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Data Article

Conspectus of flora, fauna and micro-climate data in Tasik Kenyir from Mac 2015–February 2016



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ARTICLE INFO

Article history:

Received 5 January 2020

Received in revised form 5 February 2020

Accepted 17 February 2020

Available online 27 February 2020

Keywords:

Biodiversity

ABSTRACT

This data article presents the diversity of flora and selected fauna in Tasik Kenyir, Malaysia. This man-made lake once suffered huge loss of biodiversity for allowing an earth-dam construction during 1980s. Series of publications on different types of target taxa have been published separately after the post-dam construction. A biodiversity assessment was conducted in Tasik Kenyir from March 2015 until February 2016. The one year assessment were compiled

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<https://doi.org/10.1016/j.dib.2020.105328>

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Climate change
Tropical rain forest
Insects
Reptiles
Birds
Mammals
Terengganu

with the previous published data to document and updated the biodiversity checklist in the lake. The data show that Tasik Kenyir is occupied by 113 tree species, 217 butterfly species, 35 bee species, 26 reptile species, 267 aves species and 153 mammal species. The micro-climate data was downloaded from the Malaysian Meteorological Department and analysed in R Studio to highlight the relationship between climate data and biodiversity data.

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Specifications table

Subject	Ecology, Evolution, Behaviour and Systematics
Specific subject area	Biodiversity and Micro-climate relation to ecology behaviour
Type of data	Table Chart Graph
How data were acquired	Flora and fauna data were obtained throughout 12 months field sampling and analysed using the R software. Micro-climate profile was downloaded from the Malaysian Meteorological Department (http://www.met.gov.my/). The instrument used for data sampling varied from trapping, transect monitoring and bioacoustics.
Data format	Raw Semi-Analysed
Parameters for data collection	Random forest plot with 25 m x 25 m subplots were established. Bait trapping and modified Pennsylvanian light trapping were set up randomly in the forested area. Aerial netting and visual encounter survey (VES) were conducted along 1 km sampling transect. Pitfall trap with 5 m aluminium fencing were installed near to the water bodies. Mist netting (2.6 m x 10 m) and four-bank harp trapping were placed at presumable bat flyway, less cluttered area and water bodies. Cage trapping was deployed at the ground level.
Description of data collection	Descriptive abundance by pool per taxa and ecosystem services. The diversity estimations using Shannon and Simpson Indices for collected taxa in Tasik Kenyir area based on the mentioned parameters in 12 month period. The species recorded list then was compared to International Union for Conservation of Nature Red List (IUCN Red List) database to determine the exact status of species in Tasik Kenyir and the exact species in the world.
Data source location	Institution: Institute of Tropical Biodiversity and Sustainable Development, Universiti Malaysia Terengganu City/Town/Region: Tasik Kenyir, Hulu Terengganu, Terengganu Country: Malaysia Latitude and Longitude for collected sample 1. Belukar Bukit (04° 53' 25.362" N, 102° 59' 33.506" E) 2. Sekayu Waterfall (04° 57' 59.01" N, 102° 57' 16.435" E) 3. Kampung Kemat (05° 00' 52.158" N, 102° 57' 10.409" E) 4. Tanjung Mentong (05° 00' 39.508" N, 102° 42' 13.52" E) 5. Saok Waterfall (05° 04.985' N, 102° 46.734' E) 6. Sungai Buweh Waterfall (05° 08' 52.58" N, 102° 46' 00.20" E) 7. Hulu Telemong (05° 13' 48" N, 102° 50' 8.88" E) 8. Sungai Deka (05° 02' 8" N, 102° 33' 54" E)
Data accessibility	Data are available with the article

Value of the Data

- The data is constructed from flora and selected faunal diversity and abundance. Thus, the data highlight local species record and contributing in updating the current taxa checklist in Tasik Kenyir, Terengganu.
- Current checklist could be use by scientific community to evaluate and comparing previous and current taxa, evaluating Tasik Kenyir biodiversity health and identify the important species to protected and conserved.
- Current checklist mostly covered at eco-tourism areas representing approximately less than 50% of Tasik Kenyir area. Besides, new locality records offer research opportunities and collaboration in future to explore and address the subject matter.
- The data was pool per taxon to relate with one year forest phenology and climate data in describing the relationship of forest as the main habitat for diversity and abundance of selected wildlife.
- The availability of data allow further insight into which environmental factors influence the onset duration and visibility of selected taxa in untouched environments, contrasting rural environments, as well as at areas with substantial human encroachment.

1. Data description

The data presented in this article were primary and secondary data on selected wildlife taxa, namely, insecta (bees and butterflies), herpetofauna (reptiles), aves and small mammals in Tasik Kenyir dipterocarp forest. Data collected was paired with basic climatology data to evaluate and correlate between sensitive biological responses with climate factors. Detailed taxa checklist consists of number of species found in each and every taxa could be found in the supplementary material table deposited in excel format with this article.

The biodiversity assessment on flora and selected fauna taxa which are insect (butterflies and bees), reptiles, aves and small mammals has been carried out from March 2015 until February 2016 in Tasik Kenyir, Terengganu (Table 1). Tasik Kenyir is the largest man-made lake in Southeast Asia which covers an area 260 km². The lake was established as a result of the implementation of earth-dam construction in 1980s.

Part of the data specifically plant [1], butterflies [1,2], bees [1,2], reptiles, aves [3–5] and small mammals [1,6–11] have been published separately. Thus, these published data were combined with unpublished data to document and update the biodiversity checklist in Tasik Kenyir. This data recorded 113 tree species, 217 butterfly species, 35 bee species, 26 reptile species, 267 aves species and 153 mammal species (Tables 2–8). Out of these species checklist, 20 species were listed as threatened

Table 1
List of sampling sites in Tasik Kenyir with coordinates and sampling period.

	Sampling site	Coordinate	Sampling period
1	Belukar Bukit	04° 53' 25.362" N 102° 59' 33.506" E	15 to 21 May, 2015 25 September to 2 October, 2015
2	Sekayu Waterfall	04° 57' 59.01" N 102° 57' 16.435" E	21 to 27 June, 2015 17 to 24 October, 2015
3	Kampung Kemat	05° 00' 52.158" N 102° 57' 10.409" E	3 to 10 November, 2015 25 to 1 February, 2015
4	Tanjung Mentong	05° 00' 39.508" N 102° 42' 13.52" E	7 to 13 March, 2015
5	Saok Waterfall	05° 04.985' N 102° 46.734' E	23 to 29 February, 2016
6	Sungai Buweh Waterfall	05° 08' 52.58" N 102° 46' 00.20" E	19 to 23 January, 2015 20 to 26 April, 2015 24 to 30 August, 2015
7	Hulu Telemong	05° 13' 48" N 102° 50' 8.88" E	26 July 01 August, 2015
8	Sungai Deka	05° 02' 8" N 102° 33' 54"E	9 to 12 February, 2015

Table 2

Summary of updated flora and fauna checklist in Tasik Kenyir. The species checklists were tabulated in Tables 3–8.

	Taxon	Family	Species	Threatened (EN & CR)
Flora	Plant	38	113	2
Fauna	Butterfly	6	217	
	Bee	3	35	
	Reptile	7	26	1
	Bird	46	265	6
	Mammal	34	153	11

EN- Endangered, CR- Critically Endangered.

Table 3

Updated taxonomic checklist of plants in Tasik Kenyir [1].

	Species	Common name	IUCN List
	Celastraceae		
1	<i>Bhesa</i> sp.		
	Alangiaceae		
2	<i>Alangium griffithii</i>		NE
	Anisophylleaceae		
3	<i>Anisophyllea curtisii</i>		VU
4	<i>Anisophyllea disticha</i>		LC
5	<i>Anisophyllea grandis</i>		VU
	Dilleniaceae		
6	<i>Dillenia grandifolia</i>		DD
	Ebenaceae		
7	<i>Diospyros</i> sp.		
	Lecythidaceae		
8	<i>Barringtonia</i> sp.		
	Myrsinaceae		
9	<i>Ardisia breviramea</i>		DD
	Sapotaceae		
10	<i>Ganua motleyana</i>		DD
11	<i>Madhuca</i> sp.		
12	<i>Pouteria malaccensis</i>		NT
	Fabaceae		
13	<i>Cynometra malaccensis</i>		NT
14	<i>Ormosia</i> sp.		
15	<i>Parkia speciosa</i>		DD
16	<i>Saraca declinata</i>		DD
17	<i>Saraca thaipingensis</i>		DD
	Leguminosae		
18	<i>Dialium</i> sp.		
	Polygalaceae		
19	<i>Xanthophyllum affine</i>		
20	<i>Xanthophyllum griffithii</i>		LC
21	<i>Xanthophyllum</i> sp. 1		
22	<i>Xanthophyllum</i> sp. 2		
	Fagaceae		
23	<i>Castanopsis</i> sp.		
24	<i>Lithocarpus lucidus</i>		DD
25	<i>Lithocarpus</i> sp.		
	Apocynaceae		
26	<i>Kopsia</i> sp.		
	Rubiaceae		
27	<i>Diplospora malaccensis</i>	Gading-gading	NE
28	<i>Ixora</i> sp.		
29	<i>Urophyllum trifurcum</i>		NE
	Verbenaceae		
30	<i>Vitex pinnata</i>	Leban Tanduk	LC
31	<i>Vitex vestita</i>	Leban Hutan	LC

Table 3 (continued)

	Species	Common name	IUCN List
	Lauraceae		
32	<i>Actinodaphne glomerata</i>	Medang Serai	NE
	<i>Dehassia</i> sp.		
34	<i>Litsea</i> sp. 1		
35	<i>Litsea</i> sp. 2		
	Annonaceae		
36	<i>Alphonsea</i> sp.		
37	<i>Goniothalamus</i> sp.		
38	<i>Monocarpia marginalis</i>	Mempisang	NE
39	<i>Polyalthia</i> sp.		
40	<i>Xylopia</i> sp.		
	Myristicaceae		
41	<i>Horsefieldia</i> sp.		
42	<i>Knema hookeriana</i>		VU
43	<i>Knema</i> sp. 1		
44	<i>Knema</i> sp. 2		
45	<i>Myristica</i> sp.		
46	<i>Pimelodendron griffithianum</i>	Perah Ikan	NE
47	<i>Pimelodendron</i> sp.		
	Calophyllaceae		
48	<i>Mesua lepidota</i>		DD
	Clusiaceae		
49	<i>Garcinia</i> sp. 1		
50	<i>Garcinia</i> sp. 2		
	Euphorbiaceae		
51	<i>Antidesma</i> sp. 1		
52	<i>Aporosa globifera</i>		NE
53	<i>Croton argyratus</i>	Hamba Raja	NE
54	<i>Croton laevifolius</i>	Hujan Panas	NE
55	<i>Drypetes pendula</i>	Lidah Lidah	NE
56	<i>Drypetes</i> sp.		
57	<i>Elateriospermum tapos</i>	Perah	NE
58	<i>Endospermum diadenum</i>		NE
59	<i>Galeria</i> sp.		
60	<i>Macaranga gigantea</i>	Mahang Gajah	LC
61	<i>Macaranga</i> sp. 1	Mahang	
62	<i>Macaranga</i> sp. 2	Mahang	
63	<i>Macaranga triloba</i>	Mahang Merah	NE
	Phyllanthaceae		
64	<i>Antidesma</i> sp. 1		
65	<i>Baccaurea parviflora</i>	Asam Tambun	NE
66	<i>Baccaurea racemosa</i>	Setambun	NE
67	<i>Baccaurea</i> sp. 1		
68	<i>Glochidion</i> sp. 2		
69	<i>Glochidion superbum</i>	Ubah Ubah	NE
70	<i>Richeriella malayana</i>		NE
	Violaceae		
71	<i>Rinorea anguifera</i>	Pacat Kenyang	
72	<i>Rinorea horneri</i>		LC
73	<i>Rinorea javanica</i>		NE
74	<i>Rinorea longiracemosa</i>		NE
75	<i>Rinorea</i> sp.		
	Dipterocarpaceae		
76	<i>Dipterocarpus grandiflorus</i>	Keruing Belimbing	EN
77	<i>Dipterocarpus kunstleri</i>	Keruing Gombang Merah	CR
78	<i>Hopea dyeri</i>	Merawan Palit	NE
79	<i>Shorea leprosula</i>	Meranti Tembaga	NT
80	<i>Shorea</i> sp. 1	Meranti	
81	<i>Shorea</i> sp. 2	Meranti	
82	<i>Shorea</i> sp. 3	Meranti	
	Sterculiaceae		
83	<i>Pterospermum</i> sp.	Bayur	VU
84	<i>Scaphium linearicarpum</i>	Kembang Semangkuk Bulat	NE

(continued on next page)

Table 3 (continued)

	Species	Common name	IUCN List
	Thymelaceae		
85	<i>Aquilaria</i> sp.	Agarwood	
	Tiliaceae		
86	<i>Pentace curtisii</i>	Melunak Bukit	NT
87	<i>Pentace grandiflora</i>		DD
	Myrtaceae		
88	<i>Syzygium griffithii</i>	Kelat	NE
89	<i>Syzygium politum</i>		NE
90	<i>Syzygium polyalthium</i>		NE
91	<i>Syzygium</i> sp. 1		
92	<i>Syzygium</i> sp. 2		
93	<i>Syzygium</i> sp. 3		
	Cannabaceae		
94	<i>Gironniera</i> sp.		
95	<i>Gironniera subequalis</i>		LC
	Moraceae		
96	<i>Artocarpus</i> sp.	Wild Jack Fruit	
	Rosaceae		
97	<i>Parinari</i> sp.		
	Olcaceae		
98	<i>Ochanostachys amentacea</i>		DD
99	<i>Scorodocarpus borneensis</i>	Kulim	DD
	Anacardiaceae		
100	<i>Bouea oppositifolia</i>	Kundang Rumania	NE
101	<i>Swintonia schwenkii</i>	Merpauh Riang	NE
102	<i>Swintonia</i> sp.	Merpauh	
	Burseraceae		
103	<i>Canarium littorale</i>	Kedondong Bulan	LC
	Meliaceae		
104	<i>Aglaiia</i> sp. 1		
105	<i>Aglaiia</i> sp. 2		
106	<i>Aglaiia</i> sp. 3		
107	<i>Aglaiia</i> sp. 4		
	Sapindaceae		
108	<i>Pometia pinnata</i>	Kasai	NE
109	<i>Xerospermum</i> sp.	Rambutan	NE
	Theaceae		
110	<i>Pyrenaria acuminata</i>		LC
	Flacourtiaceae		
111	<i>Hydnocarpus</i> sp.		DD
112	<i>Hydnocarpus woodii</i>		NE
113	<i>Scaphocalyx spathacea</i>		NE
	No. of family	38	
	No. of species	113	

(endangered [EN], critically endangered [CR]) based on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species (Table 2; Fig. 1). This data highlight the presence of Sumatran rhino, *Dicerorhinus sumatrensis* in Kenyir area during 1990s. However, this species was believed to locally extinct since 2000s. Presently, *D. sumatrensis* has been declared extinct in Malaysia after the death of a last standing male and female rhino in May and November 2019, respectively.

The one year biodiversity data was paired with climate data which are temperature ($^{\circ}\text{C}$), humidity (%RH) and rainfall (mm) to evaluate and correlate between sensitive biological responses with climate factors (Table 9; Figs. 2 and 3).

1.1. Experimental design, materials, and methods

The biodiversity assessment was carried out from March 2015 until February 2016 in Tasik Kenyir (Table 1). A random forest plot with 25 m x 25 m subplots were established to determine the tree

Table 4
Updated taxonomic checklist of butterflies in Tasik Kenyir [1,2].

	Species	Common name	IUCN List
	Hesperiidae		
1	<i>Ancistroides gemmifer gemmifer</i>		DD
2	<i>Hyarotis iadera</i>		NE
3	<i>Notocrypta curvifascia corinda</i>		DD
4	<i>Pelopidas agna agna</i>		NE
5	<i>Pelopidas mathias mathias</i>		NE
	Lycaenidae		
6	<i>Allotinus borneensis</i>		NE
7	<i>Allotinus horsfieldi</i>		NE
8	<i>Allotinus substrigosus</i>		NE
9	<i>Allotinus unicolor</i>		NE
10	<i>Anthene emolus</i>		NE
11	<i>Arhopala aedias agnis</i>	Large Metallic Oakblue	NE
12	<i>Arhopala antimuna antimuna</i>	Small Tailless Oakblue	NE
13	<i>Arhopala azinis</i>		NE
14	<i>Arhopala democritus</i>		NE
15	<i>Arhopala epimuta</i>		NE
16	<i>Arhopala moorei busa</i>		NE
17	<i>Arhopala tropaea</i>		NE
18	<i>Caleta roxus pothus</i>		NE
19	<i>Cheritra freja frigga</i>	Common Imperial	LC
20	<i>Curetis tagalia jopa</i>		NE
21	<i>Drupadia ravindra</i>		NE
22	<i>Eooxyides tharis</i>		NE
23	<i>Jamides celeno aelianus</i>	Common Caerulean	NE
24	<i>Jamides elpis</i>		NE
25	<i>Jamides ferrari evansi</i>		NE
26	<i>Jamides malaccanus</i>		NE
27	<i>Logania malayica</i>		DD
28	<i>Spindasis ionita senama</i>	Long-Banded Silverline	NE
29	<i>Zemoras emesoides emesoides</i>		NE
30	<i>Zizula hylax pygmaea</i>	Pygmy Grass Blue	NE
	Nymphalidae		
31	<i>Agatasa calydonia calydonia</i>	Glorious Begum	NE
32	<i>Amathusia masina malaya</i>		NE
33	<i>Amathusia ochraceofusca ochraceofusca</i>		NE
34	<i>Amathusia perakana perakana</i>		NE
35	<i>Amathusia phidippus phidippus</i>	Palm King	NE
36	<i>Amathuxidia amythaon dilucida</i>	Koh-I-Noor	NE
37	<i>Athyma nefte subrata</i>	Colour Sergeant	NE
38	<i>Athyma perius perius</i>	Common Sergeant	LC
39	<i>Athyma pravara helma</i>	Lance Sergeant	NE
40	<i>Athyma reta moorei</i>	Malay Staff Sergeant	NE
41	<i>Bassarona dunya dunya</i>	Great Marquis	NE
42	<i>Bassarona recta monilis</i>	Redtail Marquis	NE
43	<i>Bassarona teuta goodrichi</i>	Banded Marquis	NE
44	<i>Cethosia hypsea hypsina</i>	Malay Lacewing	NE
45	<i>Charaxes bernardus crepax</i>	Tawny Rajah	NE
46	<i>Charaxes durnfordi</i>	Chestnut Rajah	NE
47	<i>Cirrochroa emalea</i>	Malay Yeoman	NE
48	<i>Cirrochroa orissa orissa</i>	Banded Yeoman	NE
49	<i>Cirrochroa satellita satellita</i>	Yellow Banded Yeoman	NE
50	<i>Cirrochroa surya siamensis</i>	Litte Yeoman	NE
51	<i>Cirrochroa tyche rotundata</i>	Common Yeoman	NE
52	<i>Coelites epiminthia epiminthia</i>	Blue Catseye	NE
53	<i>Cupha erymanthis lotis</i>	Rustic	NE
54	<i>Cyrestis cocles earli</i>	Marbled Map	NE
55	<i>Cyrestis themire themire</i>	Little Map	NE
56	<i>Danaus genutia genutia</i>		DD
57	<i>Danaus melanippus hegesippus</i>	Black Veined Tiger	DD

(continued on next page)

Table 4 (continued)

	Species	Common name	IUCN List
58	<i>Dichorragia nesimachus</i>	Constable	NE
59	<i>Dichorragia sondaica</i>		NE
60	<i>Discophora timora perakensis</i>		NE
61	<i>Dophla evelina compta</i>		NE
62	<i>Elymnias casiphone saueri</i>		NE
63	<i>Elymnias hypermnesta agina</i>		NE
64	<i>Elymnias nesaea lioneli</i>		NE
65	<i>Elymnias panthera panthera</i>	Tawny Palffy	NE
66	<i>Elymnias penanga penanga</i>	Pointed Palmfly	NE
67	<i>Erites angularis angularis</i>	Angled Cyclops	DD
68	<i>Erites argentina delia</i>		DD
69	<i>Eulacera asteria kumana</i>	Elegant Emperor	NE
70	<i>Euploea eunice leucogonis</i>		NE
71	<i>Euploea eyndhovii</i>		NE
72	<i>Euploea mulciber mulciber</i>	Striped Blu Crow	NE
73	<i>Euploea radamanthus radamanthus</i>	Magpie Crow	NE
74	<i>Euploea tulliolus</i>	Dwarf Crow	NE
75	<i>Euripus nyctelius euploides</i>	Coutesan	NE
76	<i>Euthalia adonia pinwilli</i>	Green Baron	NE
77	<i>Euthalia agnis paupera</i>		NE
78	<i>Euthalia alpheda langkawica</i>		NE
79	<i>Euthalia eriphylae</i>		NE
80	<i>Euthalia ipona</i>		NE
81	<i>Euthalia kanda marana</i>		NE
82	<i>Euthalia mahadeva zichrina</i>		NE
83	<i>Euthalia merta merta</i>		NE
84	<i>Euthalia monina monina</i>	Malayan Baron	NE
85	<i>Faunis canens arcesilas</i>	Common Faun	NE
86	<i>Heronia sumatrana</i>		NE
87	<i>Hypolimnas anomala</i>		NE
88	<i>Hypolimnas bolina bolina</i>	Great Egg-Fly	NE
89	<i>Idea hypermnestra</i>		NE
90	<i>Idea stollii</i>		NE
91	<i>Ideopsis gaura perakana</i>		NE
92	<i>Ideopsis juvena sitah</i>		NE
93	<i>Ideopsis similis persimilis</i>		NE
94	<i>Ideopsis vulgaris macrina</i>	Blue Glassy	NE
95	<i>Junonia atlites atlites</i>	Grey Pansy	NE
96	<i>Junonia hedonia ida</i>		NE
97	<i>Junonia orithya wallacei</i>	Blue Pansy	DD
98	<i>Kallima limborgi amplirufa</i>	Malayan Oakleaf	NE
99	<i>Lebadea martha malayana</i>	Knight	NE
100	<i>Lethe chandica namura</i>		NE
101	<i>Lexias canescens pardalina</i>		NE
102	<i>Lexias cyanipardus</i>		NE
103	<i>Lexias dirtea merguia</i>		NE
104	<i>Lexias pardalis dirteana</i>	Archduke	NE
105	<i>Melanitis leda leda</i>	Common Evening Brown	NE
106	<i>Melanitis phedima abdullae</i>		NE
107	<i>Melanocyza faunula</i>		NE
108	<i>Moduxa rocris milonia</i>	Commander	NE
109	<i>Mycalesis anapita anapita</i>	Tawny Bush Brown	NE
110	<i>Mycalesis dohertyi dohertyi</i>		NE
111	<i>Mycalesis fusca fusca</i>	Malayan Bush Brown	NE
112	<i>Mycalesis horsfieldi hermana</i>		NE
113	<i>Mycalesis intermedia distanti</i>	Intermediate Bush Brown	NE
114	<i>Mycalesis janardana sagittigera</i>	Mottled Bush Brown	DD
115	<i>Mycalesis maianeas maianeas</i>	Bandless Bushbrown	NE
116	<i>Mycalesis mineus macromalayana</i>	Dark-Branded Bush Brown	NE
117	<i>Mycalesis mnasicles perna</i>	Cyclops Bush Brown	NE
118	<i>Mycalesis oroatis ustulata</i>	Red Bush Brown	NE
119	<i>Mycalesis orseis nautilus</i>	Purple Bush Brown	NE

Table 4 (continued)

	Species	Common name	IUCN List
120	<i>Mycalesis patiana patiana</i>	Eliot's Bush Brown	NE
121	<i>Mycalesis perseoides perseoides</i>	Parchmarchi Bush Brown	NE
122	<i>Mycalesis perseus cepheus</i>	Dingy Bush Brown	NE
123	<i>Mycalesis visala phamis</i>	Long-Branded Bush Brown	NE
124	<i>Neorina lowii neophyta</i>	Malayan Oel	NE
125	<i>Neptis agatha charon</i>		NE
126	<i>Neptis clinia</i>	Sullied Sailer	NE
127	<i>Neptis clinioides gunongensis</i>		NE
128	<i>Neptis duryodona nesia</i>		NE
129	<i>Neptis hylas papaja</i>	Common Sailer	NE
130	<i>Neptis leucoporus cresina</i>	Grey Sailer	NE
131	<i>Neptis miah</i>	Small Yellow Sailer	NE
132	<i>Neptis omeroda omeroda</i>		NE
133	<i>Neptis sedata</i>		NE
134	<i>Orsotriaena medus cinerea</i>	Dark Grass Brown	NE
135	<i>Pantoporia aurelia</i>	Baby Lascar	NE
136	<i>Pantoporia hordonia hordonia</i>	Common Laskar	NE
137	<i>Pantoporia sandaka sandaka</i>	Extra Laska	NE
138	<i>Parantica sylvia aspasia</i>	Yellow Glassy Tiger	NE
139	<i>Parthenos sylvia lilacinus</i>	Clipper	NE
140	<i>Pelopidas agna agna</i>	Dark-Branded Swift	NE
141	<i>Phaedyra columella singa</i>	Short-Banded Swift	NE
142	<i>Polyura athamas athamas</i>	Common Nawab	NE
143	<i>Polyura moori moori</i>	Malayan Nawab	NE
144	<i>Prothoe franck uniformis</i>	Blue Begum	NE
145	<i>Ragadia makuta siponta</i>	Brown-Banded Ringlet	NE
146	<i>Rhinopalpa polynice eudoxia</i>	Wizard	NE
147	<i>Tanaecia aruna aruna</i>		NE
148	<i>Tanaecia flora flora</i>	Blue Count	NE
149	<i>Tanaecia godartii asoka</i>	Malay Count	NE
150	<i>Tanaecia iapis puseda</i>	Horsfield's Baron	NE
151	<i>Tanaecia julli bougainvillei</i>	Common Earl	NE
152	<i>Tanaecia palguna consanguinea</i>		NE
153	<i>Tanaecia pelea irenae</i>	Malayan Viscount	DD
154	<i>Tanaecia pelea pelea</i>	Malayan Viscount	DD
155	<i>Terinos clarissa malayanus</i>	Malayan Assyrian	NE
156	<i>Terinos terpander robertsia</i>	Royal Assyrian	NE
157	<i>Thaumantis odona pishuna</i>	Godart's Jungle Glory	NE
158	<i>Thauria aliris</i>	Tufted Junglesking	NE
159	<i>Tirumala septentrionis septentrionis</i>	Dark Blue Tiger	NE
160	<i>Vindula dejone erotella</i>	Lesser Cruiser	NE
161	<i>Xanthotaenia busiris busiris</i>	Yellow-Barred Pan	NE
162	<i>Ypthima baldus newboldi</i>	Common Five Ring	NE
163	<i>Ypthima fasciata torone</i>	Malayan Six Ring	NE
164	<i>Ypthima horsfieldii humei</i>	Horsfield's Six-Ring	NE
165	<i>Ypthima huebneri</i>	Common Four Ring	NE
166	<i>Ypthima pandocus corticaria</i>	Common Three Ring	NE
167	<i>Zeuxidia amethystus amethystus</i>	Saturn	NE
168	<i>Zeuxidia aurelius</i>	Great Saturn	NE
169	<i>Zeuxidia doubledayi doubledayi</i>	Scarce Saturn	NE
	Papilionidae		
170	<i>Chilasa clytia clytia dissimilis</i>	Common Mime	NE
171	<i>Graphium agamemnon agamemnon</i>	Tailed Jay	NE
172	<i>Graphium antiphates</i>	Five-Bar Swordtail	NE
173	<i>Graphium eurypylus mecisteus</i>	Great Jay	NE
174	<i>Graphium evemnon eventus</i>	Blue Jay	NE
175	<i>Graphium sarpedon luctatius</i>	Common Bluebottle	NE
176	<i>Pachliopta aristolochiae asteris</i>	Common Rose	NE
177	<i>Pachliopta coon doubledayi</i>	Common Clubtail	NE
178	<i>Pachliopta neptunus neptunus</i>	Yellow Bodied Clubtail	NE
179	<i>Papilio demolion demolion</i>	Banded Swallowtail	DD
180	<i>Papilio memnon agenor</i>	Great Mormon	NE

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Table 4 (continued)

	Species	Common name	IUCN List
181	<i>Papilio nephelus</i>	Black And White Helen	NE
182	<i>Papilio polytes romulus</i>	Common Mormon	NE
183	<i>Parides varuna varuna</i>	Common Batwing	NE
184	<i>Pathysa delesserti delesserti</i>	Malayan Zebra	NE
185	<i>Pathysa macareus perakensis</i>	Lesser Zebra	NE
186	<i>Pathysa ramaceus pendleburyi</i>	Pendlebury's Zebra	NE
187	<i>Troides aeacus thomsoni</i>	Golden Birdwing	DD
	Pieridae		
188	<i>Abisara geza niya</i>	Spotted Judy	NE
189	<i>Abisara savitri</i>		NE
190	<i>Appias indra plana</i>	Plain Muffin	NE
191	<i>Appias libythea olferna</i>	Striped Albatross	NE
192	<i>Appias lycinda vasava</i>	Chocolate Albatross	NE
193	<i>Appias nero figulina</i>	Orange Albatross	NE
194	<i>Appias paulina distanti</i>	Common Albatross	NE
195	<i>Catopsilia pomona pomona</i>	Lemon Emigrant	NE
196	<i>Catopsilia pyranthe pyranthe</i>	Mottled Emigrant	NE
197	<i>Catopsilia scylla cornelia</i>	Orange Emigrant	NE
198	<i>Cepora iudith malaya</i>	Orange Gull	NE
199	<i>Dercas verhuelli herodorus</i>	Tailed Sulphur	NE
200	<i>Eurema ada iona</i>	Talbot's Grass Yellow	NE
201	<i>Eurema andersonii andersonii</i>	Anderson Grass Yellow	DD
202	<i>Eurema hecabe contubernalis</i>	Common Grass Yellow	NE
203	<i>Eurema lacteola lacteola</i>	Scarce Grass Yellow	NE
204	<i>Eurema sari sodalis</i>	Choocolate Grass Yellow	NE
205	<i>Eurema simulatrix tecmessa</i>	Grass Yellow	NE
206	<i>Eurema tilaha nicevillei</i>	Malayan Grass Yellow	NE
207	<i>Gandaca harina distanti</i>	Tree Yellow	NE
208	<i>Hebomoia glaucippe aturia</i>	Great Orange Tip	NE
209	<i>Leptosia nina nina</i>	Psyche	NE
210	<i>Moduza procris milonia</i>	Commander	NE
211	<i>Parantica aspasia aspasia</i>	Yellow Glassy Tiger	NE
212	<i>Pareronia valeria lutescens</i>	Malayan Wanderer	NE
213	<i>Prioneris philonome themana</i>	Redspot Sawtooth	NE
214	<i>Prioneris philonome themana</i>	Redspot Sawtooth	NE
215	<i>Saletara liberia distanti</i>	Malaysian Albatross	NE
	Riodinidae		
216	<i>Paralaxita damajanti damajanti</i>	Malay Red Harlequin	DD
217	<i>Taxila haquinus haquinus</i>	Harleuin	NE
	No. of family	6	
	No. of species	217	

species composition in an area. A total of 20 baited traps and a modified Pennsylvanian light-trapping were set up randomly in the forested area to catch butterflies and bees [1,2], respectively. Aerial netting and visual encounter survey (VES) were conducted along 1 km sampling transect during butterflies [1,2] and reptile assessment, respectively. Point count was conducted twice a day and eight mist nets were deployed at the presumable bird fly [5]. A total of eight mist nets and 100 cage traps were deployed to capture volant [12,13] and non-volant small mammals [14–17], respectively. All flora and faunal species were measured and identified. The assessment data was compiled with published data [1–4,6,7,14] to have the comprehensive species checklist in Tasik Kenyir.

To highlight the relationship of forest as the main habitat for diversity and abundance of selected taxa, micro-climate data such as temperature (°C), humidity (%RH) and rainfall (mm) was downloaded from the nearest weather station near Tasik Kenyir at Kuala Berang owned by the Malaysian Meteorological Department (<http://www.met.gov.my/>). The micro-climate data from March 2015 until March 2016 was tabulated in Table 9 and been summarised in Figs. 2 and 3. The collective micro-climate data was analysed using R Studio software and the average mean value was taken to represent the monthly climate value for temperature, humidity and amount of rainfall [17]. The Table 9 data was paired with Shannon and Simpson indices driven from taxa checklists collected from primary data analysis using R Studio.

Table 5
Updated taxonomic checklist of bees in Tasik Kenyir [1,2].

	Species	Common name	IUCN List
	Andrenidae		
1	<i>Andrena</i> sp.	Mining Bee	DD
	Halictidae		
2	<i>Nomia strigata</i>	Sweat Bee	NE
3	<i>Maculonomia terminata</i>	Sweat Bee	NE
4	<i>Lasioglossum</i> sp.	Sweat Bee	DD
	Apidae		
5	<i>Xylocopa aestuans</i>	Carpenter Bee	NE
6	<i>Xylocopa caerulea</i>	Carpenter Bee	NE
7	<i>Xylocopa dejeanii</i>	Carpenter Bee	NE
8	<i>Xylocopa flavonigrescens</i>	Carpenter Bee	NE
9	<i>Xylocopa latipes</i>	Carpenter Bee	NE
10	<i>Xylocopa</i> sp.	Carpenter Bee	
11	<i>Xylocopa varipuncta</i>	Carpenter Bee	NE
12	<i>Ceratina smaragdula</i>	Small Carpenter Bee	NE
13	<i>Ceratina</i> sp.	Small Carpenter Bee	
14	<i>Ceratina unimaculata</i>	Small Carpenter Bee	NE
15	<i>Amegilla insularis</i>	Blue Banded Bee	NE
16	<i>Amegilla zonata</i>	Blue Banded Bee	NE
17	<i>Thyreus himalayensis</i>	Cuckoo Bee	NE
18	<i>Heterotrigona erythrogastra</i>	Carpenter Bee	NE
19	<i>Heterotrigona itama</i>	Carpenter Bee	NE
20	<i>Homotrigona aliciae</i>	Carpenter Bee	NE
21	<i>Homotrigona fimbriata</i>	Carpenter Bee	NE
22	<i>Geniotrigona thoracica</i>	Carpenter Bee	NE
23	<i>Lepidotrigona terminata</i>	Carpenter Bee	NE
24	<i>Lepidotrigona ventralis</i>	Carpenter Bee	NE
25	<i>Lophotrigona canifrons</i>	Carpenter Bee	NE
26	<i>Tetragonilla atripes</i>	Carpenter Bee	NE
27	<i>Tetragonilla collina</i>	Carpenter Bee	NE
28	<i>Tetragonula fuscobalteata</i>	Carpenter Bee	NE
29	<i>Tetragonula geissleri</i>	Carpenter Bee	NE
30	<i>Tetragonula laeviceps</i>	Carpenter Bee	NE
31	<i>Tetragonula melina</i>	Carpenter Bee	NE
32	<i>Tetragonula</i> sp.	Carpenter Bee	DD
33	<i>Tetrigona apicalis</i>	Carpenter Bee	NE
34	<i>Apis cerana</i>	Honey Bee	NE
35	<i>Apis dorsata</i>	Honey Bee	NE
	No. of family	3	
	No. of species	35	

Table 6
Updated taxonomic checklist of reptiles in Tasik Kenyir [1,2].

	Species	Common name	IUCN List
	Geomydidae		
1	<i>Heosemys spinosa</i>	Spiny Hill Turtle	EN
2	<i>Notochelys platynota</i>	Malayan Flat-Shelled Turtle	VU
	Trionychidae		
3	<i>Dogania subplana</i>	Malayan Softshell Turtle	LC
4	<i>Amyda cartilagenea</i>	Asian Softshell Turtle	
	Agamidae		
5	<i>Draco fimbriatus</i>	Fringed Flying Lizard	VU
6	<i>Draco formosus</i>	Beautiful Flying Lizard	LC
7	<i>Draco melanopogon</i>	Black-Bearded Flying Lizard	NE
8	<i>Gonocephalus bellii</i>	Blue-Necked Angle-Headed Lizard	LC
9	<i>Gonocephalus grandis</i>	Giant Angle-Headed Lizard	LC
	Gekkonidae		
10	<i>Cnemaspis peninsularis</i>	Peninsular Rock Gecko	LC
11	<i>Cyrtodactylus consobrinus</i>	Peter's Bent-Toed Gecko	NE
12	<i>Cyrtodactylus quadrivirgatus</i>	Four-Stripped Bent-Toed Gecko	LC
13	<i>Gehyra mutilata</i>	Common Four-Clawed Gecko	NE
14	<i>Gekko monarchus</i>	Warty House Gecko	NE
15	<i>Gekko smithii</i>	Smith's Giant Gecko	LC
16	<i>Hemidactylus craspedotus</i>	Frippy Forest Gecko	NE
17	<i>Hemidactylus frenatus</i>	Asian House Gecko	LC
18	<i>Hemiphyllodactylus typus</i>	Common Worm Gecko	LC
19	<i>Luperosaurus browni</i>	Brown's Camouflage Gecko	NE
20	<i>Ptychozoon kuhli</i>	Kuhl's Parachute Gecko	NE
	Scincidae		
21	<i>Eutropis longicaudata</i>	Long-Tailed Ground Skink	LC
22	<i>Eutropis multifasciata</i>	Common Sun Skink	LC
23	<i>Lipinia vittigera</i>	Common Stripped Skink	LC
	Varanidae		
24	<i>Varanus salvator</i>	Water Monitor Lizard	LC
	Colubridae		
25	<i>Calamaria pavementata</i>	Brown Reed Snake	LC
26	<i>Orthriophis taeniurus ridleyi</i>	Cave Racer	NE
	No. of family	7	
	No. of species	26	

Table 7
Updated taxonomic checklist of aves in Tasik Kenyir [1,3–5].

	Species	Common name	IUCN List
	Accipitridae		
1	<i>Haliaeetus leucogaster</i>	White-Bellied Sea Eagle	LC
2	<i>Haliastur indus</i>	Brahminy Kite	LC
3	<i>Ichthyophaga humilis</i>	Lesser Fish Eagle	NT
4	<i>Ichthyophaga ichthyaetus</i>	Grey-Headed Fish-Eagle	NE
5	<i>Nisaetus alboniger</i>	Blyth's Hawk Eagle	LC
6	<i>Spilornis cheela</i>	Crested Serpent Eagle	LC
7	<i>Spizaetus cirrhatus</i>	Changeable Hawk-Eagle	NE
8	<i>Aviceda leuphotes</i>	Black Baza	LC
9	<i>Pernis ptilorhynchus</i>	Oriental Honey-Buzzard	LC
10	<i>Macheiramphus alcinus</i>	Bat Hawk	LC
11	<i>Milvus migrans</i>	Black Kite	LC
12	<i>Accipiter soloensis</i>	Chinese Goshawk	LC
13	<i>Accipiter gularis</i>	Japanese Sparrowhawk	LC
14	<i>Hieraetus kienerii</i>	Rufous-Bellied Eagle	NE
15	<i>Spizaetus nanus</i>	Wallace's Hawk-Eagle	NE
	Bucerotidae		
16	<i>Anorrhinus galeritus</i>	Bushy-Crested Hornbill	NT
17	<i>Anthracoceros albirostris</i>	Oriental Pied Hornbill	LC
18	<i>Anthracoceros malayanus</i>	Black Hornbill	VU
19	<i>Buceros bicornis</i>	Great Hornbill	VU
20	<i>Buceros rhinoceros</i>	Rhinoceros Hornbill	VU
21	<i>Rhinoplax vigil</i>	Helmeted Hornbill	CR
22	<i>Aceros corrugatus</i>	Wrinkled Hornbill	EN
23	<i>Aceros undulatus</i>	Wreathed Hornbill	VU
24	<i>Aceros comatus</i>	White-Crowned Hornbill	EN
	Apodidae		
25	<i>Apus pacificus</i>	Fork-Tailed Swift	LC
26	<i>Apus nipalensis</i>	House Swift	LC
27	<i>Aerodramus germani</i>	Germain's Swiftlet	NE
28	<i>Collocalia fuciphagus</i>	Edible-Nest Swiftlet	LC
29	<i>Cypsiurus balasiensis</i>	Asian Palm-Swift	LC
30	<i>Rhaphidura leucopygialis</i>	Silver-Rumped Needletail	LC
	Caprimulgidae		
31	<i>Caprimulgus macrurus</i>	Large-Tailed Nightjar	LC
32	<i>Caprimulgus affinis</i>	Savanna Nightjar	LC
	Hemiprocnidae		
33	<i>Hemiprocnis comata</i>	Whiskered Treeswift	LC
	Batrachostomidae		
34	<i>Batrachostomus auritus</i>	Large Frogmouth	NT
	Scolopacidae		
35	<i>Actitis hypoleucos</i>	Common Sandpiper	LC
	Columbidae		
36	<i>Chalcophaps indica</i>	Emerald Dove	LC
37	<i>Spilopelia chinensis</i>	Spotted Dove	LC
38	<i>Geopelia striata</i>	Zebra Dove	LC
39	<i>Treron olax</i>	Little Green-Pigeon	LC
40	<i>Treron curvirostra</i>	Thick-Billed Green-Pigeon	LC
41	<i>Ptilinopus jambu</i>	Jambu Fruit Dove	NT
42	<i>Ducula aenea</i>	Green Imperial-Pigeon	LC
43	<i>Ducula badia</i>	Mountain Imperial-Pigeon	LC
44	<i>Macropygia ruficeps</i>	Little Cuckoo-Dove	LC
45	<i>Treron capellei</i>	Large- Green Pigeon	VU
46	<i>Treron vernans</i>	Pink-Necked Green-Pigeon	LC
	Alcedinidae		
47	<i>Alcedo atthis</i>	Common Kingfisher	LC
48	<i>Alcedo meninting</i>	Blue-Eared Kingfisher	LC
49	<i>Ceyx erithacus</i>	Black-Backed Kingfisher	NE
50	<i>Ceyx rufidorsa</i>	Rufous-Backed Kingfisher	LC
51	<i>Lacedo pulchella</i>	Banded Kingfisher	LC

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Table 7 (continued)

	Species	Common name	IUCN List
52	<i>Pelargopsis capensis</i>	Stork-Billed Kingfisher	LC
53	<i>Todiramphus chloris</i>	Collared Kingfisher	LC
54	<i>Halcyon pileata</i>	Black-Capped Kingfisher	LC
55	<i>Halcyon smyrnensis</i>	White-Throated Kingfisher	LC
56	<i>Alcedo euryzona</i>	Javan Blue-Banded Kingfisher	CR
	Coraciidae		
57	<i>Eurystomus orientalis</i>	Dollarbird	LC
	Meropidae		
58	<i>Merops viridis</i>	Blue-Throated Bee-Eater	LC
59	<i>Merops leschenaulti</i>	Chestnut-Headed Bee Eater	LC
60	<i>Nyctyornis amictus</i>	Red-Bearded Bee-Eater	LC
	Cuculidae		
61	<i>Cacomantis merulinus</i>	Plaintive Cuckoo	LC
62	<i>Cacomantis sonneratii</i>	Banded Bay Cuckoo	LC
63	<i>Centropus rectunguis</i>	Short-Toed Coucal	VU
64	<i>Centropus sinensis</i>	Greater Coucal	LC
65	<i>Clamator coromandus</i>	Chestnut-Winged Cuckoo	LC
66	<i>Cuculus micropterus</i>	Indian Cuckoo	LC
67	<i>Eudynamis scolopaceus</i>	Asian Koel	LC
68	<i>Cuculus fugax</i>	Malaysian Hawk-Cuckoo	NE
69	<i>Phaenicophaeus chlorophaeus</i>	Raffles's Malkoha	LC
70	<i>Phaenicophaeus curvirostris</i>	Chestnut-Breasted Malkoha	LC
71	<i>Phaenicophaeus sumatranus</i>	Chestnut-Bellied Malkoha	NT
72	<i>Phaenicophaeus diardi</i>	Black-Bellied Malkoha	NT
73	<i>Phaenicophaeus tristis</i>	Green-Billed Malkoha	LC
74	<i>Phaenicophaeus javanicus</i>	Red-Billed Malkoha	LC
75	<i>Rhinortha chlorophaea</i>	Raffles's Malkoha	LC
76	<i>Surniculus lugubris</i>	Square-Tailed Drongo-Cuckoo	LC
77	<i>Zanclostomus javanicus</i>	Red-Billed Malkoha	LC
	Falconidae		
78	<i>Microhierax fringillarius</i>	Black-Thighed Falconet	LC
79	<i>Falco tinnunculus</i>	Common Kestrel	LC
	Pandionidae		
80	<i>Pandion haliaetus</i>	Osprey	LC
	Phasianidae		
81	<i>Arborophila campbelli</i>	Campbell's Partridge	LC
82	<i>Argusianus argus</i>	Great Argus	NT
83	<i>Gallus gallus</i>	Red Junglefowl	LC
84	<i>Lophura ignita</i>	Crested Fireback	NT
85	<i>Polyplectron malacense</i>	Malayan Peacock-Pheasant	VU
86	<i>Rheinardia ocellata</i>	Crested Argus	EN
87	<i>Arborophila chartonii</i>	Chestnut-Necklaced Partridge	NE
	Rallidae		
88	<i>Amaurornis phoenicurus</i>	White-Breasted Waterhen	LC
	Aegithinidae		
89	<i>Aegithina lafresnayei</i>	Great Iora	LC
90	<i>Aegithina tiphia</i>	Common Iora	LC
91	<i>Aegithina viridissima</i>	Green Iora	NT
	Campephagidae		
92	<i>Coracina fimbriata</i>	Lesser Cuckooshrike	LC
93	<i>Tephrodornis gularis</i>	Large Woodshrike	NE
94	<i>Pericrocotus divaricatus</i>	Ashy Minivet	LC
95	<i>Pericrocotus igneus</i>	Fiery Minivet	NT
96	<i>Coracina striata</i>	Bar-Bellied Cuckooshrike	LC
97	<i>Hemipus hirundinaceus</i>	Black-Winged Flycatcher-Shrike	LC
98	<i>Hemipus picatus</i>	Bar-Winged Flycatcher-Shrike	LC
99	<i>Lalage nigra</i>	Pied Triller	LC
100	<i>Pericrocotus flammeus</i>	Scarlet Minivet	LC
	Chloropseidae		
101	<i>Chloropsis cochinchinensis</i>	Blue-Winged Leafbird	NT
102	<i>Chloropsis cyanopogon</i>	Lesser Green Leafbird	NT
103	<i>Chloropsis sonnerati</i>	Greater Green Leafbird	VU

Table 7 (continued)

	Species	Common name	IUCN List
	Cisticolidae		
104	<i>Prinia flaviventris</i>	Yellow-Bellied Prinia	LC
105	<i>Prinia rufescens</i>	Rufescent Prinia	LC
106	<i>Orthotomus ruficeps</i>	Ashy Tailorbird	LC
107	<i>Orthotomus sericeus</i>	Rufous-Tailed Tailorbird	LC
	Corvidae		
108	<i>Corvus enca</i>	Slender-Billed Crow	LC
109	<i>Corvus macrorhynchos</i>	Large-Billed Crow	LC
110	<i>Platylophus galericulatus</i>	Crested Jay	NT
111	<i>Platysmurus leucopterus</i>	Black Magpie	LC
112	<i>Platylophus galericulatus</i>	Crested Jay	NT
113	<i>Crypsirina temia</i>	Racket-Tailed Treepie	LC
	Dicaeidae		
114	<i>Dicaeum cruentatum</i>	Scarlet-Backed Flowerpecker	LC
115	<i>Dicaeum trigonostigma</i>	Orange-Bellied Flowerpecker	LC
116	<i>Prionochilus maculatus</i>	Yellow-Breasted Flowerpecker	LC
117	<i>Prionochilus percussus</i>	Crimson-Breasted Flowerpecker	LC
118	<i>Prionochilus thoracicus</i>	Scarlet-Breasted Flowerpecker	NT
119	<i>Dicaeum agile</i>	Thick-Billed Flowerpecker	LC
120	<i>Dicaeum chrysorrheum</i>	Yellow-Vented Flowerpecker	LC
	Dicruridae		
121	<i>Dicrurus aeneus</i>	Bronzed Drongo	LC
122	<i>Dicrurus annectans</i>	Crow-Billed Drongo	LC
123	<i>Dicrurus paradiseus</i>	Greater Racket-Tailed Drongo	LC
124	<i>Dicrurus remifer</i>	Lesser Racket-Tailed Drongo	LC
125	<i>Dicrurus macrocercus</i>	Black Drongo	LC
126	<i>Dicrurus leucophaeus</i>	Ashy Drongo	LC
	Estrildidae		
127	<i>Lonchura leucogastra</i>	White-Bellied Munia	LC
128	<i>Lonchura striata</i>	White-Rumped Munia	LC
129	<i>Lonchura punctulata</i>	Scaly-Breasted Munia	LC
130	<i>Erythrura prasina</i>	Pin-Tailed Parrotfinch	LC
	Eupetidae		
131	<i>Eupetes macrocerus</i>	Rail-Babbler	NT
	Eurylaimidae		
132	<i>Calyptomena viridis</i>	Asian Green Broadbill	NT
133	<i>Cymbirhynchus macrorhynchus</i>	Black-And-Red Broadbill	NE
134	<i>Eurylaimus javanicus</i>	Banded Broadbill	NT
135	<i>Eurylaimus ochromalus</i>	Black-And-Yellow Broadbill	NT
136	<i>Corydon sumatranus</i>	Dusky Broadbill	LC
	Hirundinidae		
137	<i>Hirundo daurica</i>	Barn Swallow	NE
138	<i>Hirundo tahitica</i>	Pacific Swallow	LC
139	<i>Cecropis striolata</i>	Striated Swallow	NE
	Irenidae		
140	<i>Irena puella</i>	Asian Fairy-Bluebird	LC
	Monarchidae		
141	<i>Hypothymis azurea</i>	Black-Naped Monarch	LC
142	<i>Terpsiphone paradisi</i>	Asian Paradise-Flycatcher	LC
	Motacillidae		
143	<i>Motacilla flava</i>	Yellow Wagtail	LC
144	<i>Dendronanthus indicus</i>	Forest Wagtail	LC
145	<i>Motacilla cinerea</i>	Grey Wagtail	LC
146	<i>Anthus rufulus</i>	Paddyfield Pipit	LC
	Muscicapidae		
147	<i>Copsychus malabaricus</i>	White-Rumped Shama	NE
148	<i>Copsychus saularis</i>	Oriental Magpie Robin	LC
149	<i>Culicicapa ceylonensis</i>	Grey-Headed Canary-Flycatcher	LC
150	<i>Cyornis banyumas</i>	Hill Blue-Flycatcher	LC
151	<i>Cyornis concretus</i>	White-Tailed Flycatcher	LC
152	<i>Cyornis tickelliae</i>	Tickell's Blue-Flycatcher	LC

(continued on next page)

Table 7 (continued)

	Species	Common name	IUCN List
153	<i>Enicurus leschenaulti</i>	White-Crowned Forktail	LC
154	<i>Enicurus ruficapillus</i>	Chestnut-Naped Forktail	NT
155	<i>Ficedula mugimaki</i>	Mugimaki Flycatcher	LC
156	<i>Ficedula solitaris</i>	Rufous-Browed Flycatcher	LC
157	<i>Ficedula zanthopygia</i>	Yellow-Rumped Flycatcher	LC
158	<i>Luscinia cyane</i>	Siberian Blue-Robin	LC
159	<i>Philentoma pyrhoptera</i>	Rufous-Winged Philentoma	LC
160	<i>Philentoma velata</i>	Maroon-Breasted Philentoma	NT
161	<i>Rhinomyias umbratilis</i>	Grey-Chested Jungle-Flycatcher	NT
162	<i>Trichixos pyrropygus</i>	Rufous-Tailed Shama	NT
	Nectariniidae		
163	<i>Aethopyga saturata</i>	Black-Throated Sunbird	LC
164	<i>Anthreptes malacensis</i>	Brown-Throated Sunbird	LC
165	<i>Anthreptes simplex</i>	Plain Sunbird	LC
166	<i>Anthreptes singalensis</i>	Ruby-Cheeked Sunbird	LC
167	<i>Arachnothera crassirostris</i>	Thick-Billed Spiderhunter	LC
168	<i>Arachnothera longirostra</i>	Little Spiderhunter	LC
169	<i>Arachnothera magna</i>	Streaked Spiderhunter	LC
170	<i>Arachnothera modesta</i>	Grey-Breasted Spiderhunter	LC
171	<i>Arachnothera robusta</i>	Long-Billed Spiderhunter	LC
172	<i>Hypogramma hypogrammicum</i>	Purple-Naped Sunbird	LC
	Oriolidae		
173	<i>Oriolus xanthornus</i>	Dark-Throated Oriole	LC
174	<i>Oriolus chinensis</i>	Black-Naped Oriole	LC
	Pittidae		
175	<i>Pitta granatina</i>	Garnet Pitta	NT
176	<i>Pitta caerulea</i>	Giant Pitta	NT
177	<i>Pitta sordida</i>	Hooded Pitta	LC
	Pycnonotidae		
178	<i>Alophoixus bres</i>	Grey-Cheeked Bulbul	LC
179	<i>Alophoixus finschii</i>	Finsch's Bulbul	NT
180	<i>Alophoixus ochraceus</i>	Ochraceous Bulbul	LC
181	<i>Alophoixus phaeocephalus</i>	Yellow-Bellied Bulbul	LC
182	<i>Hemixos flavala</i>	Ashy Bulbul	LC
183	<i>Iole olivacea</i>	Buff-Vented Bulbul	NT
184	<i>Pycnonotus atriceps</i>	Black-Headed Bulbul	NE
185	<i>Pycnonotus brunneus</i>	Red-Eyed Bulbul	LC
186	<i>Pycnonotus cyaniventris</i>	Grey-Bellied Bulbul	NT
187	<i>Pycnonotus erythroptalmos</i>	Spectacled Bulbul	LC
188	<i>Pycnonotus eutilotus</i>	Puff-Backed Bulbul	LC
189	<i>Pycnonotus goiavier</i>	Yellow-Vented Bulbul	LC
190	<i>Pycnonotus plumosus</i>	Olive-Winged Bulbul	LC
191	<i>Pycnonotus simplex</i>	Cream-Vented Bulbul	LC
192	<i>Pycnonotus squamatus</i>	Scaly-Breasted Bulbul	NT
193	<i>Pycnonotus zeylanicus</i>	Straw-Headed Bulbul	CR
194	<i>Tricholestes criniger</i>	Hairy-Backed Bulbul	LC
	Rhipiduridae		
195	<i>Rhipidura javanica</i>	Pied Fantail	LC
196	<i>Rhipidura perlata</i>	Spotted Fantail	LC
	Sturnidae		
197	<i>Acridotheres fuscus</i>	Jungle Myna	LC
198	<i>Gracula religiosa</i>	Hill Myna	LC
199	<i>Aplonis panayensis</i>	Asian Glossy Starling	LC
200	<i>Acridotheres tristis</i>	Common Myna	LC
201	<i>Sturnus sturinus</i>	Purple-Backed Starling	LC
	Sylviidae		
202	<i>Abroscopus superciliaris</i>	Yellow-Bellied Babbler	LC
203	<i>Orthotomus atrogularis</i>	Dark-Necked Tailorbird	LC
204	<i>Orthotomus ruficeps</i>	Ashy Tailorbird	LC
205	<i>Orthotomus sericeus</i>	Rufous-Tailed Tailorbird	LC
206	<i>Orthotomus sutorius</i>	Common Tailorbird	LC
207	<i>Seicercus castaniceps</i>	Chestnut-Crowned Warbler	LC

Table 7 (continued)

	Species	Common name	IUCN List
	Timaliidae		
208	<i>Alcippe brunneicauda</i>	Brown Fulvetta	NT
209	<i>Alcippe peracensis</i>	Mountain Fulvetta	LC
210	<i>Erpornis zantholeuca</i>	White-Bellied Yuhina	LC
211	<i>Kenopia striata</i>	Striped Wren-Babbler	NT
212	<i>Leiothrix argenteauris</i>	Silver-Eared Masia	LC
213	<i>Macronous gularis</i>	Pin-Striped Tit-Babbler	LC
214	<i>Macronous ptilosus</i>	Fluffy-Backed Tit-Babbler	NT
215	<i>Malacocincla abbotti</i>	Abbott's Babbler	LC
216	<i>Malacocincla malaccensis</i>	Short-Tailed Babbler	NT
217	<i>Malacopteron affine</i>	Sooty-Capped Babbler	NT
218	<i>Malacopteron cinereum</i>	Scaly-Crowned Babbler	LC
219	<i>Malacopteron magnirostre</i>	Moustached Babbler	LC
220	<i>Malacopteron magnum</i>	Rufous-Crowned Babbler	NT
221	<i>Pellorneum capistratum</i>	Black-Capped Babbler	LC
222	<i>Pomatorhinus montanus</i>	Chestnut-Backed Scimitar-Babbler	LC
223	<i>Pteruthius melanotis</i>	Black-Eared Shrike-Babbler	LC
224	<i>Stachyris erythroptera</i>	Chestnut-Winged Babbler	NE
225	<i>Stachyris maculata</i>	Chestnut-Rumped Babbler	NT
226	<i>Stachyris nigriceps</i>	Grey-Throated Babbler	LC
227	<i>Stachyris nigricollis</i>	Black-Throated Babbler	NT
228	<i>Stachyris poliocephala</i>	Grey-Headed Babbler	LC
229	<i>Trichastoma bicolor</i>	Ferruginous Babbler	LC
230	<i>Trichastoma rostratum</i>	White-Chested Babbler	NT
231	<i>Trichastoma tickelli</i>	Buff-Breasted Babbler	LC
	Turdidae		
232	<i>Myophonus robinsoni</i>	Malayan Whistling Thrush	NT
	Megalaimidae		
233	<i>Calorhamphus fuliginosus</i>	Brown Barbet	NT
234	<i>Megalaima australis</i>	Blue-Eared Barbet	NE
235	<i>Megalaima mystacophanos</i>	Red-Throated Barbet	NT
236	<i>Psilopogon chrysopogon</i>	Gold-Whiskered Barbet	LC
237	<i>Psilopogon franklinii</i>	Gold-Whiskered Barbet	LC
238	<i>Psilopogon henricii</i>	Yellow-Crowned Barbet	NT
239	<i>Psilopogon rafflesii</i>	Red-Crowned Barbet	NT
	Picidae		
240	<i>Blythipicus rubiginosus</i>	Maroon Woodpecker	LC
241	<i>Dryocopus javensis</i>	White-Bellied Woodpecker	LC
242	<i>Meiglyptes tukki</i>	Buff-Necked Woodpecker	NT
243	<i>Meglyptes tristis</i>	Buff-Rumped Woodpecker	DD
244	<i>Celeus brachyurus</i>	Rufous Woodpecker	LC
245	<i>Mulleripicus pulverulentus</i>	Great Slaty Woodpecker	VU
246	<i>Picus chlorolophus</i>	Lesser Yellownappe	LC
247	<i>Picus mentalis</i>	Checker-Throated Woodpecker	NE
248	<i>Picus miniaceus</i>	Banded Woodpecker	LC
249	<i>Picus puniceus</i>	Crimson-Winged Woodpecker	LC
250	<i>Sasia abnormis</i>	Rufous Piculet	LC
	Zosteropidae		
251	<i>Zosterops everetti</i>	Everett's White-Eye	LC
	Psittacidae		
252	<i>Loriculus galgulus</i>	Blue-Crowned Hanging-Parrot	LC
253	<i>Psittacula longicauda</i>	Long-Tailed Parakeet	VU
254	<i>Psittinus cyanurus</i>	Blue-Rumped Parrot	NT
	Strigidae		
255	<i>Ninox scutulata</i>	Brown Hawk-Owl	LC
256	<i>Otus bakkamoena</i>	Collared Scops Owl	LC
257	<i>Otus rufescens</i>	Reddish Scops-Owl	NT
258	<i>Ketupa ketupu</i>	Buffy Fish-Owl	LC
259	<i>Strix seloputo</i>	Spotted Wood Owl	LC
260	<i>Strix leptogrammica</i>	Brown Wood Owl	LC

(continued on next page)

Table 7 (continued)

	Species	Common name	IUCN List
	Trogonidae		
261	<i>Harpactes diardii</i>	Diard's Trogon	NT
262	<i>Harpactes duvaucelii</i>	Scarlet-Rumped Trogon	NT
263	<i>Harpactes orrhophaeus</i>	Cinamon-Rumped Trogon	NT
264	<i>Harpactes kasumba</i>	Red-Naped Trogon	NT
265	<i>Harpactes oreskios</i>	Orange-Breasted Trogon	LC
	No. of family	46	
	No. of species	265	

Table 8

Updated taxonomic checklist of mammals in Tasik Kenyir [1,6–17].

	Species	Common Name	IUCN List
	Manidae		
1	<i>Manis javanica</i>	Sunda Panggolin	CR
	Erinaceidae		
2	<i>Echinorex gymnura</i>	Moonrat	LC
3	<i>Hylomys suillus</i>	Short-Tailed Gymnure	LC
	Soricidae		
4	<i>Crociodura malayana</i>	Malayan Shrew	LC
5	<i>Suncus etruscus</i>	Pygmy Whited-Tooth Shrew	LC
	Tupaiaidae		
6	<i>Tupaia glis</i>	Malayan Treeshrew	DD
	Cynocephalidae		
7	<i>Galeopterus variegatus</i>	Sunda Flying Lemur	LC
	Pteropodidae		
8	<i>Balionycteris maculata</i>	Spotted-Winged Fruit Bat	LC
9	<i>Chironax melanocephalus</i>	Black-Capped Fruit Bat	LC
10	<i>Cynopterus brachyotis</i> "Sunda"	Lesser Dog-Faced Fruit Bat	LC
11	<i>Cynopterus brachyotis</i> "Forest"	Lesser Dog-Faced Fruit Bat	LC
12	<i>Cynopterus horsfieldii</i>	Horsfield's Fruit Bat	LC
13	<i>Cynopterus sphinx</i>	Greater Short-Nosed Fruit Bat	LC
14	<i>Eonycteris spelaea</i>	Dawn Bat	LC
15	<i>Macroglossus minimus</i>	Dagger-Tooth Long-Nosed Fruit Bat	LC
16	<i>Macroglossus sobrinus</i>	Hill Long-Tounged Fruit Bat	LC
17	<i>Megaerops ecaudatus</i>	Temminck's Tailless Fruit Bat	LC
18	<i>Penthetor lucasi</i>	Lucas's Short-Nosed Fruit Bat	LC
19	<i>Pteropus vampyrus</i>	Large Flying Fox	NT
20	<i>Rousettus amplexicaudatus</i>	Geoffroy's Rouset	LC
	Emballonuridae		
21	<i>Emballonura monticola</i>	Lesser Sheath-Tailed Bat	LC
	Nycteridae		
22	<i>Nycteris tragata</i>	Malayan Slit-Faced Bat	NT
	Megadermatidae		
23	<i>Megaderma iyra</i>	Greater Falsed Vampire Bat	LC
24	<i>Megaderma spasma</i>	Lesser Falsed Vampire Bat	LC
	Rhinolophidae		
25	<i>Rhinolophus affinis</i>	Intermediate Horseshoe Bat	LC
26	<i>Rhinolophus chiewkweeae</i>	Chiewkwee's Horseshoe Bat	NE
27	<i>Rhinolophus lepidus</i>	Blyth's Horseshoe Bat	LC
28	<i>Rhinolophus luctus</i>	Beddome's Horseshoe Bat	LC
29	<i>Rhinolophus pearsoni</i>	Pearson's Horseshoes Bat	LC
30	<i>Rhinolophus robinsoni</i>	Penninsular Horseshoes Bat	NT
31	<i>Rhinolophus sedulus</i>	Lesser Wooly Horseshoes Bat	NT
32	<i>Rhinolophus stheno</i>	Lesser Brown Horseshoes Bat	LC
33	<i>Rhinolophus pusilus</i>	Least Horseshoes Bat	LC

Table 8 (continued)

	Species	Common Name	IUCN List
	Hipposideridae		
34	<i>Hipposideros armiger</i>	Great Himalayan Leaf-Nosed Bat	LC
35	<i>Hipposideros ater</i>	Dusky Leaf-Nosed Bat	LC
36	<i>Hipposideros atrox</i>	Lesser Bicoloured Leaf-Nosed Bat	LC
37	<i>Hipposideros bicolor</i>	Bicoloured Leaf-Nosed Bat	LC
38	<i>Hipposideros cervinus</i>	Fawn-Colored Leaf-Nosed Bat	LC
39	<i>Hipposideros cineraceus</i>	Durga Das's Leaf-Nosed Bat	VU
40	<i>Hipposideros diadema</i>	Diadem Leaf-Nosed Bat	LC
41	<i>Hipposideros dyacorum</i>	Leaf-Nosed Bat	NE
42	<i>Hipposideros larvatus</i>	Horsfield's Leaf-Nosed Bat	LC
43	<i>Hipposideros ridleyi</i>	Ridley's Leaf-Nosed Bat	VU
44	<i>Hipposideros galeritus</i>	Cantor's Leaf-Nosed Bat	LC
45	<i>Ceoplos robinsonii</i>		NE
	Vespertilionidae		
46	<i>Kerivoula intermedia</i>	Small Woolly Bat	NT
47	<i>Kerivoula pellucida</i>	Clear-Winged Woolly Bat	NT
48	<i>Kerivoula minuta</i>	Least Woolly Bat	NT
49	<i>Kerivoula papillosa</i>	Papillose Woolly Bat	LC
50	<i>Kerivoula hardwickii</i>	Hardwicke's Woolly Bat	LC
51	<i>Kerivoula krauensis</i>	Krau Woolly Bat	DD
52	<i>Miniopterus schreibersii</i>	Schreiber's Bent-Winged Bat	NT
53	<i>Miniopterus medius</i>	Medium Bent-Winged Bat	LC
54	<i>Miniopterus ridleyi</i>	Bent-Winged Bats	NE
55	<i>Murina rozendaali</i>	Gilded Tube-Nosed Bat	VU
56	<i>Murina cyclotis</i>	Round-Eared Tube-Nosed Bat	LC
57	<i>Murina suilla</i>	Brown Tube-Nosed Bat	LC
58	<i>Myotis ater</i>	Peters's Myotis	LC
59	<i>Myotis horsfieldii</i>	Horsfield's Myotis	LC
60	<i>Myotis muricola</i>	Taiwan Broad-Muzzled Myotis	LC
61	<i>Myotis ridleyi</i>	Ridley's Myotis	NT
62	<i>Myotis siligorensis</i>	Himalayan Whiskered Bat	LC
63	<i>Myotis mystacinus</i>	Steppe Whiskered Bat	LC
64	<i>Philetor brachypterus</i>		LC
65	<i>Phoniscus jagorii</i>	Peters's Trumpet-Eared Bat	LC
66	<i>Scotophilus kuhlii</i>	Lesser Asiatic Yellow House Bat	LC
67	<i>Tylonycteris pachypus</i>	Lesser Bamboo Bat	LC
68	<i>Tylonycteris robustula</i>		LC
69	<i>Glischropus tylopus</i>	Common Thick-Thumbed Bat	LC
	Mollosidae		
70	<i>Chaerephon johorensis</i>	Northern Free-Tailed Bat	VU
	Lorisidae		
71	<i>Nycticebus coucang</i>	Greater Slow Loris	VU
	Cercopithecoidea		
72	<i>Macaca fascicularis</i>	Crab Eating Macaca	NT
73	<i>Macaca nemestrina</i>	Southern Pig-Tailed Macaque	VU
74	<i>Presbytis femoralis</i>	Banded Surili	NT
75	<i>Presbytis siamensis</i>	White-Thighed Surili	NT
76	<i>Trachypithecus obscurus</i>	Dusky Leaf Monkey	NT
	Hylobatidae		
77	<i>Hylobates lar</i>	Malaysian Lar	EN
78	<i>Symphalangus syndactylus</i>	Siamang	EN
	Canidae		
79	<i>Cuon alpinus</i>	Dhole	EN
80	<i>Canis familiaris</i>	Wild Dog	NE
	Ursidae		
81	<i>Helarctos malayanus</i>	Sun Bear	VU
	Mustelidae		
82	<i>Aonyx cinerea</i>	Asian Small-Clawed Otter	VU
83	<i>Lutra sumatrana</i>	Hairy-Nosed Otter	EN

(continued on next page)

Table 8 (continued)

	Species	Common Name	IUCN List
84	<i>Lutrogale perspicillata</i>	Smooth-Coated Otter	VU
85	<i>Martes flavigula</i>	Yellow-Throated Marten	LC
86	<i>Mustela nudipes</i>	Malay Weasel	LC
	Viverridae		
87	<i>Arctictis binturong</i>	Binturong	VU
88	<i>Paguma larvata</i>	Masked Palm Civet	LC
89	<i>Paradoxurus hermaphroditus</i>	Common Palm Civet	LC
90	<i>Viverra zibetha</i>	Large-Spotted Civet	EN
91	<i>Viverra tangalunga</i>	Malay Civet	LC
92	<i>Viverra zibetha</i>	Large Indian Civet	LC
93	<i>Arctogalidia trivirgata</i>	Small-Toothed Palm Civet	LC
94	<i>Hemigalus derbyanus</i>	Banded Civet	NT
	Hespertidae		
95	<i>Herpastes urya</i>	Crab-Eating Mongoose	LC
	Felidae		
96	<i>Catopuma temminckii</i>	Asiatic Golden Cat	NT
97	<i>Panthera pardus</i>	Leopard	VU
98	<i>Panthera tigris</i>	Tiger	EN
99	<i>Pardofelis marmorata</i>	Marbled Cat	NT
100	<i>Prionailurus bengalensis</i>	Leopard Cat	LC
101	<i>Prionailurus planiceps</i>	Flat-Headed Cat	EN
102	<i>Neofelis nebulosa</i>	Clouded Leopard	VU
	Prionodontidae		
103	<i>Prionodon linsang</i>	Banded Linsang	LC
	Elephantidae		
104	<i>Elephas maximus</i>	Asian Elephant	EN
	Tapiridae		
105	<i>Tapirus indicus</i>	Malay Tapir	EN
	Rhinocerotidae		
106	<i>Dicerorhinus sumatrensis</i>	Sumatran Rhinoceros	CR
	Suidae		
107	<i>Sus scrofa</i>	Wild Boar	LC
	Tragulidae		
108	<i>Tragulus javanicus</i>	Javan Chevrotain	DD
109	<i>Tragulus kanchil</i>	Lesser Oriental Chevrotain	LC
110	<i>Tragulus napu</i>	Greater Oriental Chevrotain	LC
	Cervidae		
111	<i>Rusa unicorn</i>	Sambar	VU
112	<i>Muntiacus muntjak</i>	Southern Red Muntjak	LC
	Bovidae		
113	<i>Capricornis sumatraensis</i>	Sumatran Serow	VU
114	<i>Bos gaurus</i>	Gaur	VU
	Sciuridae		
115	<i>Aeromys tephromelas</i>	Black Flying Squirrel	DD
116	<i>Callosciurus nigrovittatus</i>	Black-Striped Squirrel	LC
117	<i>Callosciurus notatus</i>	Plantain Squirrel	LC
118	<i>Callosciurus caniceps</i>	Grey-Bellied Squirrel	LC
119	<i>Callosciurus prevostii</i>	Prevost's Squirrel	LC
120	<i>Hylomys spadiceus</i>	Red-Cheeked Flying Squirrel	LC
121	<i>Lariscus insignis</i>	Three-Striped Ground Squirrel	LC
122	<i>Petaurista petaurista</i>	Red Giant Flying Squirrel	LC
123	<i>Petinomys setosus</i>	Temminck's Flying Squirrel	VU
124	<i>Petinomys vordermanni</i>	Vordermann's Flying Squirrel	VU
125	<i>Ratufa affinis</i>	Pale Giant Squirrel	NT
126	<i>Ratufa bicolor</i>	Black Giant Squirrel	NT
127	<i>Rhinosciurus laticaudatus</i>	Shrew-Faced Squirrel	NT
128	<i>Sundasciurus hippurus</i>	Horse-Tailed Squirrel	NT
129	<i>Sundasciurus lowii</i>	Low's Squirrel	LC
130	<i>Sundasciurus tenuis</i>	Slender Squirrel	LC
131	<i>Hylomys platyurus</i>	Jentink's Flying Squirrel	DD

Table 8 (continued)

	Species	Common Name	IUCN List
	Muridae		
132	<i>Berylmys bowersi</i>	Bower's White-Toothed Rat	LC
133	<i>Leopoldamys sabanus</i>		LC
134	<i>Maxomys inas</i>	Malayan Mountain Maxomys	LC
135	<i>Maxomys rajah</i>	Rajah Sundaic Maxomys	VU
136	<i>Maxomys surifer</i>	Indomalayan Maxomys	LC
137	<i>Maxomys whiteheadi</i>	Whitehead's Sundaic Maxomys	VU
138	<i>Mus caroli</i>	Ryukyu Mouse	LC
139	<i>Mus musculus</i>	House Mouse	LC
140	<i>Niviventer cremoriventer</i>	Sundaic Arboreal Niviventer	LC
141	<i>Niviventer fulvescens</i>	Chestnut White-Bellied Rat	LC
142	<i>Pithecheir parvus</i>	Malay Peninsula Pithecheir	DD
143	<i>Rattus annandalei</i>	Annandale's Sundaic Rat	LC
144	<i>Rattus argentiventer</i>	Ricefield Rat	LC
145	<i>Rattus exulans</i>	Polynesian Rat	LC
146	<i>Rattus rattus</i>	House Rat	LC
147	<i>Rattus surifer</i>		NE
148	<i>Rattus tiomanicus</i>	Malaysian Field Rat	LC
149	<i>Sundamys muelleri</i>	Müller's Sundamys	LC
	Spalacidae		
150	<i>Rhizomys sumatrensis</i>	Indomalayan Bamboo Rat	LC
	Hystricidae		
151	<i>Hystrix brachyura</i>	Malayan Porcupine	LC
152	<i>Atherurus macrourus</i>	Asiatic Brush-Tailed Porcupine	LC
153	<i>Trichys fasciculata</i>	Long-Tailed Porcupine	LC
	No. of family	34	
	No. of species	153	

Threatened species (%)

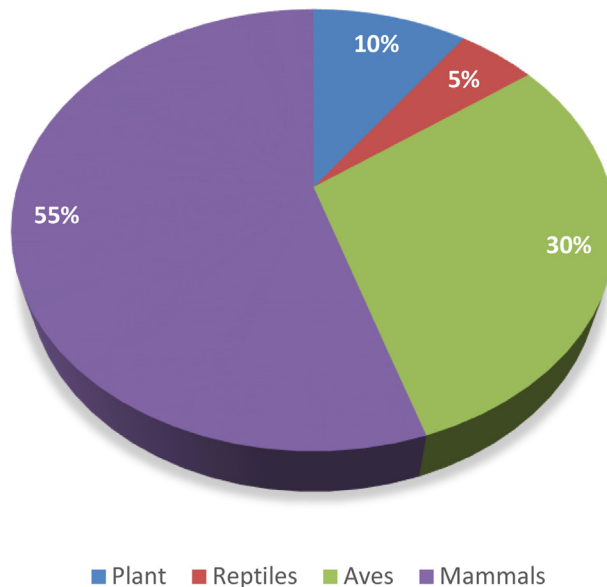
**Fig. 1.** Summary of threatened species (%) in Tasik Kenyir.

Table 9
Micro-climate data of Tasik Kenyir from March 2015 until February 2016.

Month	Climate		
	Temperature (°C)	Humidity (%RH)	Rainfall (mm)
Mar-15	25.72	76.80	24.80
Apr-15	26.16	79.60	214.80
May-15	27.02	78.10	26.40
Jun-15	26.82	81.60	38.20
Jul-15	26.94	82.20	143.60
Aug-15	25.79	83.40	178.40
Sep-15	26.49	83.30	99.40
Oct-15	25.86	84.80	201.60
Nov-15	25.22	89.80	592.80
Dec-15	25.13	87.81	259.00
Jan-16	25.69	85.61	136.60
Feb-16	26.64	85.10	104.60

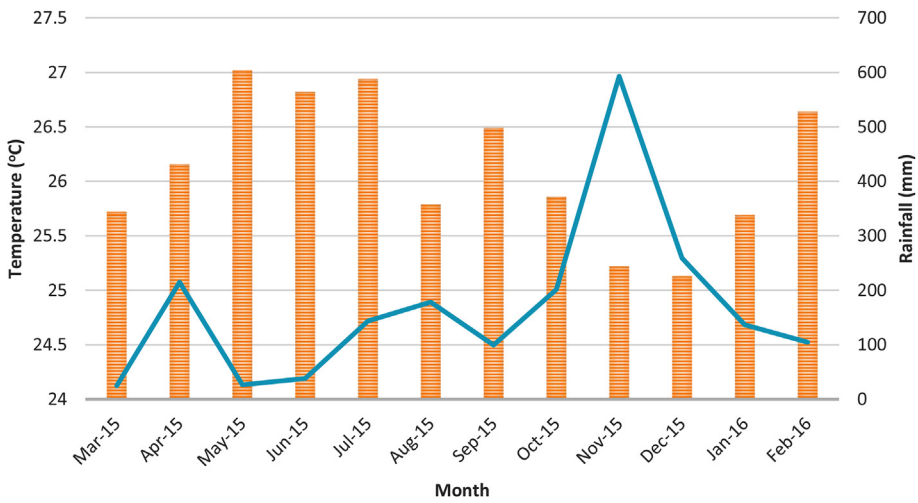


Fig. 2. Temperature and rainfall data of Tasik Kenyir from March 2015 until February 2016.

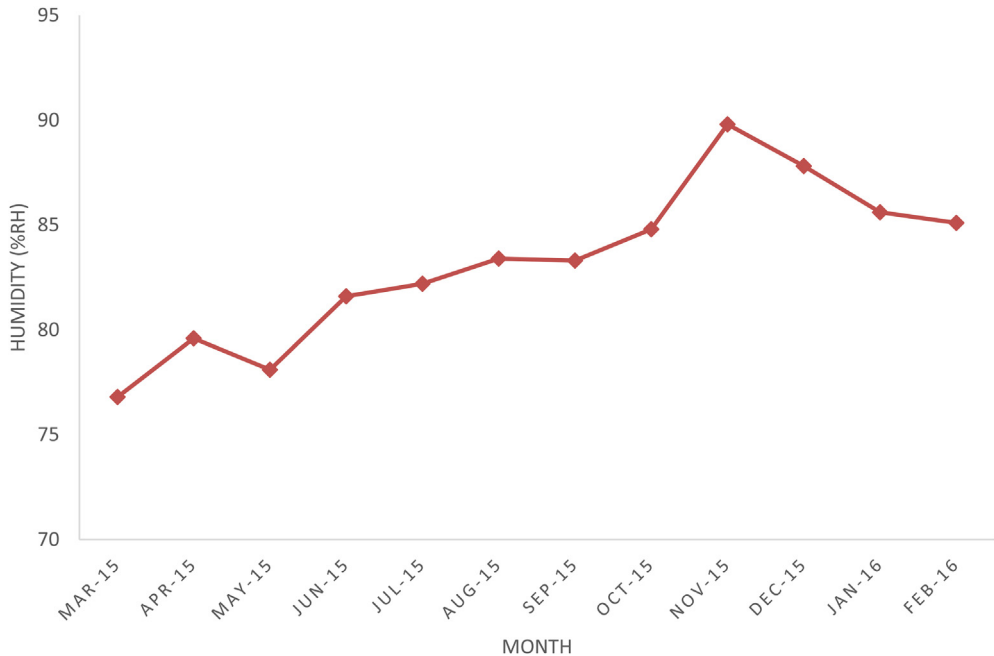


Fig. 3. Humidity (%RH) data of Tasik Kenyir from March 2015 until February 2016.

Author contribution

Mohd Noor Afiq Ramlee: Participated in all experiments, coordinated the data-analysis and contributed to the writing of the manuscript.

Mohd Fadli Hussin: Participated in data analysis and data collection.

Azuan Roslan: Participated in site monitoring and data collection (Mammals).

Fathihi Hakimi Rosmid: Participated in site monitoring and data collection (Insect).

Elizabeth Pesiu: Participated in site monitoring and data collection (Plant).

Noor Aisyah A Rahim: Participated in site monitoring and data collection (Mammals & Plant).

Nur Izzah Izzati Ahmad: Participated in site monitoring and data collection (Mammals).

Gertrude David: Participated in site monitoring and data collection (Birds).

Amirah Azizah Zakaria: Participated in site monitoring and data collection (Reptile).

Nur Amalina Adanan: Participated in site monitoring and data collection (Insect).

Hasrulzaman Hassan Basri: Participated in site monitoring and data collection (Mammals, Reptile).

Muhammad Syamsul Aznan Ariffin: Participated in site monitoring and data collection (Reptile).

Candyrilla Vera Bartholomew: Participated in site monitoring and data collection (Plants & Birds).

Muhamad Aidil Zahidin: Participate in manuscript design, data arrangement and writing.

Mohd Safih Lola: Participate in manuscript design, data analysis and planning.

Mohd Tajuddin Abdullah: Lead research project, planning, design research materials, organized the study and contributed to the writing of the manuscript.

Acknowledgments

We thank the Universiti Malaysia Terengganu (UMT) for the administration and logistic support, and the Department of Forestry Peninsular Malaysia (JH/100 Jld. 11(22) and the Department of Wildlife and National Park (DWNP) Peninsular Malaysia (600-2/2/21-5 [17], 100-34/1.24-5 [15&16], T-00370-16-16, 60-4/1.13-21[55], T-00372-16-16, 100-34/1.24-6[21]) for the research permits. This study was

supported by Trans-Disciplinary Research Grant Scheme (TRGS/2015/59373), Niche Research Grant Scheme (NRGS/2015/5313/2 & 6), Geopark Kenyir Development Fund (KGDR/2015/53167/3) and *Geran Galakan Penyelidikan* (GGP/2014/68007/127). All the grants were awarded to MT Abdullah and colleagues.

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.dib.2020.105328>.

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