

KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

February 2022 SUMMARY

Pandanán and Bugsuk Balabac, Palawan



28

Bilang ng nagawang
patrolya



81.6

Kabuuang kilometrong naabot
ng patrolya



21.7

Kabuuang oras ng
patrolya



Bilang ng illegal na
kailangang aksyunan



0

Bilang ng nai-report sa KFI



0

Bilang ng naaresto



57

Pinakamataas na bilang
sa tulugan ng Katala



80

Bilang ng cavity nesters



14

Bilang ng naitalang na-
mumunga at namumulak-
lak na puno



0

Nakuha ng mga silo o patibong



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KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY PANDANAN AND BUGSUK ISLANDS, BALABAC

February 2022

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

Pandanan and Bugsuk Islands belong to the north-easternmost municipality of Balabac in Palawan (Fig. 1). 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 *Pometia pinnata*, *Dracontomelon dao*, *Koordersiodendron pinnatum*, *Intsia bijuga*, and *Ficus* spp. 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 security company guards. Extensive mangroves are thriving which mostly dominated by genus *Sonneratia* and *Rhizophora*. Mangrove forest play important role not only to its wildlife inhabitant but act as one of the main food sources for the critically endangered Philippine Cockatoo. Both islands have old growth *Sonneratia* that can sustain food to significant numbers of wild cockatoo population during its fruiting season.

Currently, 101 bird species have been recorded in Pandanan, Bugsuk and adjacent Malinsuno Island. Among these are six globally threatened and six near-threatened species (IUCN 2019). Of outstanding conservation concern are particularly the larger tree cavity nesters, like Palawan Hornbill, all three parrot species of Palawan, Philippine Cockatoo *Cacatua haematuropygia*, Blue-naped Parrot *Tanygnathus lucionensis* and Blue-headed Racquet-tail *Prioniturus platenae*, and other conservation relevant species like Grey Imperial-pigeons *Ducula pickeringii* and Mantanani Scops-owl *Otus mantananensis* (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. On the other hand Bugsuk Island also serves as one of the important habitat for the endemic Balabac Mousedeer *Tragulus nigricans*,

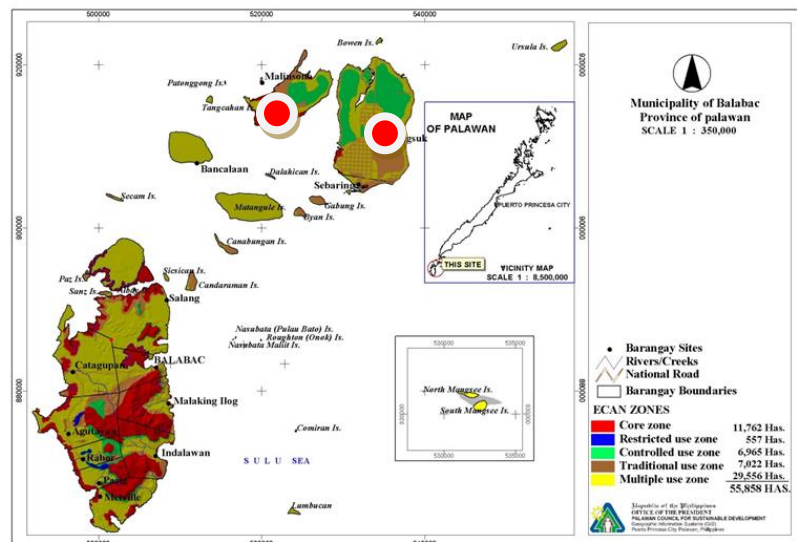


Figure 1. Location map of Pandanan and Bugsuk Island (red dots) in municipality of Balabac, Palawan (Map: PCSDS).

due to restricted access of locals and less presence of hunting, deer population thriving in significant numbers. Bugsuk Island is apparently the only place in the world where the highly threatened Balabac Mousedeer, Palawan Porcupine, Philippine Cockatoo and Palawan Hornbill co-exist in the same forest habitat in viable populations.

Both islands' marine ecosystem harbors several threatened marine turtle species. Portions locally declared as marine protected area remain as important breeding sites for grouper, wrasses and other high valued marine products.

Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species at Pandanan and Bugsuk Island.
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 increase number of Philippine Cockatoo breeding pairs on Pandanan/Bugsuk by at least 5% by 2024 (up from 23 and 10 from Pandanan and Bugsuk respectively in 2021).
2. Increase viable population of endangered and endemic target cavity-nesters by at least 3% by 2024 e.g. Palawan Hornbill (up from 15 breeding pairs in 2021), Blue-naped Parrot (up from 6 breeding pairs in 2021), in Pandanan and Bugsuk Islands from 2022-2024.
3. Reduce threats in the area by 50% from 2022-2024.

Methods

Deputized wardens patrol by foot, by boat and by truck monthly within sites. 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 2021). Ease of identification in the field was considered as well. The maps are generated and analysed through QGIS. Patrols are coordinated with the concerned barangay, private land owner/company and protected area office wherever it applies.

II. PATROL TEAM AND EFFORT

Patrolling and monitoring events were conducted by KFI wildlife wardens. A total of 19 regular patrolling events were conducted at Pandanan Island of which two were at night time (6:30pm to 10:30pm). As we covered 61km in Pandanan Island. While in Bugsuk Island, for five days we conducted 9 patrols covering 20.6km distance.

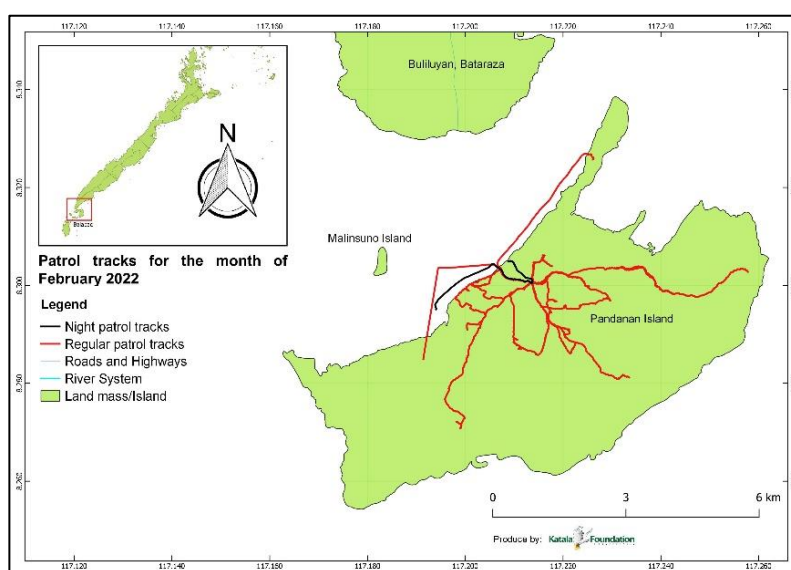


Figure 2. Patrol tracks at Pandanan island for this month of February 2022 (Map: KFI 2022).

III. PATROL OBSERVATIONS

A. Wildlife observations

Five threatened bird species continuously recorded in Pandanan as of this period: Palawan Hornbill, Blue-naped Parrot, Blue-headed Racquet tail, Hill mynah and Philippine Cockatoo. Other bird species noted during the monitoring event are Green imperial Pigeon, Pied Imperial Pigeon, Pink-necked Green Pigeon, Asian Koel, Great slaty Woodpecker, Spot-throated Woodpecker, Common emerald Dove, Tabon Scrubfowl, Oriental dwarf Kingfisher, Stork billed Kingfisher and Hooded Pitta. Nocturnal bird species noted are Malayan night Heron, Rufous night Heron and two owl species: the Palawan Scops owl and Mantanani Scops owl.

For terrestrial mammals recorded were Long-tailed Macaque, Flying Squirrel and Southern Palawan Tree Squirrel.

In Bugsuk Island, we recorded the following wildlife species during the visit: Palawan Hornbill, Hill Mynah, Philippine Cockatoo, Blue-naped Parrot and Balabac Mousedeer.

B. Philippine Cockatoo and Palawan Hornbill nest monitoring

Twenty-eight cockatoo nest trees were monitored and checked as of February (Fig. 3) in Pandanan. Of these 28 nest trees, four listed as active and occupied by Cockatoos. Presence of eggs and hatchling was later verified from one of the occupied nest trees. Continued preparation by other cockatoo breeding pairs was noted from other nest trees in Pandanan Island. Occupation of other nests are expected by the following months. For Palawan Hornbill, none of the 13 nest trees are occupied as of yet however cleaning and preparation were observed from two nest trees.

In Bugsuk Island, seven cockatoo nest trees were monitored and checked during the February visit of which three were active and occupied. Presence of cockatoo eggs was confirmed from these nests. Other nests are under preparation. As for Palawan Hornbill nests, seven nests are still accessible and monitored. Monitoring result shows that five nests had ongoing preparation and cleaning made by hornbills. No occupied nest found as of this monitoring period.

Quick nest survey within the western part of Bugsuk was made however no new and active cockatoo nest tree was found. Thorough nest survey is needed by April to June in order to locate new nest trees in Bugsuk Island. Continue scheduled nest monitoring activities will be made on both islands.

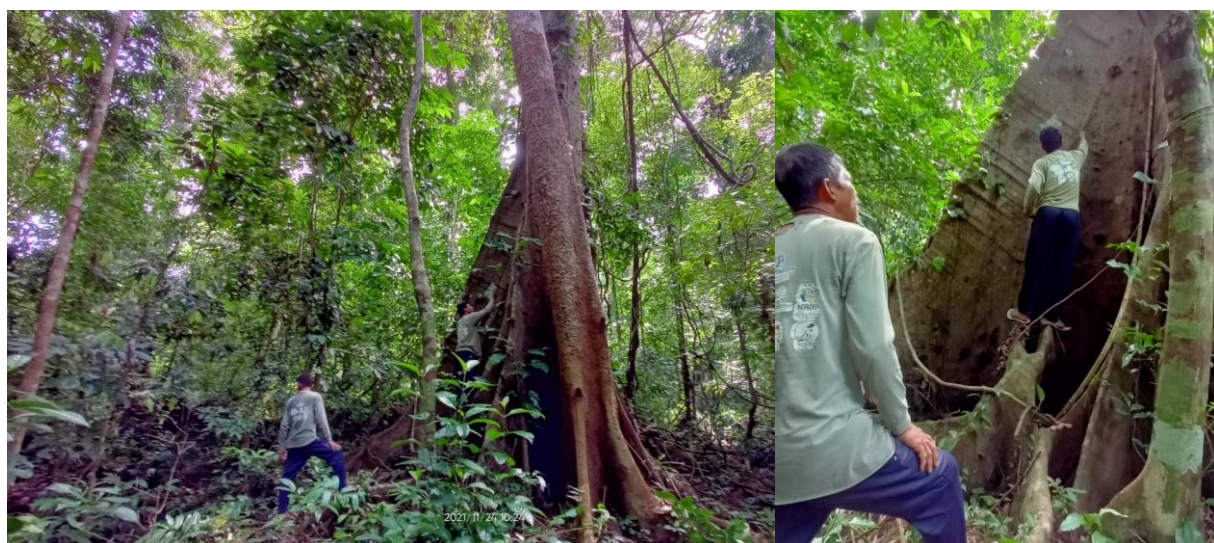


Figure 3. Nest monitoring activity inside Pandanan and Bugsuk Island (Photos: KFI 2022).

C. Philippine Cockatoo roost counts and food providing tree monitoring

Highest cockatoo count recorded at traditional roost site was 57 while lowest number was 17 individuals. Low numbers at the roost site are most likely due to ongoing cockatoo breeding season at both islands. In Sebaring, nine cockatoos recorded as the highest count this period, cockatoo used different roost trees from time to time. No threats found on both roost site.

Food source monitoring continued inside Pandanan and Bugsuk Islands. We recorded 15 plant species that are fruit-bearing: Aga, Andalugo, Alalod, Badjang *Alocasia macrorrhizos*, Akle, Bago, Balinad, Balite *Ficus sp.*, Kamilet, Kapuk-gubat *Bombax ceiba*, Marapisa, Rangingi vines, Samburagat, Taluto *Pterocymbium tinctorium* and Tarungtung (Fig. 4).



Figure 4. Recorded food sources for Philippine Cockatoo and Palawan Hornbill, Tatulo (left) and fruits of Mangkupa gubat (Right, Photos: RAntonio).

D. Community monitoring and threats observation

No transient locals found inside Pandanan Island. In term of threats, illegal logging activities inside Arananan coastal forest, Pandanan Island were documented. Four forest trees illegally cut using chainsaw by unknown locals; these trees are locally identified as: Kamilet (1), Nato (1), Magalmod (1) and Bayoso *P.ponnetia* (1). Most of these trees except Kamilet, were sliced into lumber of different sizes and traces of immediate lumber hauling were found heading down to shoreline of Arananan. Generated lumbers are believed to be transported to neighboring islands or barangays of mainland Palawan.



Figure 5. A partially utilized trunk of Bayoso tree (left) and remnants of Nato tree after it was completely utilized by illegal logger (Right, Photos: KFI 2022).

In addition to recorded threats, two ongoing clearings for kaingin were documented along the primary coastal forest of Arananan as of February 4, 2022. Our investigation revealed that clearing was owned by allegedly a certain Mr. Randy Arellano, resident of Pandanan and by his son-in-law named Bernie Tagle. Quick area assessment was made by team. Clearings were situated inside the old growth forest with most of the cut trees are identified as food providing plants for Philippine Cockatoo and Palawan Hornbill. Measurement of area cleared was made using a mobile base apps Locus GIS, while individual measurement of cut tree diameter (inch) was done using tape measure. First clearing was owned by Mr. Arellano which had a total area of 0.21ha while the second clearing is 0.33ha. The average diameter of cut trees in the alleged clearing of Mr. Arellano was 7.04inches while for second clearing was 12.8inch (see attached tabulated data of tree diameter and additional documentation). One active cockatoo nest tree about 280m distance from these clearings is potentially disturbed. Notification to stop the clearing was given to Mr. Randy Arellano however he insists that he finishes the clearing activity since already 70% is done and further stated that he needs to recover his expenses for the said cleaning.



Figure 6. Ongoing clearings along Arananan coastal forest: Mr. Arellano clearing (left) and Mr. Tagle clearing (Right, Photos: KFI 2022).

E. Camera trap installation and checking

Checking of installed camera traps inside Pandanan and Bugsuk Islands was made. Wildlife documented by these cameras on Pandanan Island include Long-tailed Macaque, Forest Rats, Southern Palawan tree Squirrel and Tabon Scrubfowl while cameras in Bugsuk Island recorded the presence of Palawan bearded Pig, Balabac Mousedeer, Tabon Scrubfowl and Southern Palawan tree Squirrel. Relocation of camera traps were made at the two islands, currently four and one in Pandanan and Bugsuk respectively.



Figure 7. Camera trap checking at Bugsuk Island (left) and relocation of camera trap inside Pandanan Island (Right, Photos: KFI 2022).

IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Presence of illegal logging activity continued in Pandanan Island and clearing for kaingin within primary coastal forest are persistent. Further monitoring is made by our team on these two issues particular on the clearing while formal report will be made to Barangay Council and DENR-CENRO for proper action.

Three camera traps had malfunctions and had to be retrieved for checking.

V. RECOMMENDATIONS

A tighter law enforcement and monthly joint monitoring activities by concerned parties/agencies are deemed necessary to avert further destruction. Visibility of law enforcement agencies would greatly help.

VI. ACKNOWLEDGEMENT

We are indebted to our wildlife wardens for their patience and work: Ismael S. Dela Cruz Jr., Deo E. Aplid and Ariel C. Omog. Likewise, we thank our escorts from SCAA, Philippine Army who restlessly secured us every monitoring visit. Thank you very much to the Jewelmer Corporation by providing the KFI team full assistance during every visit in Bugsuk island especially to Sir Jacques Christopher Branellec and Ms. Vianney Brossard. We also extend our appreciation to the Council members of Barangay Bugsuk, Council members of Barangay Pandanan and Local Government Unit of Balabac Municipality for making the conservation project more effective and successful.

We are grateful to KFI family and board members and project staff (J-Kris Gano) for their help, assistance and sharing expertise and ideas.

We are indebted and grateful for the support of the following organizations and agencies for supporting patrols and implementation of our work in Pandanan and Bugsuk Islands, Palawan (logos below):



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Pandanan Island, Balabac

Clearing/Kaingin Monitoring Activity

Patroller/Personnel: KFI Wildlife Wardens, Pandanan Island

Location: Arananan Coastal Forest, Pandanan Island

Geographical Coordinates: N08.29011, E117.20038 and N08.29142, E117.20034

Issue Recorded: Clearing inside primary forest

Area cleared (ha.): 0.21ha and 0.33ha (both ongoing)

Table 1. List of measured cut trees inside Mr. Randy Arellano clearings (ongoing).

Trees cut	Diameter (inch)
Ulam	5
Taluto	7.5
Mata-mata	5
Baro	7
Ulam	6
Alalod	12
Salogon	7
Taluto	11
Salogon	5
Ulam	5
Bongyu	11
Baro	8
Salogon	6
Sahing	5
Mata-mata	5
Mata-mata	5
Kamilet	5
Ulam	7
Baro	10
Taluto	6
Mata-mata	10
Girangan	10
Baro	12
Bayog	5
Girangan	7
Mangkupa Gubat	7
Baro	9
Samburagat	6
Baloknog	4
Lambunaw	5
Samburagat	5
Total:	218.5
Average diameter (inch):	7.04

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Figure 1. Area being cleared by Mr. Randy Arellano, some of trees are Cockatoo food source.

Table 2. List of measured cut trees inside Mr. Bernie Tagle clearing (ongoing).

Trees cut	Diameter (inch)
Balinad	8
Balinad	12
Taluto	17
Balinad	11
Bayog	14
Baro	12
Sahing	13
LamaTulang	8
Mangupak	6
Ulam	4
Sahing	5
Mata-mata	7
Mata-mata	7
Kandong	10
Kamilet	55
Sahing	9
Kamilet	33
Anuling	53
Alalod	19
Lambunaw	10
Kamilet	14

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Alalod	11
Sahing	10
Amugis	6
Magtaro	9
BabaTiyong	9
Mata-mata	13
Mata-mata	11
Kamagong	12
Sahing	18
BabaTiyong	13
Kamagong	18
KapalKulit	11
Balangihan	5
Mata-mata	6
Salogon	5
Sahing	6
Barebidan	11
Kamilet	7
Anuling	9
Malagatasan	8
Total:	525
Average diameter (inch):	12.80



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Figure 2. Cut trees inside Mr. Tagle clearings.