



A CHECKLIST OF MAMMALS OF KERALA, INDIA

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Abstract: A checklist of mammals of Kerala State is presented in this paper. Accepted English names, scientific binomen, prevalent vernacular names in Malayalam, IUCN conservation status, endemism, Indian Wildlife (Protection) Act schedules, and the appendices in the CITES, pertaining to the mammals of Kerala are also given. The State of Kerala has 118 species of mammals, 15 of which are endemic to Western Ghats, and 29 species fall under the various threatened categories of IUCN.

Keywords: CITES, Indian Wildlife (Protection) Act, Malayalam name, vernacular name, Western Ghats.

The systematic collections of mammals of Kerala were made as early as the second half of the 19th century. The first book on Indian Mammals by Jerdon (1867) had references to the mammals of Kerala State. Other important historical publications that referred to the mammals of Kerala were those by Sterndale (1884) and Blanford (1888, 1891). As part of the Bombay Natural History Society's (BNHS) Mammal Survey of India held between 1912 to 1923, systematic collections of mammals were carried out from Kerala, the results of which were published by Thomas (1914–1924), Wroughton (1913–1921), Ryley (1913, 1914), Hinton

(1918) and Lindsay (1926, 1929). Taxonomic account on the mammals of Kerala found place in the second edition of the Fauna of British India series by Pocock (1939, 1941) and Ellerman (1961). The other taxonomic treatment on the mammals of Kerala include Ellerman & Morrison-Scot (1951), Prater (1971), Das (1986), Sadasivan (1987), Kurup (1989), Jayson (1996), Balakrishnan (1997), Nameer (2000), Dinesh et al. (2002) and Menon (2003, 2014). A regional checklist of mammals was published by Sathasivam (1996) where he listed 158 species of mammals from Kerala and Tamil Nadu. Subsequently, Nameer et al. (2001) reported 135 species of mammals from the Western Ghats. Dinesh et al. (2004) listed 106 species of mammals, while Easa and Ramachandran (2005) reported 145 species from Kerala.

The two ubiquitous and historically introduced species have been included in the list (e.g., Brown Rat *Rattus norvegicus* and House Mouse *Mus musculus*). The taxonomy and nomenclature follow Wilson & Reeder (2005) and Wilson & Mittermeier (2009), while the vernacular names have been taken from various sources (Sadasivan 1987; Nameer 2000; Menon 2008;



Vandeleuria nilagirica
Nilgiri Long-tailed Tree Mouse

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Dinesan et al. 2010). Marine mammals in the list are indicated in blue colour.

Though 118 species have been listed here, the occurrence of certain species within the political boundary of Kerala has not been verified as yet, because of the absence of authentic sight records of these species. The most important among these are the Malabar Civet *Viverra civettina* and the Fishing Cat *Prionailurus viverrinus*. Though these two species were known to occur in Kerala based on historical records (Jerdon 1867; Blanford 1888–1891; Pocock 1939; Hutton 1949; Prater 1971; Kurup 1987, 1989), two recent studies (Nandini & Mudappa 2010; Janardhanan et al. 2014) have ruled out the distribution in Kerala. Similarly, there has only been a vague mention of the presence of Eurasian Otter *Lutra lutra* from Kerala in the historic past (Jerdon 1867; Blanford 1888–1891; Pocock 1941; Prater 1971), and there have not been any authentic records of this species from anywhere in the state.

Several recent taxonomic studies have led to splits in the species status of mammals. The Common Langur *Semnopithecus entellus* has now been split into seven species in India (Karanth et al. 2008; Nag et al. 2011; Zinner et al. 2013), of which two are known from Kerala. The other taxonomic splits include those related to Gray Slender Loris *Loris lydekkerianus*, Nilgiri Palm Squirrel *Funambulus sublineatus*, Nilgiri Vandeleuria *Vandeleuria nilagirica*, Hill Shrew *Suncus niger* and Indian Chevrotain *Moschiola indica* (Corbet & Hill 1992, Groves 2000, 2005; Groves & Meijaard 2005; Hutterer 2005; Meegaskumbura & Schneider 2008; Musser & Carleton 2005; Dissanayake & Oshida 2012; Nekaris 2013). There have been several nomenclatural changes at the both generic and species levels, which are given in the Table 1 below, examples include Nilgiri Langur *Semnopithecus johnii*, Blanford's Madromys *Madromys blanfordi*, Chocolate Bat *Falsistrellus affinis*, Dormer's Bat *Scotozous dormeri*, Sambar Deer *Rusa unicolor* and Nilgiri Tahr *Nilgiritragus hylocrius* (Grubb 2005; Musser & Carleton 2005; Simmons 2005; Karanth et al. 2008; Nag et al. 2011; Zinner et al. 2013).

In this monograph, 118 species of mammals in 35 families and 13 orders are listed. Out of which 15 are endemic to Western Ghats. Twenty-nine species of mammals of Kerala, fall under the various threatened categories of IUCN, and five are Near-threatened. Eighty-seven species fall under one of the schedules of Indian Wildlife (Protection) Act and 46 come under one of the appendices of CITES.

REFERENCES

- Balakrishnan, M. (1997). Mammalian Resources, pp. 494–506. In: Thampi, K.B., N.M. Nayaar & C.S. Nair (eds.). *The Natural Resources of Kerala*. WWF (I). Thiruvananthapuram, 567pp.
- Blanford, W.T. (1888–1891). *The Fauna of British India, Including Ceylon and Burma. Mammalia. Part I & II*. Taylor and Francis, Red Lion Court Fleet Street, London, 617pp.
- Das, P.K. (1986). Studies on the taxonomy and geographical distribution of the species of bats obtained by the Silent Valley expedition, 1980. *Records Zoological Survey of India* 84(1–4).
- Dinesan, C., C. Radhakrishnan & J.R.B. Alfred (2002). *Threatened Mammals of Kerala*. Zoological Survey of India, Kolkata, i-v+58pp.
- Dinesan, C., C. Radhakrishnan & M.J. Palot (2004). A systematic list of mammals reported from Kerala, India. *Indian Forester* 130(10): 1113–1131.
- Dinesan, C., C. Radhakrishnan & M.J. Palot (2010). *Keralathile Sasthanikal* (Mammals of Kerala). Malabar Natural History Society, Kozhikode, 174pp.
- Dissanayake, R. & T. Oshida (2012). The systematics of the Dusky Striped Squirrel, *Funambulus sublineatus* (Waterhouse, 1838) (Rodentia: Sciuridae) and its relationships to Layard's Squirrel, *Funambulus layardi* Blyth, 1849. *Journal of Natural History* 46(1–2): 91–116.
- Easa, P.S. & K.K. Ramachandran (2005). *Biodiversity Documentation for Kerala. Part 12 - Mammals*. Kerala Forest Research Institute, Peechi, 40pp.
- Ellerman, J.R. & T.C.S. Morrison-Scott (1951). *Checklist of Palaearctic and Indian Mammals, 1758–1946*. British Museum of Natural History, London, 810pp.
- Ellerman, J.R. & T.C.S. Morrison-Scott (1966). *Checklist of Palaearctic and Indian Mammals, 1758–1946, 2nd Edition*. British Museum of Natural History, London, 810pp.
- Frost, D.R., W.C. Wozencraft & R.S. Hoffmann (1991). Phylogenetic relationship of hedgehogs and gymnures (Mammalia: Insectivora: Erinaceidae). *Smithsonian Contributions to Zoology* 518: 1–69.
- Groves, C.P. & P. Grubb (1982). Relationships of living deer. In: Wemmer, C.M. (ed.). *Biology and Management of the Cervidae. Research Symposia of the National Zoological Park*. Smithsonian Institution Press, Washington, D.C. xiii+577 pp.
- Groves, C.P. & E. Meijaard (2005). Interspecific variation in *Moschiola*, The Indian Chevrotain. *The Raffles Bulletin of Zoology* 12: 413–421.
- Groves, C.P. (2001). *Primate Taxonomy*. Smithsonian Institution Press, Washington DC, 350pp.
- Grubb, P. (2005). Artiodactyla, pp. 637–722. In: Wilson, D.E. & D.M. Reeder (eds.). *Mammal Species of the World: A Taxonomic and Geographic Reference, 3rd Edition*, Vol. 1 & 2. The Johns Hopkins University Press, Baltimore, 2142pp.
- Hinton, M.A.C. (1918–1923). Scientific results from the mammal survey # XVII, XVIII, XXXIV & XXXVI. *Journal of the Bombay Natural History Society* 26(1): 59–88, 26(4): 933–940, 28(4): 1056–1066, & 29(1): 77–83.
- Hutterer, R. (2005). Soricomorpha, pp. 220–311. In: Wilson, D.E. & D.M. Reeder (eds.). *Mammal Species of the World: A Taxonomic and Geographic Reference, 3rd Edition*, Vol. 1 & 2. The Johns Hopkins University Press, Baltimore, 2142pp.
- Hutton, A.F. (1949). Notes on the snakes and mammals of the High Wavy Mountains, Madura District, South India. Part II - Mammals. *Journal of the Bombay Natural History Society* 48: 681–694.
- Janardhanan, R., S. Mukherjee, P.V. Karunakaran & R. Athreya (2014). On the occurrence of the Fishing Cat *Prionailurus viverrinus* Bennet, 1833 (Carnivora: Felidae) in coastal Kerala, India. *Journal of Threatened Taxa* 6(3): 5569–5573; <http://dx.doi.org/10.11609/JoTT.o3780.5569-73>
- Jayson, E.A. (1996). *Rare and Endangered Mammals of Kerala*. KFRI, Book No. 3. Peechi, 44pp.
- Jerdon, T.C. (1867). *The Mammals of India*. British Museum of Natural History publications, 335pp.

Table 1. Checklist of mammals of Kerala

	English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
I. ORDER PROBOSCIDEA									
1	Asian Elephant (Indian Elephant)	<i>Elephas maximus</i>	Linnaeus, 1758	അറന്ത	Ana	EN	EN	Sch. I	App. I
II. ORDER SIRENIA									
2	Dugong (Sea Cow)	<i>Dugong dugon</i>	(Muller, 1776)	കരടം ഓരോ	Katal Pašu	VU	VU	Sch. I	App. I
III. ORDER SCANDENTIA									
3	Madras Treeshrew (South Indian Treeshrew) ¹	<i>Anathana ellioti</i>	(Waterhouse, 1850)	മാനക്കുട്ടി	Mara Nacheli	LC	LC		
IV. ORDER PRIMATES									
4	Gray Slender Loris (lorises)	<i>Loris lydekkerianus</i>	Cabrera, 1908	കാർബിജോ പാഡാങ്ക്	Kutittivāñči	LC	LC	Sch. I	
5. Family Ceropithecidae (old world monkeys)									
5	Bonnet Macaque ¹	<i>Macaca radiata</i>	(E. Geoffroy, 1812)	നാസൻ കുറുക്ക്	Nāṭan Kurāñči	LC	LC	Sch. II	
6	Lion-tailed Macaque	<i>Macaca silenus</i>	(Linnaeus, 1758)	സിംഹവാലൻ കുറുക്ക്	Sinhavālān Kurāñči	EN	WG	Sch. I	
7	Black-footed Gray Langur (Black-footed Grey Langur, Malabar Sacred Langur)	<i>Semnopithecus hypoleucus</i>	Blyth, 1841	കാലിക്കൂറൻ കുറുക്ക്	Karinkayyan Kurāñči	VU	WG	Sch. II	
8	Nilgiri Langur ³	<i>Semnopithecus johnii</i>	(J. Fischer, 1829)	കാലിക്കൂറൻ	Karinkurāñči	VU	WG	Sch. I	
9	Tufted Gray Langur (Tufted Grey Langur, Coronamandel Sacred Langur) ⁴	<i>Semnopithecus priam</i>	Blyth, 1844	മഠാപ്പിന്ദം കുറുക്ക്	Teṭṭapi hanumāñči kurāñči	NT	NT	Sch. II	
V. ORDER RODENTIA									
10	Malabar Giant Squirrel (Indian Giant Squirrel) ¹	<i>Ratufa indica</i>	(Erxleben, 1777)	മലയൻകുറുക്ക്	Malayanči	LC	LC	Sch. II	
11	Grizzled Giant Squirrel (Sri Lankan Giant Squirrel) ⁴	<i>Ratufa macroura</i>	(Pennant, 1769)	ചെമ്പൻ അഞ്ചുവാൻ	Chāmpal Añčāñan	NT	NT	Sch. I	
12	Indian Giant Flying Squirrel (Large Brown Flying Squirrel)	<i>Petaurus philippensis</i>	(Elliot, 1839)	പാഡാൻ	Pāñčāñ	LC	LC	Sch. II	
13	Travancore Flying Squirrel ⁴	<i>Petaromys fuscocapillus</i>	(Jerdon, 1847)	കുറഞ്ഞ പാഡാൻ	Kunnan Pāñčāñ	NT	NT	Sch. I	
14	Three-striped Palm Squirrel (Indian Palm Squirrel) ⁵	<i>Funambulus palmarum</i>	(Linnaeus, 1766)	അഞ്ചുവാൻകുറുക്ക്	Añčāñakkančāñan	LC	LC		
15	Nilgiri Palm Squirrel ⁶	<i>Funambulus sublineatus</i>	(Waterhouse, 1838)	കുറഞ്ഞ അഞ്ചുവാൻ	Kunnan Añčāñan	VU	WG		
16	Jungle Palm Squirrel (Western Ghats Striped Squirrel)	<i>Funambulus tristriatus</i>	(Waterhouse, 1837)	കാട്ടുവരായാന്കുറുക്ക്	Kāttuvārayančāñan	LC	WG		

	English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
7. Family Platacanthomysidae (tree mouse)									
17	Spiny Tree Mouse (Spiny Dormouse)	<i>Platacanthomys losurus</i>	Blyth, 1859	മുള്ളേരി	Mulleri	VU	WG		
8. Family Muridae (rats and mice)									
18	Lesser Bandicoot-rat (Indian Mole-rat)	<i>Bandicota bengalensis</i>	(Gray, 1835, in 1830-1835)	തൃപ്പൂണി	Turappaneli	LC	Sch. V		
19	Greater Bandicoot-rat	<i>Bandicota indica</i>	(Bechstein, 1800)	ബാന്ദികോട്ടി	Peruchâjî	LC	Sch. V		
20	Indian Bush Rat	<i>Golunda ellioti</i>	Gray, 1837	അരോളിന്റെ കുലി	Geâluntâ Eli	LC	Sch. V		
21	Blanford's Madromys (White-tailed Wood-rat) ⁷	<i>Madromys blanfordi</i>	(Thomas, 1881)	രണ്ടുവാലൻ കുലി	Vellavâlan Eli	LC	Sch. V		
22	Little Indian Field Mouse	<i>Mus booduga</i>	(Gray, 1837)	മുരിഗു അരുളംകുലി	Cheruchuntheti	LC	Sch. V		
23	Bonhôte's Mouse (Servant Mouse)	<i>Mus famulus</i>	Bonhôte, 1898	കുട്ടിക്കുണ്ണേരി	Kâttuchuntheli	EN	WG	Sch. V	
24	House Mouse ⁸	<i>Mus musculus</i>	Linnaeus, 1758	മുള്ളേരി	Chuntheli	LC	Sch. V		
25	Brown Spiny Mouse (Flat-haired Mouse)	<i>Mus platythrrix</i>	Bennett, 1832	മുള്ളേരി അരുളംകുലി	Mullian Chuntheli	LC	Sch. V		
26	Brown Rat ⁹	<i>Rattus norvegicus</i>	(Berkenhout, 1769)	തുവിന്തൻ കുലി	Tavîtan Eli	LC	Sch. V		
27	Ranjinji's Field Rat (Kerala Rat) ¹⁰	<i>Rattus ranjiniæ</i>	Agarwal & Ghosal, 1969	രണ്ണാം കുലി	Nellei	EN	KL	Sch. V	
28	House Rat (Roof Rat)	<i>Rattus rattus</i>	(Linnaeus, 1758)	എലി	Eli	LC	Sch. V		
29	Sahyadris Forest Rat	<i>Rattus saterae</i>	Hinton, 1918	സഹ്യാദ്രി കുങ്കുലി	Sahyâdri Kâtteli	VU	WG	Sch. V	
30	Indian Gerbil	<i>Tatera indica</i>	(Hardwicke, 1807)	കാംതു കുലി	Kangaru Eli	LC	Sch. V		
31	Nilgiri Vandeleuria (Nilgiri Long-tailed Tree Mouse) ¹¹	<i>Vandeleuria nilagirica</i>	Jerdon, 1867	വഡവൻ അരുളംകുലി	Vâlan Chuntheli	EN	WG	Sch. V	
9. Family Hystricidae (porcupines)									
32	Indian Crested Porcupine	<i>Hystrix indica</i>	Kerr, 1792	മുള്ളേരി എന്മി	Mullapanini	LC		Sch. IV	
VI. ORDER LAGOMORPHA									
10. Family Leporidae (hares)									
33	Black-naped Hare (Indian Hare)	<i>Lepus nigricollis</i>	F. Cuvier, 1823	കുട്ടായ്മൻ	Kâttmuyal	LC		Sch. IV	
VII. ORDER ERINACEOMORPHA									
11. Family Erinaceidae (hedgehogs)									
34	Bare-bellied Hedgehog (Madras Hedgehog) ¹²	<i>Paraechinus nudiventris</i>	(Horsfield, 1851)	ഉന്നതിരുവന്നം	Ittilpanni	LC		Sch. IV	
VIII. ORDER SORICOMORPHA									
12. Family Soricidae (shrews)									
35	Kelaart's Long-clawed Shrew ⁴	<i>Feroculus feroculus</i>	(Kelaart, 1850)	നിലംവളർത്തി നീരുളി	Siléâñ Nachelî	EN			
36	Day's Shrew	<i>Suncus dayi</i>	(Dobson, 1888)	കുട്ടി നീരുളി	Kâttunacheli	EN	WG		
37	House Shrew (Grey Must Shrew)	<i>Suncus murinus</i>	(Linnaeus, 1766)	വിട്ടി നീരുളി	Vîttunacheli	LC			
38	Hill Shrew (Indian Highland Shrew) ¹³	<i>Suncus niger</i>	(Horsfield, 1851)	കുടി നീരുളി	Malanacheli	NE	WG		

	English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
39	Pygmy White-toothed Shrew	<i>Suncus etruscus</i>	(Savi, 1822)	കുറഞ്ഞ താളുളി	Kunnannacheli	LC			
IX. ORDER CHIROPTERA									
	13. Family Pteropodidae (fruit bats)								
40	Lesser Dog-faced Fruit Bat	<i>Cynopterus brachyotis</i>	(Muller, 1838)	മരുപ്പൊന്ത് വയ്ക്കൽ	Śvānamukhan Vavāl	LC		Sch. V	
41	Short-nosed Fruit Bat (Greater Short-nosed Fruit Bat)	<i>Cynopterus sphinx</i>	(Vahl, 1797)	കുറഞ്ഞകുളി വയ്ക്കൽ	Kurumükkan Vavāl	LC		Sch. V	
42	Dawn Bat (Lesser Dawn Bat) ¹⁴	<i>Eonycteris spelaea</i>	(Dobson, 1871)	സ്രീതേ വയ്ക്കൽ	Prabhātā Vavāl	LC		Sch. V	
43	Indian Flying Fox	<i>Pteropus giganteus</i>	(Brunnich, 1782)	ഉന്തൻ സൗമ്യവേൽ	Intyan Palavavāl	LC		Sch. V	
44	Fulvous Fruit Bat (Leschenault's Rousette)	<i>Rousettus leschenaultii</i>	(Desmarest, 1820)	മണംപുലുപ്പുൻ വഴവാലും	Māññāchuvappan Palavavāl	LC		Sch. V	
	14. Family Emballonuridae (sheath-tailed bats)								
45	Pouch-bearing Bat (Naked-rumped Pouched Bat)	<i>Saccopteryx sacculatus</i>	(Temminck, 1838)	സാക്കപ്പൊന്ത് ഉന്നവാലുംവും	Sāñchivāhī Uravālanvāval	LC			
46	Bearded Sheath-tailed Bat (Black-bearded Tomb Bat)	<i>Taphozous melanopogon</i>	Temminck, 1841	കുറിതോട് ഉന്നവാലുംവും	Karintāti Uravālanvāval	LC			
47	Long-armed Sheath-tailed Bat (Long-winged Tomb Bat)	<i>Taphozous longimanus</i>	Hardwicke, 1825	നീർക്കുരുക്കുള്ള് ഉന്നവാലുംവും	Nikkaiyyan Uravālanvāval	LC			
	15. Family Megadermatidae (false-vampire bats)								
48	Greater False-vampire Bat	<i>Megaderma lyra</i>	E. Geoffroy, 1810	വലവു താളിപ്പിൾ	Valiya Narichir	LC			
49	Lesser False-vampire Bat	<i>Megaderma spasma</i>	(Linnaeus, 1758)	മലവിൽ താളിപ്പിൾ	Cetiya Narichir	LC			
	16. Family Rhinolophidae (horseshoe bats)								
50	Lesser Woolly Horseshoe Bat (Beddomme's Horseshoe Bat)	<i>Rhinolophus beddomei</i>	Ander sen, 1905	എിന്റെ കുറ്റിലുംവും	Chinna Kutirātānvanvāl	LC			
51	Blyth's Horseshoe Bat	<i>Rhinolophus lepidus</i>	Blyth, 1844	മുവി കുറ്റിലുംവും	Cheru Kutirātānvanvāl	LC			
52	Least Horseshoe Bat	<i>Rhinolophus pusillus</i>	Temminck, 1834	കുറഞ്ഞ കുറ്റിലുംവും	Kunnan Kutirātānvanvāl	LC			
53	Rufous Horseshoe Bat	<i>Rhinolophus rouxi</i>	Temminck, 1835	മലവിൽ കുറ്റിലുംവും	Chempān Kutirātānvanvāl	LC			
	17. Family Hipposideridae (leaf-nosed bats)								
54	Dusky Leaf-nosed Bat	<i>Hipposideros ater</i>	Templeton, 1848	ഉന്തൻ ഉലച്ചുകുളംവും	Irulan Iamükkannavāl	LC			
55	Fulvous Leaf-nosed Bat	<i>Hipposideros fulvus</i>	Gray, 1838	താപിൻ ഉലച്ചുകുളംവും	Taitian Iamükkannavāl	LC			
56	Schneider's Leaf-nosed Bat	<i>Hipposideros speoris</i>	Schneider, 1800	ഉന്തൻ ഉലച്ചുകുളംവും	Intyan Iamükkannavāl	LC			
	18. Family Molossidae (free-tailed bats)								
57	Egyptian Free-tailed Bat	<i>Tadarida aegyptiaca</i>	(E. Geoffroy, 1818)	ഉദ്ദൈന്തുന്ത് ഉന്നവാലും	Jijsyn Vəlanvāval	LC			
	19. Family Vespertilionidae (evening bats)								
58	Hairy-winged Bat (Lesser Hairy-winged Bat)	<i>Harpiocephalus harpia</i>	Temminck, 1840	അരബ്ജീകാൻ ഉന്നവും	Rēāmachirakan Vāval	LC			
59	Painted Bat (Painted Woolly Bat)	<i>Kerivoula picta</i>	(Pallas, 1767)	പിരു ഉന്നവും	Chitravāval	LC			

	English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
60	Horsfield's Mouse-eared Bat (Horsfield's Myotis)	<i>Myotis horsfieldii</i>	(Temminck, 1840)	മുയിലിൻ വാവൽ	Cheviyan Vaval	LC			
61	Burmese Whiskered Bat (Burmese Whiskered Myotis)	<i>Myotis montivagus</i>	(Dobson, 1874)	ഡിരബന്നൻ	Miśavāval	LC			
62	Chocolate Bat ¹⁵	<i>Falsistrellus affinis</i>	(Dobson, 1871)	മുടികൻ അരക്കുമ്പൻ	Taviyan Atakkavāval	LC			
63	Kelaart's Pipistrelle	<i>Pipistrellus ceylonicus</i>	(Kelaart, 1852)	സിലേൻ അരക്കുമ്പൻ	Silēñ Atakkavāval	LC			
64	Least Pipistrelle	<i>Pipistrellus tenuis</i>	(Temminck, 1840)	കുറഞ്ഞ അരക്കുമ്പൻ	Kunnan Atakkavāval	LC			
65	Dormer's Bat ¹⁶	<i>Scotoreous dormeri</i>	(Dobson, 1875)	അമ്പൽക്കുട്ടൻ അരക്കുമ്പൻ	Đéâumarute Atakkavāval	LC			
66	Greater Asiatic Yellow House Bat	<i>Scotophilus heathii</i>	(Horsfield, 1831)	മണംപാലൻ	Maññavāval	LC			
67	Lesser Asiatic Yellow Bat	<i>Scotophilus kuhlii</i>	Leach, 1821	മുഡം മണംപാലൻ	Cherū Mañnavavāval	LC			
68	Bamboo Bat	<i>Tylonycteris pachypterus</i>	(Temminck, 1840)	മഴുമ്പൻ	Mulajavāval	LC			
X. ORDER PHOLIDOTA									
	20. Family Manidae (pangolins)								
69	Indian Pangolin	<i>Manis crassicaudata</i>	E. Geoffroy, 1803	ഘറ്റാനാന്താളി	Înămpêci	EN		Sch. I	App. II
XI. ORDER CARNIVORA									
	21. Family Canidae (dogs)								
70	Bengal Fox ¹⁷	<i>Vulpes bengalensis</i>	(Shaw, 1800)	കുഡിക്കൻ	Kurukkan	LC		Sch. II	App. III
71	Golden Jackal	<i>Canis aureus</i>	Linnaeus, 1758	കുറിപ്പൻ, ഉംഗ്രൻ	Kurunari, Újan	LC		Sch. II	App. III
72	Indian Wild Dog (Dhole)	<i>Cuon alpinus</i>	(Pallas, 1811)	മുഗ്രായ, കുറിപ്പൻ	Chennâya, Kâttîunâya	EN		Sch. II	App. II
	22. Family Ursidae (bears)								
73	Sloth Bear	<i>Melursus ursinus</i>	(Shaw, 1791)	കാരി	Karati	VU		Sch. I	App. I
	23. Family Mustelidae (otters and martens)								
74	Nilgiri Marten	<i>Martes gwatkinsi</i>	Horsfield, 1851	കണന്ന	Maranâya	VU	WG	Sch. II	App. III
75	Asian Small-clawed Otter (Clawless Otter)	<i>Aonyx cinerea</i>	Illiger, 1815	മും താണ്ടാഡ	Mala Nirmâya	VU		Sch. I	App. II
76	Smooth-coated Otter (Indian Smooth-coated Otter)	<i>Lutrogale perspicillata</i>	(I. Geoffrey Saint-Hilaire, 1826)	നിർന്നന്ന	Nîrnâya	VU		Sch. II	App. II
	24. Family Viverridae (civets and palm civets)								
77	Small Indian Civet	<i>Viverricula indica</i>	(E. Geoffroy Saint-Hilaire, 1818)	എംബളുക്ക്	Püveruk	LC		Sch. II	App. III
78	Common Palm Civet (Toddy Cat)	<i>Paradoxurus hermaphroditus</i>	(Pallas, 1777)	മംസ്ക്രി	Marappatti	LC		Sch. II	App. III
79	Brown Palm Civet (Jerdon's Palm Civet)	<i>Paradoxurus jerdoni</i>	Blanford, 1885	മുടിക്കൻ ലവാളുക്ക്	Taviyan Veruk	LC	WG	Sch. II	App. III
	25. Family Herpestidae (mongooses)								
80	Brown Mongoose ¹⁸	<i>Herpestes fuscus</i>	Gray, 1837	മുടിക്കൻ കുറി	Taviyan Kiri	LC		Sch. II	
81	Indian Grey Mongoose	<i>Herpestes edwardsii</i>	(E. Geoffroy Saint-Hilaire, 1818)	മുടം കുറി	Nâtan Kiri	LC		Sch. II	App. III

English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
82 Ruddy Mongoose ¹⁷	<i>Herpestes smithii</i>	Gray, 1837	പുളിസ്തന്തരൻ കുറി	Chunavan Kiri	LC		Sch. II	App. III
83 Stripe-necked Mongoose ⁴	<i>Herpestes vitticollis</i>	Bennett, 1835	മലബാറിൽ	Chenhkiri	LC		Sch. II	App. III
26. Family Felidae (cats)								
84 Jungle Cat	<i>Felis chaus</i>	Schreber, 1777	കുട്ടപുച്ചാ	Kattupučcha	LC		Sch. II	App. II
85 Leopard Cat	<i>Prionailurus bengalensis</i>	Kerr, 1792	പുലിപുച്ചാ	Pulipučcha	LC		Sch. I	App. I
86 Rusty-spotted Cat ¹⁷	<i>Prionailurus rubiginosus</i>	(I. Geoffroy Saint-Hilaire, 1831)	തൃഥിനുംനാശക	Turumpān Pučha	VU		Sch. I	App. I
87 Leopard	<i>Panthera pardus</i>	(Linnaeus, 1758)	എല്ലോപ്പുളി	Pullippuli	NT		Sch. I	App. I
88 Tiger	<i>Panthera tigris</i>	(Linnaeus, 1758)	കടുവ	Katuvu	EN		Sch. I	App. I
XII. ORDER ARTIODACTyla								
27. Family Suidae (pigs)								
89 Wild Boar (Wild Pig)	<i>Sus scrofa</i>	Linnaeus, 1758	കുട്ടകുട്ടാം	Kattupanni	LC		Sch. III	
28. Family Tragulidae (mouse deer)								
90 Indian Chevrotain (Mouse Deer) ¹⁸	<i>Moschiola indica</i>	Gray, 1852	കുറുമുഠൻ, കുറുപ്പുന്നി	Kūramān, Kurampanni	LC		Sch. I	
29. Family Cervidae (deer)								
91 Spotted Deer (Chital)	<i>Axis axis</i>	(Erxleben, 1777)	പിള്ളമുരം	Pullimān	LC		Sch. III	
92 Barking Deer (Indian Muntjac) ¹⁹	<i>Muntiacus muntjak</i>	(Zimmermann, 1780)	ങക്കുംഡൻ, കെക്കുംഡൻ	Kēlāmān, Kēlayāt	LC		Sch. III	
93 Sambar Deer	<i>Rusa unicolor</i>	(Kerr, 1792)	കുമ്പാൻ, കുംബാൻ	Kalamān, Mlāv	VU		Sch. III	
30. Family Bovidae (cattle)								
94 Gaur (Indian Gaur)	<i>Bos gaurus</i>	Smith, 1827	കുട്ടപ്പേരം	Kattupātt	VU		Sch. I	App. I
95 Four-horned Antelope (Chouisingha)	<i>Tetracerus quadricornis</i>	(de Blainville, 1816)	ഉള്ളമുഠൻ	Ullamān	VU		Sch. I	
96 Nilgiri Tahr ²⁰	<i>Nilgiritragus hyloctis</i>	(Ogilby, 1838)	പഞ്ചമുഠൻ	Varayāt	EN	WG	Sch. I	
XIII. ORDER CETACEA								
31. Family Delphinidae (marine dolphins)								
97 Common Dolphin (Short-beaked Common Dolphin)	<i>Delphinus delphis</i>	Linnaeus, 1758	കുട്ടപ്പാൻ, കുടലേരി	Katalpanni, Kataleti	LC		Sch. II	App. II
98 Grey Dolphin (Risso's Dolphin)	<i>Grampus griseus</i>	(G. Cuvier, 1812)	ബഹു അണംബന്നിൻ	Chāra Dēlphin	LC		Sch. II	App. II
99 Short-finned Pilot Whale (Pacific Pilot Whale)	<i>Globicephala macrorhynchus</i>	Gray, 1846	കുറാപ്പിടികൾ അബാദൻവിൻ	Kunnichirakan Dēlphin	DD		Sch. II	App. II
100 Pygmy Killer Whale (Slender Blackfish)	<i>Feresa attenuata</i>	Gray, 1875	കുറാൻ കുലുവാളിന്തെഗ്രാം	Kunnan Keālayālithimigalaṁ	DD		Sch. II	App. II
101 Fraser's Dolphin (Sarawak Dolphin)	<i>Lagenodelphis hosei</i>	Fraser, 1957	ബൈബാനാനുദാന അബാദൻവിൻ	Phrāserute Dēlphin	LC		Sch. II	App. II
102 Melon-headed Dolphin (Indian Broad-beaked Dolphin)	<i>Peponocephala electra</i>	(Gray, 1846)	മലബാൻ ത്രിഭൂമിഡാം	Talayan Timinigalaṁ	LC		Sch. II	App. II
103 False Killer Whale	<i>Pseudorca crassidens</i>	(Owen, 1846)	കൊട കുലുവാളിന്തെഗ്രാം	Kabata Keālayālithimigalaṁ	DD		Sch. II	App. II
104 Rough-toothed Dolphin	<i>Steno bredanensis</i>	(G. Cuvier in Lesson, 1828)	വരുടക്കാൻപിന്	Parukkan Pallan	LC		Sch. II	App. II

	English name	Species name	Authority	Malayalam name	Vernacular name	IUCN	END	WPA	CITES
105	Indo-Pacific humpback Dolphin (Plumbeous Dolphin)	<i>Sousa chinensis</i> (Osbeck, 1765)		സുഗ്രാമംസി	Punnanet̄i	NT		Sch. II	App. II
106	Striped Dolphin	<i>Stenella coeruleoalba</i> (Meyen, 1833)		വിരഞ്ഞ	Varayan	LC		Sch. II	App. II
107	Pantropical Spotted Dolphin (Bridled Dolphin)	<i>Stenella attenuata</i> (Gray, 1846)		എല്ലേരി പ്രജനനഭൂമി	Pulli Dēliphin	LC		Sch. II	App. II
108	Spinner Dolphin	<i>Stenella longirostris</i> (Gray, 1828)		മെലിയാട്ടം	Meliyanet̄i	DD		Sch. II	App. II
109	Bottle-nosed Dolphin	<i>Tursiops truncatus</i> (Montagu, 1821)		കുപ്പിമുക്കൻ ദീപിഥിൻ	Kuppimukkan Dēliphin	LC		Sch. II	App. II
32. Family Phocoenidae (porpoises)									
110	Finless Porpoise (Indo-Pacific Finless Porpoise)	<i>Neophocaena phocaenoides</i> (G. Cuvier, 1829)		പുറാധാരണി	Eliyanet̄i	VU		Sch. I	App. II
33. Family Physeteridae (sperm whales)									
111	Pygmy Sperm Whale	<i>Kogia breviceps</i> (Blainville, 1838)		കുളംൻ ഏരിയൽവാലി	Kunnan Enjātāmingalam	DD		Sch. II	App. II
112	Sperm Whale	<i>Physeter catodon</i> Linnaeus, 1758		എരുളുതിരിവാലി	Enja Timingalam	VU		Sch. II	App. II
34. Family Ziphiidae (beaked whales)									
113	Ginkgo-toothed Whale (Ginkgo-toothed Beaked Whale)	<i>Mesoplodon ginkgodens</i> Nishiwaki and Kamiya, 1958		ജിംഗ്കോ തിരിവാലി	Jin̄kē Tāmingalam	DD		Sch. II	App. II
35. Family Balaenopteridae (rorquals)									
114	Minke Whale (Lesser Rorqual)	<i>Balaenoptera acutorostrata</i> Lacepede, 1804		ഒരാറ്റ് തിരിവാലി	Cherū Timingalam	LC		Sch. II	App. I
115	Bryde's Whale (Tropical Whale)	<i>Balaenoptera edeni</i> Anderson, 1879		വാലൈപ്പാരിഡോ തിരിവാലി	Braideante Timingalam	DD		Sch. II	App. I
116	Blue Whale	<i>Balaenoptera musculus</i> (Linnaeus, 1758)		നീല തിരിവാലി	Nila Timingalam	EN		Sch. II	App. I
117	Fin Whale (Common Rorqual)	<i>Balaenoptera physalus</i> (Linnaeus, 1758)		പിലകൻ തിരിവാലി	Chitakan Timingalam	EN		Sch. II	App. I
118	Humpback Whale	<i>Megaptera novaeangliae</i> (Borowski, 1781)		കുറംൻ തിരിവാലി	Kūnan Timingalam	LC		Sch. II	App. I

¹ Endemic to peninsular India
² Formerly placed under *L. tardigradus*, but has since been split into two and *L. tardigradus* is now endemic to Sri Lanka (Groves 2000, 2005; Nekaris 2013).

L. lydekerianus is endemic to southern India and Sri Lanka
³ Formerly placed under the genus *Trachypithecus*, but later changed to *Semnopithecus* (Karanth et al. 2008; Nag et al. 2011; Zinner et al. 2013)

⁴ Endemic to Western Ghats and Sri Lanka
⁵ Endemic to southern India and Sri Lanka
⁶ *F. sublineatus* is split into *F. sublineatus* and *F. obscurus*, the former endemic to Western Ghats and the latter endemic to Sri Lanka (Dissanayake & Oshida 2012)

⁷ Formerly placed under the genus *Cremnomys*; later moved to *Madromys* Musser & Carleton (2005)
⁸ Originally a Palearctic species and is introduced in India
⁹ Native to southeastern Siberia, northeastern China and parts of Japan. Introduced species in India
¹⁰ Known only from few specimens collected from the rice fields of Thrissur, Alleppey and Thiruvananthapuram (Agarwal 2000; Musser & Carleton 2005)

¹¹ Formerly *V. deracea* later split into *V. olereaceo* and *V. nilagirica* (Corbet & Hill 1992, Musser & Carleton 2005)

¹² Formerly *Hemiechinus nudiventer* (Corbet & Hill 1992), but later moved to the genus *Paroecinthus* (Frost et al. 1991; Hutterer 1993, 2005). Endemic to southern India

¹³ Formerly *S. montanus* Hutterer (2005), but later split to *S. niger* and *S. montanus*, former endemic to Western Ghats while the latter is endemic to Sri Lanka (Meegaskumbura & Schneider 2008)

¹⁴ Nameer et al. (in press.)

¹⁵ Formerly placed under the genus *Pipistrellus*, later moved to *Falsistrellus* (Simmons 2005)

¹⁶ Formerly placed under the genus *Pipistrellus*, later moved to *Scotozous* (Simmons 2005)

¹⁷ Endemic to peninsular India and Sri Lanka

¹⁸ Formerly *Tragulus memintra*, until split and moved to the genus *Moschiola* (Groves & Meijaard 2005). Endemic to India.

¹⁹ Formerly placed under the genus *Cervus*, later moved to *Rusa* (Grubb 2005)

²⁰ Formerly placed under the genus *Hemitragus*, later moved to *Nilgiritragus* (Ropiquet & Hassanin 2005)



Image 1. Asain Elephant *Elephas maximus*



Image 2. Lion-tailed Macaque *Macaca silenus*



Image 3. Nilgiri Langur *Trachypithecus johnii*



Image 4. Grey Langur *Semnopithecus priam*

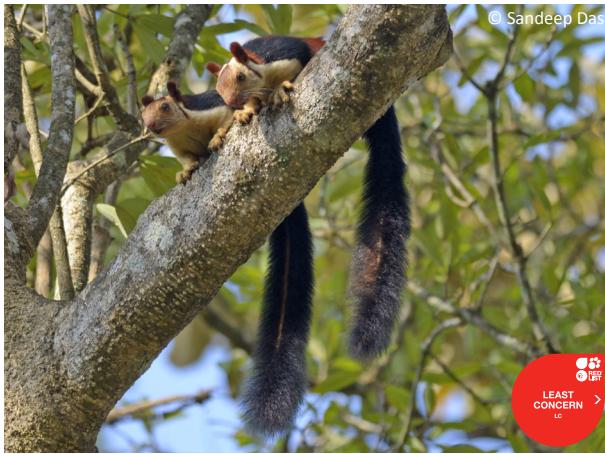


Image 5. Malabar Giant Squirrel *Ratufa indica*



Image 6. Grizzled-giant Squirrel *Ratufa macroura*



Image 7. Nilgiri Long-tailed Tree Mouse *Vandeleuria nilagirica*



Image 8. Greater-shortnosed Fruit Bat *Cynopterus sphinx*



Image 9. Dusky Leaf-nosed Bat *Hipposideros ater*



Image 11. Fulvous Leaf-nosed Bat *Hipposideros fulvus*

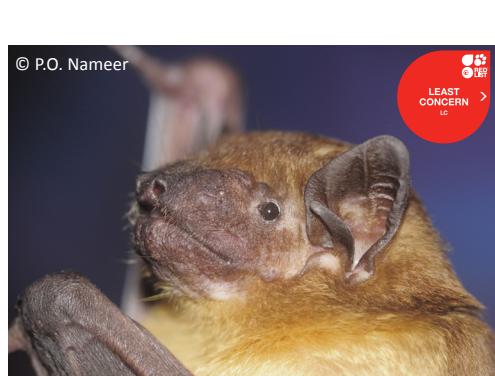


Image 10. Greater Asiatic Yellow House Bat *Scotophilus heathii*



Image 12. Blyth's Horseshoe Bat *Rhinolophus lepidus*



Image 13. Rufous Horseshoe Bat *Rhinolophus rouxii*



Image 14. Indian Pangolin *Manis crassicaudata*



Image 15. Sloth Bear *Melursus ursinus*



Image 16. Brown Mongoose *Herpestes fuscus*



Image 18. Tiger *Panthera tigris*



Image 17. Nilgiri Tahr *Nilgiritragus hylocrius*

- Karanth, P.K., L. Singh, R. Collura & C.B. Stewart (2008).** Molecular phylogeny and biogeography of langurs and leaf monkeys of south Asia (Primates: Colobinae). *Molecular Phylogenetics and Evolution* 46: 683–694.
- Kurup, G.U. (1987).** The rediscovery of the Malabar Civet, *Viverra megaspila civetta* Blyth in India. *Cheetal* 28(2): 1–4.
- Kurup, G.U. (1989).** The rediscovery of Malabar Civet (*Viverra megaspila civetta* Blyth) in India. *Tiger Paper* 1989: 13–14.
- Lindsay, H.M. (1926).** Bombay Natural History Society's Mammal Survey of India: Report 38, 40, 41, 42, 43, 44, & 45. *Journal of the Bombay Natural History Society* 31(1): 40–48, 31(2): 379–382, 31(2): 383–403, 31(2): 403–407, 31(3): 591–597, 31(3): 597–606, & 31(3): 606–612.
- Meegaskumbura, S. & C.J. Schneider (2008).** A taxonomic evaluation of the Shrew *Suncus montanus* (Soricidae: Crocidurinae) of Sri Lanka and India. *Ceylon Journal of Science (Biological Sciences)* 37 (2): 129–136.
- Menon, V. (2008).** *Indiyile Sasthanikal - Oru Field Guide*. (Indian Mammals - A Field Guide). DC Books, 321pp.
- Menon, V. (2003).** *A Field Guide to Indian Mammals*. Dorling Kindersley (India) Pvt. Limited, 201pp.
- Menon, V. (2014).** *Indian Mammals - A Field Guide*. Hachette Book Publishing Indian Pvt. Ltd., 528pp.
- Musser, G.G. & M.D. Carleton (2005).** Rodentia: Myomorpha: Muroidea: Murinae, pp. 1189–1531. In: Wilson, D.E. & D.M. Reeder (eds.). *Mammal Species of the World: A Taxonomic and Geographic Reference*, 3rd Edition, Vol. 1 & 2. The Johns Hopkins University Press, Baltimore, 2142pp.
- Nag, C.K.S., P. Pramod & P.K. Karanth (2011).** Taxonomic Implications of a field study of morpho types of Hanuman Langurs (*Semnopithecus entellus*) in peninsular India. *International Journal of Primatology*; <http://dx.doi.org/10.1007/s10764-011-9504-0>
- Nameer, P.O. (2000).** Checklist of Indian Mammals. Kerala State Forest Department and Kerala Agricultural University, 90pp+xxv.
- Nameer, P.O., S. Molur & S. Walker (2001).** Mammals of Western Ghats: a simplistic overview. *Zoos' Print Journal* 16(11): 629–639; <http://dx.doi.org/10.11609/JoTT.ZPJ.16.11.629-39>

- Nandini, R. & D. Mudappa (2010).** Mystery or myth: a review of history and conservation status of the Malabar Civet *Viverra civettina* Blyth, 1862. *Small Carnivore Conservation* 43: 47–59.
- Pocock, R.I. (1939).** *The Fauna of British India including Ceylon and Burma*. (Vol. 1, *Primates and Carnivora*, in part). Taylor and Francis Red Lion Court Fleet Street, London, 463pp.
- Pocock, R.I. (1941).** *The Fauna of British India including Ceylon and Burma*. (Vol. 2, *Carnivora*, in part). Taylor and Francis Red Lion Court Fleet Street, London, 503pp.
- Prater, S.H. (1971).** *The Book of Indian Animals*. 3rd Edition. 12th reprint 2005. Bombay Natural History Society, Bombay, 324pp.
- Ropiquet, A. & A. Hassanin (2005).** Molecular evidence for the polyphyly of the genus *Hemitragus* (Mammalia, Bovidae). *Molecular Phylogenetics and Evolution* 36: 154–168.
- Ryley, K.V. (1913–1914).** Bombay Natural History Society's Mammal Survey of India: Report 9, 10, 11, 12, 13& 14. *Journal of the Bombay Natural History Society* 22(2): 283–295, 22(3): 464–486, 22(3): 486–513, 22(4): 684–699, 22(4): 700–710, & 22(4): 710–725.
- Sadasivan, V. (1987).** *Keralathile Vanyajeevikal - Sasthanikal*. (Wildlife of Kerala - Mammals). Kerala State Institute of Language, Kerala, 81p.
- Sathasivam, K. (1996).** A checklist of the mammals of Tamil Nadu and Kerala. *Blackbuck* 12(3): 60–70.
- Simmons, N.B. (2005).** Chiroptera, pp. 312–529. In. Wilson, D.E. & D.M. Reeder (eds.). *Mammal Species of the World: A Taxonomic and Geographic Reference*, 3rd Edition, Vol. 1 & 2. The Johns Hopkins University Press, Baltimore, 2142pp.
- Sterndale, R.A. (1884).** *Natural History of the Mammals of India and Ceylon*. Thacker, Spink and Co. Calcutta, 540pp.
- Thomas, O. (1914–1924).** Scientific Results from Mammal Survey Part VII, VIII, IX, X, XVI, XIX, XXI, XXII, XXIII, XXIV, XXV, XXVII, XXX, XXXI, XXXV, XXXVI, & XXXVIII. *Journal of the Bombay Natural History Society* 23(1): 23–31, 23(2): 197–205, 23(3): 413–416, 23(4): 607–613, 25(2): 119–206, 26(4): 933–940, 27(1): 33–39, 27(2): 248, 27(2): 249, 27(3): 596–598, 27(4): 772, 28(1): 26–27, 28(2): 428–432, 28(4): 1067–1068, & 29(1): 84.
- Wilson, D.E. & D.M. Reeder (eds.) (2005).** *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd Edition, Vol. 1 & 2. The Johns Hopkins University Press, Baltimore, i-xxxv+1–743pp & pp.i-xvii+745–2142.
- Wilson, D.E. & R.A. Mittermeier (eds.) (2009).** *Handbook of Mammals of the World - Vol. I. Carnivores*. Lynx Edicions. Barcelona, 727pp.
- Wroughton, R.C. (1912–21).** Bombay Natural History Society's Mammal Survey of India: Report 1, 2, 3, 4, 5, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 32, 33, 34 & 35. *Journal of the Bombay Natural History Society* 21(2): 392–410, 21(3): 820–825, 21(3): 826–844, 21(3): 844–851, 21(4): 1170–1195, 23(4): 695–720, 24(1): 79–96, 24(1): 96–110, 24(2): 309–310, 24(2): 311–316, 24(3): 468–493, 24(4): 749–758, 24(4): 758–773, 24(4): 773–782, 25(1): 63–71, 25(2): 274–278, 27(2): 314–322, 27(3): 545–549, 27(3): 549–553, & 27(3): 553–554.
- Wroughton, R.C. (1918–21).** Summary of the results from the Indian mammal survey of Bombay Natural History Society, Part I, II, III, VI, VII, & Appendix. *Journal of the Bombay Natural History Society* 25(4): 547–598, 26(1): 19–58, 26(2): 338–378, 27(1): 57–85, 27(2): 301–313, & 27(3): 520–534.
- Wroughton, R.C. & K.V. Ryley (1913).** Bombay Natural History Society's Mammal Survey of India: Report 6, 7 & 8. *Journal of the Bombay Natural History Society* 22(1): 29–44, 22(1): 45–47 & 22(1): 58–66.

