

# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

## May 2021 SUMMARY Dumaran Island Critical Habitat Dumaran, Palawan



23

Bilang ng nagawang  
patrolya



403.92

Kabuuang kilometrong naabot ng  
patrolya



123

Kabuuang oras ng  
patrolya



4,499

Bilang ng natanim



0

Bilang ng nai-report sa mga  
awtoridad



0

Bilang ng ilegal na  
gawain na naobserba



18

Pinakamataas na bilang sa  
tulugan ng Katala



4

Pinakamataas na  
grupong Talusi na nakita



34

Nakitang namumunga at  
namumulaklak na puno





## KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY Dumaran, Palawan

**May 2021**

Prepared by:

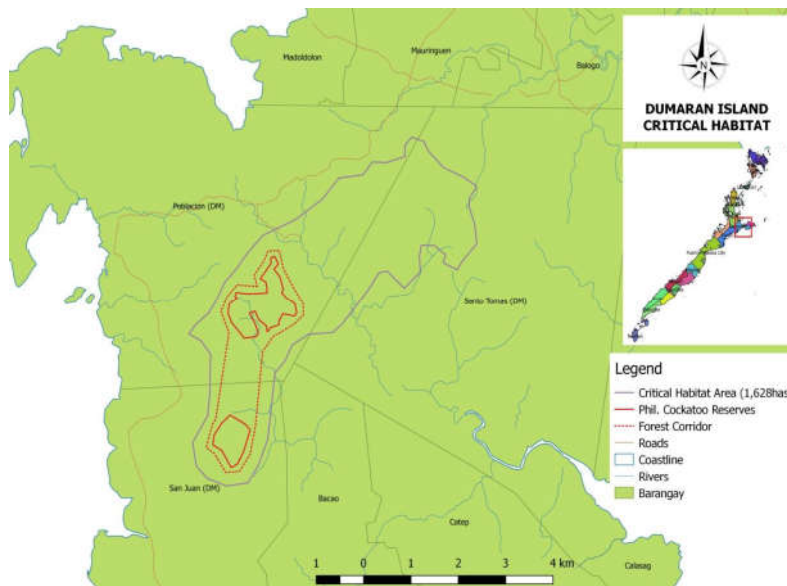
**Michael F. Plazos, Lemuel Pabico, Peter Widmann and Indira D. L. Widmann**

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

Dumaran is situated in north-eastern Palawan between 10°22' and 10°41'N and 119°28' and 119°55'E. Nine Barangays are situated on Palawan mainland, seven on western Dumaran Island. The island is situated in the Sulu Sea and separated by a ca. seven km wide channel from the mainland.

On Dumaran Island only few small and isolated forest patches remain, none of them larger than 103 ha. The most abundant formation is evergreen and semi-evergreen lowland forest with Ipil *Intsia bijuga*, Amugis *Koordersiodendron pinnatum* being emergent tree species of commercial value. Ornithological surveys conducted by Katala Foundation so far yielded 136 species from the island. A prominent species of conservation concern is the Philippine Cockatoo, which can be found with viable population in the mangroves and forest remnants of Dumaran Island, but apparently not anymore on the mainland. The last remaining forest patches are therefore of global conservation concern. This notion is supported by the recent records of other globally threatened species, particularly the Palawan Forest Turtle *Siebenrockiella leytenensis* (CR). Other species of conservation concern are Palawan Hornbill *Anthracoceros marchei* (VU), Blue-headed Racquet-tail (VU) and Palawan Pencil-tailed Tree-mouse *Chiropodomys calamianensis* (DD).

Habitat degradation and destruction, rather than poaching, remain the biggest challenge for cockatoo conservation in Dumaran.



**Figure 1.** Dumaran Island Critical Habitat connects two locally declared cockatoo reserves and establishes a corridor through reforestation and assisted regeneration.

The Dumarán Island Critical Habitat (DICH), comprising 1,628ha, was established through PCSD Resolution No. 14-513 that connects the two existing cockatoo reserves through a corridor and extends to include remaining forest fragments in the area (Fig. 1). This is the first critical habitat established in the Province of Palawan. A Local Protected Area Management Committee (LPAMC) functions as its interim management body.

### Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within the declared Critical Habitat.
2. Identify and preserve priority sites for conservation and maintain their ecological functions.
3. Prevent and report to enforcement agencies illegal activities that compromise the integrity of the conservation area.

### Conservation Targets

1. To stabilize cockatoo population on Dumarán Island, Dumarán from 2018-2021.
2. Increase viable population of endangered and endemic target cavity-nests e.g., Palawan Hornbill, Blue-naped Parrot, Blue-headed Racquet-Tail etc. in Dumarán from 2018-2021.
3. Reduce threats in the area by 50% from 2018-2021.

### Methods

Deputized wardens patrol by foot within site and there are times by boat especially when patrolling is done along the mangroves area or within the separate island. 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 bio-indicators (IUCN, 2019). Ease of identification in the field was considered as well. The maps are generated and analyzed through QGIS.

Patrols are coordinated with the concerned barangay, LGU and Bantay-Dumarán wherever it applies.

## II. PATROL TEAM AND EFFORT

Monthly patrol and monitoring included the recording of fruiting wild trees for Cockatoos and other wildlife as well as threats inside and outside the Critical Habitat. The wardens covered 403.92km within the Omoi and Manangbaling Protected Area, forested area within Bulalakaw, Candez and Kasipulo and coastal areas of Bgy. San Juan. There were 10-18 Philippine Cockatoos observed at the roost site during the month of May 2021. Most of the time, 18 cockatoos were observed. Fair weather was observed throughout the month.

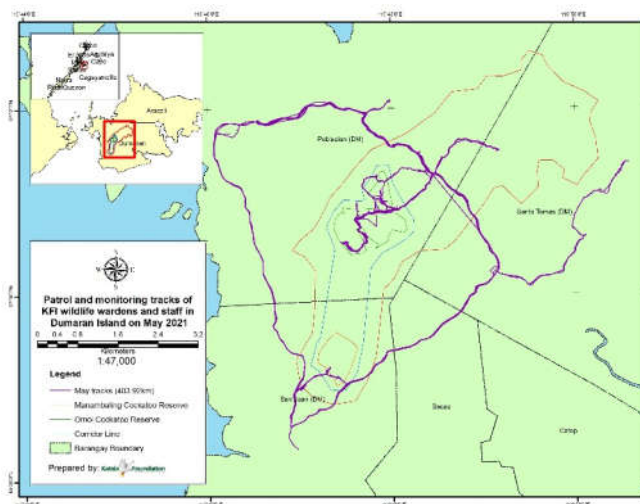


Figure 2. Patrol tracks of wildlife wardens for May



### III. PATROL OBSERVATIONS

#### ***Breeding Season 2020***

Four natural nests of Philippine Cockatoo were checked. One pair had a second clutch of two eggs yet was found infertile. This pair had two failed attempts this year. One banded hatchling from another occupied nest has successfully fledged. Biometrics and blood samples were taken from hatchlings for DNA sexing and PBFD tests. Gold, a released bird in 2016 bred successfully this year again with one hatchling. We note that Gold hit the news last year when it had its first successful hatchling after released in 2016. Two artificial nest boxes (ANBs) are occupied this year by the cockatoos. One has three hatchlings which very unfortunately were all lost due to competition with Hill Myna. The latter expelled one hatchling from the nest which was found dead on the ground and the other two were severely injured on the head. Both were rescued but succumbed to their wounds the day after. The other ANB is occupied by Wescom, one of the released birds in 2016, a male confiscated from Wescom and rehabilitated at our center in Narra and brought to Dumaran to help in supplementing the natural population.



**Figure 3.** (Left) Two hatchlings badly injured by Hill Myna succumbed despite rescue efforts; this year's hatchling of Gold (right). Gold hit the news in 2020 when it first bred after release in 2016. Photo by KFI

For the other parrots: Twelve nests of Blue-naped Parrot were checked of which 17 successful fledglings were recorded from 10 nest trees while two more nest trees have two hatchlings each nearing to fledge. Eleven nests of Blue-headed Racquet Tail were checked and nine of these have hatchlings and three have eggs as of this reporting period.

For other cavity-nesters: None of the known **Hill Myna** nests was occupied this year. However, we have noticed them competing with cockatoos and other cavity-nesters. Two ANBs were occupied by Hill Myna. One **Gokgok** nest has two eggs. One **White Collared Kingfisher** nest has three fledglings. Two more ANBs were occupied by **Dollarbird** with five hatchlings and one egg. Four potential nest trees of **Red-headed Woodpecker** were discovered this year but only one has confirmed two eggs.

### **Wildlife Observations**

Thirty- eight wildlife species were recorded this month in the reforestation site of Omoi and in several Biodiversity System Monitoring (BMS) stations in the DICH including the target species Philippine Cockatoo, Palawan Hornbill, Blue- headed Racquet -tail, and Blue- naped Parrot. Other bird species recorded were the Brown Shrike, Cattle Egret, Asian Glossy Starling among others. Non-avian species recorded were the Palawan Water Monitor, Palawan Horned Frog, squirrels, and rodents. Installed ground camera traps captured several wildlife which included the Palawan Bearded Pig, Long Tailed Macaque, Red Jungle fowl, Tabon Scrubfowl, otters, squirrels, and monkeys.



**Figure 4.** An otter captured in the camera trap

### **Supplementation of natural population**

We are intensely monitoring two released birds which have confirmed hatchlings. One is Gold which was released in 2016 and successfully bred last year. This year Gold has another hatchling we closely monitor. The other released bird is Wescom, a male confiscated bird in 2016 and was release in Dumaran same year. It is occupying an artificial nest box that was installed recently. We continue to monitor this progress and hopefully by June both hatchlings from these birds will be banded and successfully fledge. Other released birds in the recent years are observed foraging and have integrated with the wild cockatoos.

### **Foraging**

Trees inside and outside of the phenology plots at the two Cockatoo reserves were regularly monitored. Six tree species inside the plots were recorded to be flowering and fruiting: Kulayan, Iniol, Bunog, Amuraon, Anan, and Baringbing (photo right). These are all food providing trees for the Cockatoos. Trees outside of the plots that were fruiting and flowering were: Amuraon, Amumusing, Balite, Banaba, Banga, Bangkudo, Basa, Betad, Binunga, Bunog, Bunot- Bunot, Bonuang, Casay, Dulo, Iniam, Iniol, Kalampinay, Kulayan, Lago, Lanite, Luyong- Luyong, Magabo, Maranggo, Olandeg, Panapuan, Saleng, Somalagen, Tabigue, Tagalilong, Talisay, Taluto and Tebey.

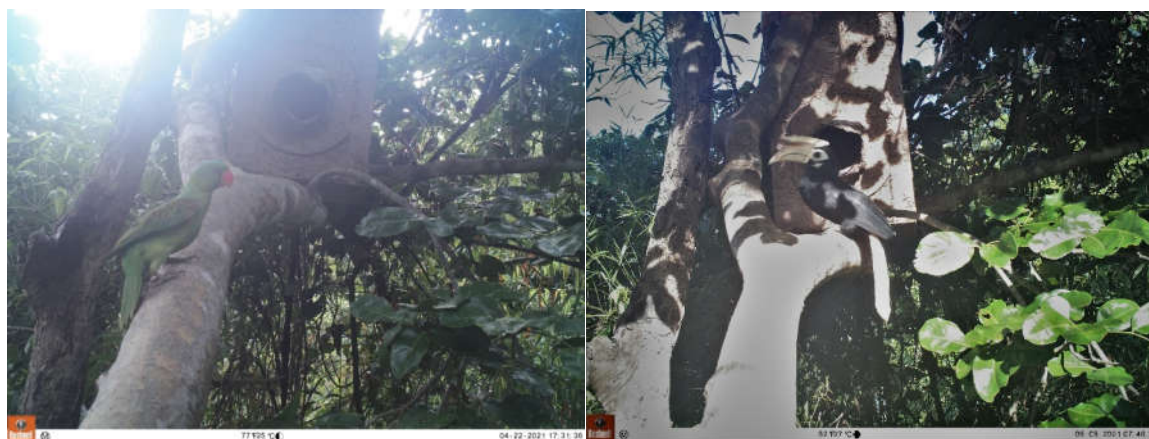


**Figure 5.** A flowering tree observed

### **Hornbill Monitoring**

Only one natural nest of Palawan Hornbill successfully bred this year with two hatchlings. One out of four artificial nest boxes for the hornbill was regularly inspected but not occupied by hornbill. One hornbill ANB is successfully occupied by a Gokgok with two successful fledglings. A potential new nest tree was discovered this year and occupied with two hatchlings and one egg. Until these will successfully fledge, we could count four hatchlings of Palawan Hornbill for this year.

There were one to four hornbills observed and recorded during the current month in the areas of Omoi, Candez, Kasipulo, Manangbaling, Bacao, Poblacion, and Camaya. Some of them were perched, call and make noise in trees of Kandis, Lagara, Coconut, Domalta, Talisay, Cashew, Lanite, Iniam, Gemilina, Ipil, Narra, Binunga, and Kulayan,. A camera trap installed in front of one of the ANB captured a hornbill visiting the ANB. Wildlife recorded in this camera trap were Tokay Gecko, squirrels and Blue-naped Parrot.



**Figure 6.** Blue-naped parrot (left) is one of the common birds taken from the camera traps set in front of an artificial nest box meant for the Palawan Hornbill (right). Photo by KFI.

#### IV. OTHER HIGHLIGHTS

Inventory of seedlings and wildlings at main and satellite nursery yielded the ff: 9,505 wildlings in the main nursery (most of them are Palomaria, Nato, and Dumaran); while currently 1,488 seedlings in Candez satellite nursery and 1,258 and in Manangbaling satellite nursery. There are no seedlings in the growth chamber. There were 4,499 trees planted this month. Candez area experienced a total of 444mm rainfall from fourteen daily occasions while Omoi area with 388mm from twelve daily occasions. Lagan had 173mm rainfall from five daily occasions this month.

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

Kaingin (Slash and burn) activities were observed this season outside the protected area and forested area. Persistent IEC campaigns must be pursued and livelihood options must be offered by the government especially by the Department of Agriculture or other agencies.





**Figure 7.** A pit viper sighted by a warden during one of the planting days in May (above); our wildlife wardens sharing a meal (baon) while on duty (below). They may look old but they are certainly strong to do work on site. Photo by KFI

## ACKNOWLEDGEMENT

Thank you very much to the LGU-Dumaran through the leadership of Mayor Arnel Caabay, Vice Mayor Pablo and their able staff, Municipal Administrator Alberto Ajud, MENRO Caabay, all department heads, barangay officials, and everyone in the LGU for helping us always with utmost attention.

We are indebted to our deputized wardens of Dumaran: Nestor Arzaga, Orlando Balmonte, Eddie Derecho, Angelu Paduga, Maximo Pineda and volunteers Domingo Sy, Felipe Condesa, and Andres Aurelio for their services and efforts provided to the KFI-PCCP Dumaran project.

Great thanks also to the PCSDS and DENR-ROXAS for their support. We are grateful to the whole KFI family and supporters for their help, assistance and sharing expertise and ideas.

We are indebted to the following organizations and agencies for providing funds for this project:



## References

- Critchlow, R., Plumtre, A.J., Alidria, B., Nsubuga, M., Driciru, M., Rwetsiba, A., Wanyama, F., 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 (2019). IUCN Red List of Threatened Species. Version 2016.1. ([www.iucnredlist.org](http://www.iucnredlist.org)).
- 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.