



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

E-mail: [penropalawan@denr.gov.ph](mailto:penropalawan@denr.gov.ph)

Telfax No. (048) 433-5638 / (048) 433-5638



January 9, 2023

**MEMORANDUM**

**FOR :** The Regional Executive Director  
DENR MIMAROPA  
1515 DENR By the Bay Bldg., Roxas Boulevard,  
Barangay 668, Ermita Manila

**THRU :** The OIC, Assistant Regional Director for Technical Services

**FROM :** The Provincial Environment and  
Natural Resources Officer

**SUBJECT :** **KFI PATROL AND MONITORING REPORT ON FOREST AND  
BIODIVERSITY FOR THE MONTH OF SEPTEMBER TO  
NOVEMBER 2022**

Forwarded is the memorandum dated December 23, 2022 from CENRO Quezon along with the KFI Patrol and Monitoring Report on Forest and Biodiversity of Rasa Island Wildlife Sanctuary (RIWS) for the month of September to November CY 2022.

The following were observed during the patrolling activities:

Month	No. of Patrols	Total area covered	No. of Bird Species observed	No. of Katala in roost sites observed	No. of Katala species foraging observed	No. of Fruit bearing plant species observed
September	21	387	32	205	124	11
October	22	165	33	199	68	9
November	21	202	33	171	127	12

For information and record.



"For the PENRO"

**RONIE B. GANDEZA**  
DMO IV/OIC-Chief TSD  
In Charge Office of the PENRO

DENR-PALAWAN  
PENRO-RECORDS  
**RELEASED**  
By:   
Date: 10 JAN 2023 CN 23-57





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*[Signature]*  
**RONIE B. GANDEZA**  
DMO IV/OIC-Chief TSD  
In Charge Office of the PENRO





Republic of the Philippines  
Department of Environment and Natural Resources  
MIMAROPA Region  
**COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE**  
National Highway, Bgy. Alfonso XIII, Quezon, Palawan  
Email: cenroquezon@denr.gov.ph

December 23, 2022

**MEMORANDUM**

FOR : The Provincial Environment and  
Natural Resources Officer  
Sta. Monica, Puerto Princesa City

FROM : The Community Environment and  
Natural Resources Officer

SUBJECT : **KFI PATROL AND MONITORING REPORT ON FOREST AND  
BIODIVERSITY FOR THE MONTH OF SEPTEMBER TO  
NOVEMBER 2022**

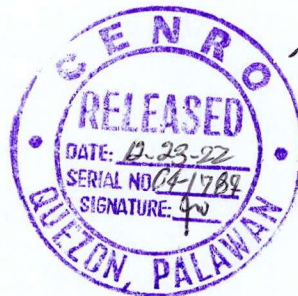
**DENR PENRO  
PALAWAN RECORDS  
RECEIVED**

BY: *[Signature]*  
DATE: 12-27-2022 *11686*

Respectfully forwarded the memorandum dated December 23, 2022 of Forester Ma. Teresa V. Ayson, Protected Area Superintendent of Rasa Island Wildlife Sanctuary (RIWS) regarding the submitted Patrol and Monitoring Report on Forest and Biodiversity of Rasa Island Wildlife Sanctuary (RIWS) and its environs of Katala Foundation, Incorporated (KFI) for the month of September to November 2022.

For your information and record.

*[Signature]*  
**RENATO S. GONZAGA**





Republic of the Philippine  
Department of Environment and Natural Resources  
MIMAROPA Region

COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE  
PROTECTED AREA MANAGEMENT OFFICE – RASA ISLAND WILDLIFE SANCTUARY  
National Highway, Antipuluan, Narra, Palawan  
Contact No.: 0917-160-4920  
Email: [rasaislandwildlifesanctuary@gmail.com](mailto:rasaislandwildlifesanctuary@gmail.com)

December 16, 2022

**MEMORANDUM**

**FOR** : The Community Environment and  
Natural Resources Officer  
Quezon, Palawan

**FROM** : The Rasa Island Wildlife Sanctuary  
Protected Area Superintendent

**SUBJECT** : KFI PATROL AND MONITORING REPORT ON FOREST AND  
BIODIVERSITY FOR THE MONTH OF SEPTEMBER TO NOVEMBER 2022



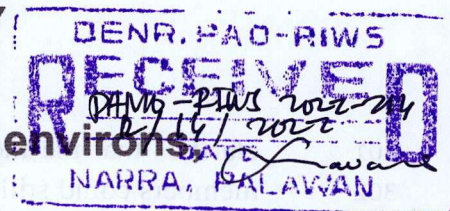
Respectfully forwarded herewith the Katala Foundation Inc. (KFI) Patrol and Monitoring Report for the months of September, October, and November 2022 received by this office this 16<sup>th</sup> day of December 2022.

For your information and further instruction.

MA. TERESA V. AYSON



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



21

Bilang ng nagawang  
patrolya



0

Bilang ng illegal na  
kailangang aksyunan



205

Pinakamataas na bilang sa  
tulugan ng Katala



387

Kabuuang kilometrong naabot  
ng patrolya



0

Bilang ng mga issues na  
nai-report sa PAMO



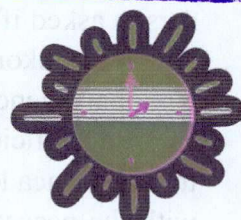
32

Bilang ng ibang uri ng  
ibon na nakita



11

Uri ng halamang namumunga



76.5

Kabuuang oras ng  
patrolya



0

Bilang ng naaresto



124

Pinakamataas na bilang  
ng Katala sa kinakainan



Mandai  
NATURE

Freundenskurs  
Zoo Landau e.V.

Stadtholding Landau in der Pfalz  
Zoo Landau in der Pfalz  
LAOLA

Marion J. Packer  
Trust



Katala  
Foundation  
INCORPORATED



Department of Environment and Natural Resources  
Biodiversity Management Bureau



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

SEPTEMBER 2022

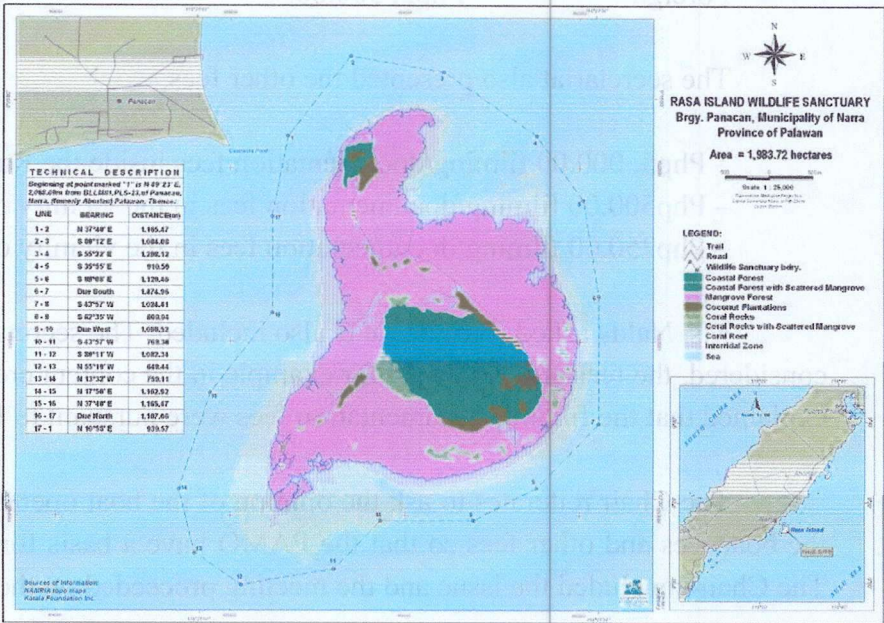
Prepared by:

Anna Rose Agullo, Mark Qunit, 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 km<sup>2</sup> land area situated in the Sulu Sea, just offshore of the Municipality of Narra, Palawan, Philippines (Fig. 1). About 1.75 km<sup>2</sup> are covered with coastal forest, mangrove (5.60 km<sup>2</sup>), cultivated areas (predominantly coconut; 0.39 km<sup>2</sup>), 0.60 km<sup>2</sup> are barren or sparsely vegetated sand and coral outcrops. 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 **387kms** of nest checking, wildlife monitoring and patrol around Rasa. Total of precipitation in September 2022: **63mm** on Rasa, **69.1mm** at Panacan 2 and **103mm** on Katala Institute.

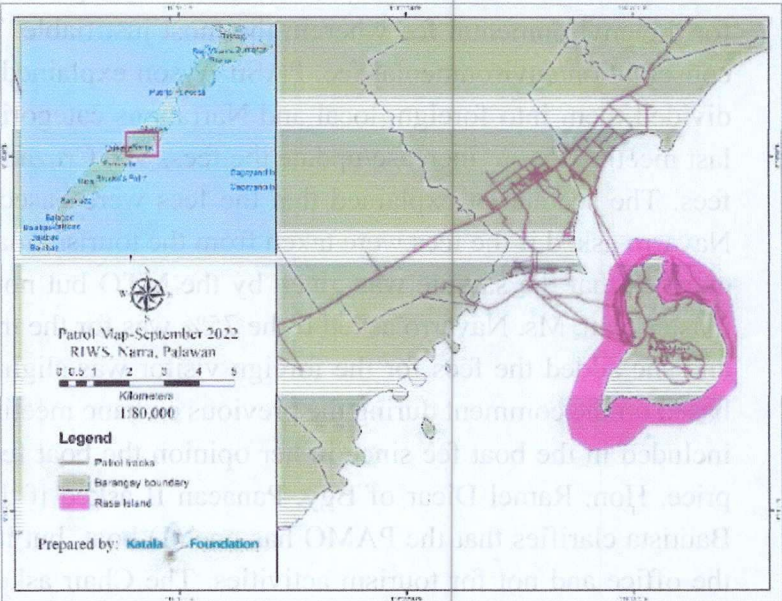


Figure 2. Patrol tracks in red marks in August 2022

Six camera traps were deployed around Rasa while two were at hanging aviary. 15 data loggers were still mounted on Rasa.



III. PATROL OBSERVATIONS  
A. WILDLIFE OBSERVATIONS

In September 2022, fledglings were observed with adult cockatoos often during wildlife monitoring. **205 individuals** were recorded on Sept. 15 in the afternoon at traditional roost site. Cockatoos were observed sleeping on nest trees at western part of Rasa with a total of 9 individuals while 156ind were roosting on traditional roost site on Sept. 12. Meanwhile, on Sept. 17, 5:57-7:00PM, Loreto noted 6ind sleeping on branch of Baginsurod tree at Alisto area. Cockatoos left the area at 5:58AM heading Gaspar area. He also observed roosting 10 cockatoos on another nest tree at eastern Rasa on Sept. 23 at 6:20PM. No roosting cockatoos at Borbon station during schedules of roost counting.

This month, the highest foraging count is **124 individuals** alone at Borbon, Panacan station flying back from mainland to Rasa on Sept. 27, 6:30-9:46AM. 44ind were the highest foraging at Marcelo area which was also counted on Sept. 27 in the morning. Earlier on Sept. 2, a total of 67 cockatoos were recorded at Borbon and Parco, Antipuluan station with 46 and 21ind respectively. On Sept. 23, One cockatoo was foraging at Princess Urduja while on Sept. 30, a flock was recorded feeding near Parco, Antipuluan, Narra (Fig. 3). Earliest and latest foraging recorded at 6:08AM and 5:05pm at Parco and Borbon station respectively.

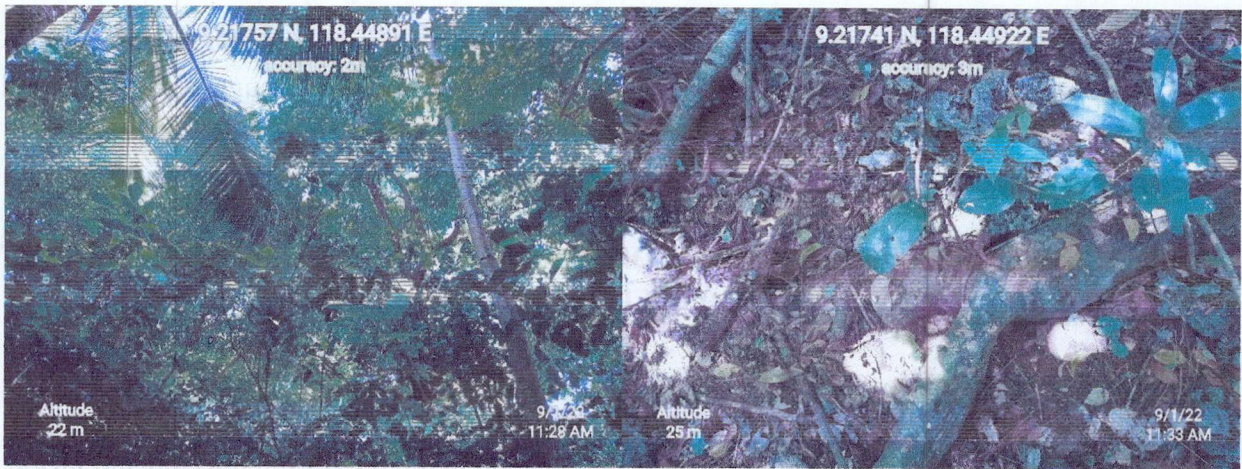
Other noted species in this month on Rasa were Nicobar Pigeon, Red-headed Flameback/ Woodpecker, Tabon Scrubfowl, Blue-headed Racquet-tail (BHRT), Egret sp., Western Osprey, Stork-billed Kingfisher, Oriental Dwarf-kingfisher, Great-billed Heron, Rufous Night-heron, Changeable Hawk-eagle, White bellied sea-eagle, Whimbrel, Sunbird sp., Grey-cheeked Bulbul, Large-tailed Night-jar, Green Imperial-Pigeon, Reef Egret, Greater Coucal, Pipit, Blue-Paradise Flycatcher/ Black-naped Monarch, Swiftlet sp., Ashy Drongo, White-vented Shama, Fruit-dove sp., Emerald Dove, Common Koel, Asian Glossy Starling, Rufous-tailed Tailor-bird, Dollarbird, and Zebra Dove. Monitor Lizard were frequently encountered. Wardens observed roosting site of Rufous Night-Heron (RHN) on coastal forest of Rasa on Sept. 1. Feces were noted on the ground under the trees (Fig. 4).

Spot-throated Flameback was recorded on one nest in August 30, 2022 at 9:43AM through camera trap (Fig. 5). On July 16, 2022 at 9:00AM, one cockatoo fledgling was peeking from a nest hole while an adult one was guarding (Fig. 6). Cockatoos with gold rings on left tarsus were spotted on Pagatpat nest tree which were banded in 2017 on July 15 and 17, 2022 (Fig. 7). Meanwhile, on Sept. 5, four cockatoos were spotted around Pagatpat nest on western Rasa (Fig. 8). Sleeping cockatoos were also recorded on Pagatpat nest through camera footages from August 28, 2022 to September 4, 2022 (Fig. 9).

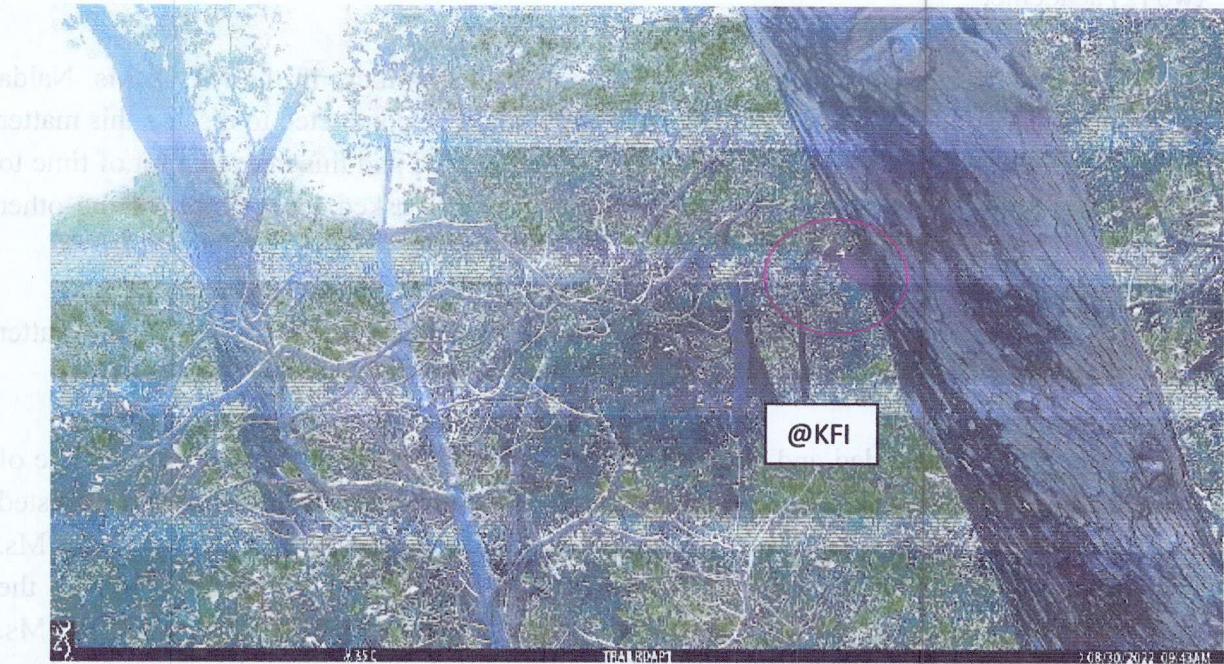


**Figure 3.** Cockatoo feeds on Malunggay at Princess Urduja (left); while a flock was feeding near Parco, Antipuluan (right) ©KFI

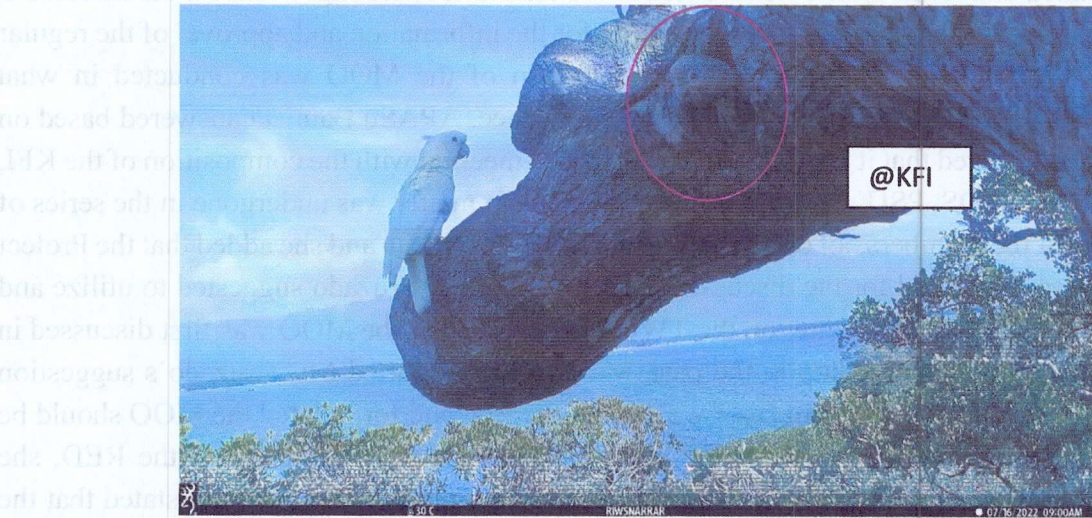




**Figure 4.** Roost site of Rufous Night-Heron in coastal forest of Rasa monitored on Sept. 1 (left); Feces of RHN on ground (right) ©KFI



**Figure 5.** Spot-throated Flameback perching on Pagatpat nest on Aug. 30, 2022



**Figure 6.** Cockatoo fledgling was peeking on nest hole of Pagatpat nest tree on Rasa while the adult guided on July 16, 2022 at 9:00AM

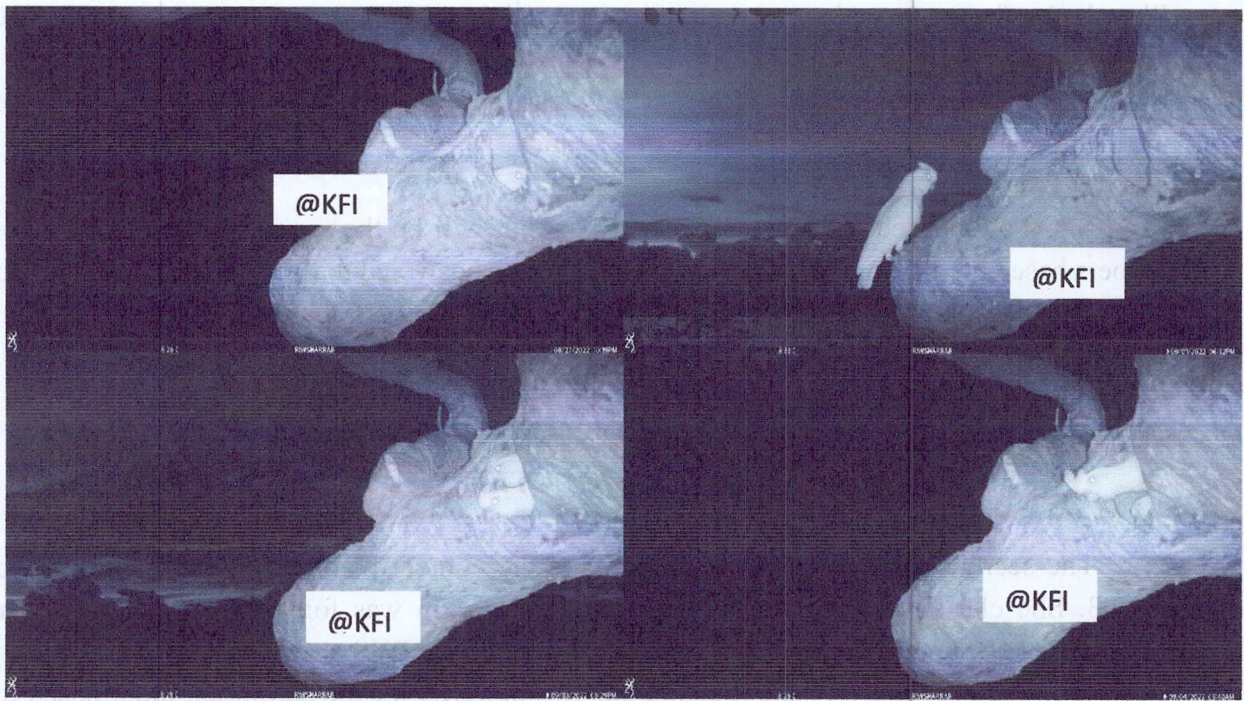




**Figure 7.** Cockatoo with gold ring on left tarsus and brown/gold ring on right tarsus on July 15, 2022 on Pagatpat nest tree on Rasa (left) while on July 17, cockatoo with gold ring on left tarsus and silver/yellow/y-green ring on right tarsus was also observed on the same tree (right)



**Figure 8.** Four cockatoos spotted around Pagatpat nest tree on western Rasa on Sept. 5, 2022



**Figure 9.** Roosting cockatoos on Pagatpat nest tree from August 27, 2022 to September 4, 2022



**Release of rescued Philippine Cockatoos**

On Sept. 19, Angel (DENR-70-22) from Rasa and Anna (DENR-131-22) from IPPF were transferred back to Katala Institute from Rasa. The two birds were monitored weak and with decreased weight after three weeks of observation in hanging aviary. Mites were also observed on both. They were under appropriate care in bird clinic to gain weight and strength. After more observations, the two will be transferred back to Rasa for soft release.

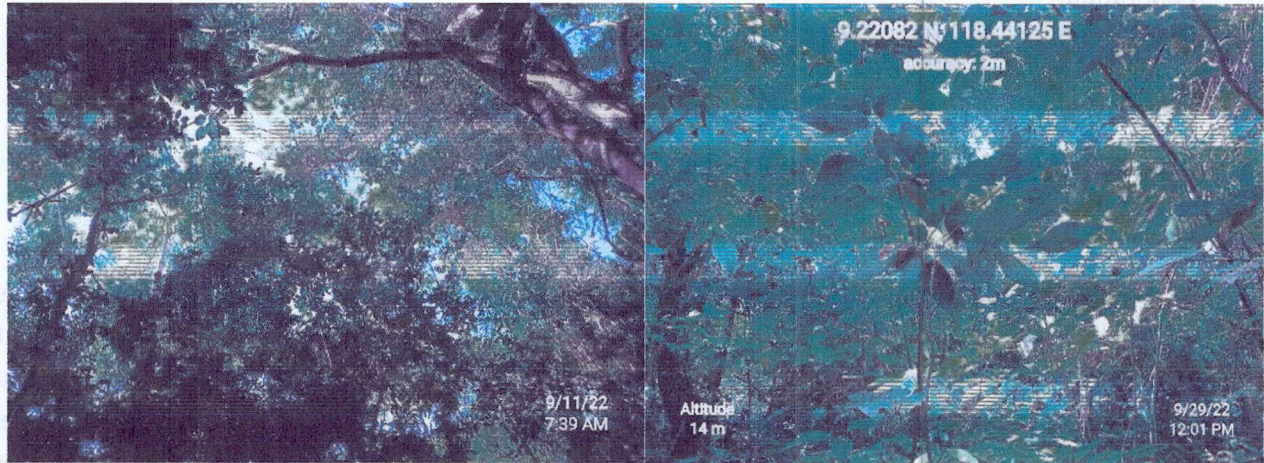


**Figure 10.** Checking on cockatoos DENR 131 and 70-22 in Rasa aviary ©KFI

**Vegetation assessment**

In September 2022, green vegetation was predominant on Rasa both on mangrove and coastal forest (Fig. 11). Among the inventoried food-plant species for cockatoos and other fauna on Rasa, five species were fruiting namely Balete, Ginlalisid, Gatasan, Kanumay and Rhizophora sp. Most food-plant species were fruiting abundantly in 2nd quarter of 2022 (Fig. 13). Some other fruiting food-plant species on Rasa were Balindadagat, Magtalisay, Pagatpat, Bogo, Lanete, Tubo bato, and vine sp. (wild orange). Likewise, Malunggay trees were fruiting in abundance at Panacan and Panacan 2, Narra between first and second quarter of the year. Malunggay trees were more fruiting at Villaruz area than on other areas in September 2022 (Fig. 14). Flowering trees and vines on Rasa were Gatasan, Magtalisay, Lanete, Kanumay and Tulang pagi. Less precipitation was noted in the 3rd quarter of than in the previous quarters of 2022 (Fig. 15).

On Sept. 1, dead Gindaon in coastal forest of Rasa fell. It was recorded occupied by cockatoos with two successful fledglings in 2021 (Fig. 12). A beehive was also observed at Alisto area which implied that vegetation on Rasa was fruiting this month (Fig. 12).



**Figure 11.** Green vegetation on inner coastal forest on Rasa Island ©KFI



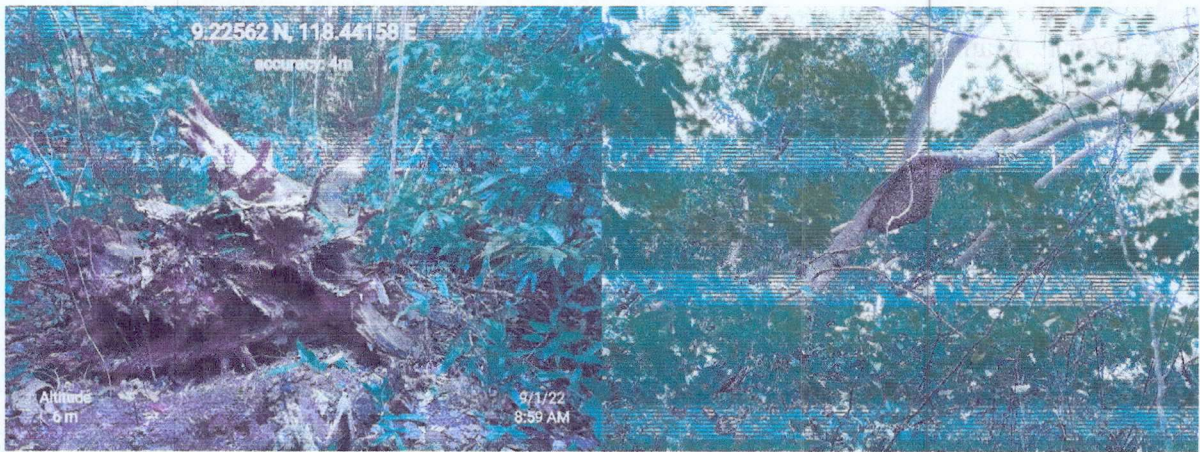


Figure 12. Dead Gindaon on coastal forest of Rasa fell on Sept. 1 (left); Beehive near Favila area ©KFI

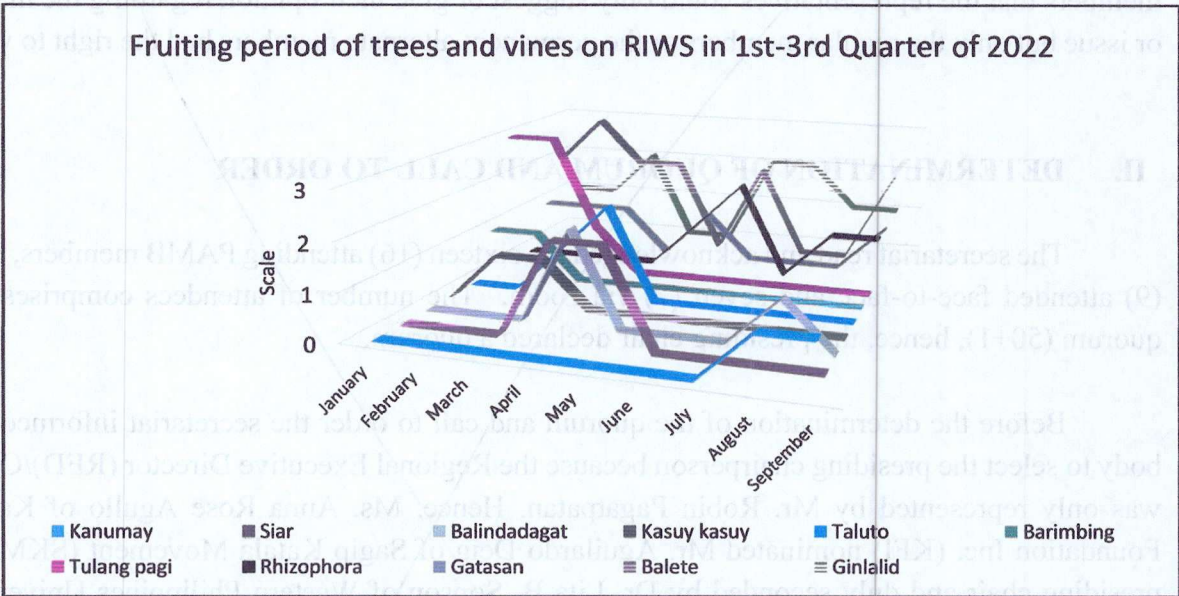


Figure 13. Fruiting period of food-plant species of cockatoos and other fauna on Rasa Island Wildlife Sanctuary (RIWS), Narra, Palawan in September 2022 (scale: 0-no fruit; 3-most)

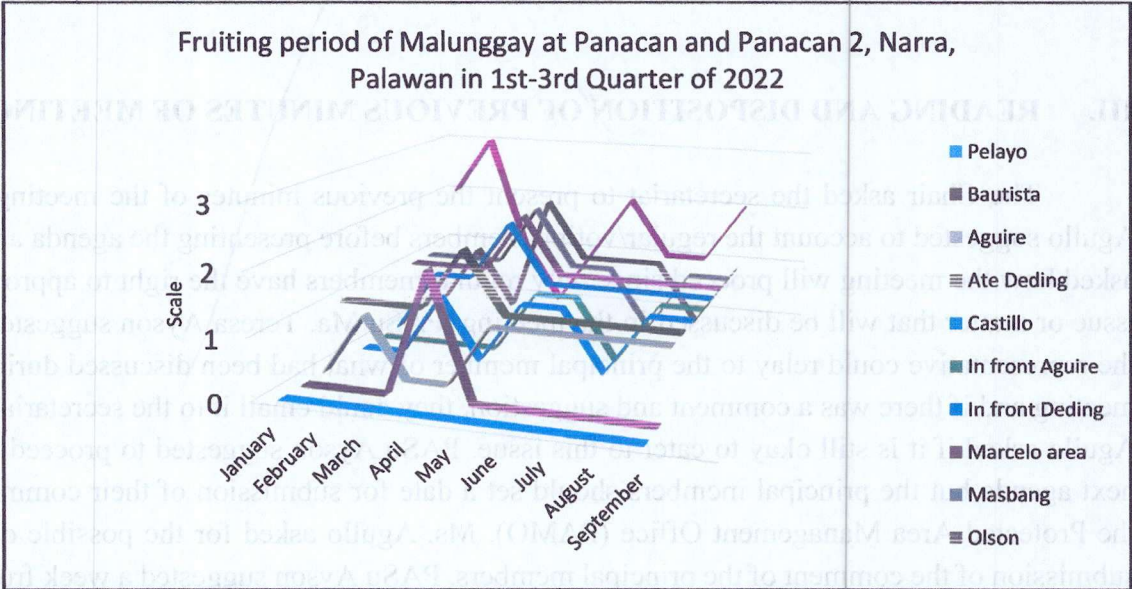


Figure 14. Fruiting period of Malunggay, most preferred food of cockatoos at Panacan and Panacan 2, Narra Palawan



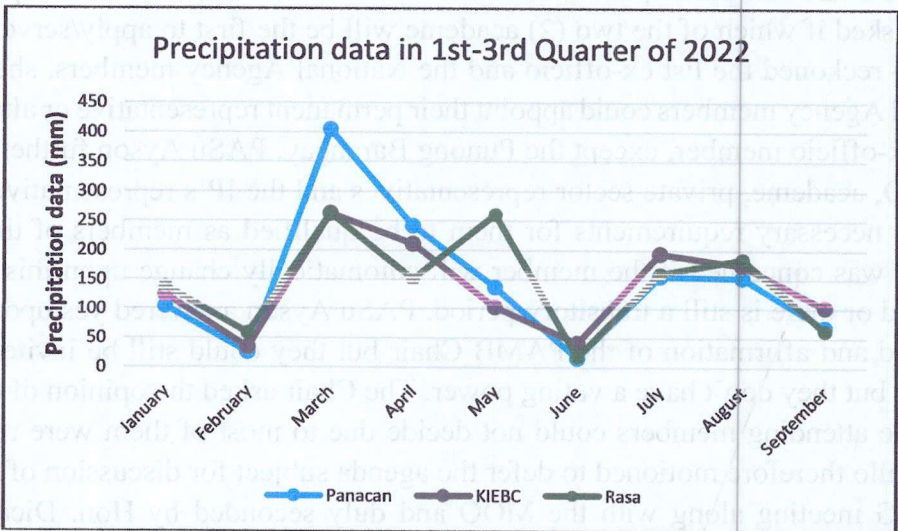


Figure 15. Precipitation data on Panacan 2, KIEBC, Antipuluan and RIWS in 1st to 3rd quarter of 2022

B. THREAT OBSERVATION

No adverse human activities observed on Rasa during monitoring. No expansion was noted on lobster fry at Borbon. Floating cage was still on its former status (Fig. 16).



Figure 16. Lobster fry pens (left) and floating cage (right) at Borbon, Panacan ©KFI

III. OTHER HIGHLIGHTS

Monitoring on coconut plantations on Rasa. On Sept. 20, five persons collected 800kgs of copra from Alisto area in two weeks while on Sept. 24, four persons including Boyet Villarias gathered 4000kgs of copra on Rasa in 24days.

On Sept. 14, Theresa Roessler was glad to see on Rasa Island the Philippine cockatoos, a closer relative of Tanimbar corella which she works for. She shared that she was fascinated by the cockatoos and congratulated the great conservation efforts of KFI. Theresa was assisted by Mr. J. Bautista of Protected Area Management Office (PAMO). Mario joined focus group discussion among coconut plantations claimants on Rasa which was initiated by the PAMO on Sept. 16 at Malinao, Narra (Fig. 17). Around 300ind from LGU-Narra, KFI, NGAs, academe and private sectors in Narra, Palawan participated on International Coastal Clean-up Day on Sept. 17 at the coast of Bgy. Antipuluan (Fig. 17).





**Figure 17.** PAMO conducts talk with Rasa claimants at Bgy. Malinao (left); BJMP personnel with KFI staff collect plastics at Antipuluan coast in celebration of International Coastal Clean-up (right) ©KFI

**IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN**

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.

**V. ACKNOWLEDGEMENT**

The PCCP acknowledges the key players on the ground: 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. 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:

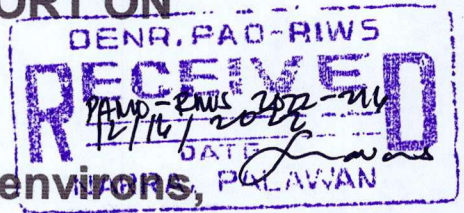


**References**

Critchlow, R., Plumptre, A.J., Alidria, B., Nsubuga, M., Driciru, M., Rwetsiba, A., Wanyama, F., and Beale, C.M. (2017). Improving Law-Enforcement Effectiveness and Efficiency in Protected Areas Using Ranger-collected Monitoring Data. Conservation Letters 10, 572-580.  
IUCN (2019). IUCN Red List of Threatened Species. Version 2019.1. ([www.iucnredlist.org](http://www.iucnredlist.org)).  
Teacher, A.G.F., Griffiths, D.J., Hodgson, D.J., and Inger, R. (2013). Smartphones in ecology and evolution: a guide for the app-rehensive. Ecology and Evolution 3, 5268-5278.

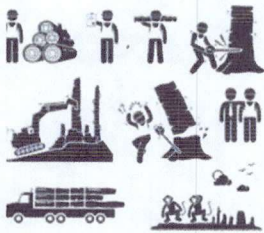


# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY October 2022 SUMMARY Rasa Island Wildlife Sanctuary and its environs, Narra, Palawan



22

Bilang ng nagawang  
patrolya



0

Bilang ng illegal na  
kailangang aksyunan



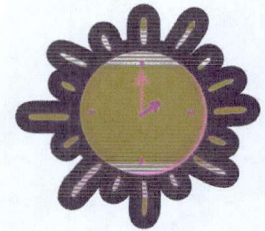
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Kabuuang kilometrong naabot  
ng patrolya



0

Bilang ng mga issues na  
nai-report sa PAMO



61

Kabuuang oras ng  
patrolya



0

Bilang ng naaresto



199

Pinakamataas na bilang sa  
tulugan ng Katala



33

Bilang ng ibang uri ng  
ibon na nakita



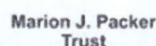
9

Uri ng halamang namumunga



68

Pinakamataas na bilang  
ng Katala sa kinakainan





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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.

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- 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 **165kms** of nest checking, wildlife monitoring and patrol around Rasa. Total of precipitation in October 2022: **206mm** on Rasa, **107mm** at Panacan 2 and **160mm** on Katala Institute, Antipuluan.

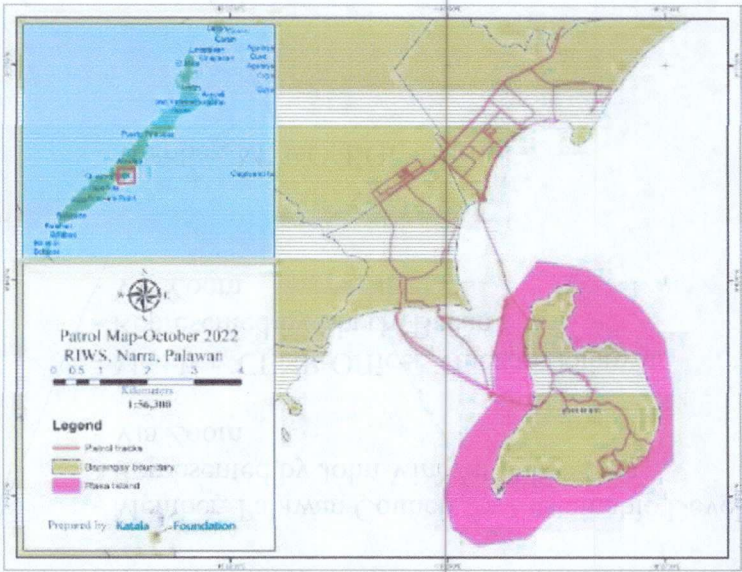


Figure 2. Patrol tracks in red marks in October 2022

In October 2022, 14 nest trees were characterized; six camera traps were deployed around Rasa while two were at hanging aviary; and 15 data loggers were checked. Preparation for the release of two cockatoos on Rasa and for nest flushing occurred.



III. PATROL OBSERVATIONS  
A. WILDLIFE OBSERVATIONS

This year's fledglings were still observed with adult cockatoos during wildlife monitoring both on Rasa and mainland. Loreto counted **199 cockatoo individuals** in Oct. 21, 2022 from 5:40-6:19a.m. at traditional roosting site on Rasa while 197ind were recorded on Oct. 20 from 5:46-6:22p.m. at the same area. Previously, in the first half of the month, he noted 166ind from traditional roosting site and Lucito counted 9ind from three nest trees on Oct. 9. The latter noted no sleeping cockatoos at Alisto area in Oct. 9. No cockatoos were also observed at Borbon roost site during monitoring.

Veronica monitored **68 cockatoo individuals** flying from Rasa to Borbon, Panacan from 6:09-7:13a.m. on Oct. 4. In the morning on Oct. 14, a total of 57ind were recorded from Borbon and Parco station, with 49ind and 8ind respectively, flying from Rasa. Meanwhile, the highest count at foraging area (Marcelo area) were 18ind recorded on Oct. 18. This month, cockatoos were still noted in the afternoon from 1:39-5:10p.m. at foraging area, Princess Urduja and Panacan Pier while one cockatoo was seen flying at 11:20a.m. on Oct. 27 in Princess Urduja. During our timed monitoring in October 2022, less cockatoos were observed foraging on mainland, probably because of monsoon and frequent rain. Lesser cockatoos were also noted in the afternoon. Both earliest and latest foraging were recorded at 6:02a.m. and 6:45p.m. at Borbon station.

In October 2022, we noted three individuals of Red-headed Flameback feeding on termites near cockatoo nest tree on Oct. 21, 2022 at 11a.m. A camera trap was installed at mangrove areas near boardwalk where Mario and Loreto saw a pair of Mantanani Scops-owl. The Blue-naped Parrot was not observed or heard on Rasa this month. Reynaldo observed three individuals of marine turtles on mangrove entrance to camp on Oct. 4. Less nests and individuals of Rufous Night-heron were noted on roosting site at Panacan 2 on Oct. 19 at 4:42p.m (Fig. 4). A beehive was observed near nest 76 on Oct. 25 (Fig. 4). Other monitored species on Rasa were Nicobar Pigeon, Blue-headed Racquet-tail, Tabon Scrubfowl, Western Osprey, Egret sp., Mantanani-Scops-owl, Spotted Wood-owl, Changeable Hawk-eagle, White bellied sea-eagle, Great-billed Heron, Rufous Night-heron, Stork-billed Kingfisher, Oriental Dwarf-kingfisher, White-collared Kingfisher, Copper-throated Sunbird, Palawan Bulbul, Swiftlet sp., Whimbrel, Large-tailed Night-jar, Ashy Drongo, Blue-Paradise Flycatcher/ Black-naped Monarch, Reef Egret, Greater Coucal, Common Koel, Pipits, Emerald Dove, Pied-fantail, Rail, Rufous-tailed Tailor-bird, Asian Glossy Starling, Dollarbird and Zebra Dove.



**Figure 3.** Wardens team with KFI staff take off to monitor on Rasa (left); Bernito paints plain sheets in preparation of nest flushing (right) ©KFI





**Figure 4.** Bernito and Loreto measure DBH of Pagatpat *Sonneratia alba* (left) while Edwin assessed the canopy (right), during nest characterization in preparation for next breeding season ©KFI

**Release of rescued Philippine Cockatoos**

Observations on Angel and Anna, the cockatoos inside hanging aviary on Rasa Island, continued this month. The proposed release for the two will be in the first week of November 2022 with prior preparations and assessment especially on the health status of the birds.



**Figure 5.** Lucito and Mark weigh and assess health condition of cockatoos in Rasa aviary ©KFI

**Vegetation assessment**

Vegetation on Rasa is on green state in October 2022 (Fig. 6). Inventoried food-plants on Rasa are fruiting less though the following fruiting trees and vines sufficed: Magtalisay, Balete, Buntot-daga, Tubo-bato, Balindadagat, Tabangaw, Tulang-manok, Lanete, Kanumay and other mangrove species. Flowering ones are Gatasan, Tulang-pagi, Tubo-bato, sp. 2 and mangrove species. Malunggay trees at Panacan and Panacan 2, Narra are fruiting as much as with the previous months except on the two stations in Panacan 2 which are not fruiting this month. Malunggay trees at Villaruz area are still fruiting more abundantly than on other areas.

Three trees of Rotok-rotok, a mangrove species fell due to decomposition on Oct. 25 at southeast Rasa (Fig. 6). This month, frequent precipitation distributed more volume of which on three stations at Panacan, Panacan 2 and Antipuluan than last month.





**Figure 6.** Green vegetation of coastal and mangrove forest on Rasa Island in October 2022 (top); Mario gathers phenology of food-plant species on Rasa digitally (left bottom); decaying mangroves fell at southeast Rasa (right bottom) ©KFI

**B. THREAT OBSERVATION**

No adverse human activities observed on Rasa during monitoring. No expansion was noted on lobster fry pens at Borbon and the floating fish cage is still at the area.

**III. OTHER HIGHLIGHTS**

*Monitoring on coconut plantations and marine resources on Rasa.* On Oct. 6, four persons collected 3000pcs of copra from C. Batac area in a week while on Oct. 10, five persons gathered 3700pcs of copra at Espinosa area in five days. On Oct. 10, one person harvested 15kgs of mangrove crabs near Alisto and Agui area for three days. Meanwhile, two persons gathered 15kgs of Lato at camp entrance within 3hrs on Oct. 11. Lucito collected 4kgs of mangrove crabs in four days of leaving the traps at B. Batac and Deig area.

KFI wardens and staff maintained the Katala lot at Panacan 2, Narra on Oct. 28, 2022 (Fig. 7). Grasses were trimmed and fence was repaired. Trees were also measured for monitoring. 60% of Malunggay seedlings and cuttings beside the fenced road survived. Malunggay cuttings were also collected in preparation for tree planting on new Barangay Hall and covered court at Barangay Antipuluan. A total of 96 Malunggay cuttings from the council and collected from Panacan 2, and 250 seedlings of Narra, Ipil, *Gyrocarpus* sp., Balindadagat, Malugai and Siar from Katala Institute were planted at Bgy. Antipuluan, Narra on Oct. 29 (Fig. 7).

Anna and Mark resumed IEC with 88 participants at Bgy. Aramaywan, Narra on Oct. 20<sup>th</sup> (Fig. 9). In the next day, Anna talked with 240 participants at Bgy. Calategas, Narra. Implementation



of Philippine Cockatoo Conservation Program (PCCP) was tackled that emphasized on KFI's conservation message "Share a place to live". Hundreds of posters were distributed. The IEC schedules were coordinated with the municipal links of 4Ps in Narra, Palawan. Mark and Reynaldo joined the team which composed of DENR, LGU, PCG and Narra MPS on installation of buoys around Rasa Island on Oct. 6 (Fig. 10). Energy Development Corporation (EDC)-BINHI program personnel visited KI and handed three species of wildlings namely *Diospyros transita* (from Brooke's Point), *Embolanthera spicata* (Estrella Village in Narra) and *Barringtonia ridsdalei* (Estrella Village, Narra), to raise in KI nursery on Oct. 7 (Fig. 10). In celebration of 19th Palay Festival in Narra, Palawan, KFI staff joined parade on Oct. 21.



**Figure 7.** Edwin fixes the fence while Loreto measures trees (above); Collection and hauling of Malunggay cuttings and native seedlings for tree planting at Antipuluan (below); ©KFI





**Figure 8.** Barangay Antipuluan council, KFI, MENRO and RIWS-PAMO enjoy for tree planting at Antipuluan on Oct. 29<sup>th</sup>, for the objective of providing food for the cockatoos in Narra, Palawan (above); Mark, Joshuael and Mario collect parameters for monitoring of planted seedlings ©KFI



**Figure 9.** Barangay Aramaywan community actively participates in the presentation on cockatoo conservation @KFI





**Figure 10.** Installation of buoys around Rasa (left); Mr. Ronino Gibe shares best ways of potting the wildlings (right) ©KFI

**IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN**

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 BATAAC, MARIO BATAAC, 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.

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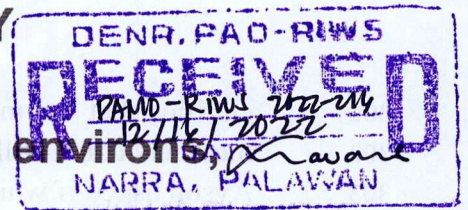
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# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY November 2022 SUMMARY Rasa Island Wildlife Sanctuary and its environs, Narra, Palawan



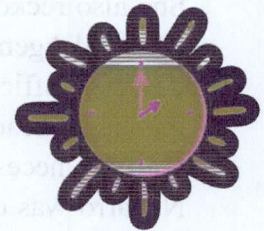
21

Bilang ng nagawang  
patrolya



202

Kabuuang kilometrong naabot  
ng patrolya



63

Kabuuang oras ng  
patrolya



0

Bilang ng illegal na  
kailangang aksyunan



1

Bilang ng mga issues na  
nai-report sa PAMO



0

Bilang ng naaresto



171

Pinakamataas na bilang sa  
tulugan ng Katala



33

Bilang ng ibang uri ng  
ibon na nakita



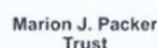
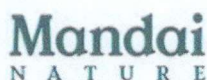
127

Pinakamataas na bilang  
ng Katala sa kinakainan



12

Uri ng halamang namumunga





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 km<sup>2</sup> land area situated in the Sulu Sea, just offshore of the Municipality of Narra, Palawan, Philippines (Fig. 1). About 1.75 km<sup>2</sup> are covered with coastal forest, mangrove (5.60 km<sup>2</sup>), cultivated areas (predominantly coconut; 0.39 km<sup>2</sup>), 0.60 km<sup>2</sup> are barren or sparsely vegetated sand and coral outcrops. 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

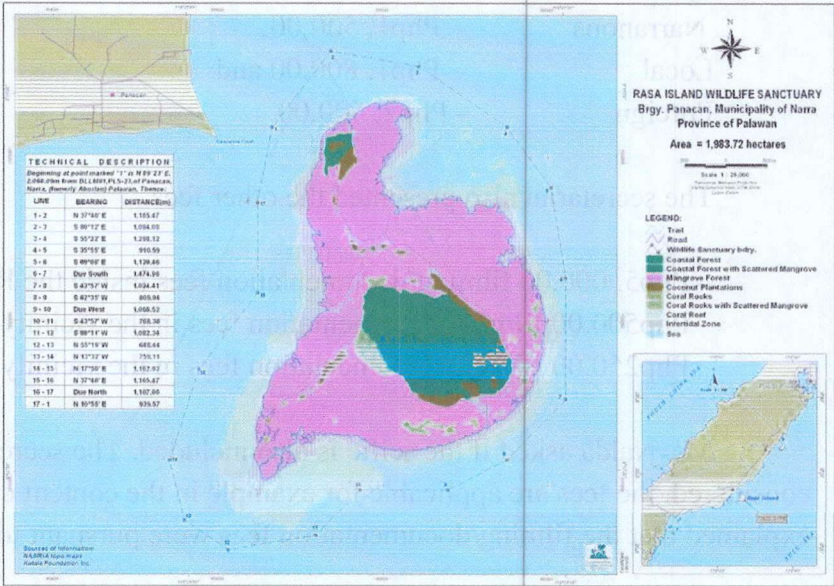
Rasa Island

Wildlife Sanctuary

in Narra,

Palawan,

Philippines





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.

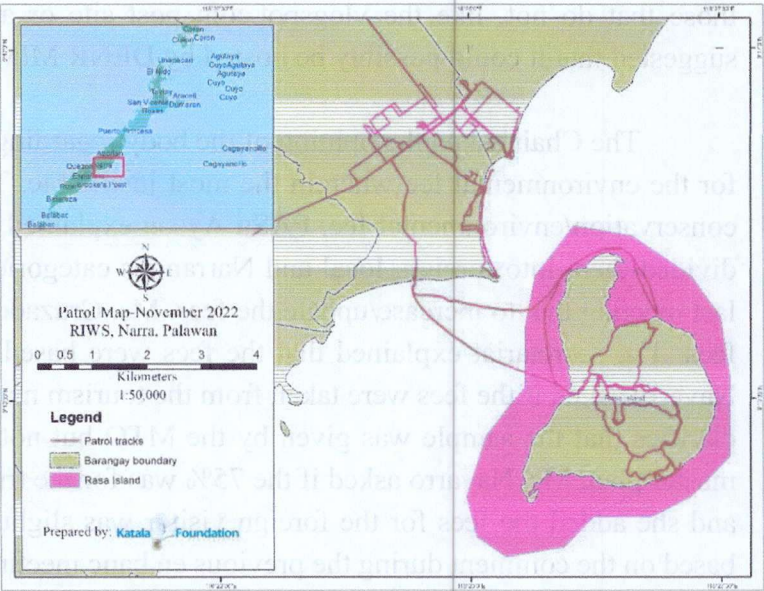


Figure 2. Patrol tracks in red marks in November 2022

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.

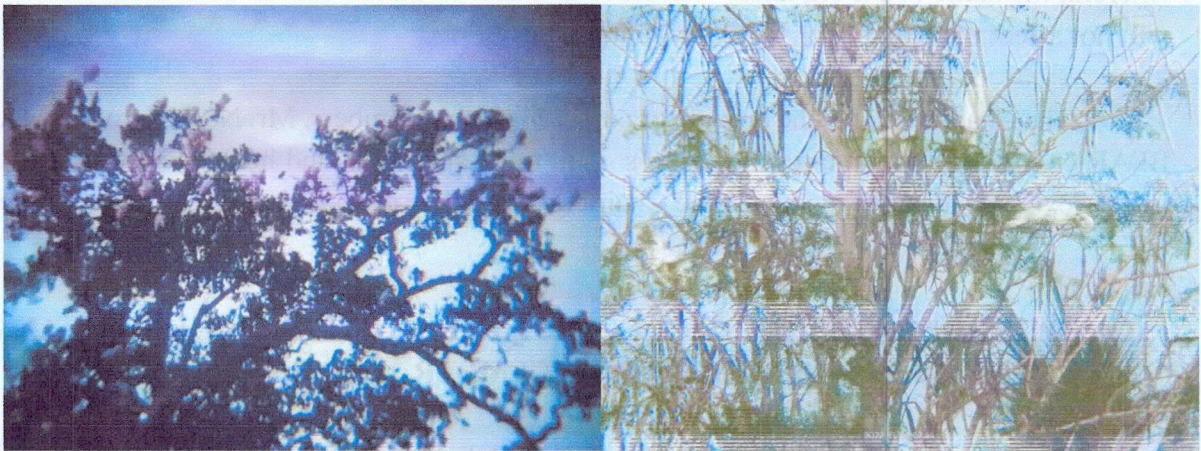
Sub-adult cockatoos were observed on mainland this month. Lesser cockatoos were noted foraging in the afternoon at the stations which probably is due to the rains and winds which usually were stronger in the afternoon. Both earliest and latest foraging were recorded at 6:09a.m. and 5:55p.m. at Borbon 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. 7<sup>th</sup> 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

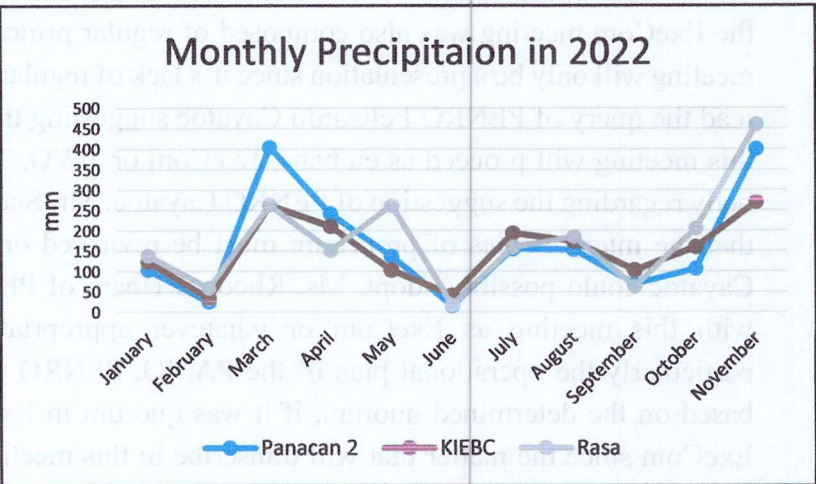
**Vegetation assessment**

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.

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