### KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

March 2022 SUMMARY Pandanan and Bugsuk Balabac, Palawan





Kabuuang oras ng patrolya



Bilang ng illegal na kailangang aksyunan



Bilang ng nai-report sa KFI



Bilang ng naaresto



Pinakamataas na bilang sa tulugan ng Katala



Bilang ng cavity nesters



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



Nakuhang mga silo o patibong









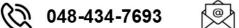














Department of Environment as Biodiversity Manage

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APRIL 2022 SUMMARY Pandanan and Bugsuk Balabac, Palawan











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Nakuhang mga silo o patibong























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

#### March - April 2022

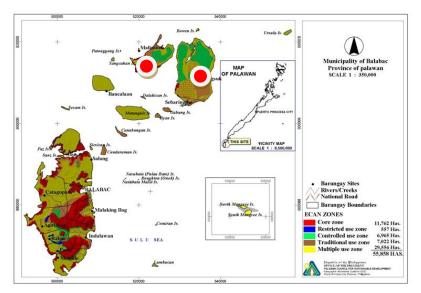
Prepared by:

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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 nearthreatened 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, Bluenaped Parrot Tanygnathus lucionensis and Blue-headed Racquet-tail Prioniturus platenae, and other conservation species like relevant Grey



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

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 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**

In March, a total of 30 regular patrols were conducted at Pandanan Island which covered a total distance of 127km while in Bugsuk Island monitoring visit was conducted in March 12-15, 2022 which covered 16.9km mostly on northwestern part only.

Patrol and monitoring at Pandanan Island covered the total distance of 85km in April. While in Bugsuk Island weeklong monitoring 20.3km of routine nest checking and nest survey.

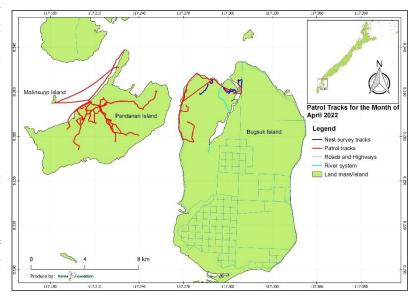


Figure 2. Patrol tracks at Pandanan island for this month of April 2022 (Map: KFI 2022).

#### **III. PATROL OBSERVATIONS**

#### A. Wildlife observations

Seven target threatened bird species were recorded from March to April on Pandanan Island: Philippine Cockatoo, Palawan Hornbill, Blue-naped Parrot, Blue-headed Racquet tail, Hill mynah, Palawan scops Owl and Great slaty Woodpecker. We also noted the presence of a pair of Nicobar Pigeon (IUCN:near threatened) at northern forest of Pandanan during the early week of the month which were foraging on ground level during the field observation. Other bird species recorded this month were Green imperial Pigeon, Crested serpent Eagle, Asian Koel, Spot throated Woodpecker, Common emerald Dove, Tabon Scrubfowl, Hooded Pitta, Stork-billed Kingfisher and White-collared Kingfisher. Terrestrial mammals include Long tailed Macaque and Flying Squirrel. Records of migrant species also made for 74 individuals Grey-faced Buzzard and lone Osprey, heading northward during late afternoon of March 18, 2022.

Monitoring visit at Bugsuk island from March 12-15, 2022 and April 23 to 29, 2022 record the following wildlife species: Philippine Cockatoo, Palawan Hornbill, Blue-naped Parrot, Blueheaded Racquet tail, Great slaty Woodpecker, Tabon Scrubfowl, Stork-billed Kingfisher and Nicobar Pigeon. In terms of terrestrial mammal, we noted Palawan bearded Pig and Balabac Mousedeer. For marine species, we continuously record the presence of Salt water Crocodile (juvenile and adult) at Bugsuk Island, while significant numbers of juvenile to breeding Green sea turtles and Hawksbill turtles found in sea grass meadows of north western Pandanan.

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

Complete nest checking and monitoring activity was conducted for 25 cockatoo nest trees in Pandanan island. This month we confirmed seven additional nests which are occupied bringing the total of 19 nests (12 nest as of March reporting) actively occupied on Pandanan. Cockatoo eggs were noted from these additional active nests and undergo incubation as of this period. Numbers of live young cockatoos also increased with total of 28 after complete verification and nest checking. Health assessment and banding of live young commenced in Pandanan this April with seven successfully banded by wildlife wardens and staff. Egg loss from five nests was found by our team during the routine nest checking, eight cockatoo eggs were declared spoiled or missing from these nests. Missing egg is mainly caused by predation of tree dwelling snake and competition by other occupants of nest holes.



Figure 3. Banded young cockatoos at Pandanan Island (left) and in Bugsuk Island (right). (Photos: RAntonio).

In Bugsuk island, four cockatoo nests remain active and occupied while additional new nest tree was discovered in northern part of the island as of April visit. A total of 12 live young cockatoos were banded by our team from these active nests. While mortality of three hatchlings was recorded from two nests probably due to inclement weather. Biometrics and assessment were conducted on each young while collection of blood sample to be used for DNA sexing and PBFD (Psittacine beak and feather disease) was made on each banded young bird from both islands.



Figure 4. Routine nest checking and banding activity at Bugsuk Island (Right, Photos: RAntonio).

For Palawan Hornbill nests status, none as of yet of the fourteen nests are occupied although we observed continued preparations done like sealants and recent fecal matter was found and presence of possible occupant within the vicinity during the nest checking. Meanwhile, at Bugsuk Island two previously recorded nest holes are now active and occupied, female and young hornbills were confirmed inside. Discovery of three new nests in northern Bugsuk was made this visit, these three nests are also active and occupied (Fig. 4). In total, five nest tree are known active and occupied in Bugsuk with eight live young hornbills recorded.

For other cavity nesting birds, 10 new nests of Blue-naped parrot and four Hill Mynah nests weres discovered in northern Bugsuk respectively. Most of these nests contain eggs and undergo incubation period.



Figure 4. Newly discovered hornbill nest tree in Bugsuk island, hosted by Amugis tree (Left). Forest tree seeds commonly found below the occupied and active nests of hornbills (Right, Photos: RAntonio).

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

Highest counts taken at the roost site were 54 and 58 while the lowest is 21 individuals for March and April respectively. Torrential rainfall during the 10th and 11th of April affects the counting activity of wildlife wardens in Malinsuno Island while cockatoos arrive in roost site shortly after dusk. At secondary roost site in Sebaring, 11 cockatoos were counted and recorded as the highest number in the area in March.

In terms of cockatoo and wildlife food source, we recorded up to 17 forest trees, two vines and a palm species: Aga, Akle, Amugis, Antipulo, Aloyaw, Badjang Alocasia macrorrhizos, Bago, Balinad, Balite Ficus sp., Bayoso, Kamilet, Kaliyat vines, Limon-limon, Mainggit Cananga odorata, Magdita-dita, Magbaka-baka, Magnangka-nangka, Marapisa, Rangingi vines, Tarungtong, Se-ar and Pisa palm (Fig. 5).

In Sebaring, cockatoos reportedly continued to observe feeding at the fruits of Pagatpat Sonneratia alba, pods of Moringa and pods of Ipil-ipil tree.



Figure 4. Recorded food source of cockatoo, hornbill and other wildlife: pods of Balinad (left), fruit of Amugis (center) and fruit of Balite/Ficus (Right, Photos: RAntonio).

#### D. Community monitoring and threats observation

#### **MARCH 2022**

We reported to the barangay council five transients spotted in Pandanan this month. Three were from Narra, Palawan while two from Bataraza Palawan. Relative visitation and fishing activity are the two purposes mentioned by these respondents.

In terms of recorded threats, illegal cutting of forest trees using chainsaw by unknown locals was discovered and recorded within the sites of Kambangtuli, Arananan and Tagbinwan coastal forest. A total of eleven trees were cut from these sites. In Kambangtuli one Magloana tree was cut down using axe and later into sizes by using chainsaw from which two boat hulls were produced from this tree. The hull measures 3inch thick, 18 inch wide and 20feet in length. No local cutter noted during the discovery; confiscation was made on March 03, 2022 by wildlife wardens with assistance of Barangay Tanod, each hull was transferred to Barangay Captain Nestor M. Gabinete Jr property for proper custody (Fig. 5). Meanwhile, cut trees along Arananan were identified as follows: Ogayan (1), Anaan (1), Bayoso (1) and in Tagbinwan are Magloana (1), Amugis (1), Se-ar (1) and Mangupak (3). All generated lumbers were missing during the discovery only stumps left indicating the "cut and immediate extract" method used to avoid detection by patrollers. We also found last March 18, 2022 one identified cockatoo potential nest tree in Tagbiwan forest was probably intentionally cut by unknown locals (Fig. 6). Cockatoo nest preparation from this tree was recorded last February monitoring, search for the nest branch was made however it was severely damaged due to impact, no actual occupation yet noted. We surmise the tree was cut a week prior to the discovery and we further suspected that it was intentionally but so that patrols would not be done in the area anymore since no more cockatoo nest trees will be monitored and they can continue to destroy these valued coastal forests!



Figure 5. Confiscated boat hull from Kambangtuli forest, the two hull has an estimated value of Php. 20,000.00. Both hulls are under custody of Barangay council of Pandanan (Right, Photos: KFI 2022).



Figure 6. Cockatoo potential nest tree at Tagbinwan coastal forest intentionally cut by unknown locals. The tree was left untouched after it was cut (Photos: KFI 2022).

#### **APRIL 2022**

Three transients residing along Arananan coastal forest as of April 11, 2022 were recorded by our team. These three men were originally from Puerto Princesa City particular from Barangay Napsan and Luzviminda. These local identified themselves as Bernie Taglie, Bunso Taglie both from Luzviminda and Teddy Cayapas from Napsan. No proper identification or Barangay ID shown to monitoring team. Accordingly, a certain Mr. Randy Arellano enticed them to join him in making kaingin along Arananan. Names were listed for further notification to barangay council of their presence. Five new clearings were found in the vicinity, all clearing is situated inside "old kaingin site".

In terms of threats, one Mararango tree was found being cut by chainsaw inside the Dalahican-Aranan coastal forest. Cutting is made almost two weeks or so, all generated lumbers are already missing or hauled from site by allegedly a local cutter. Furthermore, line of ground snare traps was discovered in northern Pandanan Island as of April 08, 2022. The snare trap is intended for ground dwellers like Bearded Pig and bird species like Tabon Scrubfowl and Nicobar Pigeon. A total of 20 snare traps were immediately dismantled by patrol team.



Figure 7. Monitoring of transient locals at Arananan (left) and ground traps in northern Pandanan (Right, Photos: KFI 2022).

#### E. Camera trap routine checking

Regular checking and card retrieval of deployed camera traps in Bugsuk was made last March 14, 2022. Footages captured by the camera trap revealed the presence of the following animals at the northwestern part of Bugsuk Island: Balabac Mousedeer (Fig.8), Palawan bearded Pig, Long-tailed Macague, Civet Cat, Tabon Scrubfowl and Common emerald Dove. Installation of additional cam is suggested on northwestern part of Bugsuk Island.



Figure 8. Deer feeding activity; Balabac Mousedeer feeding of foliage's in front of camera traps (left) and passing pair of Palawan bearded Pig (female and male on far back (Right, Photos: KFI 2022).

Regular checking and card replacement of deployed camera trap in Bugsuk was made last April 25, 2022. Presence of the following animals and wildlife was continuously recorded in northern Bugsuk: Balabac Mousedeer, Palawan bearded Pig, Long-tailed Macague, Tabon Scrubfowl and heard of Water Buffalo or wild Carabao.

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

Illegal logging and clearing activity are prevalent and persistent in Pandanan Island. Cutting of trees especially the nest providing trees indicate people are aware there are patrols done by wardens and in order to avoid these patrols be conducted in these areas they rather would cut potential nest trees and leave them untouched as an assertion of their powers over the law. While there is a need for intensive information campaign, less of these similar incidents would have had happened or could be averted if there is more conviction from law enforcing agencies to implement the law and act on reported incidences. While we put our wardens on the forefront, we appreciate if actions are taken more serious and cases are filed. Visibility would help as well. We have reported several confiscations in the past but no action.

Influx of non-island residents in Pandanan continued and some of these locals also engage in clearing activity during kaingin season. Information of recorded transient locals were forwarded to barangay council for proper monitoring.

#### **V. RECOMMENDATIONS**

A tighter law enforcement and monthly joint monitoring activities by concerned parties/agencies are deemed necessary to avert further forest 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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