KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

August 2021 SUMMARY Dumaran Island Critical Habitat Dumaran, Palawan



14

Bilang ng nagawang patrolya



185.1

Kabuuang kilometrong naabot ng patrolya



Kabuuang oras ng patrolya



6100

Bilang ng natanim



0

Bilang ng nai-report sa mga awtoridad



Bilang ng ilegal na gawain na naobserba



25

Pinakamataas na bilang sa tulugan ng Katala



7

Pinakamataas na grupong Talusi na nakita



32

Nakitang namumunga at namumulaklak na puno















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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 mainland. The the last remaining forest patches are therefore global of conservation concern. This notion is supported by the recent records of other globally threatened species. particularly the Palawan Forest Turtle Siebenrockiella leytensis (CR). Other species of conservation concern are Palawan Hornbill Anthracoceros marchei (VU), Blue-headed Racquet-tail (VU) and Palawan Penciltailed Tree-mouse Chiropodomys calamianensis (DD).

Habitat degradation and destruction, rather than

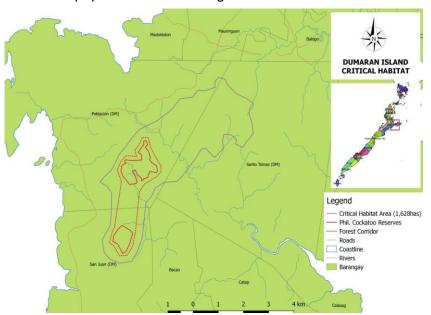


Figure 1. Dumaran Island Critical Habitat connects two locally declared cockatoo reserves and establishes a corridor through reforestation and assisted regeneration.

poaching, remain the biggest challenge for cockatoo conservation in Dumaran.

The Dumaran Island Critical Habitat (DICH), comprising 1,628 ha, 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 Dumaran Island, Dumaran 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 Dumaran 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-Dumaran wherever it applies.

II. PATROL TEAM AND EFFORT

Monthly patrol consisted of recording fruiting wild trees for cockatoos and other wildlife as well as threat monitoring inside and outside the Critical Habitat. Wildlings and driftwood to be used in artificial nest box (ANB) construction were also collected; there were two good driftwood collected. The wardens covered about 185.1km patrolling within the Omoi and Manambaling Protected Area, tree planting area in Camaya, Aranlegan and Rillas Area in Bgy. Poblacion, Barong-bongan Area and coastal areas in Bgy. San Juan, and forested areas within Bulalakaw, Candez, and Kasipulo. There were four cut Kulayan trees observed within CH in areas of Sitio Palokpok, Bgy. Sto. Tomas. According to our informant, Roel Aborot allegedly was the one seen pulling the trees from the area using his carabao. We have reported this to the barangay concerned. Kaingin practices were also recorded but they were outside of PA and forested area. Nest characterization was also conducted on three newly discovered nests of Red-headed Woodpecker. Data were gathered and recorded using Open Data Kit (ODK) through a smart phone.



Figure 2. Map of patrol tracks in August (top); and cut Kulayan trees recorded during monitoring (bottom).

III. Patrol Observations

Roosting

There were 14-25 cockatoos observed at the roost site during the month; these numbers were observed in both morning and afternoon. Most of the time (10 days), 20 cockatoos were observed. Fair weather was observed most days of the month but there were five instances of afternoon rainfall in the roost and four cloudy days. We are consistently monitoring the four roosting cockatoos in the coconut area in Bgy. Poblacion. They were observed coming to and

from the Poblacion proper, the mangroves area, and Salvacion Area. These cockatoos comprised of two adults and two hatchlings.

We have also initiated synchronized counting of cockatoos in eight stations namely: Lagan, Bacao, Omoi, Manambaling, Kasipulo, Candez, Poblacion, and Salvacion. We conducted two synchronized counting this month, the dusk of August 24 and dawn of August 25. We have counted 31 roosting cockatoos from 5:55pm to 6:04PM on August 24 on three different areas i.e., Lagan (25), Omoi (4), and Manambaling (2). We assumed that the three cockatoos passing through Bacao at 4:40pm and the six cockatoos passing through Kasipulo at 5PM were part of the roosting cockatoos in either Lagan or Omoi. In the morning of August 25, the 25 roosting cockatoos in Lagan flew directly to Bacao at 5:30am; at 6:10am there were 13 perched cockatoos on a Taluto tree in Bacao and four cockatoos feeding on a Malunggay Tree which we assumed came from the roosting cockatoos in Lagan. The four roosting cockatoos in Omoi flew to Candez while the two cockatoos in Manambaling flew to San Juan.



Figure 3. Observed cockatoos during monitoring in Lagan and other forested areas.

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. These were Anan, Kulayan, Luwas-luwas, Amuround, Pagatpat and Casay. Some of the trees in Omoi and Manambaling plots were shedding leaves. Thirty-two food-providing trees outside the plots were recorded to be fruiting and flowering. These are Agboy, Amuaron, Anan, Balintanag, Banaba, Barok, Batbat, Betad, Begnay, Berrie,Bunot- Bunot, Bunog, Casay, Dangkalan, Domalta, Duguan, Dumaran, Imamangal, Iniam, Kalampinay, Kandis, Kulayan, Lamoto, Lanete, Mulawin, Olandeg, Panapuan, Saleng, Tagalilong, Tagpe, Taulili and Tebey. This was twice the number of recorded fruiting trees compared to last month (16).



Figure 4. Fruiting trees recorded in Lagan; Pagatpat (left) and Anan (right).

Supplementation of natural population

Released birds in the recent years were now foraging and inhabiting the island just like the wild cockatoos. They were sighted passing, perching, and feeding on wild fruits at Omoi, Candez Area, Bgy. Poblacion, Bgy. Bacao, Manangbaling and Bgy. San Juan. Birds that reached households and kaingin areas were shooed away by residents due to their knowledge that taming cockatoos will be detrimental to the population.

Hornbill Monitoring

Hornbill observations were also regularly recorded. Groups of two to seven hornbills were observed in Omoi, Candez, Manambaling, Bacao, Camaya, and Aranlegan. Most of the observations were recorded in Omoi (12 observations). Hornbills were observed perching, biting, and making noise on Kulayan, Balite, Cashew, Ipil, Saleng, Gmelina, Somalagen, Amugis, Taluto, Talisay, and Nato trees. As in the previous months, the camera trap installed on a hornbill ANB captured several other species apart from the hornbill like gecko and squirrel.

Other Wildlife Species

A total of 54 species were recorded in the Biodiversity Monitoring Station and in the reforestation site in Omoi. This included target cavity-nesters such as Philippine Cockatoo, Palawan Hornbill, Blue-headed Racquet-tail, and Blue-naped Parrot. Other avian species recorded were Tabon Scrubfowl, Crested Serpent Eagle, Great Slaty Woodpecker, Chestnut-breasted Malkoha, Blue Paradise Flycatcher among others. Monkeys, snakes, squirrels, rats, and monitor lizards were also encountered during monitoring and observation.

Ground camera traps also recorded several wildlife species including Philippine Megapode, Red Junglefowl, White-vented Shama, Philippine Pitta, Hooded Pitta, Palawan Water Monitor, Palawan Tree Shrew, Long-tailed Macaque, squirrels, rats, and night-heron.



Figure 5. Recorded wildlife in camera traps (clockwise): Philippine Megapode, Palawan Tree Shrew, Palawan Water Monitor, and Philippine Pitta

III. OTHER HIGHLIGHTS

There are 10,645 wildlings in the main nursery; most of them are Nato, Palomaria and Dumaran. A total of 2850 wildlings were collected for the nursery and the same number were released for planting. In Candez satellite nursery, there are currently 1, 476 wildlings; this total was after deducting 13 wildlings that died this month. Most of the wildlings in the latter nursery are Nato. A total of 1,235 wildlings are present in Manambaling satellite nursery; this is after subtracting eight dead wildlings and 45 wildlings released for planting. Most of the wildlings in Manambaling are Palomaria. There are no seedlings in the growth chamber.

Regular works in the nursery were continuous for the month i.e., potting of soils and wildlings, watering of plants, cleaning, and wildlings inventory. Roof of the nursery was also replaced if necessary and seed beds were constructed to support collected wildlings.



Figure 6. Wardens making additional seedbed that will serve as recovery area of newly collected wildlings (left); and potting of soils for the collected wildlings (right)

There were 6,100 trees planted within the Camaya area inside the Critical Habitat. Planted trees came from the nurseries (2895) and through direct boling (3205). Most of the planted trees were Baslayan, Palomaria, and Domalta. Candez area experienced a total of 521mm rainfall from 21 daily occasions, Omoi area with 383mm from 17 daily occasions and Lagan with 328mm rainfall from 13 daily occasion.



Figure 7. Wildlife wardens planting wildlings in the Camaya Area

Breeding Season Assessment

All issues, concerns, problems encountered, and suggestions were heard, talked and discussed during the breeding season assessment last August 15. Plans for next year's breeding season were noted.

Competition of cavity-nesting birds was the main concern this breeding season, particularly with the Hill Mynahs that we assume are attacking and intruding the nests of other birds. The distance between nest and nest trees made it difficult for monitoring, add also the short number of climbers in the site i.e., three. Nonetheless schedule of checking and monitoring was followed.

The wardens noticed scarcity of Malunggay on nearby areas; Malunggay are abundant only at Lagan, Bgy. Bohol, and Bgy. Bacao. Other fruits are available nearby. It was decided that Malunggay trees will be planted within Omoi and Bgy. Sto. Tomas. There were no communication problems encountered.

Over-all, this year's breeding season was a success due to the high number of successful fledglings of many cavity nesters, albeit small number of cockatoo fledglings. However, Gold had its second breeding and another translocated bird bred this year, and in an ANB for that matter.



Figure 8. Wardens during the breeding season assessment of 2021. Results, issues, concerns, and future plans were discussed and talked upon.

Meetings attended

KFI was invited by the Department of Environment and Natural Resources (DENR) for a public consultation regarding Protected Area Suitability Assessment (PASA) last Aug 6, 2021. According to them, no more mangroves will be used, damaged, and destroyed in the island, instead planting of more mangroves should be done.



Figure 9. KFI field officer Plazos during the public consultation of DENR in Bgy. Sto Tomas (left) and Bgy. San Juan (right).

KFI staff also attended regular meetings like Solid Waste Management Board Meeting and ECAN Board Meeting last August 19, 2021. We have also attended Municipal Devolution Transition Meeting last August 20, 2021.

A prior meeting was also conducted by DENR, local government unit (LGU) of Dumaran, and KFI staff last August 26 regarding the meeting and consultation with holders of Certificate of Stewardship Contract (CSC) on the following day of August 27. This is an offshoot of the first meeting conducted in February 2021. The meeting on August 27 was attended by CSC holders inside and outside the DICH. The DENR explained to the holders that they should only developed areas that were awarded to them based on the contract and expansion is subject to cancellation of contracts. It was also explained that if there is expansion in their area, this should not be developed in the future. Field evaluation was conducted the following days after the meeting; priority of evaluation are CSC holders inside the DICH, but those outside the DICH will be evaluated too according to the DENR.

Survey and Evaluation os CSC holders in Bgy. Sto. Tomas, Dumaran

Twenty seven out of 29 CSC holders in Bgy. Sto Tomas were evaluated from August 28-30, 2021 but only eight CSC holders have their area remeasured. Some of the holders agreed that unawarded areas they cultivated will be claimed by the authorities while some were hostile which prevented the evaluation team from entering the areas. Initial assessment shared by DENR in Feb. 2021 revealed that 16 out of 20 assessed CSC holders exceeded their area of cultivation while others have even sold their awarded areas.

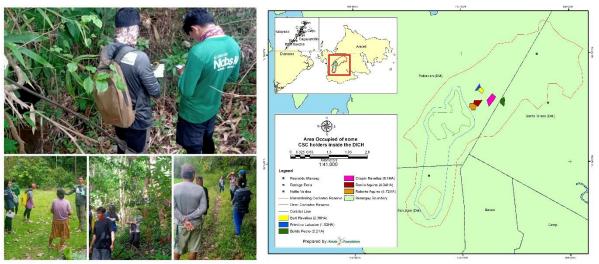


Figure 10. During the conduct of survey and evaluation to areas of residents with CSC holder (bottom-left), MP and DENR staff while getting GPS readings of the areas surveyed (top-right). Map of the areas occupied by some CSC holders.

IV.ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Kaingin (Slash and burn) activities were observed this season outside and inside 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.

As regards the evaluation of the CSC holders in Dumaran Island especially those inside the declared Dumaran Island Critical Habitat (DICH), we look forward that the DENR takes the lead in presenting the results of its field evaluation to all stakeholders. It should be made clear that these CSC holders are due indeed for evaluation after over 25 years they have not been assessed since granted this stewardship award. This is also to explain that it is not the KFI that demands this evaluation. There should be clear consequences (i.e. forfeiture of renewal) for CSC holders that over expanded beyond their awarded area, also in fairness to compliant holders. We also look forward that all key stakeholders from government agencies, CSC holders and KFI will work hand in hand to harmonize these areas without compromising the integrity of the forest fragments and the value of the remnant lowland forests on Dumaran and its restoration efforts that have been done.

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References

- Critchlow, R., Plumptre, 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).
- 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.