Original Study

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Mammals of Myanmar: an annotated checklist

https://doi.org/10.1515/mammalia-2023-0098 Received August 5, 2023; accepted January 30, 2024; published online April 4, 2024

Abstract: When the book Wild mammals of Myanmar (Tun Yin 1993) was published, a total of 252 mammal species were reported. Since that publication, numerous new species have been described, taxonomic revisions published, and additional distribution records produced that have expanded Myanmar's mammals considerably. Therefore, we aimed to provide an updated checklist of the mammals of Myanmar, which includes the scientific and common names, global and Myanmar distributions, remarks on taxonomy, and conservation information including the IUCN Red List status and legal protection status under The Conservation of Biodiversity and Protected Areas Law 2018 of Myanmar. Our new checklist includes 365 (33 marine and 332 terrestrial) mammal species belonging to 13 orders and 49 families. We also confirmed that Myanmar is home to at least nine endemic mammal species. Our results highlight the areas that require further exploration to gain a more comprehensive understanding of Myanmar's diverse fauna.

Keywords: distribution; endemic; marine; terrestrial; occurrence; records

1 Introduction

Myanmar is the second largest country in Southeast Asia, with a land area of 676,577 km² extending from 9°28' to 28°29' N and 92°10' to 101°10' E, bordering India and Bangladesh to the west, and China, Laos, and Thailand to the east. Locating at the junction of three different ecoregions: the Sino-Himalayan region in the north and west, the Indochinese region in the east, and the Malayan Peninsular region in the south; Myanmar is recognized as one of the most biodiverse countries in Southeast Asia. Due to Myanmar's economic and political isolation over the past 70 years, as well as internal conflicts in some regions, many parts of Myanmar have been largely unavailable for field exploration and scientific research. Thus, the biodiversity of Myanmar remains remarkably poorly documented, and surveys and monitoring are also still lacking for many areas of the country, especially for aquatic ecosystems (MONREC 2015). The IUCN Red List can be used to infer how relatively poorly described Myanmar's fauna and flora; e.g., the total number of plant and animal species assessed in Myanmar (6045) is significantly lower than in either Thailand (7635) or Vietnam (7310), even though Myanmar is one-third larger than Thailand and twice the size of Vietnam (IUCN 2022).

Major challenges for biodiversity and conservation assessment in Myanmar are the data availability as published observations are very scarce (Khine and Schneider 2020). Even though mammals (especially large- and mediumsized) are as well-studied as the other taxon, there is no updated mammal species list of Myanmar apart from a book published in 1993 which revised and updated the Wild Animals of Burma (the former name of Myanmar) of U Tun Yin in 1967. According to the Myanmar National Biodiversity Strategy and Action Plan (2015–2020), more than 300 mammal species have been recorded in Myanmar. However, this number of species was an estimate as there was no detailed information on the taxonomic classification of these species. The only reference for mammals of Myanmar is based only on the Wild mammals of Myanmar (Tun Yin 1993) which provided a wealth of information on morphology, behavior, ecology, habitat and distribution of 252 (both terrestrial and marine) mammal species. However, the availability of this book is not accessible to the general scientific community and is very out of date. On the other hand,

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the description of new species such as the leaf deer *Muntiacus putaoensis*, snub-nosed monkey *Rhinopithecus strykeri*, popa langur *Trachypithecus popa*, Hkakaborazi tube-nosed bat *Murina hkakaboraziensis*, and new distributional records of many species highlight a need for a more comprehensive and up-to-date list of the mammals of Myanmar.

Research and conservation efforts on mammals have greatly increased in the last decade with an immense accumulation of knowledge; however, most of the conservation research in Myanmar is geographically biased and focused on the conservation of globally threatened large charismatic mammal species. Even though over 5.8 % of the country's land area is designated as Protected Areas (PAs), these PAs were typically not established to conserve smaller mammalian species. Moreover, the study of marine and small mammals such as bats and rodents are less popularized and hampered by a shortage of experienced taxonomists. Species checklists represent the taxonomic richness of a country and an essential tool for the conservation and management of regional biodiversity, as they are used to implement regional red lists and atlases, and to prioritize management and conservation strategies (Loy et al. 2019). Therefore, an updated compilation of the checklist of mammal species is urgently needed in Myanmar for the sake of conservation and protection of biodiversity. Here, we use the data not only from our camera trap survey in five PAs and two Reserved Forest (RF) (i.e., about 30 % of the total PAs) but also from an extensive literature survey of the mammals of Myanmar to provide the most updated checklist of mammals of Myanmar.

2 Method of checklist preparation

Knowledge of the mammal of Myanmar has greatly increased over recent years from the growing availability of molecular tools, which brought marked changes in taxonomy, but also because of intensive field surveys resulting in growing distributional data. These data are, however, scattered throughout numerous publications and unpublished sources, most of which are difficult to access. Here, we updated the checklist based mainly on "Wild Mammals of Myanmar" (Tun Yin 1993) which was the most recently published comprehensive list of mammals of Myanmar. In addition, we complied and updated this checklist by reviewing the eight volumes of the Handbook of the Mammals of the World: Vol. 1 (Carnivores: Wilson and Mittermeier 2009), Vol. 2 (Hoofed Mammals: Wilson and Mittermeier 2011), Vol. 3 (Primates: Mittermeier et al. 2013), Vol. 4 (Sea Mammals: Wilson and Mittermeier 2014), Vol. 6 (Lagomorphs and Rodents I: Wilson et al. 2016), Vol. 7

(Rodents II: Wilson et al. 2017), Vol. 8. (Insectivores, Sloth and Colugos: Wilson and Mittermeier 2018) and Vol. 9 (Bats: Wilson and Mittermeier 2019). This checklist includes all native and non-native species of mammals known to occur in Myanmar regularly. For native species, we also include recently extinct species that used to occur in Myanmar regularly.

To gather data on the distribution of mammals, we reviewed a total of 275 publications, including reports and documents written in the Myanmar language. In addition, we collected distributional data from online databases of museum specimens, citizen-recorded wildlife species groups on Facebook (Native Species Conservation and Identification, Wildlife of Myanmar, and Myanmar Biodiversity), and unpublished reports from the Forest Department of Myanmar. Marine mammals species data are updated mainly based on the report "Marine Conservation in Myanmar-The current knowledge of marine systems and recommendations for research and conservation" which complied over 600 papers and reports describing studies that have been primarily conducted by Myanmar scientists on the country's marine biodiversity and habitats (Holmes et al. 2014). Also, we used the distributional data of mammals from our camera trap survey (published and unpublished data) in two National Park (NP), three Wildlife Sanctuary (WS) and two RF in Myanmar: Hkakaborazi NP (2700 km²), Hponkanrazi WS (3810 km²) and the Madwalrazi area (4778 km²), Htamanthi WS (2151 km2), Natmataung NP (713.5 km²), Shwesettaw WS (552.7 km²) and Htaung Pru RF (190 km² in Tanintharyi Region).

For each species, we provide the following information: scientific and common names, both in English and Myanmar, brief description of global and local distribution range, and remarks on taxonomy and conservation related information such as their IUCN threatened status (only for critically endangered, endangered and vulnerable) and legal protection status (completely protected, normally protected and seasonally protected) in Myanmar by The Conservation of Biodiversity and Protected Areas Law 2018. We also provide a checklist of mammalian taxa in phylogenetic order with their IUCN threatened status (only for critically endangered, endangered and vulnerable) and Myanmar's legal protection status (Table 1). Additionally, we present the distribution of occurrence records for all mammals (Figure 1) and the political units of Myanmar indicating the number of recorded mammalian species (Figure 2), excluding the orders Sirenia and Artiodactyla (Cetacea), due to the limited distribution records of marine mammals. We also provide a Supplementary Table S1 with the list of species and their IUCN and Myanmar's legal protection status for all mammal species of Myanmar.

Table 1: Checklist of mammals in phylogenetic order and summary of the number of species for each order and family included in the IUCN Red List of threatened categories (CR: critically endangered; EN: endangered and VU: vulnerable) and legal protection status (CP: completely protected, NP: normally protected and SP: seasonally protected) by the *Conservation of Biodiversity and Protected Areas Law (2018)* of Myanmar.

Higher level classification	Family	Genera	Species	IUCN redlist status (CR, EN, VU)	Myanmar protection status (CP, NP, SP)
Order Proboscidea	Elephantidae	1	1	1	1
Order Sirenia	Dugongidae	1	1	1	1
Order Scandentia	Tupaiidae	1	1	-	1
Order Dermoptera	Cynocephalidae	1	1	-	1
Order Primates					
Suborder Strepsirrhini					
Infraorder Lorisiformes	Lorisidae	1	1	1	1
Suborder Haplorrhini					
Superfamily Cercopithecoidea	Cercopithecidae	4	15	13	14
Superfamily Hominoidea	Hylobatidae	2	4	4	4
Order Lagomorpha	Ochotonidae	1	2	-	-
	Leporidae	1	2	-	1
Order Rodentia					
Suborder Sciuromorpha	Sciuridae	13	30	1	19
Suborder Myomorpha					
Superfamily Muroidea	Spalacidae	2	4	-	-
	Cricetidae	3	4	-	-
	Muridae	17	50	2	-
Suborder Hystricomorpha					
Infraorder Hystricognathi	Hystricidae	2	2	-	2
Order Eulipotyphla	Galericidae	3	3	-	-
	Soricidae	10	22	-	-
	Talpidae	4	8	-	-
Order Chiroptera					
Suborder Yinpterochiroptera	Pteropodidae	7	11	-	-
	Rhinolophidae	1	22	-	-
	Hipposideridae	3	16	1	-
	Megadermatidae	2	2	-	-
	Craseonycteridae	1	1	-	-
Suborder Yangochiroptera	Emballonuridae	3	6	-	-
	Nycteridae	1	1	-	-
	Molossidae	2	2	-	-
	Miniopteridae	1	3	-	-
	Vespertilionidae	18	48	-	-
Order Pholidota	Manidae	1	2	2	2
Order Carnivora					
Suborder Feliformia	Felidae	6	8	4	8
	Prionodontidae	1	2	-	2
	Viverridae	7	8	2	8
	Herpestidae	1	3	-	2
Suborder Caniformia	Canidae	3	4	1	4
	Ursidae	2	2	2	2
	Ailuridae	1	1	1	1
	Mustelidae	7	13	4	12
Order Perissodactyla	Tapiridae	1	1	1	1
	Rhinocerotidae	2	3	3	2
Order Artiodactyla					
Suborder Suina	Suidae	1	1	-	-
Suborder Ruminantia	Tragulidae	1	3	-	2
	Moschidae	1	1	1	1
	Cervidae	5	8	3	8
	Bovidae	6	10	8	9

Table 1: (continued)

Higher level classification	Family	Genera	Species	IUCN redlist status (CR, EN, VU)	Myanmar protection status (CP, NP, SP)
Suborder Whippomorpha Infraorder Cetacea					
Parvorder Mysticeti	Balaenopteridae	2	7	3	7
Parvorder Odontoceti	Delphinidae	13	16	2	6
	Kogiidae	1	2	-	2
	Phocoenidae	1	1	1	1
	Physeteridae	1	1	1	1
	Ziphiidae	3	5	-	5
	Total (species)	173	365	63	131



Figure 1: Geographic location of Myanmar and the distribution of all occurrence records of mammals (excluding the orders Sirenia and Artiodactyla (Cetacea), due to the limited distribution records of marine mammals) in Myanmar.





3 Checklist of Mammals

Order Proboscidea Illiger, 1811 Family Elephantidae Gray, 1821 (1 species) Genus *Elephas* Linnaeus, 1758

1. Elephas maximus Linnaeus, 1758

Common name: Asian Elephant Myanmar name: $\infty \hat{c}$

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in the PAs and RF of Kachin, Kayin, Kayah, Mon, Shan and Rakhine States and Sagaing, Mandalay, Ayeyarwady, Bago, Yangon and Tanintharyi Regions.

Remarks: This species is an endangered and completely protected species of Myanmar.

Order Sirenia Illiger, 1811 Family Dugongidae Gray, 1821 (1 species) Genus *Dugong* Lacépède, 1799

2. Dugong dugon (Müller, 1776)

Common name: Dugong, Sea Cow Myanmar name: ရေဝက်

Distribution: Tropical coastal waters of Indian and West Pacific Oceans. In Myanmar, recorded off the coast of Rakhine (Tun and Ilangakoon 2006) and distributed along the coasts of Andaman Sea and Bay of Bengal.

Remarks: This species is listed as vulnerable by the IUCN and completely protected in Myanmar.

Order Scandentia Wagner, 1855 Family Tupaiidae Gray, 1825 (1 species) Genus *Tupaia* Raffles, 1821

3. Tupaia belangeri (Wagner, 1841)

Common name: Northern Tree Shrew

Myanmar name: വമ്മ്പേ

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Bago and Sagaing Regions (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and widely distributed throughout the country.

Remarks: This species is listed as normally protected species of Myanmar.

Order Dermoptera Illiger, 1811 Family Cynocephalidae Simpson, 1945 (1 species) Genus *Galeopterus* Thomas, 1908

4. Galeopterus variegatus (Audebert, 1799)

Common name: Sunda Flying Lemur, Sunda Colugo Myanmar name: မျောက်လောင်းပျံ

Distribution: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Singapore, Thailand and Vietnam. In Myanmar, recorded in Tanintharyi Region.

Remarks: This species is listed as a completely protected species of Myanmar.

Order Primates Linnaeus, 1758 Suborder Strepsirrhini É. Geoffroy Saint-Hilaire, 1812 Infraorder Lorisiformes Gregory, 1915 Family Lorisidae Gray, 1821 (1 species) Genus *Nycticebus* É. Geoffroy Saint-Hilaire, 1812

5. Nycticebus bengalensis (Lacépède, 1800)

Common name: Bengal Slow Loris Myanmar name: မျောက်လေပွေ/မျောက်မောင်းမ

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Laos, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi Landscape; Lwin et al. 2021, Indawgyi Wetland WS, Proposed Imawbum NP; Nijman 2015), Rakhine State (Southern Rakhine Mountain Ranges; Freund et al. 2021), Tanintharyi Region (Lampi Marine NP; Bisi et al. 2019) and possibly distributed in Alaungdawkathapa NP.

Remarks: It is an endangered and completely protected species of Myanmar.

Suborder Haplorrhini Pocock, 1918

Superfamily Cercopithecoidea Gray, 1821 Family Cercopithecidae Gray, 1821

Subfamily Cercopithecinae Gray, 1821 (5 species: all species are listed as completely protected species in Myanmar except for the rhesus monkey which is normally protected)

Genus Macaca Lacépède, 1799

6. Macaca arctoides (I. Geoffroy Saint-Hilaire, 1831)

Common name: Stump-tailed Macaque

Myanmar name: မျောက်မြီးတို

Distribution: Cambodia, Laos, Malaysia, Thailand, Vietnam, Southern China and Northeastern India. In Myanmar, recorded in Kachin State (Hkakaborazi and Proposed Imawbum NP, Hponkanrazi, Hukaung Valley and Indawgyi Wetland WS), Sagaing Region (Alaungdawkathapa NP, Htamanthi and Proposed Mahamyaing WS), Kayin State and Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve, Proposed Lenya and Tanintharyi NP).

Remarks: This species is listed as vulnerable by the IUCN.

7. Macaca assamensis (McClelland, 1839)

Common name: Assamese Macaque

Myanmar name: အာသံမျောက်

Distribution: Bangladesh, Bhutan, China, India, Laos, Nepal, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi and Proposed Imawbum NP, Hponkanrazi, Hukaung Valley and Indawgyi Wetland WS) and Sagaing Region (Htamanthi WS and possibly in Alaungdawkathapa NP and Proposed Mahamyaing WS).

8. Macaca fascicularis (Raffles, 1821)

Common name: Long-tailed Macaque

Myanmar name:

မျှောက်တံငါ/ဇရပ်တောမျောက်/ကဏန်းစားမျောက်

Distribution: Bangladesh, India, Timor-Leste, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam. In Myanmar, recorded in Rakhine State (Southern Rakhine Yoma; Geissmann et al. 2008), Ayeyarwady Region (Meinmahlakyun WS) and Tanintharyi Region (Lampi Marine NP; Bisi et al. 2019, Proposed Lenya NP; Grindley 2019 and possibly in Tanintharyi Nature Reserve).

Remarks: This species is listed as endangered by the IUCN.

9. Macaca leonina (Blyth, 1863)

Common name: Northern Pig-tailed Macaque

Myanmar name: မျောက်ပုတီး/မျောက်မည်း

Distribution: Cambodia, Laos, Thailand, Vietnam, Bangladesh, India and China. In Myanmar, recorded in Kachin State (Proposed Imawbum NP, Hukaung Valley and Indawgyi Wetland WS), Sagaing Region (Htamanthi WS), Rakhine State (Rakhine Yoma Elephant Range WS and Southern Rakhine Yoma), Kayin State (need to identify whether *M. leonina* or *M. nemestrina*; (Moo et al. 2017) and Tanintharyi Region (Lampi Marine NP, Proposed Lenya and Tanintharyi NP).

Remarks: This species is listed as vulnerable by the IUCN.

10. Macaca mulatta (E.A.W. Zimmermann, 1780)

Common name: Rhesus Macaque

Myanmar name: မျောက်စပ်/မျောက်ဖင်နီ

Distribution: Afghanistan, Bangladesh, Bhutan, China, India, Laos, Nepal, Pakistan, Thailand and Vietnam. In Myanmar, recorded in most of the PAs and RF throughout the country.

Subfamily Colobinae Jerdon, 1867 (10 species: all species are listed as completely protected species in Myanmar except for Popa langur which has no current assessment) Genus *Presbytis* Eschscholtz, 1821

11. Presbytis femoralis (Martin, 1838)

Common name: Banded Langur

Myanmar name: သစ်ရွက်စားမျောက်မြီးရှည်

Distribution: Malaysia, Singapore, Thailand and Southern Myanmar (Proposed Lenya and Tanintharyi NP and possibly in Tanintharyi Nature Reserve).

Remarks: This species is categorized as critically endangered by the IUCN. Formerly, the species in Myanmar was regarded as *P. melalophos robinsoni* (Tun Yin 1993) or *P. femoralis robinsoni*. Later, with their morphological characters, the species in Myanmar is treated as Robinson's banded langur *P. robinsoni* Thomas, 1910 (Ang et al. 2020). However, there is still debating on its taxonomic status.

Genus Rhinopithecus A. Milne-Edwards, 1872

12. *Rhinopithecus strykeri* Geissmann, Lwin, S. S. Aung, T. N. Aung, Z. M Aung, Hla, Grindley and Momberg, 2011

Common name: Stryker's Snub-nosed Monkey, Myanmar Snub-nosed Monkey

Myanmar name: မြန်မာနှာလန်မျောက်

Distribution: China and Northern Myanmar (Maw River area, Northeastern Kachin State; Geissmann et al. 2011). **Remarks:** This species is categorized as critically endangered by the IUCN.

Genus Trachypithecus Reichenbach, 1862

13. Trachypithecus barbei (Blyth, 1847)

Common name: Tenasserim Langur

Myanmar name:

တနင်္သာရီသစ်ရွက်စားမျောက်/တနင်္သာရီမျောက်မြီးရှည်

Distribution: Distributed only in a small part of the transboundary Dawna-Tenasserim landscape between Myanmar and Thailand, and it is restricted to about 4000 km² on the Myanmar-Thailand border (Freund et al. 2021). In Myanmar, recorded an infant in Tanintharyi Nature Reserve in 2013 (Freund et al. 2021).

Remarks: *T. germaini* is commonly listed in Myanmar; however, this species is not present and its putative occurrence in Myanmar is based on the incorrect assignment of *Pithecus pyrrhus atrior* as a synonym of *T. germaini* instead of *T. barbei* (Roos et al. 2020). It is categorized as vulnerable by the IUCN.

14. Trachypithecus crepusculus (Elliot, 1909)

Common name: Indochinese Gray Langur Myanmar name: မျောက်ညို

Distribution: Cambodia, China, Laos, Thailand and Vietnam. In Myanmar, recorded in Kayin State (Mt. Muleiyit) and possibly distributed in Southern area (Roos et al. 2014). **Remarks:** This taxon was formerly classified as a subspecies of *T. phayrei* and it is categorized as endangered by the IUCN.

15. Trachypithecus melamerus (Elliot, 1909)

Common name: Shan State Langur

Myanmar name: ရှမ်းမျောက်မြီးရှည်

Distribution: Southwest China and East Myanmar (Shan State between the Ayeyarwaddy and Thanlwin rivers, with the Southwestern limit probably extending into the Kayah-Karen (Kayin) Mountains; Roos et al. 2020).

Remarks: Formerly listed as *T. phayrei shanicus* but now elevated to a full species (Roos et al. 2020) and currently listed as endangered by the IUCN.

16. Trachypithecus obscurus (Reid, 1837)

Common name: Dusky Langur

Myanmar name: မျောက်မျက်ကွင်းဖြူ

Distribution: Malaysia, Thailand and Southern Myanmar (Lampi Marine NP; Bisi et al. 2019 and Proposed Lenya NP; Grindley 2019).

Remarks: It is categorized as endangered by the IUCN.

17. Trachypithecus phayrei (Blyth, 1847)

Common name: Phayre's Langur

Myanmar name: မျောက်မျက်ကွင်းပြာ

Distribution: Bangladesh, India, Thailand, Laos, Vietnam and Southern China. In Myanmar, recorded in Kachin State (Indawgyi Wetland WS), Kayin State (Moo et al. 2017), Rakhine State (Rakhine Yoma Elephant Range WS; Cremonesi et al. 2021).

Remarks: This species is categorized as endangered by the IUCN.

18. Trachypithecus pileatus (Blyth, 1843)

Common name: Capped Langur

Myanmar name: မျောက်ညို/မျောက်မြီးရှည်

Distribution: Bangladesh, Bhutan, China, India and Northwestern Myanmar (Hukaung Valley WS; Naing et al. 2015 and possibly distributed in West of the Chindwin River). **Remarks:** It is categorized as vulnerable by the IUCN.

19. *Trachypithecus popa* Roos, Helgen, Miguez, Thant, Lwin, A. K. Lin, A. Lin, Yi, Soe, Hein, Myint, Ahmed, Chetry, Urh, Veatch, Duncan, Kamminga, Chua, Yao, Matauschek, Meyer, Liu, Li, Nadler, Fan, Quyet, Hofreiter, Zinner and Momberg, 2020

Common name: Popa Langur

Myanmar name: ပုပ္ပါးမျောက်မြီးရှည်

Distribution: Only occur in Myanmar; between the Ayeyarwaddy and Thanlwin Rivers in the Central Dry Zone (Mount Popa, Bago Yoma, Myogyi Monastery, Panlaung-Pyadalin Cave Wildlife Sanctuary, and Mount Yathae Pya) and into the western foothills of the Kayah-Karen (Kayin) Mountains (Roos et al. 2020).

Remarks: This is a recently discovered new primate species which is endemic to Myanmar (Roos et al. 2020). It is categorized as critically endangered by the IUCN.

20. Trachypithecus shortridgei (Wroughton, 1915)

Common name: Shortridge's Langur

Myanmar name: ရှေ့ရစ်မျောက်/မျောက်ညို

Distribution: China and Northern Myanmar (Madwalrazi, Proposed Imawbum NP, Hponkanrazi, Htamanthi and Indawgyi Wetland WS).

Remarks: It is categorized as endangered by the IUCN.

Suborder Haplorrhini Pocock, 1918

Superfamily Hominoidea Gray, 1825

Family Hylobatidae Gray, 1871 (4 species: all are listed as completely protected species of Myanmar and endangered except for *Hoolock leuconedys* which is categorized as vulnerable by the IUCN) Genus *Hoolock* Mootnick and Groves, 2005

21. Hoolock hoolock (Harlan, 1834)

Common name: Western Hoolock Gibbon Myanmar name: အနောက်ပိုင်းမျက်ခုံးဖြူမျောက်လွှဲကျော် Distribution: Bangladesh, India and Western Myanmar (Southern Rakhine Mountain Ranges and West of the Chindwin River; Freund et al. 2021).

Remarks: Formerly considered conspecific with *H. leuconedys* and the Myanmar species is considered as *H. h. hoolock* (Roos et al. 2014).

22. Hoolock leuconedys (Groves, 1967)

Common name: Eastern Hoolock Gibbon Myanmar name: အရှေ့ပိုင်းမျက်ခုံးဖြူမျောက်လွှဲကျော် Distribution: China, India and Northern Myanmar (Hkakaborazi Landscape recorded by vocalization; Lwin et al. 2021, Proposed Imawbum NP; Nijman 2015, Hukaung Valley, Indawgyi Wetland, Htamanthi and Proposed Mahamyaing WS; Brockelman et al. 2009).

23. *Hoolock tianxing* Fan, He, Chen, Ortiz, B. Zhang, Zhao, Lio, H-B. Zhang, Kimock, Wang, Groves, Turvey, Roos, Helgen and Jiang, 2017

Common name: Skywalker Hoolock Gibbon, Gaoligong Hoolock Gibbon

Myanmar name: စကိုင်းဝေါ့ကာမျောက်လွှဲကျော်

Distribution: Distributed between the Irrawaddy-Nmai Hka River and the Salween River in China and Myanmar. Historical museum specimens are also known from further south at Gokteik, Shan State, northern Myanmar (Fan et al. 2017).

Genus Hylobates Illiger, 1811

24. Hylobates lar (Linnaeus, 1771)

Common name: Lar Gibbon, White-handed Gibbon Myanmar name: မျောက်လွှဲကျော်လက်ဖြူ Distribution: China, Indonesia, Laos, Malaysia and

Distribution: China, Indonesia, Laos, Malaysia and Thailand. In Myanmar, recorded in Dawna-Tenasserim landscape (Tanintharyi Nature Reserve), Shan State and possibly in Mandalay Region (Shweudaung WS).

Remarks: There are five recognized subspecies and Myanmar has two subspecies: *H. l. carpenter* which distributed in Eastern and *H. l. entelloides* in Southern Myanmar (Roos et al. 2014).

Order Lagomorpha Brandt, 1855 Family Ochotonidae Thomas, 1897 (2 species) Genus *Ochotona* Link, 1795

25. Ochotona forresti Thomas, 1923

Common name: Forrest's Pika Myanmar name: ကျောက်ယုန်သိမ်/တောယုန်သိမ် Distribution: Bhutan, China, India and Northern Myanmar (West of the Nmaikha River, Kachin State; Lissovsky 2014). Remarks: This species was described as a subspecies of *O. pusilla* in "Wild Mammals of Myanmar" (Tun Yin 1993).

26. Ochotona thibetana (Milne-Edwards, 1871)

Common name: Moupin Pika

Myanmar name: ယုန်သိမ်

Distribution: Bhutan, China and India. In Myanmar, recorded in Kachin State (Hponkanrazi WS and Proposed Imawbum NP).

Family Leporidae Fischer, 1817 (2 species) Genus *Lepus* Linnaeus, 1758

27. Lepus comus G. M. Allen, 1927

Common name: Yunnan Hare Myanmar name: ယူနန်ယုန် Distribution: China and Northen Myanmar (Wu et al. 2000).

28. Lepus peguensis Blyth, 1856

Common name: Burmese Hare Myanmar name: တောယုန်/မြန်မာယုန်ရိုင်း **Distribution:** Cambodia, Laos, Thailand and Vietnam. In Myanmar, recorded in Natmataung NP, Shwesettaw WS and widely distributed throughout the country.

Remarks: It is a normally protected species of Myanmar.

Order Rodentia Bowdich, 1821

Suborder Sciuromorpha Brandt, 1855 Family Sciuridae Fischer de Waldheim, 1817 (30 species: seven flying squirrels and 12 squirrels are listed as normally protected species in Myanmar) Subfamily Ratufinae Moore, 1959 Genus *Ratufa* Gray, 1867

29. Ratufa bicolor (Sparrman, 1778)

Common name: Black Giant Squirrel Myanmar name: လင်းသတ်

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Madwal Razi; Lwin et al. 2021), Rakhine State (South Rakhine Yoma; Geissmann et al. 2008), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018), Tanintharyi Region (Lampi Marine NP; Bisi et al. 2019 and Proposed Lenya NP; Grindley 2019). **Remarks:** Eleven subspecies are recognized: *R. b. angusticeps, R. b. felli, R. b. gigantean, R. b. leucogenys, R. b. melanopepla* and *R. b. phaeopepla* are considered as the subspecies that occurred in Myanmar (Thorington et al. 2012).

Subfamily Sciurinae Fischer de Waldheim, 1817 Genus *Belomys* Thomas, 1908

30. Belomys pearsonii (Gray, 1842)

Common name: Hairy-footed Flying Squirrel Myanmar name: ခြေထောက်အမွေးထူရှူးပျံ Distribution: Bhutan, China, India, Laos, Nepal, Thailand,

Vietnam and Northern Myanmar.

Remarks: Four subspecies were recognized and *B. p. trichotis* is considered as a subspecies that distributed in Myanmar.

Genus Biswamoyopterus Saha, 1981

31. Biswamoyopterus sp.

Common name: Flying Squirrel

Myanmar name: ရူူးပုံ

Distribution: Northern Myanmar (Li et al. 2020a)

Remarks: A specimen from Northern Myanmar is confirmed as representing the genus *Biswamoyopterus*;

however, further molecular based taxonomic study is needed to confirm the species (Li et al. 2020a) as it may belong to either *B. biswasi* Saha 1981 or *B. gaoligongensis* Li et al. 2019.

Genus Eupetaurus Thomas, 1888

32. *Eupetaurus nivamons* Q. Li, Jiang, Jackson and Helgen, 2022 in Jackson et al. 2022

Common name: Yunnan Woolly Flying Squirrel Myanmar name: ယူနန် အမွေးပွရှူးပျံ Distribution: Southwest China, Bhutan and possibly in Northeastern Myanmar (Jackson et al. 2022).

Genus Hylopetes Thomas, 1908

33. Hylopetes alboniger (Hodgson, 1836)

Common name: Particolored Flying Squirrel Myanmar name: ရှူးပုံဖြူ

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Laos, Nepal, Thailand and Vietnam. In Myanmar, recorded in Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and widely distributed in the mountainous area of Chin, Kachin, Shan, Kayah and Kayin States.

34. Hylopetes phayrei (Blyth, 1859)

Common name: Indochinese Flying Squirrel

Myanmar name: ဖေယာရူူးပုံ

Distribution: China, Laos, Thailand, Vietnam and Myanmar (recorded in Mount Popa and widely distributed).

Remarks: Two subspecies are recognized; *H. p. phayrei* is considered as the subspecies that distributed in Myanmar (Jackson and Thorington 2012; Tun Yin 1993).

35. Hylopetes spadiceus (Blyth, 1847)

Common name: Red-cheeked Flying Squirrel

Myanmar name: ပါးနီကြွက်ရှူးပျံ

Distribution: Brunei Darussalam, Indonesia, Laos, Malaysia, Singapore, Thailand, Vietnam and Myanmar (recorded in Rakhine State and possibly distributed in the Southern area).

Remarks: Three subspecies are recognized; *H. s. spadiceus* is considered as the subspecies that distributed in Myanmar.

Genus Petaurista Link, 1795

36. Petaurista alborufus (Milne-Edwards, 1870)

Common name: Red-and-white Giant Flying Squirrel Myanmar name: ဖြူနီစပ်ကျားရှူးပျံ **Distribution:** Southern China and Northeastern Myanmar. **Remarks:** Currently, there are five recognized subspecies and *P. a. ochraspis* is regarded as Myanmar subspecies (Thorington et al. 2012). However, it is controversial because Tun Yin (1993) described two subspecies of Myanmar: Chindwin flying squirrel *P. a. candidulus* and Taylor's flying squirrel *P. a. taylori*; however, the later was considered as a synonym of *P. a. candidulus* by Ellerman and Morrison-Scott (Jackson and Thorington 2012).

37. Petaurista caniceps (Gray, 1842)

Common name: Gray-headed Giant Flying Squirrel Myanmar name: ခေါင်းပြာရှူးပျံ

Distribution: Nepal, Bhutan, India, Southcentral China and Western Myanmar (recorded in Chin Hills and possibly in Northern area; Krishna and Kumar 2017).

38. Petaurista elegans (Müller, 1840)

Common name: Spotted Giant Flying Squirrel Myanmar name: ရှူးပုံကြီး

Distribution: Bhutan, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand, Vietnam and Northern Myanmar (recorded in Proposed Imawbum NP and widely distributed).

Remarks: Eight subspecies are recognized: *P. e. elegans* and *P. e. sybilla* are considered as the subspecies that distributed in Chin Hills and Northern Myanmar (Jackson and Thorington 2012; Tun Yin 1993).

39. Petaurista magnificus Hodgson, 1836

Common name: Hodgson's Giant Flying Squirrel Myanmar name: ဟောဒ့်ဆန်းရှူးပုံကြီး

Distribution: Bhutan, India, Nepal, China and Northern Myanmar.

Remarks: The taxonomic and distribution status of this species in Myanmar need further investigation.

40. Petaurista petaurista (Pallas, 1766)

Common name: Red Giant Flying Squirrel Myanmar name: ရှူးပုံနီ

Distribution: Afghanistan, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal and Thailand. In Myanmar, recorded in Lampi Marine NP; Bisi et al. 2019, Indawgyi Wetland WS and Proposed Imawbum NP; Nijman 2015.

Remarks: Eighteen subspecies are recognized: *P. p. candidula* and *P. p. taylori* are considered as the subspecies that distributed in Kindat, Chin Hills and Southern Tanintharyi Region (Thorington et al. 2012).

Petaurista philippensis (Elliot, 1839) 41.

Common name: Indian Giant Flying Squirrel Myanmar name: ကြောင်ရှူးပျံကြီး

Distribution: Bangladesh, Cambodia, China, India, Laos, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Rakhine and Myeik Archipelago (Ross Island) and possibly distributed throughout the country.

Remarks: Two subspecies: P. p. cineraceus and P. p. mergulus are recognized as Myanmar subspecies (Thorington et al. 2012).

Petaurista sybilla Thomas and Wroughton, 1916 42.

Common name: Chindwin Giant Flying Squirrel Myanmar name: ချင်းတွင်းရှူးပုံကြီး

Distribution: Bhutan, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand, Vietnam and Western Myanmar (recorded in Kindat, Chin Hills; Tun Yin 1993 and possibly distributed in the Northern area).

Remarks: The taxonomic status of this species needs further clarification as it was sometimes considered as a subspecies of P. caniceps (Wilson et al. 2016).

Petaurista yunanensis (J. Anderson, 1875) 43.

Common name: Yunnan Giant Flying Squirrel

Myanmar name: ယူနန်ရှူးပုံ

Distribution: China and possibly in Northern Laos, Northern Vietnam and Northern Myanmar (Proposed Imawbum NP; Nijman 2015).

Genus Petinomys Thomas, 1908

44. Petinomys vordermanni (Jentink, 1890)

Common name: Vordermann's Flying Squirrel Myanmar name: ရူူးပုံသေး

Distribution: Brunei Darussalam, Indonesia, Malaysia and Southern Myanmar (Tanintharyi Region).

Remarks: A record from Tanintharyi village, Southern Myanmar was listed as a subspecies P. v. phipsoni (Jackson and Thorington 2012; Tun Yin 1993). This species is categorized as vulnerable by the IUCN; however, not yet listed under the protection status of Myanmar.

Genus Priapomys Li et al., 2021

45. Priapomys leonardi (Thomas, 1921)

Common name: Himalayan Large-eared Flying Squirrel Myanmar name: ဟိမဝန္တာနားရွက်ကြီးရူူးပျံ

Distribution: China, Eastern Himalayas and Northern Myanmar (Kachin State; Li et al. 2021).

Genus Olisthomys (Carter, 1942)

Olisthomys morrisi (Carter, 1942) 46.

Common name: Flying Squirrel

Myanmar name: ဝမ်းဗိုက်ဖြူရှူးပျံ Distribution: Brunei Darussalam, Indonesia, Malaysia, Thailand and Northern Myanmar (Dalu (Taro) and Hukaung Valley WS).

Remarks: This species was previously treated as a subspecies of Petinomys setosus morrisi (Carter 1942); however, a recent phylogenetic study by Kruskop et al. (2022) supports the recognition of Olisthomys as a valid genus.

Subfamily Callosciurinae Pocock, 1923 Genus Callosciurus Gray, 1867

47. Callosciurus caniceps (Gray, 1842)

Common name: Gray-bellied Squirrel Myanmar name: ဝမ်းဗိုက်ပြာရှဉ့်ရွှေဝါ

Distribution: Laos, Malaysia, Thailand and Southern Myanmar (recorded in Lampi Marine NP; Bisi et al. 2019). Remarks: There are eight recognized subspecies and four subspecies: C. c. caniceps, C. c. altinsularis, C. c. bimaculatus, C. c. domelicus are listed in Myanmar.

48 Callosciurus erythraeus (Pallas, 1779)

Common name: Pallas's Squirrel Myanmar name: ရှဉ်ငပေါ Distribution: Bangladesh, Cambodia, China, India, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Proposed Imawbum NP; Nijman 2015), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018), Tanintharyi Region (Lampi Marine NP; Bisi et al. 2019) and widely distributed throughout the country.

Remarks: Approximately 26 subspecies are generally recognized. Tun Yin (1993) listed several subspecies for Myanmar such as Naga squirrel C. e. nagarum, Kinnear's squirrel C. e. kinneari and North Shan States Black-backed squirrel C. e. shanicus; however, there is no updated information to confirm these subspecies.

49. Callosciurus finlaysonii (Horsfield, 1823)

Common name: Finlayson's Squirrel

Myanmar name: ရှဉ့်နီကလေး Distribution: Cambodia, Laos, Thailand and Vietnam. In Myanmar, recorded in Rakhine State (South Rakhine Yoma; Geissmann et al. 2008), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018), and possibly distributed in Shan State, Bago, Taungoo, Yangon and Mount Popa.

Remarks: Myanmar subspecies is recognized as C. f. ferrugineus.

Callosciurus phayrei (Blyth, 1856) 50.

Common name: Phayre's Squirrel

Myanmar name: ဖေယာရှဉ် Distribution: Southern China and Myanmar (recorded in the Gulf of Mottama (Martaban) and distributed from the upper Irrawaddy River and the Sittaung River eastward to the Salween River and south to southern Myanmar).

Callosciurus pygerythrus (I. Geoffroy Saint-51. Hilaire, 1831)

Common name: Irrawaddy Squirrel

Myanmar name: ဧရာဝတီရှဉ့်

Distribution: Bangladesh, China, India, Nepal and Vietnam. In Myanmar, recorded in Magway Region (Shwesettaw WS; Thu et al. 2022), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and possibly distributed in the Central and Western area.

Remarks: Seven subspecies were recognized; C. p. pygerythrus, C. p. blythii, C. p. janetta, C. p. mearsi, C. p. owensi, C. p. stevensi are considered as the subspecies that distributed in Myanmar.

Callosciurus quinquestriatus (J. Anderson, 1871) 52.

Common name: Anderson's Squirrel

Myanmar name: ရှဉ့်ဗိုက်ကျား

Distribution: Southwestern China and Northeastern Mvanmar.

Genus Dremomys Heude, 1898

Dremomys lokriah (Hodgson, 1836) 53.

Common name: Orange-bellied Himalayan Squirrel Myanmar name: ဝမ်းဗိုက်လိမ္မော်ရောင်ဟိမဝန္တာရှဉ့်

Distribution: Bangladesh, Bhutan, China, India, Nepal and Northern Myanmar (mountainous area of Chin and Kachin State).

Remarks: Eight subspecies were recognized by Chatterjee et al. (2021) and four subspecies: D. l. lokriah, D. l. macmillani, D. l. pagus and D. l. subflaviventris are listed in Myanmar.

54. Dremomys pernyi (Milne-Edwards, 1867)

Common name: Perny's Long-nosed Squirrel Myanmar name: နှာတံရှည်ဟိမဝန္တာရှဉ့်

Distribution: China, India and Vietnam. In Myanmar, recorded in Kachin State (Proposed Imawbum NP), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and possibly in Chin and Shan States.

Remarks: Eight subspecies were recognized; D. p. howelli and D. p. imus are considered as the subspecies that distributed in Chin Hills and Northern Myanmar respectively.

Dremomys rufigenis (Blanford, 1878) 55.

Common name: Asian Red-cheeked Squirrel Myanmar name: ရှဉ့်ပါးနီ

Distribution: China, India, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Kayin State (Mt. Mulayit), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and widely distributed throughout the country.

Remarks: Eight subspecies are recognized; D. p. howelli and D. p. imus are considered as the subspecies that distributed in Chin Hills and Northern Myanmar respectively.

Genus Menetes Thomas, 1908

56. Menetes berdmorei (Blyth, 1849)

Common name: Indochinese Ground Squirrel Myanmar name: မြေရှဉ့်/ရှဉ့်ဘေးကျား

Distribution: Cambodia, China, Laos, Thailand, Vietnam and Myanmar (recorded in Lampi Marine NP; Bisi et al. 2019 and possibly distributed from Central to Southeastern area). Remarks: There are seven recognized subspecies and two subspecies: M. b. berdmorei and M. b. decorates are listed in Myanmar.

Genus Tamiops J. A. Allen, 1906

Tamiops mcclellandii (Horsfield, 1840) 57.

Common name: Himalayan Striped Squirrel Myanmar name: ဟိမဝန္တာရှဉ့်ဘေးကျား

Distribution: Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam and Northern Myanmar (recorded in Proposed Imawbum NP, Proposed Mahamyaing WS and possibly distributed in the Central area).

Remarks: The genus name of this taxon was described as Callosciurus in "Wild Mammals of Myanmar" (Tun Yin 1993). Six subspecies are recognized: T. m. mcclellandii, T. m. barbei, and possibly T. m. collinus, are considered as subspecies occurred in Myanmar.

58. Tamiops swinhoei (Milne-Edwards, 1874)

Common name: Swinhoe's Striped Squirrel

Myanmar name: ဆွင်ဟိုရှဉ့်ကျား

Distribution: Southwest China, Northwest Vietnam and Northern Myanmar (Proposed Mahamyaing WS; Thazin Wai et al. 2018).

Remarks: The genus name of this taxon was described as Callosciurus in "Wild Mammals of Myanmar" (Tun Yin 1993). Four subspecies are recognized: T. s. spencei is considered as subspecies occurred in Kachin State of Myanmar.

Suborder Myomorpha Brandt, 1855 (None of the species from this suborder is listed under the protection status of Myanmar.)

Superfamily Muroidea Illiger, 1811 Family Spalacidae Gray, 1821 (4 species) Subfamily Rhizomyinae Winge, 1887 Genus *Cannomys* Thomas, 1915

59. Cannomys badius (Hodgson, 1841)

Common name: Lesser Bamboo Rat Myanmar name: ဝါးဘိုးကြွက်ကလေး Distribution: Bangladesh, Bhutan, Cambodia, India, Laos, Nepal, Thailand, Vietnam and Myanmar (recorded in Proposed Mahamyaing WS; Thazin Wai et al. 2018 and widely distributed).

Genus Rhizomys Gray, 1831

60. Rhizomys pruinosus Blyth, 1851

Common name: Hoary Bamboo Rat Myanmar name: ဝါးဘိုးကြွက်ပါးဖြူ Distribution: Cambodia, China, India, Laos, Malaysia, Thailand, Vietnam and Myanmar (widely distributed).

61. Rhizomys sinensis Gray, 1831

Common name: Chinese Bamboo Rat Myanmar name: ဝါးပွေး Distribution: China, Vietnam and Northeastern Myanmar.

62. Rhizomys sumatrensis (Raffles, 1821)

Common name: Indomalayan Bamboo Rat, Large Bamboo Rat

Myanmar name: ဝါးဘိုးကြွက်ကြီး

Distribution: Cambodia, China, Indonesia, Laos, Malaysia, Thailand, Vietnam and Northeastern Myanmar.

Family Cricetidae Fischer, 1817 (4 species) Subfamily Arvicolinae Gray, 1821 Genus *Eothenomys* Miller, 1896

63. Eothenomys cachinus (Thomas, 1921)

Common name: Kachin Red-backed Vole, Kachin Vole **Myanmar name:** ကချင်ကျောနီပွေး **Distribution:** China and Northeast Myanmar (West of Salween River valley; Liu et al. 2019).

64. Eothenomys melanogaster (Milne-Edwards, 1872)

Common name: Père David's Red-backed Vole Myanmar name: ပီယာဒေးဗစ်ကျောနီပွေး **Distribution:** China, India, Thailand, Vietnam and Northern Myanmar.

Genus *Microtus* Schrank, 1798

65. Microtus clarkei (Hinton, 1923)

Common name: Clarke's Vole

Myanmar name: ကလာ့ကီ ကျောနီပွေး

Distribution: Southwest China, Vietnam and Northeastern Myanmar (Adaung Valley, Kachin State) (Smith and Xie 2013; Tun Yin 1993).

Remarks: This species was formerly placed in Neodon clarkei.

Genus Neodon Hodgson, 1849

66. Neodon forresti Hinton, 1923

Common name: Forrest's Mountain Vole Myanmar name: တောင်ပွေး Distribution: Southern China and Northern Myanmar.

Family Muridae Illiger, 1811 (50 species) Subfamily Murinae Illiger, 1811 Genus *Apodemus* Kaup, 1829

67. Apodemus agrarius (Pallas, 1771)

Common name: Striped Field Mouse Myanmar name: ကျောစင်းကျားရှိလယ်ကြွက် Distribution: Widely distributed in Europe and Asia including in the Northern Myanmar.

68. Apodemus draco (Barrett-Hamilton, 1900)

Common name: South China Field Mouse Myanmar name: တရုတ်လယ်ကြွက် Distribution: China, India and Northern Myanmar (Proposed Imawbum NP; Nijman 2015) and possibly in Southeastern Chin State.

69. Apodemus latronum Thomas, 1911

Common name: Large-eared Field Mouse Myanmar name: နားရွက်ကြီးလယ်ကြွက် Distribution: China, India and Northern Myanmar (Kachin State).

70. Apodemus peninsulae (Thomas, 1907)

Common name: Korean Field Mouse Myanmar name: ကိုရီးယားလယ်ကြွက် Distribution: China, Japan, Korea, Russia, and Northern Myanmar (recorded in Adaung valley; Kaneko 2010). Genus Bandicota Gray, 1873

71. Bandicota bengalensis (Gray, 1835)

Common name: Lesser Bandicoot Rat Myanmar name: မြေကြွက်သိမ် Distribution: Bangladesh, India, Malaysia, Nepal, Pakistan, Sri Lanka and Myanmar (widely distributed).

72. Bandicota indica (Bechstein, 1800)

Common name: Greater Bandicoot Rat Myanmar name: မြෙကွက်ကြီး Distribution: Bangladesh, Cambodia, China, India, Laos, Malaysia, Nepal, Sri Lanka, Thailand, Vietnam and Myanmar (widely distributed).

73. Bandicota savilei Thomas, 1916

Common name: Savile's Bandicoot Rat Myanmar name: တောမြေကြွက်ကြီး Distribution: Cambodia, Thailand, Vietnam, Southern Laos and Myanmar (from Central to Southeastern area along the border of Thailand).

Genus *Berylmys* **Ellerman**, 1947 (This genus name was described as *Rattus* in "Wild Mammals of Myanmar" (Tun Yin 1993).

74. Berylmys berdmorei (Blyth, 1851)

Common name: Berdmore's White-toothed Rat Myanmar name: ကြွက်မွေးသွားဖြူ Distribution: Cambodia, China, Laos, Thailand, Vietnam and Myanmar (from Central to Southern area).

75. Berylmys bowersi (Anderson, 1879)

Common name: Bower's White-toothed Rat Myanmar name: မူလာရစ်ကြွက်ကြီး Distribution: Cambodia, China, India, Indonesia, Laos,

Malaysia, Thailand, Vietnam and Myanmar (widely distributed).

76. Berylmys mackenziei (Thomas, 1916)

Common name: Mackenzie's White-toothed Rat Myanmar name: မက်ကန်ဇီကြွက်

Distribution: China, India, Vietnam and Western Myanmar (recorded in Chin Hills (West of Kindat) and distributed in Sagaing Region and Chin State along the border of India).

77. Berylmys manipulus (Thomas, 1916)

Common name: Manipur White-toothed Rat Myanmar name: မဏိပူရကြွက်သွားဖြူ **Distribution:** China, India and Myanmar (from Central to Northern area).

Genus Chiropodomys Peters, 1868

78. Chiropodomys gliroides (Blyth, 1856)

Common name: Indomalayan Pencil-tailed Tree Mouse **Myanmar name:** တောကြွက်မြီးဖွာ

Distribution: Cambodia, China, India, Indonesia, Laos, Malaysia, Thailand, Vietnam and Myanmar (widely distributed).

Genus Chiromyscus Thomas, 1925

79. Chiromyscus chiropus (Thomas, 1891)

Common name: Burmese Tree Rat, Indochinese Chiromyscus

Myanmar name: သစ်ပင်ကြွက်ကလေး

Distribution: China, Laos, Thailand, Vietnam and Southeastern Myanmar (recorded in Karen Hills and possibly distributed in the eastern area along the border of China, Laos and Thailand).

80. *Chiromyscus langbianis* (H.C. Robinson and Kloss, 1922)

Common name: Langbian Tree Rat Indochinese Arboreal Niviventer

Myanmar name: ကြွက်မြီးနက်

Distribution: China, Cambodia, India, Laos, Thailand, Vietnam and Myanmar (from Northwestern area along the border of India to Tanintharyi Region).

Remarks: This species is sometimes known as *Niviventer langbianis*.

Genus Diomys Thomas, 1917

81. Diomys crumpi Thomas, 1917

Common name: Crump's Rat **Myanmar name:** ကြွက်ကြီး

Distribution: Northern India, Central Nepal and Northern Myanmar (Namti, Kachin State; Musser and Newcomb 1983). **Genus** *Hapalomys* Blyth, 1859

82. Hapalomys longicaudatus Blyth, 1859

Common name: Greater Marmoset Rat Myanmar name: ට්:ලාත් Distribution: Southwest China, Peninsular Malaysia, Thailand and Southeastern Myanmar (Sittaung river valley). **Remarks:** This species is categorized as endangered by the IUCN; however, not yet listed under the protection status of Myanmar.

Genus Leopoldamys Ellerman, 1947

83. Leopoldamys edwardsi (Thomas, 1882)

Common name: Edward's Long-tailed Giant Rat Myanmar name: တောကြီးကြွက်မြီးရှည်

Distribution: China, Vietnam and Northern Myanmar (recorded in Hukaung Valley WS).

Remarks: *L. edwardsi* is distributed in western and central China only, thus, the species in Myanmar could possibly be another cryptic species distributed throughout the southern China (Li et al. 2019). Further taxonomic identification for this species is needed in Myanmar.

84. Leopoldamys herberti (Kloss, 1916)

Common name: Herbert's Long-tailed Giant Rat **Myanmar name:** မြီးရှည်ကြွက်ကြီး

Distribution: Bangladesh, China, India, Laos, Thailand, Vietnam and Southeastern Myanmar.

Remarks: This species was sometimes considered as *L. neilli* (Balakirev et al. 2013); therefore, further taxonomic identification is needed in Myanmar.

85. Leopoldamys vociferans (G.S. Miller, 1900)

Common name: Indomalayan Long-tailed Giant Rat Myanmar name: အင်ဒိုမလေးမြီးရှည်ကြွက်ကြီး

Distribution: Bangladesh, Cambodia, Indonesia, Malaysia, Laos, Thailand and Vietnam. In Myanmar, recorded in Lampi Marine National Park (Bisi et al. 2019) and possibly distributed in Tanintharyi Region.

Remarks: Balakirev et al. (2013) revealed the absence of proper *L. sabanus* in continental Indochina, we assumed that the species in Southern Myanmar as *L. vociferans*. Further taxonomic identification is needed.

Genus Maxomys Sody, 1936

86. Maxomys surifer (Miller, 1900)

Common name: Indomalayan Spiny Rat **Myanmar name:** ကြွက်နီ

Distribution: Brunei Darussalam, Cambodia, China, Indonesia, Laos, Malaysia, Thailand, Vietnam and Southern Myanmar (recorded in Lampi Marine NP; Bisi et al. 2019).

87. Maxomys whiteheadi (Thomas, 1894)

Common name: Whitehead's Sundaic Spiny Rat Myanmar name: ကြွက်ခေါင်းဖြူ

Distribution: Peninsular Malaysia, Thailand, Sumatra, Borneo, and various adjacent islands. In Myanmar, possibly distributed in the Southern peninsular area (Pimsai et al. 2014).

Remarks: This species is categorized as vulnerable by the IUCN; however, not yet listed under the protection status of Myanmar.

Genus Micromys Dehne, 1841

88. Micromys erythrotis (Blyth, 1856)

Common name: Indochinese Harvest Mouse Myanmar name: အင်ဒိုတရုတ်ကြွက် Distribution: China, India, Laos, Vietnam and Northern Myanmar (Chen et al. 2023).

89. Micromys pygmaeus (Milne-Edwards, 1874)

Common name: Himalaya Mouse

Myanmar name: ဟိမဝန္တာတောင်ကြွက်

Distribution: Middle-to-high elevations of the Himalayas and Hengduan Mountains (1600–3800 m) and possibly in Northern Myanmar (Chen et al. 2023).

Remarks: This species is previously considered a subspecies of *M. minutus or M. erythrotis* (Chen et al. 2023). Further taxonomic identification and geographical distribution is needed in Myanmar.

Genus Millardia Thomas, 1911

90. Millardia kathleenae Thomas, 1914

Common name: Burmese Soft-furred Rat, Popa Soft-furred Rat

Myanmar name: ပုပ္ပါး အမွေးနုကြွက်

Distribution: Only occur in the Central Myanmar (Mount Popa, near the type locality of Bagan, but absent from surrounding areas; Musser and Carleton 2005). **Remarks:** This species is endemic to Myanmar.

Genus *Mus* Linnaeus, 1758

91. Mus booduga (Gray, 1837)

Common name: Little Indian Field Mouse Myanmar name: အိန္ဒိယလယ်ကြွက်သေး Distribution: Bangladesh, India, Nepal, Pakistan, Sri Lanka and Myanmar (possibly distributed in the Central area and Western Chin State).

92. Mus caroli Bonhote, 1902

Common name: Ryukyu Mouse, Ricefield Mouse Myanmar name: လယ်ကြွက် Distribution: Cambodia, China, Japan, Laos, Malaysia, Thailand, Vietnam and Myanmar (from Central to Southern area).

93. Mus cervicolor Hodgson, 1845

Common name: Fawn-colored Mouse

Myanmar name: ကြွက်ညို Distribution: Cambodia, India, Laos, Nepal, Pakistan, Sri Lanka, Thailand, Vietnam and Myanmar (from Central to Northern area).

94. Mus cookii Ryley, 1914

Common name: Cook's Mouse

Myanmar name: တောင်ကြွက်/ကွစ်ကြွက် Distribution: Bangladesh, Bhutan, China, India, Laos, Nepal, Thailand, Vietnam and Northeastern Myanmar (recorded in Gokteik, Shan State).

95. Mus lepidoides Fry, 1931

Common name: Little Burmese Field Mouse

Myanmar name: မြန်မာလယ်ကြွက်သေး **Distribution:** Only occur in the Central area of Myanmar along the Irrawaddy River (Mount Popa is the type locality of this species; Shimada et al. 2010).

Remarks: This species is recognized as distinct species from M. booduga and from all other species of Mus and endemic to Myanmar (Shimada et al. 2010).

Mus musculus Linnaeus, 1758 96.

Common name: House Mouse

Myanmar name: အိမ်ကြွက်

Distribution: Spread throughout the world in association with humans. In Myanmar, widely distributed throughout the country.

97. Mus nitidulus Blyth, 1859

Common name: Blyth's Mouse

Myanmar name: ဘလိုက်လယ်ကြွက်

Distribution: Only occur in the Central area of Myanmar (from Mandalay to Shwegyin, Bago and Hmawbi Township; Shimada et al. 2007).

Remarks: This species is endemic to Myanmar. It was treated as a synonym of a more widely distributed M. cervicolor, but Shimada et al. (2007) recognized as a distinct species from all other species of Mus currently recognized in the Asian region.

Mus pahari Thomas, 1916 98.

Common name: Indochinese Shrew-like Mouse

Myanmar name: တောင်စွေ ကြွက်

Distribution: Bhutan, Cambodia, China, India, Laos, Thailand, Vietnam and Myanmar (distributed in Chin, Kachin and Shan States: Ellerman 1947).

99. Mus shortridgei Thomas, 1914

Common name: Shortridge's Mouse Myanmar name: ကြွက်ပု Distribution: Cambodia, Laos, Thailand, Vietnam and Myanmar (from Mount Popa to the Eastern area).

Genus Niviventer J. T. Marshall Jr., 1976

100. Niviventer brahma (Thomas, 1914)

Common name: Brahman White-bellied Rat Myanmar name: ကြွက်ဝမ်းဖြူ Distribution: From Northern India through Northern Myanmar to Southwestern China.

101. Niviventer confucianus (Milne-Edwards, 1871)

Common name: Confucian White-bellied Rat Myanmar name: တရုတ်ကြွက်ဝမ်းဖြူ Distribution: China, Thailand, Vietnam and Northeastern Mvanmar (Kachin and Shan States).

102. Niviventer cremoriventer (G. S. Miller, 1900)

Common name: Sundaic Arboreal White-bellied Rat

Myanmar name: မလေးကြွက်ဝမ်းဖြူ Distribution: Brunei Darussalam, Indonesia, Malaysia, Thailand, Singapore and Southern Myanmar (Myeik Archipelago).

Remarks: Further study is needed to confirm the distribution of this species in Myanmar.

103. Niviventer eha (Wroughton, 1916)

Common name: Smoke-bellied Rat

Myanmar name: ကြွက်ဝမ်းမဲ

Distribution: Southern China, Northeastern India, Nepal and Northern Myanmar (Proposed Imawbum NP).

104. Niviventer fulvescens (Gray, 1847)

Common name: Indochinese White-bellied Rat Myanmar name: ကြွက်နီ

Distribution: China, India, Indonesia, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (widely distributed).

105. Niviventer niviventer (Hodgson, 1836)

Common name: Himalayan White-bellied Rat Myanmar name: ဟိမဝန္တာကြွက်ဝမ်းဖြူ Distribution: Bhutan, China, India, Laos, Vietnam and possibly in Northern Myanmar.

Remarks: Further study is needed to confirm the distribution of this species in Myanmar.

106. Niviventer tenaster (Thomas, 1916)

Common name: Indochinese Mountain White-bellied Rat, Tenasserim White-bellied Rat

Myanmar name: တနင်္သာရီကြွက်ဝမ်းဖြူ **Distribution:** Cambodia, China, Laos, Thailand, Vietnam

and Southern Myanmar (recorded in Mt. Mulayit, Kayin State and possibly distributed in the Central area)

Genus Rattus Fischer, 1803

107. Rattus and amanensis (Blyth, 1860)

Common name: Indochinese Forest Rat

Myanmar name: တောကြွက်

Distribution: Bhutan, Cambodia, China, Northeastern India, Andaman and Nicobar Islands, Laos, Nepal, Thailand, Vietnam and Northeastern Myanmar.

108. Rattus exulans (Peale, 1848)

Common name: Pacific Rat, Polynesian Rat Myanmar name: ကြွက်ကလေး

Distribution: Widespread throughout and probably native to Southeast Asia and spread to islands either with humans or through natural rafting on drifting vegetation (Francis 2019).

109. Rattus nitidus (Hodgson, 1845)

Common name: White-footed Indochinese Rat **Myanmar name:** ခြေဖြူတောင်ကြွက်

Distribution: Bhutan, China, India, Nepal, Philippines, Thailand and Vietnam. In Myanmar, recorded in Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and widely distributed in the mountainous area of the country.

110. Rattus norvegicus (Berkenhout, 1769)

Common name: Brown Rat

Myanmar name: ကြွက်ညို

Distribution: Original distribution comprised Northern China, Southeast Siberia and Japan, but the species has been since introduced worldwide.

111. Rattus pyctoris (Hodgson, 1845)

Common name: Himalayan Rat

Myanmar name: ဟိမဝန္တာတောင်ကြွက်

Distribution: Afghanistan, Bangladesh, Bhutan, China, India, Iran, Kazakhstan, Kyrgyzstan, Nepal, Pakistan, Tajikistan, Uzbekistan and Northern Myanmar.

112. Rattus rattus (Linnaeus, 1758)

Common name: Roof Rat, House Rat **Myanmar name:** အိမ်ကြွက်

Distribution: Probably native to Asia and widespread throughout the world in association with humans.

113. Rattus tanezumi (Temminck, 1844)

Common name: Oriental House Rat Myanmar name: အိမ်ကြွက် Distribution: Widely distributed in East and South Asia, and Southern Myanmar.

Genus Sundamys Musser and Newcomb, 1983

114. Sundamys muelleri (Jentink, 1880)

Common name: Müller's Rat Myanmar name: ကြွက်ကြီးမြီးရှည် Distribution: Brunei Darussalam, Indonesia, Malaysia, Philippines, Thailand and Southern Myanmar.

Genus Vandeleuria Gray, 1842

115. Vandeleuria oleracea (Bennett, 1832)

Common name: Indomalayan Long-tailed Climbing Mouse Myanmar name: ထန်းကြွက်/ကိုင်းကြွက်

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Nepal, Sri Lanka, Thailand, Vietnam and probably in Laos. In Myanmar, recorded in Sagaing Region (Proposed Mahamyaing WS: Thazin Wai et al. 2018) and widely distributed throughout the country.

116. Vernaya fulva (G.M. Allen, 1927)

Common name: Vernay's Climbing Mouse Myanmar name: တောင်ကြွက်နီမြီးရှည် Distribution: Southern China to Northen Myanmar.

Suborder Hystricomorpha Brandt, 1855 Infraorder Hystricognathi Brandt, 1855 Family Hystricidae Fischer de Waldheim, 1817 (2 species: all porcupines in Myanmar are normally protected.) Genus *Atherurus* F. Cuvier, 1829

117. Atherurus macrourus (Linnaeus, 1758)

Common name: Asiatic Brush-tailed Porcupine Myanmar name: ဖြူမြီးဖွာ Distribution: Bangladesh, China, India, Laos, Malaysia, Thailand, Vietnam and Myanmar (widely distributed).

Genus Hystrix Linnaeus, 1758

118. Hystrix brachyura Linnaeus, 1758

Common name: Malayan Porcupine Myanmar name: ဖြူကောင်ကြီး Distribution: Bangladesh, China, India, Indonesia, Laos, Malaysia, Nepal, Singapore, Thailand, Vietnam and Myanmar (widely distributed).

Order Eulipotyphla Waddell, Okada and Hasegawa, 1999 (None of the species from this order is listed under the protection status of Myanmar). Family Galericidae Pomel, 1848 (3 species) Genus *Echinosorex* Blainville, 1838

119. Echinosorex gymnura (Raffles, 1822)

Common name: Moonrat

Myanmar name: လမင်းကြွက်

Distribution: Brunei Darussalam, Indonesia, Malaysia and Thailand. In Myanmar, possibly distributed from Bago to Tanintharyi Region.

Genus Hylomys Müller, 1840

120. Hylomys suillus Müller, 1839

Common name: Short-tailed Gymnure Myanmar name: လယ်ကြွက်သိမ်

Distribution: Cambodia, China, Indonesia, Laos, Malaysia, Thailand and Vietnam. In Myanmar, possibly distributed in Tanintharyi Region, Shan, Kayah, Kayin and Mon States. **Remarks:** Since *H. suillus* occurs in Java Island only (Bannikova et al. 2014), the species in Myanmar could possibly be *H. s. peguensis* Blyth, 1859 and *H. s. siamensis* Kloss, 1916.

Genus Neotetracus Trouessart, 1909

121. Neotetracus sinensis Trouessart, 1909

Common name: Shrew Gymnure Myanmar name: စေ္လလယ်ကြွက် Distribution: China, Vietnam and Northern Myanmar.

Family Soricidae G. Fischer, 1814 (22 species) Subfamily Crocidurinae Milne-Edwards, 1872 Genus *Crocidura* Wagler, 1832

122. Crocidura attenuata Milne-Edwards, 1872

Common name: Asian Gray White-toothed Shrew Myanmar name: စေ္ဂ့မွဲသွားဖြူ

Distribution: Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal, Philippines, Thailand and Vietnam. In Myanmar, widely distributed throughout the country.

123. Crocidura cranbrooki Jenkins, Lunde and Moncrieff, 2009

Common name: Cranbrook's White-toothed Shrew Myanmar name: ခရန်းဘရုတ်ခ်ကြွက်စုတ်

Distribution: Only occur in high river valleys and surrounding hills of the northernmost area of Myanmar, near the borders with Tibet and Yunnan of China (Jenkins et al. 2009).

Remarks: Specimens of this species were originally identified as *C. attenuata*; however, Jenkins et al. (2009) recognized as distinct species and endemic to Myanmar.

124. *Crocidura dracula* Thomas, 1912

Common name: Large White-toothed Shrew, Dracula Shrew Myanmar name: ဒရက်ကူလာကြွက်စုတ်

Distribution: China, Laos, Vietnam and Northern Myanmar (Tun Yin 1993).

Remarks: Bui et al. (2020) suggested that the Mekong River is the natural barrier for the distribution of *C. fuliginosa* and *C. dracula* which distributed in China, Laos, and Vietnam. Thus, further study is needed to confirm the distribution of this species in Myanmar.

125. Crocidura fuliginosa (Blyth, 1855)

Common name: Southeast Asian White-toothed Shrew Myanmar name: အရှေ့တောင်အာရှကြွက်စုတ် **Distribution:** Cambodia, Laos, Malaysia, Thailand, Vietnam and possibly in Bangladesh. In Myanmar, recorded in Bago Region (Shwegyin Township) and possibly distributed throughout the country.

126. Crocidura indochinensis H.C. Robinson and Kloss, 1922

Common name: Indochinese White-toothed Shrew Myanmar name: အင်ဒိုတရုတ်ကြွက်စုတ်

Distribution: China, Thailand and Vietnam. In Myanmar, possibly distributed in Kachin State (Bumphabum WS and Hukaung Valley WS) and Shan State along the border of China, Laos and Thailand.

Remarks: This species was identified as a subspecies of *C. horsfieldi* in "Wild Mammals of Myanmar" (Tun Yin 1993) which does not occur in Myanmar. However, Bannikova et al. (2011) described this species as endemic to Dalat Plateau in southern Vietnam. Thus, further genetic information and distribution of this species are still needed to confirm in Myanmar.

127. Crocidura rapax G. M. Allen, 1923

Common name: Chinese White-toothed Shrew

Myanmar name: တရုတ်ကြွက်စုတ်

Distribution: China, India, Vietnam and Northern Myanmar (Myitkyina Township, Kachin State).

Remarks: The species in Myanmar could possibly be *C. r. rapax*; however, taxonomic status and distribution range of this species need further investigation (Bannikova et al. 2011).

Genus Suncus Ehrenberg, 1832

128. Suncus etruscus (Savi, 1822)

Common name: Etruscan Shrew

Myanmar name: ကြွက်စုတ်ပု

Distribution: Southern Europe, North Africa and Asia. In Myanmar, widely distributed throughout the country.

129. Suncus murinus Linnaeus, 1766

Common name: Asian House Shrew **Myanmar name:** အိမ်ကြွက်စုတ်

Distribution: Widely distributed throughout Asia and introduced in historical times into coastal Africa and Madagascar. In Myanmar, recorded in Kachin State (Yikyawdi Village, Putao; Kawada et al. 2012), Sagaing Region (Proposed Mahamyaing WS; Thazin Wai et al. 2018) and widely distributed throughout the country.

Subfamily Soricinae G. Fischer, 1814 Genus *Anourosorex* Milne-Edwards, 1872

130. Anourosorex assamensis J. Anderson, 1875

Common name: Assam Mole Shrew

Distribution: China, India and Myanmar (Tedim Township, Chin State and Putao Township, Kachin State; Kawada et al. 2012, 2014).

131. Anourosorex squamipes Milne-Edwards, 1872

Common name: Chinese Mole Shrew

Myanmar name: စေးချွမ်လူးစွေ့

Distribution: China, India, Laos, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Proposed Imawbum NP, Yikyawdi Village and Putao Township).

Genus Blarinella Thomas, 1911

132. Blarinella wardi Thomas, 1915

Common name: Burmese Short-tailed Shrew Myanmar name: မြန်မာစွေ့မြီးတို Distribution: China and Northeastern Myanmar.

Genus Chimarrogale Anderson, 1877

133. Chimarrogale himalayica (Gray, 1842)

Common name: Himalayan Water Shrew Myanmar name: ဟိမဝန္တာရေစွေ့

Distribution: China, India, Laos, Nepal, Vietnam and Northeastern Myanmar.

Remarks: This species was described as subspecies of *C. platycephala* in "Wild Mammals of Myanmar" (Tun Yin 1993).

134. Chimarrogale styani de Winton, 1899

Common name: Chinese Water Shrew Myanmar name: တရုတ်ရေစွေ့ Distribution: China and Northeastern Myanmar (Proposed Imawbum NP).

Genus Chodsigoa Kastchenko, 1907

135. Chodsigoa furva Anthony, 1941

Common name: Dusky Brown-toothed Shrew

Myanmar name: စွေမဲ

Distribution: China and Northern Myanmar (Imawbum; Chen et al. 2017).

136. Chodsigoa parca G.M. Allen, 1923

Common name: Lowe's Brown-toothed Shrew Myanmar name: လိုဝီලෙූ Distribution: China, Thailand, Vietnam and Northeastern

Myanmar.

Genus Episoriculus Ellermann and Morrison-Scott, 1966

137. Episoriculus baileyi (Thomas, 1914)

Common name: Bailey's Brown-toothed Shrew Myanmar name: ေစွ မြီးရှည် Distribution: China, India, Nepal, Vietnam and Northern Myanmar (Kachin State).

138. Episoriculus caudatus (Horsfield, 1851)

Common name: Hodgson's Brown-toothed Shrew Myanmar name: စေရသွားမဲ

Distribution: China, India, Nepal, Vietnam and Northern Myanmar along the border of China.

Remarks: Since there is taxonomic uncertainty between *E. caudatus* and *E. umbrinus*, further genetic as well as morphological study based on samples from more localities is needed in Myanmar (Abramov et al. 2017; Motokawa and Lin 2005).

139. Episoriculus macrurus (Blanford, 1888)

Common name: Arboreal Brown-toothed Shrew Myanmar name: တောင်စွေ့မြီးရှည်

Distribution: China, India, Nepal, Vietnam and Northern Myanmar.

140. Episoriculus umbrinus (G. M. Allen, 1923)

Common name: Hidden Brown-toothed Shrew Myanmar name: စွေသွားမဲ Distribution: China, India, Nepal, Vietnam and Northern Myanmar.

Genus Nectogale Milne-Edwards, 1870

141. Nectogale elegans Milne-Edwards, 1870

Common name: Elegant Water Shrew Myanmar name: ବେର୍ବଡୁ Distribution: Bhutan, China, India, Nepal and Northern Myanmar (Hill 1962).

Genus Sorex Linnaeus, 1758

142. Sorex bedfordiae Thomas, 1911

Common name: Lesser Striped Shrew Myanmar name: ကျောစင်းကျားရှိစွေ့ Distribution: China, Nepal and Northern Myanmar.

Genus Soriculus Blyth, 1854

143. Soriculus nigrescens (Gray, 1842)

Common name: Himalayan Shrew Myanmar name: ഗ്ലാട്ടോളേ Distribution: Bhutan, China, India, Nepal and Northern Myanmar.

Family Talpidae G. Fischer, 1814 (8 species) Subfamily Talpinae G. Fischer, 1814 Genus *Euroscaptor* Miller, 1940

144. Euroscaptor grandis G. S. Miller, 1940

Common name: Greater Chinese Mole Myanmar name: တရုတ်ပွေးကြီး Distribution: China and possibly in Northern Myanmar. Remarks: Since the taxonomic status of this species was described from a single specimen that was distinguishable by its large size, the taxonomic identification of this species is still confused (Zemlemerova et al. 2016). There is still no confirmed record of this species in Myanmar.

145. Euroscaptor klossi Thomas, 1929

Common name: Kloss's Mole

Myanmar name: നസോറ്റോ

Distribution: China, Laos, Malaysia, Thailand, Vietnam and Southern Myanmar (from Shan State to Tanintharyi Region along the border of China, Laos and Thailand).

Genus Parascaptor Gill, 1875

146. Parascaptor leucura (Blyth, 1850)

Common name: White-tailed Mole Myanmar name: ပွေးမြီးဖြူ

Distribution: Bangladesh, China and India. In Myanmar, recorded in Kachin State (Yikyawdi Village, Putao) and Mandalay Region (Pyinoolwin Township; Kawada et al. 2012) and possibly distributed in Shan and Chin States.

Genus Scaptonyx Milne-Edwards, 1872

147. Scaptonyx fusicaudus Milne-Edwards, 1872

Common name: Long-tailed Mole Myanmar name: ပွေးမြီးရှည် Distribution: China, Vietnam and Northeastern Myanmar.

Subfamily Uropsilinae Dobson, 1883 Genus *Uropsilus* Milne-Edwards, 1871

148. Uropsilus gracilis (Thomas, 1911)

Common name: Gracile Shrew Mole Myanmar name: ေစွင္ဖေပွးရှည် Distribution: Southwestern China and possibly in Northern Myanmar (Tu et al. 2012).

149. Uropsilus investigator (Thomas, 1922)

Common name: Inquisitive Shrew Mole

Myanmar name: 60.603

Distribution: China and possibly in adjacent area of Northeastern Myanmar.

Remarks: Since this species is considered as endemic species of China (Smith and Xie 2013; Tu et al. 2015), the distribution of this species in Myanmar is needed to confirm.

150. Uropsilus nivatus (G. M. Allen, 1923)

Common name: Snow Mountain Shrew Mole Myanmar name: နင်းတောင်စွေပွေး

Distribution: China and possibly in adjacent area of Northeastern Myanmar.

Remarks: Since there are only valid distribution records of this species in Tibet and adjacent regions of Northwestern Yunnan, the distribution of this species in Myanmar is still needed to confirm (Tu et al. 2015).

151. Uropsilus soricipes Milne-Edwards, 1872

Common name: Chinese Shrew Mole

Myanmar name: တရုတ်စွေ့ပွေး

Distribution: China and Northeastern Myanmar (Tun Yin 1993). **Remarks:** Since this species is considered as endemic species of China (Smith and Xie 2013; Tu et al. 2015), the distribution of this species in Myanmar is needed to confirm. Order Chiroptera Blumenbach, 1779 (None of the species from this order is listed under the protection status of Myanmar.) Suborder Yinpterochiroptera Springer, Teeling, Madsen, Stanhope and Jong, 2001 Family Pteropodidae Gray, 1821 (11 species) Subfamily Cynopterinae Andersen, 1912 Genus *Cynopterus* F. Cuvier, 1824

152. Cynopterus brachyotis (Müller, 1838)

Common name: Lesser Short-nosed Fruit Bat Myanmar name: လင်းသက်နာခေါင်းတိုအသေး

Distribution: Cambodia, China, India, Indonesia, Laos, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste and Vietnam. In Myanmar, recorded in Rakhine State (Alai Chaung Village, Gwa Township and Kalar Chaung Village, Sittway Township; Pearch et al. 2003) and Mandalay Region (Yema village, Patheingyi Township; Shein and Sein 2013).

153. Cynopterus sphinx (Vahl, 1797)

Common name: Greater Short-nosed Fruit Bat Myanmar name: လင်းသက်နာခေါင်းတိုအကြီး

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi Landscape), Mandalay Region (Patheingyi Township), Mon State (Kyaik Kha-Mi), Sagaing and Tanintharyi Regions (Proposed Lenya NP), Shan and Rakhine States (Bates et al. 2021; Grindley 2019; Pearch et al. 2003; Shein and Sein 2013; Struebig et al. 2005).

Genus Megaerops Peters, 1865

154. Megaerops niphanae Yenbutra and Felten, 1983

Common name: Ratanaworabhan's Fruit Bat **Myanmar name:** အမြီးမဲ့လင်းသက်

Distribution: Cambodia, India, Laos, Thailand, Vietnam and Northern Myanmar (newly recorded in Hkakaborazi Landscape; Bates et al. 2021).

Remarks: This is the new distribution record of this species for Myanmar (Bates et al. 2021).

Genus Sphaerias Miller, 1906

155. Sphaerias blanfordi (Thomas, 1891)

Common name: Blandford's Fruit Bat

Myanmar name: တောင်လင်းသက်

Distribution: Bhutan, China, India, Laos, Nepal, Thailand, Vietnam and Myanmar (recorded in Kayin Hills and possibly distributed in the Northern and Eastern mountainous area).

Subfamily Macroglossusinae Almeida, Simmmons and Giannini, 2020 Genus *Macroglossus* F. Cuvier, 1824

Genus Muci oglossus r. Cuvier, 1824

156. Macroglossus sobrinus K. Andersen, 1911

Common name: Greater Long-nosed Fruit Bat Myanmar name: လင်းသက်နူတ်သီးရှည်

Distribution: Cambodia, China, India, Indonesia, Laos, Malaysia, Thailand, Vietnam and Myanmar (recorded in Hkakaborazi Landscape; Bates et al. 2021 and possibly distributed throughout the country particularly in Tanintharyi Region and Kayah State).

Subfamily Pteropodinae Gray, 1821 Genus *Pteropus* Brisson, 1762

157. Pteropus hypomelanus Temminck, 1853

Common name: Island Flying Fox

Myanmar name: ခွေးလင်းဆွဲ

Distribution: India, Indonesia, Malaysia, Maldives, Papua New Guinea, Philippines, Solomon Islands, Thailand, Vietnam and Southern Myanmar (recorded in Myeik Archipelago and Proposed Lenya NP; Grindley 2019; Oo et al. 2017b). **Remarks:** This is the new locality record and the first mainland record of *P. h. geminorum* for Myanmar than the type locality of South Twin Island and Sir John Hayes Island (Kunthi Kyun) in the Myeik Archipelago (Oo et al. 2017b).

158. Pteropus medius (Temminck, 1825)

Common name: Indian Flying Fox Myanmar name: လင်းသက်/လင်းဆွဲ

Distribution: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka and Myanmar (recorded in Rakhine State, Mandalay, Sagaing and Bago Regions; Bates et al. 2000; Struebig et al. 2005).

Remarks: This species is considered as conspecific with *Pteropus giganteus*.

159. Pteropus vampyrus (Linnaeus, 1758)

Subfamily Rousettinae Andersen, 1912 Genus *Eonycteris* Dobson, 1873

160. Eonycteris spelaea (Dobson, 1871)

Common name: Lesser Dawn Bat Myanmar name: ဝတ်ရည်စုပ်လင်းသက်

Distribution: Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Timor-Leste, Vietnam and Southern Myanmar (recorded in Mawlamyine Township and widely distributed throughout the country).

Genus Rousettus Gray, 1821

161. *Rousettus amplexicaudatus* (É. Geoffroy Saint-Hilaire, 1810)

Common name: Geoffroy's Rousette

Myanmar name: _സറ്റാന്

Distribution: Brunei Darussalam, Cambodia, China, Indonesia, Laos, Malaysia, Papua New Guinea, Philippines, Singapore, Solomon Islands, Thailand, Timor-Leste, Vietnam and Southern Myanmar.

162. Rousettus leschenaultii (Desmarest, 1820)

Common name: Leschenault's Rousette

Myanmar name: လင်းဝက်

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Patheingyi Township, Proposed Lenya NP, Yangon city, Shan, Rakhine, Kayin and Mon States (Grindley 2019; Pearch et al. 2003; Shein and Sein 2013; Struebig et al. 2005).

Family Rhinolophidae Gray, 1825 (22 species) Genus *Rhinolophus* Lacépède, 1799

163. Rhinolophus acuminatus Peters, 1871

Common name: Acuminate Horseshoe Bat Myanmar name: မြင်းခွာလင်းဆွဲအသေး **Distribution:** Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand and Vietnam. In Myanmar, recorded in Tanintharyi Region (Proposed Lenya NP; Grindley 2019) and Bago Region (Nyaungkharshay village, Daik Oo Township; Bates et al. 2004a).

164. Rhinolophus affinis Horsfield, 1823

Common name: Intermediate Horseshoe Bat

Myanmar name: မြင်းခွာလင်းဆွဲအလတ်

Distribution: Bangladesh, Bhutan, China, Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Singapore, Thailand and Vietnam. In Myanmar, recorded in Tanintharyi, Bago and Sagaing Regions, Kachin and Shan States (Bates et al. 2004a, 2021; Grindley 2019).

165. Rhinolophus coelophyllus Peters, 1867

Common name: Croslet Horseshoe Bat

Myanmar name: မြင်းခွာလင်းဆွဲ

Distribution: Laos, Malaysia and Thailand. In Myanmar, recorded in Mon State (Mawlamyine Township), Mandalay Region (Patheingyi Township), Sagaing Region and possibly in Northern area (Bates et al. 2004a; Shein and Sein 2013).

166. Rhinolophus lepidus Blyth, 1844

Common name: Blyth's Horseshoe Bat

Myanmar name: ဘလိုက်မြင်းခွာလင်းဆွဲ

Distribution: Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Nepal, Pakistan, Thailand and Vietnam. In Myanmar, recorded in Kachin, Kayah and Rakhine States, Mandalay, Sagaing and Bago Regions (Bates et al. 2004a, 2021; Pearch et al. 2003).

167. Rhinolophus macrotis Blyth, 1844

Common name: Big-eared Horseshoe Bat Myanmar name: နားရွက်ကြီးမြင်းခွာလင်းဆွဲ

Distribution: Bangladesh, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Philippines, Thailand, Vietnam and Eastern Myanmar (recorded in Naga and Shwe Oo Min Caves, Shan State; Bates et al. 2004a).

168. Rhinolophus malayanus Bonhote, 1903

Common name: Malayan Horseshoe Bat

Myanmar name: မလေးရှားမြင်းခွာလင်းဆွဲ

Distribution: Cambodia, Laos, Malaysia, Thailand, Vietnam and Myanmar (recorded in Kachin, Shan, Kayin and Mon States, Mandalay and Tanintharyi Regions; Bates et al. 2004a; Grindley 2019; Shein and Sein 2013; Struebig et al. 2005).

169. Rhinolophus marshalli Thonglongya, 1973

Common name: Marshall's Horseshoe Bat Myanmar name: မာရှဲလ်မြင်းခွာလင်းဆွဲ Distribution: China, Laos, Malaysia, Thailand, Vietnam and Southeastern Myanmar (recorded in Naga Cave, Shan State and Saddan-Sin Cave, Mon State; Bates et al. 2004a).

170. *Rhinolophus microglobosus* Csorba and Jenkins, 1998

Common name: Indo-Chinese Horseshoe Bat, Vietnamese Brown Horseshoe Bat

Myanmar name: ဗီယက်နမ်မြင်းခွာလင်းဆွဲ

Distribution: Cambodia, China, Laos, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Nanti Hill Forest, Bhamo Township), Mandalay Region (Sanite cave, Wetwun Village, Pyin Oo Lwin), Mon State (Indian Single Rock Temple Cave) (Soisook et al. 2008).

171. Rhinolophus pearsonii Horsfield, 1851

Common name: Pearson's Horseshoe Bat

Myanmar name: ပီယာဆန်မြင်းခွာလင်းဆွဲ

Distribution: Bangladesh, Bhutan, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (recorded in Shan, Mon and Kachin States; Bates et al. 2004a).

172. Rhinolophus perniger Hodgson, 1843

Common name: Northern Woolly Horseshoe Bat

Myanmar name: အမွေးပွမြင်းခွာလင်းဆွဲ

Distribution: Bangladesh, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Singapore, Thailand and Vietnam. In Myanmar, recorded in Tanintharyi Region, Shan, Chin and Kachin States (Bates et al. 2004a, 2021; Grindley 2019).

Remarks: Taxonomic status of this species is currently uncertain and it was previously recognized as a subspecies of *R. luctus* (Wilson and Mittermeier 2019).

173. Rhinolophus pusillus Temminck, 1834

Common name: Least Horseshoe Bat

Myanmar name: မြင်းခွာလင်းဆွဲအသေး

Distribution: Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand and Vietnam. In Myanmar, recorded in Shan State (Nant Khun Village, Tone Khan Village and Taung Pauk Village), Kachin State (Hai Bum, Myitkyina), Bago, Patheingyi Township, Sagaing and Tanintharyi Regions (Bates et al. 2004a; Grindley 2019; Shein and Sein 2013).

174. Rhinolophus rex G. M. Allen, 1923

Common name: King Horseshoe Bat Myanmar name: ශුර්ෘතාගර්ංකු Distribution: China, Laos, Thailand, Vietnam and Eastern Myanmar (recorded in Kalaw, Shan State; Oo et al. 2017a). Remarks: The first record by Oo et al. 2017a is regarded as the first country record of *Rhinolophus paradoxolophus* and represent its considerable western range extension. *R. paradoxolophus* was generally recognized as a species distinct from *R. rex* but the two taxa are now considered a single species based on genetic data (Tu et al. 2023; Wilson and Mittermeier 2019).

175. Rhinolophus rouxii Temminck, 1835

Common name: Indian Rufous Horseshoe Bat

Myanmar name: အိန္ဒိယမြင်းခွာလင်းဆွဲ

Distribution: India, Sri Lanka, Cambodia, Vietnam and Myanmar (Taungoo Township; Lal 1981 and Kawthaung and Myeik; Nyo 2005).

176. Rhinolophus shameli Tate, 1943

Common name: Shamel's Horseshoe Bat

Myanmar name: မြင်းခွာလင်းဆွဲ

Distribution: Cambodia, Laos, Thailand, Vietnam and Myanmar (recorded in Shan State, Mandalay and Sagaing Regions; Bates et al. 2004a; Nyo 2005).

177. Rhinolophus shortridgei K. Andersen, 1918

Common name: Shortridge's Horseshoe Bat Myanmar name: မြင်းခွာလင်းဆွဲပု Distribution: Northern India, China and Central Myanmar (Bagan and along the Irrawaddy River).

178. Rhinolophus sinicus K. Andersen, 1905

Common name: Chinese Rufous Horseshoe Bat Myanmar name: တရုတ်မြင်းခွာလင်းဆွဲ Distribution: China, India, Nepal, Vietnam and Northern Myanmar.

179. Rhinolophus stheno K. Andersen, 1905

Common name: Lesser Brown Horseshoe Bat Myanmar name: မြင်းခွာလင်းဆွဲနက်အသေး

Distribution: Indonesia, Malaysia, Thailand, Vietnam and possibly in peninsular Myanmar.

Remarks: Bates et al. (2004a) recorded this species in the upper Myanmar, however, according to its distribution range, the species could possibly distribute in peninsular Myanmar.

180. Rhinolophus subbadius Blyth, 1844

Common name: Little Nepalese Horseshoe Bat Myanmar name: နီပေါမြင်းခွာလင်းဆွဲ Distribution: Bangladesh, China, India, Nepal, Bhutan and Northern Myanmar (Nam Tamai Valley, Kachin State).

181. Rhinolophus thomasi K. Andersen, 1905

Common name: Thomas's Horseshoe Bat Myanmar name: သောမက်စ်မြင်းခွာလင်းဆွဲ Distribution: China, Laos, Thailand, Vietnam and Southeastern Myanmar (recorded in Karen Hills, Naga Cave, Myin-Ma-Hti Cave and Taho Hills of Shan State; Bates et al. 2004a).

182. *Rhinolophus thailandensis* Wu, Harada and Motokawa, 2009

Common name: Thailand Horseshoe Bat

Myanmar name: ထိုင်းမြင်းခွာလင်းဆွဲ

Distribution: Thailand and possibly distributed in China, India, Cambodia and Northeastern and Southern Myanmar along the border of Thailand (Wu et al. 2009).

Remarks: Specimens referred to as *R. yunanensis* from the entire distribution range need to be performed to correctly understand the distribution of *R. thailandensis* and *R. yunanensis* (Wu et al. 2009).

183. Rhinolophus trifoliatus Temminck, 1834

Common name: Trefoil Horseshoe Bat

Myanmar name: နှာခေါင်းဝါမြင်းခွာလင်းဆွဲ

Distribution: China, India, Indonesia, Malaysia, Singapore, Thailand and Myanmar (recorded in Shan State; Nyo 2005 and Bankachon, Myeik and Proposed Lenya NP; Grindley 2019).

184. Rhinolophus yunanensis Dobson, 1872

Common name: Dobson's Horseshoe Bat Myanmar name: ယူနန်မြင်းခွာလင်းဆွဲ Distribution: China, India, Thailand and Northern Myanmar (recorded in Nam Tamai Valley, Kajihtu and Mahtu of Kachin State; Hill 1986).

Family Hipposideridae Lydekker, 1891 (16 species) Genus *Aselliscus* Tate, 1941

185. Aselliscus stoliczkanus (Dobson, 1871)

Common name: Stoliczka's Trident Bat Myanmar name: ရက်ဝိုင်းလင်းဆွဲ Distribution: China, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Namdee Hill), Shan State (Gotkeik gorge cave, Sanite cave No. 2), Mon State, Kayin State and Mandalay Region (Chay-myit- pin forest fragment and National Kandawgyi Garden) (Aye 2011; Bates et al. 2000; Nyo 2005; Struebig et al. 2005).

Genus Coelops Blyth, 1848

186. Coelops frithii Blyth, 1848

Genus Hipposideros Gray, 1831

187. Hipposideros armiger (Hodgson, 1835)

Common name: Great Himalayan Leaf-nosed Bat, Great Leaf-nosed Bat

Myanmar name: ဟိမဝန္တာ နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲကြီး Distribution: Cambodia, India, Indonesia, China, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (recorded in Proposed Lenya NP, Shan, Kayin, Chin and Mon States; Nyo 2005; Struebig et al. 2005).

188. Hipposideros bicolor (Temminck, 1834)

Common name: Bicolored Leaf-nosed Bat

Myanmar name: နှစ်ရောင်စပ် နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: Brunei Darussalam, China, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Timor-Leste, Vietnam and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019).

Remarks: This species is known from the Sundaic subregion; however, Grindley (2019) recorded this species in Tanintharyi Region as a new distribution record of Myanmar.

189. Hipposideros cineraceus Blyth, 1853

Common name: Least Leaf-nosed Bat Myanmar name: နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲသေး

Distribution: India, Indonesia, Laos, Malaysia, Pakistan, Philippines, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi Landscape; Bates et al. 2021), Tanintharyi Region (Proposed Lenya NP; Grindley 2019) and widely distributed throughout the country.

190. Hipposideros diadema (É. Geoffroy, 1813)

Common name: Diadem Leaf-nosed Bat **Myanmar name:** သရဖူဆောင်းလင်းဆွဲ **Distribution:** Australia, Cambodia, India, Indonesia, Laos, Malaysia, Papua New Guinea, Philippines, Solomon Islands, Thailand, Timor-Leste, Vietnam and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019).

191. *Hipposideros einnaythu* Douangboubpha, Bumrungsri, Satasook, Soisook, Hla Bu, Aul, Harrison, Pearch, Thomas and Bates, 2011

Common name: House-dwelling Leaf-nosed Bat **Myanmar name:** အိမ်နေလင်းဆွဲ

Distribution: Only occur in Kaeng Krachan NP of Thailand and Rakhine State (Kan Thar Yar Beach, Gwa Township) and Tanintharyi Region (Tharabwin Village and Myeik) of Myanmar (Douangboubpha et al. 2011; Wongwaiyut et al. 2023).

Remarks: Specimens from Myanmar originally referred to *Hipposideros ater* by Pearch et al. (2003) were referable to *H. einnaythu* (Douangboubpha et al. 2011). This species is previously regarded as endemic to Myanmar; however, Wongwaiyut et al. (2023) confirm the presence of this species in Thailand.

192. Hipposideros galeritus Cantor, 1846

Common name: Cantor's Leaf-nosed Bat

Myanmar name: နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Sri Lanka, Thailand, Vietnam and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019).

193. Hipposideros gentilis K. Andersen, 1918

Common name: Andersen's Roundleaf Bat, Exotic Leafnosed Bat

Myanmar name: အန်ဒါဆန်နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: Bangladesh, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (recorded in Thayet Township, Magway Region).

Remarks: Tun Yin (1993) listed *Hipposideros fulvus* in Myanmar; however, this species is currently restricted to the Indian subcontinent (Murray et al. 2018) and Tate (1941) also mentioned that the specimens of *H. fulvus* from Myanmar were referable to *H. pomona gentilis*.

194. Hipposideros grandis G.M. Allen, 1936

Common name: Grand Leaf-nosed Bat

Myanmar name: နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲကြီး

Distribution: China, Laos, Thailand, Vietnam and Myanmar (recorded in Sagaing Region and possibly distributed in the upper Central to Eastern area). **Remarks:** This species was listed as a subspecies of *H. lar-vatus* in "Wild Mammals of Myanmar" (Tun Yin 1993).

195. Hipposideros lankadiva Kelaart, 1850

Common name: Indian Leaf-nosed Bat

Myanmar name: အိန္ဒိယနှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: Bangladesh, India, Sri Lanka and Myanmar (recorded in the Pawtawmu Cave in Karmine Township and Bhamo, Kachin State; Bates et al. 2015).

Remarks: *H. l. gyi* is a subspecies that was newly discovered in Kachin State, Myanmar in 2011 (Bates et al. 2015).

196. Hipposideros larvatus (Horsfield, 1823)

Common name: Intermediate Leaf-nosed Bat Myanmar name: နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲအလတ် Distribution: Bangladesh, Cambodia, China, India, Indonesia, Laos, Malaysia, Thailand, Vietnam and Myanmar (widely distributed).

197. Hipposideros lylei Thomas, 1913

Common name: Shield-faced Leaf-nosed Bat Myanmar name: ဒိုင်းပုံနာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: China, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Mandalay Region (Winkabar Cave, Patheingyi Township; Shein and Sein 2013), Shan State (Innwine cave; Struebig et al. 2005), Kayin and Mon States (Nyo 2005).

198. Hipposideros pomona K. Andersen, 1918

Common name: Pomona Leaf-nosed Bat

Myanmar name: ပိုမိုနားနှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: South China, Cambodia, India, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Mandalay Region (Patheingyi Township; Shein and Sein 2013), Rakhine State (Pearch et al. 2003) and the Central area (Sagaing Hill Range; Tun et al. 2015).

Remarks: This species is listed as endangered by the IUCN; however, not yet listed under the protection status of Myanmar.

199. Hipposideros pratti Thomas, 1891

Common name: Pratt's Leaf-nosed Bat

Myanmar name: နှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ

Distribution: China, Vietnam and Northern Myanmar (a record from Myanmar needed to be confirmed; Wilson and Mittermeier 2019).

200. Hipposideros speoris (Schneider, 1800)

Common name: Schneider's Leaf-nosed Bat Myanmar name: ရှနိုက်ဒါးနှာခေါင်းရွက်ဝိုင်းလင်းဆွဲ Distribution: India, Sri Lanka and Central Myanmar (Pyay, Bago Region; Dar et al. 2019).

Family Megadermatidae H. Allen, 1864 (2 species) Genus *Lyroderma* Peters, 1872

201. Lyroderma lyra (É. Geoffroy Saint-Hilaire, 1810)

Common name: Greater Asian False Vampire **Myanmar name:** သွေးစုပ်လင်းဆွဲ

Distribution: Afghanistan, Bangladesh, Cambodia, China, India, Laos, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Shan State (Innwine cave), Tanintharyi Region (Proposed Lenya National Park; Grindley 2019), Bago Region, Sagaing Region, Kayin and Mon States (Bates et al. 2000; Nyo 2005; Struebig et al. 2005).

Genus Megaderma É. Geoffroy Saint-Hilaire, 1810

202. Megaderma spasma (Linnaeus, 1758)

Common name: Lesser Asian False Vampire, Lesser False Vampire Bat

Myanmar name: သွေးစုပ်လင်းဆွဲသိမ်

Distribution: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Philippines, Singapore, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Mandalay Region (Patheingyi Township; Shein and Sein 2013), Tanintharyi Region (Proposed Lenya NP; Grindley 2019), Mon and Kayin States (Nyo 2005).

Family Craseonycteridae Hill, 1974 (1 species) Genus *Craseonycteris* Hill, 1974

203. Craseonycteris thonglongyai Hill, 1974

Common name: Kitti's Hog-nosed Bat, Hog-nosed Bat **Myanmar name:** ဝက်နာခေါင်းလင်းနို့

Distribution: Sai Yoke District of Thailand and Southern Myanmar (Kayin and Mon States; Bates et al. 2001; Nyo 2005).

Suborder Yangochiroptera Koopman, 1985 Family Emballonuridae Gervais, 1855 (6 species) Subfamily Emballonurinae Gervais, 1855 Genus *Emballonura* Temminck, 1838

204. Emballonura monticola Temminck, 1838

Common name: Lesser Sheath-tailed Bat Myanmar name: မြီးစွပ်လင်းဆွဲသေး Distribution: Indonesia, Malaysia, Thailand and Southern Myanmar (Proposed Lenya NP).

Subfamily Taphozoninae Jerdon, 1867 Genus *Saccolaimus* Temminck, 1838

205. Saccolaimus saccolaimus (Temminck, 1838)

Common name: Bare-rumped Sheath-tailed Bat, Nakedrumped Pouched Bat Myanmar name: မြီးစွပ်လင်းဆွဲ Distribution: South and East Asia and Southern Myanmar.

Genus Taphozous É. Geoffroy Saint-Hilaire, 1818

206. Taphozous longimanus Hardwicke, 1825

Common name: Long-winged Sheath-tailed Bat, Long-winged Tomb Bat

Myanmar name: သံခ်ိုုင်းလင်းဆွဲလက်မောင်းရှည် **Distribution:** Bangladesh, Cambodia, India, Indonesia, Laos, Malaysia, Sri Lanka, Thailand and Myanmar (widely distributed).

207. Taphozous melanopogon Temminck, 1841

Common name: Black-bearded Tomb Bat **Myanmar name:** လင်းဆွဲမှတ်ဆိတ်နက်

Distribution: Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste, Vietnam and Myanmar (widely distributed).

208. Taphozous nudiventris Cretzschmar, 1830

Common name: Naked-rumped Tomb Bat Myanmar name: သံခြိုင်းမြီးစွပ်လင်းဆွဲ Distribution: North African countries, India, Pakistan and Northwestern Myanmar (Western and Central area).

209. Taphozous theobaldi Dobson, 1872

Common name: Theobald's Tomb Bat **Myanmar name:** သံချိုင်းလင်းဆွဲ

Distribution: Cambodia, China, India, Thailand, Vietnam and Southern Myanmar (Tanintharyi Region, Mon and Kayin States; Nyo 2005).

Family Nycteridae Van der Hoeven, 1855 (1 species) Genus *Nycteris* É. Geoffroy Saint-Hilaire and G. Cuvier, 1795.

210. Nycteris tragata (K. Andersen, 1912)

Common name: Malayan Slit-faced Bat Myanmar name: မျက်နှာအကွဲရာပါလင်းဆွဲ Distribution: Brunei Darussalam, Indonesia, Malaysia, Singapore, Thailand and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019).

Family Molossidae Gervais, 1856 (2 species) Subfamily Molossinae Gervais, 1856 Genus *Chaerephon* Dobson, 1874

211. Mops plicatus (Buchanan, 1800)

Common name: Wrinkle-lipped Free-tailed Bat Myanmar name: နှုတ်ခမ်းတွန့်လင်းဆွဲ

Distribution: Cambodia, China, India, Laos, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam and Myanmar (widely distributed).

Remarks: This species was previously listed in the genus *Chaerephon.*

Genus Tadarida Rafinesque, 1814

212. Tadarida teniotis (Rafinesque, 1814)

Common name: European Free-tailed Bat Myanmar name: အမြီးလွတ်လင်းဆွဲ

Distribution: Palaearctic distribution, with the Southeastern part of the range extending into the Indomalayan region and Northern Myanmar (Benda and Piraccini 2016). **Remarks:** Further investigation is needed to confirm the distribution of this species in Myanmar.

Family Miniopteridae Dobson, 1875 (3 species) Genus *Miniopterus* Bonaparte, 1837

213. Miniopterus fuliginosus (Hodgson, 1835)

Common name: Asian Long-fingered Bat, Eastern Bentwinged Bat

Myanmar name: လင်းဆွဲတောင်ပံကွေး

Distribution: South and East Asia and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019).

214. Miniopterus magnater Sanborn, 1931

Common name: Large Long-fingered Bat, Western Long-fingered Bat

Myanmar name: လင်းဆွဲတောင်ပံကွေးအကြီး

Distribution: Cambodia, China, India, Indonesia, Laos, Malaysia, Papua New Guinea, Thailand and Vietnam. In Myanmar, recorded in Proposed Lenya NP, Hpa-an and Mawlamyine Township (Grindley 2019; Myo et al. 2020; Nyo 2005).

215. Miniopterus pusillus Dobson, 1876

Common name: Small Long-fingered Bat Myanmar name: လင်းဆွဲတောင်ပံကွေးအသေး Distribution: Cambodia, China, India, Indonesia, Laos, Nepal, Philippines, Thailand, Vietnam and Southern Myanmar (Tanintharyi Region, Mon and Kayin States; Nyo 2005).

Family Vespertilionidae Gray, 1821 (48 species) Subfamily Vespertilioninae Gray, 1821 Genus *Arielulus* Hill and Harrison, 1987

216. Arielulus circumdatus (Temminck, 1840)

Common name: Bronze Sprite

Myanmar name: လင်းနို့နက်ရွှေ

Distribution: Cambodia, China, India, Indonesia, Malaysia, Nepal, Thailand, Vietnam and Northeastern Myanmar (possibly distributed in Kachin and Shan States).

Genus Eptesicus Rafinesque, 1820

217. Eptesicus pachyotis (Dobson, 1871)

Common name: Thick-eared Serotine, Thick-eared Bat Myanmar name: လင်းဆွေနားရွက်ထူ

Distribution: Bangladesh, China, India, Thailand and Northeastern Myanmar (Kachin and Shan States; Tun Yin 1993).

Remarks: Further investigation is needed to determine the distribution of *Eptesicus* species in Myanmar since there is no authenticated record (Bates et al. 2005).

Genus Glischropus Dobson, 1875

218. *Glischropus bucephalus* Csorba, 2011

Common name: Indochinese Thick-thumbed Bat Myanmar name: လက်မတုတ်လင်းနို့

Distribution: Cambodia, Laos, Thailand, Vietnam and Myanmar (recorded in Karen Hills and possibly distributed in the Southeastern area).

Remarks: All specimens from Myanmar were of *G. tylopus* (Bates et al. 2005; Tun Yin 1993). However, Csorba (2011) recognized that all specimens collected in the Indochinese

zoogeographic subregion are in fact representatives of new species *G. bucephalus*.

Genus Hesperoptenus Peters, 1868

219. Hesperoptenus blanfordi (Dobson, 1877)

Common name: Blanford's False Serotine, Blanford's Bat Myanmar name: ဘလန်းဖိုဒ်လင်းနို

Distribution: Cambodia, Indonesia, Laos, Malaysia, Thailand, Vietnam and Southern Myanmar (Tanintharyi Region, Mon and Kayin States).

220. Hesperoptenus tickelli (Blyth, 1851)

Common name: Tickell's False Serotine, Tickell's Bat Myanmar name: တစ်ကဲလ်လင်းဆွဲ

Distribution: Bangladesh, Bhutan, Cambodia, India, Laos, Nepal, Sri Lanka, Thailand, Vietnam and Southern Myanmar (distributed in Mawlamyine Township, Mon State; Tun Yin 1993).

Genus Hypsugo Kolenati, 1856

221. Hypsugo affinis (Dobson, 1871)

Common name: Chocolate Pipistrelle Myanmar name: ချောကလက်လင်းနို

Distribution: Cambodia, Laos, Bangladesh, China, India, Nepal, Sri Lanka and Vietnam. In Myanmar, recorded in

Kachin State (Bhamo), Mon State (Saddan Sin Cave and Indian Single Rock Temple Cave; Bates et al. 2005) and possibly in Kayin State and Mandalay Region.

222. Hypsugo cadornae (Thomas, 1916)

Common name: Cadorna's Pipistrelle Myanmar name: ကာဒေါနားလင်းနို

Distribution: India, Laos, Thailand, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape; Bates et al. 2021; Hill 1962).

223. *Hypsugo dolichodon* Görföl, Csorba, Eger, Truong-Son and Francis, 2014

Common name: Long-toothed Pipistrelle Myanmar name: အစွယ်ပါလင်းနို့ Distribution: Laos, Vietnam, and possibly in Cambodia and Southern Myanmar (Görföl et al. 2018). **Remarks:** *H. affinis* from Myanmar could be identified as *H. dolichodon* by Görföl et al. (2018); thus, further taxonomic revision is required for these two species.

224. Hypsugo lophurus (Thomas, 1915)

Common name: Burmese Pipistrelle Myanmar name: မြန်မာလင်းနို့ Distribution: Only occur in Tanintharyi Region (Maliwun, Victoria Point and Proposed Lenya NP) of Myanmar. Remarks: This species is endemic to Myanmar.

225. Hypsugo pulveratus (Peters, 1871)

Common name: Chinese Pipistrelle Myanmar name: တရုတ်လင်းနို့

Distribution: China, Laos, Thailand and Vietnam. In Myanmar, recorded in Mon State (Saddan Sin Cave), Kayin State (Yathay Pyan Cave, Weibyan Cave), Mandalay Region (Pyin Oo Lwin) and Shan State (Badalin cave) (Bates et al. 2005).

Genus Ia Thomas, 1902

226. Ia io Thomas, 1902

Common name: Great Evening Bat

Myanmar name: ညနေခင်းလင်းဆွဲ

Distribution: China, India, Laos, Nepal, Thailand, Vietnam and Northern Myanmar (recorded in Hta Ein Cave, Shan State; Bates et al. 2005 and Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

Genus *Mirostrellus* Görföl, Kruskop, Tu, Estók, Son and Csorba, 2020

227. Mirostrellus joffrei Thomas, 1915

Common name: Joffre's Pipistrelle

Myanmar name: ဂျော့်ဖရယ်လင်းနို့

Distribution: India, Nepal, Vietnam and Northern Myanmar (recorded in Kachin Hills and West of Kindat, Sagaing Region).

Remarks: This species was originally described in *Nyctalus* due to its long and slender wings, but subsequently transferred to *Pipistrellus*, and most recently to *Hypsugo*, on the basis of morphology. Anthony's Pipistrelle *Hypsugo anthonyi* is apparently morphologically like *M. joffrei* but with a paler pelage; however, Bates et al. (2005) suggested that *anthonyi* may prove to be conspecific with *joffrei*. Görföl et al. (2020) change the genus of *joffrei* to *Mirostrellus*.

Genus Nyctalus Bowditch, 1825

228. Nyctalus noctula (Schreber, 1774)

Common name: Common Noctule Myanmar name: နိုတူလင်းဆွဲ

Distribution: Wide Palaearctic distribution, including Europe and Southern Scandinavia to the Urals and Caucasus, Turkey to Israel and Oman, Western Turkmenistan, Western Kazakhstan, Uzbekistan, Kyrgyzstan, and Tajikistan to Southwest Siberia and perhaps the Himalayas. In Myanmar, there is only record in the Northern area and referable to *N. labiatus* or *N. noctula labiatus* (Bates et al. 2000).

Genus Pipistrellus Kaup, 1829

229. Pipistrellus abramus (Temminck, 1840)

Common name: Japanese Pipistrelle

Myanmar name: ဂျပန်လင်းနို့

Distribution: China, Japan, Korea, Laos, Russia, Vietnam and Eastern Myanmar (recorded in Namkam, Shan State; Das and Sinha 1995).

230. Pipistrellus ceylonicus (Kelaart, 1852)

Common name: Kelaart's Pipistrelle

Myanmar name: ကဲလက်လင်းနို့

Distribution: Bangladesh, China, India, Indonesia, Laos, Malaysia, Pakistan, Sri Lanka, Vietnam and Myanmar (recorded in Pyaunggaung, Shan State, Bago and Ayeyarwady Regions; Nyo 2005).

231. Pipistrellus coromandra (J. E. Gray, 1838)

Common name: Indian Pipistrelle **Myanmar name:** အိန္ဒိယလင်းနို

Distribution: Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Laos, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Mandalay Region (Htonbo Compound), Mon and Kachin States (Myitkyina), Yangon, Bago and Tanintharyi Regions (Bates et al. 2005; Grindley 2019; Nyo 2005).

232. Pipistrellus javanicus (J. E. Gray, 1838)

Common name: Javan Pipistrelle

Myanmar name: ဂျာဗားလင်းနို

Distribution: Afghanistan, Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Philippines, Singapore, Thailand and Vietnam. In Myanmar, recorded in Bago Township, Yangon Region (Thone Kwa), Mon State (Kyaik-Kha-Mi), Kachin State (Dalu), Rakhine State (Bout-thi-su Quarter, Sittway), Tanintharyi Region (Myeik) (Bates et al. 2005; Pearch et al. 2003).

233. Pipistrellus paterculus Thomas, 1915

Common name: Mount Popa Pipistrelle

Myanmar name: ပုပ္ပါးတောင်လင်းနို့

Distribution: China, India, Laos, Thailand and Vietnam. In Myanmar, recorded in Mandalay Region (Hintha Cave, Mount Popa, and Pyin Oo Lwin), Kayin State (Yathay Pyan Cave), Kachin State (Nam Tisang Valley, Sumka Uma, Sumprabum, Ningma and Indawagyi Lake), Sagaing Region (Tatkon, Homalin, Hkamti, Htamanthi, and Kyaukmyaung), Shan State (Pyaunggaung), Bago Region and Mon State (Bates et al. 2005; Nyo 2005).

234. Pipistrellus tenuis (Temminck, 1840)

Common name: Least Pipistrelle

Myanmar name: လင်းနိုပ္

Distribution: Afghanistan, Bangladesh, Cambodia, China, Christmas Island, Cocos Islands, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Timor-Leste and Vietnam. In Myanmar, recorded in Rakhine State (Tai-Gyo Village, Ngapali Beach, Chan-pyin village, Bout-thi-su Quarter, Kya-ma-thaut), Sagaing Region (Homalin, Kabaw Valley, Nanyaseik, Phawzaw, and Maungkan), Kachin and Shan States (Bates et al. 2005; Pearch et al. 2003).

Genus Scotomanes Dobson, 1875

235. Scotomanes ornatus (Blyth, 1851)

Common name: Harlequin Bat Myanmar name: လင်းဆွဲပြောက်ပြောက် Distribution: Bangladesh, China, India, Laos, Nepal, Thailand, Vietnam and Northern Myanmar (Hill 1962).

Genus Scotophilus Leach, 1821

236. Scotophilus heathii (Horsfield, 1831)

Common name: Greater Asiatic Yellow Bat Myanmar name: လင်းဆွဲဝါကြီး

Distribution: Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Laos, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Hkakaborazi Landscape of Kachin State (Bates et al. 2021), Shan State, Yangon, Bago and Ayeyarwady Regions (Nyo 2005).

237. Scotophilus kuhlii Leach, 1821

Common name: Lesser Asiatic Yellow Bat Myanmar name: လင်းဆွဲဝါသေး

Distribution: Bangladesh, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Timor-Leste, Thailand and Vietnam. In Myanmar, recorded in Hkakaborazi Landscape of Kachin State (Bates et al. 2021), Rakhine State (Pearch et al. 2003), Mandalay, Yangon, Bago and Ayeyarwady Regions (Nyo 2005).

Genus Tylonycteris Peters, 1872

238. Tylonycteris fulvida (Blyth, 1859)

Common name: Indomalayan Lesser Bamboo Bat, Amber Bamboo Bat

Myanmar name: ဝါးလင်းနို့သေး

Distribution: South and East Asia and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

Remarks: This species was previously treated as subspecies of *T. pachypus*, but now re-elevated to species rank (Tu et al. 2017). Since a review of the "Vespertilionidae" known from Myanmar only listed *T. pachypus* (Bates et al. 2005) and formal confirmation of species rank is pending, further studies are needed to clarify.

239. Tylonycteris malayana Chasen, 1940

Common name: Malayan Greater Bamboo Bat Myanmar name: မလေးရှားဝါးလင်းနိုကြီး

Distribution: Northeastern India through parts of Southern China to much of mainland and Southeast Asia including Southern Myanmar.

Remarks: This species was previously included as a subspecies of *T. robustula*, but it is now re-elevated to full species rank (Tu et al. 2017). As the formal confirmation of species rank is pending, further studies are needed to clarify.

Subfamily Kerivoulinae Miller, 1907 Genus *Kerivoula* Gray, 1842

240. Kerivoula depressa Miller, 1906

Common name: Flat-skulled Woolly Bat, Flat-headed Woolly Bat

Myanmar name: ခေါင်းပြားလင်းနို့

Distribution: Cambodia, Laos, Thailand, Vietnam and Southeastern Myanmar.

241. *Kerivoula furva* Kuo, Soisook, Ho, Csorba, Wang and Rossiter, 2017

Common name: Dark Woolly Bat Myanmar name: ခေါင်းပြားအမွေးမဲလင်းနို့ Distribution: China, India, Laos, Nepal, Pakistan, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

242. Kerivoula hardwickii (Horsfield, 1824)

Common name: Hardwicke's Woolly Bat Myanmar name: တောလင်းနို့

Distribution: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

243. *Kerivoula kachinensis* Bates, Struebig, Rossiter, Kingston, Oo and Mya, 2004b

Common name: Kachin Woolly Bat

Myanmar name: ကချင်တောလင်းနို

Distribution: Cambodia, China, Laos, Thailand, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

244. Kerivoula picta (Pallas, 1767)

Common name: Painted Woolly Bat Myanmar name: ရောင်စုံလင်းနို့

Distribution: Bangladesh, ^CCambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Sri Lanka, Thailand, Vietnam and Myanmar (widely distributed).

245. *Kerivoula titania* Bates, Struebig, Hayes, Furey, Mya, Thong, Tien, Son, Harrison, Francis and Csorba, 2007

Common name: Titania's Woolly Bat

Myanmar name: တီတာနီယားလင်းနို Distribution: Cambodia, China, Laos, Thailand, Vietnam

and Northern Myanmar (recorded in Hkakaborazi Landscape; Bates et al. 2021).

Genus Phoniscus Miller, 1905

246. Phoniscus jagorii (Peters, 1866)

Common name: Peters' Trumpet-eared Bat Myanmar name: ခရာနားပုံစံရှိလင်းဆွဲ

Distribution: Indonesia, Laos, Malaysia, Philippines, Thailand, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape; Bates et al. 2021). **Remarks:** There is no previous authenticated record of this species, Bates et al. (2021) firstly recorded this species in Northern Myanmar.

Subfamily Murininae Miller, 1907 Genus *Harpiocephalus* Gray, 1842

247. Harpiocephalus harpia Temminck, 1840

Common name: Hairy-winged Bat, Lesser Hairy-winged Bat Myanmar name: တောင်ပံအမွေးပါလင်းနို့

Distribution: China, India, Indonesia, Laos, Philippines, Thailand, Vietnam and Myanmar (recorded in Mogok Township, Mandalay Region and possibly distributed in Northern and Central area; Tun Yin 1993).

Remarks: The taxonomic status of this species is controversial and sometimes confused with *H. mordax*.

Genus Murina Gray, 1842

248. Murina cyclotis Dobson, 1872

Common name: Round-eared Tube-nosed Bat Myanmar name: ရွက်ဝိုင်းပြွန်နှာခေါင်းလင်းနို့

Distribution: Cambodia, China, India, Laos, Nepal, Philippines, Sri Lanka, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

249. *Murina eleryi* Furey, Thong, Bates and Csorba, 2009

Common name: Elery's Tube-nosed Bat Myanmar name: ပြွန်နှာခေါင်းလင်းနို့သေး

Distribution: Cambodia, China, Laos, Thailand, Vietnam and Northern Myanmar (recorded in Hkakaborazi Landscape, Kachin State; Bates et al. 2021).

Remarks: Previously listed as *M. aurta*; however, subsequent studies suggested that specimens previously regarded as *M. aurata* elsewhere in Southeast Asia should be referred to *M. eleryi*, whilst *M. aurata* may be restricted to the mountains around its type locality in Tibet (Eger and Lim 2011; Francis et al. 2010; Francis and Eger 2012).

250. Murina feae (Thomas, 1891)

Common name: Fea's Tube-nosed Bat, Ashy Tube-nosed Bat Myanmar name: ဖီယာပြွန်နှာခေါင်းလင်းနို့

Distribution: Cambodia, China, Laos, Thailand, Vietnam and Myanmar (recorded in Biapo in the Karen Hills, 70 km Northeast of Taungoo Township and Hkakaborazi Landscape, Kachin State; Bates et al. 2021). Remarks: Although Struebig et al. (2005) reported the occurrence of *M. tubinaris* in Kachin State (Namdee Hill), specimens previously reported as M. tubinaris from Southeast Asia were recently recognized as a distinct species, M. cineracea. Francis and Eger (2012), however, suggested that *M. feae* is the appropriate name for this species, based on examination of the holotype from Myanmar.

Murina harrisoni Csorba and Bates, 2005 251.

Common name: Harrison's Tube-nosed Bat

Myanmar name: ဟာရီဆန်ပြွန်နှာခေါင်းလင်းနို့ Distribution: Cambodia, China, Laos, Thailand, Vietnam and Myanmar (recorded in Biapo in the Karen Hills, 70 km Northeast of Taungoo Township).

Remarks: The specimen from Myanmar was formerly reported as M. leucogaster but it should be referred to M. harrisoni and thus M. leucogaster should also be removed from the list of species from Myanmar (Francis and Eger 2012).

252. Murina hkakaboraziensis Soisook, Thaw, Kyaw, Oo, Pimsai, Suarez-Rubio and Renner, 2017

Common name: Hkakabo Razi Tube-nosed Bat

Myanmar name: ခါကာဘိုရာဇီပြွန်နှာခေါင်းလင်းနို့

Distribution: Only occur in Hkakaborazi Landscape, Kachin State of northern Myanmar until recently (Bates et al. 2021; Soisook et al. 2017).

Remarks: This species is endemic to Myanmar that discovered in 2017 (Soisook et al. 2017).

253. Murina huttoni (Peters, 1872)

Common name: Hutton's Tube-nosed Bat Myanmar name: ပြွန်နှာခေါင်းလင်းနို့

Distribution: Bhutan, China, India, Malaysia, Nepal, Laos, Pakistan, Thailand, Vietnam and Western Myanmar (recorded in Chin Hills: Tun Yin 1993).

254. Murina jaintiana Ruedi et al. 2012

Common name: Jaintia Tube-nosed Bat Myanmar name: ဂျရန်တီးရားပြွန်နှာခေါင်းလင်းနို့

Distribution: Only occur in Northeastern India (Meghalaya) and in adjacent areas of Northwestern Myanmar (Chin Hills) (Ruedi et al. 2012).

Remarks: The former records of M. tubinaris from Northeast India and Myanmar may refer to M. jaintiana or M. feae (Francis and Eger 2012) but the range limits of these two species need to be reassessed.

Murina pluvialis Ruedi et al. 2012 255.

Common name: Rainforest Tube-nosed Bat Myanmar name: မိုးသစ်တောပြွန်နှာခေါင်းလင်းနို့ Distribution: Only occur in East Khasi Hills of Meghalaya in Northeastern India and recently discovered in Hkakaborazi Landscape, Kachin State of Myanmar (Bates et al. 2021).

Subfamily Myotinae Tate, 1942 Genus Eudiscopus Conisbee, 1953

Eudiscopus denticulus (Osgood, 1932) 256.

Common name: Disk-footed Bat Myanmar name: လင်းဆွေခြေဝိုင်း Distribution: Laos, Vietnam, Thailand and Central Myanmar (recorded in Bago Yoma; Koopman 1970).

Genus Myotis Kaup, 1829

257. Myotis chinensis (Tomes, 1857)

Common name: Large Myotis

Myanmar name: တရုတ်လင်းဆွဲကြီး

Distribution: China, Thailand and Vietnam. In Myanmar, recorded in Shan State (Thuve Oo Min Cave), Kavin State (YathayPyan Cave), Mon State (Hnidon Hill Cave, Saddan-Sin Cave) (Bates et al. 2001, 2005).

258. Myotis hasseltii (Temminck, 1840)

Common name: Lesser Large-footed Myotis Myanmar name: ဟက်ဆဲလ်လင်းနိ

Distribution: Cambodia, China, India, Indonesia, Malaysia, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Bago, Yangon, Rakhine State (Ponnagyun Township) and Tanintharyi Region (Myeik and Proposed Lenya NP) (Bates et al. 2005; Grindley 2019; Nyo 2005; Pearch et al. 2003).

259. Myotis horsfieldii (Temminck, 1840)

Common name: Horsfield's Myotis Myanmar name: ဟော့စ်ဖီးလင်းနို

Distribution: Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Vietnam and Southern Myanmar (recorded in Bayint Nyi Cave, Kayin State, Indian Single Rock Temple Cave and Kyauk-Ta-Lone, Mon State and Proposed Lenya NP, Tanintharyi Region; Bates et al. 2001; Bates et al. 2005; Grindley 2019).

260. Myotis montivagus (Dobson, 1874)

Common name: Burmese Whiskered Myotis Myanmar name: မြန်မာနှုတ်ခမ်းမွေးလင်းဆွဲ Distribution: China, Laos, India, Thailand, Vietnam and Northern Myanmar (recorded in Adung Valley, Kachin State).

261. Myotis muricola (J.E. Gray, 1846)

Common name: Nepalese Whiskered Bat Myanmar name: နီပေါနုတ်ခမ်းမွေးလင်းဆွဲ

Distribution: Bhutan, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Philippines, Singapore, Thailand, Vietnam and Southern Myanmar (recorded in Leik Kyi Village, Ross Island and Proposed Lenya NP; Bates et al. 2005; Grindley 2019).

Remarks: It was listed as subspecies of *M. mystacinus* in "Wild Mammals of Myanmar" (Tun Yin 1993).

262. Myotis mystacinus (Kuhl, 1817)

Common name: Common Whiskered Myotis

Myanmar name: နူတ်ခမ်းမွေးလင်းဆွဲ

Distribution: Europe and North Asia and Eastern Myanmar (recorded in Hta Ein Cave, Shan State; Bates et al. 2005). **Remarks:** Bates et al. (2005) listed the first record of *M. mystacinus* which is the first authenticated record from Myanmar and Southeast Asia.

263. Myotis siligorensis (Horsfield, 1855)

Common name: Himalayan Whiskered Myotis Myanmar name: သွားသေးနူတ်ခမ်းမွေးလင်းဆွဲ

Distribution: Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand and Vietnam. In Myanmar, recorded in Shan State (Montawa Cave, Naga Cave and Tonetar Cave), Mon State (Yathay Pyan Cave), Kachin State (Hkakaborazi Landscape) (Bates et al. 2005, 2021).

Order Pholidota Weber, 1904

Family Manidae Gray, 1821 (2 species: all pangolins are listed as critically endangered by the IUCN and completely protected in Myanmar.) Genus *Manis* Linnaeus, 1758

264. Manis javanica Desmarest, 1822

Common name: Sunda Pangolin Myanmar name: မလေးသင်းခွေချပ်

Distribution: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Singapore, Thailand and Vietnam. In Myanmar, recorded in Sagaing Region (Htamanthi WS), Rakhine State (Rakhine Yoma Elephant Range WS), and Tanintharyi Region (Lampi Marine NP, Proposed Lenya and Tanintharyi NP).

265. Manis pentadactyla Linnaeus, 1758

Common name: Short-tailed Pangolin, Chinese Pangolin **Myanmar name:** တရုတ်သင်းခွေချပ်

Distribution: Bangladesh, Bhutan, China, India, Laos, Nepal, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Hponkanrazi and Indawgyi Wetland WS, Hukaung Valley WS and Proposed Imawbum NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Htamanthi WS, Alaungdawkathapa NP) and Kayin State.

Order Carnivora Bowdich, 1821 Suborder Feliformia Kretzoi, 1945 Family Felidae Fischer de Waldheim, 1817 (8 species) Subfamily Felinae Genus *Catopuma* Severtzov, 1858

266. Catopuma temminckii (Vigors and Horsfield, 1827)

Common name: Asian Golden Cat

Myanmar name: ကျားမင်း/ကျားနီ/ကြောင်မင်း/ရွှေကြောင်

Distribution: Widely distributed in Southeast Asia, China, India, Bangladesh, Bhutan and Nepal. In Myanmar, recorded in most of the PAs and RF in Kachin, Chin, Rakhine and Kayin States, Bago Yoma (Mountain Ranges), Ayeyarwady, Sagaing and Tanintharyi Regions.

Remarks: This species is listed as completely protected species of Myanmar.

Genus Felis Linnaeus, 1758

267. Felis chaus Schreber, 1777

Common name: Jungle Cat

Myanmar name: တောကြောင်/ကြောင်ပါး

Distribution: South and Southeast Asia, West and Central Asia to Egypt. In Myanmar, recorded in the central area (Shwesettaw WS), and skin samples were recorded in Hpu Lum village, Khaunglanhpu, Kachin State, Mandalay Township, Nawng-Ya market in Loikaw, Alaungdaw Kathapa NP (Zaw et al. 2014).

Remarks: This species is listed as completely protected species of Myanmar.

Genus Pardofelis Severtzov, 1858

268. Pardofelis marmorata (Martin, 1837)

Common name: Marbled Cat Myanmar name: ကြောင်သလင်း/သစ်တက်ကြောင် **Distribution:** Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand and Vietnam. In Myanmar, recorded in Bago Yoma, Kachin State (Hkakaborazi NP, Hponkanrazi, Bumphabum and Hukaung Valley WS, Saramati Mountain and Proposed Imawbum NP), Chin State (Natmataung NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Htamanthi WS, Alaungdawkathapa NP), Kayin State, Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve and Proposed Lenya NP) (Grindley 2019; Moo et al. 2017; Zaw et al. 2014).

Remarks: This species is a completely protected species of Myanmar.

Genus Prionailurus Severtzov, 1858

269. Prionailurus bengalensis (Kerr, 1792)

Common name: Leopard Cat

Myanmar name: သစ်ကြောင်/သစ်ကြုပ်/ကြောင်ကွက် **Distribution:** South and East Asia including Myanmar (recorded in most of the PAs and RF throughout the country). **Remarks:** This species is listed as a normally protected species of Myanmar.

270. Prionailurus viverrinus (Bennett, 1833)

Common name: Fishing Cat

Myanmar name: ကြောင်တံငါ

Distribution: Bangladesh, Bhutan, Cambodia, Indonesia, India, Laos, Nepal, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Ayeyarwady Region (Meinmahla Kyun WS; Lin and Platt 2019) and possibly distributed in Indawgyi Wetland WS.

Remarks: This species is a vulnerable and completely protected species of Myanmar.

Subfamily Pantherinae Pocock, 1917 Genus *Neofelis* Gray, 1867

271. Neofelis nebulosa (Griffith, 1821)

Common name: Indochinese Clouded Leopard Myanmar name: အင်းကျား/သစ်တက်ကျား

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal and Thailand. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Hponkanrazi, Bumphabum and Hukaung Valley WS, Saramati Mountain and Proposed Imawbum NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Alaungdawkathapa NP, Htamanthi and Proposed Mahamyaing WS), Kayin State (Kweenkoh, Mae Nyaw Kee, Thoepli, Yoe Mu Kyo), Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve and Proposed Lenya NP), Ayeyarwady Region (Lemyathna and Ingabu Townships) (Moo et al. 2017; Nijman 2015; Zaw et al. 2014).

Remarks: This species is a vulnerable and completely protected species of Myanmar.

Genus Panthera Oken, 1816

272. Panthera pardus Linnaeus, 1758

Common name: Leopard

Myanmar name: ကျားသစ်

Distribution: Cambodia, China, Malaysia, Thailand and possibly in Laos, Vietnam and Singapore. In Myanmar, recorded in Kachin and Shan States (Hukaung Valley WS, Panlaung and Padalin Cave WS, Saramati Mountain, Momeik and Mabein Townships), Sagaing Region (Alaungdawkathapa NP, Htamanthi WS), Paunglaung catchment, Bago (Swa Chaung catchment) and Rakhine Yoma (Paletwa), Kayin State and Tanintharyi Region (Htaung Pru RF and Proposed Lenya NP) (Grindley 2019; Moo et al. 2017; Zaw et al. 2014).

Remarks: *P. p. delacouri* is a subspecies that occurred in Southeast Asia and Southern China (Miththapala et al. 1996); and listed as critically endangered by the IUCN and completely protected species of Myanmar.

273. Panthera tigris (Linnaeus, 1758)

Common name: Tiger

Myanmar name: ကူား

Distribution: Bangladesh, Bhutan, China, India, Indonesia, Laos, Malaysia, Nepal, Russia and Thailand. In Myanmar, recorded in Kachin State (Hukaung Valley WS), Sagaing Region (Htamanthi WS), Kayin and Tanintharyi Region (Myinmoletkat Mountain Area, Htaung Pru RF and Proposed Lenya NP) (Grindley 2019; Moo et al. 2017; Zaw et al. 2014). **Remarks:** This is an endangered and completely protected species of Myanmar.

Family Prionodontidae Horsfield, 1824 (2 species: all linsangs in Myanmar are listed as normally protected species)

Genus Prionodon Horsfield, 1822

274. Prionodon linsang (Hardwicke, 1821)

Common name: Banded Linsang **Myanmar name:** လင်စိုင်ကျား

Distribution: Brunei Darussalam, Indonesia, Malaysia, Thailand and Southern Myanmar (recorded in Kayin State; Moo et al. 2017 and Proposed Lenya NP; Grindley 2019).

275. *Prionodon pardicolor* Hodgson, 1842

Common name: Spotted Linsang

Myanmar name: လင်စိုင်ပြောက်

Distribution: Bhutan, Cambodia, China, India, Laos, Nepal, Thailand, Vietnam and Myanmar (recorded in PAs and RF of Kachin, Kayin, Rakhine, Chin and Shan States, Sagaing and Tanintharyi Regions).

Family Viverridae Gray, 1821 (8 species) Subfamily Hemigalinae Gray, 1864 Genus *Hemigalus* Jourdan, 1837

276. Hemigalus derbyanus (Gray, 1837)

Common name: Banded Palm Civet, Banded Civet Myanmar name: ကြောင်ဝံစင်းကျား

Distribution: Brunei Darussalam, Indonesia, Malaysia, Thailand and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019 and Htaung Pru RF).

Remarks: This species is listed as a completely protected species of Myanmar.

Subfamily Paradoxurinae Gray, 1865 Genus *Arctictis* Temminck, 1824

277. Arctictis binturong (Raffles, 1822)

Common name: Binturong

Myanmar name: ဝံကြောင်

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Philippines, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Bumphabum, Hponkanrazi, Indawgyi Wetland and Hukaung Valley WS and Proposed Imawbum NP), Chin State (Natmataung NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Htamanthi WS and Alaungdawkathapa NP), Kayin State, Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve and Proposed Lenya NP).

Remarks: This species is a vulnerable and completely protected species of Myanmar.

Genus Arctogalidia Merriam, 1897

278. Arctogalidia trivirgata (Gray, 1832)

Common name: Small-toothed Palm Civet Myanmar name: ကြောင်ဝံနားရွက်ဖြူ

Distribution: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Singapore, Thailand and Vietnam. In Myanmar, recorded in Kachin and Chin States (Natmataung NP), Tanintharyi Region (Lampi Marine NP; Bisi et al. 2019 and Htaung Pru RF) and possibly distributed in Rakhine State and Bago Region.

Remarks: This species is a completely protected species of Myanmar.

Genus Paguma Gray, 1831

279. Paguma larvata (C.E.H. Smith, 1827)

Common name: Masked Palm Civet Myanmar name: ကြောင်ဝံနဂါး/ကြောင်နဂါး

Distribution: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Nepal, Pakistan, Singapore, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Naungmung, Bumphabum, Hponkanrazi, Indawgyi Wetland and Hukaung Valley WS and Proposed Imawbum NP), Chin State (Natmataung NP), Sagaing Region (Htamanthi WS) and Kayin State. **Remarks:** This species is listed as a completely protected species of Myanmar.

Genus Paradoxurus F. Cuvier, 1821

280. Paradoxurus musangus (Raffles, 1821)

Common name: Sumatran Palm Civet

Myanmar name: ကြောင်ဝံပိုက်

Distribution: Cambodia, Thailand, the Sundaic region (Peninsular Malaysia, Singapore, Sumatra, Java, Nias, Bangka, Bali, Flores and Roti islands), Vietnam and Myanmar (distributed in most of the PAs and RF) (Veron et al. 2015).

Remarks: This species is listed as a normally protected species of Myanmar.

Subfamily Viverrinae Gray, 1821 Genus *Viverricula* Hodgson, 1838

281. Viverricula indica (Geoffroy Saint-Hilaire, 1803)

Common name: Small Indian Civet Myanmar name: ကြောင်ကတိုး/ကြောင်နံ့သာ

Distribution: South and East Asia including Myanmar (recorded in most of the PAs and RF).

Remarks: This species is a normally protected species of Myanmar.

Genus *Viverra* Linnaeus, 1758

282. Viverra megaspila Blyth, 1862

Common name: Large-spotted Civet Myanmar name: ကြောင်မြင်းကြွက် **Distribution:** Cambodia, Laos, Malaysia, Thailand, China and Vietnam. In Myanmar, recorded in Kachin State (Hukaung Valley WS; Zaw et al. 2008) and possibly in Shan and Kayin State although the camera-trap pictures were not identifiable to species level (Moo et al. 2017).

Remarks: This species is an endangered and completely protected species of Myanmar. It was formerly distributed in central Myanmar (Sagaing and Magway Regions) to Tanintharyi Region; however, there is no recent record of this species in their historical distribution range.

283. Viverra zibetha Linnaeus, 1758

Common name: Large Indian Civet Myanmar name: ကြောင်မြင်း

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Singapore, Thailand, Vietnam and Myanmar (recorded in most of the PAs and RF except in the central area).

Remarks: This species is a completely protected species of Myanmar.

Family Herpestidae Bonaparte, 1845 (3 species) Subfamily Herpestinae Bonaparte, 1845

Genus *Urva* Hodgson, 1837 (Formerly known as *Herpestes* but now placed in the genus *Urva*; Veron et al. 2007; Patou et al. 2009)

284. Urva auropunctata (Hodgson, 1836)

Common name: Small Indian Mongoose Myanmar name: အိန္ဒိယမြွေပါ

Distribution: Afghanistan, Bangladesh, Bhutan, India, Iran, Jordan, Nepal, Oman, Pakistan and Saudi Arabia. In Myanmar, no recent record of this species could be due to the misidentification of this species with *U. javanica* because of their similar morphology; however, it is possibly distributed in Chin State and central to the southern area.

Remarks: Due to taxonomic uncertainty, a revision based on molecular analysis is needed for this species in Myanmar.

285. Urva javanica (Geoffroy Saint-Hilaire, 1818)

Common name: Javan Mongoose

Myanmar name: မြေပါ

Distribution: Cambodia, Indonesia, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Indawgyi Wetland WS and possibly distributed in most of the PAs and RF throughout the country.

Remarks: This species is listed as a normally protected species of Myanmar; however, due to taxonomic uncertainty, a revision based molecular analysis is needed in Myanmar.

286. Urva urva (Hodgson, 1836)

Common name: Crab-eating Mongoose

Myanmar name: ကဏန်းစားမြွေပါ

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (recorded in most of the PAs and RF).

Remarks: This species is listed as a normally protected species of Myanmar.

Suborder Caniformia Kretzoi, 1938 Family Canidae Fischer, 1817 (4 species) Genus *Canis* Linnaeus, 1758

287. Canis aureus Linnaeus, 1758

Common name: Golden Jackal

Myanmar name: ခွေးအ/ခဲဝါ

Distribution: Asia, East Africa and Southeast Europe. In Myanmar, widely distributed in most of the PAs and RF throughout the country except in the northern and southernmost areas.

Remarks: This species is a normally protected species of Myanmar.

288. Canis lupus Linnaeus, 1758

Common name: Gray Wolf

Myanmar name: ဝံပုလွေ

Distribution: North America, Canada and Eurasia. In Myanmar, the existence of this species was based principally on isolated sightings in the neighborhoods of Hpare village, Chipwi Township (Tun Yin 1993) and Pangnamdim (Rabinowitz and Khaing 1998) in Kachin State.

Remarks: This species is listed as normally protected species of Myanmar; however, it could be regionally extinct in Myanmar since no recent record in their known distribution range.

Genus Cuon Hodgson, 1838

289. Cuon alpinus (Pallas, 1811)

Common name: Dhole

Myanmar name: တောခွေး

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal and Thailand. In Myanmar, recorded in most of the PAs and RF in Kachin, Shan, Chin, Kayin and Rakhine States and Sagaing, Bago, Ayeyarwady and Tanintharyi Regions.

Remarks: This species is an endangered and completely protected species of Myanmar.
Genus Vulpes Frisch, 1775

290. Vulpes vulpes (Linnaeus, 1758)

Common name: Red Fox

Myanmar name: မြေခွေးနီ

Distribution: Widely distributed in Asia, Europe, North Africa and North America. In Myanmar, the existence of this species was only based on a few records of a young fox in Bhamo in 1925 and fox tracks in Chimili Pass, Kachin State (Tun Yin 1993).

Remarks: This species is listed as a completely protected species of Myanmar; however, it could be regionally extinct in Myanmar since no recent record in their known distribution range.

Family Ursidae Fischer de Waldheim, 1817 (2 species: both are categorized as vulnerable and completely protected species in Myanmar) Subfamily Ursinae Fischer, 1817 Genus *Helarctos* Horsfield, 1825

291. Helarctos malayanus (Raffles, 1822)

Common name: Sun Bear

Myanmar name: റന്റ്/ഗ്രോറന്റ്

Distribution: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Thailand, Vietnam and possibly in China. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Hponkanrazi and Hukaung Valley WS and Proposed Imawbum NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Htamanthi WS and Alaungdawkathapa NP), Kayin State and Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve and Proposed Lenya NP).

Genus Ursus Linnaeus, 1758

292. Ursus thibetanus Cuvier, 1823

Common name: Asiatic Black Bear

Myanmar name: ဝက်ဝံကြီး/မြင်းဝံ

Distribution: Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Iran, Japan, Korea, Laos, Nepal, Pakistan, Russia, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Hponkanrazi and Hukaung Valley WS and Proposed Imawbum NP), Chin State (Natmataung NP), Rakhine State (Rakhine Yoma Elephant Range WS), Sagaing Region (Htamanthi WS and Alaungdawkathapa NP), Kayin State (Kweenkoh, Mae Nyaw Kee, Thoepli, Yoe Mu Kyo), Tanintharyi Region (Htaung Pru RF, Tanintharyi Nature Reserve and Proposed Lenya NP).

Family Ailuridae Gray, 1843 (1 species) Genus *Ailurus* Cuvier, 1825

293. Ailurus fulgens Cuvier, 1825

Common name: Chinese Red Panda, Eastern Red Panda Myanmar name: ကြောင်နီ/ပန်ဒါနီ/ကြောင်ဝံ Distribution: China, India and Northern Myanmar (Hka-

kaborazi NP, Hponkanrazi WS and Proposed Imawbum NP; Lwin et al. 2021; Nijman 2015).

Remarks: Two subspecies are recognized and the red panda that recorded in the Northern Myanmar has similar morphological characters to *A. f. styani*, i.e., distinct tail rings, pale red colored face, living within an elevation range of 2700–2900 m (Lwin et al. 2021); however, further genetic information is still needed to confirm its identity. This species is listed as endangered by the IUCN and a completely protected species of Myanmar.

Family Mustelidae Fischer, 1817 (13 species) Subfamily Helictidinae Gray, 1865 Genus *Melogale* Geoffroy Saint-Hilaire, 1831

294. Melogale moschata (Gray, 1831)

Common name: Small-toothed Ferret Badger Myanmar name: ကြောင်အူငယ်

Distribution: China, India, Laos and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi NP, Hponkanrazi WS), Chin State (Natmataung NP), and distributed in most of the PAs and RF throughout the country.

Remarks: This species is a normally protected species of Myanmar.

295. Melogale personata Geoffroy Saint-Hilaire, 1831

Common name: Large-toothed Ferret Badger **Myanmar name:** ကြောင်အူကြီး

Distribution: Bangladesh, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam and Myanmar (recorded in most of the PAs and RF).

Remarks: This species is a normally protected species of Myanmar.

Subfamily Lutrinae Bonaparte, 1838 Genus *Aonyx* Lesson, 1827

296. Aonyx cinereus (Illiger, 1815)

Common name: Asian Small-clawed Otter Myanmar name: ဖုံခြေသည်းငယ်

Distribution: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal,

Philippines, Singapore, Thailand, Vietnam and Northern Myanmar (recorded in Indawgyi Wetland WS).

Remarks: This species is a vulnerable and completely protected species of Myanmar.

Genus Lutra Brisson, 1762

297. Lutra lutra (Linnaeus, 1758)

Common name: Eurasian Otter

Myanmar name: ချောင်းဖျားဖျံ

Distribution: Asia, Africa, Europe and Northern Myanmar (recently recorded a skin sample in Kachin State; Lwin et al. 2021).

Remarks: This species is listed as a completely protected species of Myanmar.

298. Lutra sumatrana (Gray, 1865)

Common name: Hairy-nosed Otter

Myanmar name: ဆူမားတြားဖုံ

Distribution: Cambodia, Indonesia, Malaysia, Thailand, Vietnam and possibly in Brunei Darussalam and Laos. In Myanmar, recorded in Kachin State (skin sample record in Gam Majaw in 1939) and Shan State (skin for illegal trade in MongLa in 2014) (Duckworth and Hills 2008; Shepherd and Nijman 2014).

Remarks: This species is an endangered and completely protected species of Myanmar.

Genus Lutrogale Gray, 1865

299. Lutrogale perspicillata (Geoffroy Saint-Hilaire, 1826)

Common name: Smooth-coated Otter

Myanmar name: ဖျံအမွေးနု/ဖျံအမွေးချော

Distribution: Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, China, Cambodia, India, Indonesia, Iraq, Laos, Malaysia, Nepal, Pakistan, Singapore, Thailand, Vietnam and Southern Myanmar (recorded in Proposed Lenya NP; Grindley 2019 and Lampi Marine NP; Bisi et al. 2019). **Remarks:** This species is a vulnerable and completely pro-

tected species of Myanmar.

Subfamily Martinae Wagner, 1841 Genus *Martes* Pinel, 1792

300. Martes flavigula (Boddaert, 1785)

Common name: Yellow-throated Marten Myanmar name: ഹാറ്റെറെറ് **Distribution:** Widely distributed in Asia including Myanmar (recorded in most of the PAs and RF).

Remarks: This species is a normally protected species of Myanmar.

301. Martes foina (Erxleben, 1777)

Common name: Stone Marten

Myanmar name: ဆတ်ခလောက်ငယ်

Distribution: Widely distributed in much of Europe and Asia including Myanmar (recorded a skin by Rabinowitz and Khaing (1998) in the village of Karaung, Hkakaborazi NP, Kachin State).

Remarks: This species is a normally protected species of Myanmar. No recent record of this species probably indicates a small distribution range in Myanmar (Zaw et al. 2008).

Subfamily Melinae Bonaparte, 1838 Genus *Arctonyx* Cuvier, 1825

302. Arctonyx albogularis (Blyth, 1853)

Common name: Northern Hog Badger

Myanmar name: ခွေးတူဝက်တူ

Distribution: China, India, Bangladesh, Northern Myanmar and possibly in Bhutan (Helgen et al. 2008).

Remarks: The distribution of this species in Myanmar needs to confirm.

303. Arctonyx collaris Cuvier, 1825

Common name: Greater Hog Badger Myanmar name: ခွေးတူဝက်တူကြီး

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Thailand, Vietnam and Myanmar (recorded in most of the PAs and RF).

Remarks: This species is a vulnerable and completely protected species of Myanmar.

Subfamily Mustelinae Fischer, 1817 Genus *Mustela* Linnaeus, 1758

304. Mustela kathiah Hodgson, 1835

Common name: Yellow-bellied Weasel Myanmar name: ဝမ်းဗိုက်ဝါဝီဇယ်

Distribution: Bhutan, Cambodia, China, India, Laos, Nepal, Pakistan, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Hkakaborazi NP and Hponkanrazi WS), Chin State (Natmataung NP), and Sagaing Region (Htamanthi WS). **Remarks:** This species is a normally protected species of Myanmar.

305. Mustela sibirica Pallas, 1773

Common name: Siberian Weasel

Myanmar name: ဆိုက်ဗေးရီးယားဝီဇယ်

Distribution: Bhutan, China, India, Japan, North and South Korea, Mongolia, Nepal, Pakistan and Russia. In Myanmar, recorded a skin sample in Kachin Hills and a skin sample with a skull at Mong La market, Shan State in 2006 (Shepherd and Nijman 2007).

Remarks: This species is a normally protected species of Myanmar.

306. Mustela strigidorsa Gray, 1853

Common name: Back-striped Weasel

Myanmar name: ကျောဖြူစင်းရှိဝီဇယ်

Distribution: China, India, Laos, Nepal, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Proposed Imawbum NP, Hponkanrazi WS and Madwal Razi area), Sagaing Region (Htamanthi WS; Cremonesi et al. 2021) and Kayin State (Southeast of Moolayit Mountain; Zaw et al. 2008).

Remarks: This species is a normally protected species of Myanmar.

Order Perissodactyla Owen, 1848 Family Tapiridae Gray, 1821 (1 species) Genus *Tapirus* Brisson, 1762

307. Tapirus indicus Desmarest, 1819

Common name: Malayan Tapir

Myanmar name: ကြံ့သူတော်

Distribution: Indonesia (Sumatera), Malaysia and Thailand. In Myanmar, recorded in Tanintharyi Region (Tanintharyi Nature Reserve, Htaung Pru RF, Proposed Lenya and Tanintharyi NP).

Remarks: This species is an endangered and completely protected species of Myanmar.

Family Rhinocerotidae Gray, 1821 (3 species) Subfamily Rhinocerotinae Owen, 1845 Genus *Dicerorhinus* Gloger, 1841

308. Dicerorhinus sumatrensis (Fischer, 1814)

Common name: Sumatran Rhinoceros Myanmar name: ဝက်ကြံ့ **Distribution:** This species once distributed in Bhutan and Northeast India, through Southern China, Myanmar, Thailand, Cambodia, Laos, Vietnam and the Malay Peninsula, and the islands of Sumatra and Borneo in Indonesia, however, it is facing extinction in most of the historical distribution range. In Myanmar, formerly distributed in Northern Myanmar particularly in Shweudaung, Htamanthi and Hukaung Valley WS (Rabinowitz et al. 1995), however, it has been regionally extinct since there is no recent record. **Remarks:** This species is listed as critically endangered by the IUCN and completely protected species of Myanmar.

Genus Rhinoceros Linnaeus, 1758

309. Rhinoceros sondaicus Desmarest, 1822

Common name: Javan Rhinoceros **Myanmar name:** ကြံ့ဆင်

Distribution: This species once distributed in Bangladesh, Myanmar, Thailand, Laos, Cambodia, Vietnam, and probably Southern China through peninsular Malaysia to Sumatra and Java in the mid nineteenth century (Groves 1967). In Myanmar, formerly distributed in Southern Myanmar and the last known record is two individuals that occurred in Dawei Township area on the Myanmar-Thailand border in 1962.

Remarks: This species is listed as critically endangered by the IUCN and a completely protected species of Myanmar.

310. Rhinoceros unicornis Linnaeus, 1758

Common name: Greater One-horned Rhinoceros Myanmar name: အိန္ဒိယကြံ့

Distribution: India, Nepal, Bangladesh and Bhutan. This species may have existed in Myanmar (Tun Yin 1993); however, it has been regionally extinct in their distribution range.

Remarks: This species is listed as vulnerable by the IUCN.

Order Artiodactyla Owen, 1848 Suborder Suina Gray, 1868 Family Suidae Gray, 1821 (1 species) Genus *Sus* Linnaeus, 1758

311. Sus scrofa Linnaeus, 1758

Common name: Eurasian Wild Pig, Wild Boar Myanmar name: ഗ്രോററ്റ് Distribution: Distributed in all continents except Antarctica, and on many oceanic islands. In Myanmar, widely distributed and recorded in most of the PAs and RF throughout the country.

Suborder Ruminantia Scopoli, 1777

Family Tragulidae Milne-Edwards, 1864 (3 species: all chevrotain/mouse-deer are listed as completely protected species in Myanmar) Genus *Tragulus* Brisson, 1762

312. Tragulus kanchil (Raffles, 1822)

Common name: Lesser Indo-Malayan Chevrotain Myanmar name: ချေလှောင်/ယုန်သမင်(အသေး)

Distribution: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Singapore, Thailand and Vietnam. In Myanmar, recorded in Tanintharyi Region (Htaung Pru RF and Lampi Marine NP).

Remarks: The species was described as Javan Chevrotain or lesser mouse deer *T. javanicus* in "Wild Mammals of Myanmar". However, this species is only distributed in Indonesia. Thus, the lesser mouse deer of Myanmar could be *T. kanchil* or *T. kanchil lampensis* (Bisi et al. 2019); however, further taxonomic study is needed.

313. Tragulus napu (F. Cuvier, 1822)

Common name: Greater Indo-Malayan Chevrotain Myanmar name: ချေလှောင်/ယုန်သမင်(အကြီး) Distribution: Brunei Darussalam, Indonesia, Malaysia, Singapore and Thailand. In Myanmar, recorded in Tanintharyi Region (Htaung Pru RF and Lenya Proposed NP).

314. Tragulus williamsoni Kloss, 1916

Common name: Northern Chevrotain

Myanmar name: ယုန်သမင်

Distribution: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Singapore, Northern Thailand and possibly in Southern China, Laos, Vietnam and Southeastern Myanmar.

Remarks: Although this taxon was regarded as a distinct species, its distribution range remains unclear and further taxonomic study is needed (Meijaard et al. 2017).

Family Moschidae Gray, 1821 (1 species) Genus *Moschus* Linnaeus, 1758

315. Moschus fuscus Li, 1981

Common name: Black Musk Deer Myanmar name: ကတိုးချေ **Distribution:** Bhutan, Southern China, Northeastern India and Nepal. In Myanmar, a sample was recorded in Putao Township, Kachin State (Lwin et al. 2021).

Remarks: The species was described as Siberian musk deer *M. moschiferus* in "Wild Mammals of Myanmar"; however, *M. moschiferus* is distributed in Northeast Asia. Thus, the musk deer in Myanmar could possibly be *M. fuscus* (Pan et al. 2015), however, further taxonomic study is needed. This species is an endangered and completely protected species of Myanmar.

Family Cervidae Goldfuss, 1820 (8 species) Subfamily Cervinae Goldfuss, 1820 Genus *Axis* C. H. Smith, 1827

316. Axis porcinus (Zimmermann, 1780)

Common name: Hog Deer

Myanmar name: ဒရယ်

Distribution: Bangladesh, Bhutan, Cambodia, India, Nepal, Pakistan and possibly in China, Laos and Vietnam. In Myanmar, recorded in Kachin State (Hukaung Valley WS; Naing et al. 2015, Indawgyi Wetland WS; Lwin et al. 2018) and Kayin State (sighting record in the Kayin lowland forest area; Moo et al. 2017).

Remarks: This species is an endangered and completely protected species of Myanmar.

Genus Rucervus Hodgson, 1838

317. Rucervus eldii M'Clelland 1842

Common name: Brow-antlered Deer, Eld's Deer, Thamin Myanmar name: သမင်/ရွှေသမင်

Distribution: China, Cambodia, India, Laos and Thailand. There are four recognized subspecies; *R. e. thamin* Thomas, 1918 is a subspecies that only occur in Central Myanmar (Chatthin and Shwesettaw WS, Popa Mountain Park and Chaungponkan WS; Thu et al. 2019). This is an endemic, endangered and completely protected species of Myanmar.

Genus Rusa C. H. Smith, 1827

318. Rusa unicolor (Kerr, 1792)

Common name: Sambar

Myanmar name: කරා

Distribution: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Sri Lanka, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Madwalrazi area, Bumphabum, Hponkanrazi, Indawgyi Wetland and Hukaung Valley WS), Chin State (Natmataung NP), Sagaing Region (Alaungdawkathapa NP, Htamanthi and Proposed Mahamyaing WS), Kayin State, Rakhine State, Tanintharyi Region, Bago Yoma and Popa Mountain Park.

Remarks: This species is a vulnerable and normally protected species of Myanmar.

Genus Elaphodus Milne-Edwards, 1872

319. Elaphodus cephalophus Milne-Edwards, 1872

Common name: Tufted Deer

Myanmar name: မောက်တင်ချေ

Distribution: Only occur in China and Northern Myanmar (Proposed Imawbum NP; Nijman 2015).

Remarks: This species is listed as completely protected species of Myanmar.

Genus Muntiacus Rafinesque, 1815

320. Muntiacus feae (Thomas and Doria, 1889)

Common name: Fea's Muntjac

Myanmar name: မူလာရစ်ချေ

Distribution: Only occur in Thailand and Myanmar (Htaung Pru RF and Proposed Lenya NP, Proposed Imawbum NP and possibly in Kayin State).

Remarks: A photograph taken at 1250-m elevation in Hponkanrazi WS in Northern Myanmar shows a male with some features like *M. feae* and the trophies attributed to this species were observed in the villages in the Wusut Area, Hmai Hka catchment, Kachin State in 2010 (Nijman 2015). No further details are available and these records are best considered provisional at the moment though the distribution of this species is restricted to a small area in Southern Myanmar and Thailand (Nijman 2015). This species is listed as completely protected species of Myanmar.

321. Muntiacus gongshanensis Ma, 1990

Common name: Gongshan Muntjac

Myanmar name: ချေနက်

Distribution: Southwest China and Northern Myanmar (Hponkanrazi WS, Hkakaborazi and Proposed Imawbum NP; Lwin et al. 2021; Nijman 2015; Zhang et al. 2021).

Remarks: This species is listed as completely protected species of Myanmar.

322. *Muntiacus putaoensis* Amato, Egan and Rabinowitz, 1999

Common name: Leaf Muntjac

Myanmar name: ဖက်ချေ

Distribution: China and Northern Myanmar (Hkakaborazi NP and Hponkanrazi WS; Lwin et al. 2021) and adjacent area of India.

Remarks: This species is listed as a completely protected species of Myanmar.

323. Muntiacus vaginalis (Boddaert, 1785)

Common name: Northern Red Muntjac

Myanmar name: ବ୍ୟୋ

Distribution: Bangladesh, Bhutan, Brunei Darussalam Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam. In Myanmar, widely distributed and recorded in most of the PAs and RF. **Remarks:** *M. vaginalis* is considered as a subspecies of *M. muntjac*; however, by their distribution range, the muntjac species in Myanmar could be identified as *M. vaginalis* (Zhang et al. 2021). In Myanmar, presence is uncertain as the red muntjac of Myanmar is identified as "northern red muntjac *M. vaginalis*" (Zhang et al. 2021); however, possibly distributed in southern Tanintharyi Region (Proposed Lenya NP and its extension; Grindley 2019). This species is listed as a seasonally protected species of Myanmar.

Family Bovidae Gray, 1821 (10 species) Subfamily Bovinae Gray, 1821 Genus *Bos* Linnaeus, 1758

324. Bos gaurus C.H. Smith, 1827

Common name: Gaur, Indian Bison Myanmar name: ပြောင်

Distribution: Bhutan, Cambodia, China, India, Laos, Malaysia, Nepal, Thailand, Vietnam, and possibly in Sri Lanka and Bangladesh. In Myanmar, recorded in Kachin and Shan States (Hponkanrazi, Bumphabum and Hukaung Valley WS, Momeik and Mabein Townships), Sagaing Region (Alaungdawkathapa NP, Htamanthi WS), Paunglaung catchment, Rakhine State (Rakhine Yoma Elephant Range WS; Cremonesi et al. 2021), Bago Region (North Zamari WS; Hein et al. 2020), Kayin State (Moo et al. 2017), Tanintharyi Region (Tanintharyi Nature Reserve, Htaung Pru RF and Proposed Lenya NP; Grindley 2019) and possibly in Shweudaung WS. **Remarks:** The wild species of gaur was considered as *B. gaurus*, while referring to the domestic form (Mythun, Mithan or Gayal) as *B. frontalis* Lambert, 1804 (Gentry et al. 2004). *B. g. readei* is regarded as Myanmar's subspecies, it is a vulnerable and completely protected species of Myanmar.

325. Bos javanicus d'Alton, 1823

Common name: Banteng

Myanmar name: စိုင်

Distribution: Cambodia, China, Indonesia, Laos, Malaysia, Thailand and Vietnam. In Myanmar, recorded in Sagaing Region (Alaungdawkathapa NP and Proposed Mahamyaing WS), Bago Region (North Zamari WS; Hein et al. 2020), and Tanintharyi Region (Tanintharyi Nature Reserve and Proposed Lenya NP; Grindley 2019).

Remarks: There are three subspecies; *B. j. birmanicus* is regarded as Myanmar subspecies. This is an endangered and completely protected species of Myanmar.

Genus Bubalus C. H. Smith, 1827

326. Bubalus arnee (Kerr, 1792)

Common name: Asian Wild Buffalo

Myanmar name: တောက္ခဲ

Distribution: Bhutan, Cambodia, India, Nepal, Thailand and possibly in Bangladesh, Indonesia, Laos, Malaysia, Sri Lanka and Vietnam. In Myanmar, recorded in Rakhine State (South Rakhine Yoma; Geissmann et al. 2008).

Remarks: The wild species of water buffalo was considered as *B. arnee*; while the domestic forms as *B. bubalis* (Gentry et al. 2004). Three subspecies were recognized: *B. a. arnee* (much of India and Nepal); *B. a. fulvus* (Assam and neighboring areas); and *B. a. theerapati* (Southeast Asia). This is an endangered and completely protected species of Myanmar.

Subfamily Antilopinae Gray, 1821 Genus *Budorcas* Hodgson, 1850

327. Budorcas taxicolor Hodgson, 1850

Common name: Mishmi Takin

Myanmar name: _{သားမ}င်း

Distribution: Bhutan, China and India. In Myanmar, recorded in Kachin State (Hponkanrazi WS, Hkakaborazi and Proposed Imawbum NP).

Remarks: This is a vulnerable and completely protected species of Myanmar.

Genus Capricornis Ogilby, 1837

328. Capricornis rubidus Blyth, 1863

Common name: Burmese Red Serow Myanmar name: တောဆိတ်နီ

Distribution: China and India. In Myanmar, recorded in Kachin State (Hponkanrazi and Indawgyi Wetland WS, Hukaung Valley WS; Naing et al. 2015, Proposed Imawbum NP; Nijman 2015), Chin State (Natmataung NP) and Sagaing Region (Htamanthi WS) and Rakhine State (Rakhine Yoma Elephant Range WS; Cremonesi et al. 2021).

Remarks: This species was formerly regarded as subspecies of *C. sumatraensis*. It is a vulnerable and completely protected species of Myanmar.

329. Capricornis milneedwardsi David, 1869

Common name: Indochinese Serow, Chinese Serow Myanmar name: ෆොකිග්

Distribution: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Thailand and Vietnam. In Myanmar, recorded in Kachin State (Proposed Imawbum NP; Nijman 2015, Hponkanrazi and Indawgyi Wetland WS), Sagaing Region (Htamanthi WS and Alaungdawkathapa NP), Kayin State (Moo et al. 2017), Tanintharyi Region (Proposed Lenya NP; Grindley 2019), and possibly in Tanintharyi Nature Reserve and Bago Yoma.

Remarks: This species is previously classified as a subspecies of *C. sumatraensis* (Mori et al. 2019). It is a vulnerable and completely protected species of Myanmar. Due to taxonomic uncertainty, further genetic study is needed in Myanmar.

Genus Naemorhedus C. H. Smith, 1827

330. Naemorhedus cranbrooki (Hayman, 1961)

Common name: Cranbrook's goral

Myanmar name: ခရန်းဘရွတ်ခ်တောင်ဆိတ်

Distribution: Only occur in Northern Myanmar (Li et al. 2020b).

Remarks: This species was formerly considered as a subspecies of *N. baileyi* which is a vulnerable species of IUCN. Since the range of *N. baileyi* is isolated by the Yarlung Tsangpo-Brahmaputra River; the species in Myanmar is identified as *N. cranbrooki* which is restricted to Northern Myanmar (Li et al. 2020b). This species is endemic to Myanmar and a completely protected species.

331. Naemorhedus evansi (Lydekker, 1905)

Common name: Burmese goral

Myanmar name: မြန်မာတောင်ဆိတ်

Distribution: Thailand, China and Northern Myanmar.

Remarks: This species was formerly considered as a subspecies of *N. griseus*; however, it is now recognized as distinct species (Li et al. 2020b). Hence, it is not listed yet under the legal protection status of Myanmar.

332. Naemorhedus griseus (Milne-Edwards, 1871)

Common name: Chinese Goral

Myanmar name: တရုတ်တောင်ဆိတ်/ဟိမဝန္တာတောင်ဆိတ်

Distribution: China, Northeastern India, Thailand, Vietnam and possibly in Northern Myanmar (seven skulls of this species were observed in Paungjar Village, Kachin State in 2014 by Nijman 2015).

Remarks: This species is listed as vulnerable and a completely protected species of Myanmar.

Genus Pseudois Hodgson, 1846

333. Pseudois nayaur (Hodgson, 1833)

Common name: Greater Blue Sheep

Myanmar name: ရေခဲတောင်ဆိတ်

Distribution: Bhutan, China, India, Nepal, Pakistan and Northern Myanmar (a skin sample was recorded in Kachin State; Lwin et al. 2021).

Remarks: This species is listed as completely protected species in Myanmar. The lack of recent record of this species could be due to their habitat preference above 2500-m altitude or it could probably be threatened by hunting in its habitat.

Suborder Whippomorpha Waddell et al. 1999 Infraorder Cetacea Brisson, 1762

Parvorder Mysticeti Flower, 1864

Family Balaenopteridae Gray, 1864 (7 species: all whales are categorized as completely protected species in Myanmar)

Genus Balaenoptera Lacépède, 1804

334. Balaenoptera acutorostrata Lacépède, 1804

Common name: Common Minke Whale

Myanmar name: မင်ကီးဝေလငါး

Distribution: Worldwide distribution from arctic to tropical waters. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

335. Balaenoptera borealis Lesson, 1828

Common name: Sei Whale

Myanmar name: စိုင်ဝေလငါး

Distribution: Worldwide distribution from arctic to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Remarks: This species is listed as endangered by the IUCN.

336. Balaenoptera edeni Anderson, 1879

Common name: Bryde's Whale, Sittaung Whale Myanmar name: ဘရိုင်းဝေလငါး

Distribution: Worldwide distribution from warmtemperate to tropical waters. In Myanmar, recorded in the Sittaung River and in the nearshore waters of the Myeik Archipelago and in the offshore waters of the Bay of Bengal (Parnum 2019; Smith and Tun 2008; Yamada et al. 2022).

337. Balaenoptera musculus (Linnaeus, 1758)

Common name: Blue Whale

Myanmar name: ဝေလငါးပြာ

Distribution: Worldwide distribution from arctic to tropical waters. In Myanmar, recorded in the Myanmar coastal waters (Yamada et al. 2022).

Remarks: This species is listed as endangered by the IUCN.

338. *Balaenoptera omurai* Wada, Oishi and Yamada, 2003

Common name: Omura's Whale

Myanmar name: အိုမြူရာဝေလငါး

Distribution: Tropical and subtropical waters of the Indo-Pacific region extending to 34° N and 12° S. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019; Yamada et al. 2022).

339. Balaenoptera physalus (Linnaeus, 1758)

Common name: Fin Whale

Myanmar name: ဆူးတောင်ပါဝေလငါး

Distribution: Worldwide distribution from arctic to tropical waters. In Myanmar, recorded in the Rakhine coast (Tun and Ilangakoon 2006), Andaman Sea and Bay of Bengal. **Remarks:** This species is listed as vulnerable by the IUCN.

Genus Megaptera Gray, 1846

340. Megaptera novaeangliae (Borowski, 1781)

Common name: Humpback Whale Myanmar name: ကျောဘိုပါဝေလငါး **Distribution:** Worldwide distribution from cold-temperate to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Parvorder Odontoceti Flower, 1867 Family Delphinidae Gray, 1821 (16 species) Genus *Delphinus* Linnaeus, 1758

341. Delphinus capensis Gray, 1828

Common name: Long-beaked Common Dolphin Myanmar name: နှုတ်သီးရှည်လင်းပိုင် Distribution: All temperate and tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Genus *Feresa* Gray, 1870

342. Feresa attenuata Gray, 1874

Common name: Pygmy Killer Whale

Myanmar name: အသားစားဝေလငါးပု

Distribution: Tropical and warm temperate waters. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

Genus Globicephala Lesson, 1828

343. Globicephala macrorhynchus Gray, 1846

Common name: Short-finned Pilot Whale

Myanmar name: ရေယက်တို လမ်းညွှန်ဝေလငါး

Distribution: Tropical, warm-temperate and cold-temperate waters of the North Pacific. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Genus Grampus Gray, 1828

344. Grampus griseus (G. Cuvier, 1812)

Common name: Risso's Dolphin Myanmar name: ရီဆိုလင်းပိုင်/ဖြူနက်ကျားလင်းပိုင် Distribution: Temperate and tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Genus Lagenodelphis Fraser, 1956

345. Lagenodelphis hosei Fraser, 1956

Common name: Fraser's Dolphin

Myanmar name: ဖရေဇာလင်းပိုင်/ဖလော့စာလင်းပိုင်

Distribution: Warm-temperate to tropical waters. In Myanmar, possibly distributed along the coasts of the Andaman Sea and Bay of Bengal.

Genus Orcaella Gray, 1866

346. Orcaella brevirostris (Owen in Gray, 1866)

Common name: Irrawaddy Dolphin Myanmar name: ဧရာဝတီလင်းပိုင်

Distribution: Tropical coastal waters and large rivers in Southeast Asia, Northern Australia and Papua New Guinea. In Myanmar, recorded in the Irrawaddy River and in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008). **Remarks:** This species is listed as endangered and completely protected species of Myanmar.

Genus Orcinus Fitzinger, 1860

347. Orcinus orca (Linnaeus, 1758)

Common name: Killer Whale

Myanmar name: ອານາະອາະຣດເນດໃ: Distribution: All seas and oceans. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

Genus Peponocephala Nishiwaki and Norris, 1966

348. Peponocephala electra (Gray, 1846)

Common name: Melon-headed Whale Myanmar name: ဖရဲသီးခေါင်းဝေလငါး/ခေါင်းလုံးဝေလငါး Distribution: Warm-temperate to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Genus Pseudorca Reinhardt, 1862

349. Pseudorca crassidens (Owen, 1846)

Common name: False Killer Whale

Myanmar name: အသားစားဝေလငါးတု

Distribution: Temperate to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Genus Sousa Gray, 1866

350. Sousa chinensis (Osbeck, 1765)

Common name: Indo-Pacific Humpback Dolphin Myanmar name: ကျောဘိုပါအင်ဒိုပစိဖိတ်လင်းပိုင် Distribution: Coastal waters and rivers from False Bay, South Africa, east to Southern China and Moreton Bay, Queensland, Australia. In Myanmar, recorded in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008). Remarks: Taxonomy of this species is currently in dispute. As currently defined, *S. chinensis* consists of at least two types, *plumbea* type in the western Indian Ocean from South Africa to the east coast of India, and *chinensis*, also from the east coast of India, China, and Australia (Wilson and Mittermeier 2014). This species is listed as vulnerable and completely protected species of Myanmar.

Genus *Stenella* Gray, 1866 (All three species are listed as completely protected species of Myanmar)

351. Stenella attenuata (Gray, 1846)

Common name: Pantropical Spotted Dolphin **Myanmar name:**

အပူပိုင်းဒေသလင်းပိုင်ပြောက်/အစက်အပြောက်ပါလင်းပိုင် **Distribution:** Temperate to tropical waters. In Myanmar, recorded in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008).

352. Stenella coeruleoalba (Meyen, 1833)

Common name: Striped Dolphin

Myanmar name: လင်းပိုင်စင်းကျား/အစင်းပါလင်းပိုင်

Distribution: Cold-temperate to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

353. Stenella longirostris (Gray, 1828)

Common name: Spinner Dolphin

Myanmar name: နှုတ်သီးရှည်ကြောင်လိမ်ကျွမ်းထိုးလင်းပိုင် Distribution: Warm-temperate to tropical waters. In Myanmar, recorded in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008).

Genus Steno Gray, 1846

354. Steno bredanensis (G. Cuvier in Lesson, 1828)

Common name: Rough-toothed Dolphin

Myanmar name: သွားကြမ်းလင်းပိုင်

Distribution: Warm-temperate to tropical waters. In Myanmar, possibly distributed along the coasts of Andaman Sea and Bay of Bengal.

Genus Tursiops Gervais, 1855

355. Tursiops aduncus (Ehrenberg, 1833)

Common name: Indo-Pacific Bottle-nosed Dolphin Myanmar name: အင်ဒိုပစိဖိတ်ပုလင်းနှုတ်သီးလင်းပိုင် Distribution: Indian Ocean. In Myanmar, recorded in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008).

356. Tursiops truncatus (Montagu, 1821)

Common name: Common Bottle-nosed Dolphin Myanmar name: ပုလင်းနှတ်သီးလင်းပိုင်

Distribution: Temperate to tropical waters, including the Black Sea. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019).

Remarks: This species is listed as completely protected species of Myanmar.

Family Kogiidae Gill, 1871 (2 species: all whale species are listed as completely protected species of Myanmar) Genus *Kogia* Gray, 1846

357. Kogia breviceps (de Blainville, 1838)

Common name: Pygmy Sperm Whale

Myanmar name: ທເມກຣ໌ະສື່ထုတ် ဝေလငါး/စပမ်းဝေလငါးပု **Distribution:** Temperate to tropical waters. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

358. Kogia sima (Owen, 1866)

Common name: Dwarf Sperm Whale **Myanmar name:**

ဖယောင်းဆီထုတ် ဝေလငါးပု/စပမ်းဝေလငါးပု

Distribution: Warm-temperate to tropical waters occasionally stands in cold-temperate areas. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

Family Phocoenidae Gray, 1825 (1 species) Genus *Neophocaena* Palmer, 1899

359. Neophocaena phocaenoides (G. Cuvier, 1829)

Common name: Indo-Pacific Finless Porpoise Myanmar name: အင်ဒိုပစိဖိတ်လင်းရှူး

Distribution: Indo-Pacific: warm-temperate to tropical waters; Persian Gulf to Malaysia, North coast of Java, China and Japan: coastal waters and some rivers. In Myanmar, recorded in the nearshore waters of the Myeik Archipelago (Smith and Tun 2008).

Remarks: This species is listed as vulnerable by the IUCN and a completely protected species of Myanmar.

Family Physeteridae Gray, 1821 (1 species) Genus *Physeter* Linnaeus, 1758

360. Physeter macrocephalus Linnaeus, 1758

Common name: Sperm Whale Myanmar name: လင်းရှူး/စပမ်းဝေလငါး **Distribution:** Antarctic and cold-temperate waters (Northern hemisphere) to tropical waters. In Myanmar, recorded in the offshore waters of Bay of Bengal (Parnum 2019). **Remarks:** This species is listed as vulnerable by the IUCN and a completely protected species of Myanmar.

Family Ziphiidae Gray, 1865 (5 species: all whale species are listed as completely protected species of Myanmar) Genus *Indopacetus* Moore, 1968

361. Indopacetus pacificus (Longman, 1926)

Common name: Longman's Beaked Whale

Myanmar name:

အပူပိုင်းဒေသပုလင်းနှုတ်သီးဝေလငါး/လောင်းမန်းနှုတ်သီးပါဝေလငါး **Distribution:** Indian Ocean, West South Pacific Ocean and tropical waters. In Myanmar, stranded near the Yangon River mouth (Yamada et al. 2012).

Genus Mesoplodon Gervais, 1850

362. Mesoplodon densirostris (Blainville, 1817)

Common name: Blainville's Beaked Whale Myanmar name: ဘလိန်းဗေးနှုတ်သီးပါဝေလငါး Distribution: Temperate to tropical waters. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

363. Mesoplodon ginkgodens Nishiwaki and Kamiya, 1958

Common name: Ginkgo-toothed Beaked Whale Myanmar name: ဂင်ဂိုသွားရှိနှုတ်သီးပါဝေလငါး

Distribution: North Pacific and Indian Oceans: warmtemperate to tropical waters; Japan, China, Baja California, Mexico, Sri Lanka, Indonesia and Australia. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

364. Mesoplodon layardii (Gray, 1865)

Common name: Strap-toothed Whale

Myanmar name:

သွားသိုင်းကြိုးပါဝေလငါး/သွားယုက်နူတ်သီးပါဝေလငါး

Distribution: Temperate and subantarctic Southern Hemisphere. In Myanmar, stranded in the mouth of the Pyin Sa Lu and Thaung Du Rivers in the Ayeyarwady Delta (Chit et al. 2012).

Genus Ziphius G. Cuvier, 1823

365. Ziphius cavirostris G. Cuvier, 1823

Common name: Cuvier's Beaked Whale Myanmar name: ကူဗီယာနူတ်သီးပါဝေလငါး **Distribution:** Cold-temperate to tropical waters. In Myanmar, possibly distributed in the Andaman Sea and Bay of Bengal.

4 Results and discussion

This is the first attempt to compile a comprehensive list of the mammals of Myanmar since "Wild Mammals of Myanmar (Tun Yin 1993)". We found that Myanmar supports a rich diversity of mammalian fauna (365 species: 33 marine and 332 terrestrial), belonging to 13 orders (Proboscidea, Sirenia, Scandentia, Dermoptera, Primates, Rodentia, Lagomorpha, Eulipotyphla, Chiroptera, Pholidota, Carnivora, Perissodactyla and Artiodactyla) (including Cetacea), and 49 families. It represents about one third of the 954 mammal species recorded in Indomalayan realm and about 5.4 % of the 6718 global mammalian species (Mammal Diversity Database 2024). We found that Muridae represents the richest family (50 species), followed by Vespertilionidae (48 species), and Sciuridae (30 species). This is the first annotated checklist of mammals of Myanmar; however, compared to the previous publication "Wild Mammals of Myanmar (Tun Yin 1993)" and "Wild Animals of Burma (1967)", we can add 113 species to the mammals of Myanmar particularly for the rodents, bats and marine mammals.

In addition, we found that Myanmar is home to at least nine endemic mammal species: Eld's deer *Rucervus eldii thamin*, Cranbrook's goral *Naemorhedus cranbrooki*, Popa langur *Trachypithecus popa*, Popa soft-furred rat *Millardia kathleenae*, Blyth's mouse *Mus nitidulus*, little Burmese field mouse *Mus lepidoides*, Cranbrook's white-toothed shrew *Crocidura cranbrooki*, Burmese pipistrelle *Hypsugo lophurus* and Hkakaborazi tube-nosed bat *Murina hkakaboraziensis*. Anthony's pipistrelle *Hypsugo anthonyi* and Joffre's pipistrelle *Hypsugo joffrei* were previously listed as the endemic species of Myanmar, however, recent studies showed that *H. anthonyi* as the junior subjective synonym of *H. joffrei* and distributed in the westward geographic range beyond Myanmar (Saikia et al. 2017).

We found that 63 globally threatened species (8 CR, 27 EN and 28 VU) are listed in Myanmar. A total of 131 species are legally protected under *The Conservation of Biodiversity and Protected Areas Law 2018 of Myanmar*. However, all bat species within the order Chiroptera are not legally protected in Myanmar. Two endangered species: Pomona leaf-nosed bat *Hipposideros pomona* and greater marmoset rat *Hapalomys longicaudatus*, two vulnerable rodent species: Vordermann's flying squirrel *Petinomys vordermanni* and whitehead's sundaic spiny rat *Maxomys whiteheadi*, 10 near threatened species: nine bat species and Indo-Pacific bottlenose dolphin are still needed for legal protection in Myanmar (Supplementary Table S1).

We can collect 10,123 records of distribution of all mammals in Myanmar; however, the final dataset comprises about 5000 valid data points after meticulous data cleaning and the exclusion of duplicate points (Figure 1). Number of recorded species were highest (≥100 mammal species) in the northern (Kachin State and Sagaing Region) and the southern (Tanintharyi Region) Myanmar (Figure 2). Our results highlight that the eastern and western area (Shan, Chin and Rakhine States) need to conduct more biological inventories to better describe mammal diversity of Myanmar.

In conclusion, we recommend the comprehensive mammals surveys, inside and outside PAs of Myanmar undoubtedly yield additional species in the future. Due to the limited molecular based taxonomic study, the taxonomic status of many rodents is still in a state of flux. Hence, systematic taxonomic study is crucial in Myanmar to explore the species new to science as well as valid species currently treated as synonyms. Our study also highlights a list of mammal species which are needed to manage for legal protection and conservation in Myanmar. It is likely that the number of species will be revised in the future with increasing surveys and taxonomic revisions, particularly among small mammals.

Acknowledgments: We are grateful to all the local field guides and staff from Forest Department and Southeast Asia Biodiversity Research Institute (SEABRI) of Myanmar. We are deeply appreciative of all individuals who contributed locality records of mammals from various platforms. Our heartfelt thanks go to Prof. Tan Yun Hong, Prof. Chen Xiaoyong and Prof. Li Song for their invaluable support in reviewing and structuring the earlier draft of this manuscript. We thank the editor of Mammalia and all the anonymous reviewers for their insightful comments which improved this manuscript. Our thanks also go to Win Paing **Oo (Native Species Conservation and Identification Facebook** Group) and XTBG Myanmar group (Phyo Kay Khine, Myo Thant, Zayar Phyo, Thazin Nwe, Khin MeMe Aung, and Mya Bhone Maw) for their assistance in editing the Myanmar names of the species and, Myanmar Coastal Conservation Lab for sharing the literature on marine mammals.

Research ethics: The fieldwork was conducted under the laws of Myanmar with permission from Myanmar's Ministry of Natural Resources and Environmental Conservation and followed all ethical standards.

Author contributions: AMT and R-CQ conceptualized the study; YHL prepared the maps; AMT led the writing; all authors edited and approved the manuscript.

Competing interests: The authors declare no conflict of interest regarding this article.

Research funding: The study was supported by the Transboundary Cooperation on Biodiversity Research and Conservation in Gaoligong Mountains (no. E1ZK251), Major Science and Technique Programs in Yunnan Province (Grant no. 202102AA310055), Yunnan Province Science and Technology Department (no. 202203AP140007), CAS-SEABRI (Y4ZK111B01) and Langcang-Mekong Cooperation Special Fund (Biodiversity Monitoring and Network Construction along Langcang-Mekong River Basin project). A.M.T was supported by the CAS-TWAS President's Fellowship Programme.

Data availability: The raw data can be obtained on request from the corresponding author.

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Supplementary Material: This article contains supplementary material (https://doi.org/10.1515/mammalia-2023-0098).