

# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

July 2022 SUMMARY  
Pandanan and Bugsuk  
Balabac, Palawan



13

Bilang ng nagawang  
patrolya



52.3

Kabuuang kilometrong naabot ng  
patrolya



38.4

Kabuuang oras ng patrolya



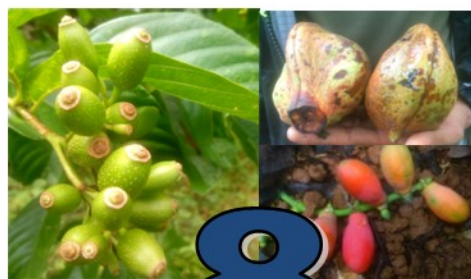
5

Bilang ng illegal na  
kailangang aksyunan



0

Bilang ng naaresto



8

Bilang ng naitalang supply  
ng Pagkain ng Katala at  
ibang buhay-ilang



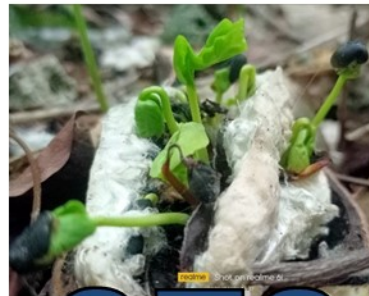
223

Pinakamataas na bilang  
sa tulugan ng Katala



53

Bilang ng bagong lipad  
na Palawan Hornbill



973

Bilang ng Naitanim



298

Bilang ng bagong lipad na Blue-  
naped parrot at Hill Mynah



0

Nakuhang mga silo o patibong ng  
mga buhay-ilang



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

July 2022

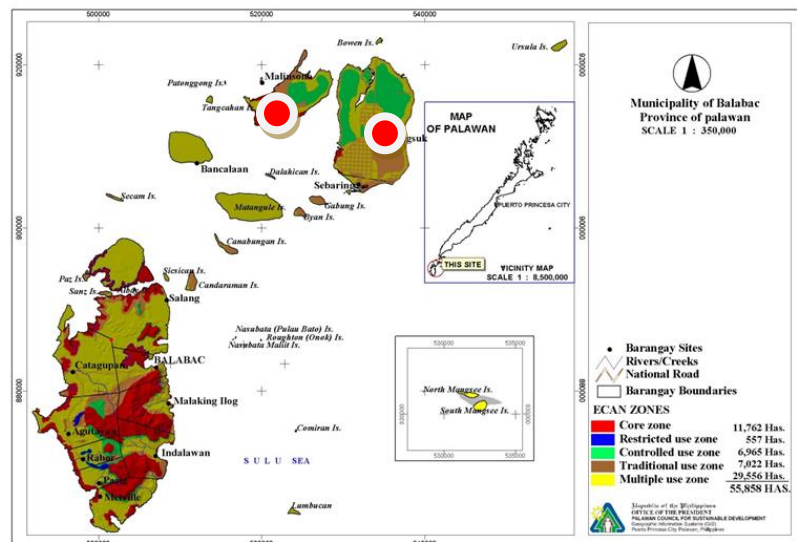
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### I. GENERAL DESCRIPTION OF THE CONSERVATION AREA, CONSERVATION OBJECTIVES, CONSERVATION TARGETS AND METHODS

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 understorey 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

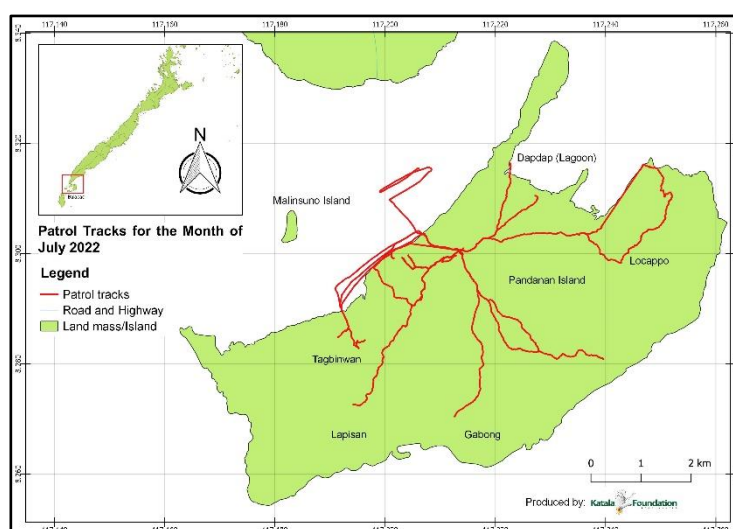
1. To increase number of Philippine Cockatoo breeding pairs on Pandanan/Bugsuk by at least 5% by 2024 (up from 23 and 10 from Pandanan and Bugsuk respectively in 2021).
2. Increase viable population of endangered and endemic target cavity-nesters by at least 3% by 2024 e.g. Palawan Hornbill (up from 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 2022). 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

Regular forest patrolling and monitoring activity were made inside Pandanan Island by wildlife wardens and staffs: Rene Antonio, Ismael S. Dela Cruz Jr., Deo E. Aplid, Celso Badilla and Ariel C. Omog. A total of 13 monitoring events was conducted covering the total area of 52.3km, monitoring along coastal waters of northern Pandanan was also done during this period. Strong southwest or Habagat affect some of our scheduled activities. Nest monitoring continue for late occupied nest trees while post nest occupation monitoring was made in most cockatoo nest trees.



**Figure 2.** Patrol tracks along Pandanan Island and coastal areas as of July 2022 (Map: KFI 2022).

### III. PATROL OBSERVATIONS

#### A. Wildlife observations

Fourteen bird species were recorded throughout July monitoring period of which four are listed as threatened species under IUCN Red list: Blue-headed racquet tail (Vulnerable), Great slaty woodpecker (Vulnerable), Palawan hornbill (Vulnerable), Philippine cockatoo (Critically endangered). KFI wildlife wardens also monitor the Philippine scrubfowl or locally known as Tabon in Pandanan Island since it is highly exploited for its meat and eggs which are sold discreetly within community.

For terrestrial mammals, presence of Palawan flying squirrel (Near threatened), Long-tailed macaque and Southern Palawan Red squirrel recorded continuously inside the island. Foraging Green Sea turtles (Endangered) and Hawksbill Sea turtles (Critically endangered) regularly seen along the coastal waters of western to northern Pandanan Island and on its island vicinities.

#### B. Philippine Cockatoo and Palawan Hornbill nest monitoring

Post nest monitoring visit were completed for 21 cockatoo nest trees on Pandanan Island. All banded young cockatoos successfully fledged from their respective nests. No poaching issues found in all active nests within the island while zero predation for hatchlings this year. As of this year breeding season, a total of 33 healthy young cockatoos were produced in Pandanan Island while 12 young cockatoos (from five active nests) in Bugsuk Island respectively (total of 45 new recruits for Balabac).

In terms of Palawan Hornbill, Pandanan Island records 17 active nest trees this year and nine of these are newly discovered. As per total live young, 28 young hornbills recorded and successfully fledged. In Bugsuk Island, 13 nest trees known active and eight of these are newly discovered during the weeklong nest survey conducted by wildlife wardens. Regular monitoring yield a total of 25 young hornbill fledges from the island. No health issue and predation found on young birds in both islands.

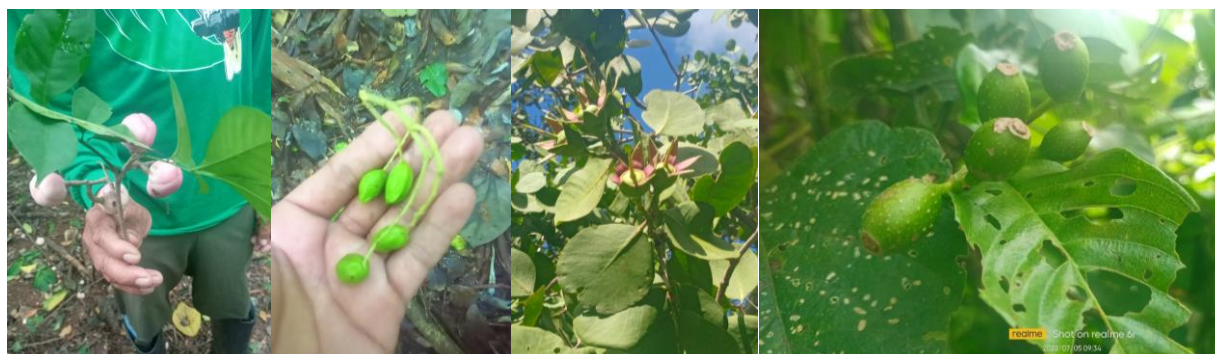
#### C. Other cavity nesting bird species breeding season updates

Continuous monitoring of the other cavity nesting bird species were made starting February this year and ended this month of July. Included on these monitoring are the previous known active nests of Blue-naped parrot and Hill mynah at Pandanan and Bugsuk Island. As of result, Pandanan had eighty-eight active nests this year and 10 of it are new nests. Hatchling records reach to a total of 190, of these 165 hatchlings are Blue-naped parrot and 25 hatchlings are Hill mynah. For Bugsuk Island, significant numbers of nest were discovered during the monthly visits. Fifty nests are known active as of this year and 42 of those are new, recorded hatchlings reach a total of 83 for Blue-naped parrot while 25 for Hill mynah respectively. All recorded young successfully fledged.

#### D. Philippine Cockatoo roost counts and food providing tree monitoring

As of July, total cockatoo count at the roost site reaches 223 during the 30<sup>th</sup> of the month while 42 individuals recorded as the lowest numbers during the early days of July. Weather affects most of the counting activity and ability of the birds to roost back by afternoon in the island. Presence of pair Palawan Hornbill in the area was recorded as of 31<sup>st</sup> during afternoon counts. The hornbill was observed crossing the Pandanan-Malinsuno channel possibly in search of new foraging or suitable new nesting place. Occurrence of this bird was reported by the roost site owner sometime in 2021 in the same area. No disturbances or conflict between two species seen; monitoring though continues.

In terms of food source for Cockatoo, Hornbill and other wildlife, eight forest trees and vines' species were recorded on fruit-bearing stage in Pandanan Island. These plants were locally identified as the following: Aga, Aloyaw, Babatiyong, Buyon, Dita vines, Mangupak, *Sonneratia alba* and Talukon (Fig. 3).



**Figure 3.** Food providing plants of Philippine Cockatoo, Palawan Hornbill and other wildlife species at Pandanan Island. Fruits of Babatiyong (left), Mangupak, *Sonneratia alba* and Buyon (Right, Photos: AOmog).

### E. Community monitoring and threats observation

Illegal logging activity had resumed and was documented inside the forest of Tagbinwan. Cut trees are locally identified as: Magloana (1), Amugis *Koordersiendendron pinnatum* (1), Mangupak (2) and Antipulo *Artocarpus blancoi*. All extracted lumber are missing from each cutting sites except for the Antipulo tree which is made into boat hull. One newly sawed boat hull was found by our team on site, the hull had a dimension of 2inch thick, 16inch wide and 17feet in length. No chainsaw operator seen nor discovered in the scene, the hull was later confiscated by KFI wildlife wardens and transferred to barangay hall of Pandanan for proper custody. Confiscation receipts was provided by our team of the same day.

We suspect these illegal activities within Pandanan Island is mainly done during early evening until 9pm to avoid being detected or being apprehended by authorities while transportation of extracted lumber is exclusively conducted in evening or wee hours. Lumbers are allegedly then sold at Buliluyan, Malinsuno and Bancalaan Island.



**Figure 4.** Newly cut trees along Tagbinwan forest, Bayoso tree (left), Amugis tree (second to left) and Antipulo tree with one boat hull found on site (Right, Photos: KFI 2022).



#### F. Tree planting and forest rehabilitation activity

Tree planting activity was made last July 25<sup>th</sup> and 26<sup>th</sup> along the coastal forest of Arananan-Dalahican (Fig. 5). Site is selected for tree planting and rehabilitation after it was heavily intruded by illegal loggers in the past, and occasional log cuttings on selected high valued trees continue as of this year. The site is classified “timberland” under the land classification by DENR and with approximate area of 67ha. It also holds significant numbers of high valued trees like Amugis, Ipil, Bayoso/malugai and Nato. It serves up to date as foraging site for cockatoos and different bird species that breed in adjacent areas. We planted a total of 973 seedlings/saplings with maximum interval of 5m, planting is made mainly by our wildlife wardens. Planted trees are locally identified as the following: Amugis (57), Balangihan (24), Bayoso (129), Nato (363), Magnangkangka (30) and Taluto (370). Successive tree planting will be made while monitoring for the survival of the plants is set every month.



**Figure 5.** Tree planting and forest rehabilitation site at Pandanan Island (Map: KFI 2022).

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

Illegal logging activity and intrusion on designated timberland continues in Pandanan Island. Documentations of these are done by patroller on each recorded threat while confiscation of illegally cut lumbers or wood products is done and turned over to the barangay for proper custody.

#### V. RECOMMENDATIONS

Establishment of wildlife critical habitat in Pandanan Island is needed to maintain the integrity of this impressive coastal forests and prevent further destruction of these forest remnants.

## 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 for the help, assistance and sharing expertise and ideas.

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## References:

- BirdLife International (2022) Species factsheet: *Caloenas nicobarica*. Downloaded from <http://www.birdlife.org> on 03/05/2022.
- Critchlow, R., Plumptre, A.J., Alidria, B., Nsubuga, M., Driciru, M., Rwetsiba, A., 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 (2022). IUCN Red List of Threatened Species. Version 2021-3. ([www.iucnredlist.org](http://www.iucnredlist.org)).
- Madulid, D. A. (2002). A Pictorial Guide of Noteworthy Plants of Palawan. Palawan Tropical Forest Program.
- 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.
- Widmann, I.D., S. Diaz & A. Espinosa. Observations on Philippine cockatoo in Pandanan and Buliluyan, Southern Palawan, Philippines, 2008 in Widmann, I.D., P. Widmann, S. Schoppe, D. Van den Beukel & M. Espeso, 2008 (eds.): *Conservation Studies on Palawan Biodiversity – a compilation of researches conducted in cooperation with or initiated by Katala Foundation, Inc., Puerto Princesa City, Palawan.*