



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

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Prepared by:

Rene A. S. Antonio, Peter Widmann and Indira D. L. Widmann

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*,

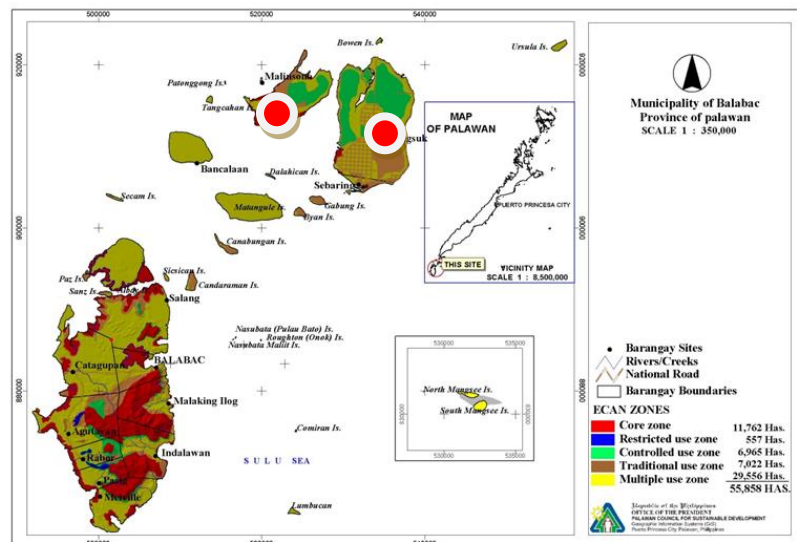


Figure 1. Location map of Pandanan and Bugsuk Island (red dots) in municipality of Balabac, Palawan (Map: PCSDS).

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

Forest monitoring and cavity nests intervention were made at Bugsuk and Pandanan Islands for this month by KFI and wildlife wardens: Rene Antonio, Ismael S. Dela Cruz Jr., Deo E. Aplid, Celso Badilla and Ariel C. Omog. Twenty-one monitoring-patrolling events were conducted in Pandanan covering a total distance of 71.9km while week-long visit in Bugsuk Island yielded nine forest patrolling-nest survey events with total of 31.8km distance. Monitoring and nest surveys were conducted at west and northwestern part of the island respectively.

Continuous community and settlement visit along the Sitios of Pandanan was made by our team while coastal patrolling was done within jurisdictional water of the Barangay. Regular patrolling in Pandanan was conducted solely by our wildlife wardens with assistance of village peace and order officer (Tanod) during coastal patrolling.

In Bugsuk, the KFI team is accompanied by the company security of Jewelmer Corporation. A volunteer in Sebaring submits his records of cockatoos in the area.

III. PATROL OBSERVATIONS

A. Wildlife observations

Five threatened cavity bird species were recorded this month inside Pandanan Island. These birds were represented by the following: Blue-headed racquet tail, Blue-naped parrot, Hill mynah, Palawan hornbill and Philippine cockatoo. Other bird species recorded are Asian koel, Common emerald dove, Green imperial pigeon, Mantanani scops owl, Stork-billed kingfisher and Tabon scrubfowl.

In Bugsuk island, recorded wildlife are as follows: Balabac mousedeer, Blue-naped parrot, Hill mynah, Palawan hornbill, Philippine cockatoo, Pied imperial pigeon and Tabon scrubfowl. Two snake species were also recorded: White-lipped tree viper (*Trimeresurus albolabris*) and Common mock viper (*Psammodynastes pulverulentus*). Sightings of foraging Green sea turtles and Hawksbill sea turtles were noted in northern Pandanan Island.



Figure 3: Snake species recorded as of June monitoring events: White-lipped tree viper (*Trimeresurus albolabris*) in Pandanan Island (left) and Common mock viper (*Psammodynastes pulverulentus*) at Bugsuk Island (Right, Photos: AOmog and RAntonio).

B. Philippine Cockatoo and Palawan Hornbill nest monitoring

Regular nest monitoring visit and intervention was completed as of June 30th. In total 21 nest trees are active and successfully occupied (20 nest tree recorded active as of May reporting). In terms of live young cockatoos, additional two hatchlings were discovered this month from two nests thus bringing to a total of 35 hatchlings for this year's breeding season on Pandanan island. However, two mortalities were later discovered from two nests hence 33 hatchlings were tagged using the DENR-marked leg bands and blood samples were collected respectively. Death of the two young birds is attributed to inclement weather and accidental fall from nest hole. No parasite or mites ever found in all young katalas. Successful fledglings of 17 individuals were already noted this month while other young birds are expected to leave their nest by the following weeks.

For Bugsuk island, 15 hatchlings were recorded and only 12 were banded while three young died at early life stage very likely to inclement weather as in the case of Pandanan. As of June monitoring, all banded young Katala successfully fledged out from their respective nest holes. Follow up nest checking by our team later confirmed the successful nest exits, no sign of nest predation or possible poaching activity.



Figure 4. Leg band application and collection of blood sample of cockatoos in Pandanan Island (left and center) and destroyed cockatoo egg, shells found below the nest branch (Right, Photos: KFI 2022).

Increase in number of Palawan Hornbill hatchlings was noted this month in Pandanan Island; additional eleven young were confirmed from seven nest holes. In total 12 young hornbills recorded, and successful fledgling already seen this month from one nest with one young hornbill. In Bugsuk Island a total of 12 identified nests are active and occupied; three of these are newly discovered during this monitoring visit. In term of hatchlings, 23 young hornbills were recorded of which two successfully fledged ahead of our schedule nest intervention. Remaining young in Bugsuk are expected to leave their nest hole within the next 10-15 days. No predation found in all active nest at the two islands.



Figure 5. Newly discovered Palawan Hornbill nest trees, commonly characterized by the presence of fecal matters and hornbill wing feathers just below the nest hole (Photos: RAntonio).

C. Philippine Cockatoo roost counts and food providing tree monitoring

As of this month, highest count at roost site is 83 while lowest count is 36. Cockatoo numbers in roost site is starting to gain however occasional strong winds accompanied by torrential rainfall hinder and affects some of the cockatoo flocks especially those with new recruits or fledglings. In secondary roost site at Sebaring, roosting cockatoo numbers range from 2-7 as May, while 3-7 on June 2022. No direct issue or threats reported from Sebaring while soil

erosion and improper waste disposal by beach goers was noted in Malinsuno roost site. Attention of landowner was called while presentation of this issue will be made by KFI staff by the next regular barangay council meeting.

In terms of food source for Cockatoo, Hornbill and other wildlife, 13 tree and two vines species were fruiting at Bugsuk and Pandanan Islands. These plants were represented by the following: *Alocasia macrorrhizos*, Aloyaw, Amugis, Antipulo, Balite *Ficus sp.*, Buyon, Daop-daop vines, Ipil, Kasay, Kaliyat vines, Mainggit *Cananga odorata*, Parya-laot, Sahing, Santol and Talisay *Terminalia catappa* (Fig. 6). Further data collection of food preference by cockatoo is ongoing, available data will be included on future reporting.



Figure 6. Recorded fruits of forest trees in Bugsuk and Pandanan Islands: Ripe fruit of Sahing tree (left), young pods of Ipil tree (center) and ripe fruit of Parya-laot tree (Right, Photos: AOMog and RAntonio).

D. Community monitoring and threats observation

Community monitoring visit was conducted at the following settlements in Pandanan Island: Dalahican, Gabong and Magsakayan. No new transient local found on these sites.

Threat recorded this month was illegal logging at the site of Bodis-Kambangtuli and Arananan-Dalahican forest. As recorded by our team, the following trees were cut by chainsaw: Anaan (2), Bayoso (1), Impaw (1), Magloana (1), Marampuso (1) and Ugayan (3). Apparently, most of these trees were utilized and extracted lumbers are missing or possibly hauled by allegedly cutters. Based on remains and observation, cuttings are mainly made during the monitoring days of wildlife wardens at Bugsuk Island. Cuttings of forest trees are within the designated timberland pursuant to DENR land classification.



Figure 7. Illegal logging activity recorded within the designated timberland of Arananan-Dalahican coastal forest, Pandanan Island. Loggers cut small trees nowadays possibly to make sure they can finish up in a night to avoid confiscation by patrollers or other concern agencies (Photos: KFI 2022).

IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Illegal logging activity and intrusion on designated timberland continued in Pandanan Island. Continued documentation is done for each recorded threat. Regular patrolling continued particular in area of concern.

V. RECOMMENDATIONS

Establishment of wildlife or critical habitat on Pandanan Island is needed to hold and prevent further destruction of the remaining forest.

VI. ACKNOWLEDGEMENT

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