# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

JULY 2021 SUMMARY Pandanan and Bugsuk Balabac, Palawan





15 Kabuuang oras ng patrolya









Bilang ng illegal na Bilang ng nai-report sa KFI kailangang aksyunan



sa tulugan ng Katala



Bilang ng cavity nesters

Bilang ng naitalang namumunga at namumulaklak na puno



Nakuhang mga silo o patibong





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

# **July 2021**

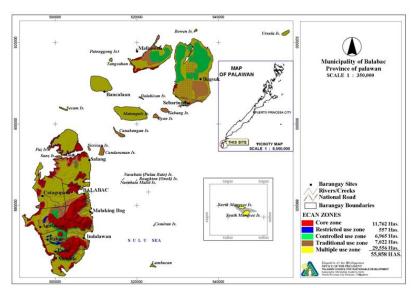
Prepared by:

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

Pandanan and Bugsuk Island belongs 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 Bugsuk Pandanan, and adjacent Malinsuno Island. Among these are six globally threatened and six nearspecies (IUCN threatened 2019). Of outstanding conservation concern particularly the larger tree cavity nesters, like Palawan Hornbill, all three parrot species Palawan. Philippine Cockatoo Cacatua haematuropygia, Blue-naped **Parrot** Tanygnathus *lucionensis* and Blue-headed **Prioniturus** Racquet-tail platenae, and other conservation



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

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, 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 island marine ecosystem harbour several threatened marine turtles species and locally declared as marine protected area that remain as the 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 Philippine Cockatoo population on Pandanan/Bugsuk by at least 5% from 2018
- 2. Increase viable population of endangered and endemic target cavity-nesters e.g. Palawan Hornbill, Blue-naped Parrot, Blue-headed Racquet-Tail, among others in Pandanan and Bugsuk Island from 2018-2021.
- 3. Reduce threats in the area by 50% from 2018-2021.

#### 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, 2019). 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 activity inside Pandanan Island was made by wildlife wardens and staff covering the total distance of 48.9km (Fig. 2). Patrol and monitoring schedules were affected by bad weather condition in the area. Field house repair was done within the month.

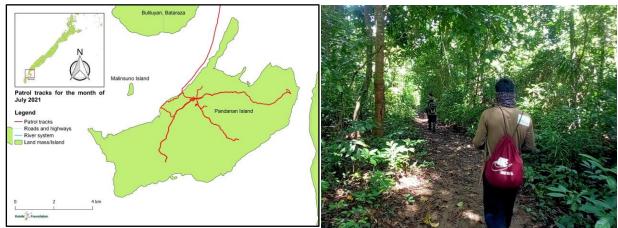


Figure 2. Patrol tracks at Pandanan Island as of July (left) and wildlife wardens conducting forest patrol and monitoring along the established BMS sites at Pandanan Island (Right, Photo and Map: KFI 2021).

### **III. PATROL OBSERVATIONS**

#### A. Wildlife observations

This month we recorded the following wildlife species: a total of 248 individuals (ind) of Philippine Cockatoo, Blue-naped Parrot (45 indi), Palawan Hornbill (20 indi), Hill Mynah (8 indi), Pied Imperial Pigeon (20 indi), Green imperial Pigeon (10 indi), Crested serpent Eagle (4 indi), Tabon Scrubfowl, Crested Goshawk, White-bellied Sea eagle and Oriental dwarf Kingfisher, White bellied Woodpecker and Great slaty Woodpecker. For terrestrial mammals we have: Flying squirrel, Southern Palawan red squirrel and Long tailed Macaque while reptiles were represented by Monitor Lizard and Spitting Cobra. Meanwhile, rescue and release of one young Crested serpent Eagle was made by wildlife wardens. Young fell off from its nest during strong wind, no wounds or injury found at the young eagle. Young was returned to its nest on the same day along the Magsakayan Forest trail (Fig. 3).

Coastal monitoring records the significant numbers of Green Sea turtle and Hawksbill Sea turtle foraging on western to northern Pandanan Island. Foraging sites composed mostly of dense sea grass and coral reefs.



Figure 3. Rescue of young Crested Serpent Eagle which fell from its nest along Magsakayan Forest trail in Pandanan Island (Photos: RAntonio).

# B. Philippine Cockatoo and Palawan Hornbill nest monitoring

Nest checking and monitoring activity of the remaining occupied cockatoo nest trees in Pandanan Island were completed. As of July, two new additional hatchlings were recorded from late occupied nest tree, however one died probably died of starvation as parent birds were affected by torrential rainfall and strong southwest wind which lasted more a week. This heavy rainfall (671mm) from July 1-24, 2021 accounts almost the total rainfall for the month. Banding of the remaining young cockatoo was done on July 25th. In total 47 young cockatoos were banded (46 young banded reported as of June) and majority of these young successfully fledged.

For Palawan Hornbill, remaining three young hornbills successfully fledged this month. Overall, 20 young Palawan Hornbills successfully fledged in Pandanan as of this year. No predation found in all occupied nest trees. On other hand, we assumed that all recorded young Palawan Hornbills from Bugsuk Island successfully fledged since all of these young were in good condition and at fledgling stages as observed during the last monitoring visit.



**Figure 4.** Banded young cockatoo from a nest occupied late in the season in Pandanan (left) and corpse of young cockatoo retrieved from the same nest hole (Right, Photos: RAntonio).

# C. Cockatoo roost counts and food providing tree monitoring

Count at the traditional roost site in Malinsuno Island reach up to 248 cockatoos as the highest while 100 cockatoos as the lowest number this month. New recruits are well observed at the roost site. On the other hand 60-100 cockatoos were observed at the secondary roost site at Dalahican proper, Pandanan Island (Fig. 5). Cockatoos were observed roosting in the area at July 27th to 30th. No threats noted from this site.

In terms of food source, 13 forest tree species and two vine species were recorded at fruiting stage to wit: Amugis tree (*Koordersiodendron pinnatum*), Aga tree (*Ficus sp.*), Aluyaw tree, Badjang (*Alocasia macrorrhizos*), Balangihan tree, Bubog tree (*Sterculia foetida*), Dao tree (*Dracontomelon dao*), Kandis tree (*Garcinia sp.*), Kaliyat vines, Mangupak tree, Marapisa tree, Palawan cherry tree, Pagatpat tree (*Sonneratia sp.*), Rangingi vines and Santol tree (*Sandoricum koetjape*) (Fig. 5).



**Figure 5.** Secondary cockatoo roost site at Sitio Dalahican, Pandanan (left) and natural food source recorded this month: Dao fruit (upper right) and Ficus fruit (Lower right, Photos: R.Antonio).

# D. Community monitoring and threats observation

No human-induced threats found within the patrolled sites. Five Kilusan Ligtas Malaria field personnel were recorded at Dalahican proper, these locals originate from Poblacion Balabac and will conduct routine testing for malaria within the settlement of Gabong where high case of malaria was reported.

# E. Camera trap installation and deployment

Footages captured by camera traps reveal the daily foraging activity of the following wildlife species along Liyang-liyang to Locappo forest Pandanan Island: Tabon Scrubfowl and Long tailed Macaque while nocturnal species include Forest Rats and Common Civet Cat (Fig. 6). Mating activity of Tabon Scrubfowl was once captured by camera trap during early morning while movement of this bird was also recorded during midnight time. Relocation of cameras within Pandanan were made this month to cover more areas on the island and to check further wildlife species and their movements.



Figure 6. Nocturnal species such as civet cat was recorded by camera traps (left) and mating activity of Tabon Scrubfowl during early morning (Right, Photos: KFI 2021).

# F. Other related conservation activities

Tree planting activities was made on July 16<sup>th</sup> and 22<sup>nd</sup>. A total of 515 seedling/saplings of native forest tree species were planted along the BMS site 4, central Pandanan Island (Fig. 7). Planted trees are locally identified as food providing and nest providing trees for Philippine Cockatoos, Palawan Hornbill, Blue-naped Parrot and other cavity nesting bird species in the island.



Figure 7. Tree planting along the BMS site 4 at Pandanan Island (left). Planted trees: Balangihan (center) and Se-ar (Right, Photos: RAntonio).

# IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Regular monitoring within the Pandanan Island will continue especially in areas known as entry and exit point of transient locals. Temporary cockatoo roost site within Pandanan will be monitored regularly while verification of reported roost site in Sebaring must be done.

### **V. RECOMMENDATIONS**

Proper land and forest management must be considered in Pandanan since it holds the secondmost important population of Philippine Cockatoos globally. Other equally threatened species of birds like the endemic Palawan Hornbill also persists on the island. Remaining forests and its integrity must be protected thereby any development in the island must seriously consider its biodiversity-richness and should be embraced by government, conservation agencies and private stakeholders.

#### VI. ACKNOWLEDGEMENT

We are indebted to our wildlife wardens for their patience and work: Ismael S. Della 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 the islands 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.

Thanks to KFI family and board members, J-Kris Gano and PCCP staff for the 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, Palawan (logos below):



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