

# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY SEPTEMBER 2022 SUMMARY IPPF-PPC, Palawan



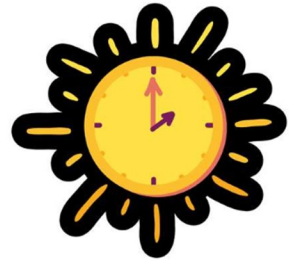
11

Bilang ng nagawang  
patrolya



162.88

Kabuuang kilometrong  
naabot ng patrolya



29.68

Kabuuang oras ng patrolya



1

Bilang ng illegal na  
aktibidades



0

Bilang ng naaresto



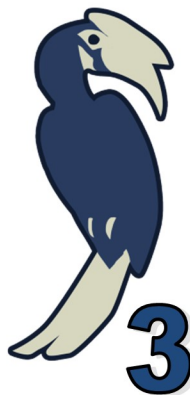
1662

Bilang ng halaman sa nursery



78

Pinakamataas na bilang sa  
tulugan ng Katala



3

Pinakamataas na  
grupo ng Talusi na nakita



16

Pinakamataas na bilang ng  
katala sa kinakainan



Anonymous  
Donor



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Biodiversity Management Bureau



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## KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY IWAHIG PRISON AND PENAL FARM (IPPF)

**September 2022**

Prepared by:

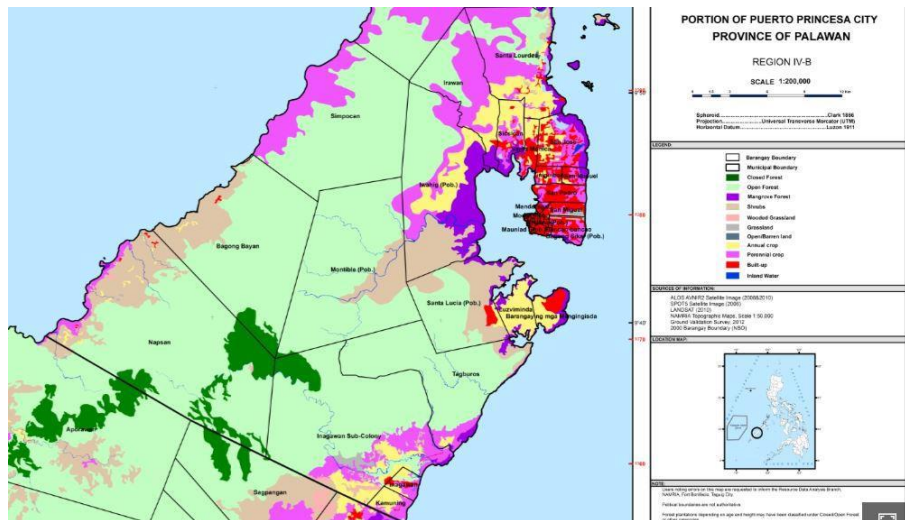
**Matt Brian P. Ong, Vicente Abendan Jr., Joshuael Nuñez, Peter Widmann and Indira D.L. Widmann**

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

IPPF is part of a larger landscape, the Sulu Sea plain, which comprises the lowlands of central Palawan facing the Sulu Sea and including areas of Puerto Princesa City and the municipalities of Narra and Aborlan.

The area is bordered by the Victoria-Anepahan Range to the west and the Sulu Sea to the east; the northern edge runs roughly along 9° 47' N, the southern along 9° 9'N.

Philippine Cockatoos have long been known to persist in the IPPF south of Puerto Princesa City. More recent are flocks of cockatoos from Rasa feeding on the mainland of Narra, and from Iwahig Penal Colony feeding in coastal areas of Puerto Princesa City,



**Figure 1.** Land use of southern Puerto Princesa, including IPPF according to NAMRIA. Large areas were classified as open forest (bright green signature); this is not in line with observations on site, where large areas of closed forests were recorded particularly in portions of Iwahig, Tagburus ("Zigzag") and Montible (Source: NAMRIA)

particularly in the compound of the Western Command (WESCOM) and Bgy. Bancao-Bancao. Large parts of the coastal plains are cultivated, mainly with coconuts and rice paddies, particularly in Narra and Iwahig, where irrigation is available. Extensive areas of disturbed grassland-forest mosaics persist, which are habitats for a surprisingly high number of Palawan endemics. One explanation for this phenomenon could be that the present vegetation resembles that of some periods in the Pleistocene. These areas are used as pastures but also for the collection of a wide variety of forest products. Grass fires are a regular occurrence and partly the vegetation is adapted to these occurrences (*Antidesma* fire savanna). Extensive



evergreen and semi-evergreen lowland forests exist at the foot of the Victoria Anepahan Range, on fossil limestone reefs in Narra and Aborlan, south of the Bay of Puerto and in the Iwahig Penal Colony. Particularly the latter area is of outstanding conservation importance. All endemic lowland bird species are recorded from the area. Globally threatened species, aside from the Cockatoo, include Palawan Peacock-pheasant *Polyplectron napoleonis*, Blue-headed Racquet-tail *Prioniturus platenae*, Palawan Hornbill *Anthracoceros marchei*, Red-headed Flameback *Chrysocolaptes erythrocephalus* Great Slaty Woodpecker *Mulleripicus pulverulentus*, Falcated Wren-babbler *Ptilocichla falcata*, and Palawan Flycatcher *Ficedula platenae*. Because of the abundance of brackish and freshwater wetlands Iwahig Penal Colony is an important wintering ground for waterbirds, including the endangered Black-faced Spoonbill *Platalea minor*.

### Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within Iwahig Prison and Penal Farm (IPPF).
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. Increased number of Philippine Cockatoo breeding pairs in Iwahig Prison and Penal Farm by at least 10% by 2024 (Baseline: average breeding pairs 2019 to 2021: 9.3).
2. Reduced threats in the area by 50% from 2022 to 2024.
3. Restored at least two hectares of cockatoo breeding and foraging habitats annually by 2024
4. Established a critical habitat for the Philippine cockatoo and other threatened wildlife species within the Iwahig Prison and Penal Farm and support the protection of the proposed Montible watershed.

### Methods

Deputized wardens patrol by foot or by boat monthly within site. Patrol members use a technology-based system to register all observations (threats, status and wildlife data) in the android and transferred them 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 analyzed through QGIS.

Patrols are coordinated with the concerned barangay, prison farms, protected area office wherever it applies.

## II. PATROL TEAM AND EFFORT

The patrol team composed of KFI, DENR, IPPF personnel, and wildlife wardens conducted habitat and nest monitoring, while other activities were roost and foraging areas monitoring within the city, breeding habitat, and the surroundings of the penal farm. The team covered a total of **162.68 km** in **September**. Please refer to the list of team members on the last page.

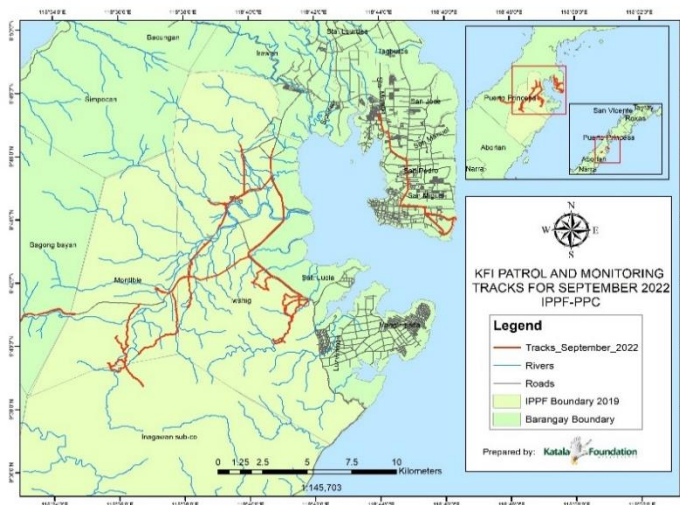


Figure 2. Patrol tracks for September 2022 ©KFI

### III. PATROL OBSERVATIONS

#### A. WILDLIFE OBSERVATIONS

- *Intensive monitoring in foraging and roosting areas continued.* The team conducted roost monitoring in the city and the penal farm's surroundings. The highest count in the city was 78; at daytime (5:10 am – 5:30 pm), cockatoos were observed preening in the mangrove area before they dispersed to forage in different parts of the city. Meanwhile, in Montible, no roosting cockatoos were observed at the traditional roosting site. Few sightings of cockatoos crossing the Tagtalaba River to Iwahig Central were observed. Concerned citizens also reported some sightings through our social media page. KFI volunteers also reported sightings of Katala in the San Miguel area going to Hartman beach to forage. The team also observed at least five cockatoos hovering in WESCOM area where we reported of a caged cockatoo.
- *Habitat monitoring and nest characterization in Montible.* This month, a three-day habitat monitoring and nest characterization was done in Montible. A total of five active nest trees and two potential nest trees were characterized. Tree data such as height, diameter at breast height, and nest hole measurements were collected. A 20 x 20 m quadrangular plot was also established to measure vegetation coverage, the number of stems, woody species, and other parameters for microhabitat data. Meanwhile, newly fledged cockatoos and their parents were seen roosting in their nest trees; the highest number of cockatoos seen in the Malabo Forest was five individuals; others were also observed foraging near their nest trees.



**Figure 3.** Snapshots during nest characterization of nest trees in Malabo Forest. ©MBong KFI

- *Observation of wildlife and other cavity nesters monitoring.* Three Palawan Hornbill were seen perching in km 26 in Montible. Blue-naped parrots were also present in all areas visited for the month; we also recorded a Blue-headed racket-tail inside Iwahig central and in the Montible sub-colony. Other avian species recorded in September include Yellow-throated leafbird, Palawan peacock pheasant (calls), Hill myna, Spot-throated Flameback, Black-headed Bulbul, Palawan Bulbul, Rufous-tailed Tailorbird, Garden Sunbird, Great Slaty Woodpecker, Black-naped Oriole, Common Iora, Palawan Drongo, Oriental Dollarbird, Palawan fairy blue-bird, White-vented Shama, Pink-necked Green-pigeon, and Hooded Pitta. Non-avian species include the Palawan-flying Squirrel, Palawan Tree Squirrel, Palawan Stink badger, Palawan bearded pig (tracks), Palawan porcupine (decayed), and some species of reptiles, including a skink sp., Palawan-monitor Lizard, Two-striped Coral Snake, and Speckle-bellied Keelback.



- Five artificial nest boxes made from plywood and an old tree trunk with a cavity were constructed and repaired by KFI. The said ANBs are ready to be installed within the penal farm to supplement the nest trees that were felled by typhoon Odette last year.
- KFI conducted distance sampling of cavity nesters and other avian species within the penal farm during the reporting period; six transect walks within Montible and Malabo forests were conducted. Out of the six transect walks, 55 stations were established. Some notable species recorded during the sampling are the Palawan hornbill, Palawan Peacock-pheasant, Palawan Bulbul, Yellow-throated Leafbird, and Philippine cockatoo; all endemic to Palawan and the Philippines, respectively.



**Figure 4.** Palawan island endemics; Two-striped Coral Snake *Calliophis bilineata* (left) and Yellow-throated Leafbird *Chloropsis palawanensis* (right) ©MB.Ong, KFI

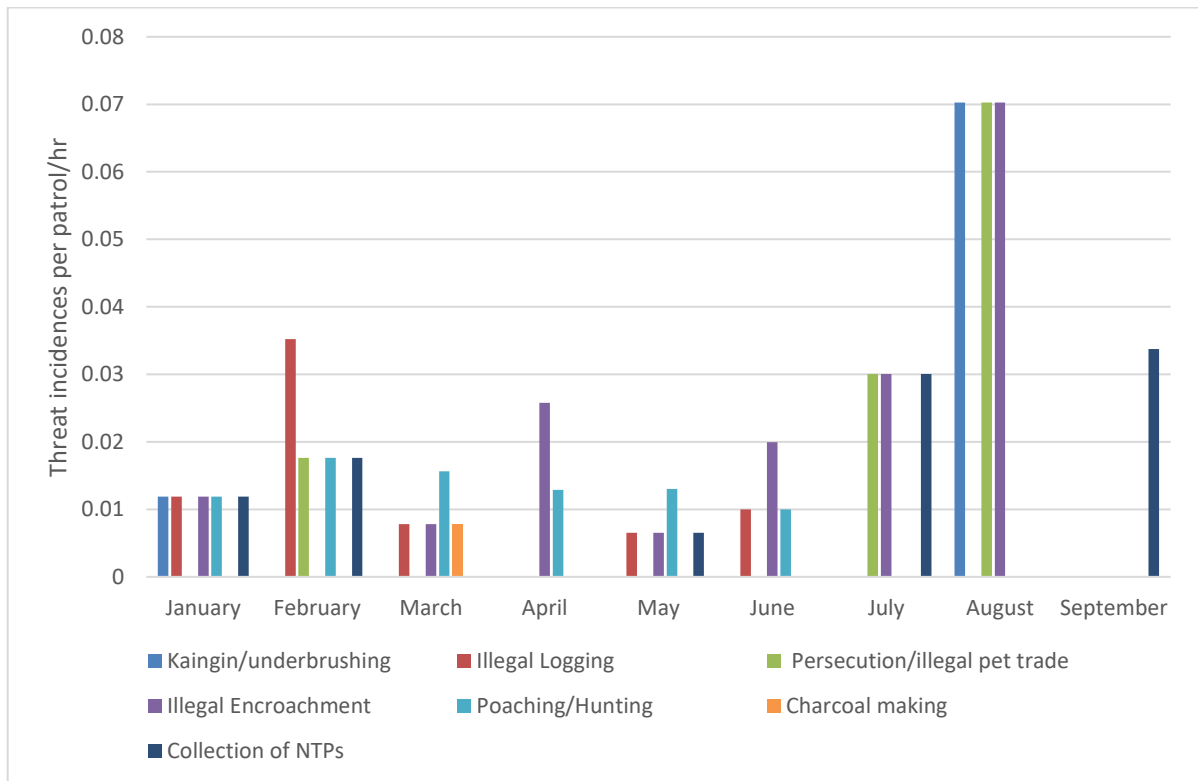
## B. THREAT OBSERVATIONS

- In Montible, rattan collectors moved to a camp near a known nest tree of Katala. The team was able to talk to one of the collectors and asked them not to disturb and vacate the area as soon as possible.
- The previously reported caged cockatoo in the city was sporadically displayed in the cage. We also noted that some wild cockatoos are flying nearby to check the enclosure.
- Data from threat rates (Fig. 5) show that habitat destruction and persecution continue to exist and are widely practiced in the penal farm and in the city, where kaingin, illegal logging, and encroachment occur year-round. Meanwhile, records of persecution/illegal pet trade were found near the end of the breeding season.

## IV. OTHER HIGHLIGHTS

- *Environment and Tourism Sector Development Agenda.* On September 23, KFI participated in a workshop spearheaded by LGU of Puerto Princesa City and USAID. The Cities for Enhanced Governance and Engagement (CHANGE) project of USAID aims to support and strengthen democratic governance in the Philippines. The workshop's main objectives were identifying issues relating to Palawan's environment and tourism sector. The CHANGE project, research, and CSO agenda were also discussed during the workshop. The Palawan State University also presented the curriculum of the new master's degree program (MSc in Environmental Management) offered by the university.
- *PhilSA project.* On September 23, in partnership with Philippine Space Agency, KFI attended the PINAS Palawan workshop. PhilSA presented their projects and data

collection methods using PhilSA's project form and data management. Some basics of GIS, remote sensing analysis, planning, and product enhancement were presented during the workshop. Data allocation and requests can also be sourced via Space Mission Control and Operation Bureau. KFI's representative, Joshuael Nuñez, shared his insights during the workshop with the KFI team in Puerto Princesa. Remote sensing is a big part of biodiversity conservation since it can provide land covers and land use, predict species distribution, map out threat hot spots, and characterize biodiversity directly.



**Figure 5.** Threat rates data for the first three quarters of 2022.

## V. ISSUES, CONSTRAINTS, AND ACTIONS TAKEN

- Increased patrolling in the sites is necessary to avert further destruction of lowland forests. Continued tree planting within these areas is a must.
- Authorities should monitor and regulate rattan collectors in Montible.
- The report of citizens about two cockatoos caged in a house near WESCOM was relayed to PCSDS since July. The latter told us that their operatives visited the area but didn't see the cockatoos. This is contrary to citizens' reports and our visit that confirmed the presence of the birds in the cage. We hope a thorough investigation can be done ASAP so not to discourage citizens from reporting illegal activities.

## VI. RECOMMENDATIONS

Policies on and better enforcement of lowland forest protection and conservation must be implemented and sustained, especially within IPPF and the Victoria Anepa'an Mountain Range (VAMR)! Lowland forests harbor more biodiversity than montane forests; thus, they should be protected against encroachment and further destruction.

## ACKNOWLEDGEMENT

We are grateful and appreciative to our partners from the DENR-CENRO Puerto Princesa City through CENRO Office and Palawan Council for Sustainable Development Staff (PCSDS) through Atty. Matta, Western Command, and Iwahig Prison and Penal Farm (IPPF) through CSupt. Joel R. Calvelo for their unrelenting support.

We also appreciate the help of CTOIII Earl Jude A. Arias from the IPPF. We also want to thank those community members who send us their cockatoo sightings in the city.

To all those who, in one way or the other, had contributed to the achievement of our shared vision for the conservation of biodiversity in the IPPF, great thanks!

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



## 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.
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**Figure 6.** Environment and tourism development sector and PhilSA project presentation within the KFI team (top), construction of artificial nest boxes (middle), snapshots from distance sampling in Montible (bottom-left) and a Speckle-bellied Keelback that was seen during the monitoring (bottom-right) ©MBong KFI



# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY OCTOBER 2022 SUMMARY IPPF-PPC, Palawan



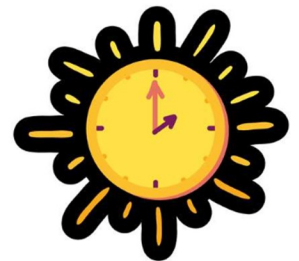
18

Bilang ng nagawang  
patrolya



280.31

Kabuuang kilometrong  
naabot ng patrolya



75.55

Kabuuang oras ng patrolya



6

Bilang ng illegal na  
aktibidades



0

Bilang ng naaresto



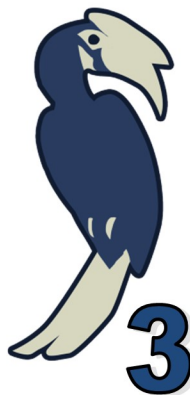
1634

Bilang ng halaman sa nursery



92

Pinakamataas na bilang sa  
tulugan ng Katala



3

Pinakamataas na  
grupo ng Talusi na nakita



25

Pinakamataas na bilang ng  
katala sa kinakainan



Anonymous  
Donor



Department of Environment and Natural Resources  
Biodiversity Management Bureau



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**October 2022**

Prepared by:

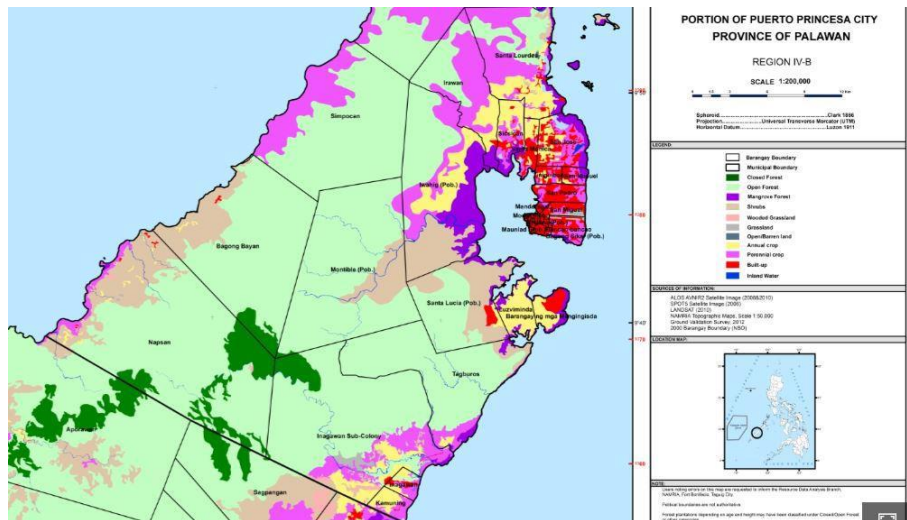
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Patrols are coordinated with the concerned barangay, prison farms, protected area office wherever it applies.

## II. PATROL TEAM AND EFFORT

The patrol team composed of KFI, DENR, IPPF personnel, and wildlife wardens conducted a two-day nest, habitat, roosting, and foraging areas monitoring within the city, breeding habitat, and the surroundings of the penal farm. The team covered a total of **280.31 km in October**. Please refer to the list of team members on the last page.

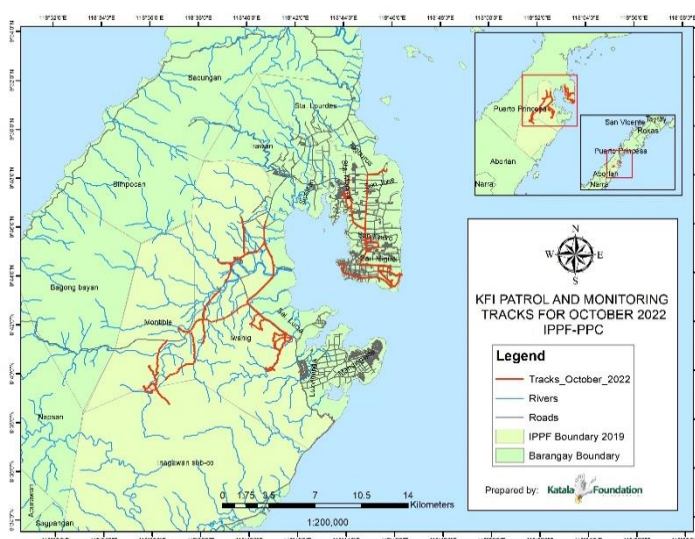


Figure 2. Patrol tracks for October 2022 ©KFI

### III. PATROL OBSERVATIONS

#### A. WILDLIFE OBSERVATIONS

- *Intensive monitoring in foraging and roosting areas continued.* The highest count in the city was recorded on October 18 when we recorded 92 individuals. At daytime (5:25 am – 5:35 pm), cockatoos were observed preening on the Pagatpat tree before they disperse to forage in different parts of the city and in the surroundings of the penal farm. A maximum of 25 cockatoos were seen perching in a Kapok tree in San Miguel area heading to Hartman beach, while some cockatoos were also observed foraging on African Tulip tree in San Pedro area within the national road going to Abanico road. Other sightings of Katala in the city were also sent through are social media page. Meanwhile KFI conducted a 3-day synchronized counting of Katala in the city and the surroundings of the penal farm. Strategic vantage points were identified prior to the monitoring. The average number of cockatoos during the count was 64 and the highest was 79 individuals. Cockatoos were observed in all strategic vantage points except in Montible. No cockatoo sightings were reported in the Montible Sub-colony during the monitoring period.
- *Habitat monitoring, nest characterization and artificial nest boxes installation.* Last September we were able to characterize seven nest trees, for October we continued the habitat monitoring and nest characterization in Sta. Lucia, Luzviminda and Montible. While the other team of KFI conducted a seven transect walks for the distance sampling of cavity nester where at least 14 species were recorded. Eight nest tree/ANBs were characterized for this month. The average height of the nest tree recorded is 43 meters where 66 meters is the highest, the mean of the diameter above breast height (DBH) was 3.98m where the highest is 7.35m. Nest of cockatoos were also noted to be in the trees that were emergent or in the canopy level. Other parameters like vegetation type, canopy coverage, and number of woody species were also recorded. Meanwhile the team also installed five artificial nest boxes (ANB) in Sta Lucia and in Montible to supplement the scarcity of nest trees that was felled by the typhoon last year.



**Figure 3.** Snapshots during ANB installation within IPPF. ©MBOng KFI

- *Observation of wildlife and other cavity nesters monitoring.* Palawan Hornbill, Blue-naped parrots, Blue-headed racket-tail, Spot-throated Flameback, Dollarbird, Sulphur bellied and Palawan Bulbul, Rufous-tailed tailorbirds, Great Slaty Woodpeckers, Yellow-throated leafbird, Palawan peacock pheasant (calls), Hill myna, Black-headed Bulbul, Garden Sunbird, Black-naped Oriole, Common Iora, Palawan Drongo, Palawan fairy blue-bird, Brown Shrike, White-vented Shama, Pink-necked Green-pigeon, and Hooded Pitta. Non-avian species include the Palawan-flying Squirrel, Palawan Tree Squirrel, Palawan Stink badger, Palawan bearded pig tracks.



## B. THREAT OBSERVATIONS

In Luzviminda, the team heard chainsaw being operated near a known nest tree of Katala but we were not able to apprehend the individual since no security escort was present during the monitoring. Felled trees, dead monitor lizard (eaten), plantation of egg plants and other vegetables, were also seen along the trails of Luzviminda/Sta Lucia. Meanwhile encroachment and clearing of lands were still prominent in the area, during our visit at least two area were being cleared and some charcoal pits were also being operated.



**Figure 4.** Charcoal pits and felled trees along the trails of Luzviminda/Sta Lucia. ©MBOng KFI

## IV. ISSUES, CONSTRAINTS, AND ACTIONS TAKEN

- Increased patrolling in the sites is necessary to avert further destruction of lowland forests. Authorities should monitor diligently rattan collectors in Montible for possible illegal activities.
- The expansion of encroachment in Luzviminda area is very alarming. Law enforcement agency should patrol and conduct an inventory of individuals encroaching in the area.
- Continued tree planting within these areas is a must.

## V. RECOMMENDATIONS

Policies on and better enforcement of lowland forest protection and conservation must be implemented and sustained, especially within IPPF and the Victoria Anepa'an Mountain Range (VAMR)! Lowland forests harbor more biodiversity than montane forests; thus, they should be protected against encroachment and further destruction.

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**Figure 6.** Snapshots during ANB installation and nest characterization in Montible, Sta. Lucia and Luzviminda ©MBong KFI