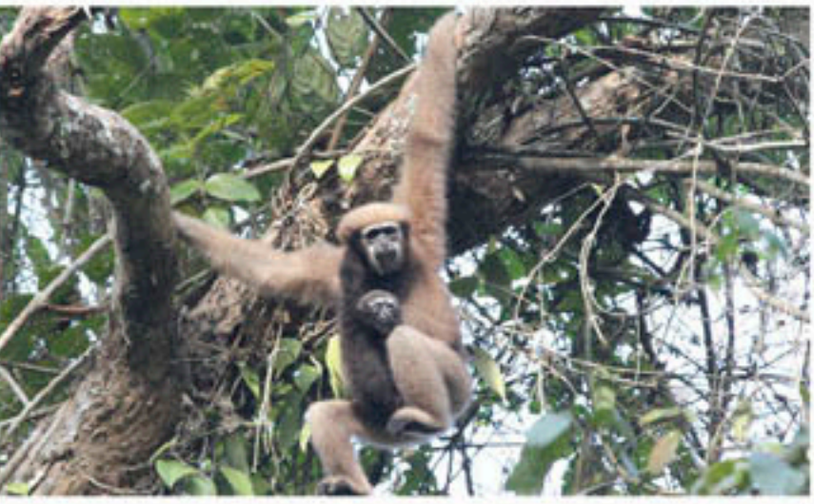
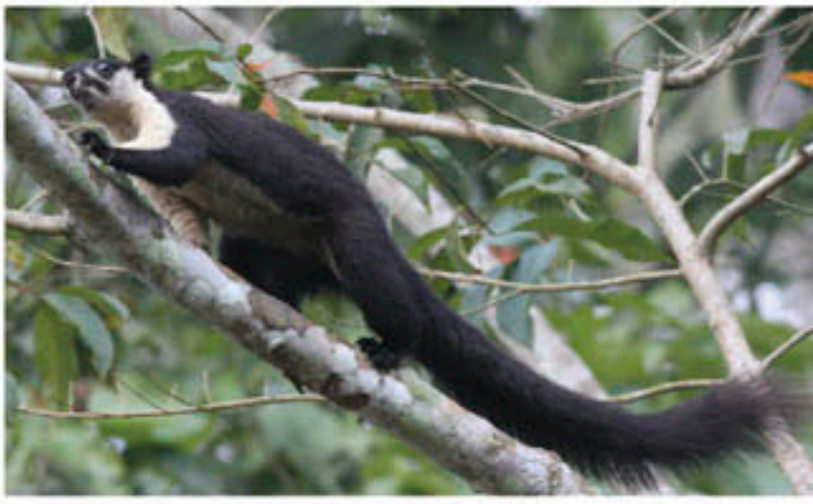
Red List of Bangladesh

Volume 2: Mammals





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RED LIST

IUCN

Red List of Bangladesh

Volume 2: Mammals

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Bangladesh Country Office
2015

This publication has been made possible because of the funding received from The World Bank through Bangladesh Forest Department to implement the subproject entitled 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project.

Published by: IUCN Bangladesh Country Office

Citation: *Of this volume*

IUCN Bangladesh. 2015. *Red List of Bangladesh Volume 2: Mammals*. IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, Bangladesh, pp. xvi+232.

Of individual species profile

[Last name of the assessor (s), initials]. 2015. [Species' scientific name]. *In:* IUCN Bangladesh. *Red List of Bangladesh Volume 2: Mammals.* IUCN, International Union for Conservation of Nature, Bangladesh Country Office, Dhaka, Bangladesh. p. [Page number].

ISBN: 978-984-34-0735-1

Publication Assistant: Sheikh Asaduzzaman

Design and Printed by: Progressive Printers Pvt. Ltd.

Cover Photo: Front Cover: (top left) *Hoolock hoolock* © M M Feeroz, (top right) *Ratufa bicolor* © M M Feeroz, (bottom right) *Lutrogale perspicillata* © M M Feeroz, (bottom left) *Stenella longirostris* © Md. Zahangir Alom
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Available from: IUCN, International Union for Conservation of Nature
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Volumes of Red List of Bangladesh

Volume 1: Summary (English)

Volume 1: Summary (Bangla)

Volume 2: Mammals

Volume 3: Birds

Volume 4: Reptiles and Amphibians

Volume 5: Freshwater Fishes

Volume 6: Crustaceans

Volume 7: Butterflies

PREFACE

The IUCN Red List of Threatened Species™ has been assessing the conservation status of plants, fungi and animal species on a global scale for the past 50 years. Since its conception in 1964, the Red List has evolved to become the world's most comprehensive information source on the extinction risk of species. Far more than a list of species and their status, it is a powerful tool to inform and catalyze action among scientists, activists, and politicians. It is used by government agencies, wildlife departments, conservation related non-governmental organizations (NGOs), natural resource planners, educational organizations, students, and the business community. The Red List process has become a massive enterprise involving the IUCN Global Species Program staff, partner organizations and experts in the IUCN Species Survival Commission and partner networks who compile the species information to make The IUCN Red List the indispensable product it is today.

IUCN Bangladesh had published the first Red List of Threatened Animals of Bangladesh in 2000. The list has been updated through a sub-project entitled 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of the Bangladesh Forest Department which is funded by The World Bank. The project commenced in December 2013 and ends in June 2016. A total of 1619 species have been assessed and updated from seven different animal groups (mammals, birds, reptiles, amphibians, freshwater fishes, crustaceans, and butterflies), subsequently published in seven volumes. In addition, summary volume (Vol: 01) has been translated into Bangla for reaching out its wider users. More than 300 national and international experts have contributed under the seven Red List Assessor Groups (RAGs) headed by respective Lead Assessors and Chief National Technical Expert to ensure that the updates are based on the best scientific information available.

A welltrained Red List project unit equipped with GIS support and all kinds of latest information technologies was established in IUCN Bangladesh to ensure the highest quality of assessment following the latest Red List categories and criteria guideline. For this purpose, more than 160 assessors have been trained on global standard Red List assessment guideline engaging international certified Red List trainers. A National Red List Database in the form of an online platform has been developed and made live for public dissemination on the <www. iucnredlistbd.org>. Data and information have been preserved for future use both electronically in offline database as well as hard copies for each individual species bearing unique Species Identification Number (SID). A National Red List Committee has been formed under the Ministry of Environment and Forests (MoEF) to ensure coordination among different agencies during the assessment process as well as for mainstreaming the findings into conservation policies. Series of dissemination workshops at national and regional levels were organized to share the preliminary assessment result to its wider stakeholders and ensure their participation in this highly scientific assessment process.

I would like to commend the assessors for their contributions to the assessment and for their commitment towards making this publication a reality. All the assessments have gone through a multistage review process engaging relevant experts and technical reviewers. The tireless efforts of the reviewers in making these books up to the global standard are gratefully acknowledged. Without their assistance this nationally important set of documents would not have been of the quality that it is now.

I also like to take this opportunity to express my sincere appreciation to all the members of 'Updating Species Red List of Bangladesh' project and all concerned people of publication work for publishing this manuscript. I would also express my gratitude to the Ministry of Environment and Forests (MoEF), Chief Conservator of Forests (CCF) and other Bangladesh Forest Department officials for their vigorous support and collaboration. I hope this publication will help the relevant agencies in taking appropriate conservation actions toward managing wildlife of Bangladesh.

Md. Akbar Hossain
Project Director
Strengthening Regional Cooperation for Wildlife Protection (SRCWP) Project
&
Deputy Chief Conservator of Forests
Bangladesh Forest Department

MESSAGE

The Government of Bangladesh is committed to take all measures prerequisite for a sustainable future. In effort, the Government takes myriad programmes and initiatives with the support of different consortia. Bangladesh has recently achieved unprecedented successes in the environmental sector. It was no surprise that Her Excellency Prime Minister Sheikh Hasina was awarded '2015 Champion of the Earth' by the United Nations. Updated the 'Red List of Bangladesh' bears yet another signature of the goodwill and devotion rendered by the Government of Bangladesh. The publication sets another milestone in biodiversity conservation of the country.

The overwhelming evidence on the loss of biodiversity all over the world showcases that we, as a nation, must act to conserve biodiversity. Ministry of Environment and Forests has been playing a pivotal role in biodiversity conservation of Bangladesh through Bangladesh Forest Department, and other national and international organizations. This publication is one among many upshots envisioned by Bangladesh Forest Department through the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project. I would like to thank The World Bank for providing the financial support, and appreciate the effort of IUCN Bangladesh Country Office in implementing the project.

I am sanguine that the updated 'Red List of Bangladesh' will concurrently help the Government of Bangladesh towards achieving the Aichi Biodiversity Targets, the Sustainable Development Goals (SDGs) and the Vision 2021.

Finally, I wish that the 'Red List of Bangladesh' would go a long way in protecting the biodiversity of the country.

Anwar Hossain Manju, MP
Minister
Ministry of Environment and Forests
Government of the People's Republic of Bangladesh

MESSAGE

I am very happy to know that *Red List of Bangladesh* - a set of visionary publications covering the status, extinction risks and possible conservation options for major biodiversity of Bangladesh has been thoroughly updated by the Bangladesh Forest Department with technical support from IUCN Bangladesh.

Bangladesh is bestowed with enviable natural resources. To save the bewildering inventory, Bangladesh is always strong-willed and committed to a number of Multilateral Environmental Agreements including the Convention on Biological Diversity (CBD). So as in harmony, the Government of Bangladesh has recently looked forward to engaging a globally recognized, powerful, most comprehensive conservation tool i.e. IUCN Red List of Threatened Species™ to update and assess the current biodiversity status. This has resulted in the rigorous effort entitling 'Updating Species Red List of Bangladesh' under the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project initiative funded by The World Bank.

'Red List of Bangladesh' is a massive milestone in the conservation history of the country. I expect that these scientific publications will provide new information; will strengthen and update existing knowledge inventory. Everybody from government/non-government officials to scholars, researchers, students and enthusiasts - should make expansive usages of these books as the most updated biodiversity database available in the country.

I strongly hope that these works of multitude potentials will help the coordination and promotion of national efforts in effective policy making for ensuring appropriate and continual biodiversity management practices envisioned by the Government of Bangladesh.

Abdullah Al Islam Jakob, MP
Deputy Minister
Ministry of Environment and Forests
Government of the People's Republic of Bangladesh

MESSAGE

Biodiversity, the incredible variety of life on Earth that sustains us, is in peril. Species are becoming threatened at the most expeditious rate ever recorded. Over the past few decades it has become the issue of global concern for its rapid reduction worldwide. Bangladesh is no exception in this regard. Though the country is exceptionally endowed with a vast variety of flora and fauna, it is unfortunate that in recent decades the biodiversity of the country is under pressure due to incrementing population and over- exploitation of natural resources.

Today, many species of Bangladesh have reached a dreadful genetic loss. Unfortunately, detailed information and consummate inventories of such species often do not exist. The Government of Bangladesh is acutely conscious of this, and has in fact been preparing to face this challenge for several years now. Bangladesh has made a tremendous progress in terms of taking development initiatives towards conservation and sustainable use of the threatened species. However, Bangladesh Forest Department in collaboration with IUCN Bangladesh and with financial assistance from The World Bank, the project 'Strengthening Regional Cooperation for Wildlife Protection' under which the subproject 'Updating Species Red List of Bangladesh' has successfully updated the threat status of wildlife of the country. I would like to express my appreciation to all the experts involved in this noble initiative.

I am very proud to note that 1619 fauna species have been assessed over the two and half year period and subsequently published in seven volumes entitled the 'Red List of Bangladesh'. I strongly believe, this set of achievements is one of the pioneer encyclopedic compilations in Bangladesh that can provide its users with updated information of different species. I hope these books will have impact on the government's policy and planning towards achieving the targets set by the different national and global commitments, as well as taking measures to protect these threatened species.

Dr. Kamal Uddin Ahmed
Secretary
Ministry of Environment and Forests
Government of the People's Republic of Bangladesh

MESSAGE

Globally, biodiversity forms the foundation of the vast array of ecosystem services that critically contribute to human well being. The diversity of the Earth's natural assets are made up of many millions of distinct biological species of plants and animals on land, in water, in atmosphere–linking humans and environment into an interdependent ecosystem which makes the Earth unique and beautiful. But, it's really unfortunate that biodiversity worldwide is disappearing faster than ever and already has declined by more than a quarter in the last 35 years in terms of number of species. It is thus indispensable to gather knowledge scientifically of existing species, their habitats, threats, etc. for undertaking pragmatic protection and conservation measures.

In this context Bangladesh Forest Department together with IUCN Bangladesh has accomplished 'Updating Species Red List of Bangladseh', as a sub-project of the 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project of Bangladesh Forest Department following the most comprehensive 'IUCN Red List of Threatened Species™' approach. As a revolutionary outcome of the project, the books entitling the 'Red List of Bangladesh' aim to provide updated information and data of 1619 animal species under seven groups in total throughout the country. This national asset will undoubtedly serve the researcher and academicians as a scientific information hub for further research and the policy makers to occupy the gap of subsisting laws and policies to catalyze appropriate conservation action. By knowing the threatened species from this Red List, further, we can bring out incipient projects where these are exactly demanded and with the opportune execution of this undertaking, we can create a safe ground as a measure of conservation. In this whole process the Red List will be a great avail.

In addition, the status and trends of the threatened species of Bangladesh portrayed in these books have the impetus for taking up the stronger efforts towards the legislation of wildlife trafficking and trading of the country. Being a bio-rich country, Bangladesh has to adopt adequate measures to halt further degradation of our precious biological resources. We hope that these books could be a consequential material in the congruous execution of the objectives of numerous biodiversity conventions and treaties, like CBD, RAMSAR, and CITES.

I sincerely acknowledge the Government of the People's Republic of Bangladesh to initiate such a milestone project and The World Bank for providing financial support. I am also very thankful to those scientists, researchers, academicians and professionals involved with the project from the very beginning for their unwearied endeavour which finally make this most fruitful.

Md. Yunus Ali
Chief Conservator of Forests
Bangladesh Forest Department
Government of the People's Republic of Bangladesh

ACKNOWLEDGEMENTS

The IUCN Red List of Threatened Species™ has been worldly recognized and used as the most comprehensive source for the conservation status of plant and animal species since 1964. IUCN Bangladesh first assessed the conservation status of species from Bangladesh in 2000. Fifteen years later, IUCN Bangladesh has updated the previous Red List implementing 'Updating Species Red List of Bangladesh' project. The final outcome of the project, the 'Red List of Bangladesh', is the fruit of a concerted effort from numerous individuals and bodies–all deserve a special note of thanks.

Our sincere gratitude to Dr. Kamal Uddin Ahmed, Secretary, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh and Chair, National Committee for Updating Species Red List of Bangladesh for his endless effort along with the officials involved from the ministry in making this initiative a success.

We extend a heartfelt thanks to Mr. Md. Yunus Ali, Chief Conservator of Forests, Bangladesh Forest Department and the officials nominated to implement 'Strengthening Regional Cooperation for Wildlife Protection (SRCWP)' Project, especially Mr. Md. Akbar Hossain, Project Director and all other staff of the SRCWP project. Our special thanks to Mr. Ashit Ranjan Paul, Conservator of Forests, Wildlife Circle and Dr. Tapan Kumar Dey, former Conservator of Forests, Wildlife Management and Nature Conservation Division, Bangladesh Forest Department for their endless endeavor in all extent of the project. We would like to acknowledge The World Bank for financing SRCWP project. In addition, our sincere gratitude goes to Bangladesh Forest Department to entrust IUCN Bangladesh Country Office with the responsibility of 'Updating Species Red List of Bangladesh'.

We humbly acknowledge Dr. Mohammad Ali Reza Khan, Chief National Technical Expert, Updating Species Red List of Bangladesh for his expertise, knowledge and technical support used in these publications. Besides, seven Lead Assessors for seven animal groups namely, Professor Dr. Mohammed Mostafa Feeroz for mammals, Mr. Enam Ul Haque for birds, Professor Dr. Md. Farid Ahsan for reptiles, Professor Dr. M. Monirul H. Khan for amphibians, Professor Dr. Mohammad Sahadat Ali for freshwater fishes, Professor Dr. Mostafa Ali Reza Hossain for crustaceans, and Professor Dr. Md. Monwar Hossain for butterflies deserve special thanks. Besides, all other assessors, national and international photographers, contributors and geo-spatial analysts have indebted us with their time, effort and support. We sincerely thank all technical reviewers and editors, as well.

The Red List Project Unit of IUCN Bangladesh Country Office, along with other officials, merit special thanks for their relentless effort to finish this project successfully. Special thanks to Mr. Craig Hilton Taylor and Ms. Caroline Pollock from IUCN Red List Unit, Cambridge, UK and colleagues from IUCN Asia Regional Office for their technical support and guidance.

We humbly acknowledge Vice Chancellors from University of Dhaka, University of Chittagong, Bangladesh Agricultural University, Khulna University and Shahjalal University of Science and Technology for allowing us to use their premises for dissemination workshops. We also extend our gratitude to the officials from Department of Fisheries, Bangladesh Fisheries Research Institute, Bangladesh Forest Research Institute, Bangladesh National Herbarium, national universities, colleges, research institutes and other partners. Participants of all meetings and workshops, advisors, data contributors and personnel from electronic and print media deserve our appreciation for their support.

We hope that the publications entitled 'Red List of Bangladesh' would greatly accelerate conservation, management and policy interventions for the threatened species of Bangladesh.

Ishtiaq Uddin Ahmad
Country Representative
IUCN Bangladesh Country Office

LIST OF ABBREVIATIONS

AOO	Area of Occupancy
BCDP	Bangladesh Cetacean Diversity Project
BFD	Bangladesh Forest Department
CBD	Convention on Biological Diversity
CCF	Chief Conservator of Forests
CHT	Chittagong Hill Tracts
CITES	Convention on International Trade in Endangered Species
CNTE	Chief National Technical Expert
CR	Critically Endangered
DD	Data Deficient
ECR	Environment Conservation Rules
EN	Endangered
EOO	Extent of Occurrence
EW	Extinct in the Wild
EX	Extinct
FA	Forest Act
FD	Forest Department
FV	Foamy Virus
GIS	Geographical Information System
H	High
IUCN	International Union for Conservation of Nature
JWS	Junior Wildlife Scout
km	Kilometer
L	Low
LC	Least Concern
Litt	Literature
M	Medium
m	Meter
MoEF	Ministry of Environment and Forests

NA	Not Applicable
NBSAP	National Biodiversity Strategic and Action Plan
NCS	National Conservation Strategy
NC-USR	National Committee for Updating Species Red List of Bangladesh
NE	Not Evaluated
NEMAP	National Environment Management Action Plan
NFA	National Forest Assessment
NFP	National Forestry Policy
NGOs	Non-governmental Organizations
NHP	Non-human Primate
NT	Near Threatened
PAs	Protected Areas
PDR	People's Democratic Republic
Pers. Comm.	Personal communication
PHVA	Population and Habitat Viability Assessment
Ppt	Parts Per Thousand
PVA	Population Viability Analysis
RAG	Red List Assessor Group
RE	Regionally Extinct
RF	Reserved Forest
RLA	Red List Authority
SFV	Simian Foamy Virus
SID	Species Identification Number
SRCWP	Strengthening Regional Cooperation for Wildlife Protection
SRV-D	Simian Retro Virus-D
SSC	Species Survival Commission
UK	United Kingdom
UNDP	United Nations Development Programme
VH	Very High
VL	Very Low
VU	Vulnerable
WB	The World Bank
WBCO	Wildlife Biodiversity Conservation Officer
WCCU	Wildlife Crime Control Unit of Bangladesh Forest Department
WI	Wildlife Inspector
WRI	World Resources Institute
WS	Wildlife Sanctuary
WWF	World Wildlife Fund
Yrs	Years

TABLE OF CONTENTS

INTRODUCTION

1. INTRODUCTION

From the zoogeographical point of view Bangladesh is at the junction of the Indo-Himalayas and Indo-China subregions, one of the few countries where the species of two biogeographic realms overlap. Because of its geographic location at the eastern end of the Indian subcontinent, Bangladesh is a transitional zone for the flora and fauna of the subcontinent and that of Southeast Asia (Stanford 1991). Because of the variation in temperature, rainfall, soil and hydrological conditions twenty five bioecological zones with distinct characteristics are recognized as major ecosystems in the country (Nishat *et al.* 2002). Because of these diverse habitats, we have unique mammalian assemblage in the country. The country supports roughly 26% of the South Asian mammals and 2.4% of all the mammalian species of the world.

1.1. Mammals

Among the animal kingdom, mammals are the most intelligent group which are most adeptly flourished and widely distributed throughout the world. They have successfully inhabited almost all the habitats of the world, from the Arctic to the Antarctic and have adapted to live on anything from trees to the ocean. Their morphological transformation allows them various methods of locomotion, from flying to swimming. Mammals range in size from the 30–40 mm (Kitti's Hog-nosed Bat) to the 33 meter (Blue Whale). Four unique characteristics are possessed by all mammals viz. the possession of a neocortex (a region of the brain), the possession of mammary glands in females for production of milk with which they nourish their young (in male these are vestigial), bodies covered by hair and having three middle ear bones (malleus, incus and stapes) which work together to transmit vibrations to the eardrum. Other than these, few unique characteristics are only found in most of the mammals but not in all. Most mammals (except Naked Mole Rat) are warm blooded or endothermic like birds. Mammalian skin contains two types of glands viz. sweat glands (Whales, Dolphins and Porpoises have no sweat glands) and sebaceous glands. Sweat glands are useful in excretion while sebaceous glands produce sebum which keeps the skin soft and smooth. Except for the five species of egg-laying mammals (monotremes), all other mammals have a placenta for feeding and growth of the fetus during gestation and give birth to live young. The body cavity is divisible into two parts by a muscular diaphragm, the upper part is thoracic cavity and the lower one is abdominal cavity. All mammals have different combination of four types of dissimilar teeth (incisors, canines, premolars and molars). Each sets of teeth are developed on the sockets of both upper and lower jaw bones.

1.1.1. Adaptation

Mammals have developed distinct anatomical adaptations for fetching, consuming and digesting diverse food. Three categories of dietary adaptations are recognized which are faunivory, frugivory and folivory (Chivers and Hladik 1980). A dramatic variation is found in gastro-intestinal tracts of mammals from those

adapted for processing animal matter mainly in the small intestine, with small stomachs and large intestines, to those dominated by stomach and/or caecum and colon for the processing of plant cell walls by fermentation. This variation is more in contrast between faunivores and folivores with an intermediate morphology shown by frugivores (Chivers and Langer 1994). Modification of limb structure is another anatomical adaptation in mammals to explore arboreal, terrestrial and aquatic habitats. Fore limbs modification is common for brachiation, swimming and flying while hind limbs are modified for walking and upright posture. Some terrestrial mammals have toes that produce claws for climbing or hooves for running. Aquatic mammals like whales and dolphins have flippers which evolved from hind limbs. The number, size, shape and location of teeth vary among mammals depending on the feeding habit. The long canines are found in carnivores that are absent in herbivores. The movement of the jaw differs in mammals according to the type of food they eat. Most of the mammals are diurnal, active throughout the day and sleep at night. However, a considerable number of mammals are nocturnal. Generally nocturnal mammals are referred to those animals that are active at night and sleep at day time. Nocturnal mammals have major adaptation in visual organ (vision). This is an adaptation to reduce the risk of being preyed upon by the diurnal predators and at the same time to avoid the competition between sympatric species for resources. Eye sight of these mammals is specially developed while having highly developed sense organs. Ability to see at night is achieved by certain anatomical differences such as Tapetum lucidum with various modifications in eye structures. Nocturnal mammals have larger eyes with larger pupils opening widely in low light, allowing it to receive more incoming light (Schmitz and Motani 2010, Hall *et al*. 2012). As the pupil is larger in comparison to focal length, nocturnal mammals process blurry images and this is recovered with multifocal lenses and concentric zones of differential focal lengths. The nocturnal mammals have silt pupils producing very blurry images if necessary during the day (Warrant 1999). The retina of the nocturnal mammals contains many more rods compared to cones. Nocturnal mammals such as the mice have thicker, larger and more highly curved lenses that almost touch the retina, which reduces the resolution of the images but gathers more light. The other nocturnal mammals overcome these problems processing multifocal lenses. The nocturnal mammals are unable to move the eyes as they are fixed in the skull socket but they are able to swivel their heads into far left and right for scanning possible predators or prey. Some nocturnal mammals are also active during the day light, such as tigers or lions and this ability is conferred by having enough cones for a secondary image forming system. In this case the rods become saturated with light bleaching rhodopsin and cones are functional for image transduction (Rich and Longcore 2006*)*. Some of them are truly nocturnal (Slow Loris, Bats) while some are 'Metaturnal,' meaning they sleep partly during the day time and partly during the night (Foxes, Rabbits). Metaturnal animals have eyes that can adapt to both low level and bright day levels of illumination. Some of the nocturnal animals are 'Crepuscular' means they are active primarily during twilight i.e. during dawn and dusk (Cats, Civets).

1.1.2. Mammalian Diversity

A total of 5,416 species of mammals are recorded under 1,229 genera, 153 families and 29 orders (Wilson and Reeder 2005). However, 5488 mammalian species are recorded in IUCN Red List assessment in 2008. The orders Rodentia, Chiroptera and Soricomorpha together comprise over 70% of mammal species. One-fourth of the world's mammals can be found on the South American continent (Lord 2007), more than 1100 species of mammals are found in Africa. Australia have 382 species (Menkhorst and Knight 2010) whereas European mammal fauna consists of

270 species among which 78 are endemic to Europe (Lévêque and Mounolou 2003). More than 500 species of mammals are found in Southeast Asia and 472 species are recorded from South Asia (Srinivasulu and Srinivasulu 2012) of which 400 species are found in India (Menon 2014) and 127 species are found in Bangladesh (IUCN Bangladesh 2015).

1.2. Mammals of Bangladesh

At present a total of 127 species of mammals belong to 35 families under 9 orders are found in Bangladesh (Appendix-i). Information on population of different species of mammals is scanty. Most of the studies during the last four decades are focused on the status of mammals of Bangladesh depending on the presence or absence of certain taxa rather than estimating population (Khan 1982, 1987a, 1996, 2015). As a result, population trend enumeration is very difficult for most of the mammalian species in the country. However, from several studies, population data on some of the very known species are available viz Bengal Tiger (Khan 2008), Asian Elephant (Gittins and Akonda 1982, Khan 1987b), Hoolock Gibbon (Gittins and Akonda 1982, Ahsan 1981, 1995, Feeroz 1990, 2001, Feeroz *et al*. 1995), Rhesus Macaque (Gittins and Akonda 1982, Khan 1987a, 1987b, 1990, Feeroz *et al*. 1995, Hasan *et al*. 2014) Capped Langur (Ahsan 1981, Stanford 1992) Common Langur (Ahsan 1981, Gittins and Akonda 1982, Khan 1987b) Spotted Deer (Dey 2007), few species of bats (Hasan *et al.* 2015, Saha *et al.* 2015) and some cetaceans (Alom 2015).

The Bengal Tiger was once found in all forested areas and even in some village groves of the country (Mitra 1957, Khan 1985, 1987a, 1987b, 1996, Khan 2011). Village-grove-dwelling tigers completely disappeared when the last tiger was shot in Banglabandha, Panchagarh, in 1962 (Khan 1987a,b), however, this species is now confined only to the mangrove forest of the Sundarbans. The Sundarbans is known to support one of the largest populations of the Bengal Tiger. Estimates vary, the figures are largely 'guestimates' because naturally secretive tigers are difficult to count in their home forest (Jackson 1993). A guestimate number of tiger was noted between 50 to 100 by Guy Mountfort in 1969. During the last four decades several researchers estimated tigers in the Sundarbans largely on extrapolation of track counts from sample areas. As a result, the number of tigers in the Sundarbans varied from 350 to 600 in these counts viz. 350 (Hendrichs 1975), 430-450 (Gittins and Akonda 1982), 450-600 (Salter 1984), 362 (Jalil 1998), 440 (UNDP in litt. 2004). These numbers seem to be overestimated if we consider tiger prey abundance and density (Feeroz 2004) and their home range (Barlow *et al*. 2009). Based on the camera trap survey, together with the track counts, and in the light of the prey densities, the tiger population was estimated around 200 in 2004 (Khan 2004, 2006, 2011). Recent camera trap surveys showed that 106 tigers are found in the Sundarbans (Forest Department 2015 in litt.).

Spotted Deer is widely distributed in all habitats of the Sundarbans. The estimate of the Spotted Deer ranges between 52600 (Khan 1986) and 80000 (Hendrichs 1975), and 83000 (Dey 2007). The relative abundance of Spotted Deer varies from habitat to habitat, a gradual reduction from west to east (Deodatus and Ahmed 2002) and deer density increases with the habitat ensuring fresh drinking water (Feeroz 2002). Apart from the Sundarbans, several islands in the Bay of Bengal also support large population of Spotted Deer. Forest Department released four pairs of Spotted Deer in Nijhum Dweep National Park in 1978 which increased up to 14000 in 2006. This number decreased to less than 2000 in 2015 (Feeroz and Uddin 2015) because of habitat loss, food crises and newborn preyed upon by the jackals and feral dogs (Feeroz and Uddin 2015). Forest Department also released 5 pairs of Spotted Deer in the Char

Kukri-Mukri Wildlife Sanctuary which now have a viable population. Spotted Deer from both these islands dispersed among the nearby islands and are now found in all islands having mangrove forest between these two islands.

Elephant population in Bangladesh has never been estimated over 500 individuals, including the migratory herds and captive population (IUCN 2004). Most of the elephant population estimates of the country are very crude and mostly depend on "guestimation" rather than estimation. As a result the estimates of the number of wild elephants in Bangladesh vary significantly (Feeroz 2013). Oliver (1978) estimated 250 elephants in Bangladesh are assumed to be visitors from Tripura, Mizoram and Burma. Ranjitsinh (1978) estimated 150 elephants in Bangladesh and assumed the number could be less than this. Khan (1980) projected the number between 201 and 218, among which 30% are thought to be non-resident. Gittins and Akonda (1982) estimated the number between 281 and 348 while Chakraborty estimated between 193 and 224, WWF (Species status report 2000) put the number between 195 and 239. A more systematic study had been conducted by IUCN-BD in 2002 using direct sighting methods and indirect (dung count) methods. Total resident elephant population was estimated between 196 and 227, non-resident elephants between 83 and 100, and 94 captive elephant (IUCN-BD 2004). Elephant population is not more than 250 according to recent elephants census by IUCN (IUCN in litt. IUCN 2015).

Rhesus Macaques are the most common primates found in all forested areas of the country, (176 groups in forested areas; Feeroz 2001, Hasan *et al*. 2014) and also in and around human settlements (37 groups in 16 localities of urban areas, Hasan *et al*. 2014). Gittins (1981) estimated 126,220 individuals of Rhesus Macaque in Bangladesh while Khan and Ahsan (1986) estimated and average of 1063 individuals/km^2 in forested areas of Bangladesh. The population of Common Langur was estimated to be only 100 individuals in Bangladesh by Gittins and Akonda (1982) while Khan and Ahsan (1986) reported 89 individuals in 8 groups in Jessore. Khan (1987), however, considered the total population of this species to be between 250 and 300 individuals. Khatun (2012) reported 246 individuals at six villages of Keshabpur while 204 individuals have been recorded in Keshabpur and Monirampur Upazilas (Anon 2015, unpublished report). Hoolock Gibbons are found in northeast, east and southeast mixed evergreen forests. A total of 3000 individuals were recorded by Gittins and Akonda in 1982, however, the population was only 200 a decade later (Feeroz and Islam 1992). A population of about 300 individuals was estimated in 2006 (Islam *et al*. 2006) with 90% decline in two and half decades.

Chiropterans constitute the largest mammalian community, however, little population data on fruit bats is available (Hasan *et al*. 2015) while data on population of other insectivorous bats is very scanty. Country's largest fruit bat colony (±3000) is recorded in Birampur of Dinazpur district (Hasan *et al*. 2015).

Total population of Indo-Pacific Finless Porpoise is around 1400 individuals (number of calves is unknown) in coastal waters in the Bay of Bengal (Smith *et al*. 2008). In the Sundarbans, 451 individuals of Irrawaddy Dolphin was recorded (Smith *et al*. 2006) while 5,383 individuals were recorded in coastal waters in the Bay of Bengal (Smith *et al*. 2008). About 225 individuals of Ganges River Dolphin (*Platanista gangetica)* in the Sundarbans (Smith *et al.* 2006) and 125 individuals in Karnaphuli-Sangu river system (Smith *et al.* 2001) were estimated, however, the population in other rivers has not been estimated yet. A population of 2,239 individuals of Indo-Pacific Bottlenose Dolphin (*Tursiops aduncus*) has been estimated by Mansur *et al*. 2011 in the northern tip of Swatch of No-ground in the Bay of Bengal. A large group of about 800 individuals of Pantropical Spotted Dolphin

(*Stenella attenuata*) were recorded in the far offshore of the southeast coast (Smith *et al.* 2008) and several other groups (mean group size ±137 individuals, range 20-350, n=8) were recorded in the Swatch of No-ground by BCDP (2008).

1.3. Mammals Habitat in Bangladesh

The geographical position of Bangladesh is unique for the diverse habitat type and mammals are found in all these habitats throughout the country. Depending on the geographic location, climatic condition and floral composition five different habitats are found in the country which are used by the mammalian communities.

1.3.1. Forests

Even a century ago, Bangladesh was a country of rich wetlands and forests, but unfortunately, most of the forests have been degraded and being converted into crop fields and human settlements. The country has 1.45 million hectares of forest land (9.8% of total area), including 1.21 million hectares (84%) natural forest and 0.24 million hectares (16%) plantations (NFA 2007). Currently, natural forests cover only 5.9% of the country's area, representing the second lowest per capita (< 0.02 ha per person) of land by any country designated for conservation (Sharma *et al.* 2005, WRI 2009). Based on the vegetation characteristics three types of natural forests are found in Bangladesh viz. mixed evergreen forest, deciduous forest and mangrove forest.

Mixed evergreen forest

Mixed evergreen forests are found in the northeast and southeast regions of Bangladesh. Most of the forests in the northeast (191 km^2 natural forest in Sylhet region) and southeast (2,130 km^2 natural forest in Chittagong and Chittagong Hill Tracts) are mixed evergreen (Feeroz *et al.* 2011). Though the mixed evergreen forests are dominated by evergreen plants but also have deciduous plants. Major plant species are *Dipterocarpus* spp.(Garjan), *Artocarpus chaplasha* (Chapalish), *Swintonia floribunda* (Civit), *Ficus* spp. (Dumur), *Bombax* spp. (Shimul), *Dillenia pentagyna* (Hargoza/Azuli), *Syzygium* spp. (Jam), *Mangifera longipes* (Ury-aam), *Tectona grandis* (Segun), etc. (Feeroz *et al.* 2012, Khan 1982, 1987, 1996, 2008, 2015). Mixed evergreen forests provide fruits throughout the year, supporting a large mammalian communities

Mixed Evergreen Forest of Bangladesh

Evergreen Forest of Bangladesh © Subinoy Khisa

of frugivorous, folivorous and seed eaters or granivorous. Dense undergrowth of this forest also supports herbivorous, carnivorous and burrowing mammals. Principle mammalian fauna of mixed evergreen forests in Chittagong Hill Tracts of southeast region are Asian Elephant, Leopard, Asiatic Black Bear, Malayan Sun Bear, Barking Deer, Hog Deer, Hoolock Gibbon, Serow, Bengal Slow Loris, Phayre's Leaf Monkey, Capped Langur, Wild Boar, Indian Crested Porcupine, Chinese Pangolin, Blyth's Horseshoe Bat, Crab-eating Mongoose.

Among the mixed evergreen forests in the southeast, several sites are very important for the mammalian community of the country. Megafauna like resident elephants are only found in this area. Four National Park and seven Wildlife Sanctuary in the southeast support more than 80% of our mammalian species. Sajek Valley (about 400 km^2) is the largest continuous mixed evergreen forest patch in the southeast with lush vegetation. Some of the very rare and Critically Endangered mammal species are still recorded from this site viz. Stump-tailed Macaque, Hog Deer, Sambar. Shangu-Matamuhuri is the second largest forest patch supporting the last remaining Leopard population of the country. Teknaf Peninsula includes Teknaf Wildlife Sanctuary (11,615 ha), Himchari National Park (1,729 ha) and Inani Protected Area (7,700 ha) in the southern tip of the country and is one of the best areas for mammals. Hilly rough terrain with dense undergrowth and fragmented evergreen forests of this area supports 43 species of mammals of the country (Feeroz 2014). One of the subpopulations of elephants is found in this area. Kaptai National Park and Dudhpukuria-Dhopachari Wildlife Sanctuary in the middle of the southeastern mixed evergreen forests of the country still have a good habitat for the mammalian community.

Rajkandhi-Tarap hills and their adjacent areas in the northeast region of Bangladesh also have mixed evergreen forests which support large mammalian community. The forest in this region is more fragmented and isolated, however, nearly 70% mammalian species are found in this region. Principle mammalian fauna of mixed evergreen forests of northeast region are Asiatic Black Bear, Barking Deer, Hoolock Gibbon, Pig-tailed Macaque, Bengal Slow

Loris, Phayre's Leaf Monkey, Capped Langur, Rhesus Macaque, Wild Boar, Indian Crested Porcupine, Masked Palm Civet, Large Indian Civet, Particoloured Flying Squirrel, Black Giant Squirrel and Intermediate Horseshoe Bat.

Several sites are very important in northeast region for the mammals. Lawachara National Park in West Bhanugach Forest Reserve, Rema-Kalenga Wildlife Sanctuary, Satchari National Park, Adompur forest beat areas and hilly areas of Borolekha and Juri areas still support major mammalian species of the country. Seven out of 10 primate taxa are found in this mixed evergreen forests.

Lawachara forest © Md. Rashedul Kabir

Deciduous forest

The deciduous forests are distributed in the central, northern and northwestern parts of the country. These are generally known as Sal or Shal forests. The Madhupur Tract (in the central part of the country) is the largest single mass of moist deciduous Sal forest in Bangladesh, with an area of 340 km^2 (NFA 2007). Dominant plants of this forest are *Shorea robusta* (Sal), *Dillenia pentagyna* (Bana Lota), *Lagerstroemia speciosa* (Jarul), *Adina cordifolia* (Jarul), *Albiziz spp.* (Siris), *Terminalia spp.* (Arjuna), *Spatholobus roxburghii* (Nasbel) and *Entada pursaetha* (Gilagach) (Feeroz 2014, Khan 1982, 1987, 1996, 2015). There are several other small patches of deciduous forests in the northwestern region of the country. The most dominant mammalian species of such forest are Capped Langur, Rhesus Macaque, Barking Deer, Jackal, Hoary-bellied Squirrel, Jungle

Shal forest © IUCN/ Md. Ahsanul Islam

Cat, civets, mongooses, bats and so on. Most of these do not occur in man-made Sal forests in the Revenue Divisions of Rangpur and Rajshahi, the north region of the country.

Mangrove forest

The largest continuous mangrove forest of the world is the Sundarbans, which itself covers an area of 0.6 million hectares. Apart from this, there are about 0.11 million hectares of planted mangrove forest along the coast of the Bay of Bengal. Generally this forest includes fairly dense evergreen plant species of about 10-15 m height, which are adapted for life under saline conditions and frequent inundation by the tides. So the trees have succulent leaves, stilt roots, pneumataphores and seeds germinate while still on the parent plant. Common plant species are *Heritiera fomes* (Sundari), *Exocaria agallocha* (Gewa), *Sonneratia apetala* (Keora) *Sonneratia caseolaris* (Choila), *Avicennia* spp. (Baen), *Nypa fruticans* (Golpata), *Phoenix paludosa* (Hental), *Acanthus ilicifolius* (Hargoza), *Typha* spp. (Hogla) (Khan 1982, 1987, 1996, 2015). The Sundarbans is the home of the Bengal Tiger along with many other mammalian fauna of the country. However, other planted mangrove forests along the coast become very important for the mammalian community of the country. Several char land (coastal island) along the coast with mangrove vegetation, Char Kukri-Mukri Wildlife Sanctuary, Nijhum Dweep National Park, Sonar Char Wildlife

Mangrove Forest © M M Feeroz

Sanctuary, Char Montaz, Dhaler Char support many important mammals of the country. Leopard Cat, Spotted Deer, Wild Boar, Oriental Small-clawed Otter, Smooth-coated Otter are found in these mangrove forests.

1.3.2. Inland Wetlands

Wetlands of Bangladesh also support a large number of aquatic mammals of the country. Nearly 50% (eight million hectares) of the total land surface of the country are considered as wetland, which includes rivers, natural lakes, freshwater marshes, baors (oxbow lakes), beels (floodplain depressions), ponds, one large water reservoir (Kaptai Lake), and extensive seasonally inundated floodplains (Feeroz 2014, Khan 1982, 1987, 1996, 2015). Wetlands of the country are significant for Gangetic River Dolphin, 3 species of otters, small cats and other small mammals. Ganges River Dolphin (*Platanista gangetica)* has already disappeared from most of the tributaries of Ganges-Brahmaputra-Meghna river systems due to siltation, insufficient water flow. It is now restricted to a very few larger channels (Alom 2015).

Kaptai lake, Rangamati © Subinoy Khisa

1.3.3. Bushy, Grassy and Bamboo-covered Areas

The hilly areas of the Chittagong and Chittagong Hill Tracts and hills in the northeast have vast areas covered by dwarf vegetation. The total of such areas is about 5% (0.80 million hectares) of the country's total area. These areas are good habitats for small mammals like 3 species of mongooses, several species of rats, civets, small cats, Wild Boar, Hog Badger etc. (Khan 2008, Feeroz *et al*. 2011, 2012, 2014).

Bamboo-covered Areas © M M Feeroz

1.3.4. Homestead Vegetation

Historically the villagers of our country grow fruit yielding plants around their homes and hence, flourishing vegetation in the backyards of village homes often create perfect habitat for the small mammals. The common vegetation of the village include *Mangifera indica* (Mango), *Artocarpus heterophylus* (Jackfruit), *Syzygium* spp. (Jam), *Litchi chinensis* (Litchu), *Zizyphus mauritiana* (Plum), *Dyospyros peregrine* (Persimmon), *Tamarindus indica* (Tamarind), *Bombax ceiba* (Silk Cotton), different species of bamboo, *Phoenix sylvestris* (Date Palm), *Ficus* spp. (Figs), *Cocos nucifera* (Coconut) (Khan 1982, 1987, 1996, 2015). These plants are often used by the fruit bats and squirrels. Homestead vegetation and surrounding crop fields are good habitats for many small mammalian species including small cats, civets, mongooses, rats and other small mammals.

Homestead Vegetation © Anik Saha

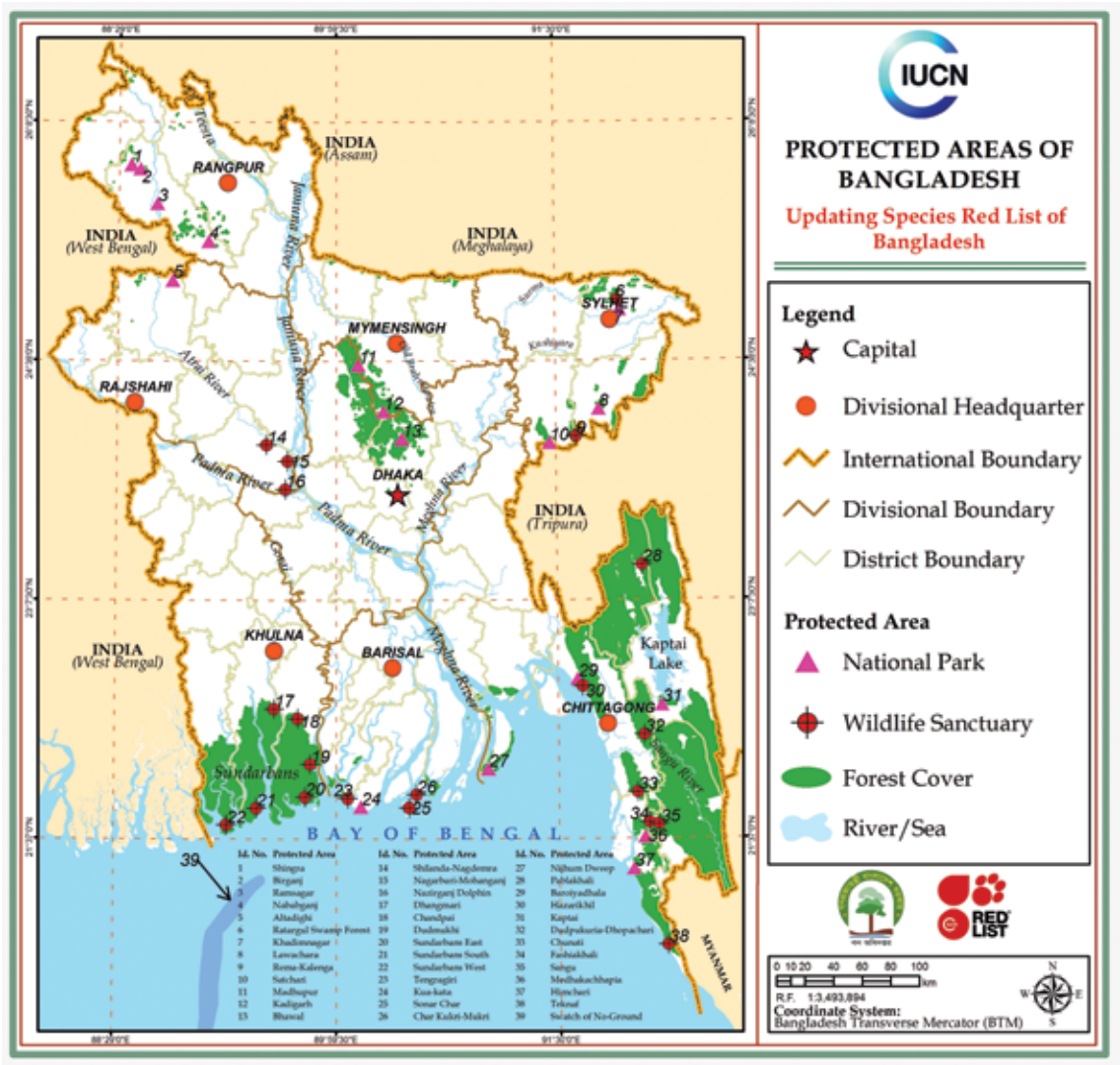
1.3.5. Marine

Estuarine areas, coasts and the Bay of Bengal provide habitats for 10 species of marine cetaceans. Indo-Pacific Finless Porpoise found in brackish water in the Sundarbans mangrove swamps, coastal and marine waters of the Bay of Bengal. Spinner Dolphin is seen only in the northern tip of Swatch of No-ground as reported by BCDP (2008). Indo-Pacific Humpback Dolphin (*Sousa chinensis*) was reported in a relatively high salinity channel of the southwest portion of the Sundarbans mangrove forest near shore water of the Bay of Bengal (Smith *et al*. 2006, 2008). Indo-Pacific Bottlenose Dolphin (*Tursiops aduncus*) was recorded in the northern tip of Swatch of No-ground in the Bay of Bengal (Mansur *et al*. 2011) and Pantropical Spotted Dolphin (*Stenella attenuata*) was also recorded in the Swatch of No-ground (BCDP 2008).

Swamp Forest © M M Feeroz

1.4. Mammals in Protected Areas of Bangladesh

Among the 38 Protected Areas of the country, 4 support only cetaceans while the rest of these Protected Areas support 11 to 50 mammalian species (Feeroz *et al*. 2011, 2012, 2013, 2014, Feeroz and Uddin 2015). Highest mammalian species numbers were recorded in Dudhpukuria-Dhopachari Wildlife Sanctuary and lowest in Khadimnagar National Park. Some of the mammalian species viz. Malayan Giant Squirrel, Barking Deer, Pig-tailed Macaque, Hoolock Gibbon, Crab-eating Mongoose and Yellow Throated Marten are only found in Protected Areas of the country. Some of the species viz. Bengal Tiger, Asian Elephant, Capped Langur and several species of small cats mostly spend their time inside Protected Areas but also forage nearby habitats. Recently 1,73,800 hectares area of the Swatch of No-ground, a submarine canyon in the Bay of Bengal



Protected Areas of Bangladesh

known as a hotspot for cetaceans, has been declared as the first "Marine Protected Area" of Bangladesh. This area has been considered as a spawning and breeding ground of many endangered oceanic species of the Bay of Bengal and Indian Ocean. Spinner Dolphin (*Stenella longirostris),* Indo-Pacific Humpback Dolphin (*Sousa chinensis*), Indo-Pacific Bottlenose Dolphin (*Tursiops aduncus*) and Pantropical Spotted Dolphin (*Stenella attenuata*) were recorded in the Swatch of No-ground (Smith *et al*. 2006, 2008, Mansur *et al*. 2011, BCDP 2008).

1.5. Why Red List and Updating the Mammals in Bangladesh

The IUCN Red List is a comprehensive information source for extinction risk of species. In practice, it provides information and analyses on the status, trends and threats to species in order to inform and catalyse actions for biodiversity conservation. Although the IUCN Red List is not a legal document, it is widely respected and considered as a guiding document for policy advocacy and awareness raising aimed at facilitating the conservation of risk species. Red List is built upon current knowledge on population trends, ranges, and recent, current or projected threats.

Red List of fauna is used for:

- Conservation planning and priority setting
- Guiding policy formulation for conservation and management
- Influencing future allocation for conservation
- Education and public awareness about biodiversity conservation

In 2000, the IUCN Bangladesh Country Office published the first Red Book in Bangladesh, where a total of 908 species were assessed and a total of 201 species including fishes, amphibians, reptiles, birds and mammals were considered threatened according to Bangladesh National Criteria. The IUCN Red Books in Bangladesh are widely consulted by the government, non-government agencies and professionals of the country and in many ways it guided conservation policies and initiatives of the country.

More than a decade have passed since the Red List Assessment has been done for Bangladesh. In September, 2003, the Assessment Criteria has been changed globally and as a result most countries are re-assessing or updating their list based on the new assessment process. There is also concern for the inclusion of other fauna groups, including crustaceans and butteflies for assessment as these fauna groups are also affected by anthropogenic activities and other natural calamities.

The previous Red List is outdated as several new species are identified in recent times and also the status of certain species has been changed. Current initiatives through this project will update Red List for seven groups of wildlife (Mammals, Reptiles, Amphibians, Birds, Freshwater Fishes, Crustaceans and Butterflies) approximately 1619 species in all. So, there was an urgent need for Bangladesh to re-assess the status of the species.

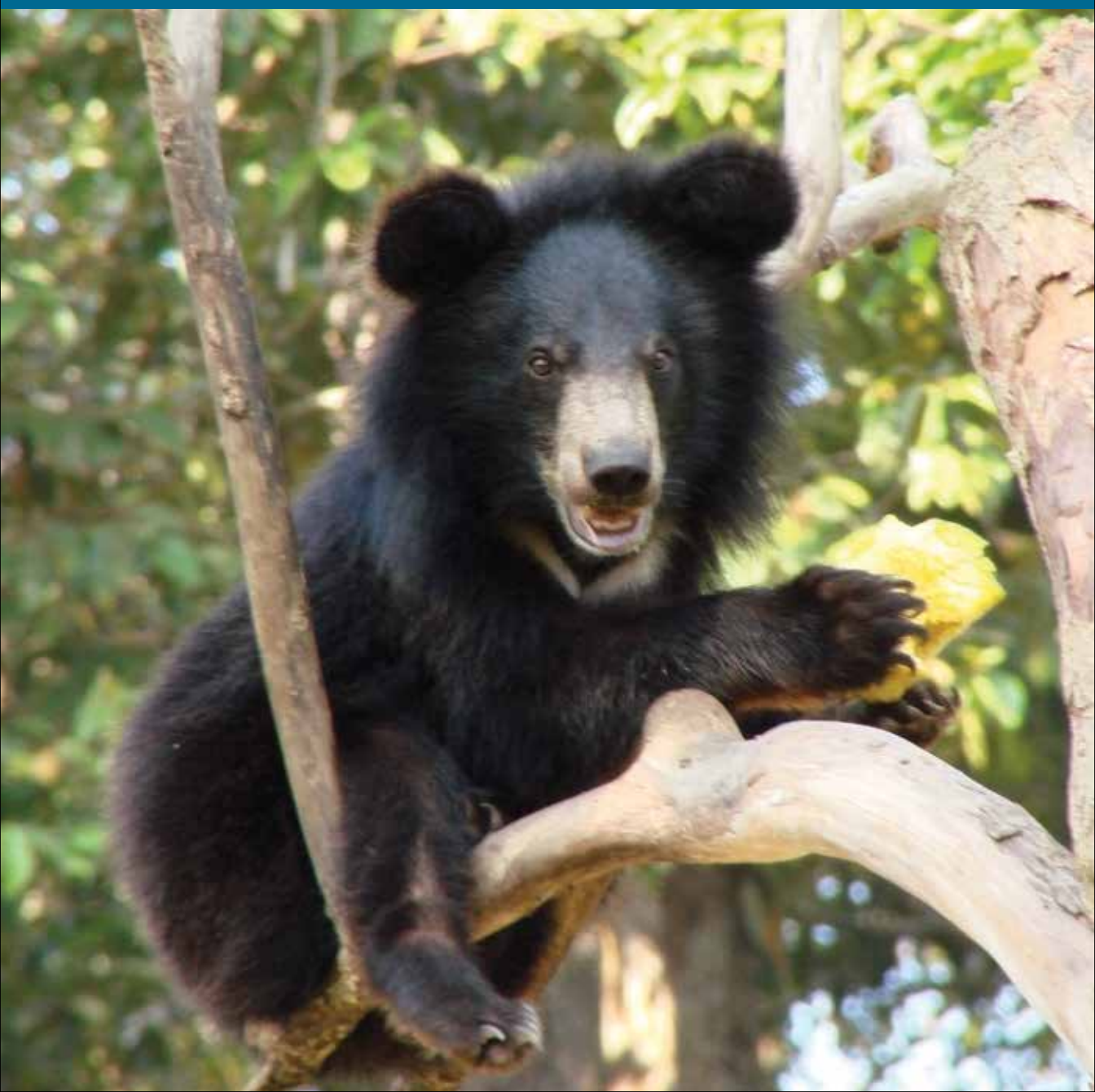
In 2013, IUCN Bangladesh Country Office took the initiative for updating/ reassessing Red List under sub-project 'Updating Species Red List of Bangladesh (Project No – SRCWP/29-7/2013/779)' under the SRCWP of the Forest Department with financial support from The World Bank.

The number of mammal species in Bangladesh was recorded to be between 120 to 135 species (Khan 1981, 2015, IUCN 2000, Khan 2008), but these do not include extinct taxon. The checklist (Khan 1982) was mainly followed for Red List evaluation process in 2000. Previously enlisted all mammalian species are re-evaluated during the Red List process in 2015 and the species which have no confirmed record (at least having confirmed sight or photograph/video/specimen etc.) are deleted from the list. Several species were included in the previous mammalian list assuming that those species were found in neighboring countries and hence, might be found in Bangladesh. However, all species that are recorded after 2000 IUCN Red List (at least having confirmed sight or photograph/video/ specimen, etc.) are included in the present evaluation. As a result, 8 species of mammals are deleted from the previous list and 21 species are included in the present mammalian species of the country. In general we followed Wilson and Reeder (2005) for mammalian taxonomy and classification for the present Red List evaluation. However, we considered the order Cetartiodactyla which previously comprised of two orders of mammals that are superficially quite different. These orders are respectively Artiodactyla, even-toed ungulates, including animals such as Gaur (Bovidae), Wild Boar (Suidae) and deer (Cervidae); and Cetacea, a group of mammals that are highly specialized for an aquatic lifestyle, including whales and dolphins. Recent molecular evidence suggests that Cetacea evolved from Artiodactyl ancestors, making Artiodactyla non-monophyletic unless Cetacea is included. Experts suggest the monophyletic clades representing Artiodactyls and Cetaceans be called Cetartiodactyla (Boisserie *et al.* 2005, Gatesy *et al.* 1996, 1999, Gatesy 1997, Graur and Higgins 1994, Milinkovitch and Thewissan 1997, Montgelard *et al*. 1997, Naylor and Adams 2001, O'Leary and Geisler 1999, Shimamura *et al*. 1997, Thewissen *et al*. 2001).

Panthera pardus

© M M Feeroz

UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY

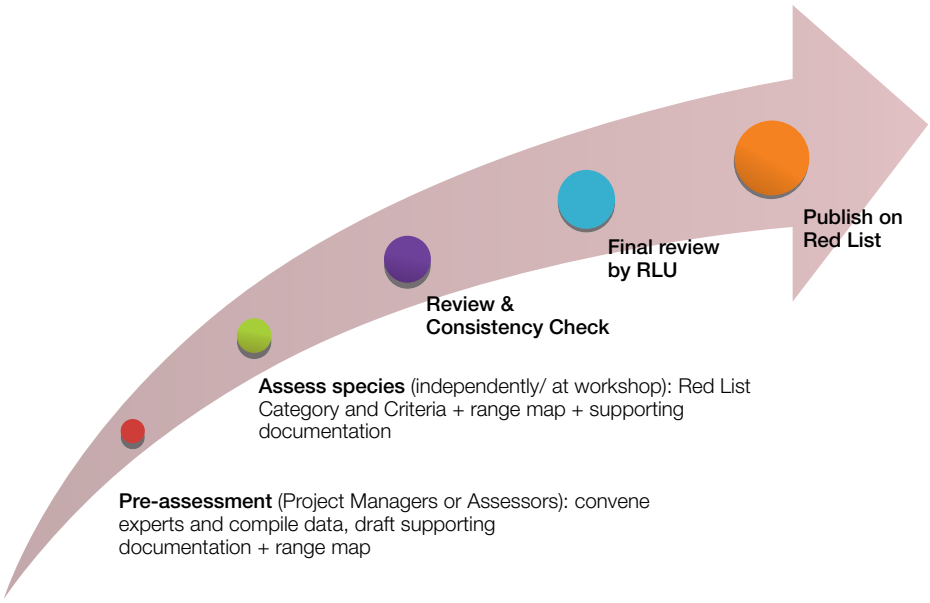


2. UPDATING SPECIES RED LIST OF BANGLADESH: ASSESSMENT METHODOLOGY

The IUCN Red List of Threatened Species™ is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species and their links to livelihoods. Particularly, its scientifically rigorous approach to determine risks of extinction has become a world standard. Looking back at 50 years since its implementation in 1964, the IUCN Red List of Threatened Species™ has been successfully established as a powerful conservation tool and has achieved its goal of providing information and analyses on the status, trends and threats to species. The assessment process of 'Updating Species Red List of Bangladesh' took more than two and a half years. During the process, members of the IUCN Global Species Programme, Red List Unit based in Cambridge-UK, the IUCN Species Survival Commission, technical team members of the Red List unit of IUCN Bangladesh, Bangladesh Forest Department officials, officials from the Department of Fisheries, faculties of the universities, scientists of the research institutes, as well as conservationists, species specialists, nature lovers, and partner organizations and other governmental agencies worked closely to ensure most accurate information and analysis of the most current status, trends and threats to wildlife species in Bangladesh. For this purpose, an inter-ministerial committee named 'National Committee for Updating Species Red List of Bangladesh (NC-USR)' was formed to ensure highest level collaboration among involved organizations, and sustainability of the outcome of the assessment at the policy level. Seven Red List Assessor Groups (RAGs) at project level led by renown species specialists have been formed to coordinate the assessment process engaging species specialists/assessors. In this course of assessment of the species strategies adapted to reduce knowledge gaps, influence national conservation, and build national capacity. A total of 1619 species status under seven groups of wildlife (Mammals, Reptiles, Amphibians, Birds, Freshwater Fishes, Crustaceans and Butterflies) have been assessed. Moreover, 160 assessors were trained on the latest Red List assessment guideline (ver 3.1) engaging certified red list trainers from IUCN Red List Unit, Cambridge, UK. A vigorous work process was applied to finish the assessment within the given timeframe ensuring highest quality, using latest species information and sharing through wider dissemination among expert groups. An interactive website (www.iucnredlistbd.org) was also published to ensure participation of all stakeholders in the assessment process as well as collecting public opinion on the draft assessment. Assessment was started in July, 2014 and stopped in November, 2015, while the project duration was from December, 2013 to June, 2016.

2.1. Red List Assessment: from Field to Publication

Categorization of Red List and criteria set up following latest Red List guideline, managing and storing the documents supporting the category and criteria of a species, and a map of species' distribution are the components of the Red List assessment. Before an assessment can be published on the Red List, it goes through a rigorous approval process (Figure in next page), which is one of the reasons that Red List is respected and valued for informing conservation decisions. This process differed slightly depending on the assessors expertise



Red List assessment process

but the basic process involved was:
First, an individual assessor was assigned to assess one species or multiple species based on his/her expertise. The convening experts assessed and compiled the data for all the species that were assigned through the project. This information often comes from published books, articles, reports and research findings but information from the grey literatures (unpublished material) and scientists' years of experience and observations were also used. Experts then examined the data and assigned a Red List category, and criteria for the species (often working with trained project staff). They also demarcated a range map and provided supporting documentations that justify the assessment. These draft assessments were then reviewed in three steps to check and make sure that all relevant data have included in the assessment, and the assessment was done using the most appropriate available data. Lead assessors of the respective animal groups were the first reviewers to provide comments and suggestions on the initial assessment by the assessors. The assessors then had to share their findings in a monthly review workshop participated by different wildlife specialists incorporating lead assessors comments. If there were any problems, it was returned to the assessors with an explanation of further imporvement. After the further improvement, if everything was in place, the reviewers approve the assessment and let the assessor know it was ready for submission. The assessor then checked all the assessments for consistency, proofreading and formatting before submitting to the IUCN Red List Project Unit. The Red List Project Unit scanned the assessments for obvious errors and quality was checked through engaging independent technical reviewers. If there were problems, the assessment further returned to the assessor for improvement. Lead assessors worked with the technical reviewers following a multi-step review process before sending the assessments for final approval by the Chief National Technical Expert (CNTE). Lead assessors meeting was held at regular interval to monitor progress of the assessment. The project also organized field investigations using sophisticated wildlife survey techniques and tools to collect missing data and information that required to make conclusive assessment of some important species. In addition, surveys were carried out in different museums owned by academic and research institutions of the country to know more about the historic information of different species. Besides, to enhance exposure of the

draft assessment, number of dissemination events were organized in collaboration of different organizations throughout the project period in all over the country. Finally, if the assessments were accepted by CNTE, they were properly documented. All the assessment sheets including species photographs, distribution maps and others necessary documents were also recorded in a computer based database- finally published on the Red List website (www.iucnredlistbd.org) and Red List books containing seven volumes.

2.2. Red List Assessment Tools

All the assessors were trained on latest assessment guideline and its application at the local level context. Two major tools applied during the assessment process were respectively 'IUCN Red List Categories and Criteria Version 3.1 (IUCN 2012)' and 'Guidelines for Application of IUCN Red List Criteria at Regional and National Levels Version 4.0 (IUCN 2012)' prepared by IUCN Species Survival Commission (SSC). Both of these tools are available online (www.iucnredlist.org and www.iucnredlistbd.org).

A species assessment sheet designed purposefully by the IUCN Red List Unit was used for assessing an individual taxon. A sample copy of the Assessment Sheet is provided in Appendix-ii.

A wide range of information were required for the assessment of species. These included, among others, species taxonomic classification and synonyms, assessment history- global and regional, global and local distribution ranges, population size and trend, Extent of Occurrence (EOO), Area of Occupancy (AOO), habitat preferences and habits, major threats and conservation measures in practice, etc.

GIS software was used to estimate AOO and EOO to assess the distribution of the taxon plotting on a 2 km^2 grid map of Bangladesh. The geographic range of present assessment included all the areas within the political boundary of Bangladesh, including coastal territorial waters. It included rivers, flat lands areas, reservoirs, hilly areas, mangrove areas and the estuaries. However, the assessment process sometimes considered the distributional ranges of some species in its catchment areas beyond political boundary, particularly estimating EOO, in that case, a dot line was used on the map for that particular species.

All species have given a Species Identification Number i.e. SID for the first time in Bangladesh, which will ensure a systematic national web-based Red List database that was synchronized with the published books. Species photographs and distribution maps were also aligned with this SID. Moreover, the assessment process also generated a large number of data sheets containing relevant and required information at various stages of the assessment.

Participants of the 5th training workshop on the Red List Assessment Process

In addition, large quantity of resource materials related to training, workshops, published and grey literatures on species were collected. All these information and materials have been electronically preserved in a purposefully designed database system in the IUCN Bangladesh Country Office to be managed in the future by the IUCN itself or the Bangladesh Forest Department. This would be used as a depository of resources and could be inspected and used by stakeholders.

Red List guideline has a number of technical terms used in different section of this document to represent assessment categories and criteria of a taxon, which are described in an Appendix-iii.

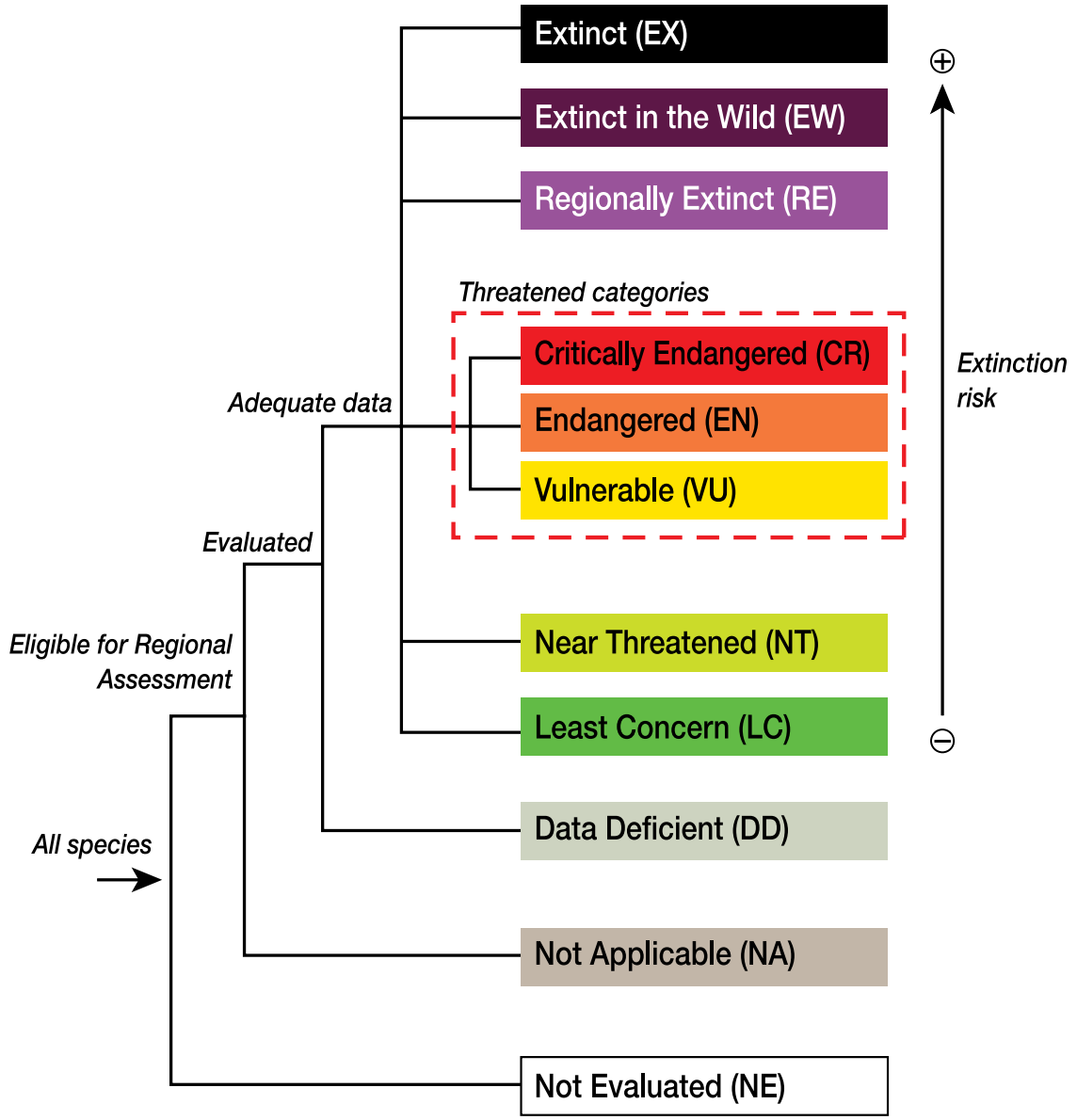
2.3. Red List Assessment Guideline (version 3.1)[1]

2.3.1. Taxonomic Range of the Assessment
Regional Red List assessment initiatives are always encouraged to follow the same taxonomic checklists as used by the global IUCN Red List (See www.iucnredlist.org/technical-documents/information-source-and-quality). For other taxonomic groups or any deviations from the recommended list, the differences and the taxonomic authorities followed should be specified. The categorization process should be applied only to wild populations inside their natural range and to populations resulting from benign introductions (IUCN 1998, 2001, 2012). All taxa should be assessed for which an important part of any stage of their life cycle (breeding, wintering, migrating, etc.) takes place in the region. The regional Red List should include all globally red listed taxa present within the region, including those that are Not Applicable (NA) at the regional level, and the global category should not be displayed alongside the regional assessment. Taxa formerly considered Regionally Extinct (RE) that naturally re-colonize the region may be assessed after the first year of reproduction. Re-introduced, formerly RE taxa may be assessed as soon as at least a part of the population successfully reproduces without direct support and the offspring are shown to be viable. Assessors are encouraged to assess visiting taxa. Vagrant taxa should NOT be assessed.

All mammalian species those are listed elsewhere (Khan 1981, 2008, 2015, IUCN Bangladesh 2000) are re-assessed during the Red List process in 2015 and the species which have no confirmed record (at least having confirmed sight or photograph/video/specimen etc.) are deleted from the list. Some species of mammals are deleted from the previous list and several species are included in the present mammalian species of the country. In general we followed Wilson and Reeder (2005) for mammalian taxonomy and classification for the present Red List evaluation.

2.3.2. Categories
The information in this section is intended to direct and facilitate the use and interpretation of the categories, criteria and subcriteria. The criteria applied to any taxonomic unit at or below species level. In this document, the term 'taxon' is used for convenience, and may represent species or lower taxonomic levels. The Red List Categories considered were as set out in IUCN Red List Categories and Criteria Version 3.1. There are nine categories at global scale, ranging from Least Concern (LC) for species that are not threatened, to the Extinct (EX) Category, for species that have disappeared from the earth. The IUCN Red List Categories and Criteria were designed for global taxon assessments. Hence, applying them to subsets of global data, especially at regional, national or local levels needs to refer to the guidelines prepared by the IUCN/SSC Regional Applications Working Group and the National Red List Working Group of the IUCN SSC Red List Committee (e.g. Gardenfors *et. al.* 2001; IUCN 2003, 2012). All the rules and definitions in the IUCN Red List Categories and Criteria: Version 3.1 (IUCN 2001, 2012) apply at regional levels, unless otherwise indicated in the above regional guideline.

[1] This is a shorter form of general guideline summarizing most common rules appropriate for Bangladesh, adapted from 'IUCN Red List categories and criteria version 3.1 (IUCN 2012)' and 'Guidelines for application of IUCN Red List criteria at regional and national levels version 4.0 (IUCN 2012)'. It is purposely written in present form of sentences so that it can be reutilized as a guiding principle for any future Red List Assessment in Bangladesh.



Red List Categories (Regional/National Level) (IUCN 2012)

When applied at national or regional levels it must be recognized that a global category may not be the same as a national or regional category for a particular taxon. For example, taxa classified as Least Concern globally might be Critically Endangered within a particular region where numbers are very small or declining, perhaps only because they are at the margins of their global range. Conversely, taxa classified as Vulnerable on the basis of their global declines in numbers or range might be Least Concern within a particular region where their population are stable. Similar results were found in the cases of current assessment, many species assessment results differed from their category assessed at the global level.

It is also important to note that taxa endemic to regions or nations will be assessed globally in any regional or national applications of the criteria, and in these cases great care must be taken to check that an assessment has not already been undertaken by a Red List Authority (RLA), and that the categorization is agreed with relevant RLA. In Bangladesh, during this assessment process, no such endemic species were assessed that needed to be considered for above steps. However, following the regional assessment guideline two more categories were applied (IUCN, 2012), Regionally Extinct (RE) for those species extinct locally but still exist elsewhere and Not Applicable (NA) for species those are not native to the region or country concerned. All taxa listed as Critically Endangered qualify for Vulnerable and Endangered, and all listed as Endangered qualify for Vulnerable. Together these categories are described as 'threatened'. The threatened categories form a part of the overall scheme. All the taxa were placed into one of the categories listed in the Figure of previous page.

Explanation of the above categories is given below:

EXTINCT (EX)
A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

EXTINCT IN THE WILD (EW)
A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

REGIONALLY EXTINCT (RE)
Category for a taxon when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD.

CRITICALLY ENDANGERED (CR)
A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

ENDANGERED (EN)
A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.

VULNERABLE (VU)
A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.

NEAR THREATENED (NT)
A taxon is Near Threatened when it has been evaluated against the criteria but does not

qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

NOT APPLICABLE (NA)

Category for a taxon deemed to be ineligible for assessment at a regional level. A taxon may be NA because it is not a wild population or not within its natural range in the region, or because it is a vagrant to the region. It may also be NA because it occurs at very low numbers in the region (i.e. when the regional Red List authority has decided to use a "filter" to exclude taxa before the assessment procedure) or the taxon may be classified at a lower taxonomic level (e.g. below the level of species or subspecies) than considered eligible by the regional Red List authority. In contrast to other Red List Categories, it is not mandatory to use NA for all taxa to which it applies; but is recommended for taxa where its use is informative.

2.3.3. Criteria for Critically Endangered, Endangered and Vulnerable

The Red List Assessment is based primarily on five broad Criteria as follows:

- **Criteria A:** Population reduction (measured in percent reduction of population) for different threatened categories. This criterion has four sub-criteria which further take into accounts four factors.
- **Criteria B:** Geographic range in the form of either B1 (Extent of Occurrences-EOO) and B2 (Area of Occupancy-AOO)
- **Criteria C**: Applicable for small population size and decline
- **Criteria D**: Applicable for very small or restricted population (used in terms of number of mature individuals)
- **Criteria E:** Relates to Qualitative Analysis

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing an extremely high risk of extinction in the wild:

A. Reduction in population size based on any of the following:
   1. An observed, estimated, inferred or suspected population size reduction of ≥90% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
      (a) direct observation
      (b) an index of abundance appropriate to the taxon
      (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
      (d) actual or potential levels of exploitation

(e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

2. An observed, estimated, inferred or suspected population size reduction of ≥80% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
3. A population size reduction of ≥80%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
4. An observed, estimated, inferred, projected or suspected population size reduction of ≥80% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, and where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:

1. Extent of occurrence estimated to be less than 100 km^2, and estimates indicating at least two of a-c:
   (a) Severely fragmented or known to exist at only a single location.
   (b) Continuing decline, observed, inferred or projected, in any of the following:
      i) extent of occurrence
      ii) area of occupancy
      iii) area, extent and/or quality of habitat
      iv) number of locations or subpopulations
      v) number of mature individuals.
   (c) Extreme fluctuations in any of the following:
      i) extent of occurrence
      ii) area of occupancy
      iii) number of locations or subpopulations
      iv) number of mature individuals.
2. Area of occupancy estimated to be less than 10 km^2, and estimate indicating at least two of a-c:
   (a) Severely fragmented or known to exist at only a single location.
   (b) Continuing decline, observed, inferred or projected, in any of the following:
      i) extent of occurrence
      ii) area of occupancy
      iii) area, extent and/or quality of habitat
      iv) number of locations or subpopulations
      v) number of mature individuals.
   (c) Extreme fluctuations in any of the following:
      i) extent of occurrence
      ii) area of occupancy
      iii) number of locations or subpopulations
      iv) number of mature individuals.

C. Population size estimated to number fewer than 250 mature individuals and either:

1. An estimated continuing decline of at least 25% within three years or one generation, whichever is longer, (up to a maximum of 100 years in the future) OR
2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
   (a) Population structure in the form of one of the following:
      i) no subpopulation estimated to contain more than 50 mature individuals,
      OR
      ii) at least 90% of mature individuals in one subpopulation.

(b) Extreme fluctuations in number of mature individuals.

D. Population size estimated to number fewer than 50 mature individuals.

E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years).

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a very high risk of extinction in the wild:

A. Reduction in population size based on any of the following:
   1. An observed, estimated, inferred or suspected population size reduction of ≥70% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
      (a) direct observation
      (b) an index of abundance appropriate to the taxon
      (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
      (d) actual or potential levels of exploitation
      (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
   2. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.
   3. A population size reduction of ≥50%, projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
   4. An observed, estimated, inferred, projected or suspected population size reduction of ≥50% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
   1. Extent of occurrence estimated to be less than 5,000 km^2, and estimates indicating at least two of a-c:
      (a) Severely fragmented or known to exist at no more than five locations.
      (b) Continuing decline, observed, inferred or projected, in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) area, extent and/or quality of habitat
         iv) number of locations or subpopulations
         v) number of mature individuals.
      (c) Extreme fluctuations in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) number of locations or subpopulations
         iv) number of mature individuals.
   2. Area of occupancy estimated to be less than 500 km^2, and estimates indicating at least two of a-c:
      (a) Severely fragmented or known to exist at no more than five locations.

(b) Continuing decline, observed, inferred or projected, in any of the following:
   i) extent of occurrence
   ii) area of occupancy
   iii) area, extent and/or quality of habitat
   iv) number of locations or subpopulations
   v) number of mature individuals.
(c) Extreme fluctuations in any of the following:
   i) extent of occurrence
   ii) area of occupancy
   iii) number of locations or subpopulations
   iv) number of mature individuals.

C. Population size estimated to number fewer than 2,500 mature individuals and either:
   1. An estimated continuing decline of at least 20% within five years or two generations, whichever is longer, (up to a maximum of 100 years in the future) OR
   2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
      (a) Population structure in the form of one of the following:
         i) no subpopulation estimated to contain more than 250 mature individuals,
         OR
         ii) at least 95% of mature individuals in one subpopulation.
      (b) Extreme fluctuations in number of mature individuals.

D. Population size estimated to number fewer than 250 mature individuals.

E. Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or five generations, whichever is the longer (up to a maximum of 100 years).

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the following criteria (A to E), and it is therefore considered to be facing a high risk of extinction in the wild:

A. Reduction in population size based on any of the following:
   1. An observed, estimated, inferred or suspected population size reduction of ≥50% over the last 10 years or three generations, whichever is the longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any of the following:
      (a) direct observation
      (b) an index of abundance appropriate to the taxon
      (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
      (d) actual or potential levels of exploitation
      (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
   2. An observed, estimated, inferred or suspected population size reduction of ≥30% over the last 10 years or three generations, whichever is the longer, where the reduction or its causes may not have ceased or may not be understood or may not be reversible, based on (and specifying) any of (a) to (e) under A1.
   3. A population size reduction of ≥30% projected or suspected to be met within the next 10 years or three generations, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of (b) to (e) under A1.
   4. An observed, estimated, inferred, projected or suspected population size reduction of ≥30% over any 10 year or three generation period, whichever is longer (up to a maximum of 100 years in the future), where the time period must include both the past and the future, AND where the reduction or its causes may not have ceased OR may

not be understood OR may not be reversible, based on (and specifying) any of (a) to (e) under A1.

B. Geographic range in the form of either B1 (extent of occurrence) OR B2 (area of occupancy) OR both:
   1. Extent of occurrence estimated to be less than 20,000 km^2, and estimates indicating at least two of a-c:
      (a) Severely fragmented or known to exist at no more than 10 locations.
      (b) Continuing decline, observed, inferred or projected, in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) area, extent and/or quality of habitat
         iv) number of locations or subpopulations
         v) number of mature individuals.
      (c) Extreme fluctuations in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) number of locations or subpopulations
         iv) number of mature individuals.
   2. Area of occupancy estimated to be less than 2,000 km^2, and estimates indicating at least two of a-c:
      (a) Severely fragmented or known to exist at no more than 10 locations.
      (b) Continuing decline, observed, inferred or projected, in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) area, extent and/or quality of habitat
         iv) number of locations or subpopulations
         v) number of mature individuals.
      (c) Extreme fluctuations in any of the following:
         i) extent of occurrence
         ii) area of occupancy
         iii) number of locations or subpopulations
         (iv) number of mature individuals.

C. Population size estimated to number fewer than 10,000 mature individuals and either:
   1. An estimated continuing decline of at least 10% within 10 years or three generations, whichever is longer, (up to a maximum of 100 years in the future) OR
   2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals AND at least one of the following (a-b):
      (a) Population structure in the form of one of the following:
         i) no subpopulation estimated to contain more than 1,000 mature individuals,
         OR
         ii) all mature individuals in one subpopulation.
      (b) Extreme fluctuations in number of mature individuals.

D. Population very small or restricted in the form of either of the following:
   1. Population size estimated to number fewer than 1,000 mature individuals.
   2. Population with a very restricted area of occupancy (typically less than 20 km^2) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.

E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

See Appendix-iv for a summary of five criteria used to evaluate if a taxon belongs to an IUCN Red List threatened category i.e. Critically Endangered, Endangered or Vulnerable.

1st Meeting of the National Red List Committee

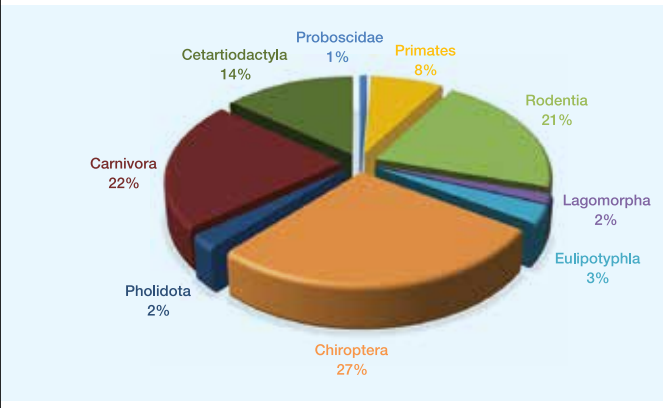
Regional Dissemination Workshop held in Bangladesh Agricultural University

STATUS OF MAMMALS IN BANGLADESH

3. STATUS OF MAMMALS IN BANGLADESH

3.1. Species Diversity

A total of 138 species of mammals are assessed during the present Red List process of which 127 species are found in the country while 11 species are extinct. Seventy percent of the mammalian species of the country belong to three groups *viz.* bats (Order: Chiroptera, 27%), carnivores (Order: Carnivora, 22%) and rodents (Order: Rodentia, 21%). Herbivores and cetaceans combined constitute 14% while other 6 orders constitute the rest of the mammalian community of the country.



Mammalian community in Bangladesh

In addition to IUCN Red List 2000, twenty one new mammal species are included here. These are Common Pipistrelle (*Pipistrellus pipistrellus*), Indian Round Leaf Bat (*Hipposideros lankadiva)*, Wrinkle-lipped Free-tailed Bat (*Chaerephon plicatus*), Least Leaf-nosed Bat (*Hipposideros cineraceus*), Dawn Bat (*Eonycteris spelaea*), Lesser False Vampire (*Megaderma spasma*), Cook's Mouse (*Mus cookii*), Edward's Rat (*Leopoldamys edwardsi*), Himalayan Rat (*Rattus nitidus*), White-toothed Rat (*Berlymys bowersi*), Red Climbing Mouse (*Vernaya fulva*), Yellow-throated Marten (*Martes flavigula*), Particolored Flying Squirrel (*Hylopetes alboniger*), Himalayan Striped Squirrel (*Tamiops macclellandii*) Indo-Pacific Humpback Dolphin (*Sousa chinensis*), Indo-Pacific Bottlenose Dolphin (*Tursiops aduncus*), Pantropical Spotted Dolphin (*Stenella attenuate*), Rough-toothed Dolphin (*Steno bredanesis*), False-killer Whale (*Pseudorca crassidens*), Sperm Whale (*Physeter macrocephalus*), Bryde's Whale (*Balaenoptera edeni)*. On the other hand, eight species that were enlisted in the IUCN Red List 2000 are deleted from the list since there are no confirmed records, eyewitnesses, voucher specimens or photographic evidence of these species in Bangladesh. These species are, three striped Palm Squirrel/Indian Palm Squirrel (*Funambulus palmarum*), Common Dolphin (*Delphinus delphis*), Short-finned Pilot Whale (*Globicephala macrorhynchus*), Melon-headed Dolphin (*Peponocephala electra*), Dugong (*Dugong dugon*), Blue Whale/Great Blue Whale (*Balaenoptera musculus*), Fin Whale/Common Rorqual/Finback (*Balaenoptera physalus*), and Humpback Whale (*Megaptera novaeangliae*). Seven species are also categorized as Not Evaluated which mostly referred in previous literatures (Khan 1982, 1985, 2015, IUCN Bangladesh 2000). These species are found in our neighboring countries but not a single confirmed record from Bangladesh has ever been made (no visual or photographic or specimen records). These species are

Savi's Pigmy Shrew or Pygmy White-toothed Shrew (*Suncus etruscus*), Horseshoe Bat (*Rhinolophus pearsonii*), Thick-eared Bat (*Eptesicus pachyotis*), Painted Bat or Papillose Bat (*Kerivoula papillosa*), Savi's Pipistrelle (*Hypsugo savii*), Harlequin Bat (*Scotomanes ornatus*).

Chiroptera is the largest mammalian order in Bangladesh comprising 35 species (8 species are newly recorded) in eight families. Different species of bats belonging to eight families under two suborders Megachiroptera (fruit bats) and Microchiroptera (insectivore bats) are found in Bangladesh. These are the only flying mammals where their forelimbs are modified for flight, second of fifth digits are greatly elongated to support the fold of skin *i.e.* patagium extending between forelimbs to hind limbs, including tail if present, and numerous insectivorous bats have tragus for echolocation. Bats play an important role in the ecosystem because both the fruit bats and insectivore bats play a definite role in the food chain. The fruit bats are mainly involved in pollination and seed dispersion. The micro chiropteran or insect eating bats are responsible for controlling insect population. A single insectivorous bat consumes about 70% food to its body weight while in pregnant condition it eats up to 100%. The bats feed upon a large amount of mosquitoes, bugs, worms, beetles, moths and other insects injurious to crops.

The mammalian order Carnivora represents 27 species in Bangladesh. Most of the members in this order can be recognized by their enlarged fourth upper premolar and first lower molar which together forms an efficient shear for cutting meat and tendon–for this reason they are known as predatory and flesh eating mammals. Canifomia typically possess a long snout and non-retractile claws in contrast to the feliforms and possess four carnassial teeth in the front of the jaw as well as single chambered auditory bullae. Two species of bears, 3 species of otters, 3 species of mongooses, 6 species of civets, 8 species of cats, 2 species of jackal/fox and one species of each of marten, badger and wild dog respectively belong to this order.

Scotophilus heathii © M K Hasan

Prionailurus bengalensis © M M Feeroz

Ratufa bicolor © M M Feeroz

are commonly known as rats and squirrel. They are distinguished from other mammals by having a very unique dentition which is highly specialized for gnawing, a single pair of upper and a single pair of lower incisors, followed by a gap (diastema), followed by one or more molars or premolars. As a result, they can chew anything in their surroundings. On the contrary members of the order Lagomorpha are similar to Rodentia except with a second pair of upper incisors behind first pair of large chisel-like incisors and rudimentary or short tail. Two species are found under the order Lagomorpha in Bangladesh.

The newly formed order Cetartiodactyla merged former two orders of mammals that are superficially quite different and that, until recently, were recognized as two separate monophyletic clades. These orders are Artiodactyla, even-toed hoofed mammals or ungulates having an even number of toes (Deer, Wild Boar and Gaur), and Cetacea, generally large marine fish like mammals well adapted for aquatic life, body is fusiform, pectoral limbs modified into broad paddle like flippers, with the tail divided in two broad horizontal fleshy flukes with a notch used in propulsion, no hind limbs and no external ears (Whales and Dolphins). A total of 18 species of mammals in the country are recorded under this order. Two species were previously considered as extinct (IUCN Bangladesh 2000) *viz.* Hog Deer and Gaur rediscovered during the last one decade from their natural habitats in Chittagong Hill Tracts region and hence, these species are re-evaluated and enlisted in the present Red List.

Among the 18 species (39 subspecies) of Primates in South Asia, 10 species are found

Tursiops aduncus © Md. Zahangir Alom

Semnopithecus entellus © M M Feeroz

in Bangladesh. Primates have some unique characters which differentiate them from other groups. They have opposable and prehensile thumb, a well-ameliorate brain and large skull, and flat nails on fingers and toes whilst having a single pair of upper lower canine. The primate community of Bangladesh consists of one species of loris, five species of macaques, three species of langurs and one species of lesser ape. Considering geographical distribution of species (overall range distribution), we have western most geographical distribution of Pig-tailed Macaque (*Macaca leonina)* in Satchari and Lawachara (Feeroz 1999, 2001, Khan 1987b), eastern most geographical distribution of Common Langur in Keshabpur and northern most geographical distribution of Long-tailed Macaque in Teknaf Peninsula (Khan 1982, 1987a, Hasan *et al*. 2011). Distribution of all these species is habitat specific except Rhesus Macaque which is found in all forest habitat types as well as in and around human settlements. Rhesus Macaque is the only species found in the Sundarbans.

Because of the recent molecular methods of phylogenetic reconstruction, shrew-like moles under the family Talpidae and true shrews under the family Soricidae are combined under the order Eulipotyphla. Three species of shrews and one species of mole are found in the order Eulipotyphla. These are small primitive mammals whose bodies are covered by means of spines or fur and have a long pointed snout projecting beyond the lower jaw.

Three species of mammals are found in the order Pholidota in Bangladesh. Mammals in this order are unique. Their bodies are covered with large overlapping horny scales with sparse hair in between, teeth are absent and a long, protrusible tongue is present to capture insects. Only one species of mammal (Asian Elephant) is present under the order Proboscidea. The noses of this animal

Manis pentadactyla © M. Monirul H. Khan

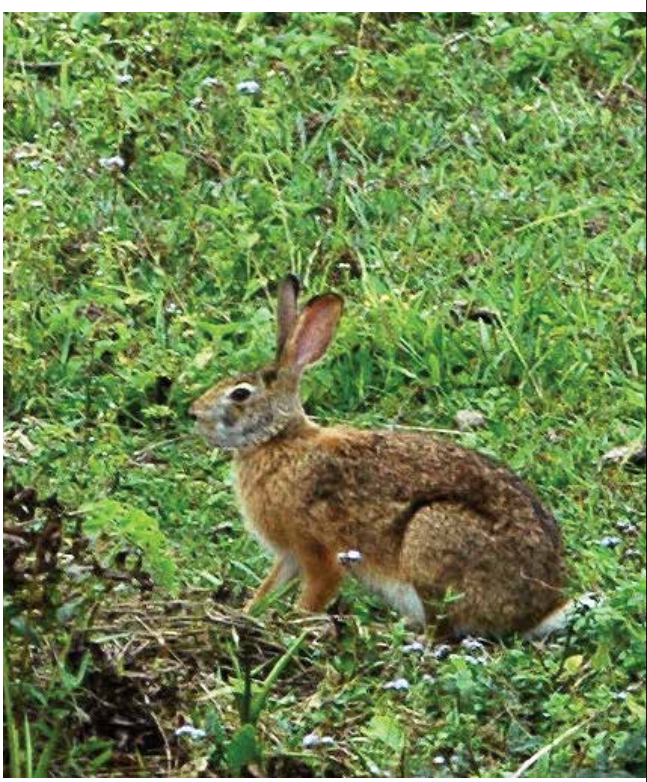
converted to a long flexible proboscis with nostrils at the end which serves as a prehensile organ. Canines are absent and two upper incisors elongated as ivory tusks.

3.2. Present Status of Mammals

Thirty eight species (29.7%) are evaluated as threatened species in the country (Table 1) while 7.1% of the species was recorded as Near Threatened. Among the threatened species 44.7% are Critically Endangered followed by 31.6% Endangered and 23.7% Vulnerable. Despite of constant threats to the survival of these species in the country, still 26.6% of the mammalian species are recorded as Least Concern. Unfortunately, very few data are available for a considerably large group of mammals and hence, 39 species are recorded as Data Deficient.

3.2.1. Extinct Species

Ten species of mammals were evaluated as Extinct in the previous Red List (IUCN



Lepus nigricollis © M. Monirul H. Khan

Table 1. Red List Status of Mammals

Order	RE	CR	EN	VU	NT	LC	DD	NE	Total Species
Proboscidea	0	1	0	0	0	0	0	0	1
Primates	0	3	5	1	0	0	1	0	10
Rodentia	0	1	1	1	1	13	10	0	27
Lagomorpha	0	0	1	0	0	0	1	0	2
Eulipotyphla	0	0	0	0	1	1	1	1	4
Chiroptera	0	0	0	0	0	11	18	6	35
Pholidota	0	2	0	0	0	0	1	0	3
Carnivora	3	7	3	6	5	4	2	0	30
Cetartiodactyla	5	3	2	1	2	5	5	0	23
Perissodactyla	3	0	0	0	0	0	0	0	3
Total	11	17	12	9	9	34	39	7	138

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

Bangladesh 2000). Striped Hyena and Blackbuck were not included in that list which are now enlisted in the present list (Table 2). Among these extinct species Gaur and Hog Deer have been rediscovered during the last decade (Khan 2006, 2008). Recently the confirmed presence of two small resident populations of Gaur in Kassalong Reserve Forest (forests of Vulongtoli Mon and Betling), Rangamati, were reported (Khan 2013).

Moreover, Gaurs are rarely sighted in Sangu Wildlife Sanctuary and few other bordering forests in Bandarban. Hog Deer was captured from Sajek Valley in 2006. However, the recent edition of Red List enlisted one species of mammal, Sloth Bear as Extinct from our country. Eleven mammalian species have gone Extinct from Bangladesh (Table 2).

Table 2. Extinct Mammalian Species of Bangladesh, 2015

Sl. No.	Scientific Name	Local Name	Place of occurrence*	Tentatively lost since	Species ID
1	*Hyaena hyaena*	Striped Hyena	Northwestern part of the country	20th Century	MA0145
2	*Canis lupus*	Grey Wolf	In all abundant tree covered areas	Mid-20th Century	MA0144
3	*Boselaphus tragocamelus*	Nilgai	Dinajpur, Rangpur Forests.	1930s	MA0142
4	*Bos javanicus*	Banteng	Chittagong & CHT	1940s	MA0140
5	*Bubalus arnee*	Wild Buffalo	Chittagong & CHT	1940s	MA0141
6	*Dicerorhinus sumatrensis*	Sumatran Rhinoceros	North of existing Sundarbans	1930s	MA0139
7	*Rhinoceros sondaicus*	Javan Rhinoceros	North of existing Sundarbans	1930s	MA0138
8	*Rhinoceros unicornis*	Indian Rhinoceros	North of existing Sundarbans	1930s	MA0137
9	*Rucervus duvaucelii*	Swamp Deer	Sundarbans	1950's	MA0143
10	*Antilope cervicapra*	Blackbuck	Northern region	End of 19th Century	MA0146
11	*Melursus ursinus*	Sloth Bear	Chittagong Hill Tracts	Beginning of 21st Century	MA0004

Extinct Mammals of Bangladesh

Striped Hyena (SID–MA0145) © M M Feeroz

Grey Wolf (SID–MA0144) © M M Feeroz

Nilgai (SID–MA0142) © M. Monirul H. Khan

Banteng (SID–MA0140) © Fletcher & Baylis www.arkive.org

Wild Buffalo (SID–MA0141) © M M Feeroz

Sumatran Rhinoceros (SID–MA0139) © Susie Ellis www.iucnredlist.org

Javan Rhinoceros (SID–MA0138) © www.pinterest.com

Indian Rhinoceros (SID–MA0137) © M M Feeroz

Swamp Deer (SID–MA0143) © www.nickgarbutt.photoshelter.com

Blackbuck (SID–MA0146) © M M Feeroz

Sloth Bear (SID–MA0004) © M K Hasan

3.2.2. Threatened Species

Critically Endangered Species

Seventeen species of mammals are recorded as Critically Endangered in Bangladesh. These species are Bengal Tiger, Leopard, Clouded Leopard, Asian Elephant, Hoolock Gibbon, Long-tailed Macaque, Phayrei's Leaf Monkey, Asiatic Black Bear, Malayan Sun Bear, Indian Pangolin, Chinese Pangolin, Eurasian Otter, Smooth-coated Otter, Gaur, Sambar, Hog Deer, Himalayan Striped Squirrel. Among the 28 species of carnivores found in the country, 7 are recorded as Critically Endangered (Table 3).

Endangered Species

Twelve species of mammals are Endangered in Bangladesh. These are Mainland Serow, Pig-tailed Macaque, Common Langur, Assamese Macaque, Capped Langur, Barking Deer, Asiatic Wild Dog, Fishing Cat, Indian Hare, Bengal Slow Loris, Oriental Small-clawed Otter, Particolored Flying Squirrel. Primates are the most threatened group of mammals in the country; 90% of primates are threatened, three species (30% of all primate species) are Critically Endangered while five species (50% of all primate species in the country) of them are Endangered.

Vulnerable Species

Nine species of mammals are recorded as Vulnerable. These are Ganges River Dolphin, Rhesus Macaque, Bengal Fox, Asian Golden Cat, Hog Badger, Yellow-throated Marten, Binturong, Masked Palm Civet and Malayan Giant Squirrel.

3.2.3. Near Threatened Species

Nine species of mammals are recorded as Near Threatened. These are Irrawaddy Dolphin, Indo-Pacific Finless Porpoise, Common Tree Shrew, Large Indian Civet, Small Indian Civet, Jungle Cat, Leopard Cat, Crab-eating Mongoose, Hodgson's Giant Flying Squirrel. Many of these species will become threatened in near future if situation does not change or if no immediate action taken to conserve these species.

Lutrogale perspicillata © M.M Feeroz

Table 3. Threatened Mammals in Bangladesh (arranged in threatened category)
Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

Sl. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Specie ID
1	Proboscidea	Elephantidae	*Elephas maximus*	Asian Elephant	Hati, Hasti, Gaja	CR	EN	MA0003
2	Primates	Cercopithecidae	*Macaca fascicularis*	Long-tailed Macaque, Crab-eating Macaque, Cynomolgus Monkey	Lomba-leji Banor, Kakrabhuji Banor, Parailla Bandor	CR	LC	MA0052
3	Primates	Cercopithecidae	*Trachypithecus phayrei*	Phayre's Langur, Phayrei's Leaf Monkey, Spectacled Langur	Chosmapora Hanuman, Kalo Hanuman, Kala Bandar	CR	EN	MA0056
4	Primates	Hylobatidae	*Hoolock hoolock*	Hoolock Gibbon, Western Hoolock Gibbon	Ulluk, Holou Bandar, Bonmanush, Hulu, Huru	CR	EN	MA0002
5	Rodentia	Sciuridae	*Tamiops macclellandii*	Himalayan Striped Squirrel, Western Striped Squirrel	Himaloyee Dora Kathbirali, Himaloyan Dorakata Kathbirali	CR	LC	MA0102
6	Pholidota	Manidae	*Manis crassicaudata*	Indian Pangolin, Scaly Anteater, Thick-tailed Pangolin	Banrui, Pipilikavuk, Piprabhuk, Keot-machh, Katpohu	CR	EN	MA0090
7	Pholidota	Manidae	*Manis pentadactyla*	Chinese Pangolin	Bonrui, Cheena Bonrui, China Piprabhuk	CR	CR	MA0092
8	Carnivora	Felidae	*Panthera pardus*	Leopard	Chitah Bagh	CR	NT	MA0014
9	Carnivora	Felidae	*Neofelis nebulosa*	Clouded Leopard	Lam Chita, Gecho Bagh, Lota Bagh	CR	VU	MA0063
10	Carnivora	Felidae	*Panthera tigris*	Tiger	Bagh, Baghro Mama, Dora Bagh, Bara-shial, Gobagha, Goira Goma, LohaFaitta, Machak (Garo), Khaiagri (Marma), Pri (Mro)	CR	EN	MA0064
11	Carnivora	Mustelidae	*Lutra lutra*	Eurasian Otter, European Otter, European River Otter, Old World Otter, Common Otter	Uudbiral, Uud, Vodor, Dhaira	CR	NT	MA0073
12	Carnivora	Mustelidae	*Lutrogale perspicillata*	Smooth-coated Otter, Indian Smooth-coated Otter.	Uud, Uud Biral, Bhodar	CR	VU	MA0074
13	Carnivora	Ursidae	*Helarctos malayanus*	Sun Bear, Malayan Sun Bear	Choto Bhalluk, Shurjo Bhalluk	CR	VU	MA0076

Sl. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Specie ID
14	Carnivora	Ursidae	*Ursus thibetanus*	Asiatic Black Bear, Himalayan Black Bear, Moon Bear, Tibetan Black Bear.	Kalo Bhalluk, Bhalu, Bhaluk, Bhalluk.	CR	VU	MA0077
15	Cetartiodactyla	Bovidae	*Bos gaurus*	Gaur	Bon Goru, Gour	CR	VU	MA0088
16	Cetartiodactyla	Cervidae	*Rusa unicolor*	Sambar, Sambar Deer	Sambar, Sambar Horin	CR	VU	MA0085
17	Cetartiodactyla	Cervidae	*Axis porcinus*	Hog Deer	Para Horin	CR	EN	MA0086
18	Primates	Cercopithecidae	*Macaca assamensis*	Assamese Macaque, Assam Macaque	Ashami Banor, Assamese Bandor	EN	NT	MA0001
19	Primates	Cercopithecidae	*Macaca leonina*	Pig-tailed Macaque	Ultaleji Banor, Chhotoleji Banor, Kolu Banor	EN	VU	MA0054
20	Primates	Cercopithecidae	*Semnopithecus entellus*	Northern Plains Sacred Langur, Common Langur	Hanuman	EN	LC	MA0055
21	Primates	Cercopithecidae	*Trachypithecus pileatus*	Capped Langur, Capped Leaf Monkey, Capped Monkey	Mukhpora Hanuman, Lalchey Hanuman	EN	VU	MA0057
22	Primates	Lorisidae	*Nycticebus bengalensis*	Slow Loris, Bengal Slow Loris, Bengal Loris, Northern Slow Loris	Lojjaboti Banor, Lajuk Banor	EN	VU	MA0050
23	Rodentia	Sciuridae	*Hylopetes alboniger*	Particolored Flying Squirrel	Bichitro-ronga Uranta Kathbirali, Choto Uranta Kathbirali	EN	LC	MA0100
24	Lagomorpha	Leporidae	*Lepus nigricollis*	Indian Hare, Rufous-tailed Hare, Black-naped Hare	Shashak, Khorgosh.	EN	LC	MA0117
25	Carnivora	Canidae	*Cuon alpinus*	Dhole, Red Dog, Indian Wild Dog, Asiatic Wild Dog	Ram Kutta (Kukur), Bon Kutta, Dhole	EN	EN	MA0059
26	Carnivora	Felidae	*Prionailurus viverrinus*	Fishing Cat	Mechho Biral, Mechho Bagh	EN	EN	MA0067
27	Carnivora	Mustelidae	*Aonyx cinerea*	Oriental Small-clawed Otter, Asian Small-clawed Otter, Small-clawed Otter	Dhaira Uud, Uud Biral, Bhodar	EN	VU	MA0071
28	Cetartiodactyla	Bovidae	*Capricornis rubidus*	Serow, Red Serow, Mainland Serow	Bon Chagol	EN	VU	MA0089
29	Cetartiodactyla	Cervidae	*Muntiacus muntjak*	Barking Deer, Indian Muntjac	Maya Harin, Ruru Harin	EN	LC	MA0087

Sl. No.	Order	Family	Scientific Name	English Name	Local Name	Status in Bangladesh	Global Status	Specie ID
30	Primates	Cercopithecidae	*Macaca mulatta*	Rhesus Macaque	Banor, Bandor	VU	LC	MA0053
31	Rodentia	Sciuridae	*Ratufa bicolor*	Black Giant Squirrel, Malayan Giant Squirrel	Baro Kathbirali, Ram Kota	VU	NT	MA0101
32	Carnivora	Canidae	*Vulpes bengalensis*	Bengal Fox	Khek Shial, Kheki	VU	LC	MA0060
33	Carnivora	Felidae	*Catopuma temminckii*	Asian Golden Cat, Asiatic Golden Cat, Golden Cat, Temminck's Cat	Shonalee Biral	VU	NT	MA0062
34	Carnivora	Mustelidae	*Arctonyx collaris*	Hog Badger, Hog-nosed Badger	Shukorakar Bazer, Gor-khodok, Gorkhudini, Balu-shuor	VU	NT	MA0072
35	Carnivora	Mustelidae	*Martes flavigula*	Yellow-throated Marten, Javan Yellow-throated Marten	Moula, Mouchaki, Halud Gaas Gokul	VU	LC	MA0075
36	Carnivora	Viverridae	*Arctictis binturong*	Binturong, Bear Cat, Palawan Binturong	Geso Bhaluk, Gach Valluk, Gach Fewa	VU	VU	MA0078
37	Carnivora	Viverridae	*Paguma larvata*	Masked Palm Civet, Gem-faced Civet	Pahari Vam, Boishne Ula, Wiamphai Naitha (Marma)	VU	LC	MA0080
38	Cetartiodactyla	Platanistidae	*Platanista gangetica*	Ganges River Dolphin, Ganges Dolphin, Blind River Dolphin, South Asian River Dolphin	Shishu, Shushuk, Shushu, Susu, Huchchum, Hurchum, Hush, Shush	VU	EN	MA0012

Stenella longirostris

3.2.4. Least Concern Species

Thirty four species are recorded as Least Concern (Appendix-i). Mostly rodents (13 species) and bats (11 species) are enlisted in this category. It indicates that existing habitats of the country are still capable of supporting large groups of small mammals. However, two species of herbivores, *viz.* Spotted Deer and Wild Boar also recorded as Least Concern. This is mainly because Wild Boar is found in all forest habitats, especially a large population is found in the Sundarbans. On the other hand Spotted Deer is found in the Sundarbans and some other nearby islands. However, it has the largest population of any large mammals in the country.

3.2.5. Data Deficient Species

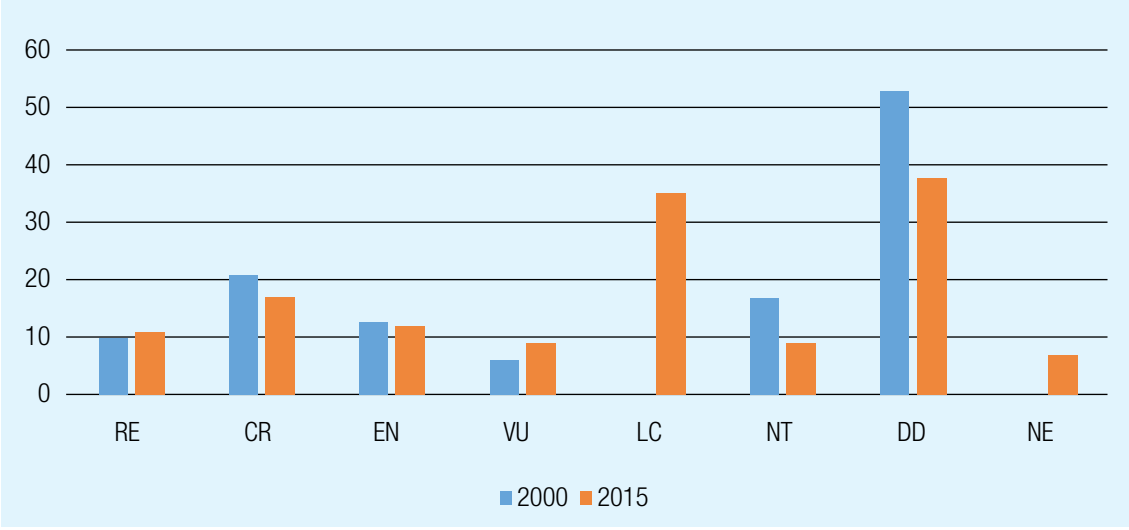
Thirty nine species of mammals are recorded as Data Deficient which is 30.5 % of the total mammalian species (Appendix-i).

3.2.6. Not Evaluated Species

Seven species are recorded as Not Evaluated since there are not a single record of either specimen or visual observation or even a photographic evidence of these species exist to fulfill the criteria to be evaluated.

3.3. Change of Species Status since IUCN Bangladesh Red List 2000

A total of 113 species of mammals were evaluated during 2000 in Bangladesh. However, at present, during the process of evaluation 8 species were excluded from the previous list because there is no possibility of findings/records of this species in our country and none of these species has ever been recorded in our country. Twenty one species were evaluated as Critically Endangered in 2000. The Threatened Categories (status) have been changed for 11 species (Table 4). This is mainly because of the availability of population data on most of these species. On the other hand, 13 species were evaluated as Endangered of which 2 became Critically Endangered. Previously, the species which were enlisted as Data Deficient in 2000 among which 57% species has been evaluated and assigned in different categories. Two species are enlisted as Critically Endangered and Endangered respectively, 3 species as Vulnerable categories. This indicates that considerable amount of research on mammals have been conducted during the last one and half decades.

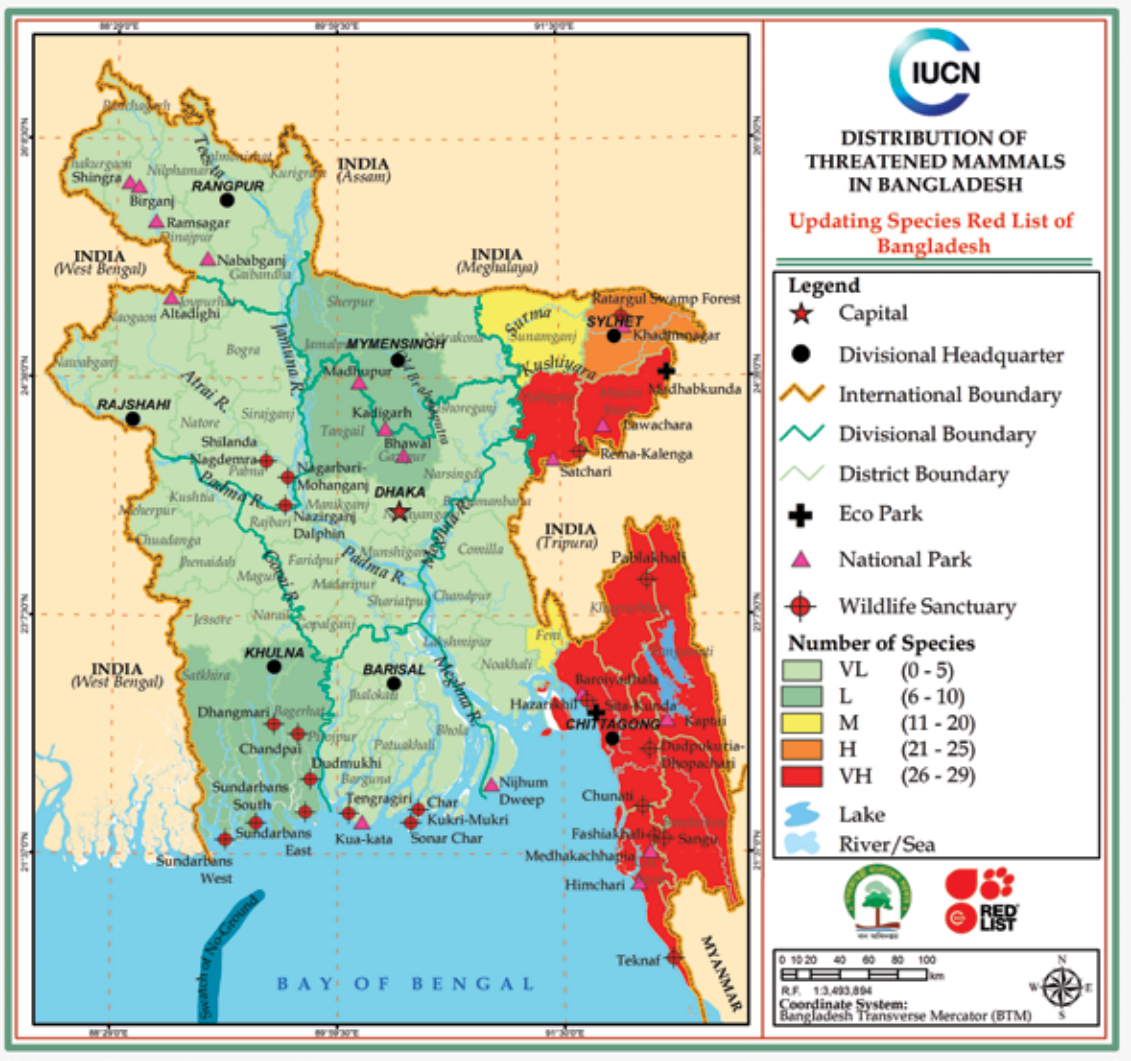


Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, LC-Least Concern, NT-Near Threatened, DD-Data Deficient, NE-Not Evaluated

Status of Mammals in Bangladesh according to IUCN Bangladesh 2000 and 2015.

Table 4. Change of Status of Mammals from 2000 Red List to 2015 Red List										
2000		2015								
Category	Total	CR	EN	VU	NT	LC	DD	NE	RE	Total
CR	21	10	5	3	1	0	1	0	1	21
EN	13	2	5	1	4	1	0	0	0	13
VU	6	0	0	2	1	3	0	0	0	6
DD	49	1	1	3	3	14	21	6	0	49
NE/NO	16	0	0	0	0	16	0	0	0	16

Status Code: CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated, RE-Regionally Extinct



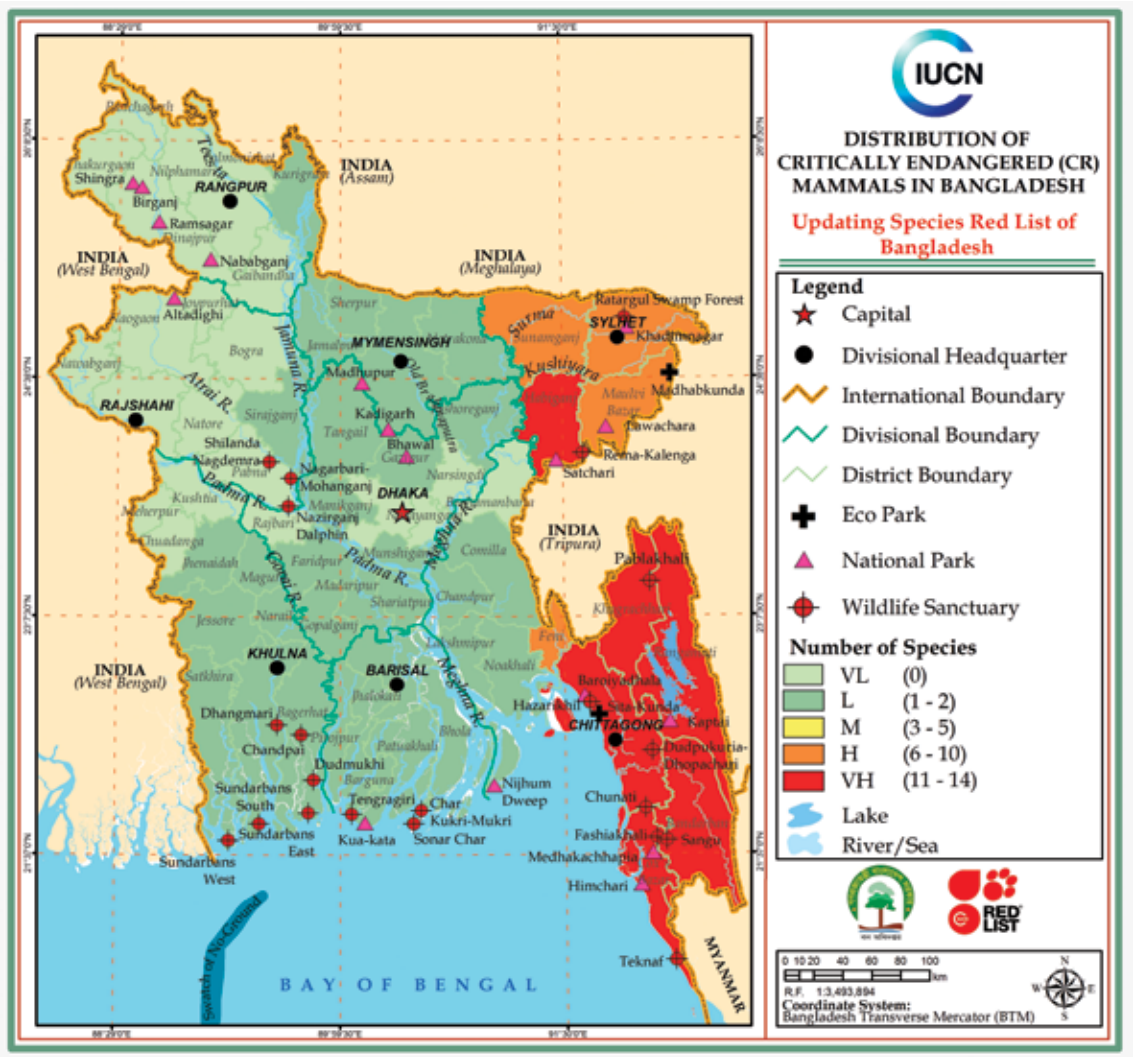
Distribution of Threatened Mammals in Bangladesh

3.4. Spatial Distribution of Threatened Mammal Species

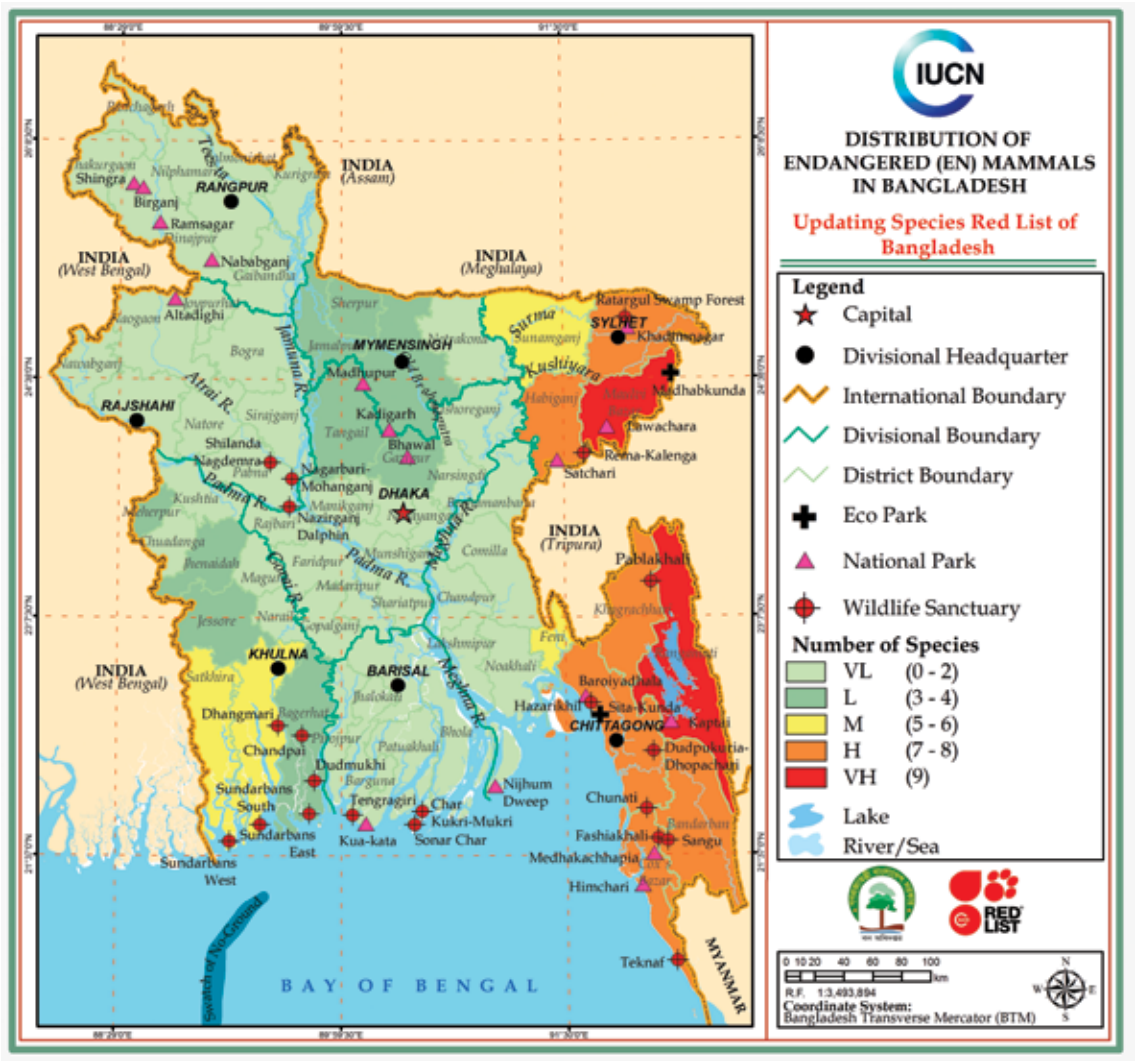
Threatened mammals of Bangladesh are not distributed uniformly throughout the country. This is mainly because of the diverse habitat type and richness of the habitat in different regions of the country which varies significantly. Evergreen and mixed evergreen forests are

mostly found in the northeast and southeast regions of the country which support more mammalian species than any other regions of the country. Depending on the distribution of the threatened mammalian species, the mammalian habitats in the country can be divided in to 5 major significant areas *viz.* Very Low (VL, up to 5 Threatened species), Low (L, 6 to 10 Threatened species), Medium (M, 11-20 Threatened species), High (H, 21 to 25 Threatened species), and Very High (VH, 26 to 29 Threatened species). Threatened mammal species diversity is very high in the southeastern hilly areas (Chittagong, Chittagong Hill Tracts and Cox's Bazar) and lower part of the northeastern hilly areas (Moulvibazar and Hobigonj areas). Upper northeast region (Sylhet and Sunamgonj) supports medium to high threatened mammal diversity.

Major areas of the country support very low Threatened mammal diversity. Critically Endangered mammal species are found mostly in the southeast (Chittagong, Chittagong Hill Tracts and Cox's Bazar) and some part of north east regions (Hobigonj).



Distribution of Critically Endangered Mammals in Bangladesh



Distribution of Endangered Mammals in Bangladesh

Endangered species are found some part of southeast (Rangamati) and some part of northeast regions (Moulvibazar); no Critically Endangered mammals are found in northwestern region of the country.

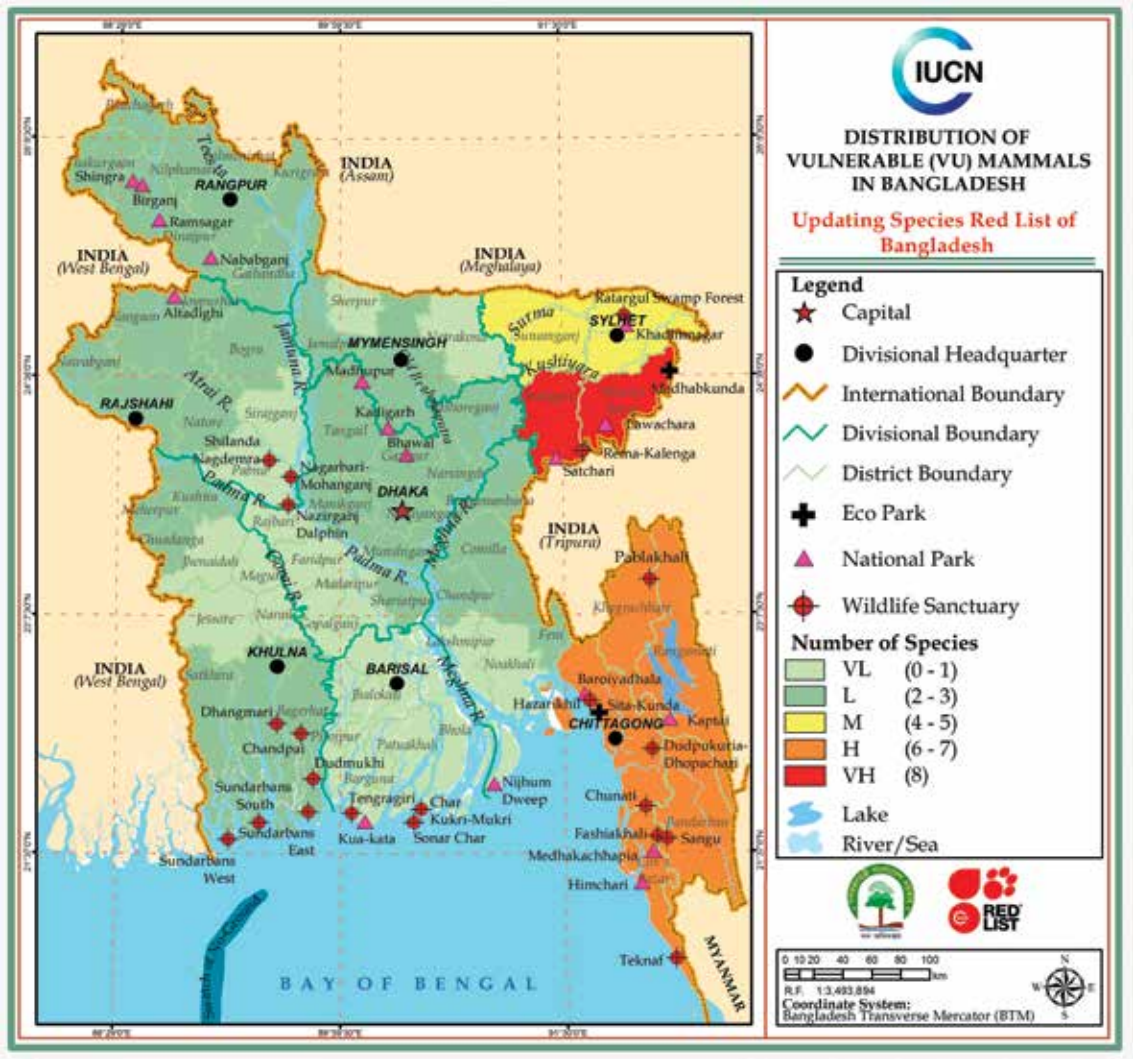
Lower parts of northeastern region support more Vulnarable mammalian species than southeastern region. Sundarbans mangrove forest support medium number of Endangered species while low number of both Critically Endangered and Vulnarable species.

3.5. Threats to Mammals of Bangladesh

During the present evaluation process of IUCN Red List, several threats are identified/ recognized for the declining/decreasing of mammalian population in the country. These are logging, fragmentation, urbanization, encroachment, habitat loss, shrinkage of forests, developmental activities, habitat destruction, jhum cultivation, deforestation, illegal tree falling, over exploitation and potential habitat declining.

3.5.1. Habitat Loss, Degradation and Fragmentation

Mammalian habitats have being destroyed and fragmented in an alarming rate because of accelerating human population pressure and



Distribution of Vulnerable Mammals in Bangladesh

different anthropogenic factors. Illegal timber extraction is one of the most important causes of forest destruction. The first target of illegal timber collectors is large sized hard wood plants which eventually affect upper canopy using arboreal mammals, especially Hoolock Gibbons, Langurs, Macaques and Squirrels for their movement and maintaining daily activities. On the other hand, the softwood trees which provide food for the mammals are used in plywood factories. So removal of both soft and hard wood sporadically creates uneven gaps in the forest and eventually affects both feeding and foraging of the arboreal mammals. Many traditional houses in the country are constructed with a framework of wood with a root of corrugated tins and small sized fruit yielding trees. Indiscriminate logging and habitat fragmentation are considered as major threats for 21.2% of the mammalian species of the country.

Fuel wood collection is a regular event by the people living in and around the forest for their daily demand. But large scale commercial extraction of fuel wood severely affect the mammalian habitat. Small and medium sized trees which provide fruits to the mammals and other wildlife species are cut down for

commercial purposes. Bush and different undergrowth are mostly affected because of fuel wood extraction and eventually affect terrestrial and burrower mammals. Undergrowth is also being modified by the unplanned plantation program by the Forest Department. In many forested areas Rattan (Cane) is planted by clearing the forest undergrowth. The rapid growth of canes prevents growth of any other plant species. Movements of terrestrial mammals are highly restricted by the extensive growth of cane.

Betel-leaf plantation is also a major threat for the alteration of mammalian habitat. Many tribal people living in and around the northeastern forest cultivate betel-leaf. Large trees are trimmed to support the betel-leaf to climb up and the undergrowth of these areas are also cleared. However, the betel-leaf cultivators in southeastern region are a bit different. They do not use large tree as a betel-leaf creeper, instead they use a small stick for each of the betel-leaf plant and partially cover betel-leaf field to protect their betel-plants from direct sun. Therefore, thousands of small sticks from the seedlings and bamboo found in the nearby forests are used for this purpose. Forest regeneration is being greatly hampered resulting gradual degradation of mammalian habitat.

Pineapple, Banana (*Musa* spp.), Citrus, Bean (*Vigna* spp.) and Papaya (*Carica papaya*) are extensively cultivated in many hill slopes while paddy (*Oryza* spp.) is cultivated in the low land between two hills or in valleys. Shifting cultivation is another threat through which the local people clear the forest floor, burn it and plant these crops, resulting in destruction of natural vegetation. Cultivated lands are expanding each year which cause forest fragmentation.

Overgrazing by domestic animals is another threat for mammalian habitat fragmentation in the country. Generally cattle eliminate seeds and seedlings those are potential source of forest regeneration as well as accelerating soil erosion. This is the common scenario in almost all the forests including Wildlife Sanctuaries and National Parks except the Sundarbans. Domestic cattle are the potential source of many zoonotic diseases. Cattle grazing in forests increase the risk of zoonoses.

Due to the lack of vegetation cover massive landslide occurs during monsoon in many forest areas especially in Chittagong and Chittagong hill Tracts. Due to landslides most of the water creeks (*Chara*) in forest areas are filled up which creates shortage of drinking water supply for mammals living in those areas. Landslides also create problem for the movement of animals. For example, due to landslides most of the creeks are being filled up which posing shortage of drinking water for the elephants in Teknaf Wildlife Sanctuary. The tragic death of elephant cubs during movement through the slippery landslide areas is also evident in Teknaf Wildlife Sanctuary (Hasan 2015).

Construction of temporary and permanent dams in many rivers severely affects the aquatic mammals of the country. The rivers are drying up in winter and suffering from flash flood during monsoon. As a result, migration and breeding of fishes in these rivers has been decreased which ultimately affect fish dependent mammal populations especially cetacean population. It also affects wetland dependent other mammals viz. Fishing Cat, otters and jackals. Unsustainable fishing is another factor affecting wetland dependent mammalian population. Use of different fishing gear specially use of gill nets for fishing is causing problem to the movement of dolphins both in freshwater and marine habitats. As dolphin breaths in the air, trapped dolphins in gill nets or in any other fishing gears die after a certain period. Captured dolphins in the fishing nets are usually killed by the fishermen because of the demand of its fats as fish bait. Captured dolphins are also reported to sell in the market as fish (Hasan 2015). On the other

hand polluted industrial water, excessive use of chemical fertilizer and pesticides, spillage from water vessels are polluting the wetland ecosystem and eventually affect our aquatic mammals.

Large scale unplanned urbanization relentlessly fragmented mammalian habitat in the country. Lowlands in suburban areas are being filled up for infrastructure development. Construction of new roads, highway and railway lines have been fragmenting the existing mammal habitats and also creating obstacles for the movement of animals. Hoolock Gibbons are trapped both side of the railroad in Lawachara National Park while the regular routes of Asian Elephants in the southeastern region ruthlessly intersected and fragmented by the gravel road. Elephant-human conflicts are the regular occurrence in these sites. Rhesus Macaques in the Sal forest of Bhawal and Madhupur Tracts are now trapped in some fragmented habitats because of rapid urbanization and infrastructure development.

3.5.2. Human-Other Mammals Conflict

Human-wildlife conflict is a growing concern in our country which emerges during the last two decades. Increased population pressure with the demand for fuel wood is wiping off the vegetal covers and forest of the country. On the other hand expansion of cultivated/ agricultural land and rapid urbanization bring both human and wild mammals in close proximity. As a result competition for resource used by both the group eventually creates conflict. As in many other countries in South and Southeast Asia, large areas of Bangladesh has been deforested over the past decades and mammals are the most affected group (Feeroz *et al.* 2013). A total of 89 species of wild animals have been reported to engage in conflict activities over the last 20 years of which 31 species are mammals (Rawshan *et. al.* 2014). Many wild mammals of Bangladesh such as Bengal Tiger, Asian Elephant, Leopard, Fishing Cat, Golden Cat, Jungle Cat, Civets etc. are facing the threat of extinction due to human-wildlife conflict (Rawshan *et al.* 2012). During the last two decades the total number of human-wildlife incidents increased significantly and humans casualty during conflict also increased significantly (Rawshan *et al.* 2014). The trends of wildlife casualty and the number of lethal retributions during the conflict were found exponentially high over the last 20 years. Although the nonlethal remedies such as translocation and placing the animal in captivity, were significantly greater in more recent years than in earlier years (Rawshan *et al.* 2014). Human-wildlife conflicts especially crop raiding by mammals cause a enormous economic loss to the local people. A significant amount of paddy fields in the southeastern part of the country have been destroyed by elephants (Sarker and Røskaft 2010). Destruction of households, homestead gardens, fruit trees and other settlements by elephants are also evident. These destructions sometimes seriously affect low income poor families in that region. Economic loss due to the wild animals is significant considering the annual income of those families (Hasan 2015). These conflicts also causing spread of zoonosis diseases. In Bangladesh, non-human primate (NHP) harbors at least three retroviruses. While simian beta retrovirus, previously known as simian retrovirus D (SRV-D), and simian T-cell lymphotropic virus (Jones-Engel, unpublished data) are found in only a few, isolated populations of some species, simian foamy virus (SFV) is ubiquitous (Feeroz *et al.* 2013). Foamy virus (FV) naturally infect cats, cows, some horses and all species of NHP tested (Karksson *et al.* 2012). SFV is highly prevalent and is efficiently transmitted through saliva among Rhesus Macaques (up to 100% of free ranging macaques are infected by age 3). Some human infections have been documented, but no human-to-human transmission has been reported (Jones-Engel 2007, Boneva *et al.* 2007).

3.5.3. Unintentional Killing, Hunting and Poaching

Hunting and poaching are the major threats for mammals especially for charismatic species those are particularly used for trophies or as pet animals. Twenty nine ethnic communities of the country consume wild mammals to fulfill their protein need. Along with other animals, the ethnic community frequently hunt many mammalian species viz. Wild Boar, Barking Deer, Indian Hare, small cats, monkeys, mongooses, civets, squirrels, rats, bats etc. Amateur and professional hunters also hunt large mammals such as deer and Wild Boar for consumption. *Santals* and *Garo* (ethnic community) community of northern part of the country go out for group hunting during winter, excavate burrows and kill a large number of local mammals including jackel, fox, small cats, civets, mongooses and hares. Wild Boar and Rhesus Macaques have been wiped out from the Sal forest of north Bengal due to over hunting. The *Sautal, Mro, Pankua* and some other ethnic communities in the Chittagong Hill Tracts consume any living animals including primates and elephants (Hasan 2015).

3.5.4. Local and International Trade

Illegal wildlife trade is another serious threat to mammals in the country. Mammalian species are killed for local consumption and even for illegal international trade for their skins, bones, flesh and fur, used for decoration, clothing, medicine, and also for unconventional exotic food. These products have demands in both local and international illegal markets. Information on the local demand for wild animals in the country is very scanty. Eighteen mammalian species are traded illegally according to the Wildlife Crime Control Unit (WCCU) of the Forest Department (in Litt.). Illegal trade is considered one of the major threats for 26.5% of the mammalian species of the country.

3.5.5. Incidental Killing by Vehicle Collision

Many forest areas in the country have been bisected by roads, highways and railway roads which causing a tremendous biodiversity loss. Especially many mammalian species (including threatened species) die on road through the crash with vehicles. Nocturnal mammals especially civets, jackal and small cats often die on road (Hasan *et al*. 2013).

3.5.6. Tourist Activities

Recently, uncontrolled tourist activities are recorded which severely interrupt normal daily activity of diurnal mammals and also disrupt the roosting sites of nocturnal mammals in many habitats rich in mammalian fauna. Some of the well known mammalian habitats *viz.* Satchari National Park, Lawachara National Park and Sundarbans East Wildlife Sanctuary are overcrowded during the tourist seasons. Loud sound, curious activities, non-ecofriendly activities by the visitors in the Protected Areas force the mammalian species to leave their home ranges. In many forest areas Rhesus Macaques are being habituated with provisioning for tourist attraction. Tourists visiting these areas get a chance to feed these monkeys. The close association of monkeys with human imposes the chance of bidirectional disease transmission. These animals have a potentiality to spread disease to the wild populations (Hasan 2015, Feeroz *et al.* 2013).

Funambulus pennantii © M M Feeroz

Elephas maximus

MAMMAL CONSERVATION AND RECOMMENDATION

4. MAMMAL CONSERVATION AND RECOMMENDATION

4.1. Mammal Conservation and Management

Holistic approaches for mammal management and conservation plan has been developed by Forest Department through SRCWP with the support from The World Bank (Mammal Management Strategy 2015). This management plan incorporated all aspects of mammal management including threat analysis, existing policy frame work, gap analysis and recommendations. Proper implementation of this management plan might play a vital role in mammalian conservation in the country. Bangladesh is the signatory of many international conventions, treaties and protocols *viz.* CBD, CITES, Ramsar Convention, Kyoto Protocol. All these play a vital role in mammal conservation as well as biodiversity conservation as a whole in the country. Bangladesh has a number of laws that deal with the various aspects of the mammalian conservation issues. The following are the major legal instruments related to mammal conservation in the country.

- National Forestry Policy (NFP-1979; revised in 1994)
- Forest Act (FA) of 1927
- Bangladesh Environment Conservation Act, 1995
- Wildlife (Conservation and Security) Act, 2012
- Environment Conservation Rules (ECR), 1997
- The Environment Court Act, 2000
- Protection and Conservation of Fish Act, 1950 (amendment in 1963, 1970, 1982 1995, 2002)
- Protection and Conservation of Fish Rules, 1985 (amendment in 1987)
- Marine Fisheries Ordinance, 1983
- Agricultural Pesticide Ordinance, 1971
- The Fertilizer Regulation Order, 1995
- Imports and Exports (Control) Act, 1950
- Customs Act, 1969
- Export Policy Order 2012-15

Other than these major legal instruments, many environmental policies of Bangladesh have been formulated in the post-Rio era which play major role in biodiversity conservation including mammals. Some of these are:

- The Environment Policy 1992
- Bangladesh National Conservation Strategy (NCS) , 1996
- National Environment Management Action Plan (NEMAP), 1996
- National Biodiversity Strategic Action Plan (NBSAP), 2004
- Land Use Policy, 2001
- The Fisheries Policy, 1998
- National Agriculture Policy, 1999
- Livestock Development Policy, 1992
- National Water Policy, 1999
- Industry Policy, 1999
- Energy Policy, 1995
- Export Policy, 1997-2002
- National Science and Technology Policy, 1983.
- বনজদ্রব্য-পরিবহন- (নিয়ন্ত্রণ)- বিধিমালা- ২০১১
- করাত-কল-(লাইসেন্স)- বিধিমালা- ২০১২
- সামাজিক বনায়ন বিধিমালা-২০০৪
- ইট-প্রস্তুত-ও-ভাটা-স্থাপন- (নিয়ন্ত্রণ)-আইন-২০১৩

4.2. Recommendations

4.2.1. Research

During the present Red List evaluation process, necessity of eight major categories of research has been identified for the threatened mammalian species of the country. Among these, ecological study and evaluation of present status and distribution have been suggested for 41% and 28% threatened mammals respectively**.** Population genetic study is one of the recent development through which variation between the population and sub-population can easily be determined. Dispersion of mammals in the country can easily be determined by studying population genetics.

4.2.2. Management Priorities

Eight management priorities are suggested for the threatened mammals of the country. Protection of habitat got the highest priority for 35% of threatened mammals of the country. Since a large number of cetacean species are found in the Swatch of No ground, management priority for this vast protected area is highly recommended. Immediate and effective measures should be taken up for proper implementation of Bangladesh Wildlife (Conservation and Security) Act, 2012 for the reduction of indiscriminate hunting and poaching as well as loss of habitats for the mammals in the country.

- Protection of habitat
- Protection of population
- Management plan for Swatch of No Ground
- Retribution killing should be stopped
- Raising awareness
- Proper implementation of Bangladesh Wildlife (Conservation and Security Act, 2012)
- Population management
- Protection of the mixed evergreen forests

4.2.3. Ex-situ Conservation

Captive propagation is not essential for most of the species. Captive breeding is only suggested for 10% of mammalian species of the country.

4.2.4. Institutional Development

All major forested areas especially all protected areas of the country are managed by the Forest Department. Unfortunately, the institutional framework of the Forest Department was highly focused on revenue earning from

Axis axis © M M Feeroz

Sus scrofa © M M Feeroz

the forest resources while conservation of mammals in particular are neglected. On the other hand poor institutional capacity, insufficient manpower and logistics of the Forest Department made it impossible for the proper management and conservation of mammals in the country. However, in last half a decade, Forest Department has been realized the necessity for the conservation of wildlife and trying to overcome this situation. Some of the recent initiatives *viz.* creating Wildlife Circle, Wildlife Crime Control Unit (WCCU), Wildlife Biodiversity Conservation Officer (WBCO), Wildlife Inspectors (WI) and Junior Wildlife Scout (JWS) all these have already played a vital role in mammal conservation in the country. Priority should be given to strengthen the capacity of the Forest Department in respect to human resource development as well as logistic support enhancement. Only then well trained and well equipped working force will be able to minimize most of the threats for the mammalian community of the country.

4.2.5. Protected Area (PA) Management

Most of the threatened mammals are found in the protected areas of the country. All Critically Endangered mammals are only found in the protected areas. Thus, proper management of protected areas will be ensuring habitat protection of all threatened mammals. Protected areas are declared under the legal provision but their management system is still very poor. Following issues should be addressed for the proper management of PAs in respect to mammal conservation.

- Visual demarcation of boundaries between PAs and Non-PAs
- Reduce fragmentation and degradation of habitats within PAs
- Buffer zone and Core areas of all the PAs have to be demarcated
- Strengthen capability of the Forest Department officials working in PAs by providing training and logistics

4.2.6. Public Awareness and Conflict Management

Non-formal environmental education and awareness program among the people living in and around Protected Areas may play a vital role in mammal conservation. Involvement of local people in PAs management, providing

alternate livelihood can reduce habitat destruction and wildlife trade. This also can help for the reduction of human-mammals conflict in the country.

4.2.7. Collaboration

Collaboration between policy maker, implementing authority, researchers, NGOs and donors is essential for successful mammal conservation in the country.

4.3. Species Specific Recommendations

4.3.1. Threatened Species

- Protecting existing Hoolock Gibbon habitats by implementing law
- In depth study of physiology of the Bengal Tiger in the Sundarbans as this is the only population of it that lives in salt water environment and in the mangrove ecosystem
- Regular monitoring of the Tiger and prey population densities
- Monitoring the tiger-human interactions.
- Study on status and distribution of the Tiger in the Chittagong Hill Tracts
- Following Bangladesh Tiger Action Plan 2009-2017, the Government should formulate a separate tiger management strategy
- The Government should have a separate entity to manage the entire Sundarbans, including its wildlife, possibly under an umbrella of a new department of biodiversity or wildlife conservation
- Development of national capacity for monitoring, translocation, and other aspects of the Threatened mammals by training the Forest Department officials working in the PAs
- The known area of occupancy of Threatened species should be protected by raising awareness and implementing the law
- Semi-captive otter population in Otter fishing villages in Narail district should be included under a special program to conserve the species
- Captive breeding programmes to restore wild population specifically for some Critically Endangered species *viz.* Hog Deer
- Upgrading Kassalong RF to WS and ensure protection of remaining Gaur (*Bos gaurus*) population.

4.3.2. Near Threatened Species

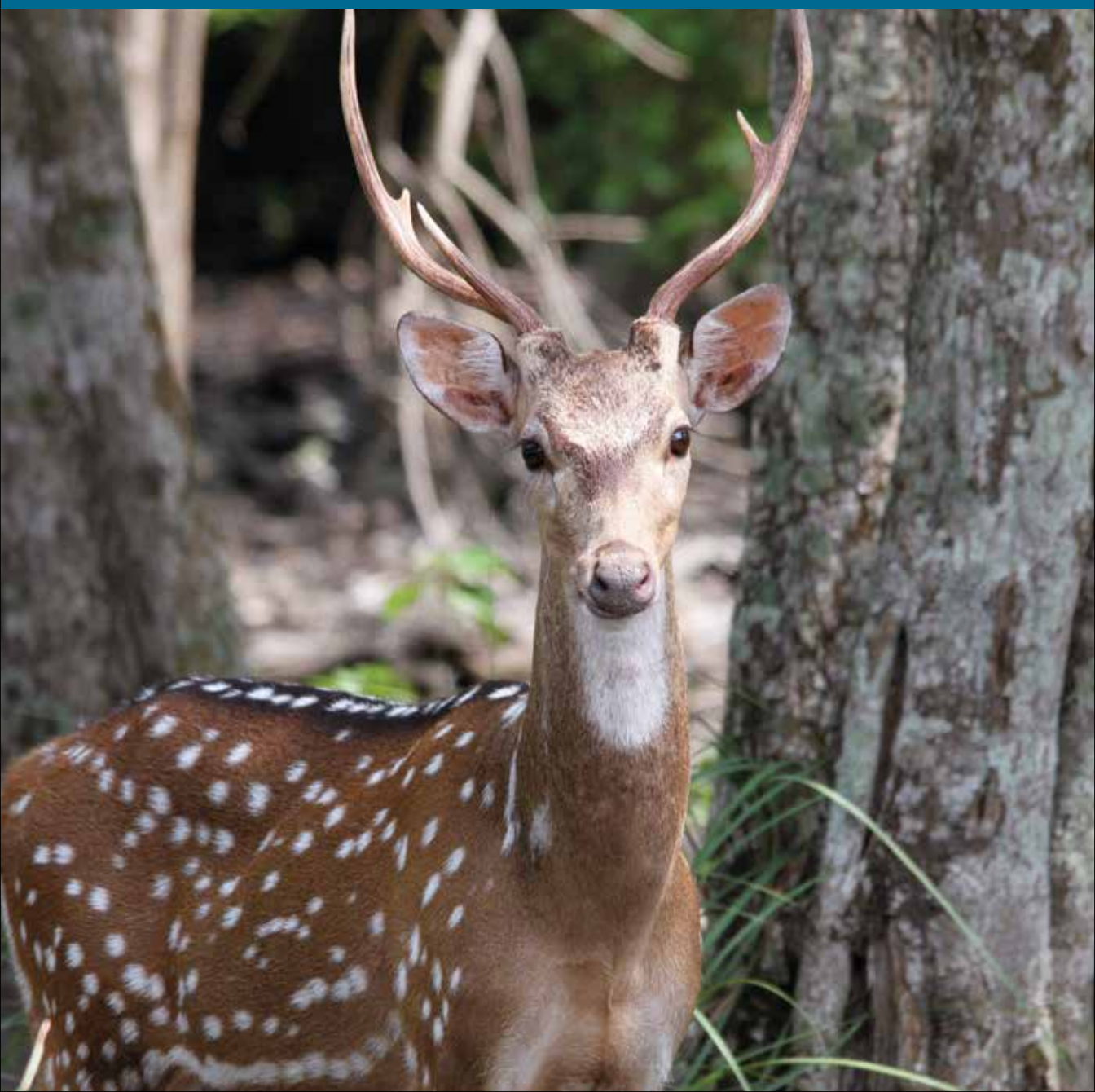
Near Threatened species are at the risk of being Threatened if condition persists and no measures take to reduce the existing threats. Population fragmentation and reduction is the main factors for most of the Near Threatened species. Following steps should be taken to keep Near Threatened species out of danger:

- Identify all possible threats and steps should be taken to minimize these
- Provide scope for fragmented population to migrate among the population to reduce inbreed depression
- Identify route and create corridor for movement between the fragmented populations
- Selective plantation for food and shelter in the fragmented habitats.

4.3.3. Data Deficient Species

Thirty nine mammalian species have been categorized as Data Deficient which are about 30.5% of the total mammals of the country. Very few information is available to assess these species. Most of these species has single or sporadic information on their occurrence in the country but nothing is known on their status, distribution, ecology and threats. Detail research on status, distribution and ecology is highly recommended.

SPECIES PROFILE



REGIONALLY EXTINCT
〈 RE 〉


Melursus ursinus
© M K Hasan

Melursus ursinus

Species ID: MA0004

REGIONALLY EXTINCT <RE>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	URSIDAE

Scientific Name: *Melursus ursinus* (Shaw, 1791)
English Name: Sloth Bear, Honey Bear
Local Name: Manthar Bhaluk
Synonym/s: *Bradypus ursinus* Shaw, 1791
Ursus labiatus (de Blainv, 1817)
U. inornatus (Pucheran, 1855)
Taxonomic Notes: Two subspecies are recognized: the Indian Sloth Bear *Melursus ursinus ursinus* (Shaw, 1791) and the Sri Lankan Sloth Bear *M. u. inornatus* (Pucheran, 1855) (Servheen *et al.* 1999).

Assessment Information

Red List Category & Criteria: Regionally Extinct (EX) ver 3.1
Justification: There is no sighting record of it in last fifty years from Bangladesh. Survey by Islam *et al.* (2012) revealed no sign of Sloth Bear either in wild or in captivity. Choudhury (2011) did not find any individual in Dampa Tiger Reserve in the Indian state of Mizoram, which might be the only known possible habitat for this species along Bangladesh border. So, this species can be safely considered Extinct in Bangladesh.
Date Assessed: 29 June 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The Indian subcontinent, including Bangladesh, Bhutan, India, Nepal and Sri Lanka (Menon 2003, Prater 1971).
Bangladesh: According to Blanford (1988), it was a common species in Bengal during 1850s but faced a great decline at his time (1880s) mainly due to sport hunting.

Melursus ursinus © M K Hasan

The Sloth Bear had the widest distribution among all the three bear species found in Bangladesh. The species has historically been rare within the country in the southeast, east, and northeastern areas (Sarkar 2006 in Islam *et al.* 2013). Occasional presence of Sloth Bears has been recorded from Madhupur Tract, Garo Hills and in Sherpur District, which are located in the central and north-central regions of the country respectively (Islam *et al.* 2013). They were also present in Rangpur-Dinajpur area in northwestern part of the country some 50 years back (during 1960s) and were also surviving in a small population in Sylhet, Chittagong and Chittagong Hill Tracts with sightings in Teknaf and Kassalong Reserve Forest. It, however, disappeared from Dhaka, Tangail and Mymensingh forest divisions by then (Khan 1985). There is no reliable information on the presence of this species in Bangladesh, either in the wild or in captivity. Garshelis *et al.* (2008), Ahmed *et al.* (2009) and Islam *et al.* (2013) also concluded that the Sloth Bear might have possibly become extinct in Bangladesh.

Population

Total Population: Zero (0)

Habitat and Ecology

Sloth Bears are mainly solitary except for mothers with their cubs. They are non-territorial and feed largely on fruits and insects supplemented by carrion. The species typically breeds during June – July, and females give birth, usually to one or two cubs, during November – January, although it may run year-round in some areas of its range. Though they are not aggressive by nature, female sloth bears can be very dangerous for protecting their cubs. They are primarily a low land species living in wet or dry tropical forests, savannas, scrublands, and grasslands within its range.

Assessor: Shayer Mahmood Ibney Alam

Rhinoceros unicornis

CRITICALLY ENDANGERED
〈 CR 〉

Manis pentadactyla

Elephas maximus

Species ID: MA0003

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PROBOSCIDEA	ELEPHANTIDAE

Scientific Name: *Elephas maximus* Linnaeus, 1758
English Name: Asian Elephant
Local Name: Hati, Hasti, Gaja

Assessment Information

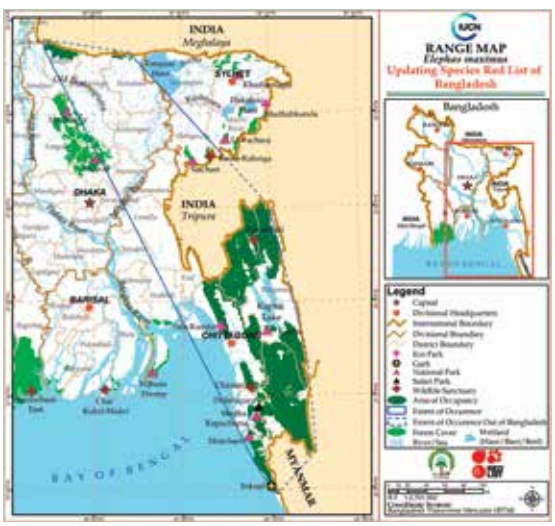
Red List Category & Criteria: CR C2a (i) ver 3.1
Justification: This species has been categorized as Critically Endangered in view of the number of mature individuals being less than 250 and population decline is continuing due to habitat destruction. Also its populations are heavily fragmented and there is very little or no genetic exchanges between two neighbouring populations. Severe human-elephant conflict and poaching are also contributing to this population decline.
Date Assessed: 29 June 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, Bhutan, Cambodia, China, India, Indonesia (Kalimantan, Sumatra), Lao PDR, Malaysia (Peninsular Malaysia, Sabah), Myanmar, Nepal, Sri Lanka, Thailand and Viet Nam. Regionally extinct from Pakistan (Sukumar 2003).
Bangladesh: The present distribution range is restricted to the hilly areas of Chittagong, Cox's Bazar and Chittagong Hill Tracts in the southeastern region of Bangladesh. In addition to few small migratory herds it seasonally occurs in some parts of Sylhet (Rema-Kalenga), Sherpur and Netrokona districts in the north and northeastern area (Khan 1982).



Elephas maximus © IUCN/Sultan Ahmed

EOO: 53,572 km^2
AOO: 10,627 km^2

Population

Generation Time (Length): 25 years (http://www.iucnredlist.org/details/199856/0)
Total Population: 350-450 individuals (Khan 1980, Islam *et al.* 1999)
Trend: Decreasing

Habitat and Ecology

Asian Elephants are generalists and they occur in grassland, tropical evergreen forest, mixed evergreen forest, moist deciduous forest, dry deciduous forested and dry thorn forest in addition to cultivated and secondary forests and scrublands. Asian Elephants are social animals and live in herds. They feed on grass and other vegetations but also raid crops. Senses of smell and hearing are well developed (Islam *et al.* 1999, IUCN Bangladesh 2000, Khan 1980, 1985, 1987).

Assessor: Anisuzzaman Khan

Macaca fascicularis

Species ID: MA0052

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Macaca fascicularis* (Raffles, 1821)
English Name: Long-tailed Macaque, Crab-eating Macaque, Cynomolgus Monkey
Local Name: Lomba-leji Banor, Kakrabhuji Banor, Parailla Bandor
Synonym/s: *Simia fascicularis* Raffles, 1821
Simia aygula Linnaeus, 1758
Simia cynomolgus Schreber, 1775
Macacus carbonarius Cuvier, 1825
Macaca aureus Geoffroy, 1826
Taxonomic Notes: At least ten subspecies are presently recognized. There is considerable hybridization between this species and *M. mulatta* where their ranges meet (Ong and Richardson 2008).

Macaca fascicularis © IUCN/Md. Tarik Kabir

Assessment Information

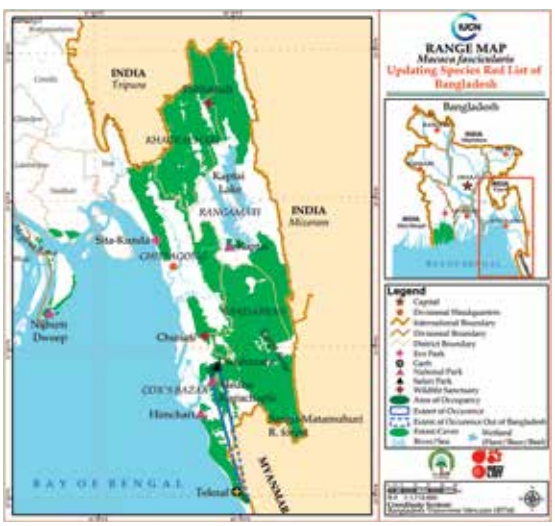
Red List Category & Criteria: CR A2ace+4a; B1+2ab (i, ii, iii, v); C1+2a (i, ii); D. ver 3.1
Justification: This species qualifies Critically Endangered criteria because of population reduction observed more than 90% over three generations and continuing (Khan 1981, 1987, Khan and Wahab1983, Feeroz 2001, Hasan and Feeroz 2010). Its EOO and AOO are less than the threshold level. Number of mature individuals is less than 20. Found only in two locations.
Date Assessed: 27 October 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, Brunei Darussalam, Cambodia, India (Andaman and Nicobar Is.), Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam. Introduced to Mauritius, Palau, Papua New Guinea (Ong and Richardson 2008).
Bangladesh: Three individuals remain on the Naff River bank at Teknaf. Eight breeding individuals were recorded in Fashiakhali WS with a Rhesus Macaque group where they formed hybrid (M. K. Hasan pers. comm.).
EOO: 481 km^2
AOO: 22 km^2



Population

Generation Time (Length): 10–12 years
Total Population: < 20
Trend: Decreasing

Habitat and Ecology

Mangroves in the Naff River bank, mixed evergreen forest in the Fashiakhali Wildlife Sanctuary. Outside Bangladesh they are highly tolerant to any environmental changes (Fooden 1991, 1995). Diurnal, semi-terrestrial and opportunistic feeder. Lives in a multi male multi female group.

Assessor: Md. Kamrul Hasan

Trachypithecus phayrei

Species ID: MA0056

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Trachypithecus phayrei* (Blyth, 1847)
English Name: Phayre's Langur, Phayrei's Leaf Monkey, Spectacled Langur
Local Name: Chosmapora Hanuman, Kalo Hanuman, Kala Bandar
Synonym/s: *Presbytis phayrei* Blyth, 1847
Semnopithecus phayrei Anderson, 1878
Taxonomic Notes: Of the three recognized subspecies only one *T. p. phayrei* is found in Bangladesh (Bleisch *et al.* 2008, Kabir 2009).

Assessment Information

Red List Category & Criteria: CR A2c; C2a (i) ver 3.1
Justification: This species is listed as Critically Endangered as its population has declined more than 80% over the last three generations due to habitat destruction. Moreover, the mature individuals in each subpopulation are less than 50.
Date Assessed: 25 August 2014

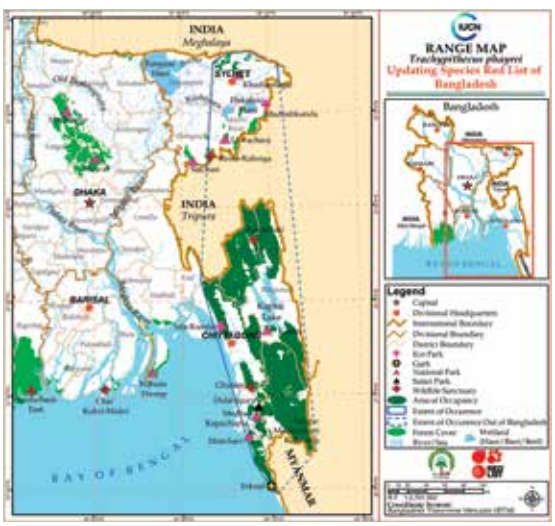
History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, China, India, Myanmar, Lao PDR, Thailand and Viet Nam (Molur *et al.* 2003).
Bangladesh: In Bangladesh, Phayre's Langur is mainly found in the mixed evergreen forests, and adjacent plantations, especially bamboo clumps of Sylhet, Chittagong Districts and the Chittagong Hill Tracts region (Kabir 2002, 2009, Khan 1987, 2015).

EOO: 38,634 km^2
AOO: 10,196 km^2



Trachypithecus phayrei © M M Feeroz

Population

Generation Time (Length): 10-12 years (inferred from other langur species).
Total Population: No quantitative data are available
Trend: Declining

Habitat and Ecology

This species is found in forests, bamboos, primary and secondary mixed evergreen forests. This species generally prefers middle canopy of the forest, but also use the top and lower part of the trees for feeding and movement.This species is diurnal, arboreal and folivorous. It loves to eat new shoots of bamboo. It lives in both uni-male and multi-male, multi- female group.

Assessor: Md. Mofizul Kabir

Hoolock hoolock

Species ID: MA0002

CRITICALLY ENDANGERED <CR>

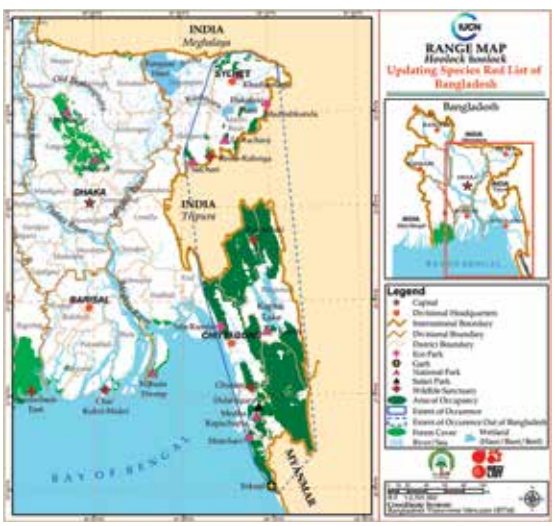
Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	HYLOBATIDAE

Scientific Name: *Hoolock hoolock* (Harlan, 1834)
English Name: Hoolock Gibbon, Western Hoolock Gibbon
Local Name: Ulluk, Bonmanush, Hulu, Huru
Synonym/s: *Simia golock* (Bechstein, 1795)
Hylobates fuscus (Wilson Lewis, 1834)
Simia hoolock (Harlan, 1834)
Bunopithecus hoolock hoolock (Harlan, 1834)
Hylobates choromandus (Ogilby, 1837)
Hylobates scyritus (Ogilby, 1840)
Hylobates hoolock (Blanford, 1881-1891)
Hylobates hoolock hoolock (Groves, 1967)
Taxonomic Notes: This taxon is now considered monotypic; it was formerly considered conspecific with *Hoolock leuconedys*. The previous generic name, *Bunopithecus*, was changed by Mootnick and Groves (2005) to *Hoolock* (Haimoff *et al.* 1984) (Brockelman *et al.* 2008).

Assessment Information

Red List Category & Criteria: CR A2ac+4a; C2a (i); E ver 3.1
Justification: Population reduction observed around 90% over the last two decades. Both Extent of Occurrence and Area of Occupancy have been reduced during this period. Total number of mature individual is <250 and number of mature individuals in each subpopulation is <50. Population viability assessment (PHVA) estimated 95% reduction of existing population by next two decades. All these occur in severely disjunct habitats having very little or no chance of genetic exchanges between two or more populations. So, this Hoolock Gibbon is assessed as Critically Endangered.
Date Assessed: 29 June 2014



Hoolock hoolock © M M Feeroz

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, India and Myanmar (Brockelman *et al.* 2008).
Bangladesh: It lives in the mixed evergreen forests of northeast and southeast of Bangladesh (Ahsan 1994, Khan 1982, 2015).

EOO: 41,602 km^2
AOO: 10,626 km^2

Population

Generation Time (Length): 17 years
Total Population: Less than 250
Trend: Declining

Habitat and Ecology

Hoolock Gibbon inhabits tropical mixed evergreen forests of the northeast and southeast of the country. It is an arboreal, brachiator, monogamous and territorial species but come down to cross a stretch of land when tree canopies are discontinuous. The family group may comprise of adult male and female with their offsprings. Hoolock gibbon is mainly frugivorous but its diet also comprise of leaves, flowers and twigs (Ahsan 1994, Feeroz 1991, Feeroz and Islam 1992, Khan 1985, 1987b).

Assessor: Mohammed Mostafa Feeroz
Associate Assessor/s: Md. Kamrul Hasan and Md. Farid Ahsan

Tamiops macclellandii

Species ID: MA0102

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Tamiops macclellandii* (Horsfield, 1840)
English Name: Himalayan Striped Squirrel, Western Striped Squirrel
Local Name: Himaloyee Dora Kathbirali, Himaloyan Dorakata Kathbirali

Synonym/s: *Tamiops macclellandi* (Horsfield, 1840)
Taxonomic Notes: The genus *Tamiops* might be a species complex and needs taxonomic review.

Assessment Information

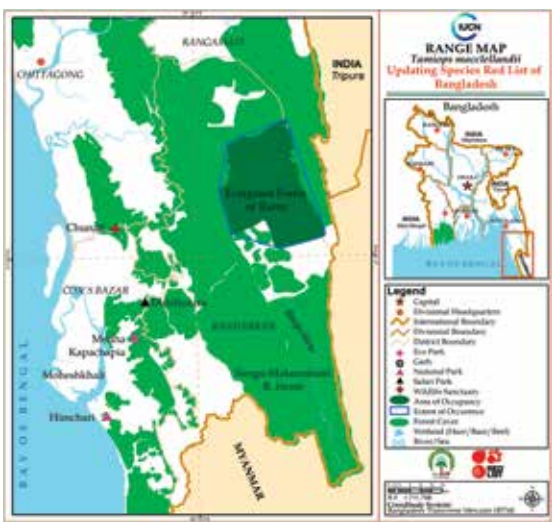
Red List Category & Criteria: CR B2ab (iii) ver 3.1
Justification: So far, this species has only been recorded once from the mixed- evergreen forest patch in Keokradong Range, Ruma, Bandarban (Khan 2012). The forest patches in the Chittagong Hill Tracts have been thoroughly explored by different biologists, but it was never seen anywhere else. Since the species is diurnal and arboreal, it is relatively more visible compared to other mammals of similar sizes. Therefore, it is possible that the species is restricted to only one forest patch where it was first found, so, it has categorized as a Critically Endangered species.
Date Assessed: 21 April 2015

History

Regional Status: Not assessed by IUCN Bangladesh in 2000, because its occurrence in Bangladesh was reported after that time.

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Viet Nam (Duckworth *et al.* 2008).



Tamiops macclellandii © M. Monirul H. Khan

Bangladesh: There is only one sight record from a mixed-evergreen forest patch in Keokradong Range, Ruma, Bandarban (Khan 2012).
EOO: 4 km^2
AOO: 4 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is stable

Habitat and Ecology

It occurs in a wide variety of habitats with sufficient trees such as primary and secondary forests, scrub forests, and gardens, including the degraded areas and areas around human habitation (Smith and Xie 2008). It is diurnal and arboreal. This squirrel feeds on fruits, vegetables and some insects. It takes shelter in tree holes. No information is available on its breeding (Francis 2008).

Assessor: M. Monirul H. Khan

Manis crassicaudata

Species ID: MA0090

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PHOLIDOTA	MANIDAE

Scientific Name: *Manis crassicaudata* Geoffroy, 1803
English Name: Indian Pangolin, Scaly Anteater, Thick-tailed Pangolin
Local Name: Banrui, Pipilikavuk, Piprabhuk, Keot-machh, Katpohu

Assessment Information

Red List Category & Criteria: CR A4d ver 3.1
Justification: This species is rare and currently reported to be found only in the Chittagong Hill Tracts. It is highly exploited for its meat and body parts which are used for medicinal purposes and is under continuous threat of hunting and poaching, therefore, it qualifies for Critically Endangered category.
Date Assessed: 16 March 2015

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, India, Nepal, Pakistan and Sri Lanka (Baillie *et al.* 2014).
Bangladesh: During 1950s to early 1970s it used to be fairly common all over the country with village groves and all terrestrial forests except the Sundarbans. From early1980s its number started dwindling due to excessive hunting, loss of village groves, clearing and burning of natural forests by the government agencies and the hill-dwelling people for commercial forestry and Jhum cultivation (Khan 1982, 1987, 2015). Rare and found mostly in the southeast region of Bangladesh (IUCN Bangladesh 2000).

Manis crassicaudata © David Brossard

EOO: 27,927 km^2
AOO: 19,391 km^2

Population

Generation Time (Length): Seven years in wild and in captivity more than 13 years (Baillie *et al.* 2014)
Total Population: Not known
Trend: Presumably declining

Habitat and Ecology

At present it only occurs in the mixed evergreen forests of the Chittagong Hill Tracts. It is a burrow-dwelling species, solitary in nature except during mating season when adult male and female share the same burrow and baby follows the mother for an appreciable period. It is predominantly terrestrial but also has the ability for climbing up with its prehensile tail and sharp claws. When threatened, more often it curls its body tucking the only scale-less soft snout under the belly and virtually becoming a ball that not even a leopard can crack open (Khan 1987). The species is capable of emitting foul smelling fluid through its anal gland to deter the predator. The pangolin is insectivorous, feeds mainly on termites, ants and their eggs and often on beetles, cockroaches and worms. Usually breeds in January, March, July and November. Gestation period lasts between 65 to 70 days. Females give birth to a single young, however, occasionally two can be produced (http://www.pangolinsg.org/pangolins/indian-pangolin/).

Assessor: Farzana Islam

Manis pentadactyla

Species ID: MA0092

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PHOLIDOTA	MANIDAE

Scientific Name: *Manis pentadactyla* Linnaeus, 1758
English Name: Chinese Pangolin
Local Name: Bonrui, China Piprabhuk, Cheena Bonrui

Assessment Information

Red List Category & Criteria: CR A2bcd ver 3.1
Justification: This species is rare and reported to be found only in the hills of northeast and southeast regions of the country. Chinese Pangolins are considered a delicacy and are hunted on a wide scale for human consumption. The body parts are also used in traditional medicines. Factors such as habitat destruction and hunting constantly challenge its survival. Therefore, it qualifies for Critically Endangered category.
Date Assessed: 25 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Himalayan foothills of Nepal, southern Bhutan and north and northeastern India, northeast and southeast Bangladesh, northern and western Myanmar, to Lao PDR and northern Viet Nam, northwest Thailand, and through southern China to Hainan, Taiwan and Hong Kong (Challender *et al.* 2014).
Bangladesh: Rare resident and occurs in the hills of northeast and southeast regions of the country (Khan 2008, Khan 2015).

EOO: 46,683 km^2
AOO: 16,433 km^2

Manis pentadactyla © M. Monirul H. Khan

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Declining

Habitat and Ecology

It occurs in a variety of habitats including subtropical, deciduous forests and grasslands. This species is nocturnal and secretive, occurs solitary or in pairs. It lives on ground and in burrows, rarely climbs trees. This Pangolin mainly feeds on insects, particularly termites and ants, besides on various other invertebrates including bee larvae, flies, worms, earthworms and crickets. It digs into ant nests and termite mounds with its large fore claws and extract the prey with its long, sticky tongue. It often coils itself for protection and usually remains silent but rarely utters hisses when alarmed. It breeds during February to July and gives birth to a single young (Challender *et al.* 2014).

Assessor: Farzana Islam

Panthera pardus

Species ID: MA0014

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Panthera pardus* Linnaeus, 1758
English Name: Leopard
Local Name: Chitah Bagh
Synonym/s: *Felis pardus* Linnaeus, 1758
Taxonomic Notes: According to genetic analysis, nine subspecies are recognized, with all continental African Leopards attributable to the nominate form (Miththapala *et al.* 1996, Uphyrkina *et al.* 2001).

Assessment Information

Red List Category & Criteria: CR A2cd ver 3.1
Justification: The species was known to occur all over the country and in all habitats as recently as 1940, except possibly for a major portion of the Sundarbans and coastal forests (Khan 1986). It no longer occurs west of longitude 90°E, nor in the Sal forest (*Shorea robusta*) belt of north-central Bangladesh where it was last sighted in Madhupur National Park in 1962 (Khan 1985). Now totally absent from the Sundarbans and from Sal forest, the species is occasionally found in the tea gardens and evergreen forests of Sylhet, notably Rajkandi and Patharia (Gittins and Akonda 1982), Chittagong, Chittagong Hill Tracts and Cox's Bazar forest divisions (Khan 1984, 1985, 1986). The Leopard has become rare and its population may no longer be viable in Bangladesh (Khan 1986). *Panthera pardus* is evaluated as Critically Endangered because from 1940, Extent of Occurrence and Area of Occupancy of this species have been reduced by more than 90% of areas.
Date Assessed: 29 June 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Panthera pardus © M M Feeroz

Geographic Range

Global: The Leopard occurs across most of sub-Saharan Africa, as remnant populations in North Africa, and then in the Arabian peninsula and Sinai/Judean Desert (Egypt/ Israel/Jordan), south western and eastern Turkey, and through southwest Asia and the Caucasus into the Himalayan foothills, India, China and the Russian Far East, as well as on the islands of Java and Sri Lanka (Nowell and Jackson 1996, Sunquist and Sunquist 2002).
Bangladesh: According to Khan (2008), "Occurs in a very few areas in southeast (Chittagong Hill tracts) and northeast (Rema-Kalenga WS) where there are good vegetation cover and prey population. Vagrant individuals visit Gozni forest in north."
EOO: 16,451 km^2
AOO: 12,765 km^2

Population

Generation Time (Length): About 7 years
Trend: Decreasing

Habitat and Ecology

It is both nocturnal and diurnal, although most hunting takes place at night where there are other larger predators but would do so at day where such predators are absent (M.A.R. Khan pers comm.) Leopard is an expert climber and often hides its kill in treetops. It is a solitary hunter. Its regular food includes ungulates, hares, galliform birds, cattle, dogs and some reptiles. It is known to breed all year round (Husain 1974, Khan 1987, 2015, Khan 2008).The Leopard has the widest habitat tolerance of any Old World felid, ranging from rainforest to desert. In Bangladesh it inhabits in hill forests and adjoining tea gardens.

Assessor: Delip K. Das

Neofelis nebulosa

Species ID: MA0063

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Neofelis nebulosa* (Griffith, 1821)
English Name: Clouded Leopard
Local Name: Lam Chita, Gecho Bagh, Lota Bagh

Assessment Information

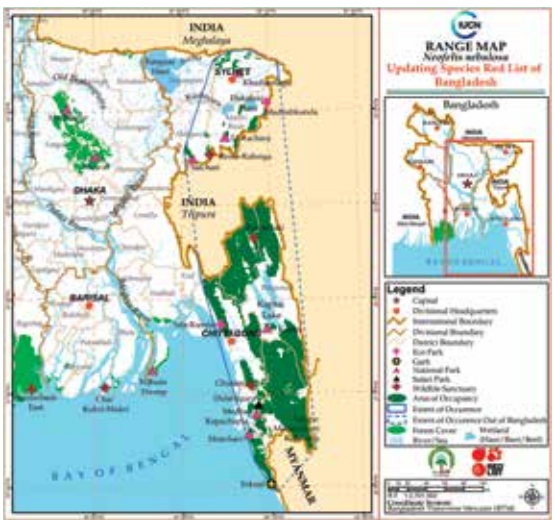
Red List Category & Criteria: CR A2cd ver 3.1
Justification: This species is very rare and inhabits within limited areas of the mixed evergreen forests of the northeastern and southeastern parts of the country. The habitats are highly fragmented and in continuing decline with hunting, poaching and killing by the locals. There are only a few sighting records of the species which although can be a result of the secretive nature of the species but extensive hunting by the indigenous communities cannot be overlooked. Although the species is protected by the law of the land but it also restores the right of the indigenous communities' culture. The reasons of the decline of the species population are understood but no such visible action for the protection of the species is in place. So, the species is considered Critically Endangered.
Date Assessed: 15 December 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia (Peninsular Malaysia), Myanmar, Nepal, Thailand and Viet Nam (Sanderson *et al.* 2008).
Bangladesh: It is restricted to the mixed evergreen forests in the northeast and southeast (Aziz 2011, Khan 2015, Khan 2008).



Neofelis nebulosa © M. Monirul H. Khan

EOO: 41,602 km^2
AOO: 10,623 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data are available, but this species is uncommon and presumably has a declining population
Trend: Presumably declining

Habitat and Ecology

It is only found in the mixed evergreen forests of the northeast and southeast parts of the country. Clouded Leopard is arboreal and restricted to patches of the mixed evergreen forests only. It is rare and very secretive in nature. It preys upon both arboreal and terrestrial vertebrates.

Assessor: Md. Modinul Ahsan
Associate Assessor/s: Rukshana Sultana

Panthera tigris

Species ID: MA0064

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Panthera tigris* (Linnaeus, 1758)
English Name: Tiger
Local Name: Bagh, Baghro Mama, Dora Bagh, Bara-shial, Gobagha, Goira Goma, Loha Faitta, Machak (Garo), Khaiagri (Marma), Pri (Mro).
Synonym/s: *Felis tigris* Linnaeus, 1758
Taxonomic Notes: Bangladesh population of tigers belongs to *P. t. tigris* (Linnaeus, 1758) subspecies referred to as the Bengal Tiger, is a valid subspecies from the time it was founded by Linnaeus and it has recently been well established by the DNA analysis (Luo *et al.* 2004). According to them the Bengal Tiger probably arrived in the Indian subcontinent approximately 12,000 years ago.

Panthera tigris © M. A. R. Khan

Assessment Information

Red List Category & Criteria: CR A1bcd ver 3.1
Justification: Tiger used to occur in and around all the forested areas of Bangladesh until the 1950s and in many villages up to the beginning of 20th century (Mitra 1957, Khan 1985, 1987a, 1987b, 1996, Khan and Chowdhury 2003, Khan 2011). Village-grove-dwelling tigers completely disappeared when the last tiger was shot in Banglabandha, Panchagarh, in 1962 (Khan 1987ab).The Sal forest population decimated by 1980s when those in the forests of the hill districts by the same period too. In these two forest ecosystems the decline is nearly 100 percent. Thankfully, the population in the Sundarbans appears to have stabilized since 1990s. Various estimates indicated the Tiger numbers between 106 and 500 (Ahmad *et al.* 2009, Khan 2011, 2014, Bangladesh Forest Department 2015 *in litt.*). In view of the disappearance of all populations from the village groves, mixed evergreen and Sal forests and being down to a single population restricted only to the Bangladesh and India parts of the Sundarbans, its unabated poaching and habitat destructions Bengal Tiger in Bangladesh has been categorized as Critically Endangered.
Date Assessed: 15 December 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russian Federation, Thailand and Vietnam. It is possibly extinct in Korea (DPR) and extinct in Afghanistan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Singapore, Tajikistan, Turkey, Turkmenistan and Uzbekistan (Tilson and Seal 1987).
Bangladesh: Only viable population is in the Sundarbans in the southwest of Bangladesh, but tigers are rarely sighted in the bordering areas of the Chittagong Hill Tracts (particularly in Kassalong Reserved Forest and Sangu Wildlife Sanctuary) and very rarely in the bordering areas of Greater Sylhet (particularly Patharia Hill Reserved Forest) straying from the neighbouring forests in India.
EOO: 6,298 km^2
AOO: 4,114 km^2

Population

Generation Time (Length): An average generation time is 5 years for Tigers (Smith and McDougal 1991)
Total Population: 106-500 individuals in the Bangladesh Sundarbans (Ahmad *et al.* 2009, Khan 2011, 2014, Bangladesh Forest Department 2015 *in litt.*)
Trend: Decreasing globally

Habitat and Ecology

Tigers are found mainly in and around the forests of tropical Asia, although they historically occurred more widely in drier and colder climes. One subspecies, the Amur Tiger *P. t. altaica*, persists in the temperate forests of Russian Far East. The Sundarbans is the only mangrove habitat for Tigers in Bangladesh. Availability of a sufficient prey based on large ungulates (particularly deer and wild boar) is the key requirement of the Tiger. Tigers need to kill 50 large prey animals per year (Karanth *et al.* 2004). Tigers are opportunistic predators and their diet includes primates, porcupines, birds, fish, rodents, insects, amphibians, reptiles, etc. Tigers are generally solitary, with adults maintaining exclusive territories, or home ranges. Adult female home ranges seldom overlap, whereas male ranges typically overlap from 1–3 females. Tiger home range and density depend on the prey abundance: densities range from 11.65 adult Tigers per 100 km^2 where prey is abundant to as low as 0.13–0.45 per 100 km^2 where prey is more thinly distributed (Nowell and Jackson 1996).

Assessor: Mohammad Ali Reza Khan and M. Monirul H. Khan

Lutra lutra

Species ID: MA0073

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	MUSTELIDAE

Scientific Name: *Lutra lutra* (Linnaeus, 1758)
English Name: Eurasian Otter, European Otter, European River Otter, Old World Otter, Common Otter
Local Name: Uudbiral, Uud, Vodor, Dhaira
Synonym/s: *Viverra lutra* Linnaeus, 1758
Lutra vulgaris Erxleben, 1777
Lutra nair Cuvier, 1823
Lutra rudipes Melchior, 1834
Lutra roensis Ogilby, 1834
Lutra indica Gray, 1837
Lutra nippon Imaizumi & Yoshiyuki, 1989

Lutra lutra © Maureen Hadert and Matthew Steer

Assessment Information

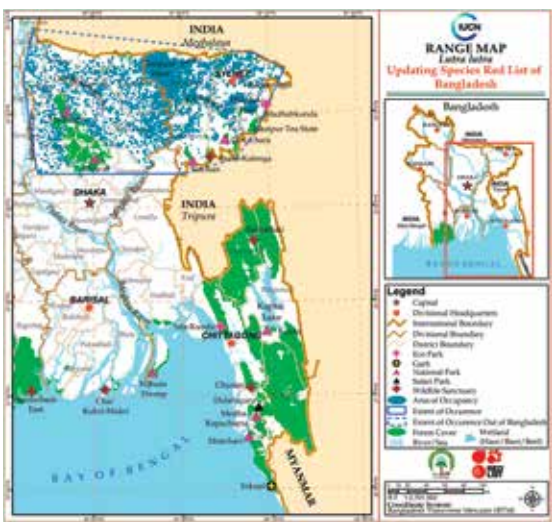
Red List Category & Criteria: CR A2ac ver 3.1
Justification: The species is known to occur in wetland habitats of Greater Sylhet and Greater Mymensingh (IUCN Bangladesh 2003, Asmat 2009) but there is no recent sighting. Once it was widespread in Bangladesh (Asmat 2009, Khan 2015) but its population has been reduced rapidly, which is still going on. Many of its former habitats have been dried out or converted, causing the decline of its Extent of Occurrence. Thus, the species is listed as Critically Endangered.
Date Assessed: 31 October 2015

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Ireland in Western Europe to the Kamchatka Peninsula in eastern Asia, and from Arctic to the southern shores of the Mediterranean (Roos *et al.* 2015).



Bangladesh: The species is known to occur in wetland habitats of Greater Sylhet and Greater Mymensingh (Asmat 2009, Feeroz *et al.* 2011, IUCN Bangladesh 2000, Khan 2015).

EOO: 34,586 km^2
AOO: 2,028 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available
Trend: Global trend is decreasing

Habitat and Ecology

It occurs in a wide variety of aquatic habitats including rivers, streams, lakes, swamps, marshes, rice-fields, swamp forests and coastal wetlands. It is active at night and spends the day roosting in a burrow or a hollow of tree. It catches the prey by mouth several times a day. Feeds mainly on fish and crustaceans, but also on small mammals, birds, bird eggs, insects, worms and even vegetation. Consumes about one kilogram of food daily. Mates in water or on land and breeds year-round. Female lays 1-4 cubs after a gestation period of about 63 days. Female mainly takes care of young for one year until the young becomes sub-adult (Grzimek 1990, Asmat 2009).

Assessor: M. Monirul H. Khan

Lutrogale perspicillata

Species ID: MA0074

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	MUSTELIDAE

Scientific Name: *Lutrogale perspicillata* (I. Geoffroy Saint-Hilaire, 1826)
English Name: Smooth-coated Otter, Indian Smooth-coated Otter
Local Name: Uud, Uud Biral, Bhodar
Synonym/s: *Lutra perspicillata* I. Geoffroy Saint-Hilaire, 1826
Taxonomic Notes: The species was named as *Lutra perspicillata* by Geoffroy 1826 and as *Lutrogale perspicillata* by Gray 1865. Two subspecies were reported (Pocock 1941) (1) *L. p. perspicillata* - in northeast and southern India, Myanmar and Sumatra; and (2) *L. p. sindica* - in north and northwestern India and Pakistan. Another subspecies *L. p. maxwelli*, whose current status is uncertain, is reported from the marshes of southern Iraq (Mason and Macdonald 1986).

Assessment Information

Red List Category & Criteria: CR A2acd ver 3.1
Justification: This species occurred in and around all the wetlands and forested areas of Bangladesh until 1980s. Its population has declined more than 90% due to hunting and poaching, loss of natural habitat and severe conflict with commercial fish farming. There is a small semi-captive population conserved traditionally in Norail District and used for fishing. However, this has also declined more than 80% in last two decades. Therefore, it has been categorized as Critically Endangered.
Date Assessed: 15 December 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Lutrogale perspicillata © M M Feeroz

Geographic Range

Global: It is native to Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Iraq, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Thailand and Viet Nam (de Silva *et al.* 2015).
Bangladesh: The species is restricted to the hilly areas of the northeast and southeast and the coastal districts when its largest population possibly still thrives in the Sundarbans Mangrove forest in the southwest corner of the country (Feeroz *et al.* 2011ab, Khan 1982, 2015).

EOO: 1,34,973 km^2
AOO: 48,147 km^2

Population

Generation Time (Length): 10 years (de Silve *et al.* 2015)
Total Population: Not known
Trend: Decreasing globally

Habitat and Ecology

The Smooth-coated Otter inhabits major rivers, mangroves and estuaries. It is predominantly a fish eater, but supplements its diet with shrimp/crayfish, crab and insects, and other vertebrates such as frog, mudskippers, birds and rats (Prater 1971, Foster-Turly 1992, Hussain and Choudhury 1998).

Assessor: Mohammed Mostafa Feeroz

Helarctos malayanus

Species ID: MA0076

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	URSIDAE

Scientific Name: *Helarctos malayanus* (Raffles, 1821)
English Name: Sun Bear, Malayan Sun Bear
Local Name: Choto Bhalluk, Shurjo Bhalluk
Synonym/s: *Ursus malayanus* (Raffles, 1821)
Helarctos euryspilus (Horsfield, 1825)
Helarctos anmamiticus (Heude, 1901)

Assessment Information

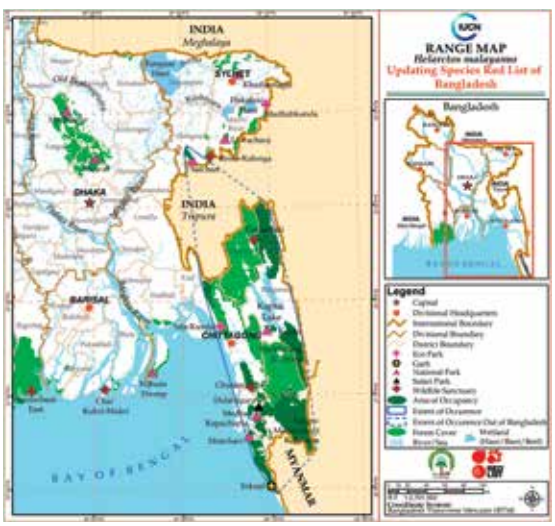
Red List Category & Criteria: CR C2a (i); D ver 3.1
Justification: There is eighty five percent loss in the potential habitat of this bear over the last four decades (Islam *et al.* 2013). There is one recent confirmed record of Sun Bear from Bandarban in 2015 (S.C. Rahman pers. comm.). One individual kept in captivity at Bangabandhu Safari Park, Dulahazara collected from Chittagong Hill Tracts. Although Extent of Occurrence and Area of Occupancy are beyond the threshold levels, the population is no way close to 50 mature individuals. Thus, it has been categorized as Critically Endangered.
Date Assessed: 18 November 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Mainland Southeast Asia as far west as Bangladesh and northeastern India, as far north as southern Yunnan Province in China, and south and east to Sumatra and Borneo (Fredriksson *et al.* 2008).
Bangladesh: A rare species, historically occurred in mixed evergreen forests of southeast and northeast and occasionally in deciduous forests of north (Blanford 1888)



Helarctos malayanus © M K Hasan

and recent reports from remote areas of the Bandarban, Khagrachari and Rangamati Districts of the Chittagong Hill Tracts (CHT) Region up to 1970s. Then, the population started dwindling and that trend continued till date (Khan 1982, 2015). Specific locations include Satchari National Park in Habiganj District, Korerhat in Mirsharai Forest Range and Rangamati in Southeastern Bangladesh (Sarker 2006). Also been reported by local people in Sangu-Matamuhuri, Bilaichhari (in Rangamati) and Remacri under Thanchi Upazila of Bandarban Hill District, Naikhongchari, Dulahazara, Cox's Bazar, Inani, Rangkheong, and Teknaf (Islam *et al.* 2013). There is only one recent confirmed report of sigthing from the Bandarban District (S.C. Rahman pers. comm.).

EOO: 27,179 km^2
AOO: 5,064 km^2

Population

Generation Time (Length): 10 years (life span 12–24 years in wild, 25–28 years in captivity)
Total Population: No quantitative data is available
Trend: Decreasing

Habitat and Ecology

In Bangladesh, Sun Bear prefers only mixed evergreen forest. It is the smallest among the eight living bear species in the world. This bear is an opportunistic omnivores. Sun Bear diet includes termites and ants, beetle larvae, honey bee larvae, and even small rodents, birds and lizards, honey and variety of fruit species, especially figs (*Ficus* spp.). Unlike other bears, it is not known to hibernate due to year round availability of food and subtropical climatic conditions in which it lives. Little is known about social structure or reproduction in Sun Bears (Fredriksson *et al.* 2008).

Assessor: Shayer Mahmood Ibney Alam

Ursus thibetanus

Species ID: MA0077

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	URSIDAE

Scientific Name: *Ursus thibetanus* Cuvier, 1823
English Name: Asiatic Black Bear, Himalayan Black Bear, Moon Bear, Tibetan Black Bear
Local Name: Kalo Bhalluk, Bhalu, Bhaluk, Bhalluk
Synonym/s: *Ursus torquatus* Wagner, 1841
Helarctos tibetanus Adam, 1858.
Selenarctos thibetanus G. Cuvier, 1823.
Taxonomic Notes: The species was found based on specimens collected from Syhet District and named as *Selenarctos thibetanus* G. Cuvier, 1823. Of the three subspecies recognized *Selenarctos thibetanus thibetanus* G. Cuvier, 1823 occurs in Bangladesh, Bhutan, India, Nepal and Pakistan (Srinivasulu and Srinivasulu 2012).

Assessment Information

Red List Category & Criteria: CR A2cd ver 3.1
Justification: There is no exact data on population size reduction but due to continuing extreme threats and known presence of just a handful of specimens in disjunct populations and the population has been reducing drastically and it is suspected that more than 80% population has been declined. Thus, this species has been categorized as Critically Endangered.
Date Assessed: 27 October 2014

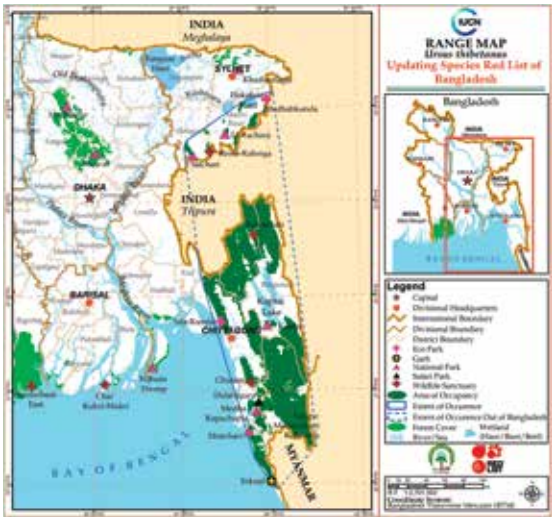
History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This bear is found in Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Iran, Japan, Korea, Lao PDR, Myanmar, Nepal, Pakistan, Russian Federation, Taiwan, Thailand and Viet Nam (Garshelis and Steinmetz 2008).
Bangladesh: Mixed evergreen forest of northeast and southeast including bamboo clusters and tea gardens under the Chittagong and Sylhet Revenue Divisions. The population from the moist deciduous Sal forests of Greater Mymensingh and Sylhet Districts has disappeared completely (Khan 1985, 1987).

EOO: 35,483 km^2
AOO: 10,549 km^2



Ursus thibetanus © M M Feeroz

Population

Generation Time (Length): 10 years (Animal Diversity 2014)
Total Population: Not known
Trend: Decreasing

Habitat and Ecology

This species inhabits mixed evergreen forests and bamboo thickets in the hilly regions. It is terrestrial, usually nocturnal and solitary, during day time they hide inside den or caves, thickets, bushes, and tree holes. This bear is omnivorous; feeds on plant parts, insects, small mammals, birds, honey bee, honey, carrion, fruits, nuts, berries, etc. (Prater 1971). Breeds during May to August and gives birth during January-February. Usually 1 or 2 cubs in a litter every other year (at most) after a gestation period of 6 to 8 months (Chakma 2009).

Assessor: Habibon Naher

Bos gaurus

Species ID: MA0088

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	BOVIDAE

Scientific Name: *Bos gaurus* Smith, 1827
English Name: Gaur, Indian Bison
Local Name: Bon Goru, Gour
Synonym/s: *Bos gour* Hardwicke, 1827
Bos cavifrons Hodgson, 1837
Bos subhemachalus Hodgson, 1837
Bos gaur Sundevall, 1846
Bos asseel Horsfield, 1851
Bubalibos annamiticus Heude, 1901
Gauribos laosiensis Heude, 1901
Gauribos sylvanus Heude, 1901
Uribos platyceros Heude, 1901
Bos gaurus Lydekker, 1907

Taxonomic Notes: IUCN considers the wild species of Gaur under *Bos gaurus*, while referring to the domestic form (Mythun, Mithan or Gayal) as *Bos frontalis*. Traditionally, three subspecies of Gaur have been recognized: *Bos gaurus gaurus* in India, Nepal, and Bhutan; *B. g. readei* in Myanmar (Burma), southern China, Lao PDR, Viet Nam, Cambodia, and Thailand north of the Isthmus of Kra; and *B. g. hubbacki* in Thailand south of the Isthmus of Kra and in West Malaysia (Lydekker 1907) (Duckworth *et al.* 2008).

Bos gaurus © M M Feeroz

Assessment Information

Red List Category & Criteria: CR B2ab (iii) ver 3.1
Justification: The Gaur used to be considered as an extinct species in Bangladesh (IUCN 2000), but few years ago the confirmed presence of two small resident populations in Kassalong RF (forests of Vulongtoli Mon and Betling), Rangamati, was reported (Khan 2013, S. Chakma pers. comm.). Moreover, Gaurs are rarely sighted in Sangu WS and few other bordering forests in Bandarban, but it is not yet sure whether they represent any resident population or vagrant individuals (Khan 2013).
Date Assessed: 21 April 2015

History

Regional Status: Extinct in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia (Peninsular Malaysia), Myanmar, Nepal, Thailand and Viet Nam, and regionally extinct in Sri Lanka (Duckworth *et al.* 2008).
Bangladesh: The confirmed presence of two small resident populations of Gaur is in Kassalong RF (forests of Vulongtoli Mon and Betling), Rangamati (Khan 2013, S. Chakma pers. comm.). Moreover, Gaurs are rarely sighted in Sangu WS and few other bordering forests in Bandarban.

EOO: 2,140 km^2
AOO: 1,231 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is decreasing

Habitat and Ecology

Gaur occurs mainly in evergreen, mixed evergreen and moist deciduous forests, but also occurs in dry deciduous forests and forest peripheries. It is nocturnal but also diurnal in undisturbed areas. It lives in groups of few to nearly 50 Gaurs. Gaur is basically a grazer but would browse on bamboo leaves, reeds and shrubs. It depends on water for drinking, but does not normally bathe or wallow. Males make mating call during the mating season (Asmat 2009, Duckworth *et al.* 2008).

Assessor: Hoq Mahbub Morshed
Associate Assessor/s: M. Monirul H. Khan

Rusa unicolor

Species ID: MA0085

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	CERVIDAE

Scientific Name: *Rusa unicolor* (Kerr, 1792)
English Name: Sambar, Sambar Deer
Local Name: Sambar, Sambar Horin
Synonym/s: *Cervus unicolor* Kerr, 1792
Rusa unicolor Grubb, 1990
Taxonomic Notes: Most 19th and 20th century sources placed the Sambar in the genus *Cervus*, as *C. unicolor*, but Grubb (1990) resurrected the genus *Rusa* for this and allied species. This was followed by Groves (2003) and Grubb (2005). Later Groves and Grubb (2011) divided Sambar into two species, Southeast Asian Sambar *C. equinus* of SE Asia (including NE India) and southern China, and residual Indian Sambar *C. unicolor* of South Asia, based on a variety of morphological differences (no mention was made of 'Chinese Sambar') (Timmins *et al.* 2015). Seven subspecies are recognized of which *R. u. unicolor* occurs in Bangladesh, India and Sri Lanka.

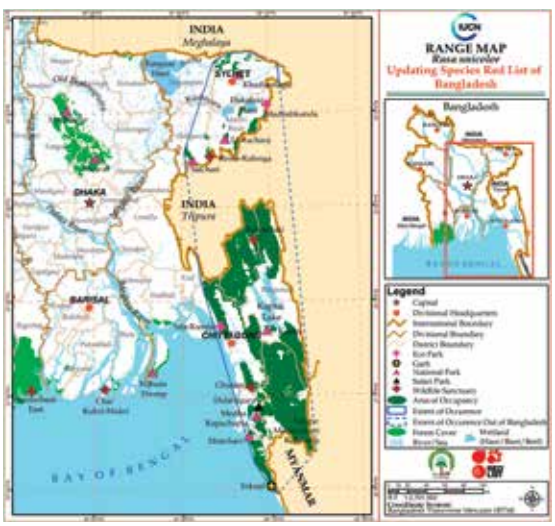
Rusa unicolor © M M Feeroz

Assessment Information

Red List Category & Criteria: CR C2a (i) ver 3.1
Justification: This species is very rare but found only in the degrading mixed evergreen forests. Though the Extent of Occurrence and Area of Occupancy of this species are much larger than the threshold level, the habitat quality and quantity have decreased at least more than 80%. Moreover, the total mature individuals in the wild will not exceed 250. Therefore, the species qualifies as Critically Endangered.
Date Assessed: 22 September 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).



Geographic Range

Global: It occurs in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China (Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Sichuan, Yunnan), India, Indonesia (Sumatra), Lao PDR, Malaysia, Myanmar, Nepal, Sri Lanka, Taiwan, Thailand and Viet Nam (Timmins *et al.* 2015).
Bangladesh: It has only been recorded from the mixed evergreen forests of the northeast and southeast.

EOO: 10,624 km^2
AOO: 41,602 km^2

Population

Generation Time (Length): 8–10 years (Timmins *et al.* 2008)
Trend: Decreasing

Habitat and Ecology

Sambar lives in dense undergrowth and tall grassbeds in the mixed evergreen forests as well as denuded forests locally called unclassed state forests in the Greater Chittagong Hill Tracts (Khan 1985). Sambar lives singly, in pair of in small family groups. It is mostly active at night but could forage at daytime where large carnivores like the tiger and leopard are absent. It is basically a grazer and to some extent a browser and always need to drink water (Khan 1985).

Assessor: Md. Farid Ahsan

Axis porcinus

Species ID: MA0086

CRITICALLY ENDANGERED <CR>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	CERVIDAE

Scientific Name: *Axis porcinus* (Zimmermann, 1780)
English Name: Hog Deer
Local Name: Para Horin

Assessment Information

Red List Category & Criteria: CR A1+2acd; D ver 3.1
Justification: Earlier it was considered as an extinct species in Bangladesh (IUCN Bangladesh 2000). In the recent past, five individuals have been re-discovered from Chittagong Hill Tracts when some indigenous hill-dwelling people took a few fawn for raising at home with a view to slaughtering these when reached adulthood. On the basis of these scanty report and earlier predictions, the species is categorized as Critically Endangered.
Date Assessed: 29 July 2015

History

Regional Status: Extinct in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, Bhutan, Cambodia, India, Nepal and Pakistan (Timmins *et al.* 2012).
Bangladesh: The Hog Deer was considered as an extinct species in Bangladesh (IUCN Bangladesh 2000). It has been disappeared from the Sundarbans (Salter 1984) and has not been reported from the Sylhet District, in the northeast, since the 1970s (Khan 2004). After a long period with no records, an animal was trapped by local people in 2002 (Khan 2004). Further surveys suggested that a few Hog Deer remained in the Chitagong Hill Tracts of the southeast (Khan 2004, Khan 2015). Recently five individuals have been collected from Chittagong Hill Tracts and kept in Bangabandhu Safari Park, Dulahazara.

Axis porcinus © M M Feeroz

EOO: 16,281 km^2
AOO: 7,806 km^2

Population

Generation Time (Length): Not known
Total Population: Very few individuals of this deer are present in the Bandarban and Khagrachari Districts of the Greater Chittagong Hill Tracts
Trend: Not known

Habitat and Ecology

Presently, it inhabits denuded mixed evergreen forest, especially grass-reed field dominated savanna country that has taken over areas which became barren due to removal of indigenous forests in the Chittagong Hill Tracts of Bangladesh. Where undisturbed, Hog Deer tends to be crepuscular, with significant daytime activity and some at night, especially in the hot and wet seasons (Dhungel and O'Gara 1991). In some areas it seems to have become more nocturnal and solitary, presumably through hunting pressure. The main social group is a female and fawn (Timmins *et al.* 2012).

Assessor: Md. Kamrul Hasan

Rusa unicolor


ENDANGERED
〈 EN 〉

Capricornis sumatraensis

Macaca assamensis

Species ID: MA0001

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Macaca assamensis* McClelland, 1839
English Name: Assamese Macaque, Assam Macaque
Local Name: Assamese Bandor, Ashami Banor
Synonym/s: *Macacus assamensis* McClelland, 1839
Macaca rheso-similis Sclater, 1872
Macaca assamensis coolidgei Osgood, 1932
Taxonomic Notes: Two subspecies recognized as *M. assamensis assamensis* and *M. a. pelops* (Hodgson 1841, Fooden 1982). *M.a. assamensis* found in Bangladesh.

Assessment Information

Red List Category & Criteria: EN B1+2ab (i, ii, iii) ver 3.1
Justification: This species has been recorded only from three locations; one in the northeast and the remaining two in the southeast. Its Extent of Occurrence, Area of Occupancy and habitat quality have been declining and presently occupying Extent of Occurrence and Area of Occupancy are within the threshold of Endangered category (Khan 1981, 1985, 1987, 2015, Gittins and Akonda 1982, Feeroz *et al.* 1995, Feeroz 2001, Khan and Ahsan 1986).
Date Assessed: 29 June 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, China, India, Lao PDR, Myanmar, Thailand and Viet Nam (Boonratana *et al.* 2008, Khan 1982, 1987, Menon 2003).

Macaca assamensis © M K Hasan

Bangladesh: Gazipur Tea estate of Rajkandhi Forest Beat in the northeast and Shuvolong of Kaptai in the southeast.

EOO: 1,273 km^2
AOO: 61 km^2

Population

Generation Time (Length): 10 years
Total Population: No quantitative data is available
Trend: Declining

Habitat and Ecology

This species is terrestrial, arboreal and diurnal. It inhabits tropical mixed evergreen forest.

Assessor: Mohammed Mostafa Feeroz

Macaca leonina

Species ID: MA0054

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Macaca leonina* (Blyth, 1863)
English Name: Pig-tailed Macaque
Local Name: Chhotoleji Banor, Ultaleji Banor, Kolu Banor
Synonym/s: *Inuus leoninus* Blyth, 1863
Macacus andamanensis Bartlett, 1869
Macacus coininus Kloss, 1903
Macaca adusta Miller, 1906
Macaca insulana Miller, 1906
Macaca nemestrina indocinensis Kloss, 1919
Macaca nemestrina blythii Pocock, 1931
Taxonomic Notes: Until recently this species was classified as a subspecies of *M. nemestrina*. There is some hybridization with *M. nemestrina* in a small area of southern peninsular Thailand, and on the islands of Phuket and Yao Yai (Groves 2001) in Boonratana *et al.* 2008.

Macaca leonina © M M Feeroz

Assessment Information

Red List Category & Criteria: EN C2a (i) ver 3.1

Justification: This species is restricted to some fragmented patches of mixed evergreen forests and population size is below the threshhold level of Endangered category. Due to the adverse effects on Area of Occupancy and Extent of Occurrence, quality of habitat, restricted number of locations and an insignificant number of mature individuals, it qualifies for Endangered.

Date Assessed: 25 August 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, India, Myanmar, Thailand, Yunnan, China, Cambodia, Lao PDR and Viet Nam (Boonratana *et al.* 2008).

Bangladesh: It occurs in mixed evergreen forests in the northeast and southeast of the country (Feeroz *et al.* 1995, Feeroz 2001, Khan 1987, 2015, Khan and Ahsan 1981)

EOO: 39,584 km^2
AOO: 4,481 km^2

Population

Generation Time (Length): 10–12 years
Total Population: Less than 1000
Trend: Has been declining (rate of decline not known) and is predicted to decline by >20% in the next 5 years

Habitat and Ecology

Pig-tailed Macaques inhabits mixed evergreen hilly forest of the east, southeastern and northeastern areas. It is terrestrial, arboreal, frugivorous and lives in single male dominated group. It is an apt climber and comfortable over land. (Feeroz *et al.* 1995, 1999, 2001, Khan 1987, 2015).

Assessor: Mohammed Mostafa Feeroz

Semnopithecus entellus

Species ID: MA0055

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

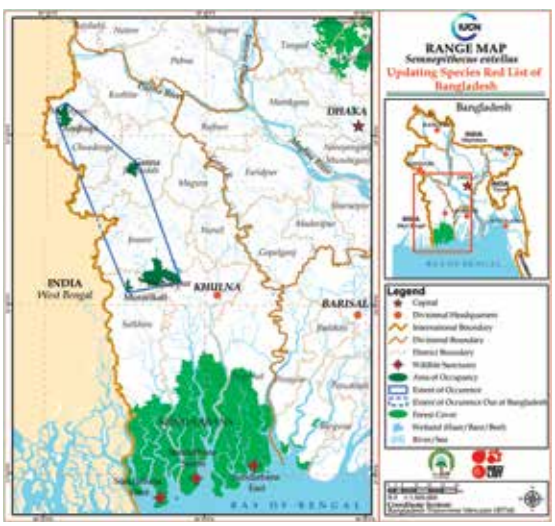
Scientific Name: *Semnopithecus entellus* (Dufresne, 1797)
English Name: Northern Plains Sacred Langur, Common Langur
Local Name: Hanuman
Synonym/s: *Simia fascicularis* Raffles, 1821
Simia aygula Linnaeus, 1758
Simia cynomolgus Schreber, 1775
Macacus carbonarius Cuvier, 1825
Macaca aureus Geoffroy, 1826
Taxonomic Notes: *Semnopithecus entellus* (Dufresne, 1797) subspecies *entellus.*

Assessment Information

Red List Category & Criteria: EN B1+2ab (iii, v); C2a (i) ver 3.1

Justification: The population of this species is known to have been decreased. Although, Gittins and Akonda (1982) estimated only 100 individuals in Bangladesh. Khan 1987 considered the total population of Hanuman in Bangladesh to be between 250 and 300 individuals considering all ages. Khan and Ahsan (1986) reported 89 individuals in 8 groups in Jessore. Khatun (2012) reported 246 individuals at six villages of Keshabpur under Jessore District. Currently, approximately 204 individuals have been observed in at 11 groups distributed in Keshabpur and Monirampur Upazilas under the same district (Anon 2015, unpublished report), though the total population is not more than 250 individuals occurring in all districts. The number of mature individuals in total population could be slightly more than 140. The Extent of Occurrence of this species is more than 100 km^2 but below 5,000 km^2. Actual Area of Occupancy is above 10 km^2. Since male migration has been occurring, all groups together can be considered as single population.

Date Assessed: 25 August 2014



Semnopithecus entellus © M M Feeroz

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species occurs in south western Bangladesh and eastern India (in Andhra Pradesh, Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, and West Bengal) and also occurs in Nepal (Chetri *et al.* 2006). The Bangladesh population is very likely to have originated from a single pair introduced by Hindu pilgrims on the bank of the River Jalangi (Mitra and Molur 2008).
Bangladesh: This is the only non-human primate species of Bangladesh that does not occur in any of the three forest types the country have. It occurs in south western Bangladesh mainly in Jessore District (Keshabpur and Manirampur upazillas), while few troops have been established in Faridpur, Meherpur, Jhinaidaha and Satkhira Districts.

EOO: 3,493 km^2
AOO: 288 km^2

Population

Generation Time (Length): Nine years (life span up to 30 years in females and 18 years in male; and female reaches sexual maturity at 3 years of age)
Total Population: 204 individuals
Trend: Decreasing

Habitat and Ecology

It is found in a wide variety of habitats covering only human habitations and agricultural lands.This species is mainly terrestrial, folivorous, and diurnal.

Assessor: Mohammad Firoj Jaman

Trachypithecus pileatus

Species ID: MA0057

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Trachypithecus pileatus* (Blyth, 1843)
English Name: Capped Langur, Capped Leaf Monkey, Capped Monkey
Local Name: Mukhpora Hanuman, Lalchey Hanuman
Synonym/s: *Simia pileata* Shaw, 1800
Macacus sinicus Kelaart, 1852
Macacus pileatus Blyth, 1863
Presbytis pileatus Blyth, 1843
Taxonomic Notes: Four subspecies are currently recognized, although their validity is in some doubt (it is thought that seasonal variation in pelage color may account for at least some of the variation) Das *et al.* 2008. Of these, only two subspecies viz. *T. p. durga* and *T. p. pileatus* are found in Bangladesh.

Trachypithecus pileatus © M M Feeroz

Assessment Information

Red List Category & Criteria: EN A1cd; C2a (i) ver 3.1
Justification: This species has been categorized as Endangered in view of the decline in of 50% of its Extent of Occurrence and Area of Occupancy and habitat quality over three generations. Moreover, there exist less than 250 individuals in each subpopulation.
Date Assessed: 15 December 2014

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Bangladesh, Bhutan, India and Myanmar (Das *et al.* 2008).

Bangladesh: Of the three species of Langurs, this species has the widest distribution. It occurs in all forest ecosystems, barring the Sundarbans which never had any of the primates but the Rhesus Macaque. In the early 1970s and 1980s it occurred in Gazipur District to Jamalpur, Sherpur, Netrokona and Mymensingh under Dhaka Division to the forests in Sylhet and Chittagong Revenue Divisions. At the current time it has just a handful specimens left in Mymensingh Division when rests are present in the mixed evergreen forests of Sylhet and Chittagong Divisions (Khan 1981, 2015).

EOO: 15,700 km^2
AOO: 1,400 km^2

Population

Generation Time (Length): 10-12 years (inferred from other Langur species)
Total Population: Quantitative data is not available
Trend: Declining

Habitat and Ecology

This species is found in the dense forest and bamboo patches of both moist deciduous and mixed evergreen forests. It generally prefers middle canopy, but also uses the top and lower canopy of the forests. It also uses forest floor for feeding and moving. This species is diurnal and predominantly arboreal. It lives in single male multi-female groups and group size varies from 2 to 15 Langurs. It is mainly folivorous and the food supplemented by fruits, flowers and nectar. It drinks water from water accumulated in tree trunks and rarely from a ground level water body. It often sits and forages in trees along the bridle paths and roads passing through a forest.

Assessor: Md. Mofizul Kabir

Nycticebus bengalensis

Species ID: MA0050

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	LORISIDAE

Scientific Name: *Nycticebus bengalensis* (Lacépède, 1800)
English Name: Slow Loris, Bengal Slow Loris, Bengal Loris, Northern Slow Loris
Local Name: Lojjaboti Banor, Lajuk Banor
Synonym/s: *Nycticebus cinereus* Milne Edwards, 1867
Nycticebus incanus Thomas, 1921
Nycticebus tenasserimensis Elliot, 1913
Taxonomic Notes: This taxon was formerly considered a subspecies of *Nycticebus coucang*.

Assessment Information

Red List Category & Criteria: EN A2cd ver 3.1
Justification: This species has a restricted distribution only in the mixed evergreen forests of northeast, east and southeast of the country. So, it is inferred that at least 50% of its population has been reduced due to the decline of its AOO, EOO, over the last two decades or so, unprecedented changes in habitat qualities and potential level of exploitation that are continuing unabated. It has been wiped out from its former range in the Sal forests (Khan 1987). Thus, it has been categorized as Endangered.

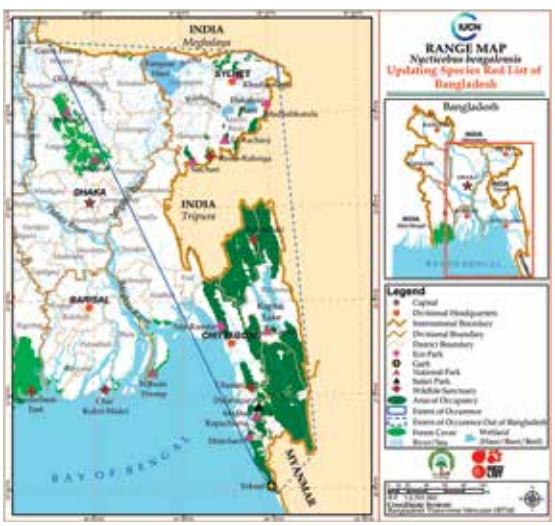
Date Assessed: 21 January 2015

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, Cambodia, China, India, Lao PDR, Myanmar, Thailand and Viet Nam (Streicher *et al.* 2008).
Bangladesh: This species is rare and currently distributed in mixed evergreen forests of northeast and southeast only.



Nycticebus bengalensis © M M Feeroz

EOO: 68,871 km^2
AOO: 10,625 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available
Trend: Not known

Habitat and Ecology

This species is nocturnal. Sleeps during day in tree holes or inside dense vegetation to avoid direct sunlight. Occurs solitarily or in pairs. Territorial and marks its territory by urine splashed on tree or wherever it lives (Khan 1981). This Loris moves very slowly. It feeds on insects, small vertebrates, fruits and gums. This species breeds year-round (Khan 2008).

Assessor: Md. Kamrul Hasan

Hylopetes alboniger

Species ID: MA0100

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Hylopetes alboniger* (Hodgson, 1836)
English Name: Particolored Flying Squirrel
Local Name: Bichitro-ronga Uranta Kathbirali, Choto Uranta Kathbirali
Synonym/s: *Sciuropterus alboniger* Hodgson, 1836
Sciuroptera turnbulli Gray, 1837

Hylopetes alboniger © M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: EN B1ab(iii) ver 3.1

Justification: This species is rare and occurs in and around mixed evergreen forests of Greater Sylhet in the northeast. Both EOO and AOO of this species are relatively small and restricted to a few forest patches. Continuing decline of the quality of its known and potential habitats has been observed. Therefore, it qualifies for Endangered category.

Date Assessed: 18 November 2014

History

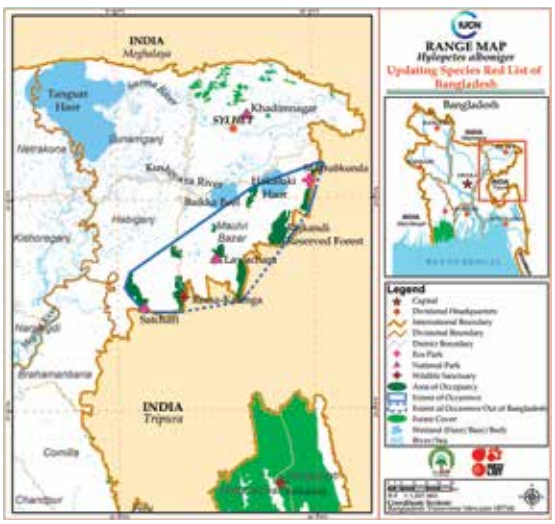
Regional Status: Not Assessed (IUCN Bangladesh 2000)

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam (Duckworth *et al.* 2008).

Bangladesh: This squirrel occurs in and around mixed evergreen forests of Greater Sylhet in the northeast. It is likely to be present in the mixed evergreen forests of the Chittagong Revenue Division (Khan 2015).

EOO: 3,192 km^2
AOO: 428 km^2



Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is decreasing

Habitat and Ecology

It occurs as solitary, in pairs or in small family groups. Mainly arboreal, but rarely comes to the ground. This squirrel is apt in gliding from tree to tree and feeds on soft, fleshy fruits (e.g. *Ziziphus*, jackfruit), seeds (e.g. tamarind), shoots, buds and leaves. It makes its drey in tree hollows. In each litter 2-3 young are born. The squirrel is found in mixed evergreen forests, montane forests, oak and rhododendron forests (Duckworth *et al.* 2008). Populations can be found in primary forests as well as secondary, degraded forests and scrubby habitat. It is nocturnal and almost purely arboreal.

Assessor: M. Monirul H. Khan

Lepus nigricollis

Species ID: MA0117

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	LAGOMORPHA	LEPORIDAE

Scientific Name: *Lepus nigricollis* Cuvier, 1823
English Name: Indian Hare, Rufous-tailed Hare, Black-naped Hare
Local Name: Shashak, Khorgosh

Assessment Information

Red List Category & Criteria: EN A2ac ver 3.1
Justification: The population outside the forest has virtually being wiped out. Though this species is widely distributed in the forested areas, but based on its existing threats it is suspected that at least 50% of its population, AOO and habitat quality has been reduced and the process is still continuing. Thus, it is categorized as Endangered.
Date Assessed: 21 March 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, Bhutan, India, Indonesia, Nepal, Pakistan and Sri Lanka. Introduced to Mauritius and Seychelles.
Bangladesh: Widely but sparingly distributed throughout the country and confined to forests and some of its fragments (Khan 2008, Khan 2015).
EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: Though this species is widely distributed but based on its threats it is presumed that now a very small population exists. Usually prefers large track of bush and jungles. Also found in forest edges and woodlands (Khan 1985).
Trend: Presumably stable

Lepus nigricollis © M. Monirul H. Khan

Habitat and Ecology

It is nocturnal and shy, usually found active during dawn and dusk. Herbivorous and consumes a variety of vegetations. Like other hares it is caprophagic. Female gives birth to 1-4 young at a time (Khan 1996, Kamruzzaman 2009).

Assessor: Md. Kamrul Hasan

Cuon alpinus

Species ID: MA0059

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	CANIDAE

Scientific Name: *Cuon alpinus* (Pallas, 1811)
English Name: Dhole, Red Dog, Indian Wild Dog, Asiatic Wild Dog
Local Name: Ram Kutta (Kukur), Bon Kutta, Dhole
Synonym/s: *Canis dukhunensis* Sykes, 1831
Canis primaevus Hodgson, 1833
Cuon primaevus Adams, 1858

Assessment Information

Red List Category & Criteria: EN A2cd ver 3.1
Justification: This species is rare and restricted only to a few severely fragmented areas in the eastern Chittagong Hill Tracts in the southeast of Bangladesh. It used to occur in the forests of Rema-Kalenga Wildlife Sanctuary in the northeast until 2000. The quality and quantity of habitats are declining rapidly when prey species is diminishing at an alarming rate. It has been assumed that at least 50% of the population has been reduced over the last ten years. Therefore, it qualifies for Endangered category.
Date Assessed: 27 October 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Russian Federation, Tajikistan, Thailand and Viet Nam.
Bangladesh: Rare and restricted only to several isolated patches in eastern Chittagong Hill Tracts (Kassalong RF, Pablakhali WS, Rheinkheong RF and Sangu WS) in the southeast of Bangladesh. Previously it occurred (until the year 2000) in the forests of Rema-Kalenga WS in the northeast. It used to be common in forests of Geater Sylhet, Chittagong and Chittagong Hill Tracts Districts at least up to 1950s. Then, as the forest denudation followed by hunting of it and its prey and all major wildlife species of these mixed evergreen forest the species has virtually disappeared, barring a few very difficult to observe packs in the remotest parts of the Hill Tracts. A live specimen collected from the Hill Tracts was in display in Dhaka Zoo during 1970s (Ahmed 1982).

Cuon alpinus © www.indianbiodiversity.org

EOO: 10,308 km^2
AOO: 3,201 km^2

Population

Generation Time (Length): Not known, but the lifespan is usually 10 years.
Total Population: Fewer than 2,500 mature individuals worldwide. No quantitative data is available from Bangladesh.
Trend: Global trend is decreasing

Habitat and Ecology

Dhole is found mostly in family packs of 2-30 individuals and unites in groups during day time but rarely at night. Prey animals include medium-sized ungulates such as deer, wild boar and wild goat, and occasionally domestic cattle. It sleeps inside a den. Mating takes place during September-February giving birth to 4-6 cubs at a time in the den after a gestation period of 60-65 days (Durbin *et al.* 2008). In Bangladesh, its prey animals mostly include Wild Boar, Barking Deer, Sambar, supplemented with smaller ground-dwelling vertebrates (M A Khan pers. comm.). Occurs in a wide variety of vegetation types, including primary, secondary and degraded forms of tropical dry and moist deciduous forest, evergreen and mixed evergreen forests, dry thorn forests, grassland, scrub, forest mosaics, and alpine steppe (above 3,000 m mean sea level). It has not been recorded from desert regions. In Bangladesh it is restricted to mixed evergreen forest.

Assessor: M. Monirul H. Khan

Prionailurus viverrinus

Species ID: MA0067

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Prionailurus viverrinus* (Bennett, 1833)
English Name: Fishing Cat
Local Name: Mechho Biral, Mechho Bagh
Taxonomic Notes: Placed in *Prionailurus* according to genetic analysis (Johnson *et al.* 2006, O'Brien and Johnson 2007). No modern analysis of subspecies is available.

Assessment Information

Red List Category & Criteria: EN A2ac ver 3.1
Justification: This species is widely distributed with low population density. Based on its existing threat, it is suspected that more than 50% of its population has been declined during the last two decades. Its Area of Occupancy and habitat quality have been reduced and the process is still continuing. Thus, it has been categorized as Endangered.
Date Assessed: 21 March 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Bhutan, China, India, Indonesia, Cambodia, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taiwan, Thailand and Viet Nam (Mukherjee *et al*. 2010).
Bangladesh: It is widely distributed throughout the country both in the countryside or homestead woodlands and in all kinds of natural forests and wetlands. At the current time a small population thrives in the countryside when the largest population is still present in the Sundarbans Mangrove Forest with diminishing numbers in other forests (Feeroz

Prionailurus viverrinus © M K Hasan

2013, 2014, Feeroz *et al.* 2011, 2012, Husain 1974, Khan 2008, 2015).

EOO: 2,11,043 km^2
AOO: 28,999 km^2

Population

Generation Time (Length): Not known
Total Population: Though this species is widely distributed but based on its threats it is presumed that now a very small population exists.

Habitat and Ecology

It prefers wetlands, marshes and haor areas. It is also recorded from the rural areas along river system or close to water bodies (Khan 2008) as well as in countryside thickets on banks of wetlands. It is nocturnal, solitary and shy. Usually Fishing Cat is found active at dawn and dusk. It is basically a fish eater but would kill any small animal that it can grab. Often these include poultry, ducks and geese, kids of goat and sheep when this cat lives near human settlements.

Assessor: Mohammed Mostafa Feeroz

Aonyx cinerea

Species ID: MA0071

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	MUSTELIDAE

Scientific Name: *Aonyx cinerea* (Illiger, 1815)
English Name: Oriental Small-clawed Otter, Asian Small-clawed Otter, Small-clawed Otter
Local Name: Dhaira Uud, Uud Biral, Bhodar
Synonym/s: *Amblonyx cinereus* Illiger, 1815
Aonyx cinereus Illiger, 1815
Lutra cinerea Illiger, 1815
Amblonyx concolor Rafinesque, 1832
Amblonyx cinerea by Pocock 1941
Taxonomic Notes: This species used to be known as *Amblonyx cinereus*. DNA work by Koepfli and Wayne (1998, 2003) indicated that the Asian Small-clawed Otter is a sister species to the African Clawless and Congo Clawless Otters. *Aonyx* is the older name, so the Asian Small-clawed Otter is now *Aonyx cinereus*. Two subspecies were reported *A. c. concolor* in northeast India, Myanmar extending up to Sumatra and *A. c. nirnai* in the hill ranges of southern India (Pocock 1941).

Aonyx cinerea © Tania Khan

Assessment Information

Red List Category & Criteria: EN A2ce ver 3.1
Justification: In the last few decades the range of Asian Small-clawed Otter has shrunk particularly in the western portion of its range in the country. Its habitats are severely fragmented and there is an ongoing decline in the extent and quality of its habitat, as well as the number of locations and subpopulations and number of mature individuals due to anthropogenic disturbances and habitat exploitation. It is suspected that the population size is below the threshold level of Endangered category. These factors qualify this species as Endangered.
Date Assessed: 14 January 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is native to Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India (Arunachal Pradesh, Assam, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu, and West Bengal), Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Singapore, Taiwan, Thailand and Viet Nam. Introduced to United Kingdom (Great Britain).
Bangladesh: Sundarbans

EOO: 6,298 km^2
AOO: 4,114 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available
Trend: Decreasing

Habitat and Ecology

It inhabits natural habitats of ponds and lakes, rivers and streams, coastal tide pools and estuaries, freshwater and mangrove swamps and also near human habitats, especially in rice fields (Khan 2008). This species lives in extended family groups of about 12 individuals with only the alpha pair breeding; offsprings from previous years help to raise the young. It is an excellent swimmer and performs swimming by moving hind legs and tail. It can dive under water for about eight minutes. In the riverine systems, it choose areas with low vegetation and its nesting burrows are dug into the muddy banks. This species spends most of its time on land unlike most other otters. It feeds mainly on invertebrates such as crustaceans and mollusks, but is also known to feed on vertebrates, in particular amphibians (Hussain 2008, Khan 2008).

Assessor: Sajeda Begum

Capricornis rubidus

Species ID: MA0089

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	BOVIDAE

Scientific Name: *Capricornis rubidus* Blyth, 1863
English Name: Serow, Red Serow, Mainland Serow
Local Name: Bon Chagol
Synonym/s: *Antelope sumatraensis* Bechstein, 1799
Capricornis sumatraensis Gray, 1850
Taxonomic Notes: Taxonomy of Serow is not completely resolved.

Assessment Information

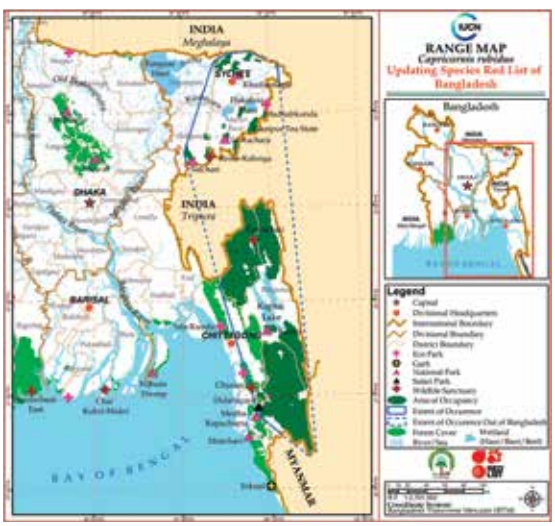
Red List Category & Criteria: EN A2bcd ver 3.1
Justification: The species was widely distributed across the mixed evergreen forests of the southeast and northeast, and the deciduous forests in the north of Greater Mymensingh (Khan 1982, 2015, Kamruzzaman 2009, Khan 2013). The populations have declined rapidly due to hunting for meat and habitat loss. It is presumed that at least 50% of its Area of Occupancy and Extent of Occurrence and habitat quality have been severely degraded over the last 10 years. Thus, it has been categorized as Endangered.
Date Assessed: 30 July 2015

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Viet Nam (Duckworth *et al.* 2008).
Bangladesh: At the current time it occurs mainly in the mixed evergreen forests of the Chittagong Hill Tracts and rarely in the forests of Greater Sylhet bordering Indian territories (Khan 1982, 2015, Kamruzzaman 2009, Khan 2013).



Capricornis rubidus © M. Monirul H. Khan

EOO: 34,405 km^2
AOO: 8,307 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is decreasing

Habitat and Ecology

It occurs mainly in mixed evergreen forests in the hills and mountains. It is most active at dawn and dusk and rests during most of the day in thick vegetation. Usually occurs as solitary but rarely in small groups. Serow feeds on grass, shoots and leaves. It defends the feeding range from intruder serows. It is able to move in steep rocky slopes. Mating takes place during October-November. A single young is born usually during September-October after a gestation period of 7-8 months (Duckworth *et al.* 2008).

Assessor: M. Monirul H. Khan

Muntiacus muntjak

Species ID: MA0087

ENDANGERED <EN>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	CERVIDAE

Scientific Name: *Muntiacus muntjak* (Zimmermann, 1780)
English Name: Barking Deer, Indian Muntjac
Local Name: Maya Harin, Ruru Harin
Synonym/s: *Cervus moschatus* Blainville, 1816
Cervus muntjak Zimmermann, 1780
Cervus pleiharicus Kohlbrugge, 1896
Muntiacus bancanus Lyon, 1906
Muntiacus rubidus Lyon, 1911
Taxonomic Notes: Groves (2003), elected to raise mainland forms of *M. muntjak* (*s.l.*) from subspecific taxa to the species *M. vaginalis*, leaving the mainly sundaic forms to constitute *M. muntjak* (*s.s.*), a position that had already been postulated by previous authors (e.g. Groves and Grubb 1990). However, this assertion of species status rests on very little evidence, primarily the assumption that all *M. muntjac* in the Sunda region carry a unique karyotype different from all *M. vaginalis* in northern regions. The Sundaic karyotype has only been documented in a single individual from the Malay Peninsula south of the Isthmus of Kra. Other purported differences (e.g. dorsal darkening, Groves (2003), if they can be considered characters rather than traits, appear minor and certainly not ones which would separate species level taxa. A much wider sampling of karyotype is needed for this systematic position to be placed on solid ground.

Muntiacus muntjak © M M Feeroz

Assessment Information

Red List Category & Criteria: EN A2acd ver 3.1
Justification: This species is only found in forested areas of Bangladesh with very low population. Based on its existing threats it is suspected that at least 50% of its population, Area of Occupancy and habitat quality have been reduced that is still continuing. Thus, it is categorized as Endangered.

Date Assessed: October 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Brunei Darussalam, India, Indonesia, Malaysia and Thailand (Groves 2003).
Bangladesh: Its range Madhupur Sal forest and mixed evergreen forest of the northeastern and southeastern regions and the Sundarbans (Feeroz *et al.* 2011, 2012, Khan 2008, Khan 2015).
EOO: 1,23,295 km^2
AOO: 15,052 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available
Trend: Not known

Habitat and Ecology

Barking Deer is associated with forest and adjacent areas and also occurs in degraded forests and nearby tea gardens. It is terrestrial and crepuscular. The diet is mostly fruits, buds, tender leaves, flowers, herbs and young grass (Kitchener *et al*. 1990).

Assessor: Tapan Kumar Dey


VULNERABLE
〈 VU 〉

Vulpes bengalensis

Macaca mulatta

Species ID: MA0053

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Macaca mulatta* Zimmermann, 1780
English Name: Rhesus Macaque
Local Name: Banor, Bandor
Synonym/s: *Cercopithecus mulatta* Zimmermann, 1780
Simia (Cercopithecus) fulvus Kerr, 1792
Macaca (Pithex) nipalensis Hodgson, 1840
Macaca (Pithex) oinops Hodgson, 1840
Macaca mulatta vestita Milne-Edwards, 1892
Macaca mulatta villosa (True, 1894)
Macaca siamica Kloss, 1917
Macaca mulatta mcmahoni Pocock, 1932
Taxonomic Notes: This species has been revised by Fooden (2000), who regards *M. mulatta* as monotypic. The molecular differences among the *M. mulatta* populations in Bangladesh have been identified but not qualified for any subspecies (Feeroz *et al.* 2008, Hasan *et al.* 2014).

Macaca mulatta © M M Feeroz

Assessment Information

Red List Category & Criteria: VU C2a (i) ver 3.1

Justification: Though this species has a wide distribution in forested areas and also in some human settlements, its population is declining. Total number of mature individuals is less than 10000 and number of mature individuals in each subpopulation is less than 1000. So, it fulfills the criteria for threatened category Vulnerable.

Date Assessed: 25 August 2014

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is known from Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Myanmar, Nepal, Pakistan, Thailand and Viet Nam (Timmins 2008).
Bangladesh: All forested and some non- forested habitats as well as in and around 18 human settlements. This is the only primate species found in the Sundarbans (Feeroz 2001, Hasan *et al.* 2013, Khan 2015).

EOO: 39,584 km^2
AOO: 4,481 km^2

Population

Generation Time (Length): 12 years (Molur *et al.* 2003)
Total Population: <10000
Trend: Declining

Habitat and Ecology

This species lives in a variety of habitats including forests and human altered areas (Hasan *et al.* 2013). Terrestrial, arboreal, frugivorous, folivorous, partly carnivorous, consuming small animals. Matrilinial group dominated by an alpha male with sub-dominant males and preferentially dominant females among the female ranks. It is at home both in trees, man-made structures and over land (Khan 1987).

Assessor: Mohammed Mostafa Feeroz

Ratufa bicolor

Species ID: MA0101

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Ratufa bicolor* (Sparrman, 1778)
English Name: Black Giant Squirrel, Malayan Giant Squirrel
Local Name: Baro Kathbirali, Ram Kota

Assessment Information

Red List Category & Criteria: VU B1ab (i, ii) ver 3.1
Justification: This species is uncommon and restricted mainly to the mixed evergreen forests in the northeast and southeast of the country. Severe pressure on forest areas for timber extraction and due to many other anthropogenic factors its habitat is rapidly shrinking. Its Extent of Occurrenceis smaller than 5000 km^2. Therefore, it qualifies for Vulnerable category.

Date Assessed: 15 December 2014

History

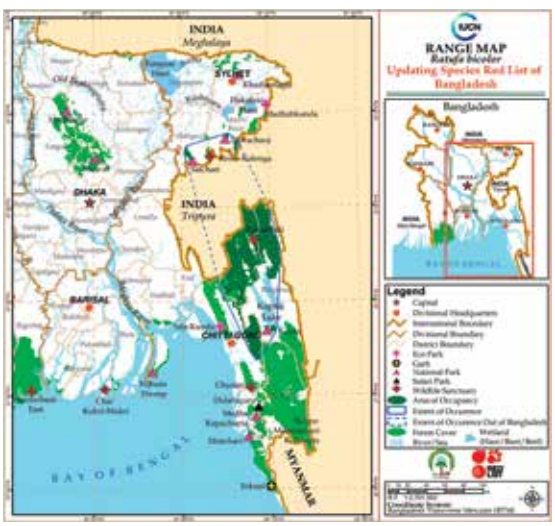
Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

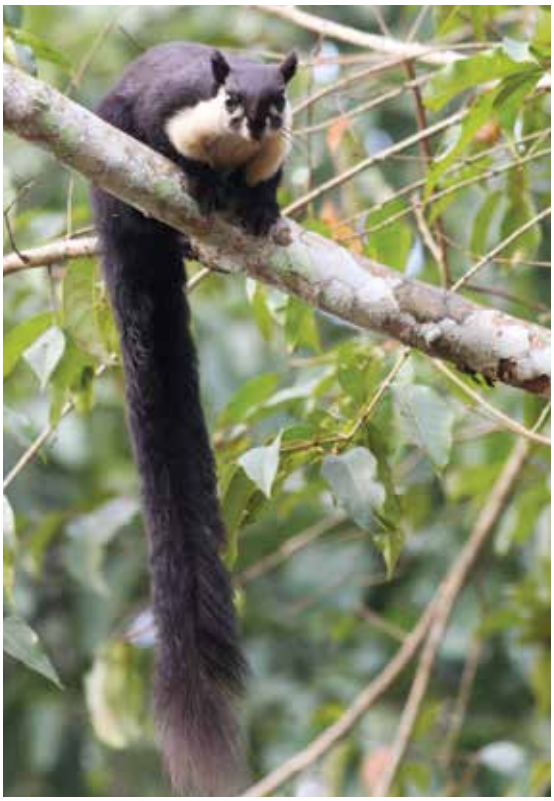
Geographic Range

Global: This species is widely distributed in Asia from northern South Asia, through southern China into much of mainland and western insular Southeast Asia. Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Viet Nam.

Bangladesh: It occurs in the mixed evergreen forest in the northeastern and southeastern hilly areas of the country (Feeroz *et al.* 2011, Khan 2015).

EOO: 14,108 km^2
AOO: 4,234 km^2





Ratufa bicolor © M M Feeroz

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is decreasing

Habitat and Ecology

It inhabits only the mixed evergreen forested areas. It is diurnal and arboreal.

Assessor: Mohammed Mostafa Feeroz

Vulpes bengalensis

Species ID: MA0060

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	CANIDAE

Scientific Name: *Vulpes bengalensis* (Shaw, 1800).
English Name: Bengal Fox
Local Name: Khek Shial, Kheki
Synonym/s: *Canis bengalensis* Shaw, 1800
Canis kokree Sykes, 1831
Canis indicus Hodgson, 1833
Vulpes hodgsonii Gray, 1837

Vulpes bengalensis © Farzana Islam

Assessment Information

Red List Category & Criteria: VU A2bc ver 3.1
Justification: This species is uncommon and now restricted mainly to the northwestern part of Bangladesh, and a small population in the border of Moulvibazar. The frequencies of sighting (index of relative abundance) has declined in the past and is being declining ever more rapidly due to retribution killing by villagers. It used to occur widely in Bangladesh but that range has now become quite restricted. So the Extent of Occurrence and Area of Occupancy have declined. Therefore, it qualifies for Vulnerable category.
Date Assessed: 27 October 2014

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is endemic to the Indian subcontinent and ranges from the foothills of the Himalayas in Nepal to the southern tip of the Indian peninsula. It is native to Bangladesh, India, Nepal and Pakistan (Johnsingh and Jhala 2008).
Bangladesh: Uncommon resident of Bangladesh, which is currently distributed in the western part of the country (west side of the river Jamuna except the Sundarbans), but a small population occurs in the bordering area of Moulvibazar. In the past, it used to be present along the coastal areas of Comilla and Chittagong revenue divisions, even up to 1980s. (Khan 1996).

EOO: 81,352 km^2
AOO: 33,367 km^2

Population

Generation Time (Length): Not known, but the lifespan is 10-12 years
Total Population: No quantitative data is available
Trend: Global trend is decreasing

Habitat and Ecology

This species is found mostly in family groups. Basically nocturnal but also active during the day, especially throughout monsoon period when sky is overcast. It hunts small mammals (especially rodents), reptiles, insects and crabs occasionally supplemented by sweet fruits. It lives in complex underground burrow network during the day. Usually four young are born inside the burrow during February-April (Kabir 2008). It prefers semi-arid, flat to undulating terrain, scrub, foothills and *grassland* habitats where it is easy to hunt and dig dens. It avoids dense forests, steep terrain, tall grasslands and true deserts.

Assessor: M. Monirul H. Khan

Catopuma temminckii

Species ID: MA0062

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Catopuma temminckii* (Vigors and Horsfield, 1827)
English Name: Asian Golden Cat, Asiatic Golden Cat, Golden Cat, Temminck's Cat
Local Name: Shonalee Biral
Synonym/s: *Felis temminckii* Vigors and Horsfield, 1827
Pardofelis temminckii (Vigors and Horsfield, 1827)

Assessment Information

Red List Category & Criteria: VU B2b (ii, iii) ver 3.1
Justification: There are several confirmed records of the species in the southeast (Chittagong Hill Tracts) and northeast (Greater Sylhet), which are based on freshly hunted specimens, skins and camera-trap images. The AOO is <2,000 km^2, and the EOO and the quality of habitat are known to be declining. Moreover, the species is hunted for meat in the Chittagong Hill Tracts. Therefore, the species has been categorized as Vulnerable.
Date Assessed: 21 January 2015

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Thailand and Viet Nam (Sanderson *et al*. 2008).
Bangladesh: There are several confirmed records of the species in the southeast (Chittagong Hill Tracts; Khan 2008, S.C. Rahman pers comm. 2014) and northeast (Greater Sylhet; H.A. Rahman pers. comm. 2014), which are based on freshly hunted specimens, skins and camera-trap images. Khan (1982) collected the first skin of it from Chittagong Hill Tracts.

Catopuma temminckii © Aparajita Datta, NCF

EOO: 34,405 km^2
AOO: 8,307 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available
Trend: Decreasing globally

Habitat and Ecology

It is nocturnal and carnivorous. It feeds mainly on mammals (small and medium-sized), birds and lizards; also rarely kills domestic goats. Births occur in hollows on the ground, rock and tree. It produces a litter of 1–3 kittens after a gestation period of about 80 days. Cubs reach sexual maturity in about two years (Asmat 2009).

Assessor: M. Monirul H. Khan

Arctonyx collaris

Species ID: MA0072

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	MUSTELIDAE

Scientific Name: *Arctonyx collaris* Cuvier, 1825
English Name: Hog Badger, Hog-nosed Badger
Local Name: Shukorakar Bazer, Gor-khodok, Gorkhudini, Balu-shuor
Synonym/s: *Arctonyx isonyx* (Horsfield, 1856)
Arctonyx taraiyensis (Gray, 1863)
Arctonyx taxoides (Blyth, 1853)
Arctonyxalbogularis (Blyth, 1853)
Arctonyx incultus (Thomas, 1922)
Arctonyx obscurus (Milne-Edwards, 1871)
Arctonyx orestes (Thomas, 1911)
Arctonyx consui (Pocock, 1940)
Arctonyx dictator (Thomas, 1910)
Arctonyx annaeus (Thomas, 1921)
Arctonyx hoevenii (Hubrecht, 1891)

Arctonyx collaris © M M Feeroz

Assessment Information

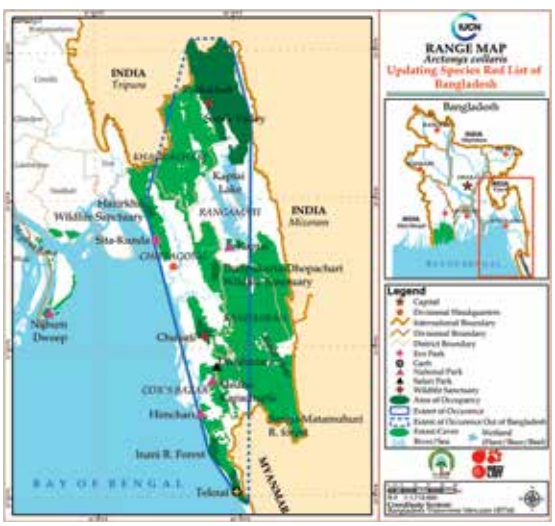
Red List Category & Criteria: VU B1ab (i, ii) ver 3.1
Justification: The Extent of Occurrence of Hog Badger is 14,807 km^2 and it is confirmed from six locations (Teknaf WS, Chunati WS, Hazarikhil WS, Dudpukuria-Dhopachari WS, Inani Protected Area, Sajek Valley). Continuous decline is observed of its Extent of Occurrence and Area of Occupancy. So, this species is assessed as Vulnerable.
Date Assessed: 17 March 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Its range extends through Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Mongolia, Myanmar, Thailand and Viet Nam (Timmins *et al.* 2008).



Bangladesh: It is found in the mixed evergreen forests of Chittagong Revenue Division that includes the Districts of Bandarban, Chittagong, Cox's Bazar, Khagrachari and Rangamati (Khan 1982, 2015). It was also reported from Noakhali district (Asmat 2009).

EOO: 14,807 km^2
AOO: 2,094 km^2

Population

Generation Time (Length): Not known
Total Population: The population size of this species is not known. However, camera trapping surveys in three Protected Areas (Chunati WS, Dudpukuria-Dhopachari WS, and Teknaf WS) rarely encountered this species (Feeroz 2014, Feeroz *et al.* 2012a, 2012b).
Trend: Not known

Habitat and Ecology

Mixed evergreen forest is the Hog Badger's principal habitat. It spends the day time in burrows that it digs for itself or in convenient natural shelters. It has been also reported from the homestead vegetation bordering forests. The Hog Badger is nocturnal, vegetarian and scavenger. Its feeding behaviour is to some extent similar to Wild Boar as it keeps digging in the wet and soft forest floor to fetch the worms and small creature as well as plant matters with its pronounced snout (Khan 2015). It forages using its powerful sense of smell. Worms and other invertebrates are taken along with roots and tubers which are pulled up with the snout and long claws of the fore paws. Fruits are also eaten and it is likely that they may also take any small mammals which it comes across (Asmat 2009). Little is known about its breeding habits, though litter size seems to be two or three young, and in captivity the average lifespan is 14 years.

Assessor: Ashis Kumar Datta

Martes flavigula

Species ID: MA0075

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	MUSTELIDAE

Scientific Name: *Martes flavigula* (Boddaert, 1785)
English Name: Yellow-throated Marten, Javan Yellow-throated Marten
Local Name: Halud Gaas, Gokul, Moula, Mouchaki
Synonym/s: *Mustela flavigula* Boddaert, 1785
Taxonomic Notes: A taxonomic revision is needed on different geographic populations. The geographic variability of *M. flavigula* is considerable; many subspecies have been described, which are considered as separate species by some taxonomists.

Martes flavigula © M. Monirul H. Khan

Assessment Information

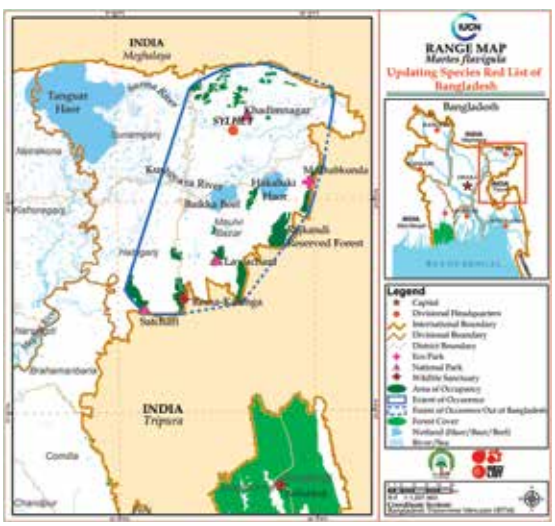
Red List Category & Criteria: VU B2b (ii, iii) ver 3.1
Justification: The species is restricted to the mixed evergreen forest areas in the northeast (Greater Sylhet) of Bangladesh. The EOO is <20,000 km^2 and the number of locations where it is found is <10. The quality of habitat is degrading due to overexploitation of resources and expansion of betel leaf cultivation. Therefore, the species has been categorized as Vulnerable.
Date Assessed: 21 January 2015

History

Regional Status: Not assessed by IUCN Bangladesh in 2000 because it has only recently been discovered.

Geographic Range

Global: It is native to Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, North Korea, South Korea, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Russian Federation, Thailand and Viet Nam (Abramov *et al.* 2008).
Bangladesh: Mixed evergreen forest areas in the northeast (Greater Sylhet) of Bangladesh (Khan 2015).



EOO: 7,973 km^2
AOO: 505 km^2

Population

Generation Time (Length): Not known, but the lifespan is up to 14 years (Abramov *et al.* 2008)
Total Population: No quantitative data is available
Trend: Stable globally

Habitat and Ecology

This species is usually active during day, but rarely at night. Occurs solitary or in pairs. Very agile and can move quickly on ground and in tree canopy. Feeds on small vertebrates, large invertebrates and bee hives. Rests in tree holes and on branches. The litter size is up to five, and the gestation period is 220-290 days (Duckworth 1995). It occurs in a wide variety of forest types, including degraded one.

Assessor: M. Monirul H. Khan

Arctictis binturong

Species ID: MA0078

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Arctictis binturong* (Raffles, 1821)
English Name: Binturong, Bear Cat, Palawan Binturong
Local Name: Geso Bhaluk, Gach Valluk, Gach Fewa
Taxonomic Notes: Nine subspecies have been recognized (Pocock 1939, Cosson *et al.* 2006). Of these, *Arctictis binturong albifrons* (F. G. Cuvier 1822) occurs in the Indian subcontinent, including Bangladesh (Ellerman and Morrison-Scott 1966).

Assessment Information

Red List Category & Criteria: VU B1ab (iii) + 2ab (iii) ver 3.1
Justification: This species has been evaluated as Vulnerable based on its Extent of Occurrence is 13,461 km^2 and Area of Occupancy being 767 km^2, current population is small and occurs only in a few disjunct areas and on the continuous threat of its habitat destruction and other existing threats.
Date Assessed: 27 October 2014

History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Its range covers Southeast Asia and Malayan peninsula, specifically Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia, Nepal, Philippines, Thailand and Viet Nam (Widmann *et al.* 2008).
Bangladesh: This species is rare, occurs in mixed evergreen forests and bamboo clumps in the southeast and northeast of the country covering the hill forests of Sylhet and Chittagong in Bangladesh (Khan 2008, 2015).

Arctictis binturong © M K Hasan

EOO: 13,461 km^2
AOO: 767 km^2

Population

Generation Time (Length): 10 years (Animal Diversity 2014)
Total Population: No quantitative data is available
Trend: Decreasing

Habitat and Ecology

This species occurs in the mixed evergreen forest and bamboo clumps in the northeast and southeast regions of Bangladesh. Binturongs are nocturnal and mostly solitary and tend to evade each other, but are not strictly territorial. They spend the majority of their time in tree but also have a high level of ground activity as they are too large to jump from tree to tree (Widmann *et al.* 2008). Binturongs have also been documented swimming and diving in order to obtain food (Cosson *et al.* 2007). Their prehensile tail acts as another limb as they climb slowly and carefully. Their hind legs can rotate backwards to enhance their back claws' ability to grasp as they climb trunks.

Assessor: Sayad Mahmudur Rahman
Associate Assessor/s: Sanjina Afrin

Paguma larvata

Species ID: MA0080

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Paguma larvata* (Smith, 1827)
English Name: Masked Palm Civet, Gem-faced Civet
Local Name: Pahari Vam, Boishne Ula, Wiamphai Naitha (Marma)
Taxonomic Notes: Corbet and Hill (1992) listed six subspecies but a taxonomic revision is needed for this species.

Paguma larvata © M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: VU A2 cd ver 3.1

Justification: This species is rare and found only in the mixed evergreen forests of the country. Its population has been declining due to the destruction of forests habitats and hunting. At least 30% of its population has been declined in the last 10 years. Thus, it has been categorized as Vulnerable.

Date Assessed: 30 November 2014

History

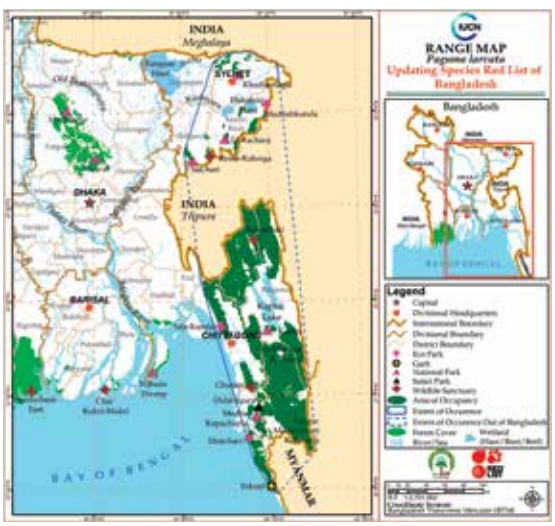
Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India (Andaman Is.), Indonesia (Kalimantan, Sumatra), Lao PDR, Malaysia (Peninsular Malaysia, Sabah, Sarawak), Myanmar, Nepal, Thailand and Viet Nam (Nowak 1999).

Bangladesh: It is restricted to the mixed evergreen forests of the northeast and southeast of Bangladesh (Khan 1982, 2008, 2015).

EOO: 41,602 km^2
AOO: 10,623 km^2



Population

Generation Time (Length): Not known but most probably averages 10 years in the wild (Nowak 1999). Its lifespan in captivity is up to 15 years (Lekagul and McNeely 1977).
Total Population: No quantitative data is available
Trend: Decreasing

Habitat and Ecology

It inhabits in mixed evergreen forests. Masked Palm Civet is arboreal, solitary and nocturnal (Nowak, 1999). It sleeps during the day in 'day beds', which are in trees over 80% of the time. These beds are located in the top 10% of the tree (measured by height) in particular day beds are not reused. There are two breeding seasons per year though there is only one breeding record in the monsoon (April) was observed (pers. obs.). It feeds on fruits, small vertebrates and insects. It rarely comes down to the ground and move in the morning or in the late afternoon.

Assessor: Shayer Mahmood Ibney Alam

Platanista gangetica

Species ID: MA0012

VULNERABLE <VU>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	PLATANISTIDAE

Scientific Name: *Platanista gangetica* (Roxburgh, 1801)
English Name: Ganges River Dolphin, Ganges Dolphin, Blind River Dolphin, South Asian River Dolphin
Local Name: Shushuk, Shushu, Susu, Huchchum, Hurchum, Hush, Shush, Shishu Mach
Synonym/s: *Platanista gangetica* (Roxburgh, 1801)
Platanista minor Owen, 1853
Taxonomic Notes: The Indus and Ganges populations were long regarded as identical until Pilleri and Gihr (1971) divided them into two species (*P. gangetica* and *P. minor*), but Kasuya (1972) reduced the two taxa to subspecies of a single species (*P. gangetica*). The two subspecies are: *P. g. gangetica*, and *P. g. minor*. Bangladesh population is *P. g. gangetica.*

Assessment Information

Red List Category & Criteria: VU A2acd ver 3.1
Justification: Throughout the distribution range, this species is facing a high risk of human impact, destruction of natural forests and daming of upper reaches of all trans-boundary rivers in the neighbouring countries that is causing massive siltation in all floodplain rivers. There has been a dramatic decline in the Extent of Occurrence, as well as habitat quality, especially in the Ganges (IWC, 2000) and Brahmaputra River basins, which is related to the construction of barrages in the upstream countries (M A R Khan pers. comm). The species has also disappeared from most of the tributaries of Ganges-Brahmaputra-Meghna river systems due to siltation, insufficient water flow. So, it is now restricted to a few larger channels (pers. obs.). It is assuming that at least 30% decline of population has occurred during last three generations with the decline in its habitat and incidental catch in drag net. Based on the ongoing threats, fragmentation of the population, the species has been assessed as Vulnerable.
Date Assessed: 29 July 2014

Platanista gangetica © Md. Zahangir Alom

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, India, Nepal, Pakistan and possibly Sikkim and Bhutan (Culik 2011, Smith and Braulik 2012). This subspecies (*P. g. gangetica*) occurs in the Ganges-Brahmaputra-Meghna, and Karnaphuli-Sangu river systems of the South Asian subcontinent, from the deltas upstream to where they are blocked by rocky barriers, shallow water, fast currents, dams, or barrages (Smith and Braulik 2012). The subspecies *P. g. minor* is endemic to the rivers of the lower Indus basin in Pakistan (Culik 2011).
Bangladesh: All major rivers of Bangladesh.

EOO: 1,42,000 km^2
AOO: 7,338 km^2

Population

Generation Time (Length): 10 to 20 years (Smith and Braulik 2012)
Total Population: About 225 individuals in the Sundarbans (about 7% calves) (Smith *et al.* 2006), 125 in Karnaphuli-Sangu River system (Smith *et al.* 2001), Population in other rivers has not been estimated yet.
Trend: Declining

Habitat and Ecology

Platanista gangetica lives exclusively in freshwater river system (Ahmed 2009, Culik, 2011, Khan 1985, 1987, Smith *et al*. 2009) and the estuaries where salinity level is low. Also during monsoon quite a good number visits the northern regions of the Sundarbans (Khan 1985, 1987 and M. A. R. Khan pers. comm). It occurs in all connected rivers and tributaries of Ganges-Brahmaputra-Meghna system, and Karnaphuli-Sangu river system in southern Bangladesh. They also present in seasonally flooded and lowlands. In general, *Platanista gangetica gangetica* mostly found in deep pools in river meanders and confluences. In the water ways of Bangladesh Sundarbans, their distribution is conditionally dependent on low salinity, high turbidity and moderate depth during both low and high freshwater flow (Smith *et al*. 2009).

Assessor: Md. Zahangir Alom

Ratufa bicolor

NEAR THREATENED
〈 NT 〉

Viverricula zibetha

© M K Hasan

Petaurista magnificus

Species ID: MA0098

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Petaurista magnificus* (Hodgson, 1836)
English Name: Hodgson's Giant Flying Squirrel
Local Name: Hodgsoner Uranta Kathbirali
Synonym/s: *Sciuropterus magnificus* Hodgson, 1836
Sciuropterus nobilis Gray, 1842
Sciuropterus chrysothryx Hodgson, 1844
Petaurista hodgsoni Ghose and Saha, 1981
Taxonomic Notes: *Petaurista petaurista* possibly represents a complex of several similar species. Further studies are needed to clarify the taxonomic status.

Assessment Information

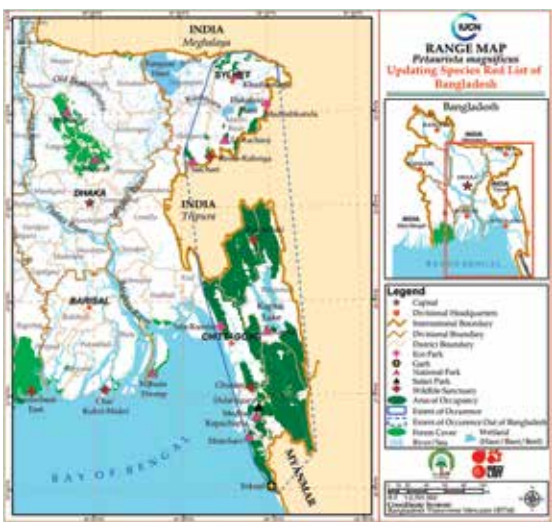
Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: The species is widely distributed in the mixed evergreen forests in the southeast and northeast of Bangladesh. It is rare and difficult to see, because of its nocturnal and arboreal habits (Khan 1996). The population is presumably declining due to habitat loss and habitat degradation. Therefore, it has categorized as a Near Threatened species.
Date Assessed: 21 March 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, China, India and Nepal (Molur 2010).
Bangladesh: Widely distributed in and around mixed evergreen forests in the southeast and northeast of Bangladesh.



Petaurista magnificus © M. Monirul H. Khan

EOO: 41,602 km^2
AOO: 10,624 km^2

Population

Generation Time (Length): Not known, but the lifespan is 10 to 12 years (Duckworth *et al.* 2008).

Total Population: Not known

Trend: Decreasing globally

Habitat and Ecology

This species occurs in denuded mixed evergreen tropical and subtropical and broad-leafed forests. It is active at night and sleeps in tree-holes or a shady place of a tree during daytime. It glides from tree to tree in search of food. Feeds on fruits, seeds, barks, sap and resin, and tender leaves and shoots. When asleep it puts its head under the body just like Bengal Slow Loris. It breeds during the rainy season and lays one young in a tree-hollow.

Assessor: M. Monirul H. Khan

Tupaia glis

Species ID: MA0018

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	EULIPOTYPHLA	TUPAIIDAE

Scientific Name: *Tupaia glis* (Diard, 1820)
English Name: Common Tree Shrew
Local Name: Gecho Chhucho
Synonym/s: *Tupia belangeri lepcha* Thomas, 1922

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: This species is widely but thinly distributed in the Sal and mixed evergreen forests of the country (Khan 1987, 2015). Its EOO and AOO are much larger than the threshold level. As it is a forest dwelling species, its habitat is continuously shrinking and being degraded due to faulty forestry policies, practices and lumber poaching. On these bases, it has been assessed as Near Threatened.
Date Assessed: 28 December 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Southeast Asia, including Thailand through the Malayan Peninsula into Indonesia (Han 2008).

Bangladesh: It is found in mixed evergreen forests of northeast and southeast as well as deciduous Sal forests in the central and northern part of the country (Kamruzzaman 2009, Khan 2008).

EOO: 1,35,082 km^2
AOO: 12,057 km^2

Tupaia glis © M. Monirul H. Khan

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available but as this species is found in a vast area, presumably has a large population.
Trend: Not known

Habitat and Ecology

It inhabits primary and mature secondary mixed evergreen and deciduous Sal forests. It is tolerant to some degree of habitat modifications (Kamruzzaman 2009, Han 2008). It spends time both in trees and on the ground, moves very fast and feeds on arthropods, fruits and leaves.

Assessor: Md. Kamrul Hasan

Felis chaus

Species ID: MA0061

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Felis chaus* Schreber, 1777
English Name: Jungle Cat, Swamp Cat, Reed Cat
Local Name: Ban Biral, Wab, Bon Bilai, Gara
Synonym/s: *Felis shawiana* Blanford, 1876
Taxonomic Notes: Jungle Cat has been separated into 10 subspecies (Nowell and Jackson 1996, Sunquist and Sunquist 2002, Wozencraft 2005) of these, *Felis chaus kutas* (Pearson 1832) occurs in Bangladesh (Srnivasulu and Srinivasulu 2012).

Felis chaus © IUCN/Sultan Ahmed

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: This species does not fulfill any of the criteria to qualify threatened categories due to its wide range and presumably large population size. But due to continual habitat destruction, poaching and human-cat conflict (Rawshan *et al*. 2012) the population trend is now decreasing. Thus, this species has been evaluated as Near Threatened.
Date Assessed: 22 September 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Central Asia, Southern Asia and Africa.
Bangladesh: It has the widest distribution among all the cat species being present in village groves and in all forest ecosystems, barring man-made mangrove forests in Bangladesh (Khan 2015, Khan 2008, IUCN 2003).

EOO: 2,22,509 km^2
AOO: 1,35,729 km^2

Population

Generation Time (Length): Not known

Total Population: Not known

Trend: Decreasing

Habitat and Ecology

In Bangladesh, the Jungle Cat inhabits variety of habitats namely bushes, forests, swamps, cultivation and near human settlements (Khan 2008). The Jungle Cat is mainly nocturnal, crepuscular and solitary. It commonly consumes rodents, lizards, snakes, frogs, fish, insects, livestock and even fruits. Breeds during December-March (Sunquist and Sunquist 2002, Khan 1987, 2008, Ahmed *et al.* 2009).

Assessor: Mohammad Sultan Ahmed

Prionailurus bengalensis

Species ID: MA0066

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Prionailurus bengalensis* Kerr, 1792
English Name: Leopard Cat
Local Name: Chita Biral
Synonym/s: *Felis bengalensis* Kerr, 1792
Taxonomic Notes: Groves (1997) suggested recognition of several distinct island subspecies on the basis of morphological analysis, including:
P. b. borneoensis Brongersma, 1936 in Borneo
P. b. heaneyi Groves, 1997 in Palawan island, Philippines
P.b. javenensis Desmarest, 1816 in Java and Bali
P.b. rabori Groves, 1997 in Negros, Cebu and Panay islands, Philippines
P.b. sumatranus Horsfield, 1821 in Sumatra and the offshore island of Tebingtinggi. Although one mainland Asian subspecies is generally recognized as *P.b. bengalensis* (Kerr 1792, Groves 1997) and based on genetic analysis the Iriomote Cat *P.b. iriomtensis* (Masuda and Yoshida 1995, Johnson *et al.* 1999) is considered a subspecies of Leopard Cat in Japan.

Prionailurus bengalensis © M M Feeroz

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: This species does not qualify for any threatened category due to its wide distribution and unavailability of the information on its population size. The population is declining due to continual habitat destruction, hunting and conflict with human (Khan 2005, Rawshan *et al*. 2012). So, Leopard Cat is evaluated as Near Threatened.
Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Its range countries are Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Russian Fedaration, Singapore, Taiwan, Province of China, Thailand and Viet Nam (Nowell and Jackson 1996, Sunquist and Sunquist 2002).
Bangladesh: Leopard Cat has the widest distribution, just after the Jungle Cat, living in all three forest ecosystems, the mixed evergreen, Sal Forests and the Sundarbans Mangrove Forest of the country (Asmat 2009, IUCN 2000, Khan 1982, 1986, 2015, Khan 2004, 2008).

EOO: 1,93,499 km^2
AOO: 16,458 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Decreasing

Habitat and Ecology

This cat occurs in a broad spectrum of habitats that include moist deciduous Sal forest, wet coastal mangrove forest and semi evergreen forest, as well as shrubs and grasslands (Khan 2005, 2008, Asmat 2009). Leopard Cat is mainly nocturnal, crepuscular and semi arboreal. Like most felids, it is opportunistic and prey on small rodents, reptiles, amphibians, birds, fish, crabs, insects, deer fawn and feeds on carrion (Khan 2004, 2008, Asmat 2009).

Assessor: Mohammad Sultan Ahmed

Herpestes urva

Species ID: MA0070

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	HERPESTIDAE

Scientific Name: *Herpestes urva* (Hodgson, 1836)
English Name: Crab-eating Mongoose
Local Name: Kankra-bhuk Benji, Moucha Bejji
Taxonomic Notes: Corbet and Hill (1992) listed three subspecies.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: This species is only found in and around mixed evergreen forests of northeast and southeast of the country. This species does not fulfill any criteria of threatened categories, however, Area of Occupancy is less than 10,000 km^2 and the population is reducing due to the gradual destruction of the habitat. Thus, it has been categorized as Near Threatened.

Date Assessed: 21 January 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Taiwan, Thailand and Viet Nam (Duckworth and Timmins 2008).

Bangladesh: This species is rare and sparsely distributed in mixed evergreen forests of northeast and southeast (Khan 1982, 2015, Feeroz *et al.* 2011, 2012).

EOO: 50,613 km^2
AOO: 9,153 km^2

Herpestes urva © M M Feeroz

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available but this species is rare in Bangladesh.
Trent: Not known

Habitat and Ecology

It inhabits mixed evergreen forest, near water and paddy field, forest undercover and the areas bordering forests. It is diurnal, shy and carnivorous; feeding on frogs, lizards, small birds and bird eggs and small rodents.

Assessor: Mohammed Mostafa Feeroz

Viverra zibetha

Species ID: MA0005

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Viverra zibetha* Linnaeus, 1758
English Name: Large Indian Civet
Local Name: Baghdas, Bham or Bham Biral, Gandho Gokul or Khatas
Synonym/s: *Viverra tainguensis* Sokolov *et al.* 1997
Taxonomic Notes: Six subspecies have been proposed (Corbet and Hill 1992) but a taxonomic revision is needed. The validity of the new species *V. tainguensis* has been seriously questioned (Veron and Walston 2003) and it is now generally considered a synonym of *V. zibetha* (Wozencraft 2005).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: Though this species is widely distributed in diverse habitats, the population has been declining due to retribution killing, hunting for meat, road-side killing and other anthropogenic factors. It has been categorized as Near Threatened based on its level of threats.
Date Assessed: 29 June 2014

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: South and Southeast Asia including Bangladesh, Bhutan, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Singapore, Thailand and Viet Nam (Wozencraft 2005).
Bangladesh: Widely distributed all over the country. This species is found in all terrestrial Protect Areas (Feeroz 2013, 2014, Feeroz *et al.* 2011, 2012) but does not occur in offshore islands (M A R Khan pers. comm.).

Viverra zibetha © M K Hasan

EOO: 1,74,044 km²
AOO: 1,35,729 km²

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

The habitat includes mixed evergreen and deciduous forests, homestead vegetation including bushes. It scrubs as well as secondary forests and plantations often said to have even wider habitat use. It is terrestrial, solitary and nocturnal. It spends most of its time on the ground but is an agile climber. During day time, sleeps in burrows that is usually dug and abandoned by other animals. This civet marks its territory with the secretions from its perineal glands. Mostly carnivorous. Diet includes birds, frogs, snakes, small mammals, eggs, crabs, fish as well as poultry and garbage but also fruits and roots (Khan 1985, 1987, 2009).

Assessor: Sajeda Begum

Viverricula indica

Species ID: MA0013

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Viverricula indica* É. Geoffroy Saint-Hilaire, 1803
English Name: Small Indian Civet
Local Name: Khatash, Gandho Gakul, Choto Bagdash, Bham, Newl, Kolkat
Synonym/s: *Civetta indica* Geoffroy Saint-Hilaire, 1803
Viverricula indica (Desmarest, 1804)
Viverricula malaccensis (Gmelin, 1788)
Taxonomic Notes: Thirteen sub-species have been reported worldwide.

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: Though this species is widely distributed in a diverse habitat throughout Bangladesh but the population has been declining due to different anthropogenic factors. Hunting, poaching and retribution killing of this species for attacking poultry and pigeon coop is also evident. Its countryside habitat is being continuously destroyed. This species does not fulfill any of the criteria for threatened categories. Therefore, this species has been categorized as Near Threatened based on its threats.
Date Assessed: 29 June 2014

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This civet is native to Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Indonesia (Jawa, Sumatera), Lao PDR, Viet Nam, Malaysia (Peninsular Malaysia), Myanmar, Nepal, Pakistan, Sri Lanka and Thailand, Introduced to Comoro Isles, Madagascar, Pemba Isles, Socotra Isles, the Philippines, Yemen and Zanzibar.

Viverricula indica © M. Monirul H. Khan

Bangladesh: Widely distributed throughout the country (Khan 2008, Khan 2015).

EOO: 1,74,044 km²
AOO: 1,35,729 km²

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available on its population size. However, this species is found all over the country. Camera trapping surveys in six Protected Areas (Rema Kalenga, Dudpukuria- Dhopachari, Fashiakhali and Teknaf Wildlife Sanctuaries, Inani Reserve Forest and Sitakunda Eco Park) encountered this species. The encounter of this species is less frequent than Large Indian Civet (Feeroz 2013, Feeroz *et al.* 2011, Feeroz *et al.* 2012ab).
Trend: Declining

Habitat and Ecology

It is found in all forests in the country as well as homestead vegetations, bamboo thickets and old graveyard. Also found in sub-urban areas. This species is primarily nocturnal and terrestrial but sometimes active during day. It usually spends daytime in burrows, tree holes and thickets. Also it likes to hide in disused buildings and ruins. This civet is omnivorous; feeds on small mammals, birds, reptiles, frogs, insects, fruits and some vegetable matter (Khan 1985, 1987, 2009). Small Indian Civet marks its territory with the characteristic scent secreted from the civet gland. No marked breeding season; young seen throughout the year. Litter size varies from 2 to 5 babies (Francis 2008).

Assessor: Sharmin Akhtar

Orcaella brevirostris

Species ID: MA0008

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Orcaella brevirostris* (Owen, 1866)
English Name: Irrawaddy Dolphin
Local Name: Iraboti, Hiraboti, Shushuk, Shush, Hush, Hochchum
Synonym/s: *Orca (Orcaella) brevirostris* Owen, 1866
Orcaella brevirostris brevirostris Ellerman & Morrison-Scott, 1951
Orcaella brevirostris fluminalis Ellerman & Morrison-Scott, 1951
Orcaella fluminalis Gray, 1871
Orcella brevirostris Anderson, 1871
Orcella fluminalis Anderson, 1871
Phocaena (Orca) brevirostris Owen, 1866

Taxonomic Notes: Dolphins of the genus *Orcaella* were recently split into two species, the Irrawaddy Dolphin *Orcaella brevirostris* and the Snub-fin Dolphin *O. heinsohni* (Beasley *et al*. 2002, 2005) as quoted in Reeves *et al.* 2008. Of these, *Orcaella brevirostris* occurs in Bangladesh (Husain 1974, Khan 1982, 1985, 1987, 2015, Smith *et al.* 2006, 2008).

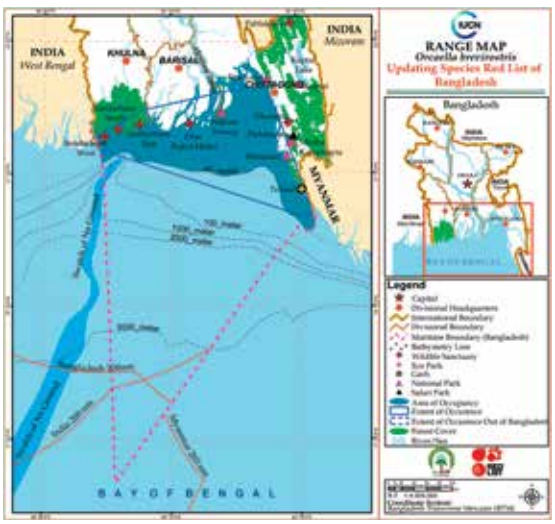
Orcaella brevirostris © Md. Zahangir Alom

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1

Justification: The species is mostly found in freshwater affected coastal waters and waterways of the Sundarbans in a large range. The Extent of Occurrence and the Area of Occupancy of this species is much higher than the threshold level. The population size is 451 individuals (3.4% calves) in the Sundarbans (Smith *et al*. 2006) and 5,383 individuals in coastal waters in the Bay of Bengal (Smith *et al*. 2008). It does not fulfill any of the criteria to qualify threatened categories but based on its existing threats, it has been categorized as Near Threatened.

Date Assessed: 29 June 2014



History

Regional Status: Critically Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Reeves *et al*. 2008 described its distribution in warm coastal waters and rivers from the Bay of Bengal to western Sulawesi, Indonesia. It occurs in Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam (Reeves *et al*. 2008).
Bangladesh: Waterways of the Sundarbans mangrove forest and fresh water affected coastal waters in the Bay of Bengal.

EOO: 63,225 km^2
AOO: 41,401 km^2

Population

Generation Time (Length): 15–16 years
Total Population: About 6000 individuals
Trend: Not known

Habitat and Ecology

It generally occurrs in small group of 1–6 animals in the Sundarbans and 1–10 animals in the coastal water, and they are very social. Inconspicuous surfacing, only show part of the back. Leaps are infrequent. Average dive duration is 115.3 second. Turbid fresh and brackish waters in the waterways of the Sundarbans and freshwater affected coastal waters in the Bay of Bengal. They prefer water depth from 2.7–16.0 meter and salinity from 7.0–34.0 ppt (Smith *et al*. 2008).

Assessor: Md. Zahangir Alom

Neophocaena phocaenoides

Species ID: MA0010

NEAR THREATENED <NT>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	PHOCOENIDAE

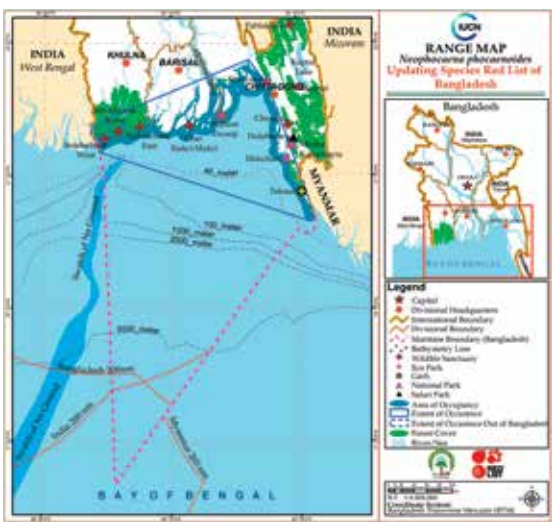
Scientific Name: *Neophocaena phocaenoides* G. Cuvier, 1829
English Name: Indo-Pacific Finless Porpoise, Finless Porpoise
Local Name: Paknahin Choto Shishu, Pakh-heen Porpoise
Synonym/s: *Delphinus phocaenoides* G. Cuvier, 1829
Taxonomic Notes: The recognition of two externally distinct morphological forms of Finless Porpoises as separate biological species (*Neophocaena phocaenoides* and *N. asiaeorientalis*) was accepted recently when it was demonstrated that the two forms are reproductively isolated (and likely have been separated since the last glacial maximum) even though they occur sympatrically in a fairly large area of eastern Asia (Wang *et al.* 2008).
The Bangladesh population has always been treated as *Neophocaena phocaenoides* (Husain 1982, 1985, 1986,1987, 2015, Smith *et al*. 2008).

Assessment Information

Red List Category & Criteria: Near Threatened (NT) ver 3.1
Justification: This species is found in brackish water in the Sundarbans mangrove swamps, coastal and marine waters of the Bay of Bengal. No population size reduction or decline is known. Its Extent of Occurrence is 25,237 km^2 (>20,000 km^2 threshold) and Area of Occupancy is 14,344 km^2 (extremely higher than 2,000 km^2 threshold). Total population size is 1,382 individuals (number of calf is unknown) in coastal waters in the Bay of Bengal (Smith *et al*. 2008) which is larger than the threshold level. It does not fulfill any of the criteria to qualify threatened categories this species has been categorized as Near Threatened based on its existing threats.
Date Assessed: 29 June 2014

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).



Neophocaena phocaenoides © www.marinebio.org

Geographic Range

Global: It occurs in Indo-Pacific; warm-temperate to tropical waters; Persian Gulf to Malaysia, north coast of Java (Tasan and Leatherwood 1984), China and Japan; coastal waters and some rivers (Wilson and Reeder 2003).
Bangladesh: Mainly in coastal waters in the Bay of Bengal with higher salinity and depth than Irrawaddy Dolphin (*Orcaella brevirostris*).

EOO: 38,606 km^2
AOO: 27,582 km^2

Population

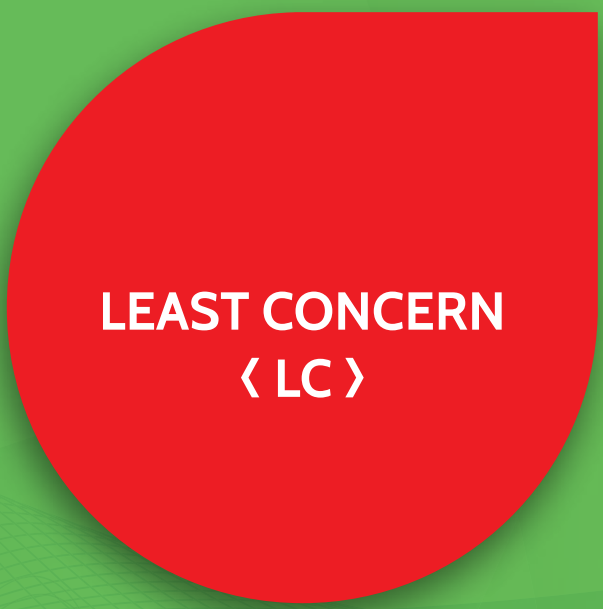
Generation Time (Length): 16.5 years
Total Population: About 1400 individuals
Trend: Not known

Habitat and Ecology

It is found as single, pairs or groups of up to 7 animals (Smith *et al*. 2008). They prefer habitat with sandy and soft bottom, and feed on small fishes, cephalopods, and crustaceans (mainly demersal species) (Jefferson and Hung 2004). They prefer mangrove swamps, estuarine brackish, coastal and marine water in the Bay of Bengal. They prefer water depth from 5.9–16.0 meter and salinity from 15.0–32.0 ppt.

Assessor: Md. Zahangir Alom

Felis chaus


LEAST CONCERN
〈 LC 〉

Rosettus leschenaultii

Hystrix indica

Species ID: MA0115

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	HYSTRICIDAE

Scientific Name: *Hystrix indica* Kerr, 1792
English Name: Indian Crested Porcupine, Indian Porcupine
Local Name: Shojaru, Haza
Synonym/s: *Hystrix leucurus* Skyes, 1831

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: It used to be widely distributed in Bangladesh (Khan 1982, 1985, 2008), but rare in many areas or absent (Khan 1985). Habitat destruction as well as killing for its meat and quills resulted in severe depletion of its population. Considering its wide range it is currently categorized as Least Concern.

Date Assessed: 21 March 2015

History

Regional Status: Endangered in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Afghanistan, Armenia, Azerbaijan, Bangladesh, China, Georgia, India, Iran, Iraq, Israel, Jordan, Kazakhstan, Nepal, Pakistan, Saudi Arabia, Sri Lanka, Turkey, Turkmenistan, Yemen (Khan 1982, Amori *et al*. 2008).

Bangladesh: Widely distributed in the country but very rare or now absent in some parts including central areas (Khan 2015). The majority of it is now restricted to the forest ecosystems and virtually disappeared from the village groves.

EOO: 2,22,509 km^2
AOO: 1,36,929 km^2

Hystrix indica © M. Monirul H. Khan

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Decreasing

Habitat and Ecology

It lives in villages with heavy wooded areas and dry crop fields, plantations and in all forest ecosystems having dry grounds. It is terrestrial, fossorial and seeks shelter in caves or in its burrow during the day. The species makes extensive burrows, depending on surrounding soils, with multiple chambers and many exists. Lives solitary (Menon 2004) or in groups of 2-4 individuals including parents. Diet includes mainly vegetable material of all kinds, including fruits, grains and roots (Prater 1980). It occasionally forages on carrion (M.A.R. Khan pers. comm.). It also chews on bones, in search of minerals (such as calcium) that help its spines grow (Gurung and Singh 1996, Prater 1980). The species utilizes both natural plants and agricultural crops as food sources (Schlimme 2000).
Gestation period is 240 days (Gurung and Singh 1996). Brood size varies from 2-4 offsprings per year (Prater 1980). Young are born with their eyes open, and the body is covered by short soft quills. The Indian Porcupine is usually monogamous, with both parents being found in the burrow with their offspring throughout the year and average life span is 27.1 years (Schlimme 2000).

Assessor: Md. Farid Ahsan

Bandicota bengalensis

Species ID: MA0103

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Bandicota bengalensis* (Gray, 1835)
English Name: Lesser Bandicoot Rat, Indian Molerat, Sind Rice Rat
Local Name: Khet-indur, Metho-indur, Math-indur
Synonym/s: *Arvicola bengalensis* Gray, 1835
Mus tarayensis Horsfield, 1855
Mus blythianus Anderson, 1878

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: Listed as Least Concern in the view of its wide distribution throughout the country (Khan 1987) and presumed large population. Moreover, this species can tolerate a broad range of habitats (Aplin *et al.* 2008). It does not fulfill any criteria to qualify threatened categories.
Date Assessed: 25 February 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Native to Bangladesh, India, Malaysia, Myanmar, Nepal, Sri Lanka and Thailand. Introduced to Indonesia and Saudi Arabia (Aplin *et al.* 2008).
Bangladesh: Widely distributed throughout the country (Khan 1982, 2008, Chakma 2009).

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Bandicota bengalensis © Samiul Mohsanin

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species is common and widely distributed, presumably has a large population.
Trend: Presumably stable

Habitat and Ecology

This species is terrestrial, burrower and crepuscular. Usually aggressive; erects piles of long hairs and grunts when excited. Feeds on variety of foods but usually vegetables, grass, roots, grains, tubers, seeds and also invertebrates (Chakma 2009). It inhabits a wide range of habitats including forests, agricultural lands and suburban areas. Prefers cultivated land (Chakma 2009). It is a known pest of all cultivated crops and stored grains (Khan 1987).

Assessor: Sharmin Akhtar

Bandicota indica

Species ID: MA0104

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Bandicota indica* (Bechstein, 1800)
English Name: Large Bandicoot Rat, Greater Bandicoot Rat, Bandicoot Rat
Local Name: Dhari Indur, Boro Indur, Boro Dhere Idur
Synonym/s: *Mus indicus* Bechstein, 1800
Mus bandicota Bechstein, 1800
Mus malabaricus Shaw, 1801
Mus perchal Shaw, 1801
Mus giganteus Hardwicke, 1804

Bandicota indica © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is widely distributed throughout the country. Its EOO and AOO are much larger than the threshold level. Presumably it has a large population. Moreover, this species is found in broad range of habitats. It does not fulfill any criteria to qualify threatened categories.
Date Assessed: 18 November 2014

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Cambodia, China, Hong Kong, India, Lao PDR, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand and Viet Nam. Introduced to Indonesia (Aplin *et al.* 2008).
Bangladesh: Rodents represent the largest group of mammals in the country and this large rat is one of the commonest species that is found from human habitations to highest mountains, and offshore islands to the city centre (Khan 1982, 1985, 1987, 2015).

EOO: 2,22,509 km^2
AOO: 1,32,741 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide distribution throughout the country, presumably has a large population.
Trend: Presumably stable

Habitat and Ecology

It is one of the most adaptable mammals of Bangladesh and a commensal to human beings. This species is terrestrial, burrower, nocturnal and crepuscular It is an apt swimmer, climber and digger. Usually consumes vegetables, grass, roots, grains, tubers, seeds, leaves, fruits of all kinds and also invertebrates There is no fixed breeding season for it but most of it takes place when grains are ready for harvesting (Francis 2008, Khan 1982, 1985, 1986, 2015, Khan 2008).

Assessor: Sharmin Akhtar

Millardia meltada

Species ID: MA0105

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Millardia meltada* (Gray, 1837)
English Name: Soft-furred Rat, Mated Field Rat, Soft-furred Field Rat
Local Name: Metho Idur
Synonym/s: *Golunda meltada* (Gray, 1837)
Mus lenuginosus (Eliot, 1839)
Mus listoni (Wroughton, 1907)

Millardia meltada © www.planet-mammiferes.org

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This rat is widely distributed all over the country and no visible threat exists. It does not meet any criteria to qualify threat categories. So, it is considered as Least Concern.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Endemic to South Asia, known from Bangladesh, India, Nepal, Pakistan and Sri Lanka (Molur *et al.* 2005).

Bangladesh: It is widely distributed throughout the country (Kamruzzaman 2009, Khan 1982, 2015).

EOO: 2,22,509 km^2
AOO: 1,39,772 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

It is found in tropical and subtropical dry deciduous forests, tropical grasslands, irrigated croplands and grasslands with gravel, agricultural lands, water courses, embankments, dry rocky hills (Molur *et al.* 2005). It lives in pairs or small colonies in self-dug out burrows. It can reproduce throughout the year (Kamruzzaman 2009).

Assessor: Habibon Naher

Mus booduga

Species ID: MA0106

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Mus booduga* (Gray, 1837)
English Name: Common Indian Field Mouse, Little Indian Field Mouse
Local Name: Metho Nengti Idur, Metho Idur, Khudi Idur, Idur
Synonym/s: *Laggada booduga* Gray, 1837
Mus terirricolor Blyth, 1851
Mus alvivebntris Blyth, 1852
Mus beavanii Peters, 1866
Laggadadunni Wroughton, 1912

Taxonomic Notes: The population in central Myanmar is genetically distinct from *Mus booduga* of South Asia, and probably represents a new distinct species, *Mus lepidoides* (K. Aplin pers. comm.). There is some confusion with the distribution as it is often confused with *Mus terricolor* (Musser and Carleton 2005).

Mus booduga © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: As this species is very common, widely distributed and has no apparent threats to its existence. Thus it has been categorized as Least Concern.

Date Assessed: 31 March 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species has been recorded widely in Bangladesh, India, Sri Lanka, eastern Pakistan, southern Nepal, and central Myanmar. It is found from sea level up to 4,000 m asl elevation (Molur *et al.* 2005).

Bangladesh: All over Bangladesh (Kamruzzaman 2009, Khan 2015).

EOO: 2,22,509 km^2
AOO: 1,36,929 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Stable

Habitat and Ecology

It is found commonly in the embankments or the plot dividing land boundaries along irrigated fields or patches of thorn scrub on the edges of cultivation lands. It lives in small burrows, under roots or stones, dug by itself. It is nocturnal and fossorial. Feeds on vegetables, seeds and also on insects (Aplin *et al.* 2008).

Assessor: Tania Khan

Mus musculus

Species ID: MA0107

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Mus musculus* Linnaeus, 1758
English Name: House Mouse
Local Name: Nengti Indur
Synonym/s: *Mus abbotti* Waterhouse, 1837
Mus domesticus Rutty, 1772 (Musser *et al.*2008).
Taxonomic Notes: Includes *domesticus* as a subspecies (Wilson and Reeder 2005). All Philippine populations of which species are now placed in the species *M. musculus* (subspecies *castaneus*) (Musser *et al.* 2008).

Mus musculus © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has been evaluated as Least Concern because as a mammal it has the widest and densest distribution in the country. Moreover, both the Extent of Occurrence and Area of Occupancy are much higher than any of the threshold levels. There is no eminent threat to the species.
Date Assessed: 21 March 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: *Mus musculus* was originally a Palaearctic species, but through its close association with humans it has been widely introduced across the globe (Musser and Carleton 2005). The species is widespread over all continents, except Antarctica, and has become established in North and South America, sub-Saharan Africa, Australia, and many oceanic islands (Macholán 1999). The list of countries of occurrence is incomplete (Musser *et al.* 2008).

Bangladesh: As a mammal, this mouse has the widest distribution and is present in great numbers in centres of human concentration to villages and in all terrestrial ecosystems (Khan 2015). However, it avoids deep forest and limited to forest peripheries having cultivation or human dwellings. It is a commensal of human beings.

EOO: 1,15,152 km^2
AOO: 1,15,152 km^2

Population

Generation Time (Length): Females reach sexual maturity at about six weeks of age and males at about eight weeks, but both can copulate as early as five weeks. If the infants live in high temperature area from birth, they will become less haired (Anon 2013).
Total Population: No quantitative data is available but this species is very common.
Trend: Stable

Habitat and Ecology

It is partial to human habitations and crop fields nearby. House Mouse lives in and around human habitations, grain stores, market places, commercial centres, office complexes, old motor launch, passenger steamers as well as crop fields and stored grain house. It is apt in running, climbing trees, swimming and walking. It can live anywhere inside a house which is sparingly used. It is a prolific breeder and the babies mature in just one month. It is an omnivore and breeds all year round (Khan 1987).

Assessor: Sayad Mahmudur Rahman
Associate Assessor/s: Sanjina Afrin

Rattus norvegicus

Species ID: MA0109

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Rattus norvegicus* (Berkenhout, 1769)
English Name: Brown Rat
Local Name: Geso Indur or Badami Indur
Synonym/s: *Rattus decimallus* Pallas, 1779
Rattus caraco Pallas, 1779
Rattus caspius Oken, 1816
Taxonomic Notes: *Rattus norvegicus* is occasionally misidentified as *Rattus rattus*.

Rattus norvegicus © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: Due to wide distribution and occurrence in large numbers as well as absence of any threat, this species has been considered as Least Concern.

Date Assessed: 18 November 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Originally native to south east Siberia, north east China and parts of Japan, but it occurs worldwide as an introduced species (Nowak and Paradiso 1983).

Bangladesh: It is one of the commonest rat species of the country distributed all over terrestrial habitats (Khan 2015).

EOO: 2,06,431 km^2
AOO: 1,32,523 km^2

Population

Generation Time (Length): 1 year
Total Population: Not known
Trend: Presumably stable

Habitat and Ecology

It lives in all types of habitats except water bodies without any vegetation or floating material. It is at home in the cities as well as in the villages or the crop fields.The Brown Rat, also called Tree Rat is the most arboreal among the rats found in the countryside and forests. It usually lives in pairs or in a family group in a burrow or tree-nest and group being dominated a male that often defends its virtually borderless territory against an intruding male. It is a true omnivore (Sarker *et al.* 2013). This species has an acute sense of hearing and sensitive to ultrasound. It is a good swimmer, both on the surface and underwater. During excessive flood it climbs to trees and leads its normal life there up to the time the water recedes (Khan 1985, 1987, Nowak and Paradiso 1983, Parker 1990). This spcies also produces communicative noises audidle to humans.

Assessor: Mohammad Firoj Jaman

Rattus rattus

Species ID: MA0110

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Rattus rattus* Linnaeus, 1758
English Name: Common House Rat, Ship Rat, Black Rat
Local Name: Indur
Taxonomic Notes: It is originally described by Linnaeus in *Systema Naturae*, and it still bears its original tautonym of *Rattus rattus*. It is the type species of the genus *Rattus*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is very common and abundant with widespread distribution. It occurs in almost all habitat ranges, has a tolerance of a degree of habitat modification. It is one of the most widespread rats in the world and is often regarded as a pest. Although the population size and trends have not been quantified or estimated, the population size is not believed to approach the thresholds of any of the threatened categories. This species is listed as Least Concern.
Date Assessed: 19 February 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species was widely introduced across the globe as a result of human activities. In Europe, it has been present since ancient times, and is found in most countries. It has widespread distribution throughout the Mediterranean region. It is found throughout Southeast Asia.
Bangladesh: Of the larger rats, this is the most widely distributed species in the country from the mangrove forests to the mixed evergreen forests in high hills to the whole country (Khan 2015).

Rattus rattus © M K Hasan

EOO: 2,22,509 km^2
AOO: 1,39,772 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably has a large population.
Trend: Not known

Habitat and Ecology

House Rats adapt to a wide range of habitats. In urban areas they are found around storehouses, residential buildings, and other human settlements. They are also found in agricultural areas, such as in crop fields. In urban areas, they are commonly found in wall cavities and false ceilings as well as they prefer to live in dry upper levels of buildings or roofs. In the wild, they live in cliffs, rocks, the ground, and trees.

This species is primarily commensal with the human beings but also found in a diverse natural and semi-natural habitat. It is a serious pest to the crops of all kinds, stored grains, food items and responsible for carrying and spreading diseases like the plague. It walks, runs, swims and climbs trees at ease. It builds a nest of dry materials that could be parts of linen, books and other household materials in a disused corner of a house, store house and in burrows. It is a prolific breeder.

Assessor: Sajeda Begum

Vandeleuria oleracea

Species ID: MA0112

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Vandeleuria oleracea* Bannett 1832
English Name: Asiatic Long-tailed Climbing Mouse
Local Name: Gecho Nengti Indur
Synonym/s: *Mus oleraceus* Bennett, 1832
Mus domesticola Hodgson, 1845
Vandeleuria badius Blyth, 1859
Taxonomic Notes: The species considered as a complex of several species; so, further taxonomic study is important to qualify the species.

Vandeleuria oleracea © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: There is little information available on the species barring that it is restricted to the forests of the country. As such it has wide Extent of Occurrence and Area of Occupancy. There is no specific threat declining the species in near future and therefore, the species is listed as Least Concern.
Date Assessed: 21 January 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is widely distributed in the main land Southeast Asia and southern China. In Southeast Asia, the species ranges from Bangladesh, Bhutan, India, Nepal and Sri Lanka (up to 200 to 1,500 m asl), Myanmar, Thailand, Cambodia into Viet Nam (Molur *et. al.* 2008, Musser and Carleton 2005). In China, it is limited to Southwest Yunnan (Smith and Xie 2008).

Bangladesh: Wide range of distribution all over the country, only in the forested habitats, especially in the bamboo bushes (Khan 2015).

EOO: 1,93,499 km^2
AOO: 16,458 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably has a large population.
Trend: Stable (IUCN 2008)

Habitat and Ecology

Typical habitats are forest and forest edges, densely vegetated bamboo bushes, and sun-grass fields and found even with the harvested remains in agricultural fields (Molur *et al.* 2005). They are mostly arboreal and usually inhabits forest and forest edge.

Assessor: Ummay Habiba Khatun

Callosciurus erythraeus

Species ID: MA0093

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Callosciurus erythraeus* (Pallas, 1779)
English Name: Pallas's Squirrel
Local Name: Lalche-buk Kathbirali
Synonym/s: *Sciurus erythraeus* Pallas, 1778
Sciurus hippurus McClelland, 1839
Sciurus erythrogaster Blyth, 1842
Macroxus puntatissimus Gray, 1867
Sciurus sladeni Anderson, 1871
Taxonomic Notes: Often confused with *Callosciurus pygerythrus.*

Callosciurus erythraeus © M K Hasan

Assessment Information

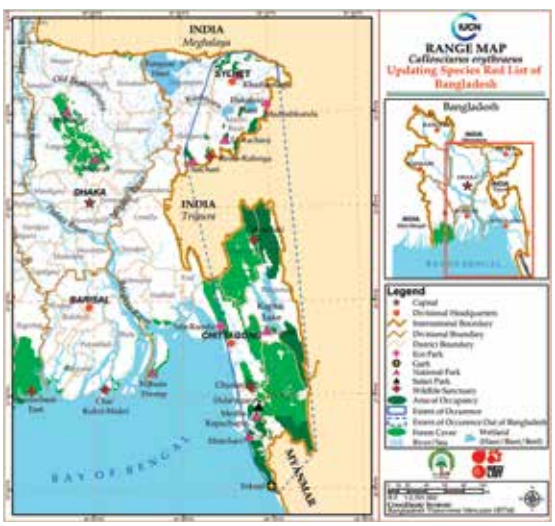
Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: Though this species is rare in evergreen forests (Feeroz 2013, Feeroz *et al.* 2012) but its EOO and AOO are much larger than the threshold level of threatened categories. Moreover, it is tolerant to some degree of habitat destruction. It does not fulfill any criteria to qualify threatened categories. So, it is considered as Least Concern.
Date Assessed: 25 August 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is widely distributed in South Asia, Bangladesh, China, Cambodia, India, Lao PDR, Malaysia, Myanmar, Taiwan, Thailand and Viet Nam (Duckworth *et al.* 2008).
Bangladesh: Mixed evergreen forests of northeast and southeast (Hasan *et al.* 2011, Khan 2015).



EOO: 39,584 km^2
AOO: 4,481 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably has a large population.
Trend: No considerable reason of declining fast

Habitat and Ecology

This species is diurnal. It is arboreal but also spends time on the ground. Feeds on leaves, fruits, seeds, nuts, insects (Francis 2008, Kamruzzaman 2009). Unlike other squirrels, it crosses long distance or run away through ground when disturbed. It is found in mixed evergreen forests but also seen in plantations and disturbed habitats nearby.

Assessor: Md. Kamrul Hasan

Callosciurus pygerythrus

Species ID: MA0094

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Callosciurus pygerythrus* (I. Geoffroy Saint Hilaire, 1832)
English Name: Hoary-bellied Squirrel, Irrawaddy Squirrel
Local Name: Badami Kathbirali, Kota, Chorkata
Synonym/s: *Sciurus pygerythrus* I. Geoffroy Saint Hilaire, 1831
Callosciurus pygerythrus Geoffroy 1831
Callosciurus pygerythrus I. Geoffroy Saint Hilaire, 1832
Taxonomic Notes: There is confusion of this species with *Callosciurus inornatus*.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is categorized as Least Concern in the view of its very common and widespread distribution and presumed large population.
Date Assessed: 14 January 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is widely distributed in northeastern South Asia, southern China and western Southeast Asia. In South Asia, this species is widely distributed in Bangladesh, Bhutan, India and Nepal. In Southeast Asia, it is largely confined to western and central Myanmar (Shrestha *et al.* 2008).
Bangladesh: Widely distributed almost all over the country. This is the commonest squirrel of the country, living from Dhaka city to the remotest forest, and even in the Sundarbans. There is no other squirrel that lives in all forest ecosystems of the country but this one (Khan 1982, 2015).

Callosciurus pygerythrus © M M Feeroz

EOO: 1,93,500 km^2
AOO: 6,771 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably has a large population.
Trend: Not known

Habitat and Ecology

It lives in forests, in well-wooded villages and semi-urban habitats with plantations bordering forests. A few pairs live in Dhaka city too. It is diurnal and arboreal but also occasionally comes to the ground. It occurs as solitary animal or in pairs. This squirrel feeds on leaves, fruits, vegetables, nuts, barks, latex, flowers and nectar. It loves to drink date juice extracted during winter. It builds its huge drey in tree tops with dry grass, leaves and twigs having an entry on one side (Khan1982, 2015, Khan 2008, Kamruzzaman 2009).

Assessor: Sajeda Begum

Dremomys lokriah

Species ID: MA0095

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Dremomys lokriah* (Hodgson, 1836)
English Name: Orange-bellied Himalayan Squirrel
Local Name: Kalo Katbirali, Komola-book Kathbirali, Kamala-pet Himalayee Katbirali, Mandar (Tripuri), Chachia (Khasia)
Synonym/s: *Sciurus lokria* Hodgson, 1836
Sciurus subflaviventris MacClelland, 1843

Dremomys lokriah © Samiul Mohsanin

Assessment Information

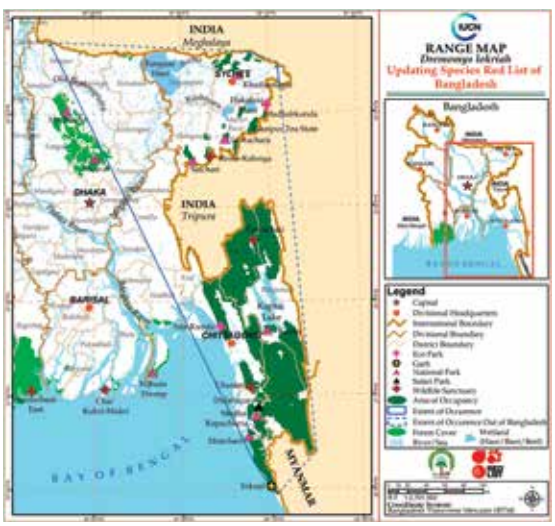
Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has a healthy population in the northeast and southeast regions and in the northern part of Bangladesh. No significant threats or evidence of continuous declination of population are visible that could push the species to any threatened category. So, it has been categorized as Least Concern.
Date Assessed: 31 March 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species is distributed in northeastern South Asia, southern China and western Southeast Asia. It has been widely recorded from Bangladesh, Bhutan, India and Nepal in South Asia at elevations of 900 to 3,000 m asl (Molur *et al.* 2005). In China, it has been recorded from southern Xizang and eastern Yunnan (Smith and Xie 2008). In Southeast Asia, it has been recorded from western and northern Myanmar.
Bangladesh: It occurs only in the mixed evergreen forests of northeast and southeast regions of Bangladesh (Khan 2015).



EOO: 45,717 km²
AOO: 10,120 km²

Population

Generation Time (Length): 7.1 years in captivity
Total Population: Not known
Trend: Decreasing

Habitat and Ecology

It inhabits forested hill and foothills ranging up to 800m above mean sea level. It occurs in mixed evergreen forests in Bangladesh. This squirrel is terrestrial. It is a diurnal and arboreal species though it also forages on the forest floor. It feeds on fruits, vegetables, nuts and latex from tree bark as well as nectar.

Assessor: Tania Khan

Funambulus pennantii

Species ID: MA0097

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Funambulus pennantii* Wroughton, 1905
English Name: Five-striped Palm Squirrel, Northern Palm Squirrel
Local Name: Dora Kathbirali

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has been categorized as Least Concern in view of its wide distribution, presumed large population and the absence of any significant threats.

Date Assessed: 16 August 2014

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species has a wide distribution ranging from Iran, through Afghanistan, Pakistan, northern India to Nepal and Bangladesh (Molur *et al.* 2005).

Bangladesh: This is the only squirrel species of Bangladesh that does not live in any forest and is restricted to the districts west of the Jamuna River that means in the Revenue Divisions of Rangpur, Rajshahi and Khulna. In the recent past people have transported it to the east of the rive Jamuna and some escaped from the zoo at Mirpur in Dhaka (Khan 1982, 1987, 2015).

EOO: 43,517 km^2
AOO: 17,890 km^2

Funambulus pennantii © M M Feeroz

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

In the Bangladesh context, its habitat is restricted to the cities, towns and villages in the Revenue Divisions of Rangpur, Rajshahi and Khulna. Diurnal and semi-arboreal. It lives in the villages and towns of the districts under the Divisions of Rangpur, Rajshahi and Khulna. It prefers gardens over paddy and other crop fields. Feeds almost entirely on fruits, vegetables, leaves, boiled rice and bread offered by people, and some small animals. It is a very active animal and builds a huge nest called drey in canopies of tall trees. It can cause damage to cultivated fruits like guava, sapota, mango, etc.

Assessor: Mohammad Firoj Jaman

Suncus murinus

Species ID: MA0016

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	EULIPOTYPHLA	SORICIDAE

Scientific Name: *Suncus murinus* Linnaeus, 1766
English Name: House Shrew, Asian House Shrew
Local Name: Chika, Chucho, Sucha
Synonym/s: *Sorex murinus* Linnaeas, 1766
Sorex caerulaeus Kerr 1792
Sorex indicus Geoffroy, 1811
Pachyura temminckii Fitzinger, 1868
Pachyura indica Jentink, 1887
Crocidura caerulea Thomas, 1906
Suncus indicus temminckii Cabrera, 1925
Suncus caerulea var. *riukiuana* Kuroda, 1938
Suncus murinus riukiuanus Imaizumi, 1960
Suncus murinus temminckii Abe, 1997

Taxonomic Notes: Due to its wide morphological variation in body size and tail length, individual populations of Asian House Shrews were classified into different subspecies or races by early mammalogists but today most of these subspecies classification have been disregarded as it is currently not possible to have a clear allocation of all listed taxa to subspecies (Hutterer 2005).

Suncus murinus © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: It is a highly adaptable species with tolerance of habitat modifications and a commensal of human beings as well as having very wide distribution in Bangladesh. Besides, no major threat is projected for this species. So, this species is categorized as Least Concern.
Date Assessed: 27 October 2014

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Afghanistan, Pakistan, India, Sri Lanka, Nepal, Bhutan, Burma, China, Taiwan, Japan, continental and peninsular Indomalayan Region; introduced into Guam, the Maldive Isls, Philippines, and probably many other islands; introduced in historical times into coastal Africa (Egypt to Tanzania), Madagascar, the Comores, Mauritius, and Réunion, and into coastal Arabia (Iraq, Bahrain, Oman, Yemen, Saudi Arabia) (Wilson and Reeder 2005).
Bangladesh: Widely distributed throughout the country.

EOO: 2,22,509 km^2
AOO: 1,35,729 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Presumably stable

Habitat and Ecology

This species is found in a very wide variety of habitats, including forested areas, grasslands, agricultural lands, and in areas associated with human settlements. It is highly adaptable and can colonize at high densities. Typically terrestrial, active during the night, spending the day in a burrow or any hiding places. It is a good swimmer and climber, comes out of its hiding places at dusk with species-specific shrill or squeaky call notes like chik-chik-chik from which the common Bengali name Chika has been derived. In addition to natural food it would readily consume food left over in the kitchen or offals dumped at the backyard. It produces an obnoxious smell that nobody likes (Khan 1985, 1987, 2015). It is a voracious insectivore and also opportunistic feeder. It breeds throughout the year, usually producing two litters per year. The gestation period is one month.

Assessor: Shamia Farhana Shoma

Hipposideros larvatus

Species ID: MA0033

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	HIPPOSIDERIDAE

Scientific Name: *Hipposideros larvatus* (Horsfield, 1823)
English Name: Horsfield's Leaf-nosed Bat, Intermediate Roundleaf Bat
Local Name: Majhari Pata-nak Chamchika
Synonym/s: *Rhinolophus larvatus* Horsfield, 1823
Phyllorhina leptophylla Dobson, 1874

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species does not qualify any of the threatened categories. It has been categorized as Least Concern in view of its distribution in a large area, presumed large population and its tolerance to a degree of habitat modification.

Date Assessed: 28 December 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

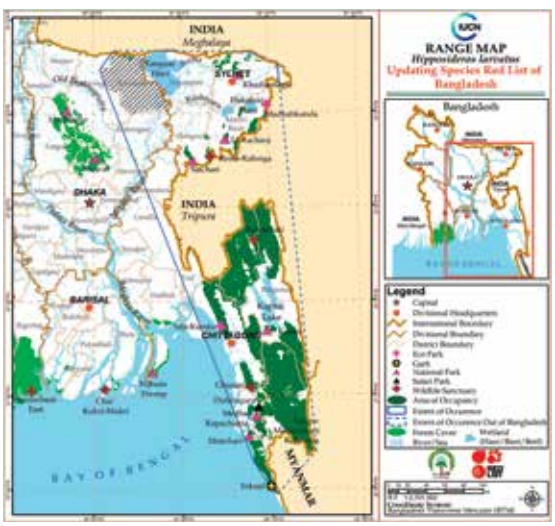
Geographic Range

Global: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Lao PDR, Malaysia, Sri Lanka, Thailand and Viet Nam (Bates *et al.* 2008).

Bangladesh: Mixed evergreen forests of northeast and southeast. Also recorded from Netrokona District.

EOO: 58,855 km^2
AOO: 13,430 km^2

Hipposideros larvatus © Tanvir Ahmed



Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

It lives in old buildings, rocks and crack in building walls (Khajuria 1980). It roosts in a very small colonies and feeds on insects in other part of its range (Phillips 1980, Nameer 2009).

Assessor: Md. Kamrul Hasan

Megaderma lyra

Species ID: MA0027

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	MEGADERMATIDAE

Scientific Name: *Megaderma lyra* É. Geoffroy, 1810
English Name: Greater False Vampire, Greater False Vampire Bat, Indian False Vampire Bat
Local Name: Bhua Daini Badur, Bhua Daini Chamchika
Synonym/s: *Vespertilio carnatica* Elliot, 1839
Megaderma spectrum Wagner, 1844
Megaderma schistacea Hodgson, 1847

Megaderma lyra © Samiul Mohsanin

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is common, widely distributed throughout Bangladesh and presumably has a large population. Moreover, it is tolerant to a degree of habitat modification (Csorba *et al*. 2008) and has no significant threat. It does not fulfill any of the criteria to qualify threatened categories. So, it has been considered as Least Concern.
Date Assessed: 18 November 2014

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in most of South and Southeast Asia, Afghanistan, Bangladesh, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Viet Nam (Csorba *et al*. 2008).
Bangladesh: It is widely distributed all over the country, from coastal areas to the hilly region and countryside to the forests (Khan 2008, 2015, Aziz 2009).

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is common and widely distributed, presumably has a large population.
Trend: Presumably stable

Habitat and Ecology

It is found in a variety of habitats, including caves, abandoned buildings, tin-sheds, old forts, tombs, grain and firewood stores and narrow culverts. It is one of the earliest active bats in the country coming out of its hiding places just around the sundown and the largest amongst the insectivore bats we have. This species roosts during day in a colony of single individual to hundreds but all huddled together. It feeds on insects as well as small vertebrates including rodents, fishes, frogs, lizards, and small birds. It is known to breed during March to May (Khan 2008, 2015).

Assessor: Md. Kamrul Hasan

Cynopterus sphinx

Species ID: MA0019

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	PTEROPODIDAE

Scientific Name: *Cynopterus sphinx* (Vahl, 1797)
English Name: Greater Short-nosed Fruit Bat
Local Name: Kola Badur, Bucha Kolabadur, Dubak (Garo)
Synonym/s: *Vespertilio sphinx* Vahl, 1797
Vespertilio fibulatus Vahl, 1797
Pteropus pusillus É. Geoffroy, 1803
Pteropus marginatus É. Geoffroy, 1810
Pachysoma brevicaudatum Temminck, 1837
Cynopterus angulatus Miller, 1898
Taxonomic Notes: There is substantial confusion between this species and *Cynopterus brachyotis*. Recent molecular studies confirm that *C. sphinx* is genetically distinct from *C. brachyotis* (Bumrungsri 2005).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is common, found in diverse habitats and widely distributed throughout Bangladesh. It does not fulfill any of the criteria to qualify threatened categories.
Date Assessed: 25 August 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Bhutan, Cambodia, India, Lao PDR, Myanmar (West), Nepal, Pakistan (Sind), Peninsular Malaysia and Indonesia, southern China and Viet Nam (Bates *et al.* 2008).
Bangladesh: It is widely distributed all over the country (Feeroz 2013, Feeroz *et al*. 2012, 2011, Khan 1982, 2008, 2015, Nameer 2009).

Cynopterus sphinx © Anik Saha

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is common and widely distributed, presumably has a large population.
Trend: No considerable reasons of declining fast

Habitat and Ecology

It is nocturnal. Usually roosts underside down in the Palmyra and Date Palm leaves, tree hollows and in caves (Khan 1985, 2015). It lives in small colonies of 3–7 individuals, sometimes more (Francis 2008, Wilson and Reeder 2005). Fly in low height but considerably fast and feeds on variety of fruits including figs. It breeds twice in a year and bears a single young (Bates and Harrison 1997). Found in a variety of habitats, including rural and semi-urban settings, primary and secondary forests.

Assessor: Md. Kamrul Hasan

Pteropus giganteus

Species ID: MA0020

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	PTEROPODIDAE

Scientific Name: *Pteropus giganteus* (Brünnich, 1782)
English Name: Indian Flying Fox, Flying Fox
Local Name: Baro Badur
Synonym/s: *Vespertilio gigantea* Brunnich, 1782
Pteropus medius Temminck, 1825
Pteropus edwardsi I. Geoffroy, 1828
Pteropus leucocephalus Hodgson, 1835
Pteropus assamensis McClelland, 1839
Pteropus ruvicollis Ogilby, 1840
Pteropus kelaarti Gray, 1871
Pteropus ariel Allen, 1908
Taxonomic Notes: Previously, this taxon has included as *Pteropus intermedius* Andersen, 1908 (Ellerman and Morrison-Scott 1951, Corbet and Hill 1992). This taxon belongs to the *vampyrus* species group and listed under *Pteropus vampyrus* (Linnaeus, 1758) (Kloss 1916, 1919; Hill 1975, Lekagul and McNeely 1977, Honacki *et al.* 1982, Racey 1992, Koopman 1993 and Nowak 1999).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This is a very common species with widespread distribution. It occurs in almost all habitat ranges, has a tolerance of a degree of habitat modification. Although the population size and trends have not been quantified or estimated, the population size is not believed to approach the thresholds of any of the threatened categories. Thus the species is listed as Least Concern.
Date Assessed: 19 February 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Pteropus giganteus © Samiul Mohsanin

Geographic Range

Global: This species is largely found in South Asia, but also occurs in adjacent China and Southeast Asia. In South Asia it is widely distributed from Bangladesh, Bhutan, India, Maldives, Nepal and Pakistan to Sri Lanka (Molur *et al.* 2008). It has been recorded from sea level to an elevation of 2,000 m above sea level. In Southeast Asia, it is present in western Myanmar with Cambodian records being apparently erroneous (Kock 2000).
Bangladesh: Widely distributed all over the country.
EOO: 2,22,509 km^2
AOO: 1,32,741 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species is very common and widely distributed, presumably it has a large population.
Trend: Not known

Habitat and Ecology

Large groups of individuals roost in trees such as banyan, fig, and tamarind. This species is nocturnal, crepuscular and arboreal. It is a social species and roosts in large colonies of hundreds to thousands of individuals on large trees in rural and urban areas, close to agricultural fields, ponds and by the side of roads. It is mostly frugivorous and feeds on a wide variety of fruits and flowers, both wild and cultivated. At dusk, these bats forage for ripe and fleshy fruits. It travels long distances, up to 150 km to and from its roost.

Assessor: Sajeda Begum

Rousettus leschenaultii

Species ID: MA0021

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	PTEROPODIDAE

Scientific Name: *Rousettus leschenaultii* (Desmarest, 1820)
English Name: Fulvous Fruit Bat, Leschenault's Rousette, Shortridges Rousette
Local Name: Kolabadur, Tamatey Kolabadur
Synonym/s: *Pteropus leschenaultii* Desmarest, 1820
Pteropus pyrivorus Hodgson, 1835
Cynopterus marginatus Gray, 1843
Cynopterus affinis Gray, 1843
*Pteropus seminudus*Kellart, 1850
Rousettus seminudus Kelaart, 1850
Eleutherura fusca Gray, 1870
Xantharpyiaseminuda Gray, 1870
Rousettus fusca Gray, 1871
Rousettus fuliginosa Gray, 1871
Cynopterus infuscate Peters, 1873

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is common and distributed in a wide range of habitats from the coastal area to the high hills with mixed evergreen forests (Khan 2001, 2008, 2015, Nameer 2009); presumably has a large population. It is found in a wide habitat types and tolerant to a degree of habitat modification (Bates and Helgen 2008). Moreover, it has no significant threat. It does not fulfill any of the criteria to qualify threatened categories. So, this species is considered as Least Concern.
Date Assessed: 25 August 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Rousettus leschenaultii © M K Hasan

Geographic Range

Global: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand and Viet Nam.
Bangladesh: Forests of southeast, Cox's Bazar, Ghazni in Sherpur, Kudum cave and Whykeong in Teknaf, Sylhet and the Sundarbans (Nameer 2009).

EOO: 1,41,020 km^2
AOO: 16,047 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is common and found in a wide range, presumably has a large population.
Trend: Not known

Habitat and Ecology

This species can share its roost with other bat species. It is mostly frugivorus but also feeds on leaves, fish and mollusks (Ghose and Ghosal 1984). It usually produces two litters in a year (Bates and Harrison 1997). It is found in a variety of habitats including caves, abandoned buildings, grain stores and narrow culverts.

Assessor: Md. Kamrul Hasan

Rhinolophus lepidus

Species ID: MA0028

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	RHINOLOPHIDAE

Scientific Name: *Rhinolophus lepidus* Blyth, 1844
English Name: Blyth's Horseshoe Bat
Local Name: Blyhter Ghurakhuri Chamchika
Synonym/s: *Rhinolophus minor* Horsfield, 1824
Rhinolophus pusillus Dobson, 1872
Taxonomic Notes: This species was considered as *R. monticola* (Andersen, 1905). Now *R. monticola* is treated as subspecies of *R. lepidus*.

Rhinolophus lepidus © Samiul Mohsanin

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: The EOO as well as the AOO of this species is much larger than the threatened threshold level. It has been categorized as Least Concern in view of its wide distribution, presumably large population and because it is unlikely to be declining fast enough to qualify for listing in a more threatened category.
Date Assessed: 25 August 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: South and Southeast Asia; Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Myanmar (West), Nepal, Pakistan (Sind), Peninsular Malaysia, Thailand and Viet Nam (Bumrungsri *et al*. 2008).
Bangladesh: This species is distributed in the forests of northeast, east, southeast and the Sundarbans, as well as in the forest edges (Khan 2008, 2015).

EOO: 1,07,897 km^2
AOO: 16,823 km^2

Population

Generation Time (Length): Not known
Total Population: Not known. As this species occupies a wide range, presumably has a large population.
Trend: No considerable reason of declining fast

Habitat and Ecology

This species is nocturnal and insectivore. It is found in forest edges. Roosts in caves and tunnels of bridges and culverts (Francis 2008, Wilson and Reeder 2005).

Assessor: Md. Kamrul Hasan

Pipistrellus coromandra

Species ID: MA0040

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Pipistrellus coromandra* (Gray, 1838)
English Name: Indian Pipistrelle, Little Indian Bat, Coromandel Pipistrelle
Local Name: Chamchika
Synonym/s: *Sctophilus coromandra* Gray, 1838
Vespertilio coromandelicus Blyth, 1851
Myotis parvipes Blyth, 1853
Vesperugo blythii Wagner, 1855
Vesperugo nicobaricus Fitzinger, 1861
Scotophilus coromandelianus Blyth, 1863
Pipistrellus coromandra Gaisler, 1870
Vesperugo micropus Peters, 1872

Taxonomic Notes: This taxon belongs to the *coromandra* subgroup of *pipistrellus* species group. Earlier this taxon included *aladdin* Thomas, 1905 (Ellerman and Morrison-Scott 1951). Gaisler (1970) proposed the nomen *afghanus* to represent forms from Pakistan and Afghanistan (Corbet and Hill 1992, Bates and Harrison 1997). As there is the problem of identification coupled with taxonomic uncertainties with most *Pipistrellus*, means that the abundance and the distribution of the species cannot be easily defined (G. Csorba pers. comm.).

Pipistrellus coromandra © Samiul Mohsanin

Date Assessed: 12 March 2015

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1.

Justification: This species is a very common with widespread distribution and has a presumed large population. It occurs in almost all habitat ranges, has a tolerance of a degree of habitat modification. Although the population size and trends have not been quantified or estimated, the population size is not believed to approach the thresholds of any of the threatened categories. Thus, it has been categorized as Least Concern.

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: South and Southeast Asia; Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Myanmar (West), Nepal, Pakistan (Sind), Peninsular Malaysia, Thailand and Viet Nam (Csorba *et al.* 2008).

Bangladesh: This species is distributed all over the country.

EOO: 2,22,509 km²
AOO: 1,32,741 km²

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably has a large population.
Trend: Not known

Habitat and Ecology

This species is nocturnal, crepuscular and arboreal. It roosts in trees, crevices and cracks in walls, hollows and ceilings of corrugated iron sheet covered and thatched houses, tiles of huts, old buildings, temples, under bark and in holes of large trees, signboards, tree hollows in small groups of few individuals (Khan 1987, Bates and Harrison 1997). Insectivore and hunts on flies, ants and other small insects. Usually two young ones are born per litter (Bates and Harrison 1997).

Assessor: Sajeda Begum

Pipistrellus tenuis

Species ID: MA0041

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Pipistrellus tenuis* (Temminck, 1840)
English Name: Least Pipistrelle, Indian Pygmy Bat
Local Name: Khudey Chamchika
Synonym/s: *Vespertilio tenuis* Temminck, 1840
Pipistrellus mimus Wroughton, 1899
Pipistrellus mimus Wroughton, 1899 subspecies *mimus*
Pipistrellus mimus Wroughton, 1912 subspecies *glaucillus*
Pipistrellus mimus Thomas, 1915 subspecies *principulus*
Pipistrellus principulus Thomas, 1915

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has been categorized as Least Concern in the view of its wide distribution throughout the country (Khan 2015), tolerance of a degree of habitat modification and presumed large population.
Date Assessed: 29 April 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Timor Lester and Viet Nam (Francis *et al.* 2008).
Bangladesh: Widely distributed throughout the country (Khan 2001, 2015).

EOO: 2, 22,509 km^2
AOO: 1, 32,741 km^2

Pipistrellus tenuis © M K Hasan

Population

Generation Time (Length): Not known
Total Population: As the species is common and widely distributed throughout the country, presumably it has a large population.
Trend: Not known

Habitat and Ecology

It inhabits a variety of habitats including forests, rural and urban settings. It roosts in tree holes, crevices and cracks in walls and ceilings of old buildings. It is adapted to highly disturbed habitats, gardens, and mangrove forests (Francis *et al.* 2008). It is nocturnal and early flyer, with a varied flight patterns (Francis *et al.* 2008). Diet comprises variety of insects including beetles, cockroaches, ants, termites, moths, hymenopterans and dipterans (Bates and Harrison 1997). Two breeding seasons are found between February-March and July-August. One to three young are born in each season.

Assessor: Md. Kamrul Hasan

Scotophilus heathii

Species ID: MA0044

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Scotophilus heathii* (Horsfield, 1831)
English Name: Greater Asiatic Yellow House Bat, Greater Asiatic Yellow Bat, Common Yellow Bat
Local Name: Boro Rongila Chamchika, Boro Holdey Chamchika
Synonym/s: *Nycticejus heathii* Horsfield, 1831
Scotophilus heathi (Horsfield, 1831)
Scotophilus heathi (Geoffroy, 1834)
Vespertilio belangeri Geoffroy, 1834
Nycticejus luteus Blyth, 1851
Scotophilus flaveolous Horsfield, 1851

Scotophilus heathii © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1.
Justification: This species is uncommon but widely distributed throughout Bangladesh and presumably has a large population. Moreover, it is tolerant to a degree of habitat modification (Bates *et al*. 2008) and has no significant threat. It does not fulfill any of the criteria to qualify threatened categories. Thus it is has been categorized as Least Concern.
Date Assessed: 21 January 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Viet Nam (Bates *et al*. 2008).
Bangladesh: Widely distributed all over the country (Khan 2001, 2008).

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is widely distributed, it presumably has a large population.
Trend: Not known

Habitat and Ecology

This species roosts during day in a small colony. Flight is moderately low. It feeds on insects. Females give birth to one or two young during April-May (Madhavan 1980). It is found in a variety of habitats including caves, abandoned buildings, grain godowns, narrow culverts and railway bridges.

Assessor: Md. Kamrul Hasan

Scotophilus kuhlii

Species ID: MA0045

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Scotophilus kuhlii* Leach, 1821
English Name: Lesser Asiatic Yellow House Bat, Lesser Asiatic Yellow Bat, Lesser Asian House Bat
Local Name: Choto Holdey Chamchika
Synonym/s: *Scotophilus fulvus* Gray, 1843
Scotophilus wroughtoni Thomas, 1897
Scotophilus temmincki wroughtoni (Thomas, 1897)
Scotophilus kuhlii wroughtoni (Thomas, 1897)
Taxonomic Notes: Earlier included under *Scotophilus heathii* Horsfield, 1831 (Tate 1942, Ellerman and Morrison-Scott 1951), the taxon *kuhlii* Leach, 1821, is now considered distinct species (Hill 1968, Hill and Thonglongya 1972, Corbet and Hill 1992) as reported in Bates *et al*. 2008.

Scotophilus kuhlii © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1.
Justification: This species is common and widely distributed throughout the country. Presumably it has a large population. Moreover, it is tolerant to a degree of habitat modification (Bates *et al*. 2008) and has no significant threat. It does not fulfill any of the criteria to qualify threatened categories. Hence it is categorized as Least Concern.
Date Assessed: 21 January 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka, Taiwan, Thailand, Timor and Viet Nam (Bates *et al*. 2008).
Bangladesh: Widely distributed all over the country (Khan 2001, 2008).

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is widely distributed, presumably has a large population.
Trend: Not known

Habitat and Ecology

This species roosts during day in a small to large colony from few individuals to hundred (Bates and Harrison 1997). Flight is slow. It feeds on insects. Females give birth to one or two young during June-July (Sinha 1986). This species inhabits a variety of habitats from village to town. Diurnal roosts include caves, abandoned buildings, holes in walls, road culverts and railway bridges.

Assessor: Md. Kamrul Hasan

Scotozous dormeri

Species ID: MA0046

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Scotozous dormeri* Dobson, 1875
English Name: Dormer's Bat, Dormer's Pipistrelle
Local Name: Dormarer Chamchika
Synonym/s: *Pipistrellus dormeri* (Dobson, 1875)
Pipistrellus dormeridormeri (Dobson, 1875)
Pipistrellus dormeri caurinus (Thomas, 1915)
Scotozous dormeri caurinus Thomas, 1915

Scotozous dormeri © www.planet-mammiferes.org

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has been categorized as Least Concern in the view of its wide distribution throughout the country (Khan 2015), tolerance of a degree of habitat modification and presumed large population.
Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, India and Pakistan.
Bangladesh: Widely distributed throughout the country (Khan 2015).

EOO: 2,21,137 km^2
AOO: 1,47,570 km^2

Population

Generation Time (Length): Not known
Total Population: As the species is common and widely distributed throughout the country it is likely to have a large population.
Trend: Not known

Habitat and Ecology

It inhabits close to man-made structures and vegetations (Khan 2001). It prefers old buildings, temples, tombs and tree holes (Nameer 2009). This species is nocturnal and flight comparatively slow. It hunts relatively close to its roost. It is known to drink water from ponds and lakes. Feeds on small insects (Bates and Harrison 1997).

Assessor: Md. Kamrul Hasan

Canis aureus

Species ID: MA0058

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	CANIDAE

Scientific Name: *Canis aureus* Linnaeus, 1758
English Name: Golden Jackal
Local Name: Shial, Pati Shial

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is a very common with widespread distribution and has a presumed large population. It occurs in almost all habitat ranges and has a tolerance of a degree of habitat modification. Although the population size and trends have not been quantified or estimated, the population size is not believed to approach the thresholds of any of the threatened categories. Thus, it has been categorized as Least Concern.
Date Assessed: 18 November 2014

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The Golden Jackal is widespread in North and northeast Africa, occurring from Senegal on the west coast of Africa to Egypt in the east, in a range that includes Morocco, Algeria, and Libya in the north to Nigeria, Chad and Tanzania in the south. They also occur in the Arabian Peninsula and have expanded their range into Europe Eastwards they range into Turkey, Syria, Iraq, Iran, Central Asia, the entire Indian subcontinent, then east and south to Sri Lanka, Myanmar, Thailand and parts of Indo-China (Jhala and Moehlman 2008).
Bangladesh: Widely distributed all over the country.

Canis aureus © M. Monirul H. Khan

EOO: 2,22,509 km²
AOO: 1,39,772 km²

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

Golden Jackals are opportunistic and venture into human habitation at night to feed on garbage. They usually occur in groups but could be found as solitary or in pairs. They are highly adaptable and opportunistic foragers with varied diet, which consists of rodents, ground birds and their eggs, reptiles, frogs, fish, insects and fruits. They are crepuscular to nocturnal. They can live in a wide variety of habitats. Jackals occupy short to medium grasslands, forests, and agricultural lands, rural and suburban habitats. They usually hide inside woodlots, graveyards and Hindu cremation grounds (Khan 2008, 2015).

Assessor: Sajeda Begum

Herpestes auropunctatus

Species ID: MA0068

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	HERPESTIDAE

Scientific Name: *Herpestes auropunctatus* Hodgson, 1836
English Name: Small Indian Mongoose
Local Name: Chhoto Beji, Nakul
Synonym/s: *Mangusta auropuntata* Hodgson, 1836
Herpestes pallipes Blyth, 1845
Taxonomic Notes: Wozencraft (2005) considered *Herpestes auropunctatus* to be conspecific with *Herpestes javanicus*. But Taylor and Matheson (1999) and Veron *et al*. (2006) suggest a specific status. Using analyses of mitochondrial DNA from a small subset of mongooses, Veron *et al.* (2006) concluded that the Javan Mongoose (*Herpestes javanicus*) and Small Indian Mongoose (*H. auropunctatus*) are two distinct species, whereas previously, based on morphological features, they have often been considered to be conspecific.

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This is a very common and widely distributed mongoose in Bangladesh. It is found in a variety of habitats and habitat modification does not significantly affect its presumed large population.This species has a wide distribution throughout the country. Moreover, there is no direct threat found which can lead it to a significant decline. So, this species has been categorized as Least Concern.
Date Assessed: 18 November 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Herpestes auropunctatus © M M Feeroz

Geographic Range

Global: It occurs in Afghanistan, Bangladesh, Bhutan, Myanmar, India (south to Sind on the west and Orissa on the east), Nepal, Pakistan, Iran, Iraq, Saudi Arabia, Cambodia, China (southern China including Hainan Island), Indonesia, Malaysia, Thailand, Lao PDR and Viet Nam (Wozencraft *et al.* 2015).
Bangladesh: Small Indian Mongoose is the most widely distributed carnivore in Bangladesh that thrives well in both natural and man-made habitats barring the interior of the Sundarbans (Khan 1982, 2008, 2015).

EOO: 2,06,431 km^2
AOO: 1,32,523km^2

Population

Generation Time (Length): Sexual maturity reached at 1 year. Average lifespan in captivity is 8 years (Prater 1971).
Trend: Not known

Habitat and Ecology

It is diurnal and likes shady places. It occurs as solitary animal or in pairs. It lives in holes burrowed by itself, in grain and firewood store houses that are sparingly used in the villages, graveyards, ruins, piles of bricks and stacks of logs as well as dry sewage drains and pipes in the cities (Khan 1985, 1987). It forages in and around countryside houses, bushes, hedges and crop fields. Feeds on rats, mice, snakes, scorpions, centipeds, wasps and all types of insects, eggs of birds and reptiles, fruits and datepalm juice. It breeds mainly from April to July.

Assessor: Khadija Rawshan

Herpestes edwardsii

Species ID: MA0069

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	HERPESTIDAE

Scientific Name: *Herpestes edwardsii* (É. Geoffroy Saint-Hilaire, 1818)
English Name: Indian Grey Mongoose, Common Mongoose
Local Name: Boro Beji, Neul, Neule, Nokul
Synonym/s: *Ichneumon edwardsii* Geoffroy Saint-Hilaire, 1818
Herpestes edwardsii (É. Geoffroy Saint-Hilaire, 1818)
Urva edwardsii (É. Geoffroy Saint-Hilaire, 1818)
Taxonomic Notes: A taxonomic revision is required, as four subspecies are recorded (Corbet and Hill 1992).

Herpestes edwardsii © M K Hasan

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species has been categorized as Least Concern in the view of its widespread large population and occurrence in human-dominated landscapes and tolerance to a degree of habitat modification.
Date Assessed: 19 March 2015

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species occurs from the central and eastern Arabian Peninsula, through Afghanistan, Pakistan, Bahrain, Saudi Arabia, Iran, Kuwait to India, Nepal, Bhutan, Sri Lanka, and Indonesia. It has been introduced to Japan and Peninsular Malaysia (Choudhury *et al.* 2013).
Bangladesh: It is widely distributed all over the country minus the offshore islands and areas of the Sundarbans that regularly gets inundated by tides. Even it lives in most district towns (Khan 1982, 1985, 1987, 2015).

EOO: 2,22,509 km²
AOO: 1,32,741 km²

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available. As the species has a wide Extent of Occurrence, presumably it has a large population.
Trend: Not known

Habitat and Ecology

It is terrestrial, diurnal and solitary hunter that remains active during the day and into late evening. It feeds on a variety of prey, including insects, spiders, scorpions and other invertebrates, as well as frogs, lizards, rodents, snakes that include venomous snakes too and also feeds on refuse and carrion (Khan 2015, Kamruzzaman 2009). This mongoose is commonly found in open forests, scrublands and cultivated fields, often close to human habitation. This mongoose loves old firewood stores, piles of log or bricks and abandoned segment of a countryside house. It lives in burrows, thickets, among groves of trees or bushes and even in drains (Khan 2015, Choudhury *et al.* 2013).

Assessor: Sajeda Begum

Paradoxurus hermaphroditus

Species ID: MA0081

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Paradoxurus hermaphroditus* (Pallas, 1777)
English Name: Common Palm Civet, Asian Palm Civet
Local Name: Gandhagakul, Nongar, Vondar, Shairel, Hailla
Synonym/s: *Paradoxurus lignicolor* Miller, 1903
Paradoxurus musangus (Raffles, 1821)
Paradoxurus philippinensis Jourdan, 1837
Taxonomic Notes: Many subspecies have been described (Corbet and Hill 1992) and a taxonomic revision is needed (Veron *et al.* in prep. as quoted in Duckworth *et al.* 2011). Of these, *Paradoxurus hermaphroditus bondar* (Desmarest, 1820) has been named after Bengali name Vondar or bondar and is found in Bangladesh and its neighbors like Bhutan, India and Myanmar (M.A.R. Khan pers. comm.).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: This species has been categorized as Least Concern in the view of its wide distribution throughout the country, tolerance to a degree of habitat modification and adaptability to different habitats.

Date Assessed: 27 October 2014

History

Regional Status: Vulnerable in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Bhutan, Borneo, Cambodia, China, India, Lao PDR, Myanmar, Nepal, Peninsular Malaysia, Philippines, Singapore, Sri Lanka, Thailand and Viet Nam (Duckworth *et al.* 2011).

Paradoxurus hermaphroditus © Tania Khan

Bangladesh: Of the several species of civets, this one has the widest distribution and occurs in almost all terrestrial habitats including parts of the Sundarbans having land connection. It is known to live in human settlements including the capital city of Dhaka (Husain 1974, Khan 2015).

EOO: 2,22,509 km²
AOO: 1,35,729 km²

Population

Generation Time (Length): 10 years
Total Population: Not known
Trend: Decreasing

Habitat and Ecology

It is found in all types of forests and plantations, including tea gardens, farming areas and human settlement (Khan 1987, Khan 2008). It is mostly terrestrial, nocturnal, crepuscular and solitary. Adults mark their ranges by dragging their anal glands along the ground or tree branches. It is mostly frugivorous but also feeds on rodents, birds, reptiles, insects, worms, seeds, eggs, snails, scorpions and loves to drink datepalm juice and that of the toddy palm or Palmyra Palm, hence its other name 'Toddy Cat'. Gestation period is two months and litter size is two to five (Khan 1987, Khan 2008, Grzimek *et al*. 2004).

Assessor: S.M. Rabiul Alam

Axis axis

Species ID: MA0084

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	CERVIDAE

Scientific Name: *Axis axis* (Erxleben, 1777)
English Name: Chital, Indian Spotted Deer, Axis Deer, Spotted Deer
Local Name: Chitra Harin,Chitol

Assessment Information

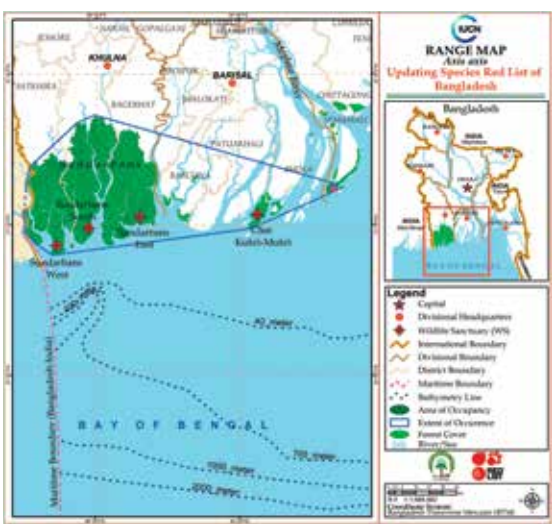
Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: Chital is listed as Least Concern because it occurs in the Sundarbans Mangrove Forest when another population has been introduced in the man-made coastal magrove forest under Noakhali District. It has a stable and sizable population (>1,00,000) and existing threats are not severe. It does not fulfill any criteria to qualify threatened categories. Thus, it has been categorized as Least Concern.
Date Assessed: 29 April 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Bangladesh, Bhutan, India, Nepal, and Sri Lanka (Prater 1971, Menon 2003).
Bangladesh: Once the Spotted Deer was very common and found in most of the forested areas of Bangladesh. It was known to occur in Madhupur deciduous forest, Sylhet and Chittagong hill forested areas (Khan 2015). But now it is confined into the Sundarbans Mangrove Forest, Nijhum Dweep National Park, Char Kukri Mukri Wildlife Sanctuary, Jahajmara Mangrove Area and Hatia (Alam and Feeroz 2010, Islam 2001). Populations outside the Sundarbans have been introduced by the Bangladesh Forest Department.
EOO: 11,913 km^2
AOO: 4,278 km^2



Axis axis © M M Feeroz

Population

Generation Time (Length): Not known
Total Population: The estimation of Spotted Deer in the Sundarbans of Bangladesh is 83,000 (Day 2007). The estimated population in Nijhum Dweep Natioanl Park is about 2000 (Feeroz and Uddin 2015).
Trend: Not known

Habitat and Ecology

Spotted Deer thrives in a variety of habitats, but usually avoid extremes for example dense moist forests and open semi-desert or desert. Moist and dry deciduous forest areas, especially adjoining dry thorn scrub or grasslands appear to be the best areas, and highest densities of Chital are reported from these habitats. Short grasslands habitat, swampy meadows and glades adjoining forest areas, coastal dry evergreen forests, mixed forests or plantations with Teak (*Tectona grandis*) and Sal (*Shorea robusta*) are also used as habitat. (Raman in press). The Spotted Deer is a gregarious and frequently found in herds of a few individuals to 100 or more. It feeds largely on grasses at all sessons with green grasses less than 10 cm high seems to be preferred. It also feeds on flowers and fruits. Chital uses more wooded habitat during the cool-dry season and early summer (November to May), where fallen fruit, leaf litter, and browse are available. In open grassland and tropical dry thorn forest, Chital density increases with the onset of monsoon rains and flush of plant growth (Mishra 1982, Moe and Wegge 1994, Khan 1996, Raman *et al*. 1996).

Assessor: A.B.M. Sarowar Alam

Sousa chinensis

Species ID: MA0123

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Sousa chinensis* (Osbeck, 1765)
English Name: Indo-pacific Humpback Dolphin, Chinese White Dolphin
Local Name: Golapi Dolphin
Taxonomic Notes: Humpback Dolphins in the Indo-Pacific are considered as of two species by some biologists: *S. plumbea* in the western Indian Ocean, from South Africa to the east coast of India and *S. chinensis*, from the east coast of India to China and Australia (Reeves *et al*. 2008).

Assessment Information

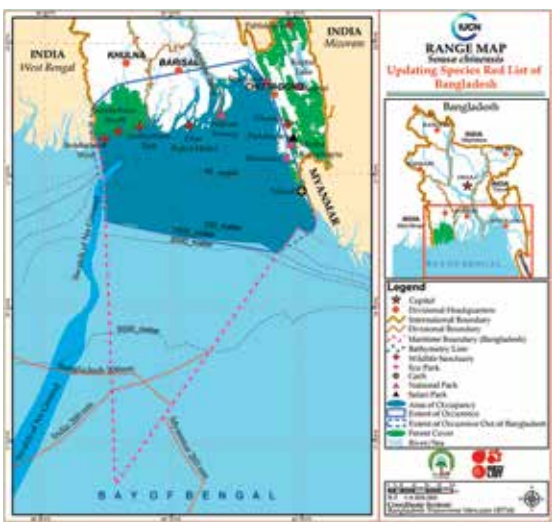
Red List Category & Criteria: Least Concern (LC) ver 3.1

Justification: In 2002, a single group of Indo-Pacific Humpback Dolphins (*Sousa chinensis*) was reported by Smith *et al.* (2006) in a relatively high salinity channel of the southwest portion of the Sundarbans Mangrove Forest of Bangladesh. A total of six sightings of *Sousa chinensis* (mean group size 16.2, range 2 - 55) in the nearshore water of the Bay of Bengal was documented in 2004 (Smith *et al*. 2008). A single sighting of two individuals was made in the outer mouth of Naaf river in the southeast of Bangladesh in 2007. The Extent of Occurrence and Area of Occupancy are greater than threshold level of threatened categories. There was no information on habitat decline. Thus, this species has been categorized as Least Concern.

Date Assessed: 31 March 2015

History

Regional Status: Not assessed yet (IUCN Bangladesh 2000).



Sousa chinensis © Md. Zahangir Alom

Geographic Range

Global: Discontinuously distributed throughout the shallow coastal waters of Indian and Pacific Oceans (Culik 2011, Reeves *et al.* 2008).
Bangladesh: Coastal and pelagic waters of the Bay of Bengal and waterways of the Sundarbans Mangrove Forest.

EOO: 13,500 km^2
AOO: 5,000 km^2

Population

Generation Time (Length): About 20 years (Taylor *et al.* 2007)
Total Population: Not known
Trend: Not known

Habitat and Ecology

Indo-Pacific Humpback Dolphins prefer areas strongly influenced by freshwater inputs. It is occurring further offshore in still shallow flats but where the water is more saline, warmer and turns from brown to green and the waterways of the Sundarbans Mangrove Forest containing high salinity. They are mostly social, makes group of 2 to 55 animals, avoids boats by diving toward different directions, splits into small groups or single animal. It breeds throughout the year (Culik 2011).

Assessor: Md. Zahangir Alom

Tursiops aduncus

Species ID: MA0124

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Tursiops aduncus* (Ehrenberg, 1833)
English Name: Indo-pacific Bottlenose Dolphin, Indian Ocean Bottlenose Dolphin
Local Name: Botolnaak Samudrik Shishu or Dolphin
Taxonomic Notes: Based on concordance in genetics, osteology, and external morphology, *Tursiops aduncus* is reported as taxonomically distinct (Wang *et al*. 1999, 2000 a, b).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: A population of 2,239 individuals of *Tursiops aduncus* has been estimated by Mansur *et al*. 2011 in the northern tip of Swatch of No-ground in the Bay of Bengal and there were also few sightings recorded outside of Swtach of No ground in the Bay of Bengal. Both the Extent of Occurrence and Area of Occupancy were much larger than the thresholds level of threatened categories. Moreover, no decline in the species population was found. Thus, it has been categorized as Least Concern.

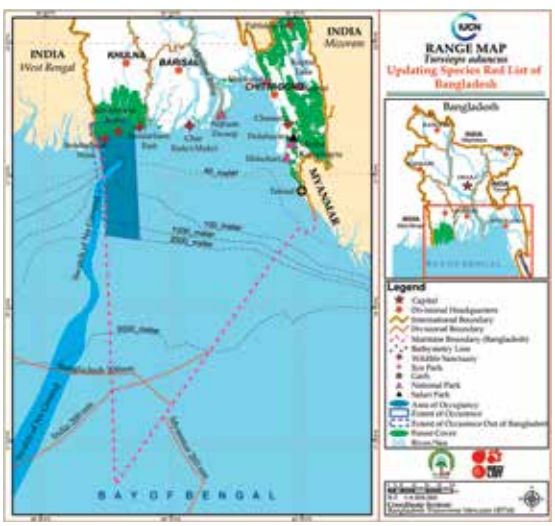
Date Assessed: 31 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: The distribution of *Tursiops aduncus* is patchy, widespread along the eastern coast of Africa, through the Red Sea and Persian Gulf, eastwards as far as Taiwan and southeastward to coastal waters of Australia (Curry and Smith 1997, Möller and Beheregaray 2001, Wells and Scott 2002, Culik 2011).



Tursiops aduncus © Md. Zahangir Alom

Bangladesh: It is restricted to the Swatch of No-ground, offshore and near shore marine habitats in the Bay of Bengal.

EOO: 16,000 km^2
AOO: 3,000 km^2

Population

Generation Time (Length): About 21 years (Taylor *et al.* 2007)
Total Population: About 2,200
Trend: Not known

Habitat and Ecology

This dolphin inhabits coastal, pelagic and marine waters of the Bay of Bengal. Very social and occurred up to 200 animals in one group. Forage over reefs or soft bottom substrata and near the shore. It moves from coastal water to the deep marine water and vice versa. Mostly breeds during December to March.

Assessor: Md. Zahangir Alom

Stenella attenuata

Species ID: MA0125

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

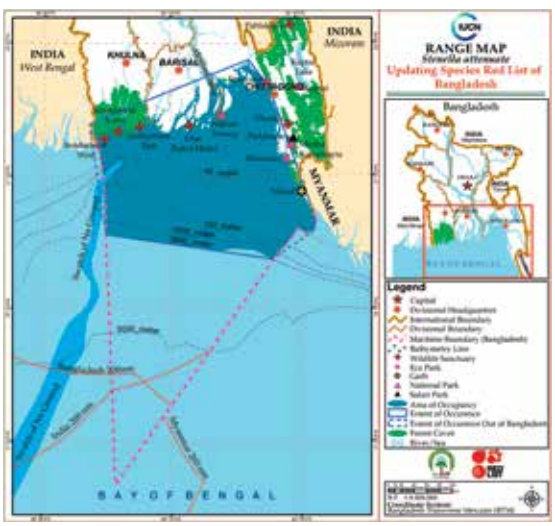
Scientific Name: *Stenella attenuata* (Gray, 1846)
English Name: Pantropical Spotted Dolphin, Bridled Dolphin, Narrow-snouted Dolphin
Local Name: Chitra Samudrik Shishu or Dolphin, Futki Dolphin
Synonym/s: *Stenella graffmani* Lönnberg, 1934
Taxonomic Notes: There are two subspecies of *Stenella ateenuata* recognized: *S. a. attenuata* distributed worldwide in the oceanic tropical waters, and *S. a. graffmani* distributed widely in the waters of eastern tropical Pacific coast (Perrin 2002).

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: Not much is known about the distribution and population size of *Stenella attenuata* in Bangladesh. A large group of about 800 individuals were in the far offshore of the southeast coast was reported by Smith *et al.* (2008) and eight sightings with mean group size of 137 individuals (range=20–350) were recorded in the Swatch of No-ground by BCDP (2008). This study does not cover the whole area of the Bay of Bengal, so this implies that significant number of population may occur further offshore in unsurveyed area. The Extent of Occurrence and the Area of Occupancy are much larger than the thresholds level of the threatened categories. Moreover, it is not believed to be facing any critical threat in the marine waters of Bangladesh (BCDP 2008). Thus, the species has been assessed as Least Concern.
Date Assessed: 31 March 2015

History

Regional Status: Not assessed yet (IUCN Bangladesh 2000).



Stenella attenuata © Md. Zahangir Alom

Geographic Range

Global: It occurs in tropical and warm temperate waters of the Indian, Pacific and Atlantic Oceans (Culik 2011, Hammond *et al*. 2012).
Bangladesh: It lives in Swatch of No-Ground, pelagic and marine habitats with high salinity in the offshore waters of Bay of Bengal.

EOO: 78,691 km^2
AOO: 64,205 km^2

Population

Generation Time (Length): About 23 years (Taylor *et al.* 2007)
Total Population: More than 1,000 in the country
Trend: Not known

Habitat and Ecology

It inhabits Swatch of No-Ground and offshore marine waters. It is very social and forms large school of up to 800 individuals. This dolphin is often found in close association with Spinner Dolphin *Stenella longirostris*.

Assessor: Md. Zahangir Alom

Sus scrofa

Species ID: MA0083

LEAST CONCERN <LC>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	SUIDAE

Scientific Name: *Sus scrofa* Linnaeus, 1758
English Name: Wild Boar, Eurasian Wild Boar
Local Name: Buno Shukar, Shuar, Poimal, Bonno
Synonym/s: *Sus papuensis* Lesson & Garnot, 1826
Sus andamanensis Blyth, 1858
Sus ternatensis Rolleston, 1877
Sus aruensis Rosenberg, 1878
Sus niger Finsch, 1886
Sus natunensis Miller, 1901
Sus floresianus Jentink, 1905
Sus babi Miller, 1906
Sus enganus Lyon, 1916
Sus goramensis De Beaux, 1924

Taxonomic Notes: In a major review of the Genus *Sus*, Groves (1981) recognized 16, possibly 17, subspecies, which are divided into four regional groupings based on both geographic and morphological criteria such as skull height and lacrimal bone length. These include various insular Southeast Asian feral and/or hybrid populations.

Sus scrofa © M M Feeroz

Assessment Information

Red List Category & Criteria: Least Concern (LC) ver 3.1
Justification: This species is common and occurs in different types of forests throughout Bangladesh. Although the population size and trends have not been quantified or estimated, the population size is not believed to approach the thresholds of any of the threatened categories. Due to its wide range of distribution, presence in many protected areas and tolerance to habitat disturbance this species is listed as Least Concern.
Date Assessed: 19 March 2015

History

Regional Status: Not Threatened in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: This species has a wide distribution throughout the steppe and broadleaved forest regions of the Palaearctic, from Western Europe to the Russian Far East, extending southwards as far North Africa, the Mediterranean Basin and the Middle East, through India, Indo-China, Japan, Taiwan and the Greater Sunda Islands of South-east Asia. This species originated in Europe and Asia, but were widely introduced to North America and are considered an invasive species in the southeastern United States and California. They are common throughout Eurasia, and inhabit every continent except Antarctica (Oliver and Leus 2008).
Bangladesh: All forests of northeast, southeast, southwest, north and central parts of Bangladesh (Khan 2008, Feeroz *et al.* 2011, 2012; Feeroz 2013).

EO0: 1,93,499 km^2
AO0: 16,458 km^2

Population

Generation Time (Length): Not known
Total Population: No quantitative data is available but as this species inhabits a wide range of habitats presumably it has a large population.
Trend: Not known

Habitat and Ecology

This species is most active in the early morning and late afternoon, though they become nocturnal in disturbed areas, where activity usually commences shortly before sunset and continues throughout the night. They occur solitary, in pair and also sometimes in groups. Wild Boars are omnivorous. They predominantly eat plant matter, particularly crops, fruits, grains, tubers, roots, and green plants. They have also been known to consume carrion, small rodents, insects, and worms. They adjust their diets based on availability of food, which can vary with seasons, weather conditions, and locations (Oliver and Leus 2008). Wild Boar is ecologically flexible and lives in habitats ranging from closed natural and planted forests to open scrublands with some cover, such as grasslands, wooded forests, agricultural areas, shrublands and marshy swamplands. They require a nearby water source and shelter (dense vegetation) to protect and conceal them from predation (Kamruzzaman 2009).

Assessor: Sajeda Begum


DATA DEFICIENT
〈 DD 〉

Pardofelis Marmorata

Macaca arctoides

Species ID: MA0051

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PRIMATES	CERCOPITHECIDAE

Scientific Name: *Macaca arctoides* (Geoffroy, 1831)
English Name: Stump-tailed Macaque, Stumptail Macaque, Bear Macaque
Local Name: Choto-leji Banor, Khato-leji Banor
Synonym/s: *Macacus arctoides* I. Geoffroy, 1831
Macaca melanotus (Ogilby, 1839)
Macaca ursinus (Gervais, 1854)
Macaca brunneus (Anderson, 1871)
Macaca rufescens (Anderson, 1872)
Macaca speciosus (Murie, 1875)
Macaca harmandi (Trouessart, 1897)
Macaca melli (Matschie, 1912)

Macaca arctoides © N Aggimarangse

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Listed as Data Deficient because there is no recent sighting report and its present status in Bangladesh is not known.
Date Assessed: 22 September 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Cambodia, China, India, Lao PDR, Malaysia, Myanmar, Thailand and Viet Nam. It is introduced to Hong Kong and Mexico.
Bangladesh: No recent sighting report is available but assumed to be present in the forests of Bangladesh adjacent to Tripura, Nagaland and Mizoram of India, and Myanmar (Khan 1982a, 1982b, 1985, 1987a, 1987b). Old record says its presence in the forests of Cox's Bazar and may be present in Chittagong, Chittagong Hill Tracts and Sylhet (Ahsan 1984) because it is found in the bordering regions of Myanmar and India (Fooden 1976, Green 1978, Srivastava 1999).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 10-12 years (Molur *et al.* 2003)
Total Population: Not known
Trend: Not known

Habitat and Ecology

Its habitat is restricted to certain moist deciduous forests and mixed evergreen forests of the east, northeast and southeast. In other countries it prefers evergreen forests of several kinds (Htun *et al.* 2008, Srivastava and Mohnot 2001). Stump-tailed Macaque is diurnal, arboreal and terrestrial in habit. It is an omnivore (Fooden 1990, Srivastava 1999). It lives in muti-male multi-female group varies geographically from 5-60 (Fooden, 1990). Females reach sexual maturity at about 4 years. Most of the mating occurs in October and November in the wild (Brereton 1994). Gestation period is about six months. Females begin to produce offspring between 4.5 and 5 years and reproduce until about 17 years (Fooden 1990, Ross 1992).

Assessor: Md. Farid Ahsan

Atherurus macrourus

Species ID: MA0114

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	HYSTRICIDAE

Scientific Name: *Atherurus macrourus* (Linnaeus, 1758)
English Name: Asiatic Brush-tailed Porcupine, Brush-tailed Porcupine
Local Name: Tuli-leji Shajaru
Synonym/s: *Atherurus assamensis* Thomas, 1921
Atherurus macrourus (Thomas, 1921) subspecies *assamensis*
Hystrix macroura (Linnaeus, 1758)
Hystrix macrourus Linnaeus, 1758

Atherurus macrourus © S. C. Rahman

Assessment Information

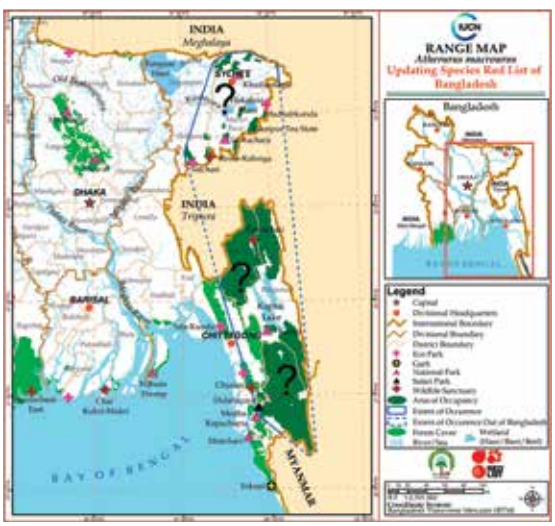
Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species occurs in the mixed evergreen forests of the Chittagong Hill Tracts, but its actual status is not clearly known since it is nocturnal and crepuscular. There is one recent record based on camera-trap image in Sangu WS, Bandarban (S. C. Rahman pers. comm. 2015), but the local people in many parts of the Chittagong Hill Tracts reported its sighting. It is expected to occur in the mixed evergreen forests of Greater Sylhet, but no specific record is available yet. The assessment of this species has further complicated due to the fact that there are references (IUCN Bangladesh 2000, Kamruzzaman 2009) of its occurrence in the deciduous forests and in the Sundarbans (without any particular location), which is very unlikely. Therefore, the species has been categorized as Data Deficient.

Date Assessed: 30 July 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).



Geographic Range

Global: It is native to Bangladesh, China, India, Lao PDR, Malaysia, Myanmar, Thailand and Viet Nam.
Bangladesh: Occurs mainly in the mixed evergreen forests of the Chittagong Hill Tracts, but might also occur in the mixed evergreen forests of Greater Sylhet (Kamruzzaman 2009, Khan 1982, 2015).

EOO: Not Known
AOO: Not Known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Global trend is decreasing.

Habitat and Ecology

It occurs mainly in subtropical and tropical montane forests. It is most active at night when it forages alone and roosts during the day in groups. Feeds on vegetable matter of the forest, but rarely feeds on crops, insects and carrion (Grazimek *et al.* 2003). It is able to run, climb and swim. Digs tunnels for daytime shelter that can be about 3.5 m long (Storch and Parker 1990). Lays one or two offspring per litter and usually two litters per year. Gestation period is 100 to 110 days (Smith and Xie 2008). Both parents raise the young and actively guard them from enemies.

Assessor: M. Monirul H. Khan

Nesokia indica

Species ID: MA0108

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Nesokia indica* (Gray, 1830)
English Name: Short-tailed Bandicoot Rat
Local Name: Khatoleji Indul
Synonym/s: *N. hardwickei* (Gray, 1837)
N. griffithi (Horsfield, 1851)
N. boettgeri (Radde and Walter, 1889)
N. brachyura (Büchner, 1889)
N. bacheri (Nehring, 1897)
N. bailwardi (Thomas, 1907)
N. beaba (Wroughton, 1908)
N. buxtoni (Thomas, 1919)
N. dukelskiana (Heptner, 1928)
N. chitralensis (Schlitter and Setzer, 1973)

Nesokia indica © www.gbif.org

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: According to Blyth (1863) this species was distributed in lower Bengal. Poché *et al.* (1982) mentioned that the Short Tailed Mole Rat (*Nesokia indica*) had the most restricted distribution being found only in well drained areas of northwestern Bangladesh. According to Khan (1982, 2015), Sarker and Sarker (1988) this species is uncommon in Bangladesh, but they did not mention local range or exact and probable location. Sufficient information is not available to assess this species. Thus, it is categorized as Data Deficient.

Date Assessed: 21 March 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Afghanistan, Bangladesh, China, Egypt, India, Iran, Iraq, Israel, Jordan, Pakistan, Palestinian Territory, Saudi Arabia, Syrian Arab Republic,Tajikistan, Turkmenistan and Uzbekistan. (Molur *et al*. 2005).

Bangladesh: Northwest of Bangladesh, Dhaka. It is partial to sugarcane and soyabean fields (Khan 1982, 2015).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

It is known to prefer sugarcane and soyabean fields in the northwestern parts of the country. It is nocturnal and fossorial.

Assessor: Md. Sakhawat Hossain

Tatera indica

Species ID: MA0111

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Tatera indica* (Hardwicke, 1807)
English Name: Indian Gerbil, Antilope Rat
Local Name: Kangaru Indur
Synonym/s: *Gerbillus indicus* Hardwicke, 1807

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Occurrence of this species in Bangladesh is doubtful (Khan 2015). Previous record of this species was based on personal communication with Father Timm (Khan 1982). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.

Date Assessed: 18 March 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Afghanistan, Bangladesh (?), India, Iran, Islamic Republic of Iraq, Kuwait, Nepal, Pakistan, Sri Lanka, Syrian Arab Republic, Turkey (Khan 1982, Kryštufek *et al*. 2008).

Bangladesh: Its occurrence in Bangladesh is doubtful (Khan 2015).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Tatera indica © www.biolib.cz

Habitat and Ecology

It inhabits dry deciduous forests, scrub forests, grasslands, uncultivated areas, undisturbed barren open areas. In Turkey, it appears to prefer uncultivated arid and semi-arid habitats with soft soil and dry river slopes (Yiğit *et al*. 2001). Terrestrial and fossorial; makes extensive burrows, depending on surrounding soils, with chambers for resting, food storage, and sleeping. Territorial, individuals live in separate burrows and canabalistic mainly on juveniles (Menon 2003). Omnivorous. Diets include grains, seeds, plants, roots, insects, reptiles and even small birds and mammals it can catch up (Yapa and Ratnavira 2013).

Assessor: Md. Farid Ahsan

Mus cookii

Species ID: MA0132

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Mus cookii* Ryley, 1914
English Name: Cook's Mouse, Ryley's Spiny Mouse
Local Name: Chisim (Bawm language)
Synonym/s: *Paruromys dominator* (Thomas, 1921)
Taxonomic Notes: This is likely to be a species complex (Musser and Carleton 2005). While *Mus nagarum* (from northeastern India) is considered a synonym of *Mus cookii* (Musser and Carleton 2005), and it is genetically very similar, it shows many morphological differences from the disjunct population in Southeast Asia (K. Aplin pers. comm.).

Mus cookii © Nikhil Chakma

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This is a newly reported species from Ruma, Bandarban (Chakma, 2015). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.

Date Assessed: 28 January 2016

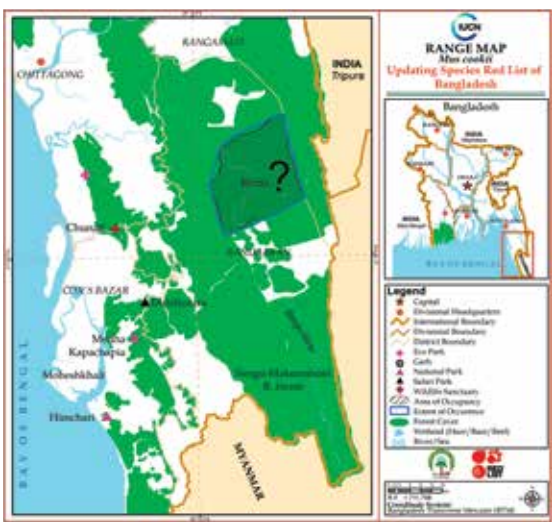
History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, Bhutan, China, India, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam (Aplin *et al.* 2008).

Bangladesh: It has been recorded from Neweden, Munlai and Basatlang villages of Ruma, Bandarban (Chakma 2015). Khan (2015) mentioned it as widely distributed without any specimen record.



EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

The species has been found at community households and upland crop fields. The species is also found at bamboo and mixed forests.

Assessor: Nikhil Chakma
Associate Assessor/s: Noor Jahan Sarker, Ken Aplin, Sohrab Uddin Sarker and Steven Belmain

Leopoldamys edwardsi

Species ID: MA0133

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Leopoldamys edwardsi* (Thomas, 1882)
English Name: Edward's Rat, Edwards's Long-tailed Giant Rat
Local Name: Zungnam (Bawm language)
Synonym/s: *Rattus edwardsi* (Marshall 1977)
Taxonomic Notes: The taxonomic status of Hainan island populations uncertain (Smith and Xie 2008). Genetic data indicates that *Leopoldamys edwardsi* is a species complex, and taxonomic revision is required (Musser and Carleton 2005).

Leopoldamys edwardsi © Nikhil Chakma

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species is recently recorded from Ruma, Bandarban (Chakma 2015). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.

Date Assessed: 28 January 2016

History

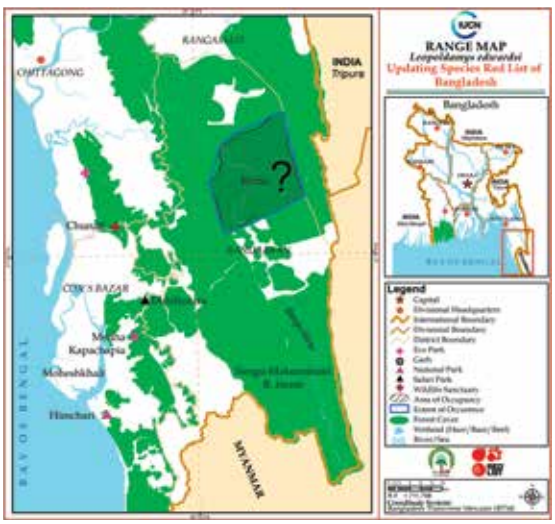
Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, China, India, Lao PDR, Malaysia, Myanmar, Thailand and Viet Nam (Aplin *et al.* 2008, Chakma 2015).

Bangladesh: It has been recorded from Neweden and Munlai villages of Ruma, Bandarban (Chakma 2015).

EOO: Not known
AOO: Not known



Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

The species has been found at community households and bamboo forests.

Assessor: Nikhil Chakma
Associate Assessor/s: Noor Jahan Sarker, Ken Aplin, Sohrab Uddin Sarker and Steven Belmain

Rattus nitidus

Species ID: MA0134

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Rattus nitidus* (Hodgson, 1845)
English Name: Himalayan Field Rat
Local Name: Zungnam (Bawm language)
Taxonomic Notes: *Rattus nitidus* possibly represents a complex of several similar species. Further studies are needed to clarify the taxonomic status of populations currently allocated to this species.

Rattus nitidus © Tawfiqur Rahman

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species is recently recorded from Ruma, Bandarban (Chakma, 2015). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.

Date Assessed: 28 January 2016

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

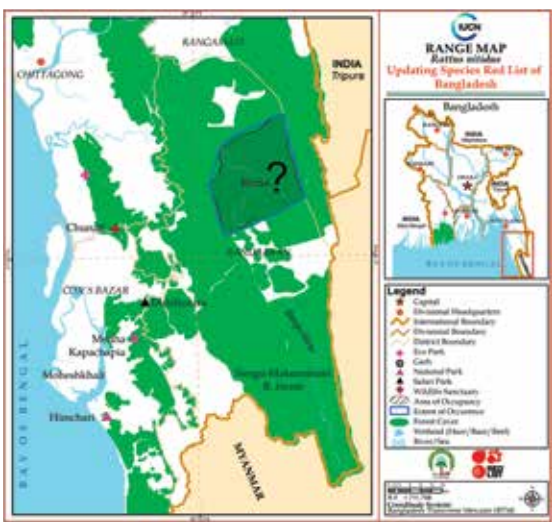
Global: It is found in Bangladesh, Bhutan, China, India, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam (Aplin *et al.* 2008).

Bangladesh: It has been recorded from Neweden, Mualpi, Munlai and Basatlang villages of Ruma, Bandarban (Chakma 2015).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known



Habitat and Ecology

The species has been found at community households and bamboo forests.

Assessor: Nikhil Chakma
Associate Assessor/s: Noor Jahan Sarker, Ken Aplin, Sohrab Uddin Sarker and Steven Belmain

Berylmys bowersi

Species ID: MA0135

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Berylmys bowersi* (Anderson, 1879)
English Name: Bower's white-toothed Rat
Local Name: Zungnam (Bawm language), Sadadant Indur (Khan 2015)
Taxonomic Notes: Requires taxonomic revision (Musser and Carleton 2005).

Berylmys bowersi © Nikhil Chakma

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: It is a newly recorded species from Ruma, Bandarban (Chakma 2015). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.
Date Assessed: 28 January 2016

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand and Viet Nam (Aplin *et al.* 2008, Chakma 2015).

Bangladesh: It has been recorded from Neweden and Munlai villages of Ruma, Bandarban (Chakma 2015). Nearly impossible to separate it from the commonly seen rats of the similar size in the country and that is possibly the reason it remained unidentified up to the time BARI-UNDP team trapped specimens in Chittagong Hill Tracts at the time of population explosion of rats following flowering of bamboos in the CHT areas during 2007-2008 (UNDP 2008, Belmain *et al.* 2010).

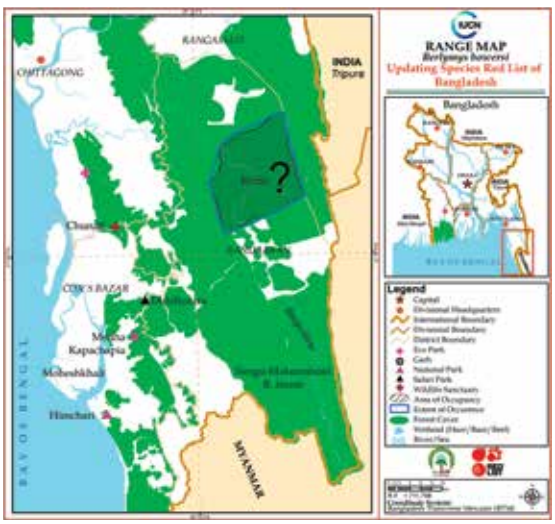
EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

The species has been found at upland community households.



Assessor: Nikhil Chakma
Associate Assessor/s: Noor Jahan Sarker, Ken Aplin, Sohrab Uddin Sarker and Steven Belmain

Vernaya fulva

Species ID: MA0136

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	MURIDAE

Scientific Name: *Vernaya fulva* (Allen, 1927)
English Name: Vernay's Climbing Mouse, Red Climbing Mouse
Local Name: Chisim (Bawm language), Lalchey Geso Indua

Vernaya fulva © Nikhil Chakma

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: It is a newly recorded species from Ruma, Bandarban (Chakma 2015). No other information is available to assess this species. Thus, it has been categorized as Data Deficient.
Date Assessed: 28 January 2016

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is found in Bangladesh, China and Myanmar (Chakma 2015, Lunde *et al.* 2008).
Bangladesh: It has been recorded from Neweden and Munlai villages of Ruma, Bandarban (Chakma 2015).

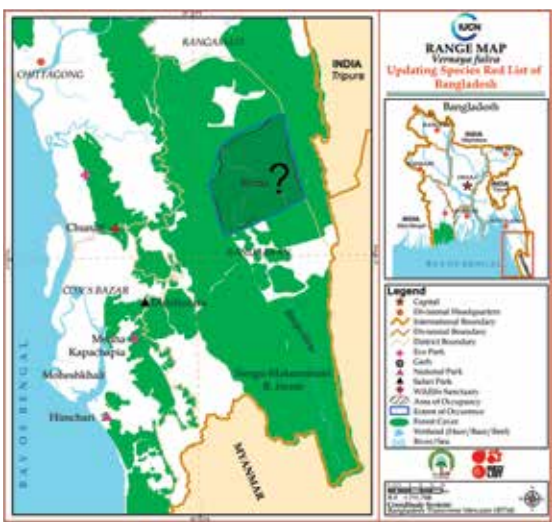
EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

The species is found at community households and crop fields.



Assessor: Nikhil Chakma
Associate Assessor/s: Noor Jahan Sarker, Ken Aplin, Sohrab Uddin Sarker and Steven Belmain

Petaurista petaurista

Species ID: MA0099

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SCIURIDAE

Scientific Name: *Petaurista petaurista* (Pallas, 1766)
English Name: Common Giant Flying Squirrel, Red Giant Flying Squirrel
Local Name: Boro Uranta Kathbirali, Lal Uranta Kathbirali
Synonym/s: *Sciurus petaurista* Pallas, 1766
Pteromys philippensis Elliot, 1839)
Taxonomic Notes: *Petaurista petaurista* possibly represents a complex of several similar species. Further studies are needed to clarify the taxonomic status.

Petaurista petaurista © www.safeproject.net

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: This species is possibly rare and known to occur in the mixed evergreen forests of the Chittagong Hill Tracts in the southeast of Bangladesh. There is one recent record of the species is known in captivity of Bangabandhu Safari Park, Dulahazara. No other information is available to assess this species. Thus, it has been categorized as Data Deficient.
Date Assessed: 18 November 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It is native to Afghanistan, Bangladesh, Brunei Darussalam, China, India, Indonesia, Malaysia, Myanmar, Nepal and Thailand (Walston *et al.* 2008).
Bangladesh: Known to occur in the mixed evergreen forests of the Chittagong Hill Tracts (one specimen from Mahalchari) (Khan 1982, IUCN Bangladesh 2000) and presumably occurs in the northeast (Walston *et al.* 2008).

EOO: 16,164 km^2
AOO: 7,802 km^2

Population

Generation Time (Length): Not known, but the lifespan in captivity is up to 16 years.
Total Population: Not known
Trend: Global trend is decreasing

Habitat and Ecology

It occurs in moist evergreen broadleaf forests, temperate forests, coniferous forests, scrub forests, rocky areas and mountain peaks.This species is solitary, arboreal, active and vocal animal. Capable of gliding a long distance between the trees. At rest it folds the flying membrane close to the body. Feeds on tree buds, leaves, bark saps, young branches and various fruits and nuts. Mating is believed to occur twice a year and the young are generally born during March-August. Usually 2-3 young are born per litter.

Assessor: M. Monirul H. Khan

Cannomys badius

Species ID: MA0113

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	RODENTIA	SPALACIDAE

Scientific Name: *Cannomys badius* Hodgson, 1841
English Name: Bay Bamboo Rat, Lesser Bamboo Rat
Local Name: Bansh Idur, Indoor
Taxonomic Notes: The species represents morphological variation seasonally, and then it is considered as a complex of several species. Therefore, some authorities suggested that a taxonomic revision is needed.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Only few records are available from Chittagong Hill Tracts (Khan 2008, 2015). It might be present in other hilly areas of the northeast and southeast of the country. Sufficient information is not available to assess this species. Thus, it is categorized as Data Deficient.

Date Assessed: 21 January 2015

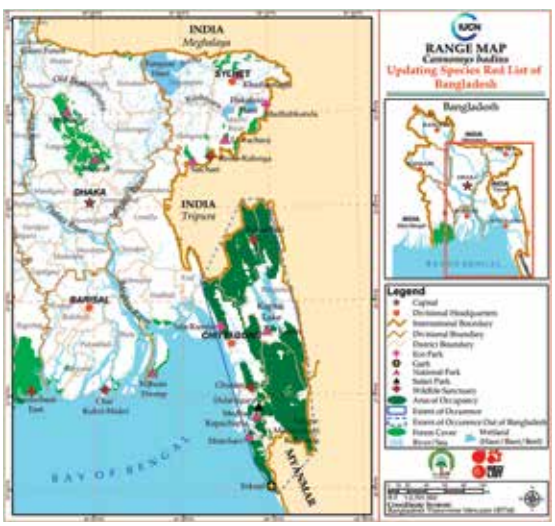
History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: The Lesser Bamboo Rat is distributed from Sumatra and Malay Peninsula in the south through Nepal (up to 2,000 m), northeast India, Bhutan, Southeast Bangladesh, Myanmar, South China (Yunnan), Northwest Viet Nam, Thailand and Cambodia (Francis 2008, Musser and Carleton 2005).

Bangladesh: Few records are available from Chittagong Hill Tracts in the southeast of Bangladesh. It might be found in other hilly areas in the east, northeast and southeast of Bangladesh.



Cannomys badius © M. Monirul H. Khan

EOO: 22,554 km^2
AOO: 10,118 km^2

Population

Generation Time (Length): Three to four years (Nevo 1999, Nowak 1999)
Total Population: Not known
Trend: Not known

Habitat and Ecology

The species lives in bamboo thickets, forests, grassy areas, and gardens in hilly or mountainous regions, at elevations up to 4,000 meters. They can burrow different types of soil, from loose well drained to hard and stony soil (Carleton and Musser 1984, Nevo 1999, Nowak 1999). It feeds on young grass, leaves and bamboo roots and shoots. Usually spends daytime in its holes and burrows, coming out at evening and forage widely through bamboo bushes (UNDP Bangladesh 2008).

Assessor: Ummay Habiba Khatun

Caprolagus hispidus

Species ID: MA0116

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	LAGOMORPHA	LEPORIDAE

Scientific Name: *Caprolagus hispidus* (Pearson, 1839)
English Name: Hispid Hare, Assam Rabbit
Local Name: Khorgosh, Kalo Khorgosh, Chotto Khorgosh

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: No information is available on its current status and distribution in the country. However, presently it might be restricted to Garo Hill areas (Khan 1985, 2015). No other information is available to assess this species. Thus, categorized as Data Deficient.

Date Assessed: 21 March 2015

History

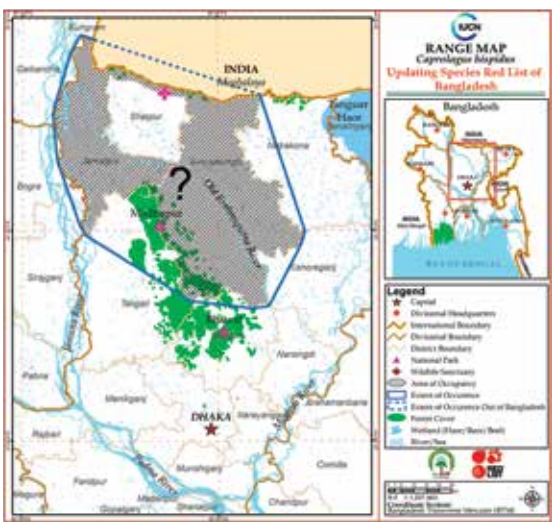
Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, India and Nepal.

Bangladesh: Old record suggests it was distributed up to Sal forests of central part of the country. In the 1800s and early 1900 the British based at Dhaka used to hunt it for sport and eat its flesh. They used to call it 'Black Rabbit'. Its present status and distribution are not known. If present, it might be restricted to Garo Hill areas or it has been totally wiped out from the country (Khan 1985, 2015).

EOO: Not known
AOO: Not known



Caprolagus hispidus © www.globalspecies.org

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

This species is nocturnal and slow moving animal. Herbivorous and feeds on grasses, leaves, shoots, barks and fruits. Litter size varies from 1 to few more young at a time (Kamruzzaman 2009). It inhabits scrubs and Sal forests, grasslands and edge of the foot hills (Khan 1985).

Assessor: Md. Kamrul Hasan

Euroscaptor micrura

Species ID: MA0017

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	EULIPOTYPHLA	TALPIDAE

Scientific Name: *Euroscaptor micrura* (Hodgson, 1841)
English Name: Himalayan Mole, Eastern Mole
Local Name: Andha Mushik, Susunderi, Sucha
Synonym/s: *Talpa micrurus* Hodgson, 1841

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Only two records are known from Lawachara National Park. One by Gittins (1980) and another by Tania Khan as noted in Khan 2015. Sufficient information is not available to assess this species. Thus, it is categorized as Data Deficient.
Date Assessed: 21 January 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

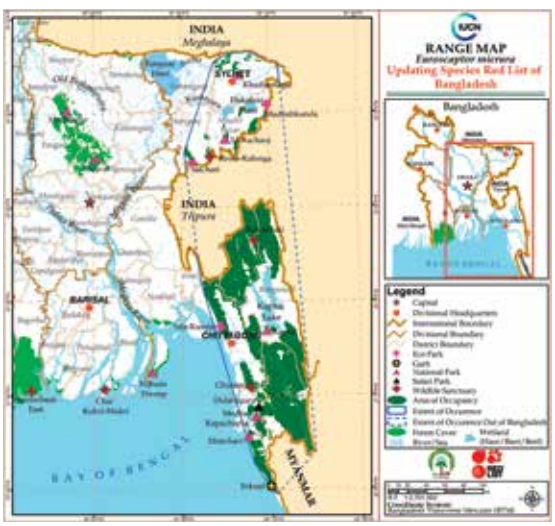
Geographic Range

Global: Native to Bangladesh, Bhutan, China, India, Malaysia and Nepal (Aplin *et al.* 2008).
Bangladesh: There are only two records and both are from the Lawachara National Park. It may also be found in other mixed evergreen forests of northeast and southeast (Khan 2008).

EOO: 41,602 km^2
AOO: 10,623 km^2

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known



Euroscaptor micrura © Tania Khan

Habitat and Ecology

This species is very secretive, nocturnal and fossorial. No information is available on its diet but usually it comprises of insects and their larvae, earthworm and other invertebrates (Kamruzzaman 2009, Khan 1982, 1985, 1987, 2015). It is purely a forest floor dwelling mammal.

Assessor: Sharmin Akhtar

Taphozous longimanus

Species ID: MA0024

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	EMBALLONURIDAE

Scientific Name: *Taphozous longimanus* Hardwicke, 1825
English Name: Long-winged Tomb Bat
Local Name: Tholey Chamchika
Synonym/s: *Taphozous brevicaudus* Blyth, 1841
T. cantorii Blyth, 1842
T. fulvidus Blyth, 1841

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is only known to occur in St. Martin's Island (Khan 1982, Nishat *et al.* 2002). Later Khan (2001) mentioned it as a common and widely distributed species without any scientific evidence. No other information is available to assess this species. Thus, it is categorized as Data Deficient.

Date Assessed: 25 August 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in Bangladesh, Cambodia, India, Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka and Thailand.

Bangladesh: Only locality specific information is available from St. Martin's Island (Khan 1982). However, Khan (2001) and IUCN (2000) mentioned it as a common and widely distributed species without any locality specific information and also without any scientific evidence.

Taphozous longimanus © Faysal Ahmad

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 4-6 years (Molur *et al.* 2002)
Total Population: In South Asia, it is widespread living in large colonies in hundreds. In many places the populations are considered to be stable. In Southeast Asia, the species is locally common (Bates *et al.* 2008).
Trend: Not known

Habitat and Ecology

No information is available from Bangladesh. However, this species is known to be found in varied habitats from arid areas to humid zones. Nocturnal, roosts in colonies from single animals to hundreds of bats. It is an early and fast flyer bat. Feeds on insects. There are two known breeding seasons, one in mid-January and the other in mid-May (Bates *et al.* 2008).

Assessor: Shayer Mahmood Ibney Alam

Taphozous melanopogon

Species ID: MA0025

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	EMBALLONURIDAE

Scientific Name: *Taphozous melanopogon* Temminck, 1841
English Name: Black-bearded Tomb Bat, Black-bearded Sheath-tailed Bat
Local Name: Kalodariwala Chamchika, Kalo Dari Gore Badur
Synonym/s: *Taphozous bicolor* Temminck, 1841
Taphozous phillipenensis Waterhouse, 1845
Taphozous. solifer Hollister, 1913

Taphozous melanopogon © Gabor Csorba, HNHM

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: No locality specific information is available. However, Khan (2001, 2015) mentioned it as a common and widely distributed species throughout the country and Nishat *et al.* (2002) reported it to be found in Panchagar and Thakurgaon region without any scientific evidence. No other information is available to assess this species. Thus, it is considered as Data Deficient.

Date Assessed: 25 August 2014

History

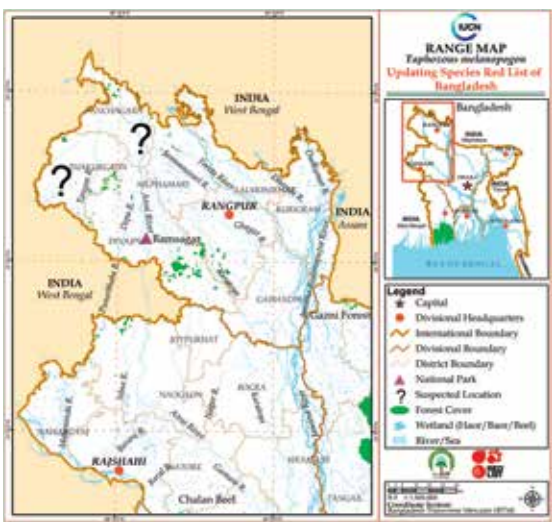
Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Cambodia, India, Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka and Thailand (Csorba *et al.* 2008).

Bangladesh: There is no confirmed record of this species from Bangladesh.

EOO: 5,701 km^2
AOO: 4,516 km^2



Population

Generation Time (Length): 4-6 years (Molur *et al.* 2002)
Total Population: Not known
Trend: Not known

Habitat and Ecology

No information on its habitat is available. However, it is nocturnal, roosts in colonies of a few to thousands of individuals in other parts of its range (Csorba *et al.* 2008). This species is known to occur in a wide variety of forest habitats in tropical regions, and has additionally been recorded from urban areas. It is found in hilly areas and roosts in caves, old dilapidated buildings, old forts, temples, old disused mines and tunnels (Csorba *et al.* 2008).

Assessor: Shayer Mahmood Ibney Alam

Saccolaimus saccolaimus

Species ID: MA0026

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	EMBALLONURIDAE

Scientific Name: *Saccolaimus saccolaimus* (Temminck, 1838)
English Name: Bare-rumped Sheathtail-bat, Pouch-bearing Bat, Pouched Tomb Bat
Local Name: Jhalor-lenji Chamchika
Synonym/s: *Saccoliamus pluto* Miller, 1910
Taphozous crassus Blyth, 1844
Taphozous pulcher Blyth, 1844
Taphozous saccolaimus Temminck, 1838

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Known to be a widespread species, however there are only two confirmed records from Sal forest ecosystem. Sufficient information is not available to assess this species. Thus it has been categorized as Data Deficient.

Date Assessed: 15 December 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Widespread species ranging from South Asia, through parts of continental and insular Southeast Asia, Melanesia to Australia.

Bangladesh: The occurrence of this species in Bangladesh was confirmed by Saha *et al.* (2014) from Jahangirnagar University campus, and mating of this species was observed in Modhupur National Park (Al-Razi *et al.* 2014). However, Khan (2001) mentioned that it is the most common among the Sheath tailed bats distributed throughout the country without any scientific evidence.

Saccolaimus saccolaimus © M K Hasan

EOO: Not known
AOO: Not known

Population

Generation Time: 4-6 years (Molur *et al.* 2002).
Total Population: Not known
Trend: Not known

Habitat and Ecology

This species is nocturnal, insectivore and canopy feeder. It inhabits forests and woodlands area and roosts include hollows of old and decaying trees, shallow caves and buildings.

Assessor: Shayer Mahmood Ibney Alam

Coelops frithii

Species ID: MA0031

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	HIPPOSIDERIDAE

Scientific Name: *Coelops frithii* Blyth, 1848
English Name: Tail-less Leaf-nosed Bat
Local Name: Lejhin Patanak Chamchika

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is doubtful occurrence of this species in Bangladesh. Some literatures (Khan 1982, 2001, Sarker and Sarker 1988, 2005, Bates and Harrison 1997, Molur *et al.* 2002) mentioned the presence of this species in Bangladesh without any locality information and also without any scientific evidence. However, this species has been known to found in Bangladesh based on bat samples received from the Sundarbans (Blyth 1848). Therefore, it is categorized as Data Deficient.

Date Assessed: 27 October 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It occurs in South Asia eastwards into southeastern China and Southeast Asia.

Bangladesh: Restricted to the Sundarbans (Khan 1982).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Coelops frithii © www.planet-mammifers.org

Habitat and Ecology

Primarily a forest-dweller. Usually roosts in hollow trees or caves. Colony size is normally 16 or less.

Assessor: Delip K. Das

Hipposideros galeritus

Species ID: MA0032

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	HIPPOSIDERIDAE

Scientific Name: *Hipposideros galeritus* Cantor, 1846
English Name: Cantor's Leaf-nosed Bat
Local Name: Cantorer Pata-nak Chamchika, Chamchika
Synonym/s: *Phyllorhina brachyota* Dobson, 1874
Phyllorhina galerita Dobson, 1876

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is no confirmed record of this species from Bangladesh. However, Khan (2001, 2015) included this species as the most common among Leaf nosed Bat and widely distributed in Bangladesh without any scientific evidence. Sufficient information is not available to evaluate this species.

Date Assessed: 28 December 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Lao PDR, Malaysia, Sri Lanka, Thailand and Viet Nam (Francis *et al*. 2008).

Bangladesh: There is no confirmed record of this species in Bangladesh.

EOO: Not known
AOO: Not known

Hipposideros galeritus © Chaitra Rajesh

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

It inhabits in old buildings, rocks and crack in building walls (Khajuria1980). No information is available from Bangladesh. However, it roosts in a very small colonies and feeds on insects in other part of its range (Phillips 1980, Nameer 2009).

Assessor: Md. Kamrul Hasan

Hipposideros lankadiva

Species ID: MA0122

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	HIPPOSIDERIDAE

Scientific Name: *Hipposideros lankadiva* Kelaart, 1850
English Name: Indian Leaf-nosed Bat, Indian Roundleaf Bat
Local Name: Guhabashi Patanak Chamchika
Synonym/s: *Hipposideros indus* Andersen, 1918
Hipposideros schistaceus Andersen, 1918

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species had a doubtful occurrence in Bangladesh. However, Khan (2001) mentioned its occurrence from the Sundarbans and adjacent areas without any scientific evidence. Recently the confirmed record of this species with photographic evidence has been known from Netrokona District. No other information is available to evaluate this species.

Date Assessed: 29 April 2015

History

Regional Status: Not evaluated by IUCN Bangladesh in 2000 (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, India (Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Orissa, Rajasthan, West Bengal), Sri Lanka.

Bangladesh: The confirmed record of this species with photographic evidence has only been known from Netrokona District. However, Khan (2001, 2015) reported this species from the Sundarbans and adjacent areas without any scientific evidence.

Hipposideros lankadiva © Anik Saha

EOO: 6,298 km^2
AOO: 4,114 km^2

Population

Generation Time (Length): 5-7 years (Molur *et al.* 2002)
Total Population: Not known
Trend: Not known

Habitat and Ecology

It lives in old buildings, old temples and disused tunnels. This bat roosts in small (50 individuals) to very large (several thousand individuals) colonies. However, it is colonial, gregarious, nocturnal insectivores, early and high flyer. Breeds once a year and gives birth to a single young after a gestation period of 260 days (Bates and Harrison 1997).

Assessor: Mohammad Firoj Jaman

Megaderma spasma

Species ID: MA0121

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	MEGADERMATIDAE

Scientific Name: *Megaderma spasma* (Linnaeus, 1758)
English Name: Lesser False Vampire, Common Asian Ghost Bat
Local Name: Choto Daini Badur
Synonym/s: *Vespertilio spasma* Linnaeus, 1758
Megaderma horsfieldii Blyth, 1863

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: This species had a doubtful occurrence in Bangladesh. However, Khan (2001, 2015) mentioned the occurrence of this species in Bangladesh without any locality information. Recently this species with photographic evidence has been know from Chittagong Hill Tracts (Anik Saha pers. com) Sufficient information is not available to assess this species. Thus, it is categorized as Data Deficient.

Date Assessed: 29 April 2015

History

Regional status: Not assessed yet by IUCN Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Sri Lanka, Thailand and Vietnam (Csorba *et al.* 2008).

Bangladesh: Only known from Chittagong Hill Tracts. However, Khan (2001, 2015) mentioned it as a widely distributed species throughout the country.

Megaderma spasma © Anik Saha

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

It has been recorded from a cave. Elsewhere, it is found in humid areas and dense tropical moist forest. It roosts in small colonies in caves, old and disused buildings, temples, hollows in large trees and disused mines (Molur *et al.* 2002). It has a low and fast flight. Feeds on lepidopterans, coleopterans, hymenopterans and other insects.

Assessor: Md. Kamrul Hasan

Tadarida aegyptiaca

Species ID: MA0047

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	MOLOSSIDAE

Scientific Name: *Tadarida aegyptiaca* (Geoffroy, 1818)
English Name: Egyptian Freetailed Bat, Egyptian Guano Bat, Egyptian Nyctinome
Local Name: Lomba-leji Chamchika
Synonym/s: *Nyctinomus aegyptiaca* Geoffroy, 1818
Nyctinomus tragata Dobson, 1874
Tadarida targata (Dobson, 1874)
Tadarida thomasi Wroughton, 1919
Tadarida sindica Wroughton, 1919
Tadarida gossei Wroughton, 1919

Tadarida aegyptiaca © Gabor Csorba, HNHM

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Occurrence of this species is doubtful in Bangladesh. However, Khan (2001, 2015) and Nameer (2009) mentioned the occurrence of this species from forests areas of the country without mentioning any locality and also without any scientific evidence. Sufficient information is not available to assess this species. Thus it is categorized as Data Deficient.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Afghanistan, Algeria, Angola, Bangladesh (?), Botswana, Congo, Egypt, Ethiopia, India, Iran, Kenya, Lesotho, Mauritania, Morocco, Namibia, Nigeria, Oman, Pakistan, Saudi Arabia, South Africa, Sri Lanka, Sudan, Tanzania, Uganda, Yemen, Zambia and Zimbabwe (Mickleburgh *et al.* 2008).

Bangladesh: No confirmed record from Bangladesh. However, Khan (2001, 2015) reported this species from forest areas of Bangladesh without any locality information.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

No information is available from Bangladesh. In other parts of its range, it emerges from roost usually about half an hour after sunset. Hunt far away from its roosting sites (Nameer 2009).

Assessor: Md. Kamrul Hasan

Chaerephon plicatus

Species ID: MA0131

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	MOLOSSIDAE

Scientific Name: *Chaerephon plicatus* (Buchanan, 1800)
English Name: Wrinkle-lipped Free-tailed Bat
Local Name: Not Known
Synonym/s: *Chaerephon luzonus* (Hill, 1961)
Chaerephon plicata (Buchanan, 1800) [orth. error]
Dysopes murinus Gray, 1830
Nyctinomus bengalensis Desmarest, 1820
Tadarida plicata (Buchanan, 1800)
Tadarida plicata subspecies insularis Phillips, 1932
Vespertilio plicatus Buchannan, 1800

Chaerephon plicatus © M. Monirul H. Khan

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The species is known from only one locality in Bangladesh, but is likely to occur in other localities of the country. A group of about 50 were seen roosting during the day, for at least several days, in a crevice of a building in Jahangirnagar University, Savar, Dhaka, in January 1995. A specimen was collected on 27 January 1995 and was identified as a Free-tailed Bat, but the species-level identification could not be done at that time. The preserved specimen was re-examined in 2015 and was identified as *Chaerephon plicatus*, which is a new species for Bangladesh (M.M.H. Khan pers. obs.). The roosting colony disappeared after January 1995, indicating that it is not a resident in the area. The species is likely to occur in other areas of Bangladesh. There is not enough data to assess its status in Bangladesh. Therefore, it is listed as Data Deficient.

Date Assessed: 04 March 2016

History

Regional Status: Not assessed in 2000 assessment by IUCN Bangladesh since it was recorded in Bangladesh after that time.

Geographic Range

Global: It is native to Cambodia, China, India, Lao PDR, Malaysia, Philippines, Sri Lanka and Vietnam (Csorba *et al.* 2014).
Bangladesh: The species is known only from Jahangirnagar University, Savar, Dhaka, but is likely to occur in other areas (M.M.H. Khan Pers. obs.).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

Roosts preferably in caves, but can also be found in crevices in rocks, old disused buildings and temples (Csorba *et al.* 2014).

Assessor: M. Monirul H. Khan

Eonycteris spelaea

Species ID: MA0049

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	PTEROPODIDAE

Scientific Name: *Eonycteris spelaea* (Dobson, 1871)
English Name: Dawn Bat, Common Dawn Bat, Common Nectar Bat, Lesser Dawn Bat
Local Name: Provati Badur
Synonym/s: *Macroglossuss pelaeus* Dobson, 1871
Eonycteris spelaea Jentink, 1889 subspecies *rosenbergii*
Eonycteris spelaea Lawrence, 1939 subspecies *glandifera*
Eonycteris bernsteini Tate, 1942
Eonycteris spelaea Maharadatunkamsi and Kitchener, 1997 subspecies *winnyae*

Eonycteris spelaea © M. Monirul H. Khan

Assessment Information

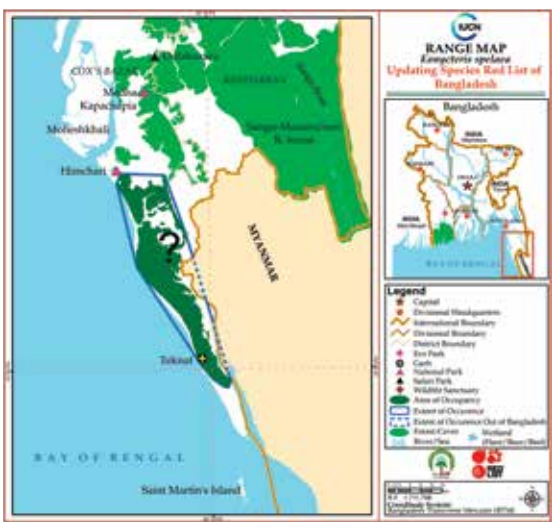
Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Only recorded from the Kudum Cave of Teknaf in the Cox's Bazar District (Khan 2013). Sufficient information is not available to assess this species. Thus, it is categorized as Data Deficient.
Date Assessed: 29 April 2015

History

Regional Status: Not assessed yet (IUCN Bangladesh 2000).

Geographic Range

Global: It is known to occur in Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Sri Lanka, Thailand and Viet Nam (Francis *et al.* 2008).
Bangladesh: It has so far been recorded from inside a very denuded mixed evergreen forest that hosts the Kudum Cave within Teknaf Range of the Cox's Bazar Forest Division (Khan 2013). It may be found in other caves in Chittagong Hill Tracts.



EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

In Bangladesh it is recorded from a warm and humid wet cave having a tiny water course running from the end of the cave towards the stream outside (Khan 2013). Elsewhere, it is found in humid areas and dense tropical moist forest. It roosts in small colonies in caves, old and disused buildings, temples, hollows in large trees and disused mines (Molur *et al.* 2002). It has a low and fast flight. Feeds on Lepidopterans, Coleopterans, Hymenopterans and other insects but does not feed on vertebrates. One young is born between April and June (Francis 2008).

Assessor: Md. Kamrul Hasan

Rhinolophus subbaidius

Species ID: MA0030

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	RHINOLOPHIDAE

Scientific Name: *Rhinolophus subbaidius* Blyth, 1844
English Name: Little Nepalese Horseshoe Bat
Local Name: Shadharon Ghorarkhuri Chamchika
Synonym/s: *Rhinolophus garoensis* Dobson,1872
Taxonomic Notes: This species belongs to *pusillus* species group. Bates and Harrison (1997) opine that the holotype of this taxon is missing and the forms representing *garoensis* Dobson, 1872 correspond to that of *Rhinolophus pusillus* Temminck, 1834. The taxonomic status needs to be re-evaluated. (Srinivasulu *et al.* in press).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is doubtful occurrence of this species in Bangladesh. However, Khan (1982, 2001, 2015) mentioned the occurrence of this species from northern part of the country and Sylhet-Moulvibazar district without any scientific evidence.

Date Assessed: 25 February 2015

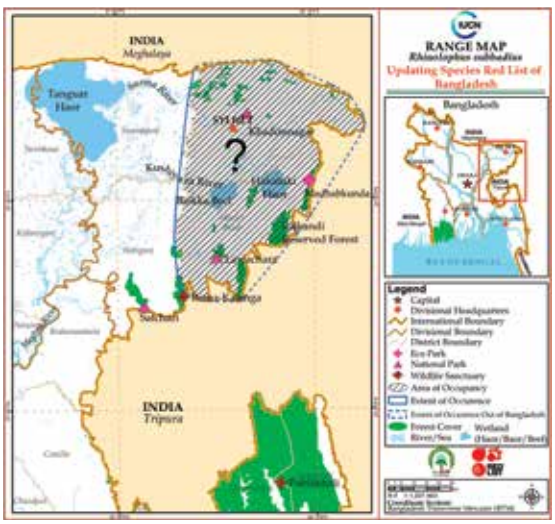
History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, China, India, Nepal and Viet Nam.

Bangladesh: The occurrence of this species in Bangladesh is still doubtful. However, Khan (1982, 2001, 2015) mentioned the occurrence of this species from northern part of the country and Sylhet-Moulvibazar District.



Rhinolophus subbaidius © www.boldsystems.org

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 4-6 years (Molur *et al.* 2002)
Total Population: Not known
Trend: Not known

Habitat and Ecology

Little is known about the habitat or ecology of this species except that it is encountered in dense forests among bamboo clumps (Molur *et al.* 2002). It is insectivorous.

Assessor: Delip K. Das

Rhinopoma hardwickii

Species ID: MA0022

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	RHINOPOMATIDAE

Scientific Name: *Rhinopoma hardwickii* Gray, 831
English Name: Lesser Mouse-tailed Bat
Local Name: Chhoto Indur-Lenji Badur
Synonym/s: *Rhinopoma hardwickei* Gray, 1831

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Appropriate data on abundance and distribution are lacking. No other information is available to assess this species. Thus, it has been categorized as Data Deficient.
Date Assessed: 15 December 2014

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: Central and northern Africa through Arabia and southern Asia. Presence in Myanmar is doubtful (Benda *et al.* 2010).
Bangladesh: The occurrence of this species in Bangladesh is still doubtful. However, Khan (2001) and Srinivasulu and Srinivasulu (2012) mentioned that this species is known to be rare within the country and can be found in southwestern region specially around the Sundarbans (Khan 2001) and Khulna (Srinivasulu and Srinivasulu 2012).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 4-6 years (Molur*et al.* 2002)
Total Population: Not known
Trend: Not known

Rhinopoma hardwickii © www.uniprot.org

Habitat and Ecology

This species is nocturnal and insectivorous. It inhabits arid and semi-arid regions. Roosting sites include trees, dry caves, old and abandoned buildings, wells and ruins.

Assessor: Shayer Mahmood Ibney Alam

Rhinopoma microphyllum

Species ID: MA0023

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	RHINOPOMATIDAE

Scientific Name: *Rhinopoma microphyllum* (Brünnich, 1782)
English Name: Greater Mouse-tailed Bat
Local Name: Indur-leja Chamchika
Synonym/s: *Vespertilio microphyllus* Brünnich, 1782
Rhinopoma hadithaensis Khajuria, 1988

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: No specific locations are known. However, Khan (2001) mentioned a wide distribution of this species throughout the country without any locality information. No other information is available to assess this species. Thus it is categorized as Data Deficient.

Date Assessed: 18 November 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Widespread across northern Africa and the Middle East, across India with unconfirmed reports in Thailand and Sumatra (Indonesia).

Bangladesh: Khan (2001) mentioned a wide distribution of this species throughout the country without any locality information or any scientific evidence that could prove its occurrence in Bangladesh.

EOO: Not known
AOO: Not known

Rhinopoma microphyllum © www.biolib.cz

Population

Generation Time (Length): 4-6 years (Molur *et al.* 2002)
Total Population: Not known
Trend: Not known

Habitat and Ecology

A species of arid areas. Roosts in crevices, small caves, mines, underground tunnels, wells, old monuments and buildings with low relative humidity and light. Lives in large colonies, sometimes with over a thousand individuals. Insectivorous and diet varies depending on the time of year and the location.

Assessor: Shayer Mahmood Ibney Alam

Hesperoptenus tickelli

Species ID: MA0035

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Hesperoptenus tickelli* (Blyth, 1851)
English Name: Tickell's Bat
Local Name: Tickeller Badur, Chamchika
Synonym/s: *Nycticejus isabellinus* Horsfield, 1851
Nycticejus isabellinus Kelaart, 1850 [*nomen nudum*]
Nycticejus tickelli Blyth, 1851

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: Only one record of this species from Bangladesh. No other information is available to assess it.

Date Assessed: 28 December 2014

History

Regional Status: Not Assessed by IUCN- Bangladesh 2000.

Geographic Range

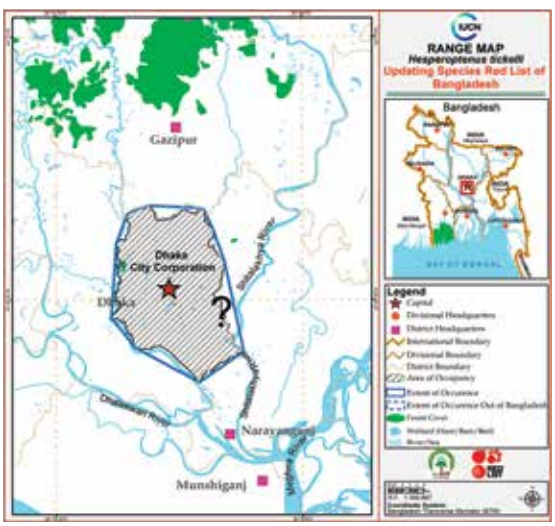
Global: Bangladesh, Bhutan, Cambodia, India, Lao PDR, Myanmar, Nepal, Sri Lanka, Thailand and Viet Nam (Csorba *et al*. 2008).

Bangladesh: A single specimen has been collected from Dhaka City in 2005 (Nameer 2009). It may also be found in other areas of Bangladesh.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known



Hesperoptenus tickelli © Faysal Ahmad

Habitat and Ecology

Usually solitary, lives singly or in small roosts during day, this bat feeds on flying insects (Nameer 2009, Phillips 1980). Generally found in low land and paddy fields as well as in home gardens (Nameer 2009).

Assessor: Md. Kamrul Hasan

Kerivoula picta

Species ID: MA0037

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Kerivoula picta (*Pallas, 1767)
English Name: Painted Bat, Painted Woolly Bat
Local Name: Komala-badami Chamchika
Synonym/s: *Vespertilio pictus* Pallas, 1767
Vespertilio kirivoula Cuvier, 1832

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: The specific information on its distribution, population and abundance is not known. The only locality specific information is available from Dhaka Division. So, it is justified as Data Deficient.

Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh, Cambodia, China, India, Indonesia (Bali, Jawa, Kalimantan, Maluku, Sumatera), Lao PDR, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand and Viet Nam (Hutson *et al.* 2008).

Bangladesh: It is reported from Dhaka Division (23°42´ N & 90°22´ E) (Blanford 1891, Bates and Harrison 1997). However, Khan (2015) reported it as an uncommon species and found in all forests of the country without any locality information.

EOO: Not known
AOO: Not known

Kerivoula picta © Gabor Csorba, HNHM

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

This species is nocturnal and insectivorous. It roosts individually or in pairs. Flight is moth like through low foliage in the forests. It breeds from June to August (Nameer 2009). It is found under dry leaves of banana, tall dry grass, disused weaver bird nests and in sugar cane fields bordering forests (Nameer 2009, Hutson *et al.* 2008).

Assessor: Khadija Rawshan

Myotis formosus

Species ID: MA0038

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Myotis formosus* (Hodgson, 1835)
English Name: Hodgson's Bat, Copper-winged Bat
Local Name: Tamatey Chamchika
Synonym/s: *Vespertilio formosa* Hodgson, 1835
Kerivoula pallida Blyth, 1863
Vespertilio auratus Dobson, 1871
Myotis formosus (Dobson, 1871)
Vespertilio dobsoni Andersen, 1881
Vespertilio andersoni Trouessart, 1897
Myotis formosus (Touessart, 1897)

Myotis formosus © www.bio.bris.ac.uk

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There is a doubt about the occurrence of this species in Bangladesh. Khan (2001, 2015) and Nameer (2009) mentioned the occurrence of this species from northeastern part of Bangladesh without any locality information. However, Srinivasulu and Srinivasulu (2005) excluded this species from their checklist. Sufficient information is not available to assess this species. Thus categorized it as Data Deficient.

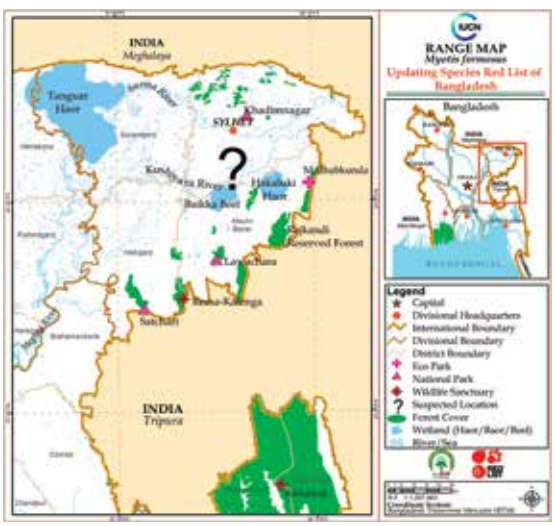
Date Assessed: 26 February 2015

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Afghanistan, Bangladesh, China, India, Indonesia, Korea, Lao PDR, Nepal, Philippines and Taiwan (Francis *et al.* 2008).
Bangladesh: Northeast of Bangladesh (Khan 2001, 2015, Nameer 2009) though need to confirm its existence with scientific evidence.



Habitat and Ecology

Only heads are visible in roost sites as their body being hidden by the leaves. Breeds during July. This species is known to inhabit hill forests (Nameer 2009).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Assessor: Md. Kamrul Hasan

Pipistrellus ceylonicus

Species ID: MA0039

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Pipistrellus ceylonicus* Kelaart, 1852
English Name: Kelaart's Pipistrelle
Local Name: Kelaarter Chamchika
Synonym/s: *Scotophilus ceylonicus* Kelaart, 182
Vesperugo indicus Dobson, 1878
Pipistrellus chrysothrix Wroughton, 1899
Pipistrellus ceylonicus chrysothrix Wroughton, 1899
Pipistrellus ceylonicus subcanus Thomas, 1915

Pipistrellus ceylonicus © Anik Saha

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: There was doubtful occurrence of this species in Bangladesh. Recently it has been recorded from Chittagong Hill Tracts (Anik Saha pers. comm.). However, Siddiqui 1961, Khan (1982, 2001, 2015, Bates and Harrison 1997, Molur *et al.* 2002) mentioned this species as widely distributed in the country without any locality information.
Date Assessed: 30 October 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: It lives in South Asia, China and Southeast Asian countries.
Bangladesh: Recorded from CHT. However, Khan (2001) mentioned the occurrence of this species throughout Bangladesh without any locality information and also without any scientific evidence (Khan 2001).

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 4-6 years
Total Population: Not known
Trend: Not known

Habitat and Ecology

It widely ranges from tropical thorn forests to highlands to human habitations both in urban and rural areas. Usually seen singly or in small groups in 3-4 individuals in abandoned houses, crevices, in railway bridge and culverts; also rarely in hollows in old tree trunks. Occasionally large colonies are seen in old and dilapidated monuments and tombs (Khan 2001).

Assessor: Delip K. Das

Pipistrellus pipistrellus

Species ID: MA0130

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CHIROPTERA	VESPERTILIONIDAE

Scientific Name: *Pipistrellus pipistrellus* (Schreber, 1774)
English Name: Common Pipistrelle
Local Name: Chamchika
Taxonomic Notes: The species has recently been separated into two species, *P. pipistrellus* and *P. pygmaeus*. Their respective distribution and status are not yet fully clarified (Simmons 2005).

Assessment Information

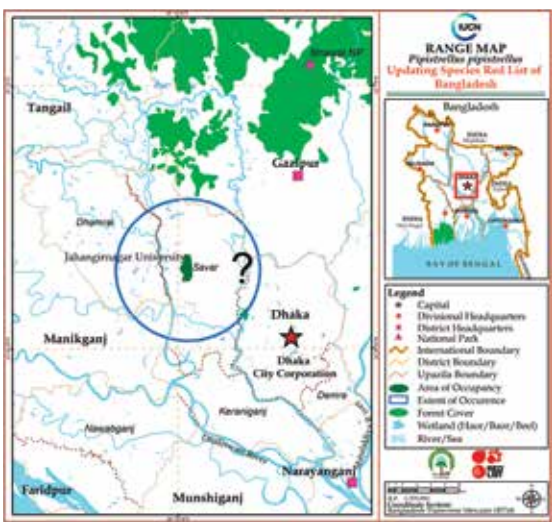
Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: This species is recently recorded from Jahangirnagar University campus, Savar, Dhaka. No other information is available to assess this species. Thus, it is categorized as Data Deficient.
Date Assessed: 28 January 2016

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: This species is found in Afghanistan, Albania, Algeria, Andorra, Armenia (Armenia), Austria, Azerbaijan, Bangladesh, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France (Corsica), Georgia, Germany, Gibraltar, Greece (East Aegean Is., Kriti), Holy See (Vatican City State), Hungary, India (Jammu-Kashmir), Iran, Islamic Republic of, Ireland, Israel, Italy (Sardegna, Sicilia), Kazakhstan, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Macedonia, the former Yugoslav Republic of, Malta, Moldova, Monaco, Montenegro, Morocco, Myanmar, Netherlands, Norway, Pakistan, Poland, Portugal, Romania, Russian Federation,



Pipistrellus pipistrellus © M K Hasan

San Marino, Serbia (Serbia), Slovakia, Slovenia, Spain (Baleares), Sweden, Switzerland, Taiwan, Province of China, Tunisia, Turkey, Ukraine and United Kingdom (Hutson *et al.* 2008).
Bangladesh: This species has been recorded from Jahangirnagar University campus, Savar, Dhaka. It was earlier noted by Khan (2001, 2010, 2015) without any specimen record.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

This species was recorded from the roof cleft of a student dormitory.This species used variable roosting sites depending on the season but in the winter the females prefer the crevices of the building because of their maternity period to be successfully completed (Hutson *et al*., 2008).

Assessor: Md. Kamrul Hasan

Manis javanica

Species ID: MA0091

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	PHOLIDOTA	MANIDAE

Scientific Name: *Manis javanica* Desmarest, 1822
English Name: Sunda Pangolin, Malayan Pangolin
Local Name: Banrui
Taxonomic Notes: Palawan pangolin *M. culionensis* is a closely related species to Malayan Pangolin *M. javanica*. Formerly, both were included under the subgenus *Paramanis* (Schlitter 1993). Afterwards, Gaubert and Antunes (2005) recorded *M. Culionensis* a distinct species. *M. javanica* includes 15-19 rows of scales on its flanks, and between 21 and 29 scales on the ventral sides of tails (Stocker 1986). It is larger, lighter in color than the other pangolins found in Southeast Asia and has shorter fore claws (Schlitter 1993).

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Khan (1985) reported that *M. javanica* might possibly occur in Bangladesh, even though there are no sighting records of the species in Bangladesh. Besides, Husain (1974) listed the species for the country without giving any locality information. Its presence in Bangladesh seems unlikely (WCMC *et al.* 1999). Thus, this species has been categorized as Data Deficient.
Date Assessed: 26 December 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Bangladesh (?), Brunei Darussalam, Cambodia, China, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand and Viet Nam (WCMC *et al.* 1999).

Manis javanica © www.zooborns.com

Bangladesh: The occurrence of this species in Bangladesh is doubtful. Khan (1985) reported its occurrence in the country without any scientific evidence.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

M. javanica can be found in a variety of habitats including forests, thick brush, grasslands, and cultivated areas such as gardens and rubber plantations (CITES 2000). It is primarily nocturnal, solitary and especially feeds on ants and termites. It is a good climber, its prehensile tail adept it well in climbing in trees to get access to termites and ants in tree holes.

Assessor: Ummay Habiba Khatun

Pardofelis marmorata

Species ID: MA0065

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	FELIDAE

Scientific Name: *Pardofelis marmorata* (Martin, 1837)
English Name: Marbled Cat
Local Name: Marbel Biral, Chopjukta Biral
Synonym/s: *Felis marmorata* (Martin,1837)
Taxonomic Notes: The Marbled Cat resembles with Clouded Leopard in colour and pattern. So, young Clouded Leopards are easily confused with this species.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: There are some intervening information on the presence of this species but appropriate data on abundance and/ or distribution are lacking. Therefore, it is categorized in Data Deficient.
Date Assessed: 27 October 2014

History

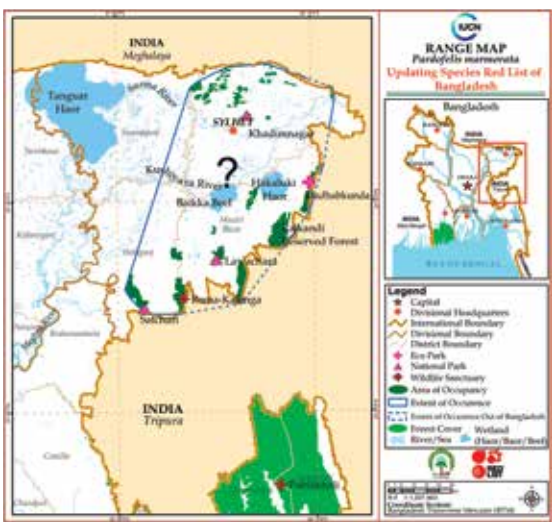
Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Marbled Cats range from the Eastern Himalayas to Upper Myanmar and the Indochinese region including areas of Northeast India, Cambodia, Lao PDR, Myanmar, Malaysia, Nepal, Thailand, Indonesia and Viet Nam (Medway 1969, Sunquist and Sunquist 2002).

Bangladesh: No record is available from wild; however, one individual was captured from Northeast region.

EOO: Not known
AOO: Not known



RANGE MAP
Pardofelis marmorata
Updating Species Red List of Bangladesh


Pardofelis marmorata © M K Hasan

Population

Generation Time (Length): Not known
Total Population: Not known
Trend: Not known

Habitat and Ecology

This species is primarily associated with moist deciduous, semi-evergreen forest (Nowell and Jackson 1996), and may prefer hill forests (Duckworth *et al.*1999, Holden 2001, Grassman *et al.* 2005). It is solitary animal, rarely seen in the wild. In captivity the longest lifespan was maximum 12 years and 3 months (Sunquist and Sunquist 2002).

Assessor: Md. Modinul Ahsan
Associate Assessor/s: Rukshana Sultana

Arctogalidia trivirgata

Species ID: MA0079

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CARNIVORA	VIVERRIDAE

Scientific Name: *Arctogalidia trivirgata* (Gray, 1832)
English Name: Small-toothed Palm Civet, Javan Small-toothed Palm Civet, Three-striped Palm Civet
Local Name: Teen Dora Nongor
Synonym/s: *Paradoxurus trivirgatus* Gray, 1832
Taxonomic Notes: A taxonomic revision is needed on different geographic populations. Schreiber *et al.* (1989) point out that the Javan form of *A. trivirgata* is clearly distinct from the ones on Borneo and Sumatra, which might be a distinct species. Van Bemmel (1952) noted that the populations of Sundaic and northern Southeast Asia differ consistently and strongly in morphology.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Although the name of Bangladesh mentioned as the westernmost range of the species (Duckworth *et al.* 2008, Khan 2009), there is no report confirming its occurrence in Bangladesh. However, it is expected to occur in mixed evergreen in the northeast and southeast of Bangladesh. In the absence of any concrete proof of occurrence the species has been categorized as Data Deficient.
Date Assessed: 25 February 2015

History

Regional Status: Not assessed by IUCN Bangladesh in 2000, because its name was not in the country checklist.

Geographic Range

Global: It is native to Brunei Darussalam, Cambodia, China; India, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand and Viet Nam (Duckworth *et al.* 2008).

Arctogalidia trivirgata © www.ecologyasia.com

Bangladesh: The species is expected to occur in mixed evergreen forests of the northeast and southeast of Bangladesh.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): Not known, but the lifespan is 10 to 12 years (Duckworth *et al.* 2008).
Total Population: Not known
Trend: Decreasing globally

Habitat and Ecology

This species is strongly arboreal and secretive. Primarily frugivorous, but also feeds on a wide range of animal food. Probably breeds throughout the year and there may be two litters per year, with two to three young in each litter (Duckworth *et al.* 2008). It occurs in evergreen and semi-evergreen forests including degraded areas having some contiguity of canopy.

Assessor: M. Monirul H. Khan

Balaenoptera edeni

Species ID: MA0129

DATA DEFICIENT <DD>

Taxonomy

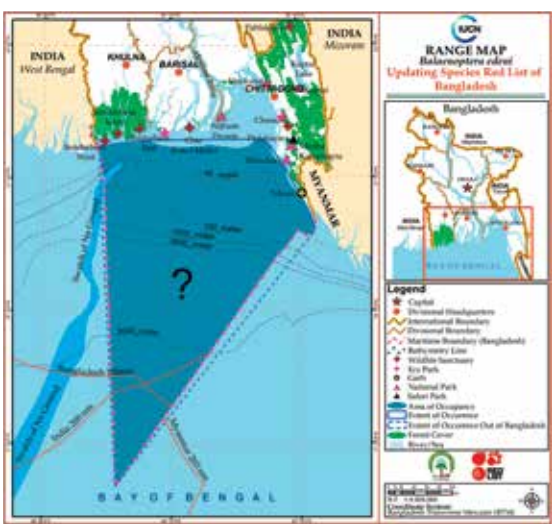
Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	BALAENOPTERIDAE

Scientific Name: *Balaenoptera edeni* Anderson, 1879
English Name: Bryde's Whale, Tropical Whale, Common Bryde's Whale, Eden's Whale, Pygmy Bryde's Whale, Bryde's Whale Complex
Local Name: Brudarer Timi, Brydes Timi, Timi
Synonym/s: *Balaenoptera brydei* Olsen, 1913
Taxonomic Notes: The taxonomic status of the Bryde's Whale is unclear. The smaller form (rarely grows larger than 11.5 meter) compared to "ordinary" large-type Bryde's Whales (Maximum length 14.6 meter for male and 15.6 meter for female) (Smith *et al*., 2008a). The smaller form was first described by Anderson (1879) as *B. edeni.* The large form is considered as *B. brydei* (Olsen1913, Sasaki *et al.* 2006). Smith *et al*. (2008a, 2008b) reported the Bangladesh population as large form.

Balaenoptera edeni © Md. Zahangir Alom

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: In February1985, a 13.7 meter long carcass of *Balaenoptera sp.* was found in the south coast of Cox's Bazar (Sarker 1990). Carcass of Brydes Whale was also found at Mandarbaria on the southwest coast of the Sundarbans in February 2008, and another carcass was found at coast of Barguna district in March 2014. During December 2006 to February 2007, forty sightings of Balaenopterids occurred in and arround the Swatch of No-ground with mean 2.9 individuals (range 1-15) of which six were confirmed Bryde's Whale sightings from photo identification (Smith *et al*. 2008a). Thus, Bryde's Whales are believed to be distributed throughout the offshore in the Bay of Bengal but there is no estimation of its population size as well as population trends. Thus, this species has been categorized as Data Deficient.



History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: Tropical and sub-tropical waters throughout the Indian, Atlantic and Pacific Oceans.
Bangladesh: It is found in the Bay of Bengal (mostly found in Swatch of No-ground) at depth >10 meter in near shore to the offshore marine waters.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): About 18 years (Taylor *et al.* 2007).
Total Population: Not known
Trend: Not known

Habitat and Ecology

It prefers coastal and marine waters with high salinity (>18.8ppt) and depth >10 meter to the deep offshore.It occurs in groups or as solitary. Surfaces slowly and leaps rarely.

Assessor: Md. Zahangir Alom

Stenella longirostris

Species ID: MA0011

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Stenella longirostris* (Gray, 1828)
English Name: Spinner Dolphin, Long-beaked Dolphin, and Long-snouted Dolphin.
Local Name: Gurni Dolphin, Ghulli Dolphin.
Synonym/s: *Delphinus longirostris* (Gray, 1828).
Taxonomic Notes: Perrin (1990) and Perrin *et al*. (1999) recognized four subspecies: *S. l. longirostris* (Gray's Spinner), *S. l. orientalis* (Eastern Spinner), *S. l. centroamericana* (Central American Spinner) and *S. l. roseiventris* (Dwarf Spinner Population of Bangladesh is considered as *S. l. orientalis.*

Assessment Information

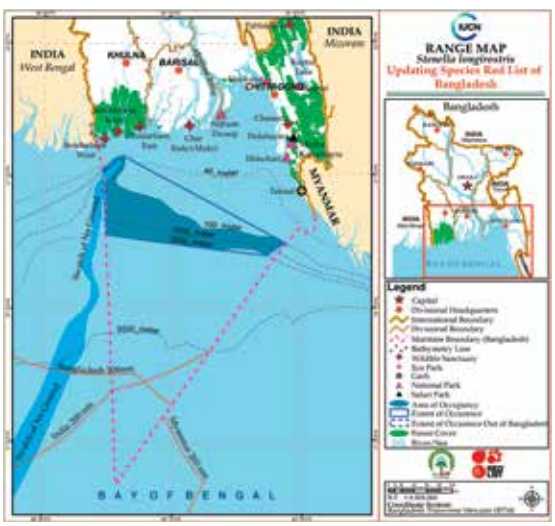
Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Little is known about the distribution and population size of *Stenella longirostris* in Bangladesh. Fourteen sightings *Stenella longirostris* in the northern tip of Swatch of No-ground were reported by BCDP (2008) with mean group size 85. There was no more information available from other marine waters of the Bay of Bengal in Bangladesh territory. Thus it is categorized as Data Deficient.
Date Assessed: 29 June 2014

History

Regional Status: Data Deficient in Bangladesh (IUCN Bangladesh 2000).

Geographic Range

Global: Spinner Dolphins are pan tropical, occurring in all tropical and subtropical waters around the world between 40°N and 40°S (Jefferson *et al*. 2008).



Stenella longirostris © Md. Zahangir Alom

Bangladesh: It is mainly restricted to the Swatch of No-ground and pelazic, marine waters with high salinity in the Bay of Bengal.

EOO: 24,275.64 km^2
AOO: 15,420.40 km^2

Population

Generation Time (Length): About 13 years
Total Population: Not known
Trend: Not known

Habitat and Ecology

Spinner Dolphins spin high in the air and then land with a loud splash, so can be detected from a long distance. Mother-calf bonds are persistence like other dolphins. They are very social and lives in groups. Large school form, break down and reform with different permutations of subgroups in the course of diurnal inshore-offshore and long shore movement related to nocturnal feeding (Culik 2011). They are often found in close association with Pantropical Spotted Dolphins *Stenella attenuate*.

Assessor: Md. Zahangir Alom

Steno bredanensis

Species ID: MA0126

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Steno bredanensis* (Cuvier in Lesson, 1828)
English Name: Rough-toothed Dolphin
Local Name: Kharbadanti Dolphin

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: Only one sighting of two individuals of *Steno bredanesis* in the Swatch of No-ground (165 km offshore on the south from the Sundarbans) was observed by BCDP in 2012 (BCDP Unpubl.). No more information is available to assess this species. Thus, it is categorized as Data Deficient.
Date Assessed: 31 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

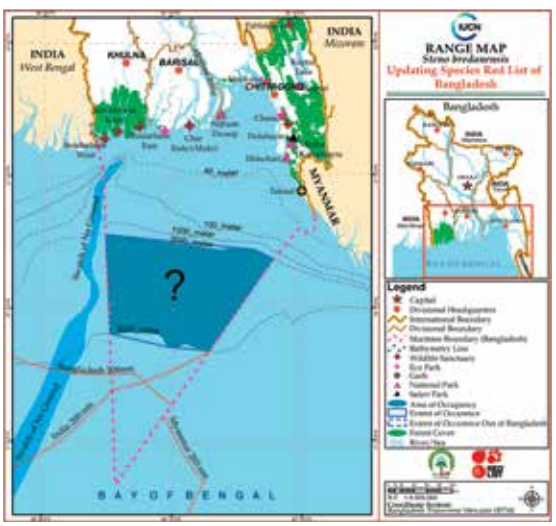
Global: It occurs in deep tropical, subtropical and warm temperate waters around the world (Culik 2011, Hammond *et al*. 2012).
Bangladesh: About 165 km far offshore deep marine waters from the coast of the Sundarbans.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 20 Years (http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=30)
Total Population: Not known
Trend: Not known

Steno bredanensis © www.adamlavertyphotography.com



Habitat and Ecology

It is social and occurs in groups fast swimmer and may swim rapidly just under the water surface showing dorsal fin with a small part of back tip.

Assessor: Md. Zahangir Alom

Pseudorca crassidens

Species ID: MA0127

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	DELPHINIDAE

Scientific Name: *Pseudorca crassidens* (Owen, 1846)
English Name: False Killer Whale
Local Name: Chhadmaghatok Timi

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1

Justification: There are only two sightings of *Pseudorca crassidens* have been reported: first one with about 30 individuals in the Swatch of No-ground in 2011, and second one with about 40 individuals in the offshore south of S. Martin's Island in 2012. One carcass was reported in the Daily Azadi newspaper of Chittagong on 28 December, 2010. There is no information available on its population size, threats or population trend. Thus, the species has been assessed as Data Deficient.

Date Assessed: 31 March 2015

History

Regional Status: Not assessed yet (IUCN Bangladesh 2000).

Geographic Range

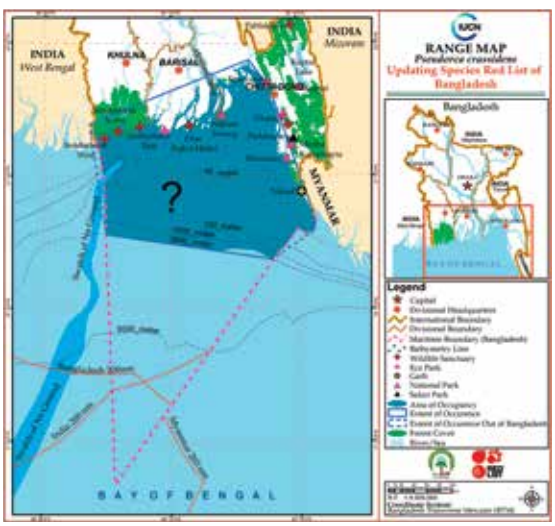
Global: In tropical, subtropical and warm temperate waters, mainly offshore (Taylor *et al.* 2008).

Bangladesh: Offshore waters and Swatch of No-ground.

EOO: Not known
AOO: Not known

Population

Generation Time (Length): 25 years (Oleson 2010)
Total Population: Not known
Trend: Not known



Pseudorca crassidens © Mushfiq Ahmed

Habitat and Ecology

It inhabits mainly offshore and deep marine waters. It is very social, rapidly approaches boats and very active and playful animal.

Assessor: Md. Zahangir Alom

Physeter macrocephalus

Species ID: MA0128

DATA DEFICIENT <DD>

Taxonomy

Kingdom	Phylum	Class	Order	Family
ANIMALIA	CHORDATA	MAMMALIA	CETARTIODACTYLA	PHYSETERIDAE

Scientific Name: *Physeter macrocephalus* Linnaeus, 1758
English Name: Sperm Whale, Spermacet Whale, Cachelot, Pot Whale
Local Name: Gandar Timi
Synonym/s: *Physeter catodon* Linnaeus, 1758
Taxonomic Notes: In the original description *Physeter macrocephalus* and *Physeter catodon,* both names are used by Linnaeus (1758) on the same page and no priority is given. However, *P. macrocephalus* is seen to use more frequently than *P. catodon*.

Assessment Information

Red List Category & Criteria: Data Deficient (DD) ver 3.1
Justification: There is no record of Sperm Whale occurrence in Bangladesh except one carcass that was found in 22 November, 2007 at the Selarchar of Sundarbans East Wildlife Sanctuary in the southern coast of Bangladesh (The Daily Purbanchal, 28 November 2007 and The Daily Star, 30 November 2007) that was brought ashore by the tidal surge Sidr that badly impacted Bangladesh western coast. No more information is available to assess this species. Thus it is categorized as Data Deficient.
Date Assessed: 31 March 2015

History

Regional Status: Not assessed (IUCN Bangladesh 2000).

Geographic Range

Global: It is generally found in continental slope or deeper water, but can be found in almost all marine waters from the equator to high latitudes (Taylor *et al*. 2008).
Bangladesh: Not known

Physeter macrocephalus © Md. Mizanur Rahman

EOO: Not Known
AOO: Not Known

Population

Generation Time (Length): About 26-32 years (Taylor *et al.* 2007)
Total Population: Not known
Trend: Not known

Habitat and Ecology

It inhabits in deep offshore waters. It prefers deep waters with high sea floor relief. Spends 72% time in foraging dive cycles. Dive duration is 45 minutes and forage up to 1km depth (Rice 1989).

Assessor: Md. Zahangir Alom

Pseudorca crassidens

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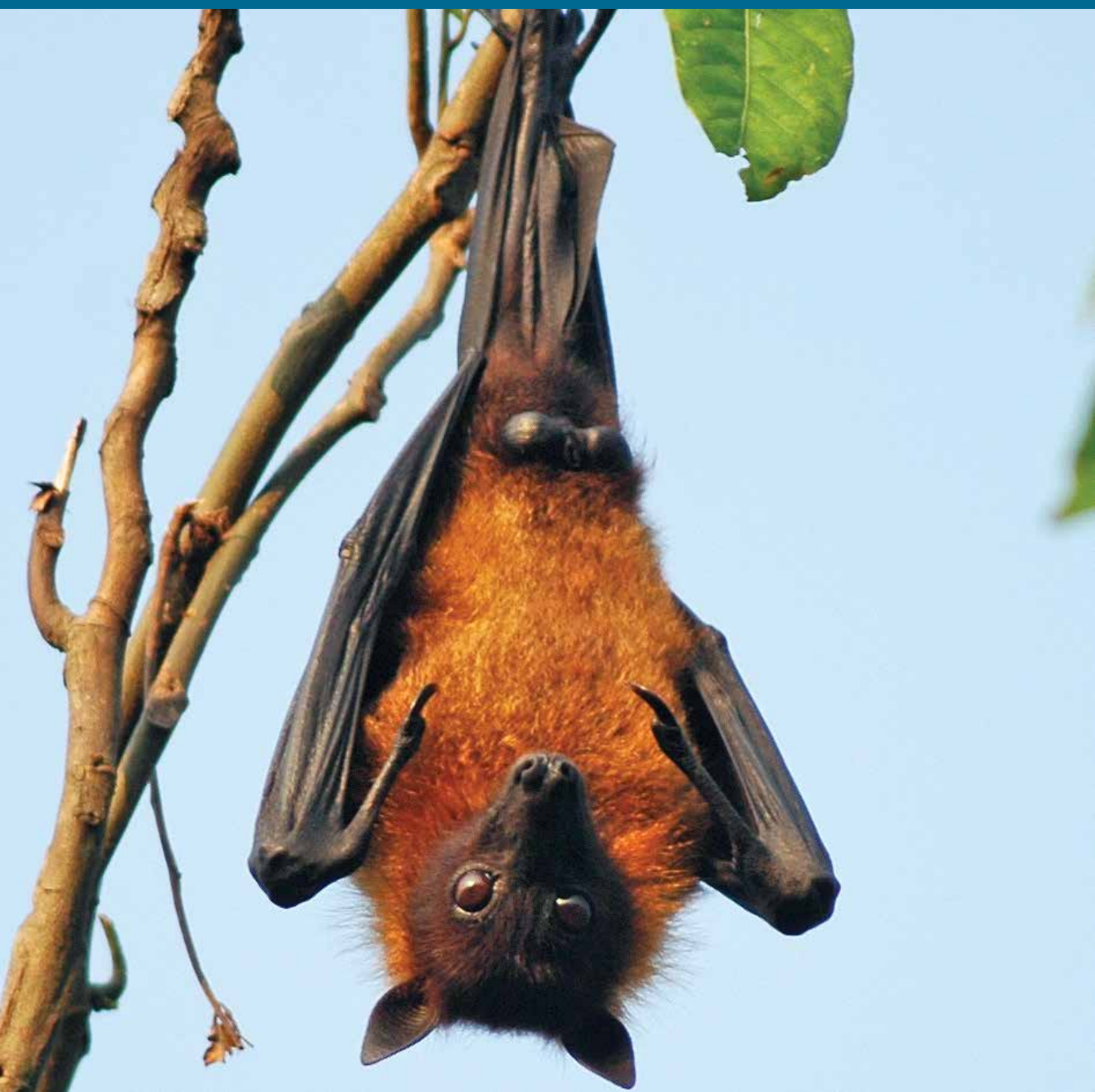

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Funambulus pennantii

APPENDICES

Appendix-i

Status of Mammals in Bangladesh (arranged in taxonomic order)

Status Code: RE-Regionally Extinct, CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient, NE-Not Evaluated

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
1	Proboscidea	Elephantidae	*Elephas maximus*	Asian Elephant	CR	EN	MA0003	39, 50, 65
2	Primates	Cercopithecidae	*Macaca assamensis*	Assamese Macaque, Assam Macaque	EN	NT	MA0001	40, 85
3	Primates	Cercopithecidae	*Macaca arctoides*	Stump-tailed Macaque, Stumptail Macaque, Bear Macaque	DD	VU	MA0051	169
4	Primates	Cercopithecidae	*Macaca fascicularis*	Long-tailed Macaque, Crab-eating Macaque, Cynomolgus Monkey	CR	LC	MA0052	39, 66
5	Primates	Cercopithecidae	*Macaca mulatta*	Rhesus Macaque	VU	LC	MA0053	41, 99, 107
6	Primates	Cercopithecidae	*Macaca leonina*	Pig-tailed Macaque	EN	VU	MA0054	34, 40, 86
7	Primates	Cercopithecidae	*Semnopithecus entellus*	Northern Plains Sacred Langur, Common langur	EN	LC	MA0055	34, 40, 87
8	Primates	Cercopithecidae	*Trachypithecus phayrei*	Phayre's langur, Phayrei's leaf monkey, Spectacle langur	CR	EN	MA0056	39, 67
9	Primates	Cercopithecidae	*Trachypithecus pileatus*	Capped Langur, Capped Leaf Monkey, Capped Monkey	EN	VU	MA0057	40, 88
10	Primates	Hylobatidae	*Hoolock hoolock*	Hoolock Gibbon, Western Hoolock Gibbon	CR	EN	MA0002	39, 68
11	Primates	Lorisidae	*Nycticebus bengalensis*	Slow Loris, Bengal Slow Loris, Bengal Loris, Northern Slow Loris	EN	VU	MA0050	40, 84, 89
12	Rodentia	Hystricidae	*Atherurus macrourus*	Asiatic Brush-tailed Porcupine, Brush-tailed Porcupine	DD	LC	MA0114	160
13	Rodentia	Hystricidae	*Hystrix indica*	Indian Crested Porcupine, Indian Porcupine	LC	LC	MA0115	123
14	Rodentia	Muridae	*Bandicota bengalensis*	Lesser Bandicoot Rat, Indian Molerat, Sind Rice Rat	LC	LC	MA0103	124
15	Rodentia	Muridae	*Bandicota indica*	Large Bandicoot Rat, Greater Bandicoot Rat, Bandicoot Rat.	LC	LC	MA0104	125
16	Rodentia	Muridae	*Millardia meltada*	Soft-furred Rat, Mated Field Rat, Soft-furred Field Rat	LC	LC	MA0105	126
17	Rodentia	Muridae	*Mus booduga*	Common Indian Field Mouse, Little Indian Field Mouse	LC	LC	MA0106	127
18	Rodentia	Muridae	*Mus musculus*	House Mouse	LC	LC	MA0107	128
19	Rodentia	Muridae	*Nesokia indica*	Short-tailed Bandicoot Rat	DD	LC	MA0108	161
20	Rodentia	Muridae	*Rattus norvegicus*	Brown Rat	LC	LC	MA0109	129
21	Rodentia	Muridae	*Rattus rattus*	Common House Rat, Ship Rat, Black Rat	LC	LC	MA0110	130
22	Rodentia	Muridae	*Tatera Indica*	Indian Gerbil, Antilope Rat	DD	LC	MA0111	162
23	Rodentia	Muridae	*Vandeleuria oleracea*	Asiatic long-tailed climbing mouse	LC	LC	MA0112	131
24	Rodentia	Muridae	*Mus cookii*	Cook's Mouse, Ryley's Spiny Mouse	DD	LC	MA0132	31, 163

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
25	Rodentia	Muridae	*Leopoldamys edwardsi*	Edward's Rat, Edwards's Long-tailed Giant Rat	DD	LC	MA0133	31, 164
26	Rodentia	Muridae	*Rattus nitidus*	Himalayan Field Rat	DD	LC	MA0134	31, 165
27	Rodentia	Muridae	*Berylmys bowersi*	Bower's white-toothed Rat	DD	LC	MA0135	166
28	Rodentia	Muridae	*Vernaya fulva*	Vernay's Climbing Mouse, Red Climbing Mouse.	DD	LC	MA0136	31, 167
29	Rodentia	Sciuridae	*Callosciurus erythraeus*	Pallas's Squirrel	LC	LC	MA0093	132
30	Rodentia	Sciuridae	*Callosciurus pygerythrus*	Hoary-bellied Squirrel, Irrawaddy Squirrel	LC	LC	MA0094	133
31	Rodentia	Sciuridae	*Dremomys lokriah*	Orange-bellied Himalayan Squirrel	LC	LC	MA0095	134
32	Rodentia	Sciuridae	*Funambulus pennantii*	Five-striped Palm Squirrel, Northern Palm Squirrel.	LC	LC	MA0097	49, 135
33	Rodentia	Sciuridae	*Petaurista magnificus*	Hodgson's Giant Flying Squirrel	NT	LC	MA0098	111
34	Rodentia	Sciuridae	*Petaurista petaurista*	Common Giant Flying Squirrel, Red Giant Flying Squirrel	DD	LC	MA0099	111, 168
35	Rodentia	Sciuridae	*Hylopetes alboniger*	Particolored Flying Squirrel	EN	LC	MA0100	31, 40, 90
36	Rodentia	Sciuridae	*Ratufa bicolor*	Black Giant Squirrel, Malayan Giant Squirrel	VU	NT	MA0101	33, 41, 100
37	Rodentia	Sciuridae	*Tamiops macclellandii*	Himalayan Striped Squirrel, Western Striped Squirrel	CR	LC	MA0102	31, 39, 69
38	Rodentia	Spalacidae	*Cannomys badius*	Bay Bamboo Rat, Lessser Bamboo Rat	DD	LC	MA0113	169
39	Lagomorpha	Leporidae	*Caprolagus hispidus*	Hispid Hare, Assam Rabbit	DD	EN	MA0116	170
40	Lagomorpha	Leporidae	*Lepus nigricollis*	Indian Hare, Rufous-tailed Hare, Black-naped Hare	EN	LC	MA0117	35, 40, 91
41	Eulipotyphla	Soricidae	*Suncus etruscus*	Savi's Pygmy Shrew, White-toothed Pigmy Shrew	NE	LC	MA0015	32
42	Eulipotyphla	Soricidae	*Suncus murinus*	House shrew, Asian house shrew.	LC	LC	MA0016	136
43	Eulipotyphla	Talpidae	*Euroscaptor micrura*	Himalayan Mole, Eastern Mole	DD	LC	MA0017	171
44	Eulipotyphla	Tupaiidae	*Tupaia glis*	Common Tree Shrew	NT	LC	MA0018	112
45	Chiroptera	Emballonuridae	*Taphozous longimanus*	Long-winged Tomb Bat	DD	LC	MA0024	172
46	Chiroptera	Emballonuridae	*Taphozous melanopogon*	Black-bearded Tomb Bat, Black-bearded Sheath-tailed Bat	DD	LC	MA0025	173
47	Chiroptera	Emballonuridae	*Saccolaimus saccolaimus*	Bare-rumped Sheathtail-bat, Pouch-bearing Bat, Pouched Bat	DD	LC	MA0026	174
48	Chiroptera	Hipposideridae	*Coelops frithii*	Tail-less Leaf-nosed Bat	DD	LC	MA0031	175
49	Chiroptera	Hipposideridae	*Hipposideros galeritus*	Cantor's Leaf-nosed Bat	DD	LC	MA0032	176
50	Chiroptera	Hipposideridae	*Hipposideros larvatus*	Horsfield's Leaf-nosed Bat, Intermediate roundleaf Bat	LC	LC	MA0033	137

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
51	Chiroptera	Hipposideridae	*Hipposideros cineraceus*	Least Leaf-nosed Bat, Ashy Roundleaf Bat	NE	LC	MA0048	31
52	Chiroptera	Hipposideridae	*Hipposideros lankadiva*	Indian Leaf-nosed Bat, Indian Roundleaf Bat	DD	LC	MA0122	31, 158, 177
53	Chiroptera	Megadermatidae	*Megaderma lyra*	Greater False Vampire, Greater False Vampire Bat, Indian False Vampire Bat	LC	LC	MA0027	138
54	Chiroptera	Megadermatidae	*Megaderma spasma*	Lesser False Vampire, Common Asian Ghost Bat	DD	LC	MA0121	31, 178
55	Chiroptera	Molossidae	*Tadarida aegyptiaca*	Egyptian Freetailed Bat, Egyptian Guano Bat, Egyptian Nyctinome	DD	LC	MA0047	179
56	Chiroptera	Molossidae	*Chaerephon plicatus*	Wrinkle-lipped Free-tailed Bat, Wrinkled-lipped Bat	DD	LC	MA0131	31, 180
57	Chiroptera	Pteropodidae	*Cynopterus sphinx*	Greater Short-nosed Fruit Bat	LC	LC	MA0019	139
58	Chiroptera	Pteropodidae	*Pteropus giganteus*	Indian Flying Fox, Indian Flying-fox	LC	LC	MA0020	140
59	Chiroptera	Pteropodidae	*Rousettus leschenaultii*	Fulvous Fruit Bat, Leschenault's Rousette, Shortridges Rousette	LC	LC	MA0021	141
60	Chiroptera	Pteropodidae	*Eonycteris spelaea*	Dawn Bat, Common Dawn Bat, Common Nectar Bat, Lesser Dawn Bat	DD	LC	MA0049	181
61	Chiroptera	Rhinolophidae	*Rhinolophus lepidus*	Blyth's Horseshoe Bat	LC	LC	MA0028	142
62	Chiroptera	Rhinolophidae	*Rhinolophus pearsonii*	Pearson's Horse-shoe Bat	NE	LC	MA0029	32
63	Chiroptera	Rhinolophidae	*Rhinolophus subbaidius*	Little Nepalese Horseshoe Bat	DD	LC	MA0030	182
64	Chiroptera	Rhinopomatidae	*Rhinopoma hardwickii*	Lesser Mouse-tailed Bat	DD	LC	MA0022	183
65	Chiroptera	Rhinopomatidae	*Rhinopoma microphyllum*	Greater Mouse-tailed Bat	DD	LC	MA0023	184
66	Chiroptera	Vespertilionidae	*Eptesicus pachyotis*	Thickeared Bat	NE	LC	MA0034	32
67	Chiroptera	Vespertilionidae	*Hesperoptenus tickelli*	Tickell's Bat	DD	LC	MA0035	185
68	Chiroptera	Vespertilionidae	*Kerivoula papillosa*	Papillose Woolly Bat	NE	LC	MA0036	32
69	Chiroptera	Vespertilionidae	*Kerivoula picta*	Painted Bat, Painted Woolly Bat	DD	LC	MA0037	186
70	Chiroptera	Vespertilionidae	*Myotis formosus*	Hodgson's Bat, Copper-winged Bat	DD	LC	MA0038	187
71	Chiroptera	Vespertilionidae	*Pipistrellus ceylonicus*	Kelaart's Pipistrelle	DD	LC	MA0039	188
72	Chiroptera	Vespertilionidae	*Pipistrellus coromandra*	Indian Pipistrelle, Little Indian Bat, Coromandel Pipistrelle.	LC	LC	MA0040	143
73	Chiroptera	Vespertilionidae	*Pipistrellus tenuis*	Least Pipistrelle, Indian Pygmy Bat	LC	LC	MA0041	144
74	Chiroptera	Vespertilionidae	*Pipistrellus savii*	Savi's Pipistrelle	NE	LC	MA0042	206
75	Chiroptera	Vespertilionidae	*Scotomanes ornatus*	Harlequin Bat	NE	LC	MA0043	32

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
76	Chiroptera	Vespertilionidae	*Scotophilus heathii*	Greater Asiatic Yellow House Bat, Greater Asiatic Yellow Bat, Common Yellow Bat	LC	LC	MA0044	32, 145, 146
77	Chiroptera	Vespertilionidae	*Scotophilus kuhlii*	Lesser Asiatic Yellow House Bat, Lesser Asiatic Yellow Bat, Lesser Asian House Bat	LC	LC	MA0045	146
78	Chiroptera	Vespertilionidae	*Scotozous dormeri*	Dormer's Bat, Dormer's Pipistrelle	LC	LC	MA0046	147
79	Chiroptera	Vespertilionidae	*Pipistrellus pipistrellus*	Common Pipistrelle	DD	LC	MA0130	31, 189
80	Pholidota	Manidae	*Manis crassicaudata*	Indian Pangolin, Scaly Anteater, Thick-tailed Pangolin	CR	EN	MA0090	39, 70
81	Pholidota	Manidae	*Manis javanica*	Sunda Pangolin, Malayan Pangolin	DD	CR	MA0091	190
82	Pholidota	Manidae	*Manis pentadactyla*	Chinese Pangolin	CR	CR	MA0092	35, 39, 65, 71
83	Carnivora	Canidae	*Canis aureus*	Golden Jackal	LC	LC	MA0058	148
84	Carnivora	Canidae	*Cuon alpinus*	Dhole, Red Dog, Indian Wild Dog, Asiatic Wild Dog	EN	EN	MA0059	40, 92
85	Carnivora	Canidae	*Vulpes bengalensis*	Bengal Fox	VU	LC	MA0060	41, 99, 101
86	Carnivora	Canidae	*Canis lupus*	Grey Wolf	RE	LC	MA0144	36, 37
87	Carnivora	Hyaenidae	*Hyaena hyaena*	Striped Hyena	RE	NT	MA0145	36, 37
88	Carnivora	Felidae	*Panthera pardus*	Leopard	CR	NT	MA0014	14, 39, 72
89	Carnivora	Felidae	*Felis chaus*	Jungle cat, Swamp cat, Reed cat	NT	LC	MA0061	113, 120
90	Carnivora	Felidae	*Catopuma temminckii*	Asian Golden Cat, Asiatic Golden Cat, Golden Cat, Temminck's Cat	VU	NT	MA0062	41, 102
91	Carnivora	Felidae	*Neofelis nebulosa*	Clouded Leopard	CR	VU	MA0063	39, 73
92	Carnivora	Felidae	*Panthera tigris*	Tiger	CR	EN	MA0064	39, 74
93	Carnivora	Felidae	*Pardofelis marmorata*	Marbled Cat	DD	VU	MA0065	122, 191
94	Carnivora	Felidae	*Prionailurus bengalensis*	Leopard cat	NT	LC	MA0066	32, 114
95	Carnivora	Felidae	*Prionailurus viverrinus*	Fishing Cat	EN	EN	MA0067	40, 93
96	Carnivora	Herpestidae	*Herpestes auropunctatus*	Small Indian Mongoose	LC	LC	MA0068	149
97	Carnivora	Herpestidae	*Herpestes edwardsii*	Indian Grey Mongoose, Common Mongoose	LC	LC	MA0069	150
98	Carnivora	Herpestidae	*Herpestes urva*	Crab-eating Mongoose	NT	LC	MA0070	115
99	Carnivora	Mustelidae	*Aonyx cinerea*	Oriental Small-clawed Otter, Asian Small-clawed Otter, Small-clawed Otter	EN	VU	MA0071	40, 94
100	Carnivora	Mustelidae	*Arctonyx collaris*	Hog Badger, Hog-nosed Badger	VU	NT	MA0072	41, 103
101	Carnivora	Mustelidae	*Lutra lutra*	Eurasian Otter, European Otter, European River Otter, Old World Otter, Common Otter	CR	NT	MA0073	39, 75

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
102	Carnivora	Mustelidae	*Lutrogale perspicillata*	Smooth-coated Otter, Indian Smooth-coated Otter.	CR	VU	MA0074	39, 76
103	Carnivora	Mustelidae	*Martes flavigula*	Yellow-throated Marten, Javan Yellow-throated Marten	VU	LC	MA0075	31, 41, 104
104	Carnivora	Ursidae	*Melursus ursinus*	Sloth Bear, Honey Bear	EX	VU	MA0004	32, 35, 36, 60, 61
105	Carnivora	Ursidae	*Helarctos malayanus*	Sun Bear, Malayan Sun Bear	CR	VU	MA0076	39, 77
106	Carnivora	Ursidae	*Ursus thibetanus*	Asiatic Black Bear, Himalayan Black Bear, Moon Bear, Tibetan Black Bear	CR	VU	MA0077	40, 78
107	Carnivora	Viverridae	*Viverra zibetha*	Large Indian Civet	NT	NT	MA0005	116
108	Carnivora	Viverridae	*Viverricula indica*	Small Indian Civet	NT	LC	MA0013	117
109	Carnivora	Viverridae	*Arctictis binturong*	Binturong, Bear cat, Palawan Binturong.	VU	VU	MA0078	41, 105
110	Carnivora	Viverridae	*Arctogalidia trivirgata*	Small-toothed Palm Civet, Javan Small-toothed Palm Civet, Three-striped Palm Civet	DD	LC	MA0079	192
111	Carnivora	Viverridae	*Paguma larvata*	Masked Palm Civet, Gem-faced Civet	VU	LC	MA0080	41, 106
112	Carnivora	Viverridae	*Paradoxurus hermaphroditus*	Common Palm Civet, Asian Palm Civet	LC	LC	MA0081	151
113	Cetartiodactyla	Balaenopteridae	*Balaenoptera edeni*	Bryde's Whale, Tropical Whale, Common Bryde's Whale, Eden's Whale, Pygmy Bryde's Whale, Bryde's Whale Complex	DD	DD	MA0129	31, 193
114	Cetartiodactyla	Bovidae	*Bos gaurus*	Gaur	CR	VU	MA0088	38, 40, 56, 79
115	Cetartiodactyla	Bovidae	*Capricornis rubidus*	Serow, Red Serow, Mainland Serow	EN	VU	MA0089	40, 95
116	Cetartiodactyla	Bovidae	*Boselaphus tragocamelus*	Nilgai	RE	LC	MA0142	36, 37
117	Cetartiodactyla	Bovidae	*Bos javanicus*	Banteng	RE	EN	MA0140	36, 37
118	Cetartiodactyla	Bovidae	*Bubalus arnee*	Wild Buffalo	RE	EN	MA0141	36, 37
119	Cetartiodactyla	Bovidae	*Antilope cervicapra*	Blackbuck	RE	NT	MA0146	36, 37
120	Cetartiodactyla	Cervidae	*Axis axis*	Chital, Spotted Deer, Axis Deer	LC	LC	MA0084	54, 152
121	Cetartiodactyla	Cervidae	*Rusa unicolor*	Sambar, Sambar Deer	CR	VU	MA0085	40, 80, 82
122	Cetartiodactyla	Cervidae	*Axis porcinus*	Hog Deer	CR	EN	MA0086	40, 81
123	Cetartiodactyla	Cervidae	*Muntiacus muntjak*	Barking Deer, Indian Muntjac	EN	LC	MA0087	40, 96
124	Cetartiodactyla	Cervidae	*Rucervus duvaucelii*	Swamp Deer	RE	VU	MA0143	36, 37
125	Cetartiodactyla	Suidae	*Sus scrofa*	Wild Boar, Eurasian Wild Boar	LC	LC	MA0083	55, 156
126	Cetartiodactyla	Delphinidae	*Orcaella brevirostris*	Irrawaddy Dolphin	NT	VU	MA0008	118, 119
127	Cetartiodactyla	Delphinidae	*Stenella longirostris*	Spinner Dolphin, Long-beaked Dolphin, Long-snouted Dolphin	DD	DD	MA0011	12, 41, 155, 194
128	Cetartiodactyla	Delphinidae	*Sousa chinensis*	Indo-pacific Humpback Dolphin, Chinese White Dolphin	LC	NT	MA0123	11, 12, 31, 153

Sl. No.	Order	Family	Scientific Name	English Name	Status in Bangladesh	Global Status	Species ID	Page No.
129	Cetartiodactyla	Delphinidae	*Tursiops aduncus*	Indo-pacific Bottlenose Dolphin, Indian Ocean Bottlenose Dolphin	LC	DD	MA0124	6, 11, 12, 31, 33, 154
130	Cetartiodactyla	Delphinidae	*Stenella attenuata*	Pantropical Spotted Dolphin, Bridled Dolphin, Narrow-snouted Dolphin	LC	LC	MA0125	7, 11, 12, 155
131	Cetartiodactyla	Delphinidae	*Steno bredanensis*	Rough-toothed Dolphin	DD	LC	MA0126	195
132	Cetartiodactyla	Delphinidae	*Pseudorca crassidens*	False Killer Whale	DD	DD	MA0127	31, 196
133	Cetartiodactyla	Phocoenidae	*Neophocaena phocaenoides*	Indo-Pacific Finless Porpoise, Finless Porpoise	NT	VU	MA0010	119
134	Cetartiodactyla	Physeteridae	*Physeter macrocephalus*	Sperm Whale, Spermacet Whale, Cachelot, Pot Whale	DD	VU	MA0128	31, 197
135	Cetartiodactyla	Platanistidae	*Platanista gangetica*	Ganges River Dolphin, Ganges Dolphin, Blind River Dolphin, South Asian River Dolphin	VU	EN	MA0012	6, 10, 41, 107
136	Perissodactyla	Rhinocerotidae	*Dicerorhinus sumatrensis*	Sumatran Rhinoceros	RE	CR	MA0139	36, 37
137	Perissodactyla	Rhinocerotidae	*Rhinoceros sondaicus*	Javan Rhinoceros	RE	CR	MA0138	36, 37
138	Perissodactyla	Rhinocerotidae	*Rhinoceros unicomis*	Indian Rhinoceros	RE	VU	MA0137	36, 37

Appendix-ii

Sample Assessment Sheet

Updating Species Red List of Bangladesh
Assessment Sheet

Name of Species:

Species ID:

Taxonomy

Kingdom	Phylum	Class	Order	Family
Scientific Name:				
Species Authority:				

English Name:	
Local Name:	
Synonym/s:	
Taxonomic Notes:	

Assessment Information	
Red List Category & Criteria (Status):	
Justification:	
Level of Assessment:	
Date Assessed:	
History:	

Geographic Range	
Global Range	
Global Status	
Global Population	
Local Range Description:	
Presence in Protected Areas:	
Extent of Occurrence	
Area of Occupancy	
Range Map:	

Population	
Generation Time (Length)	
Total Population	
No. of Sub-population	
Trend	

Habitat and Ecology	
Habit	
Habitat	
Niche	
Elevation	
Home Range	
Active Period	

Threats	
Habitat Destruction	
Trade	
Hunting/Poaching	
Other 1	
Other 2	

Conservation Actions	
Wildlife Legislation	
CITES	
Other 1	
Other 2	

Recommendations	
Research	
Management	
Captive stocks	
Other 1	
Other 2	

Sources/References

Citation (To be filled up by Lead Assessor)

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Assessor:	
Associate Assessor/s:	
Reviewer/s:	
Facilitator:	

Signature of the Assessor

Signature of the Lead Assessor

Technical Terms

Population and Population Size (Criteria A, C and D)
The term 'population' is used in a specific sense in the Red List Criteria that is different to its common biological usage. Population is here defined as the total number of individuals of the taxon. For functional reasons, primarily owing to differences between life forms, population size is measured as numbers of mature individuals only. In the case of taxa obligately dependent on other taxa for all or part of their life cycles, biologically appropriate values for the host taxon should be used.

Subpopulations (Criteria B and C)
Subpopulations are defined as geographically or otherwise distinct groups in the population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less).

Mature individuals (Criteria A, B, C and D)
The number of mature individuals is the number of individuals known, estimated or inferred to be capable of reproduction. When estimating this quantity, the following points should be borne in mind:

- Mature individuals that will never produce new recruits should not be counted (e.g. densities are too low for fertilization).
- In the case of populations with biased adult or breeding sex ratios, it is appropriate to use lower estimates for the number of mature individuals, which take this into account.
- Where the population size fluctuates, use a lower estimate. In most cases this will be much less than the mean.
- Reproducing units within a clone should be counted as individuals, except where such units are unable to survive alone (e.g. corals).
- In the case of taxa that naturally lose all or a subset of mature individuals at some point in their life cycle, the estimate should be made at the appropriate time, when mature individuals are available for breeding.
- Re-introduced individuals must have produced viable offspring before they are counted as mature individuals.

Generation (Criteria A, C and E)
Generation length is the average age of parents of the current cohort (i.e. newborn individuals in the population). Generation length therefore reflects the turnover rate of breeding individuals in a population. Generation length is greater than the age at first breeding and less than the age of the oldest breeding individual, except in taxa that breed only once. Where generation length varies under threat, the more natural, i.e. predisturbance, generation length should be used.

Reduction (Criterion A)
A reduction is a decline in the number of mature individuals of at least the amount (%) stated under the criterion over the time period (years) specified, although the decline need not be continuing. A reduction should not be interpreted as part of a fluctuation unless there is good evidence for this. The downward phase of a fluctuation will not normally count as a reduction.

Continuing decline (Criteria B and C)
A continuing decline is a recent, current or projected future decline (which may be smooth, irregular or sporadic) which is liable to continue unless remedial measures are taken. Fluctuations will not normally count as continuing declines, but an observed decline should not be considered as a fluctuation unless there is evidence for this.

Extreme fluctuations (Criteria B and C)
Extreme fluctuations can be said to occur in a number of taxa when population size or distribution area varies widely, rapidly and frequently, typically with a variation greater than one order of magnitude (i.e. a tenfold increase or decrease).

Severely fragmented (Criterion B)
The phrase 'severely fragmented' refers to the situation in which increased extinction risk to the taxon results from the fact that most of its individuals are found in small and relatively isolated subpopulations (in certain circumstances this may be inferred from habitat information). These small subpopulations may go extinct, with a reduced probability of recolonization.

Extent of occurrence (Criteria A and B)
Extent of occurrence is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of present occurrence of a taxon, excluding cases of vagrancy. This measure may exclude discontinuities or disjunctions within the overall distributions of taxa (e.g. large areas of obviously unsuitable habitat) (but see 'area of occupancy', below). Extent of occurrence can often be measured by a minimum convex polygon (the smallest polygon in which no internal angle exceeds 180 degrees and which contains all the sites of occurrence).

Area of occupancy (Criteria A, B and D)
Area of occupancy is defined as the area within its 'extent of occurrence' (see point 9 above) which is occupied by a taxon, excluding cases of vagrancy. The measure reflects the fact that a taxon will not usually occur throughout the area of its extent of occurrence, which may contain unsuitable or unoccupied habitats. In some cases (e.g. irreplaceable colonial nesting sites, crucial feeding sites for migratory taxa) the area of occupancy is the smallest area essential at any stage to the survival of existing populations of a taxon. The size of the area of occupancy will be a function of the scale at which it is measured, and should be at a scale appropriate to relevant biological aspects of the taxon, the nature of threats and the available data. To avoid inconsistencies and bias in assessments caused by estimating area of occupancy at different scales, it may be necessary to standardize estimates by applying a scale-correction factor. It is difficult to give strict guidance on how standardization should be done because different types of taxa have different scale-area relationships.

Location (Criteria B and D)
The term 'location' defines a geographically or ecologically distinct area in which a single threatening event can rapidly affect all individuals of the taxon present. The size of the location depends on the area covered by the threatening event and may include part of one or many subpopulations. Where a taxon is affected by more than one threatening event, location should be defined by considering the most serious plausible threat.

Quantitative analysis (Criterion E)
A quantitative analysis is defined here as any form of analysis which estimates the extinction probability of a taxon based on known life history, habitat requirements, threats and any specified management options. Population viability analysis (PVA) is one such technique. Quantitative analyses should make full use of all relevant available data. In a situation in which there is limited information, such data as are available can be used to provide an estimate of extinction risk (for instance, estimating the impact of stochastic events on habitat). In presenting the results of quantitative analyses, the assumptions (which must be appropriate and defensible), the data used and the uncertainty in the data or quantitative model must be documented.

Benign introduction
An attempt to establish a taxon, for the purpose of conservation, outside its recorded distribution but within an appropriate habitat and ecogeographical area; a feasible conservation tool only when there is no remaining area left within a taxon's historic range (IUCN 1998).

Breeding population
A (sub) population that reproduces within the region, whether this involves the entire reproductive cycle or any essential part of it.

Conspecific population
Populations of the same species; here applied to any taxonomic unit at or below the species level.

Downlisting and uplisting
The process for adjusting the Red List Category of a regional population according to a decreased or increased risk of extinction; downlisting refers to a reduced extinction risk and uplisting to an increased extinction risk.

Endemic taxon
A taxon naturally found in any specific area and nowhere else; this is a relative term in that a taxon can be endemic to a small island, to a country, or to a continent.

Global population
Total number of individuals of a taxon (see Population).

Metapopulation
A collection of subpopulations of a taxon, each occupying a suitable patch of habitat in a landscape of otherwise unsuitable habitat. The survival of the metapopulation is dependent on the rate of local extinctions of occupied patches and the rate of (re-) colonization of empty patches (Levins 1969, Hanski 1999).

Natural range
Range of a taxon, excluding any portion that is the result of an introduction to a region or neighbouring region. The delimitation between wild and introduced populations within a region may be based on a pre-set year or event, but this decision is left to the regional Red List authority.

Population
This term is used in a specific sense in the IUCN Red List Criteria (IUCN 2001, 2012), different from its common biological usage. Population is defined as the total number of individuals of the taxon. Within the context of a regional assessment, it may be advisable to use the term global population for this. In the Guidelines the term population is used for convenience, when reference is made to a group of individuals of a given taxon that may or may not interchange propagules with other such entities (see Regional population and Subpopulations).

Propagule
A living entity capable of dispersal and of producing a new mature individual (e.g. a spore, seed, fruit, egg, larva, or part of or an entire individual). Gametes and pollen are not considered propagules in this context.

Region
A subglobal geographical area, such as a continent, country, state, or province.

Regional assessment
Process for determining the relative extinction risk of a regional population according to the Guidelines.

Regional population
The portion of the global population within the area being studied, which may comprise one or more subpopulations.

Rescue effect
Process by which immigrating propagules result in a lower extinction risk for the target population.

Sink
An area where the local reproduction of a taxon is lower than local mortality. The term is normally used for a subpopulation experiencing immigration from a source where the local reproduction is higher than the local mortality

Subpopulations
Geographically or otherwise distinct groups in the (global) population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less; IUCN 2001, 2012); a subpopulation may or may not be restricted to a region.

Taxon
A species or infra specific entity whose extinction risk is being assessed.

Vagrant
A taxon that is currently found only occasionally within the boundaries of a region (see Visitor).
Visitor (also, visiting taxon)
A taxon that does not reproduce within a region but regularly occurs within its boundaries either now or during some period of the last century. Regions have several options on how to decide the boundaries between visitors and vagrants, e.g. using a preset percentage of the global population found in the region or predictability of occurrence.

Wild population
A population within its natural range in which the individuals are the result of natural reproduction (i.e. not the result of human-mediated release or translocation); if a population is the result of a benign introduction that is now or has previously been successful (i.e. self-sustaining), the population is considered wild.

Source: IUCN Red List Categories and Criteria version 3.1 (IUCN 2012).

Appendix-iv

SUMMARY OF THE FIVE CRITERIA (A-E) USED TO EVALUATE IF A TAXON BELONGS IN AN IUCN RED LIST THREATENED CATEGORY (CRITICALLY ENDANGERED, ENDANGERED OR VULNERABLE)[1].

A. Population sizereduction. Population reduction (measured over the longer of 10 years or 3 generations) based on any of A1 to A4

	Critically Endangered	Endangered	Vulnerable
A1	≥ 90%	≥ 70%	≥ 50%
A2, A3 & A4	≥ 90%	≥ 50%	≥ 30%

A1 Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible AND understood AND have ceased.

A2 Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may notbe reversible.

A3 Population reduction projected, inferred or suspected to be met in the future (up to a maximum of 100 years) *[(a) cannot be used for A3].*

A4 An observed, estimated, inferred, projected or suspected population reduction he time period must indude both the past and the future (up to a max. of 100 years in future), and where the causes of reduction may not have ceased OR may not be undeerstood OR may not be reversible.

based on any of the following:

(a) direct observation [except A3]

(b) an index of abundance appropriate to the taxon

(c) a dedine in area of occupancy (A00), extent of occurrence (E00) and/or habitat quality

(d) actual or potential levels of exploitation

(e) effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)

	Critically Endangered	Endangered	Vulnerable
B1. Extent of occurrence (EOO)	< 100 km²	< 5,000 km²	< 20,000 km²
B2. Area of occupancy (AOO)	< 10 km2	< 500 km²	< 2,000 km²
AND at least 2 of the following 3 conditions:			
(a) Severely fragmented OR Number of locations	= 1	≤ 5	≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals			
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulation; (iv) number of mature individuals			

C. Small population size and dedine

	Critically Endangered	Endangered	Vulnerable
Number of mature individuals	< 250	< 2,500	< 10,000
AND at least one of C1 or C2			
C1. An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future):	25% in 3 years or 1 generation (whichever is longer)	20% in 5 years or 2 generation (whichever is longer)	10% in 10 years or 3 generation (whichever is longer)
C2. An observed, estimated, projected or inferred continuing decline AND at least 1 of the following 3 conditions:			
(a) (i) Number of mature individuals in each subpopulation	≤ 50	≤ 250	≤ 1,000
(ii) % of mature individuals in one subpopulation =	90-100%	95-100%	100%
(b) Extreme fluctuations in the number of mature individuals			

D. Very small or restricted population

	Critically Endangered	Endangered	Vulnerable
D. Number of mature individuals	< 50	< 250	D1. < 1,000
D2. *Only applies to the VU category* Restricted area of occupancy or number of locations with a plausible future threat that could drive the taxon to CR or EX in a very short time.			D2. typically: A00 < 20km² or number of locations ≤ 5

E. Quantitative Analysis

	Critically Endangered	Endangered	Vulnerable
Indicating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generation, whichever is longer (100 years max.)	≥ 20% in 20 years or 5 generation, whichever is longer (100 years max.)	≥ 0% in 100 years

1 Use of this summary sheet requires full under standing of the IUCN Red List Categories and Criteria and Guidelines for Using the IUCN Red List Categories and Criteria. Please refer to both documents for explanations of terms and concepts used here.

Source: IUCN Red List Categories and Criteria version 3.1 (IUCN 2012).

Appendix-v

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18	Mr. Md. Sultan Ahmed	Assistant Wildlife Biologist, IUCN Bangladesh	113, 114
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15	Mr. Mushfiq Ahmad	Director (Programme), Bangladesh Environment and Development Society	196
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17	Dr. Nikhil Chakma	Research and Advocacy Officer, Green Hill, Rangamati	163, 164, 166, 167
18	Mr. Rajesh Puttaswamaiah	Trustee at Bat Conservation, India	176

Sl. No.	Name	Affiliation	Page No.
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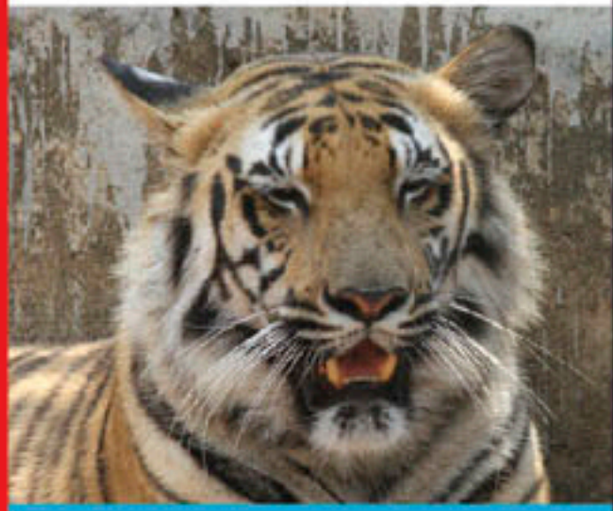
26	Mr. Tawfiqur Rahman	Student, Department of Zoology, Jahangirnagar University	165
27	Md. Zahangir Alom	Project Manager and Senior Researcher, Wildlife Conservation Society (WCS), Khulna, Bangladesh	33, 41, 107, 118, 153-155, 193, 194
28	www.arkive.org		37
29	www.iucnredlist.org		37
31	www.pinterest.com		37
31	www.nickgarbutt.photoshelter.com		37
32	www.indianbiodiversity.org		92
33	www.marinebio.org		119
34	www.planet-mammiferes.org		126
35	www.planet-mammiferes.org		147
36	www.gbif.org		161
37	www.biolib.cz		162
38	www.safeproject.net		168
39	www.globalspecies.org		170
40	www.planet-mammifers.org		175
41	www.boldsystems.org		182
42	www.uniprot.org		183
43	www.biolib.cz		184
44	www.bio.bris.ac.uk		187
45	www.zooborns.com		190
46	www.ecologyasia.com		192
47	www.adamlavertyphotography.com		195

Strengthening Regional Co-operation for Wildlife Protection (SRCWP) Project

The Strengthening Regional Co-operation for Wildlife Protection (SRCWP) project, the first World Bank supported regional project in South Asia, aims to build country capacity and incentives for tackling the illegal wildlife trade and other selected regional conservation threats to habitats in border areas. The project was launched in 2011in Bangladesh and Nepal in the first phase and Bhutan joined in the second phase to bring regional collaboration in combating wildlife crime through strengthened legislative and regulatory frameworks and well-equipped specialized agencies and systems, as well as relevant training and awareness programmes for staff responsible for enforcementof wildlife law and regulations. The project is also supporting the strengthening of the South Asia Wildlife Enforcement Network (SAWEN) which was established by SAARC countries in 2011 to combat wildlife crime in South Asia region.

The Bangladesh Forest Department (BFD) is implementing the project through a partnership with research institutes, universities and environmental NGOs. A total of 36 sub-projects have been supported to improve the management of protected areas and conservation of flagship species through a landscape approach. Some of the sub-projects are addressing human-wildlife conflict through engagement with the local communities and civil society to foster an enduring culture of wildlife stewardship and protection. The regional wildlife project has supported the establishment of a Wildlife Crime Control Unit (WCCU) within the Wildlife Circle, three Wildlife divisions in the Forest Department, and a Wildlife Center to undertake training, research, education and awareness on the issues of wildlife conservation and protection.



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