Vertebrates of Resak (Tambahan) Forest Reserve and Its Adjacent Area, Pahang

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Abstract. Southeast Pahang Peat Swamp Forest (SEPPSF) covers four forest reserves (FRs) namely Pekan FR, Nenasi FR, Kedondong FR and Resak FR. Previously, 204 species of birds, 56 species of mammals, and 47 species of herpetofauna have been recorded at SEPPSF. Recently, a rapid assessment using binoculars was carried out for two days from 18-19 May 2023 covering Resak (Tambahan) FR and its adjacent areas including oil palm plantations and Rompin town. A total of 52 species of birds from 25 families and one species of reptile were recorded. Of these, 36 species are classified as Totally Protected while eight species are Protected species according to Wildlife Conservation Act 2010. There are four Vulnerable (VU) species that were recorded namely Black Hornbill, Lesser Adjutant, Large Green-Pigeon, and Javan Myna. This result indicates a "snapshot" of vertebrates of the forest complex due to the short duration of the survey. Therefore, more intensive survey is needed to update the dynamics of the wildlife community in this area.

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1. Introduction

The Southeast Pahang Peat Swamp Forest (SEPPSF) comprises 60% of the remaining peat swamp forest cover in Peninsular Malaysia [2]. SEPPSF covers several forest reserves including Pekan Forest Reserve (FR), Nenasi FR, Kedondong FR and Resak FR. Previously, there were 204 species of birds, 63 species of mammals and 47 species of herpetofauna recorded in SEPPSF [1]. These figures were cumulative checklist from previous studies that were carried out in 1998, 1999, 2002 and 2003.

Some interesting findings were the present of tiger (*Panthera tigris*) and other threatened species including elephant (*Elephas maximus*), Otter civet (*Cynogale bennettii*), Lesser adjutant (*Leptoptilos javanicus*) and Painted terrapin (*Batagur borneensis*) [1]. However, little study has been carried out in Resak (Tambahan) Forest Reserve which located in between Nenasi FR (north) and Resak FR (south). Therefore, a preliminary survey was conducted at Resak (Tambahan) Forest Reserve including the adjacent areas (oil palm plantations and Rompin town).

2. Methodology

2.1 Field Methods

This preliminary survey was conducted at Resak (Tambahan) Forest Reserve and its adjacent areas including the oil palm plantations and Rompin town by using binoculars. Binoculars (Minox 10 X 42) were used for two consecutive days (18-19 May 2023) starting from 0730 until 1830 daily. Overall, approximately 30km trip were covered daily from Rompin town to Compartment 28 in Resak (Tambahan) Forest Reserve. All species observed were identified and documented in being divided in two columns, namely, Rompin Town-Oil Palm Plantation, (RTOP) and Resak (Tambahan) Reserve, (RTFR). There was no mist netting or other methods applied during this assessment. The species identifications were based on descriptions in Robson [4] for birds and Norhayati [3] for herpetofauna.

3. Results and Discussion

Based on the two-day observation, a total of 52 species from 25 families of birds were recorded. There were 30 species recorded at RTOP, and 34 species were recorded at RTFR (Table 1). Both sites documented 19 families respectively. Cisticolidae, Monarchidae, Nectariniidae, Picidae, Rhipiduridae and Turnicidae were the six families that were not documented at RTOP. Meanwhile, Coraciidae, Cuculidae, Meropidae, Oriolidae, Phasianidae and Ploceidae were the six families that were not documented at RTFR. Of these, 36 species are classified as Totally Protected while eight species are Protected species according to Wildlife Conservation Act 2010. There are four Vulnerable (VU) species that were recorded namely Black Hornbill, Lesser Adjutant, Large Green-Pigeon, and Javan Myna.

According to Figure 1, Accipitridae recorded 5spp at RTOP while only one species was recorded at RTFR. As for RTFR, species from Nectariniidae (5spp) were recorded in RTFR while no species from this family was recorded at RTOP. Urban birds or common inhabitants for secondary forests and plantations can be seen at RTOP including Zebra dove, Oriental magpie robin, House crow, Black-naped oriole, White-throated kingfisher, and Oriental-pied hornbill. While more "forest" species can be seen inside the forest

reserve including Asian paradise flycatcher, White-rumped shama, Laced woodpecker, Barwinged flycatcher shrike and Black hornbill.

There were 204 species of birds recorded previously in SEPPSF based on primary and secondary data. According to MDA Report, a total of 23 days of samplings were carried out primarily by observations (sightings and calls) and supplemented by the mist-netting technique used by the mammal research team [1]. Therefore, this present study is just a "snapshot" of avifauna composition in these areas, especially in RTFR. Standardizing and robust data collection by using different methods which cover diurnal and nocturnal species is recommended. Areas to be sampled also need to be multiplied to represent RTFR.

These recommendations are also applied to other taxa groups. From this survey also, there was only one species of reptile recorded – Monitor lizard which is a common species in secondary forests and plantations. It is expected more amphibian's species can be detected once observations at night were carried out.

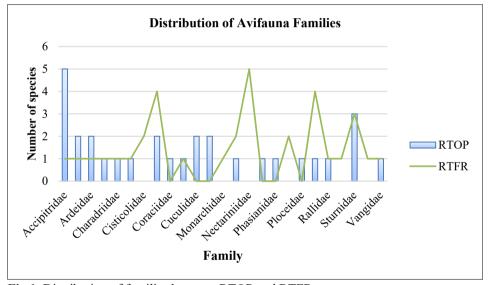


Fig 1. Distribution of families between RTOP and RTFR

Table 1. Checklist of birds recorded during this survey.

No.	Family	Common Name	Scientific Name	IUCN Status	RTOP	RTFR	Overall
1.	Accipitridae	Black-shouldered Kite	Elanus caeruleus	LC	/		/
2.	Accipitridae	Crested Serpent- Eagle	Spilornis cheela	LC	/	/	/
3.	Accipitridae	Brahminy Kite	Haliastur indus	LC	/		/
4.	Accipitridae	White-bellied Sea Eagle	Haliaeetus leucogaster	LC	/		/
5.	Accipitridae	Lesser-Fish-Eagle	Ichthyophaga humilis	NT	/		/
6.	Alcedinidae	White-throated Kingfisher	Halcyon smyrnensis	LC	/	/	/
7.	Alcedinidae	Collared Kingfisher	Todiramphus chloris	LC	/		/
8.	Ardeidae	Purple Heron	Ardea purpurea	LC	/		/

9.	Ardeidae	Little Egret	Equatia gaugatta	LC	/	/	
		-	Egretta garzetta		•	,	,
10.	Bucerotidae	Oriental Pied- Hornbill	Anthracoceros albirostris	LC	/	,	/
11.	Bucerotidae	Black Hornbill	Anthracoceros malayanus	VU		/	/
12.	Charadriidae	Red-wattled Lapwing	Vanellus indicus	LC	/	/	/
13.	Ciconiidae	Lesser Adjutant	Leptoptilos javanicus	VU	/	/	/
14.	Cisticolidae	Common Tailorbird	Orthotomus sutorius	LC		/	/
15.	Cisticolidae	Yellow-bellied Prinia	Prinia flaviventris	LC		/	/
16.	Columbidae	Spotted Dove	Streptopelia chinensis	LC		/	/
17.	Columbidae	Emerald Dove	Chalcophaps indica	LC		/	/
18.	Columbidae	Zebra Dove	Geopelia striata	LC	/	/	/
19.	Columbidae	Pink-necked Green- pigeon	Treron vernans	LC	/		/
20.	Columbidae	Large Green-Pigeon	Treron capellei	VU		/	/
21.	Coraciidae	Dollarbird	Eurystomus orientalis	LC	/		/
22.	Corvidae	House Crow	Corvus splendens	LC	/	/	/
23.	Cuculidae	Greater Coucal	Centropus sinensis	LC	/		/
24.	Cuculidae	Lesser Coucal	Centropus bengalensis	LC	/		/
25.	Meropidae	Blue-throated Bee- eater	Merops viridis	LC	/		/
26.	Meropidae	Blue-tailed Bee- eater	Merops philippinus	LC	/		/
27.	Monarchidae	Asian Paradise- Flycatcher	Terpsiphone paradisi	LC		/	/
28.	Muscicapidae	Oriental Magpie- Robin	Copsychus saularis	LC	/	/	/
29.	Muscicapidae	White-rumped Shama	Copsychus malabaricus	LC		/	/
30.	Nectariniidae	Brown-throated Sunbird	Anthreptes malacensis	LC		/	/
31.	Nectariniidae	Copper-throated Sunbird	Leptocoma calcostetha	LC		/	/
32.	Nectariniidae	Olive-backed Sunbird	Cinnyris jugularis	LC		/	/
33.	Nectariniidae	Temminck's Sunbird	Aethopyga temminckii	LC		/	/
34.	Nectariniidae	Spectacled Spiderhunter	Arachnothera flavigaster	LC		/	/
35.	Oriolidae	Black-naped Oriole	Oriolus chinensis	LC	/		/
36.	Phasianidae	Red Junglefowl	Gallus gallus	LC	/		/
37.	Picidae	Laced Woodpecker	Picus vittatus	LC		/	/
38.	Picidae	Greater Flameback	Chrysocolaptes guttacristatus	LC		/	/
39.	Ploceidae	Baya Weaver	Ploceus philippinus	LC	/		/
40.	Pycnonotidae	Black-headed Bulbul	Pycnonotus atriceps	LC		/	/
41.	Pycnonotidae	Yellow-vented Bulbul	Pycnonotus goiavier	LC	/	/	/
42.	Pycnonotidae	Olive-winged Bulbul	Pycnonotus plumosus	LC		/	/

			Total number of species Total number of families		19	19	25
					30	34	52
52.	Vangidae	Bar-winged Flycatcher-shrike	Hemipus picatus	LC		/	/
51.	Vangidae	Large Woodshrike	Tephrodornis virgatus	LC	/		/
50.	Turnicidae	Barred Buttonquail	Turnix suscitator	LC		/	/
49.	Sturnidae	Common Myna	javanicus Acridotheres tristis	LC	/	/	/
48.	Sturnidae	Javan Myna	Acridotheres	VU	/	/	/
47.	Sturnidae	Common Hill Myna	Gracula religiosa	LC		/	/
46.	Sturnidae	Asian Glossy Starling	Aplonis panayensis	LC	/		/
45.	Rhipiduridae	Malaysia Pied- Fantail	Rhipidura javanica	LC		/	/
44.	Rallidae	White-breasted Waterhen	Amaurornis phoenicurus	LC	/	/	/
43.	Pycnonotidae	Red-eyed Bulbul	Pycnonotus brunneus	LC		/	/

4. Conclusion

In conclusion, there are 52 species from 25 families of avifauna and one species of reptiles were recorded during this survey. However, this is not representing the whole area as this survey was conducted for two days based on observations. It is recommended that standardized and robust data collection must be adopted in future assessments. Thus, strategic conservation measures can be formulated once this information is gathered to conserve the vulnerable peat swamp ecosystem, especially at the southeast of Pahang.

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