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BIRDS IN TANJUNG MENTONG, TERENGGANU, PENINSULAR MALAYSIA

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From a total of 785 species of birds documented in Malaysia, 670 species can be found in Peninsular Malaysia with four endemic species and at least nine are classified as endangered (MNS Bird Conservation Council, 2015).

A bird survey was conducted at Tanjung Mentong, Tasik Kenyir (Figure 1) from 7th to 13th of March 2015 with the objective to provide a checklist of bird species at Tanjong Mentong. There is a lack of published literature on the birds of Tanjung Mentong, with only one preliminary survey of bird assemblage available by Sulaiman *et al*. (2015). Tasik Kenyir covers an area of 202 hectares and is located in the South West of Terengganu. It is well known as the largest man-made fresh water lake in South-East Asia. In 1978, the surrounding area was flooded as a result of the Sultan Mahmud Hydro Electric Dam (Mazlan *et al*., 2015; Norfaizal *et al*., 2015). The lake is surrounded by a total of 4,975 hectares of tropical lowland forest and has 340 islands after the inundation (Norfaizal *et al*., 2015).

Two understorey mist nets (12.0m x 2.5m high, 36.0mm mesh size) and two canopy mist nets (9.0m x 2.5m, 36.0mm mesh size) were deployed randomly along and across the trail in the survey area. Nets were opened from 0630h until 1830h depending on the weather condition for a total of six trapping days. Captured birds were placed in cloth bags prior to measurement and identification were done up to the species level following Strange and Jeyarajasingam (1993), Robson (2002), Davison and Fook (2003), Wells

(2007), Jeyarajasingam and Pearson (2012), and Shi (2012). Other than elevation and GPS readings, external morphological data including brooding patch, moulting stage and the type of nets (ground or canopy) were also recorded following Ramli *et al*. (2009). The birds were marked with nail polish before being released back at the trapping sites. Additionally, point count method was conducted twice a day from 0700h until 1000h and 1600h until 1800h with 100m intervals between points along a 1 km line transect. The counts were done in a radius of 25 m for 10 minutes following Marsden *et al*. (2001) and Watson *et al*. (2004).

A total of 50 individuals comprising 25 species belonging to 20 families were recorded during this survey (Table 1). Out of the 20 families recorded (Table 2), only one species was represented per family, except for Muscicapidae and Nectariniidae with three and two species, respectively. The highest number of bird species captured by using mist-netting was *Copsychus malabaricus* (White-rumped Shama) with a total of four individuals, followed by *Pycnonotus plumosus* (Olive-winged Bulbul) with two individuals. The most observed bird species was *Spilornis cheela* (Crested Serpent Eagle) with a total of seven observations followed by *Gracula religiosa* (Hill Myna) with a total of six observations.

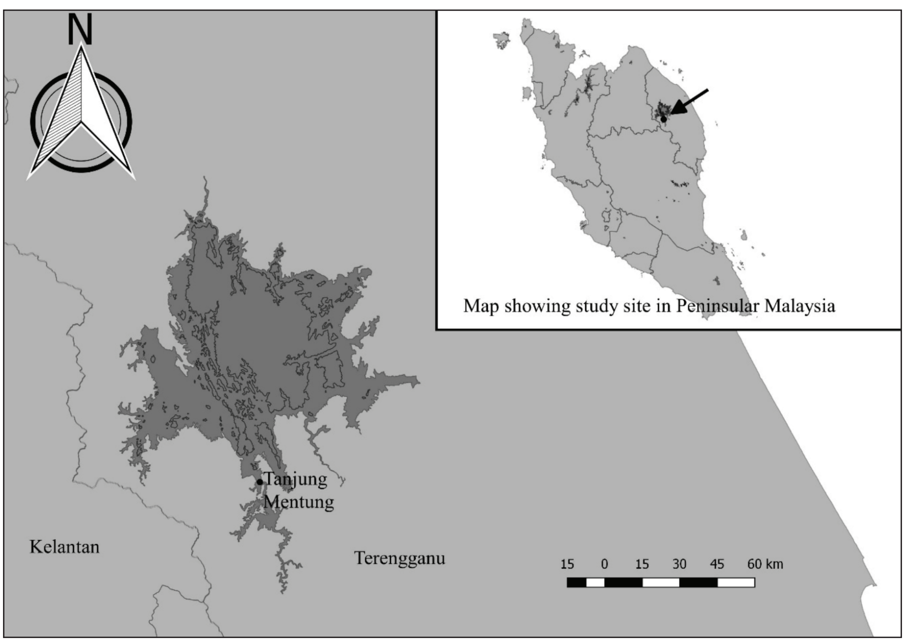

Figure 1 Map of Tanjung Mentong

All 25 bird species recorded in this survey are classified as residents for Peninsular Malaysia, with a conservation status for Least Concern (LC) for 21 species and Near Threatened (NT) status for four species, namely *Argusianus argus* (Great Argus), *Anthracoceros malayanus* (Asian Black Hornbill), *Myophonus robinsoni* (Malay Whistling Thrush), *Harpectes diardii* (Diard's Trogon) (IUCN, 2014).

Table 1 Comparison of previous study and current study

	Previous studies	Current studies
Authors	Sulaiman *et al.* (2015)	David (2017)
Total number of individuals	21	50
Total number of families	10	20
Total number of species	12	25
Methods used	Mist-netting	Mist-netting and point count
Duration	4 net-days	6 sampling days

There is an increase in the number of species recorded in this survey compared to the previous survey by Sulaiman *et al*. (2015) (Table 1) which indicates that more species could be recorded if the sampling efforts and sampling methods are increased. Therefore, a long-term survey employing various sampling methods need to be conducted to produce a more comprehensive bird checklist of Tanjung Mentong. The presence of four Near Threatened (NT) species in Tanjung Mentong also strengthen the status of this site as a potential conservation area in the future.

Table 2 Consolidated checklist of birds in Tanjung Mentong

No.	Family / Species	Common Name	N	Resident/ Migrant	IUCN Red List Status (2014)
	Sturnidae				
1	*Gracula religiosa* (Linnaeus, 1758)	Common Hill Myna	6*	R	LC
	Rhipiduridae				
2	*Rhipidura javanica* (Sparrman) 1788	Pied Fantail	1*	R	LC

	Irenidae				
3	*Irena puella* (Latham, 1790)	Asian Fairy Bluebird	1*	R	LC
	Dicruridae				
4	*Dicrurus paradiseus* (Linnaeus, 1766)	Greater racket-tailed Drongo	2	R	LC
	Dicaeidae				
5	*Prionochilus maculatus* (Temminck & Laugier, 1836)	Yellow-breasted Flowerpecker	1**	R	LC
6	*Prionochilus thoracicus* (Temminck, 1836)	Scarlet-breasted Flowerpecker	1**	R	NT
	Phasianidae				
7	*Argusianus argus* (Linnaeus, 1766)	Great Argus	1*	R	NT
	Accipitridae				
8	*Spilornis cheela* (Latham, 1790)	Crested Serpent Eagle	7*	R	LC
	Pycnonotidae				
9	*Alophoixus phaeocephalus* (Hartlaub, 1844)	Yellow-bellied Bulbul	1*	R	LC
10	*Pycnonotus plumosus* (Blyth, 1845)	Olive-winged Bulbul	2*	R	LC
11	*Pycnonotus simplex* (Lesson, 1839)	Cream-vented Bulbul	1**	R	LC
12	*Pycnonotus goiavier* (Scopoli, 1786)	Yellow-vented Bulbul	1*	R	LC
13	*Pycnonotus finlaysoni* (Strickland, 1844)	Stripe-throated Bulbul	2**	R	LC
	Bucerotidae				
14	*Anthracoceros malayanus* (Raffles, 1822)	Asian Black Hornbill	4*	R	NT
	Megalaimidae				
15	*Psilopogon duvaucelii* (Blyth, 1847)	Blue-eared Barbet	1*	R	LC

	Muscicapidae				
16	*Myophonus robinsoni* (Ogilvie-Grant, 1905)	Malay Whistling Thrush	1*	R	NT
17	*Copsychus saularis* (Linnaeus, 1758)	Oriental Magpie Robin	1*	R	LC
18	*Copsychus malabaricus* (Scopoli, 1788)	White-rumped Shama	15	R	LC
	Cisticolidae				
19	*Orthotomus sericeus* (Temminck, 1836)	Rufous-tailed Tailorbird	1*	R	LC
	Corvidae				
20	*Corvus enca* (Horsefield, 1822)	Slender Billed Crow	3*	R	LC
	Cuculidae				
21	*Cacomantis merulinus* (Scopoli, 1786)	Plaintive Cuckoo	1*	R	LC
	Nectariniidae				
22	*Arachnothera longirostra* (Latham, 1790)	Little Spiderhunter	3	R	LC
23	*Hypogramma hypogrammicum* (Müller, 1843)	Purple-naped Sunbird	4	R	LC
	Trogonidae				
24	*Harpectes diardii* (Temminck, 1832)	Diard's Trogon	1*	R	NT
	Picidae				
25	*Chrysophlegma miniaceum* (Pennant, 1769)	Banded Woodpecker	1*	R	LC
	Columbidae				
26	*Chalcophaps indica* (Linnaeus, 1758)	Emerald Dove	1*	R	LC
	Vangidae				
27	*Philentoma pyrhoptera* (Temminck, 1836)	Rufous-winged Philentoma	1*	R	LC
	Strigidae				
28	*Otus bakkamoena* (Pennant, 1769)	Collared-scops Owl	2	R	LC

	Timaliidae				
29	*Mixornis gularis* (Horsefield, 1822)	Pin-striped Tit Babbler	1*	R	LC
30	*Stachyris erythroptera* (Blyth, 1842)	Chestnut-winged Babbler	1**	R	LC
	Chloropseidae				
31	*Chloropsis cochinchinensis* (Gmelin, 1789)	Blue-winged Leafbird	1**	R	LC
	Pellorneidae				
32	*Malacocincla abbotti* (Blyth, 1845)	Abbot's Babbler	1**	R	LC
		Total no. of individuals	**63**		
		Total no. of families	**23**		
		Total no. of species	**32**		

*N: Total number of individuals recorded; R: Resident; LC: Least Concern; NT: Near Threatened; * Recorded by David (2017); ** Recorded by Sulaiman *et al.* (2015)

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