



Republic of the Philippines
Department of Environment and Natural Resources
Provincial Environment and Natural Resources Office
MIMAROPA Region

Bgy. Sta. Monica, Puerto Princesa City, Palawan

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Red

December 20, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA
1515 DENR By the Bay Building, Roxas Blvd.
Barangay 668, Ermita, Manila

THRU : The OIC, ARD for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : **PCCP PATROL REPORTS IN THREE PROJECT SITES FOR
THE MONTH OF NOVEMBER CY 2022**



Forwarded are copies of Katala Foundation Incorporated (KFI) patrol and monitoring reports on forest and biodiversity in three (3) Project Sites for the month of November CY 2022 to wit:

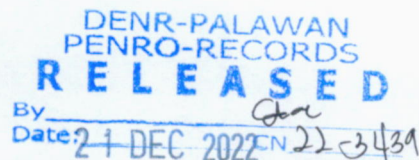
1. Dumaran Island Critical Habitat, Dumaran, Palawan;
2. Iwahig Prison and Penal Farm (IPPF), Puerto Princesa City; and
3. Rasa Island Wildlife Sanctuary (RIWS), Narra, Palawan.

For information and record.

“For the PENRO”

Rhodora B. Ubani
RHODORA B. UBANI

Supervising ECOMS/CDS Chief
In charge, Office of the PENRO





R4B PENRO Palawan <penropalawan@denr.gov.ph>

PCCP Patrol Reports for November 2022

Katala Foundation Inc. <kficacatua2016@gmail.com>
To: R4B PENRO Palawan <penropalawan@denr.gov.ph>
Cc: Indira Lacerna <idlacerna@gmail.com>

Mon, Dec 19, 2022 at 12:06 PM

**DENR PENRO
PALAWAN RECORDS
RECEIVED**BY:
DATE: 12-19-22 11:50 AM

Dear PENRO Cayatoc:

We furnish herewith our November 2022 Patrol reports from the PCCP project sites:

1. Dumarán, Palawan
2. Iwahig Prison and Penal Farm (IPPF), Puerto Princesa City, Palawan, and
3. Rasa Island Wildlife Sanctuary (RIWS), Narra, Palawan

We appreciate the acknowledgement of said report. Thank you for your continued partnership.

KATALA FOUNDATION INC.

Casuy Rd., Purok El Rancho
Sta. Monica/ P.O. Box 390
Puerto Princesa City, Palawan 5300
Philippines

CONSERVATION WITH PEOPLE

3 attachments

Dumarán-PATROL REPORT- November 2022_lem.pdf
2435K

Rasa PATROL_REPORT NOVEMBER 2022.pdf
2830K

IPPF NOVEMBER 2022 PATROL REPORT.pdf
4265K

**KFI PATROL AND MONITORING REPORT ON
FOREST AND BIODIVERSITY
November 2022 SUMMARY
Rasa Island Wildlife Sanctuary and its environs,
Narra, Palawan**



21

**Bilang ng nagawang
patrolya**



0

**Bilang ng illegal na
kailangang aksyunan**



202

**Kabuuang kilometrong naabot
ng patrolya**



1

**Bilang ng mga issues na
nai-report sa PAMO**



63

**Kabuuang oras ng
patrolya**



0

Bilang ng naaresto



171

**Pinakamataas na bilang sa
tulugan ng Katala**



33

**Bilang ng ibang uri ng
ibon na nakita**



127

**Pinakamataas na bilang
ng Katala sa kinakainan**



12

Uri ng halamang namumunga



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KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY RASA ISLAND WILDLIFE SANCTUARY

NOVEMBER 2022

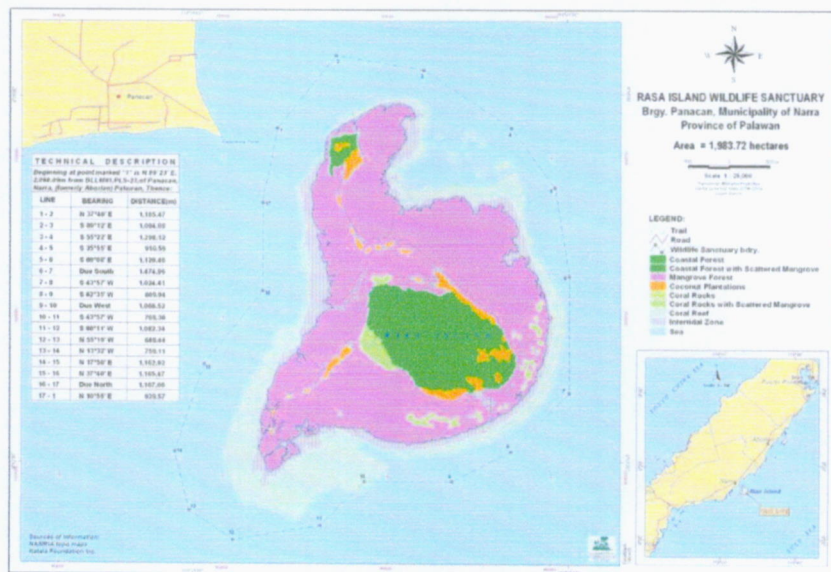
Prepared by:

Anna Rose Agullo, Mark Quinit, Peter Widmann and Indira D. L. Widmann

I. GENERAL DESCRIPTION OF THE CONSERVATION AREA, CONSERVATION OBJECTIVES, CONSERVATION TARGETS AND METHODS

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. 1). 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 manages the Rasa Island Wildlife Sanctuary (RIWS). In 2008, RIWS was chosen as Top 13 Bird Watching Sites in the Philippines by the Department of Tourism.

Figure 1.
Landuse map of
Rasa Island
Wildlife Sanctuary
in Narra,
Palawan,
Philippines



The island is the pilot site of the Philippine Cockatoo Conservation 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 ex-poachers as wildlife wardens whose main task is to patrol and protect the wildlife in particular the Philippine Cockatoo during and outside its breeding season. This scheme has proven to be efficient and lead to the dramatic recovery of the Philippine Cockatoo population to nearly 400 individuals as of to date. This makes RIWS the most important population of the species in the wild!

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 2019), 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).

Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within Rasa Island Wildlife Sanctuary.
2. Identify and preserve priority sites for conservation and maintain their ecological functions.
3. Prevent or report to enforcing agencies illegal activities that compromise the integrity of the conservation area.

Conservation Targets

1. To stabilize number of Philippine Cockatoo breeding pairs on Rasa Island and vicinity by 2024 (Baseline: average breeding pairs from 2019 to 2021: 33.0).
2. Conduct weekly patrol and permanent presence of wildlife wardens with daily reports during breeding season per year.
3. Conduct at least 12 school/community visits (with at least 20 percentage point increase in KAPP survey results for individual interventions) and one festival annually.
4. Rehabilitate at least one hectare per year through reforestation or enrichment planting within cockatoo foraging area.
5. Monitor and reduce threats in the area by 50% from 2022-2024; if any.

Methods

Deputised wardens patrol by foot or by boat monthly within site. Patrol members use a technology-based system to register all observations (threats, status and wildlife data) in the android and transferred to a smart application to generate report (Critchlow et al., 2017; Teacher et al., 2013). Species to be monitored are based on their red-list status and their value as bioindicators (IUCN, 2019). Ease of identification in the field was considered as well. The maps are generated and analyzed through QGIS/ArcGIS. Patrols are coordinated with the concerned barangay and protected area office wherever it applies.

II. PATROL TEAM AND EFFORT

The patrol and monitoring team members are our wildlife wardens and mainland volunteers:

REYNALDO ALBELAR, LORETO ALISTO, BERNITO BASIO, EDWIN BATAAC, MARIO BATAAC, LUCITO DANGIS, Veronica Marcelo, Danilo Villaruz, Monico Beleg and Antonio Marcelo. Wardens' teams covered **202kms** of nest checking, wildlife monitoring and patrol around Rasa. Total of precipitation in November 2022: **406mm** on Rasa, **400mm** at Panacan 2 and **270mm** on Katala Institute, Antipuluan.

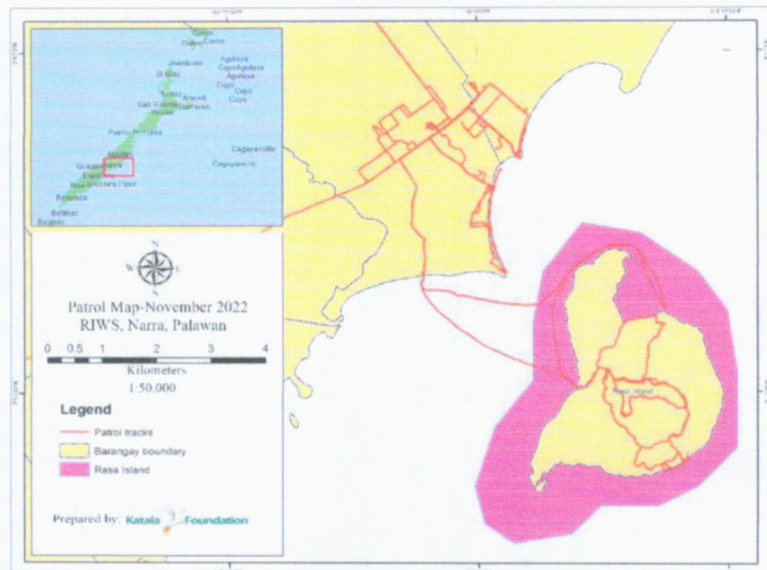


Figure 2. Patrol tracks in red marks in November 2022

Beside preparations for the release of Angel (DENR-70-22 from Rasa in 2017) and Anna (from IPPF in 2022) on Rasa and monitoring afterwards, KFI-PCCP wildlife wardens and staff were preparing for the next year's breeding season. In November 2022, 12 nest trees were installed

with plain sheets and eight were updated with parameters. Six camera traps are still deployed on Rasa.

III. PATROL OBSERVATIONS

A. WILDLIFE OBSERVATIONS

171 individuals were counted by Bernito during cockatoos' dispersal at traditional roost site from 5:15-7:00a.m. in Nov. 11. During monitoring, seven to nine cockatoos were noted sleeping on Pagatpat nest trees on west part of Rasa in the second to last week of the November. On Nov. 28, 3ind were observed flying from nest tree to another and were not seen leaving at 6:15p.m. Likewise, 2ind came out from the Pagatpat nest to Dapdap area on Nov. 29 at 5:40a.m. No cockatoos were observed roosting at Borbon and other stations. **127 individuals** dispersed from Rasa to Borbon station from 6:09-7:10a.m., Veronica counted on Nov. 30. Earlier this month, in Nov. 8th, we counted a total of 102ind from Borbon (72ind) and Parco beach (30ind) stations flying from Rasa from 6:18-7:20a.m. While in Nov. 29th, 109ind went from Rasa to mainland, counted at Borbon and Parco beach stations. 84ind went back to Rasa until 8:29a.m. in the same date. During monitoring, no cockatoos were observed at Princess Urduja and Batang-batang. The highest count at Marcelo area was 32ind recorded from 6:30-8:25a.m. in Nov. 26.

Sub-adult cockatoos were observed on mainland this month. Lesser cockatoos were noted foraging in the afternoon at the stations which probably is due to the rains and winds which usually were stronger in the afternoon. Both earliest and latest foraging were recorded at 6:09a.m. and 5:55p.m. at Borbon station.

Besides the Philippine Cockatoo, other species noted in November 2022 were Nicobar Pigeon, Red-headed Flameback, Tabon Scrubfowl, Blue-headed Racquet-tail, Egret sp., Great-billed Heron, Rufous Night-heron, Stork-billed Kingfisher, Oriental Dwarf-kingfisher, White-collared Kingfisher, Copper-throated Sunbird, Changeable Hawk-eagle, White bellied sea-eagle, Western Osprey, Mantanani Scops-owl, Spotted Wood-owl, Palawan Bulbul, Green Imperial-pigeon, Reef Egret, Blue-Paradise Flycatcher/ Black-naped Monarch, White-vented Shama, Ashy Drongo, Common Koel, Whimbrel, Large-tailed Night-jar, Rail, Greater coucal, Pipits, Emerald Dove, Asian Glossy Starling, Rufous-tailed Tailor-bird, Dollarbird and Zebra Dove. Bernito saw one individual of *Dendrelaphis cf. caudolineatus* on mangroves on Nov. 22. Monitor Lizards were frequently encountered on Rasa.



Figure 3. Bernito and Loreto mount plain sheets around nest tree to avoid cockatoo predators (left); Simultaneously with the scheduled visit, Bernito with the team updates parameters of nest trees (right) ©KFI



Figure 4. Cockatoos roost on a Pagatpat tree on traditional site (left); foraging cockatoos on malunggay at Damayan Bliss, Panacan 2 (right) ©KFI

Release of rescued Philippine Cockatoos

On Nov. 7th, Angel (DENR-70-22 from Rasa in 2017) and Anna (DENR-131-22 from IPPF in 2022) went free from its pre-release aviary on Rasa. Anna left the aviary first while Angel waited for some wild cockatoos to come and interacted immediately. Angel was not seen after interacting with the wild going to a nest tree in the afternoon of Nov. 7th while Anna was around until Nov. 20th. Monitoring on the two on Rasa and on mainland continued. Bernito heard the distinct call of the two released cockatoos flying with six wild ones at Favila area due coastal forest on Nov. 25 while Mario believed he heard Anna with eight wild cockatoos flying to mangroves on Nov. 26. At the mainland, Danilo noted two cockatoos feeding on malunggay at his station on Nov. 25 at 11:00a.m. The two were flying low and calling. He suspected one of them was Anna and viewed them until they reached Borbon.



Figure 5. Mark and Angeles collect biometrics of birds for release (left); Anna, the cockatoo with blue marks munches on Buntot-daga after leaving the aviary (right) ©KFI

Vegetation assessment

In November 2022, more and frequent torrential rains were recorded than in previous months in Narra (Fig. 6). Some flowers of some important food plants were blown and fell to the ground. The boundary and inner coastal area of Rasa as well as the mangroves exhibit green vegetation. Few leaf litters were observed at coastal areas. Flowering trees and vines on Rasa were Bogo, Tulang pagi, Kasoy-kasoy, Buntot daga, Magtalisay, Binunga, Bago, *Rhizophora* sp. and other mangrove species. Fruiting ones were Buntot daga, Tulang pagi, Ginlalid, Kasoy-kasoy, Gindaon, Magtalisay, Beled-beled, Balindadagat, Balete, Tulang Manok, sp. A1, Pagatpat,

Rhizophora sp. and other mangrove species (Fig. 7). On Nov. 23, two trees of Rotok-rotok decomposed and fell (Fig. 7).

Figure 6. Monthly precipitation at three stations: Rasa, KI and Panacan 2 in 2022

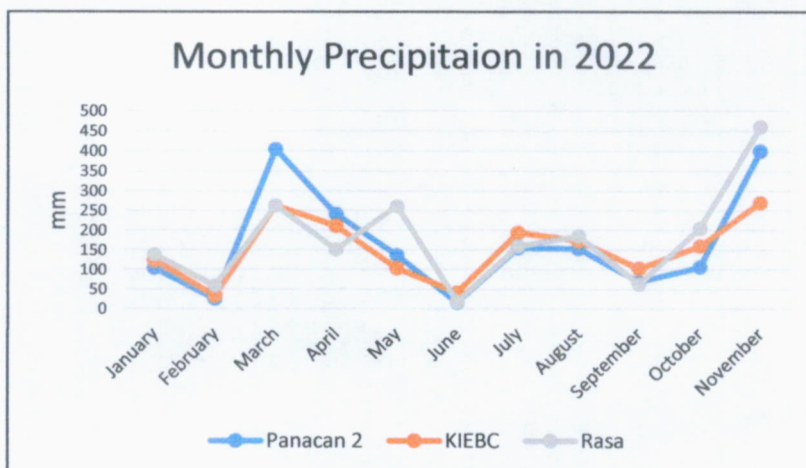


Figure 7. Fruiting Buntot-daga, a vine that provides food for cockatoos (left); Dead Rotok-rotok, a mangrove species fell in Nov. 23 on Rasa (right) ©KFI

B. THREAT OBSERVATION

One Magtalisay tree (DBH=22cm; H= approx. 26m) was found cut in coastal forest on Nov. 7, 2022. The stump was documented and no person was encountered during monitoring. Initial assessment around the vicinity was conducted and this was reported to Protected Area Office.



Figure 8. Cut Magtalisay on Rasa; cut tree with stump is still on the area ©KFI

III. OTHER HIGHLIGHTS

Monitoring on coconut plantations and marine resources on Rasa. On Nov. 4, E. Batac harvested 2gals of honey from Dapdap area in 3hrs. On Nov. 12, two persons gathered 15kgs of lato at mangrove entrance to camp in 4hrs. On Nov. 20, one person collected 10kgs of lato at mangrove entrance to camp for 5hrs. On Nov. 26, four persons gathered 17kgs of lato from tidal flat near Satina area for 3hrs while on Nov. 27, three persons gleaned 10kgs of seashells (sikad-sikad) at tidal flat near Asinan area in 4hrs.

Among the visitors this month were Jemson Baltazar who visited Rasa and encountered wildlife wardens in Nov. 2 and Richard Netherwoods enjoyed the sight of the cockatoos at roosting site in Nov. 21 (Fig. 9). Both were amazed on the cockatoos and the conservation efforts for the species. Conservation International (CI) visited KI in Nov. 4 to get footages of wildlife in the center (Fig. 10). Planted malunggay cuttings and native seedlings at the new barangay hall of Antipuluan were maintained by putting up signages to prevent unattended grazing cattles and goats in the area (Fig. 10).



Figure 9. R. Netherwoods enjoys taking photos of cockatoos at roost site (left) and interacted with wardens at camp site (right) ©KFI



Figure 10. CI takes footages of animals in KI (left); Larry puts signage inhibiting farmers to bring cattle and goats at tree planting site (right) ©KFI

IV. ISSUES, CONSTRAINTS AND RECOMMENDATIONS

The incidence of cut Magtalisay tree is reported to PAO. The trunk is left at the area for monitoring on possible transporter. Owners of lobster traps at Borbon, Panacan must be

continuously informed to not encroach inside Rasa boundary. Prescriptions for each zonation must be disseminated by PAO and with other PAMB members to encourage more active role in protection. Update on pending cases e.g. establishment of fish corral on Rasa is appreciated. Vigilance as to collection of fossilized Taklobo must continue; monitoring around Rasa at night is also encouraged.

V. ACKNOWLEDGEMENT

The PCCP acknowledges the key players on the ground: our wildlife wardens and mainland volunteers: REYNALDO ALBELAR, LORETO ALISTO, BERNITO BASIO, EDWIN BATA, MARIO BATA, LUCITO DANGIS, Veronica Marcelo, Danilo Villaruz, Monico Beleg and Antonio Marcelo. Thank you very much to the LGU-Narra through Mayor Danao and staff, Vice Mayor Calso Jr., and the municipal council, department heads, barangay officials, and everyone in the LGU for their unrelenting support and appropriation per year for our wardens and volunteers. Also, we thank the Narra community for pursuing the cause of cockatoo conservation in Narra. We also thank the PAMO through PASu Ma. Teresa V. Ayson for her kind attention. We are grateful to KFI family and board members for their help, assistance and sharing expertise and ideas. We are indebted to the following organizations and agencies for providing funds for this project:



References

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KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

November 2022 SUMMARY
IPPF-PPC, Palawan



11

Bilang ng nagawang
patrolya



150.23

Kabuuang kilometrong
naabot ng patrolya



37.7

Kabuuang oras ng patrolya



1

Bilang ng illegal na
aktibidades



0

Bilang ng naaresto



1634

Bilang ng halaman sa nursery



77

Pinakamataas na bilang sa
tulugan ng Katala



2

Pinakamataas na
grupo ng Talusi na nakita



20

Pinakamataas na bilang ng
katala sa kinakainan



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KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY IWAHIG PRISON AND PENAL FARM (IPPF)

November 2022

Prepared by:

Matt Brian P. Ong, Vicente Abendan Jr., Peter Widmann and Indira D.L. Widmann

I. GENERAL DESCRIPTION OF THE CONSERVATION AREA, CONSERVATION OBJECTIVES, CONSERVATION TARGETS, AND METHODS

IPPF is part of a larger landscape, the Sulu Sea plain, which comprises the lowlands of central Palawan facing the Sulu Sea and including areas of Puerto Princesa City and the municipalities of Narra and Aborlan.

The area is bordered by the Victoria-Anepahan Range to the west and the Sulu Sea to the east; the northern edge runs roughly along 9° 47' N, the southern along 9° 9' N.

Philippine Cockatoos have long been known to persist in the IPPF south of Puerto Princesa City. More recent are flocks of cockatoos from Rasa feeding on the mainland of Narra, and from Iwahig Penal Colony feeding in coastal areas of Puerto Princesa City,

particularly in the compound of the Western Command (WESCOM) and Bgy. Bancao-Bancao. Large parts of the coastal plains are cultivated, mainly with coconuts and rice paddies, particularly in Narra and Iwahig, where irrigation is available. Extensive areas of disturbed grassland-forest mosaics persist, which are habitats for a surprisingly high number of Palawan endemics. One explanation for this phenomenon could be that the present vegetation resembles that of some periods in the Pleistocene. These areas are used as pastures but also for the collection of a wide variety of forest products. Grass fires are a regular occurrence and partly the vegetation is adapted to these occurrences (*Antidesma* fire savanna). Extensive evergreen and semi-evergreen lowland forests exist at the foot of the Victoria Anepahan Range,

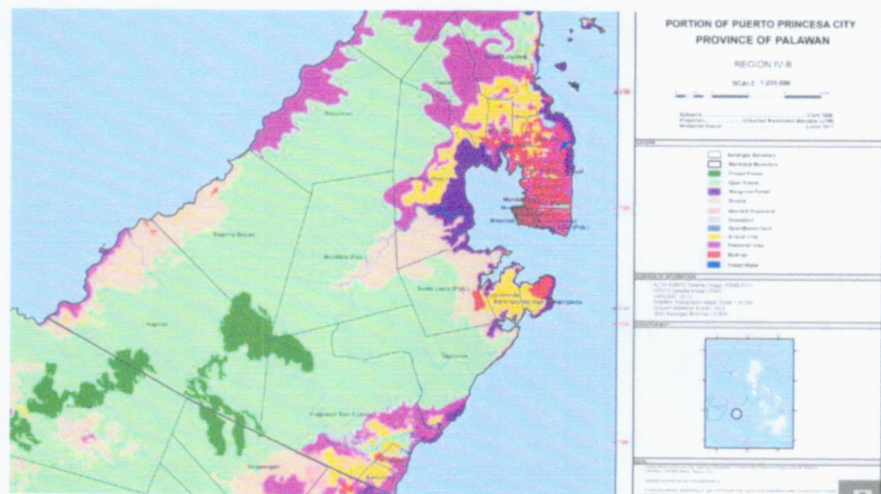


Figure 1. Land use of southern Puerto Princesa, including IPPF according to NAMRIA. Large areas were classified as open forest (bright green signature); this is not in line with observations on site, where large areas of closed forests were recorded particularly in portions of Iwahig, Tagburus ("Zigzag") and Montible (Source: NAMRIA)

on fossil limestone reefs in Narra and Aborlan, south of the Bay of Puerto and in the Iwahig Penal Colony. Particularly the latter area is of outstanding conservation importance. All endemic lowland bird species are recorded from the area. Globally threatened species, aside from the Cockatoo, include Palawan Peacock-pheasant *Polyplectron napoleonis*, Blue-headed Racquet-tail *Prioniturus platenae*, Palawan Hornbill *Anthracoceros marchei*, Red-headed Flameback *Chrysocolaptes erythrocephalus*, Great Slaty Woodpecker *Mulleripicus pulverulentus*, Falcated Wren-babbler *Ptilocichla falcata*, and Palawan Flycatcher *Ficedula platenae*. Because of the abundance of brackish and freshwater wetlands Iwahig Penal Colony is an important wintering ground for waterbirds, including the endangered Black-faced Spoonbill *Platalea minor*.

Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within Iwahig Prison and Penal Farm (IPPF).
2. Identify and preserve priority sites for conservation and maintain their ecological functions.
3. Prevent or report to enforcing agencies illegal activities that compromise the integrity of the conservation area.

Conservation Targets

1. Increased number of Philippine Cockatoo breeding pairs in Iwahig Prison and Penal Farm by at least 10% by 2024 (Baseline: average breeding pairs 2019 to 2021: 9.3).
2. Reduced threats in the area by 50% from 2022 to 2024.
3. Restored at least two hectares of cockatoo breeding and foraging habitats annually by 2024
4. Established a critical habitat for the Philippine cockatoo and other threatened wildlife species within the Iwahig Prison and Penal Farm and support the protection of the proposed Montible watershed.

Methods

Deputized wardens patrol by foot or by boat monthly within site. Patrol members use a technology-based system to register all observations (threats, status and wildlife data) in the android and transferred them to a smart application to generate report ([Critchlow et al., 2017](#); [Teacher et al., 2013](#)). Species to be monitored are based on their red-list status and their value as bioindicators ([IUCN, 2019](#)). Ease of identification in the field was considered as well. The maps are generated and analyzed through QGIS.

Patrols are coordinated with the concerned barangay, prison farms, protected area office wherever it applies.

II. PATROL TEAM AND EFFORT

The patrol team composed of KFI, Tagbanua tribe, and wildlife wardens conducted monitoring of roosting, and foraging areas within the city, breeding habitat, and the surroundings of the penal farm. The team covered a total of **150.23 km in November**. Please refer to the list of team members on the last page.

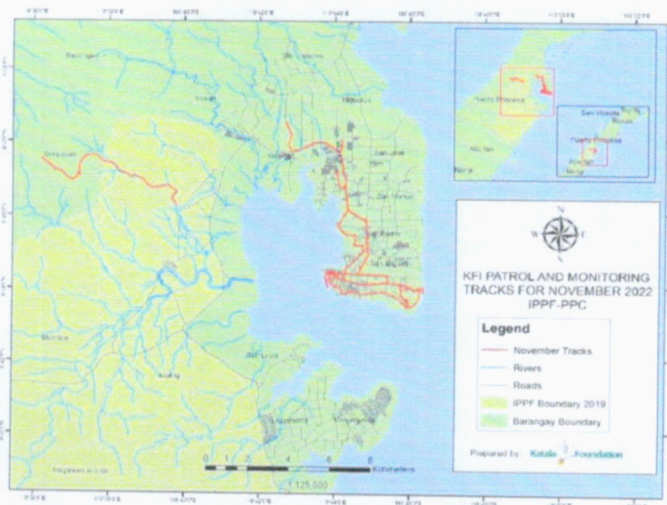


Figure 2. Patrol tracks for November 2022 ©KFI

III. PATROL OBSERVATIONS

A. WILDLIFE OBSERVATIONS

- *Intensive monitoring in foraging and roosting areas continued.* The highest roosting count for the cockatoo this month was **77**. Cockatoos were observed foraging in various tree species like Pagatpat, Taluto barks, Kapok, Balete, and Malunggay pods. From the roost site, cockatoos were seen crossing the mangrove area of the city to Puerto Bay, some cockatoos were also seen flying towards the old airport to San miguel area. Cockatoos were frequently seen in a Kapok tree on Cabiguen Street near WESCOM on their way to the beach area. Other sightings of cockatoos were also reported by a concerned citizen, 10-20 cockatoos were seen foraging on a fire tree near the City Coliseum and near Shell Gas station and were heading to the beach area. Meanwhile, no cockatoos were observed roosting at the traditional roost site in Montible.
- *Field Survey in Mt. Thumbpeak.* On November 4-5, the 2nd field survey with the EDC-BINH program continued at the higher elevations of Mt. Thumbpeak where we were able to record three priority species that were last documented from 1906 to 1911: the *Syzygium pulgarens*, *Syzygium iwagense*, and *Clethra pulgarens*. All species are critically endangered and endemic only to the highlands of Mt. Thumbpeak. We also recorded **two new species** of plant belonging to the genus of *Lithocarpus* (oak) and *Scaevola*. More information on these new species will be described by UPLB botanist Prof. Pastor Malabrigo.



Figure 3. Rediscovery of *Syzygium iwagense* at 1000masl in Mt. Thumbpeak. ©MBOnG KFI

- *Observation of wildlife and other cavity nesters monitoring.* Volunteer inmates recorded a maximum of two hornbills that cross the Bacoco river heading to Tagtalaba forest. Some bird species recorded during the monitoring were: Blue-naped Parrots, Black-naped Oriole, Spot-throated Flameback, Blue-headed racket-tail, Palawan flowerpecker, Palawan blue flycatcher, Palawan-peacock Pheasant, and White-bellied Sea eagle. Non-avian species include tracks of Palawan Bearded Pig, Palawan porcupine, squirrels, Philippine macaques, Red-tailed green rat snake, and Palawan monitor lizards.

B. THREATS/ISSUES/ OBSERVATIONS

During the patrol period, almaciga collector was noted at the higher elevation of Mt. Thumbpeak. No other threats were documented in IPPF and in the city.

IV. OTHER HIGHLIGHTS

- In celebration of the Subaraw Biodiversity Festival, we joint the photo exhibit held on November 10-13 in Robinsons Place Palawan. More than 200 people took part in the discussion, played our wildlife matching game, and showcase their memory with our wildlife memory game in which they get the chance to win some tokens from us. Offices like DENR-CENRO, Conservation International, City-ENRO, PWRCC, and PCSD also joined the activity. Children, young adults, and even senior citizens had a chance to take a selfie with KFI's mascot and participated in the exhibit. The activity was mainly to educate people of all ages and from different backgrounds about the diversity and conservation of Palawan's natural resources.
- In November 16, IPPF celebrated its 118th founding anniversary where Katala Foundation was one of the awardees recognized during the event with the newly appointed CSupt. Gary A. Garcia handing the said recognition.

Figure 4. Matt Brian Ong receives the award from CSupt. Garcia of IPPF @KFI



- In November 17, KFI attended a meeting that discussed the PDRMO background and their research agenda. Some of the topics of research are the creation of information database management, the development of digitalized disaster assistance family access cards, the development of a knowledge portal, biodiversity vulnerability, climate risk assessment, and innovative nature-based flood defense. The meeting was initiated by the PCSDS and attended by PKP members for biodiversity and sustainable development.
- In November 4, the International Day of Biosphere Reserve was celebrated by PKP members where Ms. Indira was awarded Palawan Biosphere Reserve Champion for her contribution to the conservation of Palawan biodiversity.

V. ISSUES, CONSTRAINTS, AND ACTIONS TAKEN

- Increased patrolling in the sites is necessary to avert further destruction of lowland forests. Continued tree planting within these areas is a must.
- Collection of wildlings and seedlings of the 16 critically endangered species of trees should be a core project of both LGU, DENR, PCSD, and NGO to preserve and conserve this unique species that can only be found in Palawan.

VI. RECOMMENDATIONS

Policies on and better enforcement of lowland forest protection and conservation must be implemented and sustained, especially within IPPF and the Victoria Anepa'an Mountain Range (VAMR)! Lowland forests harbor more biodiversity than montane forests; thus, they should be protected against encroachment and further destruction.

ACKNOWLEDGEMENT

We are grateful and appreciative to our partners from the DENR-CENRO Puerto Princesa City through CENRO Office and Palawan Council for Sustainable Development Staff (PCSDS) through Atty. Matta, Western Command, and Iwahig Prison and Penal Farm (IPPF) through CSupt. Joel R. Calvelo and the current leadership of CSupt. Garry A. Garcia for their unrelenting support.

We also appreciate the help of CTOIII Earl Jude A. Arias from the IPPF, Prof. Pastor Malabrigo of UPLB, For. Jimson Solatre and For. Roñino Gibe of EDC-BINHI. We also want to thank those community members who send us their cockatoo sightings in the city.

To all those who, in one way or the other, had contributed to the achievement of our shared vision for the conservation of biodiversity in the IPPF, great thanks!

We are indebted to the following organizations and agencies for providing funds for this project:



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Figure 5. Snapshots during the Subaraw festival and photo exhibit. ©MBong KFI



Figure 6. *Lithocarpus* sp. (top-left) and *Scaevola* sp. (top-right) two new species of plants in Mt Thumbpeak, *Syzygium pulgarens* last recorded in 1906 (middle), and *Clethra pulgarens* last recorded in 1911 (bottom). ©MBong KFI

KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

November 2022 SUMMARY Dumaran Island Critical Habitat Dumaran, Palawan



35

Bilang ng nagawang
patrolya



331.18

Kabuuang kilometrong naabot ng
patrolya



68.35

Kabuuang oras ng
patrolya



6115

Bilang ng natanim



3

Bilang ng naikabit na ANB



0

Bilang ng ilegal na
gawain na naobserba



26

Pinakamataas na bilang
sa tulugan ng Katala



4

Pinakamataas na
grupong Talusi na nakita



42

Nakitang namumunga at
namumulaklak na puno





KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY Dumaran, Palawan

November 2022

Prepared by:

Michael F. Plazos, Lemuel Pabico, Peter Widmann and Indira D. L. Widmann

I. GENERAL DESCRIPTION OF THE CONSERVATION AREA, CONSERVATION OBJECTIVES, CONSERVATION TARGETS AND METHODS.

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 the Palawan mainland, seven on western Dumaran Island. The island is situated in the Sulu Sea and separated by a ca. seven km wide channel from the mainland.

On Dumaran Island only a few small and isolated forest patches remain, none of them larger than 103 ha. The most abundant formation is evergreen and semi-evergreen lowland forest with *Ipil Intsia bijuga*, *Amugis Koordersiodendron pinnatum* being emergent tree species of commercial value. Ornithological surveys conducted by Katala Foundation so far yielded 136 species from the island. A prominent species of conservation concern is the Philippine Cockatoo, which can be found with viable populations in the mangroves and forest remnants of Dumaran Island, but apparently not anymore on the mainland. The last remaining forest patches are therefore of global conservation concern. This notion is supported by the recent records of other globally threatened species, particularly the Palawan Forest Turtle *Siebenrockiella leytensis* (CR). Other species of conservation concern are Palawan Hornbill *Anthracoseros marchei* (VU), Blue-headed Racquet-tail (VU), and Palawan Pencil-tailed Tree-mouse *Chiropodomys calamianensis* (DD).

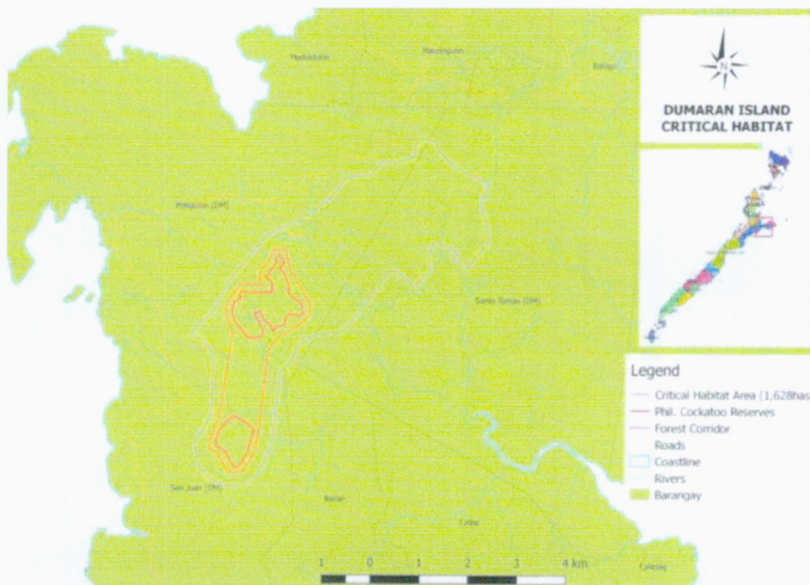


Figure 1. Dumaran Island Critical Habitat connects two locally declared cockatoo reserves and establishes a corridor through reforestation and assisted regeneration.

Habitat degradation and destruction, rather than poaching, remain the biggest challenge for cockatoo conservation in Dumaran.

The Dumarán Island Critical Habitat (DICH), comprising 1,628 ha, was established through PCSD Resolution No. 14-513 that connects the two existing cockatoo reserves through a corridor and extends to include remaining forest fragments in the area (Fig. 1). This is the first critical habitat established in the Province of Palawan. A Local Protected Area Management Committee (LPAMC) functions as its interim management body.

Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within the declared Critical Habitat.
2. Identify and preserve priority sites for conservation and maintain their ecological functions.
3. Prevent and report to enforcement agencies illegal activities that compromise the integrity of the conservation area.

Conservation Targets

1. Increased number of Philippine Cockatoo breeding pairs on Dumarán by at least 20% by 2024 (Baseline: average breeding pairs 2019 to 2021: 5.0);
2. Increased percentage points in KAPP survey results by at least 20%;
3. Pursued supplementation of Philippine Cockatoos using suitable rescued birds;
4. Reforested or enrichment-planted at least eight hectares per year;
5. Reduced threats in the area by 50% from 2022-2024.

Methods

Deputized wardens patrol by foot within site and there are times by boat especially when patrolling is done along the mangroves area or within the separate island. Patrol members use a technology-based system to register all observations (threats, status, and wildlife data) in the android and transferred them to a smart application to generate reports (Critchlow et al., 2017; Teacher et al., 2013). Species to be monitored are based on their red-list status and their value as bio-indicators (IUCN, 2019). Ease of identification in the field was considered as well. The maps are generated and analyzed through ArcGIS. Patrols are coordinated with the concerned barangay, LGU, and Bantay-Dumarán wherever it applies.

II. PATROL TEAM AND EFFORT

KFI team regularly patrolled the forested area inside and outside DICH: **Michael Plazos, Nestor Arzaga, Orlando Balmonte, Felipe Condesa, Eddie Derecho, Angelu Paduga, and volunteers Domingo Sy, Andres Aurelio, Rodolfo Comedia and Miguel Nadayao Jr.** They have recorded fruiting trees, threats, and other wildlife observed. Suitable driftwoods to be used as artificial nest boxes (ANB) were also collected if available. Monthly patrols covered 331.18km distance from 35 patrols and 68.35 hours within the Omoi and Manangbaling Protected Areas, forested area within Bulalakaw, Camaya, Candez, Kasipulo, Bohol, Poblacion, and San Juan. No threats were observed during monitoring. Four driftwoods of Tabigue tree were collected by monitoring wardens. Regular monitoring at the roost was conducted for the month where 13-26 cockatoos were observed. There were mostly 16 cockatoos in the roost either morning or afternoon (ten

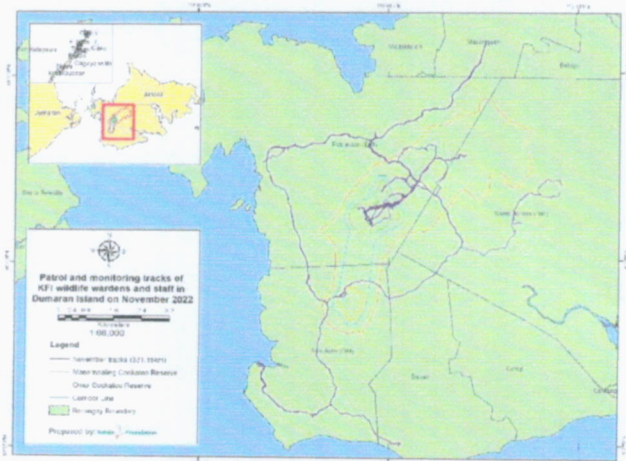


Figure 2. Patrol tracks of wildlife wardens in November

times). Cloudy and fair weather were usually observed in the roost although rain falls in four days of the month.

We went back to Bgy. Bacao to monitor roosting cockatos in the area last November 14 but no cockatoos were observed. We talked to nearby citizens and coconut plantation owner but they too have not observed any cockatoos this month. On the other hand, reports of cockatoo sightings were received from Bgy. Calasag with six to eight counts of Cockatoos perching on Coconut tree and feeding on Malunggay trees. The recipients of housing materials were tapped to monitor and report cockatoo sightings in their area.



Figure 3. Monitoring in Bgy. Bacao of roosting cockatoos; no cockatoos were recorded @KFI

PATROL OBSERVATIONS

Supplementation of natural population

Released birds in recent years were now foraging and inhabiting the island just like the wild cockatoos. They were sighted passing, perching, and feeding on wild fruits at Omoi, Candez Area, Bgy. Poblacion, Bgy. Bacao, and Bgy. San Juan.

Installation of ANB were continuous this month; an ANB made for Palawan Scops Owl was installed in a Maniksik tree near the camp last November 5, two ANBs for the cockatoo were also installed last November 12 and 22 in a Bolabog and Kamanglit tree respectively. An additional three ANBs were constructed and finished last November 26; they were hauled and delivered in Omoi for future installation.



Figure 4. Hauling and installation of ANBs @KFI

Foraging

Few trees were fruiting and flowering in phenology plots of the island. In Omoi the only flowering tree was Kulayan, while the only fruiting trees are Santol-santol and the same Kulayan tree. No fruiting nor flowering tree was recorded in Candez. In Manambaling, only one Kulayan tree was fruiting while the flowering trees were Kulayan, Kalampinay, and four Amuraon. No fruiting nor flowering Pagatpat trees were recorded in Lagan phenology plots. Trees in all of the plots were in various stages of leaf growth and leaf fall.

Forty-two food-providing trees were recorded during this month. These includes Agboy, Apitong- baboy, Amumusing, Amuraon, Anan, Antipulo, Apatot, Balite, Banaba, Banga, Bangkal, Bangkudo, Bugo, Bunog, Bunuang, Bunot-Bunot, Botabon, Catmon, Dulo, Kalampinay, Kapok, Kirag-Kirag, Kulayan, Kuliat, Ilang-Ilang, Imamangal, Inagdong, Ipil, Ipil-ipil, Lago, Lanite, Lapnog, Luwas-Luwas, Saleng, Tagalilong, Tagpe, Talisay, and Tebey.



Figure 5. Fruiting Luya-luya foraged by bulbuls and sunbird @KFI

Palawan Hornbill Monitoring

There were two to four hornbills observed during monitoring on seven areas in the island namely: Omoi, Candez, Kasipulo, Manangbaling, Bacao, Luyang and Aranlegan. They were observed perching and making noise on Kulayan, Acacia, Balite Gemilina, Mango, Cashew, Taluto and Lago tree and heard calling from forested area.

Other wildlife species

Forty species were observed in the Biodiversity Monitoring System (BMS) stations in DICH while 38 species were recorded at the reforestation site. Twenty species were recorded in both areas and these are: Palawan Hornbill, Common Iora, Blue-naped Parrot, Hooded Pitta, Spotted Dove, Palawan Monitor Lizard, Dollar bird, Black-naped Oriole, Storked- billed Kingfisher, Hill myna, Asian Glossy Starling, Red Jungle-fowl, Pink Necked-green Pigeon, Blue-Headed Racquet-tail, Zebra Dove, Barred Button Quail, Yellow-throated Leafbird, Lovely Sunbird, Bar- bellied Cuckoo Shrike.

Ground camera traps recorded several wildlife including the Long-tailed Macaque, Palawan Bearded Pig, Palawan Crow, Palawan Water Monitor, Crested Goshawk, Philippine Megapode, Bittern, Small-clawed Otter, and Northern Palawan Tree Squirrel.



Figure 6. Long-tailed Macaque (top) and Palawan Bearded Pig (below) caught by ground camera traps @KFI

III. OTHER HIGHLIGHTS

There are currently 6821 wildlings in the main nursery. This was after 47 wildlings were collected, 211 died, and 3853 seedlings released for planting. These are Lamoto, Kulayan, Palomaria, and Nato. No changes in wildlings inventoried in Candez and Manambaling satellite nursery i.e., 1289 and 52 wildlings respectively. There were 650 wildlings collected for the recovery area; most of them are Lamoto (350), Baslayan (120), and Magabo (100). Regular activities in the nursery e.g., potting, watering, weeding and cleaning, were continuous.



Figure 7. Checking of status of wildlings (left); and healthy wildlings in the nursery (right) @KFI

A total of 6115 wildlings was planted this month. They consisted of eleven species in which Palomaria (2016), Nato (1230), Iniol (690), and Lamoto (616) have the highest number of representative individuals. Highest rainfall record was recorded in Omoi monitoring station i.e., 308mm followed by Candez monitoring station i.e., 257mm. Lagan experienced the least rainfall, with only 198mm rainfall.



Figure 8. Planting of wildlings in the reforestation area in Dumaran Island @KFI

We attended the Environment Committee meeting last November 7 with Dumaran SB, MENRO, MAO, and PCSDS. PCSDS presented the current status of the updating of ECAN terrestrial and coastal map of Dumaran. We pursued for the protection of the DICH by upgrading the corridor between the two cockatoo reserves. Future meetings and visitations will be conducted. We have also submitted documents requested by MENRO as part of the Dumaran ECAN board evaluation for this year. We also attended the school governance council at the same day in which KFI is one of the stakeholders. We attended the MDRRMC training about basic incidence command system last November 15-18; they have organized a team that will serve as volunteer rescue during calamities.



Figure 9. Submission of documents to MENRO (top-left); SB environmental committee meeting (top-right); MDRMC workshop for basic incidence command system (bottom) @KFI

IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Threats to be mitigated by the presence of patrollers include increased forest encroachment, including the creation and widening of logging trails, as well as timber poaching of standing trees outside CH that may span inside. Hence, we are grateful to the LGU Dumarán for their unrelenting support for the warden scheme in the area.

We strive to continue the fruitful endeavor on the island in partnership with the local government units and the community. Enforcement should be strengthened to prevent mismanagement of forested areas and resources, inside and outside the critical habitat. Kaingin practices should be monitored so that they will not extend inside the DICH especially in the two cockatoo reserves.

ACKNOWLEDGEMENT

Thank you very much to the LGU-Dumaran through the leadership of the newly-elected Mayor Richard R. Herrera, Vice Mayor Caabay and their able staff, MENRO Caabay, all department heads, barangay officials, and everyone in the LGU for helping us always with the utmost attention.

We are indebted to our deputized wardens of Dumaran: Nestor Arzaga, Orlando Balmonte, Felipe Condesa, Eddie Derecho, Angelu Paduga, and volunteers Domingo Sy, Andres Aurelio, Rodolfo Comedia and Miguel Nadayao Jr. for their services and efforts provided to the KFI-PCCP Dumaran project.

Great thanks also to the PCSDS and DENR-ROXAS for their support. We are grateful to the whole KFI family and supporters for their help, assistance, and sharing expertise and ideas.

We are indebted to the following organizations and agencies for providing funds for this project



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