

# CURRENT STATUS OF PARROT POPULATION IN MANUSELA NATIONAL PARK, SERAM ISLAND, MALUKU

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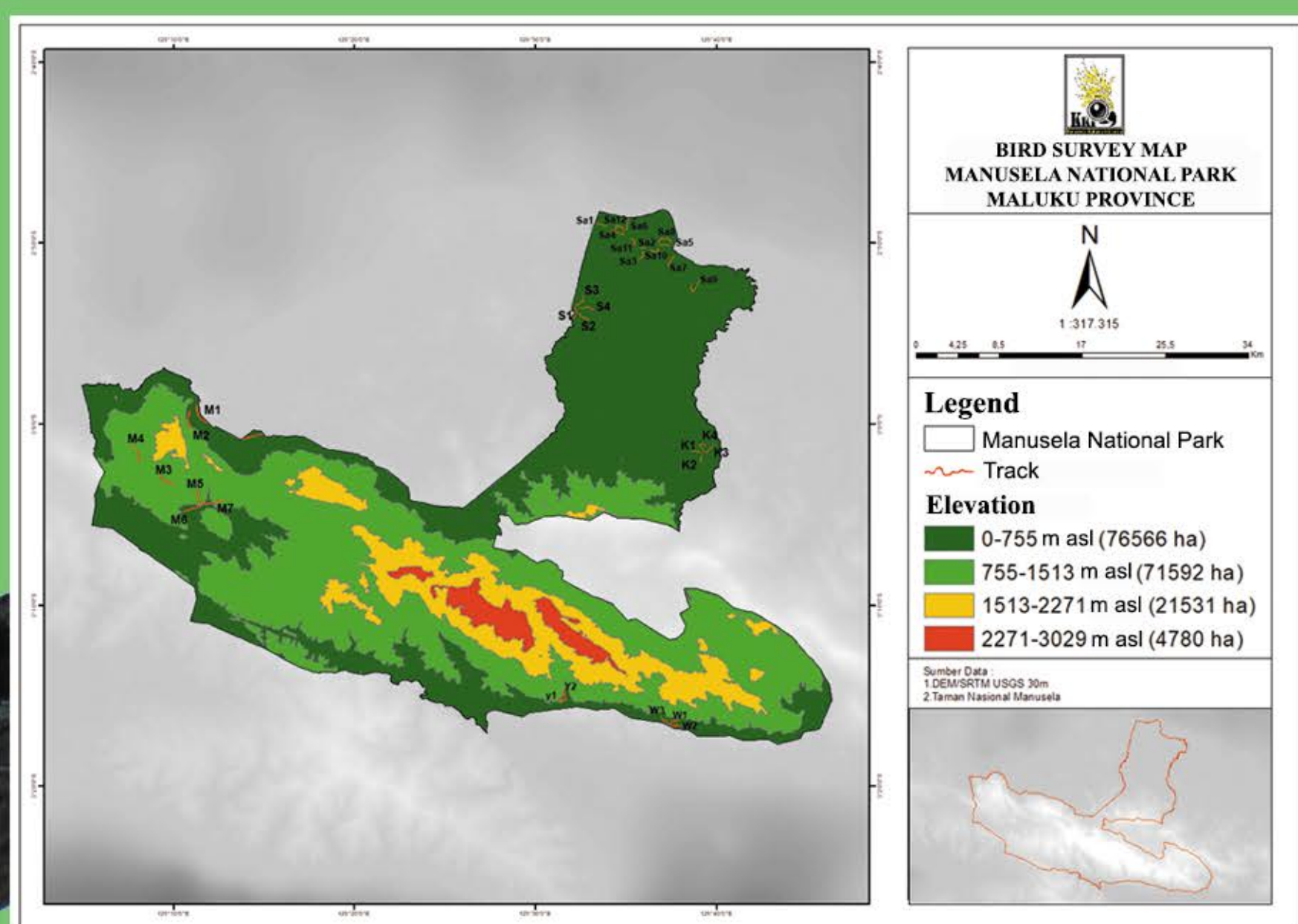
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## BACKGROUND

The exploitation of wild birds has been going on for centuries. Based on records, parrot in Indonesia, has been as pet before the eighth century (Kadarsan *et al.*, 1977). This is reinforced by the presence of carvings in the reliefs in several Temples in Java, which is built in the eighth and ninth centuries. One of the reliefs in both Prambanan and Borobudur temples is the relief of the yellow-crested cockatoo *Cacatua sulphurea* (Nandika *et al.*, 2013). Most people in Maluku, especially on Seram Island, still consider several birds as sacred species that are used in traditional ceremonies or rituals. The Seram community also believes that birds source of easy and fast money for their urgent needs. Illegal wildlife trade is the fourth most profitable organized crime in the world, after arms trafficking, drug trafficking, and human trafficking (Kurland *et al.*, 2017) and is worth around 32 billion USD per year (Johnson *et al.*, 2014). Based on data from BKSDA Maluku, birds is the first trade rank with 86% of species smuggled for trade in Maluku, and 96% of these bird species are parrots (Setiyani, 2020). The results of online trade searches, especially on Facebook in 2021, both legally and illegally traded in Singapore, 91% of them are Aves. About 59% of them are parrots and cockatoos from Indonesia (Chiok & Chng, 2021). A comprehensive evaluation of the global status of parrots revealed that one-third of the nearly 400 species are threatened with extinction, with aggregate extinction risk (IUCN Red List Index) higher than that of comparable bird groups (Olah *et al.*, 2016). This research is part of my Dissertation research to answer the purpose of the census to estimate parrot population, especially on three priority species (Salmon crested Cockatoo *Cacatua moluccensis*, Eclectus parrot *Eclectus roratus* and Blue fronted lorikeet *Charmosynopsis toxopei*).

## MAP OF MANUSELA NATIONAL PARK



## METHODOLOGY

The comparison study was carried out in 2020 at Masihulan Resort with seven observation tracks, and at Sasarata Resort with seven observation tracks and covered 249.9 ha. Then the observation was carried out from July 2023 to March 2024, in two locations of Manusela National Park:

(1) Tehoru region (south) at Mosso Resort (located in Wailomatan) and Saunulu Resort (located in Yamitala with a total of 5 observation tracks; (2) Wahai region (north) at Sariputih Resort (located in Kaloa), and Sasarata Resort (located in Sasarata and Solea). The observation covered 13 observation tracks of 160.65 ha. The total observation area is covered 410.58 ha.

The study used a mixed method of Fixed-Radius Point Count (FRPC) and Fixed-Width Line Transect (FWLT) methods, with a distance of one km and a radius of 50 m.

Data analysis used the Shannon-Wiener species diversity index and dominance.

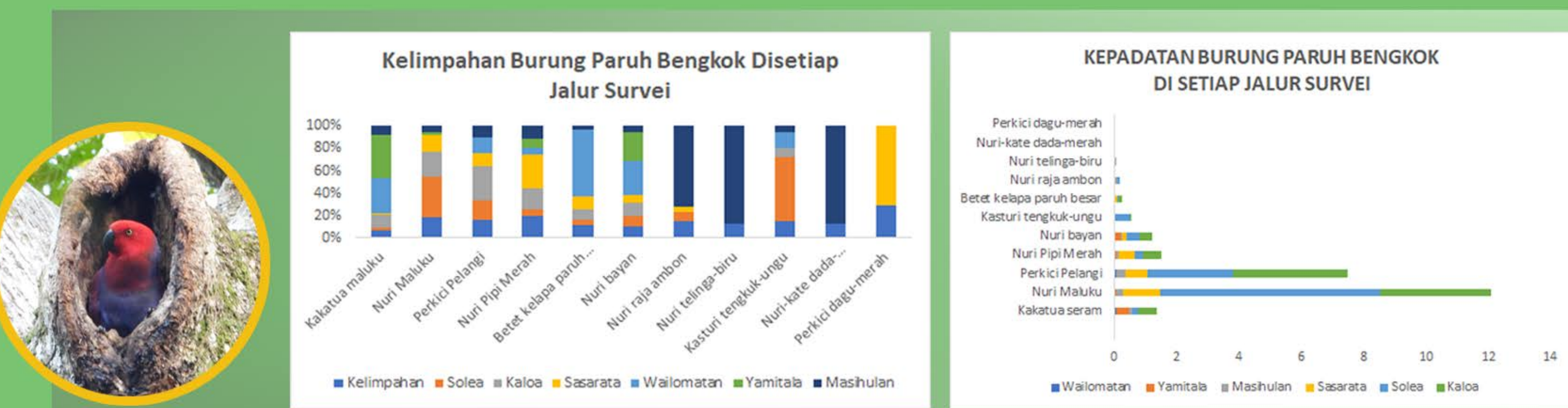
## ABSTRACT

Hunting and trapping parrot is still happen in Maluku. Birds especially parrot is their source of easy and fast money for their urgent needs. About 96% of trading bird in Maluku is parrots. This research is part of Dissertation research to answer the purpose of the census to estimate parrot population, especially on three priority species (Salmon crested Cockatoo *Cacatua moluccensis*, Eclectus parrot *Eclectus roratus* and Blue fronted lorikeet *Charmosynopsis toxopei*). The research was carried out in Manusela National Park (northern and southern part). The research calculated 95 species of birds from 41 families and recorded 11 parrots. Based on their distribution, 43 species were recorded as endemic, 25 species protected, 19 species. In the northern part of Manusela National Park, the Salmon crested cockatoo and Eclectus parrot are incubating the eggs in October. Meanwhile, for cockatoos and eclectus in the southern part of the National Park and Buru Island, the chicks have already been in fledgling step in September. The parrot abundance in Manusela National Park is very low, only two species are quite common: Red lory (21.3%), and Rainbow lorikeet (14.2%). There is very strong correlation between the decline in wild populations and hunting rates.

Keywords: hunting, Maluku, parrot, population, status

## RESULT

The observation results of two sections in Tehoru (south part) and Wahai (north part) in Manusela National Park calculated 95 species of birds from 41 families and recorded 11 parrots. Based on their distribution, 43 species were recorded as endemic, 25 species protected, 19 species included in Appendix II and one species was included in Appendix I of CITES. Based on the IUCN Red Book, about three species in Extinction status, one species Vulnerable status one species in Critically Endangered status on all survey locations.



## BREEDING SEASON, FOOD & HUNTING

In the northern part of Manusela National Park, the Salmon crested cockatoo and Eclectus parrot are incubating the eggs in October. Meanwhile, for cockatoos and eclectus in the southern part of the National Park and Buru Island, the chicks have already been in fledgling step in September. But, in Ambon island, the cockatoo hatched step in February, and the eggs are still in the nest.

The Cockatoo food trees inventoried: rambutan *Nephelium lappaceum*, durian *Durio zibethinus*, kenari *Canarium vulgare*, *Eugenia rumphii*, *Horsfieldia globularia*, *Calophyllum soulattri*, *Callamus sp.*, *Ficus sp.*, *Ochrosia coccinea*, *Fabernonthana aurantica*, matoa *Pometia pinnata*, Ketapang *Terminalia catapa*, coconut *Cocos nucifera*. The Cockatoo recorded used nest trees of Ketapang *Terminalia copelandii*, *Neuslea moluccana*, *Octomeles sumatrana*, *Duabanga moluccana*, *Falecateria moluccana*.

The Eclectus parrot recorded eating black Bintangur *Calophyllum sp.*, Kayu Loreng *Eucalyptus deglupta*, Koltada *Leea indica*, Pulaka/binuang *Octomeles sumatrana*, Kenari *Canarium vulgare*. Eclectus parrot also recorded used Ketapang tree *Terminalia copelandii*, Matoa *Pometia pinnata*, and *Canarium vulgare* as nest.

## SUMMARY

The parrot abundance in Manusela National Park is very low, only two species are quite common: Red lory with a relative abundance of 21.3%, and Rainbow lorikeet with 14.2%. Other species, like cockatoos and parrots, are only 2.3% and 2.4%.

The parrot density generally in the survey, found within a radius of every 10 ha, like Red lory about two individuals per 10 hectares, and Eclectus parrot about one individual per hectare.

There is very strong correlation between the decline in wild populations and hunting rates.

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