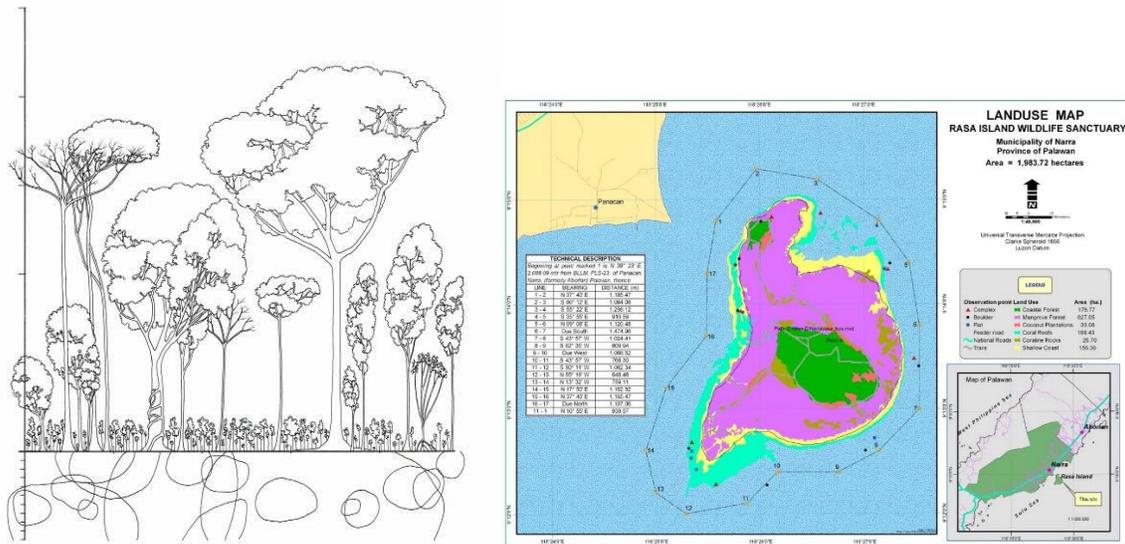


Figure 33. Coastal forest profile Rasa Island. Units above horizontal axis: each 5 m; units below horizontal axis; each 1m. Outlines below horizontal axis represent canopy cover of trees of 5m height or more (left); landuse map of Rasa with dark green signature indicating coastal forest (right)

ENIPAS Bill

The proposed Enhanced National Integrated Protected Area System Bill which provides the *en banc* declaration of all protected areas under NIPAS and expand the reach of said system was another challenge for the year. Rasa Island Wildlife Sanctuary is one of the five protected areas (PAs) that will benefit this proposed Bill. Palawan’s political leadership opposed the Bill and wanted to exclude Palawan declared protected areas. All five PAs submitted position papers (Annex 2 KFI position paper) and the Municipal Government of Narra and the Protected Area Management Board of Rasa Island also submitted its opposition and support for Rasa in particular to be re-included in the proposed bill. SB Resolution 2014-2299 and PAMB Res. 2015-001 were enacted. In the end the Committee on Natural Resources at the House of Congress favored the position of the PAs in Palawan. It remains to be seen whether this could be pushed at the bicameral level.

Constraints and measures taken

- Illegal construction and operation of fish pen within boundaries of RIWS. This was deliberated at PAMB Meeting in May and operator agreed with no complaints to remove the fish pen. The resolve of the Mayor and the PAMB members was impressive.

Objective 3: Conservation of cockatoo population on Dumaran Island, Dumaran Research on conservation-related aspects of cockatoo biology on Dumaran continued, with focus on factors influencing breeding success and foraging ecology

Breeding

Three breeding attempts were recorded on Dumaran Island in 2015. A total of seven eggs were laid, of which three were found to be rotten. Four nestlings fledged successfully, but only two were banded.

The low reproduction on Dumaran is long-observed phenomenon in this site. Reasons are unclear, but overaged breeding stock, inbreeding depression or high mortality of fledglings could play a role. Another reason could be scarcity of nest cavities or competition with other cavity nesters. However, artificial nest boxes are ignored by cockatoos since many years. Since last year we started supplementing the site with birds which were confiscated or rescued from other area.



Figure 34. Cockatoos near nest hole and perched near nest site in Omoi Cockatoo Reserve in Dumaran (Photos: P. Widmann)

Roosting

As in previous years, roost counts are lowest during the early year with onset of the breeding season, and highest afterwards. Lowest counts in 2015 were two birds in May, highest 19 individuals in September and October respectively. The latter figure does not include the recently two released birds which roost in the vicinity, but apart from the traditional roost site and therefore are not included. The relatively low number on the roost site overall possibly reflect the low output of the breeding season in 2015.

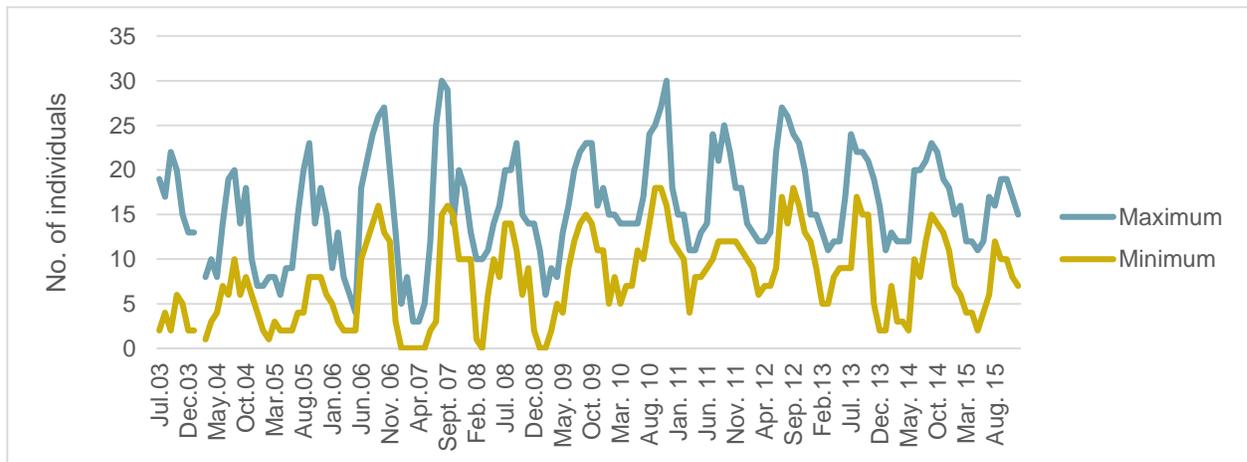


Figure 35. Minimum and maximum numbers of cockatoos counted on the traditional roost site in Lagan, Dumaran per month



Figure 36. Roosting cockatoos in Bgy. San Juan, Dumarán Island, Palawan. (Photo: M. Plazos)

Foraging

Flocks of up to eight individuals could be observed all over the project site, including in settled area. Outside of the breeding season birds typically forage on *Moringa* (right) and in the *Sonneratia* stands near the roost site before transferring to feeding areas farther away. *Sonneratia* fruits are available in low densities all year round.

The record of consumption of white flowers of *Diospyros multiflora* (Ebenaceae) is a new record for the species.



Figure 37. Cockatoos feasting on Malunggay. Photo: M. Plazos

In August, four to eleven individuals of cockatoos were observed feeding on rice in kaingin area at So. Kasipulo. No snares were put up and wardens had good interaction with claimed areas.

Supplementation of existing cockatoo population

Since the cockatoo population in Dumaran is remaining on a low level, and natural reproduction on the site is low, we initiated supplementation of the project area with confiscated or rescued bird in 2014. On September 21, 2015, additional two birds were released. A supplemental feeding station was established again, and movements of birds were intensively monitored.

From the first day after the release, both birds interacted with the wild flock, but did not join them on the roost site. Supplemental food was readily accepted, but wild food was tried within the three days after release. By early October visits to the feeding station decreased and by end of this month birds were completely self-reliant in finding natural food sources. Both birds are well as of the time of reporting.



Figure 38. The two birds were brought by our zookeeper, Angel Satioquia and the release was witnessed by PNP representatives sent by the Mayor. A water and feeding station was established for supplements until the released birds learned to eat from the wild (lower left). Released bird happily feasted on Malunggay within close proximity to roosting site (lower right). Photo: KFI

Warden scheme continued

Wardens monitored and reported kaingin activities inside and outside of the PA. Most cases were noted first quarter of the year and areas cleared varied from half a hectare to four hectares. These issues were brought to LPAMC and deliberated. Ocular inspection together with PNP and Bantay Dumarán were conducted. Measurements were taken. No DENR station is near the island municipality hence cases are not filed despite reports submitted. The LGU has been active in engaging the Bantay Dumarán and the PNP during verification of kaingin reports and inspection of sites. In the 2nd quarter only one kaingin was reported and a chainsaw was confiscated for illegal operation. The chainsaw was turned over to PNP for custody.

Artificial nest boxes were installed by wardens at the last quarter of the year using local materials and driftwoods (Fig. 39).

Repair of the KEEC was completed (Fig. 39) – all coco lumber that were already termite infested were replaced, wall sidings were replaced and stairs as well. Wardens did the work themselves at the KEEC. We planted also at the boundaries of the center as biofence.



Figure 39. Local materials used to make artificial nest boxes in Dumarán (upper photo) and repair of KEEC. (Photos: KFI)



Figure 40. KEEC full repair was done in instalments as wardens generously provided labor. PCCP wardens pose at the KEEC after its repair. (Photo: M. Plazos/KFI)

Buffer zone restoration around existing cockatoo reserves and creation of forest corridor connecting the two existing cockatoo reserves continued

Planted trees at the buffer of the Omoi Cockatoo Reserve were monitored and measured. Indigenous palms and rattan were planted at boundaries. Farmer co-operators failed to underbrush or clean planted areas because of extreme dry conditions. Mortality was also high.

Nursery shades and blocks were repaired. Seedlings are easy to inventory since the seedlings were grouped by species.



Figure 41. Nursery at Omoi, Dumaran. (Photos: M. Plazos/P. Widmann)

12th Kalabukay Festival and education activities continued

The Kalabukay Festival 2015 marked it's 12th year anniversary in June 19 hence the theme "Isang dosenang pagpupugay alay sa Kalabukay" (a dozen years of tribute for the Cockatoo). Mayor Publico led the celebrations along with ca 520 adults and kids alike. The Birdwatch Palawan spearheaded the interactive lectures that were basis for the quiz bee competition for elementary and parents too! Nearly 500 participated in the tree planting activity at the high school's eco park. Our fun activities of coloring, face painting and the chant contest were highly attended.

Based on the survey conducted by the Katala Foundation, majority said that various parts of the festivals increased their knowledge about wildlife and their interconnection to their habitat and human's activities, gave them ideas on how to protect wildlife and their habitat, and encouraged them to help in preventing the illegal trade of wildlife and to support conservation programs. Consequently, the survey also revealed that 97% of the respondents in Dumarán believed that the Katala, other wildlife and human can share a place to live. Moreso, almost a100% also believed on their capabilities to shoulder great responsibilities in protecting our natural environment.

A follow up longitudinal survey on Knowledge, Attitudes and Perceptions and Practices (KAPP) was conducted in May to June. This was funded by RARE in the amount of PhP 25,960.00 to assess the PRIDE campaign conducted in 2005.

Mike was invited to give lecture to Scouts in Dumarán during its District Scout Encampment. Nearly 530 boy and girl scouts including teachers from seven island barangays in Dumarán attended the session.

Constraints and measures taken

- A forest patch was fenced illegally consequently a nest tree inside fenced area could not be checked. After coordinating with LGU, ocular inspection was conducted with PNP and the alleged violator agreed to remove fence.

Figure 42. Snapshots of the 12th Kalabukay Festival in Dumaran: more fun activities involved not only Young Dumareños but also their Honorable Mayor, officials, military, parents and more. (Photo: KFI)



Objective 4: Education and research at the Katala Institute

Captive management of Philippine Cockatoo and other highly threatened species continued through employment and training of zookeepers and volunteers

In total 11 cockatoos were turned over this year to the center. Three were rescued from Rasa Island as two were severely attacked by mites and one which was undernourished due to lack of food supply brought about by dry months. Birds were incubated inside the bird clinic. Two others were from mainland Narra of which one had beak and head injury while the other was severely undernourished. Birds were treated, given medications and food was closely monitored. Of the six birds from Narra, three died; two were already released to the wild in Dumaran Island in September with PAMB endorsement and PCSDS transport documents. Please refer to Dumaran chapter for details on release.



Figure 43. Small rescued birds are put inside the incubator (above left). Regular weighing of birds is done (above right). The bird was turned over with a head and beak injury (lower left). Feeding of birds are carefully done with Katala hand puppet in order to minimize human contact with birds in preparation for release back to the wild. (Photo: A. Satioquia)

Five other cockatoos were confiscated by PCSDS and turned over to KI. Three were from Bataraza and two from WESCOM area in Puerto Princesa. The latter is tamed and not fit for release. Please refer to Table 1 for list of turned over cockatoos.

Table 1. Turned-over cockatoos in Katala Institute (KI), 2015.

| Date | Species | OTY | Weights (G) | ORIGIN | Turned over by | Health status (upon receipt) | Remarks |
|-----------|----------|-----|-------------|-----------------|---|---|---|
| 27-Apr-15 | Cockatoo | 1 | 3 | RIWS | Mario Batac | severely attacked by mites; cant stand yet, no feathers yet and closed eyes | Died August 8, 2015- probably respiratory problem |
| 2-May-15 | Cockatoo | 2 | 56 | RIWS | Mario Batac | Attacked by mites | Released on Sept. 20, 2015 in Dumaran Island; ringed DENR # 033-15 |
| | | | 87 | RIWS | Mario Batac | Attacked by mites | Released on Sept. 20, 2015 in Dumaran Island ; ringed DENR # 034-15 |
| 30-May-15 | Cockatoo | 1 | 335 | Mainland-Narra | Ferdinand Deramas | Beak and head damaged; very weak | Died June 18, 15 |
| 15-Jul-15 | Cockatoo | 1 | 180 | Mainland-Narra | TOURISM office-(S. Cordero turned over to them) | Empaciated keel | Died- necropsied by ALEX GRIONI findings PHEUMONIA)-July 26, 15 |
| 31-Jul-15 | Cockatoo | 1 | 291 | RIWS | Lucito Dangis | Not eating natural food | Pre release aviary; ringed DENR # 068-15 |
| 27-Aug-15 | Cockatoo | 3 | 224 | Bataraza | BJMP-Puerto; confiscated by PCSDS | Feathers are well | Ringed DENR # 038-15 |
| | | | 222 | Bataraza | BJMP-Puerto; confiscated by PCSDS | Thin, slightly weak | Ringed DENR # 0039-15 |
| | | | 214 | Bataraza | BJMP-Puerto; confiscated by PCSDS | Thin, with mites, slightly weak | Ringed DENR # 0040-15 |
| 9-Nov-15 | Cockatoo | 2 | 320 | Wescom Road PPC | confiscated by PCSDS | Feathers good, no mites, tamed | Ringed DENR # 0036-15 |
| | | | 300 | Wescom Road PPC | confiscated by PCSDS | Feathers good, no mites, tamed | For ringing |

We anticipated the effects of El Niño this year hence prepared for the following: re-release aviary was cleaned, repainted and improved; clinic was equipped with additional hatchling boxes for rescued birds; hand puppet fabricated and medicines were stocked.

The center currently holds ten cockatoos of which three will go to Jurong Bird Park in Singapore as their application for loan for captive breeding is already being processed by DENR and PCSDS. All are well maintained and feeding enrichment was done. Dr. Glenn Rebong in September had a complete health check with the birds, examined feces for parasites and collected blood samples for the confiscated birds. One bird had round worm while the rest had no parasites externally and in feces collected.

In June, we received the biggest confiscation of the Palawan Forest Turtle with 3,831 Palawan Forest Turtles *Siebenrockiella leytensis*, 168 Southeast Asian Box Turtles *Cuora amboinensis*, 25 Asian Leaf Turtles *Cycllemys dentata*. Pledges for help (financial, supplies, suggestions and manpower) overwhelmingly poured from all over the world a day after KFI informed partner. With coordination from Palawan authorities and IUCN TFTSG – Tortoise and Freshwater Turtle Specialist Group, birds that were fit for release after immediate treatment were released back in the wild. Currently, from this confiscation only six turtles are left in KIEBC for continuing care.

Landscaping with native species propagated in the Katala nursery continued

As of December, we hold 2,940 tree seedlings in the nursery. Many seedlings of Parina, Malunggay and Balindadagat were planted around KI. We had given out nearly 500 seedlings to private individuals from Narra who support our project.

The nursery was also secured with hog wire after a carabao went in the area. We have problems on pests like Golden Kohol and snails which eat a lot of our vegetables and Malunggay.



Figure 44. Some of the feeding enrichment done with cockatoos: finding food in a box, food wrapped in leaves and food hung on a stick. Dr. Rebong of Palawan Wildlife Rescue and Conservation Center had health check for all birds on Rasa as Angel helped. (Photo: A. Satioquia/KFI)

Angelo established a new vegetable garden, compost pit and applied knowledge he learned from his recent training on biogardening.



Figure 45. Dipterocarps are grown in the nursery (left). Angelo's bio garden. (Photo: A. Satioquia/KFI)

Educational trail, enclosures and visitors facilities upgraded

A field house was funded by Wildlife Reserves Singapore, as well as LPF and Funding Partners. Blueprints of the building were finalized according to initial floor plan by the Municipal Engineering Office of Narra. Building permit was secured. The floor plan of the complete building is rectangular to save on materials, with a floor size of 7x7 m, including porch. The roof outline includes a steeper central portion to allow for better ventilation; this presents the only deviation from the original plan. This roof type is also traditional in some parts of Palawan and the Philippines and integrates well in the landscape.



The building is situated close to the entrance of the facility so that the operation of the fieldhouse does not cause any disturbance of the animal collection. The station is positioned in such a way that the porch is facing the back of the area with a view on the Victoria Range (Fig. 46).

Figure 46. View from the porch of the fieldhouse on the Victoria Mountain Range (Photo: KFI)

Stacking of the field house was done in early May. Excavation of the foundation commenced in July due to intermittent wet conditions earlier. Excavation was done manually. After the concrete foundation was poured and hollow block foundation was laid, the inner foundation was backfilled in layers using locally sourced gravel and sand mix, and regularly compacted.

The floor was elevated by one meter, measured from the natural ground level, since the area is regularly affected by flooding. Walls were constructed by end of August. Water and electrical pipes were laid before concrete-finishing of walls inside and out commenced.

A two chamber septic tank was installed close to the house and connected to wastewater system.

The roof sub-structure was constructed using local hardwood. Roofing material utilized was galvanized iron sheets, which was purchased in Puerto Princesa due to cheaper material costs. A light beige colour was chosen to achieve better reflection of sunlight and reduce heat being trapped under the roof.



Figure 47. Staking and excavation of foundation, formworks, pouring of cement, finalization of the roof sub-structure and installation of corrugated iron sheets for the new field house. (Photo: A Satioquia and P. Widmann)

Interior finishing commenced as well in September with installation of door jambs and construction of the substructure for the kitchen niche, as well as the layout of the bathroom. Railing was installed on the porch, using confiscated lumber, which was provided by the local office of the Department for Environment and Natural Resources. Flooring was poured by end of September. Stairs to the porch were built in concrete and finished with a washed pebble surface. Ceilings were constructed using plywood which then were clad with 'Amakan', a locally produced mat made of finely woven bamboo fiber.

The information hut “pavilion” construction lagged a bit this year because of lack of manpower from the municipality to implement the project. This project is greatly financed from the municipality’s counterpart funds for the center.



Figure 48. Information hut unfinished (upper left); public aviary fixed and pre-release aviary repaired (lower right). (Photo: A Satioquia)

Meanwhile, the signage of the center has been completed and gate construction commenced late this year and would be completed first quarter of 2016.



Figure 49. The Katala Institute signage. (Photo: P. Widmann)

Internship and visitors

From March 9 to 29 a German vet.-med. student, Ms. Christine Hoos, from the University Giessen volunteered in KI to develop sample protocols for blood intestinal and ecto-parasites of cockatoos under simple field conditions as prevail in all KFI field sites. Her base was in Narra, since due to security reasons she was not allowed to travel to more remote sites.

She screened all cockatoos present in KI and got additional samples of nest material and hatchlings from Rasa Island, as well as from the Palawan Wildlife Rescue and Conservation Center (PWRCC). All cockatoos from KI and Rasa tested negative for blood and intestinal diseases. Two species of mites were directly collected from hatchlings in Rasa and preserved. The sampling protocol developed can be found in Annex 3.



Figure 50. Peter explains to WPU students the goal of the facility. (Photo: A Satioquia)

Apart from official visits by the funding partners, wildlife management students from the Western Philippines University had excursion at the KI in February where Peter discussed

the center's objectives, endemic wildlife species kept in the center as well as the support the center gets from funding institutions here and abroad who had long term commitments with the PCCP in particular the Loro Parque Fundacion.

Constraints and measures taken

- The electric supply within KIEBC is not reliable partially because the site is far from the nearest main line. We are in discussion with electric company and LGU Narra for possible solution. This will save costs on repairs of equipment that are destroyed due to fluctuation and long brownouts.

Other highlights

Other reported wildlife within the reporting period

Blue-naped Parrots *Tanygnathus lucionensis* IUCN: Near threatened

The species is clearly benefiting from nest protection of cavity nesters in our project site. In 2015 alone, 207 birds hatched on Pandanan Island. The species is also common and regularly reproducing in Dumarán, where seven birds fledged from four nests. Only one individual is seen since many years on Rasa. Probably the island was never inhabited by the species, and it is unclear where the one bird is coming from.

Blue-headed Racquet-tail *Prioniturus platenae* IUCN: Vulnerable

The species is doing well in all project sites. Breeding records are rare from Pandanan and Rasa, probably because in these sites the species prefers inaccessible mangrove areas, but regular from Dumarán, where the species nests in dry forests, and seven birds fledged successfully from four nests. Immature birds were recorded yearly from all sites in 2015.

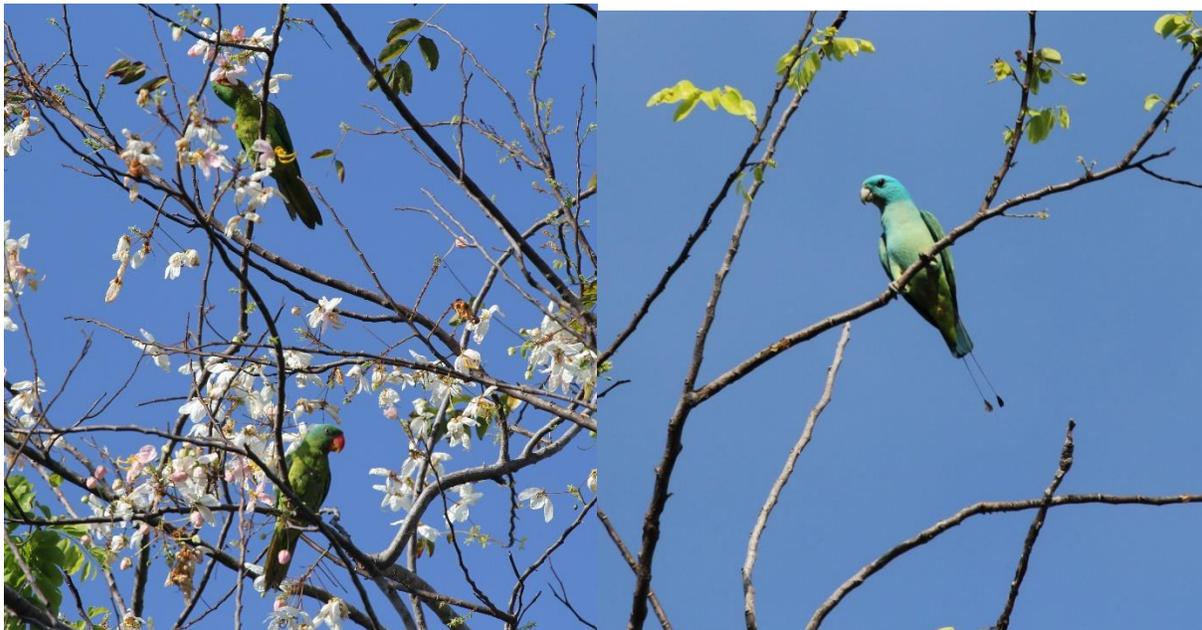


Figure 51. Blue-naped Parrots feeding on flowers of Palawan Cherry in the interior of Pandanan Island (left); Blue-headed Racquet-tail on top of the same tree (right). (Photos: P. Widmann)

Cooperations

- In March, the GIZ-PAME funded project “Realising Biodiversity Services and Values of Rasa Island Wildlife Sanctuary” started its implementation. This project goal is to avoid unsustainable resource use within Rasa Island Wildlife Sanctuary and destructive development in the impact zone of Rasa and to sustain ecological services and values. The total GIZ-PAME funds is PhP 1,121,420 mainly to fund researches on malacofauna, coral reef status and valuation study of Rasa. The LGU-Narra counterparted about PhP 800,000.00 and DENR with a counterpart of 1M.
- In April, Indira secured funding for the repair of the old Katala mascot through the RARE Alumni Funds. We also acquired a new Katala mascot which is more improved in design and easier for transport again courtesy of RARE Alumni Funds. The old Katala mascot completed a makeover in time for the festivity in Dumarán. Total amount granted was PhP 70,320.00 which included production of four cockatoo hand puppets.
- On July 28 to August 5, Peter, Indira and Rene were invited to Sumba, Indonesia to participate in the Project Planning Workshop for the Sumba Cockatoo Project in Sumba, Indonesia. We shared experiences and knowledge in the PCCP with our Indonesian counterparts. The trip was sponsored by ZGAP.
- On October 16, we organized together with the Palawan Council for Sustainable Development Staff (PCSDS) a workshop to help develop the Wildlife Management Program for Palawan. In this workshop, the participants were provided an opportunity to: (1) Identify existing wildlife management stakeholders’ actions in respect to conservation of terrestrial and freshwater ecosystems and species; (2) Identify gaps in wildlife conservation and management actions; (3) Prioritize needs and identify strategic activities that will help address these main threats: habitat destruction and degradation, overexploitation of natural resources, introduction of and control of invasive species, climate change and pollution; (4) Select members of the project steering committee and agree on their responsibilities in preparing the wildlife management strategy paper; and (5) Agree on immediate next steps. A strategy paper is envisioned to be formulated from this workshop. Target participants had direct impact on wildlife conservation in Palawan. The event was mainly funded by the Philippine Tropical Forest Conservation Foundation (PTFCF) and the PCSDS. Please see attached Proceedings of the Workshop.
- The tests for PBF and DNA sexing for all cockatoo feather samples are done in cooperation with University of the Philippines Institute of Biology (UP-IB). Results for 2014 reveal negative for PBF (received only in 2015 – Annex 4). No tests could be done from samples taken and sent this year due to the failure of the courier to deliver on time to the UP laboratory as their schedules were affected by the APEC event in Manila.

Awards and recognitions and media mileage

- On April 18, Indira and Peter received the Values Award 2015 conferred by the JCI Peacock Palawan for their exemplary dedication and commitment to environmental conservation. Junior Chamber International (JCI) is a civic organization affiliate to Jaycees International.
- On Sept. 1, PCCP Narra won as one of the Galing Pook Awardees for 2015. See Narra Objective.

- On Sept. 14-19, Peter and Indira was afforded “Species Champions this year by the European Association of Zoos and Aquaria (EAZA). *“Peter and Indira typify what it means to be a species champion”* says Philippine cockatoo EEP coordinator Eric Bairrão Ruivo from ZooParc de Beauval. *“They have rallied against major challenges to bring attention and support to a species that could have easily gone extinct.”* Peter and Indira presented three papers during the said meeting at Wroclaw, Poland where Peter also gave a plenary speech on “Flagship species programs of the Katala Foundation”. See Annex 5.
- On Nov. 16, KFI was given Plaque of Appreciation by the Iwahig Prison and Penal Farm (IPPF) for its efforts to help education the inmates about wildlife conservation.

Conferences and workshops attended, presentations done in conferences

- On February 11-12, Peter and Indira attended the 1st Palawan Protected Area Summit in Puerto Princesa City.
- In February, Peter attended the PAMB Meeting and Knowledge Platform Meetings.
- On April 29, Peter and Indira participated in the national forum workshop at the BMB-DENR on Birdwatching and Bird Photography protocols
- In April, Fred participated in the Environmental Critical Areas Network (ECAN) monitoring and law enforcement workshop hosted by PCSD and LGU Narra
- On May 6-7, Peter attended the SEP Law Review
- On May 19-22, Mike Plazos attended the Rainforestation Training held in Baybay City, Leyte.
- In May, June and July, Fred joined in monitoring and evaluation visits done by the ECAN Board and PCSDS Monitoring team.
- On June 5, Sheen participated in the World Environment Day celebration in PPC
- On June 13-14, Sheen participated in the Anti-Coal Campaign Workshop in Puerto Princesa City.
- On June 15, PCCP exhibited its works in photos at the Robinsons Mall, Puerto Princesa City in celebration of the SEP Anniversary.
- On July 1, Peter was among the eight NGO representatives who met with DENR Sec. Paje to discuss the environmental challenges in Palawan e.g. hábitat destruction, forest land use plans, enforcement issues to mention a few in the hope of keeping intact the integrity of the last frontier of the Philippines.
- On July 21-23, wardens and staff attended the BMS (Biodiversity Monitoring System) Training workshop intended for RIWS. This was sponsored by the DENR. BMS marine stations were set up and gathered data on coral reefs and sea grasses of North East of RIWS área.



Figure 52. PCCP wardens actively participated in the DENR organized BMS Training. (Photos: SH. Diaz)

- On Aug. 26, we initiated a round table discussion with PCSDS, City ENRO, IPPF to initially discuss the issues concerning the cockatoo population and hábitat destruction in the IPPF.
- On Sept. 21-22, we were invited by our partners Dr. Sven Hammer from the Goerlitz Zoo in Germany to see their facility.
- On Oct. 27-29, Angelo attended Seminar on Vetiver production and bio gardening at Puerto Princesa City.
- On Nov. 6, we attended the World Turtle Day in WPU Campus, organised by the PFTCP of KFI.
- On November 19-22, Indira graced the invitation of Parrots International to speak during its Annual Symposium held in Campo Grande, Brazil. Indira talked on community involvement in parrot conservation with her presentation “Apathy to Committed Participation: Saving the Philippine Cockatoo”. In that occasion, Peter and Indira were able to meet so many parrot conservationists and information sharing was good. The trip was generously sponsored by Chris Shank from the USA, a staunch supporter of the KFI and visited project sites in 2014. Please see enclosed report written by Rosemary Low.
- On Nov. 20 and 27, we conducted conservation education campaigns at Bgy. San Miguel (WESCOM área), Puerto Princesa City to disseminate information of foraging cockatoos from Iwahig to these areas. Campaign targeted WESCOM civilian employees, military and community members in barangay. DENR-Provincial Office joined as well in the event. Fred, Sheen and Anna had lectures and games for kids in and out of school. Kataly the mascot also joined the event.
- In Dec. Fred attended the NECPAN meeting in Narra.
- On Dec. 9-10, Peter and Indira attended the 2nd Palawan Research Symposium
- On December 9-11, Sheen and Anna attended the 10th Philippine Birdfest in Bataan. PCCP’s booth was always full of students who enjoyed the coloring activities offered. Both staff also shared experiences during the Conservation Forum.



Figure 53. Snapshots of IEC in WESCOM (upper left) and Birdfest 2015 pictorials (Photos: KFI)

- On Dec. 16-17, all wardens and staff had their medical check up.
- On Dec. 17-19, we held our Wardens Refresher's Course in Puerto Princesa City. All PCCP and turtle (PFTCP) wardens and staff gathered in one venue to refresh knowledge on PCCP's goals and highlights of results and achievements, equipment use (GPS, hypsometer, densitometer, binoculars, etc), first aid procedures, and a practical interactive session was held to thoroughly understand environmental laws, paralegal and metalegal remedies and legal processes needed for enforcement. We invited two lawyers from the Environmental Legal Assistance Center (ELAC) for the afternoon session full of role play, question and answer. The three day event ended with a Christmas salu-salo and gift giving. Costs were shared by PCCP, PFTCP and a part from the Heidelberg Zoo.]



Figure 54. Snapshots of the activities during the Wardens' Refresher's Course 2015 in Puerto Princesa City, Palawan. (Photos: KFI)

Personnel and equipment status

- Two additional staff were hired to assist in education activities and other research. Both are on probation period until December.
- Service boat for Rasa was completely destroyed after strong winds and rain battered the boat while dry docking. A similar boat was purchased through the DENR funds.
- Service boat in Pandanan was also dry docked and cleaned and engine was checked. Pandanan needs another boat for effective patrol.
- Repair of the Katala Environmental Education Centre continued throughout December.

Implications for further work

- Although the misclassification of Rasa Island's forest cover was rectified, other vegetation cover in Palawan should be rechecked as well since it is observed that similar misclassification is true to other important areas.
- The move of the Palawan Government to excise the five protected areas from the ENIPAS Bill is a challenge for Rasa. We believe a multi-sectoral management including the national authorities is important for Rasa Island Wildlife Sanctuary to ensure integrity of the PA from ad-hoc decisions that often benefits the few. Hence, there is no room for complacency.

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Annexes

Annex1 Communication from NAMRIA to BMB re Rasa Island forest cover

Annex 2 KFI's position paper on ENIPAS

Annex 3 Parasitological methods for cockatoo

Annex 4 Cockatoo PBFD report from UP-IB

Annex 5 EAZA Species Champions