



Status, distribution and conservation of otters (*Lutra* spp.) of Bangladesh



Mohammed Mostafa Feeroz, Ph.D

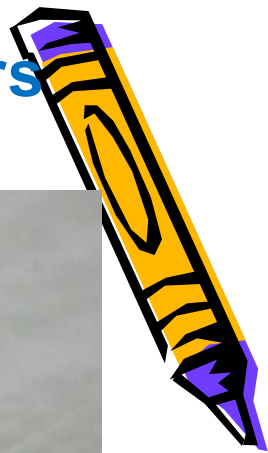
Professor

Department of Zoology, Jahangirnagar University

And

Founder

Wildlife Rescue Centre, Savar-1342, Dhaka, Bangladesh





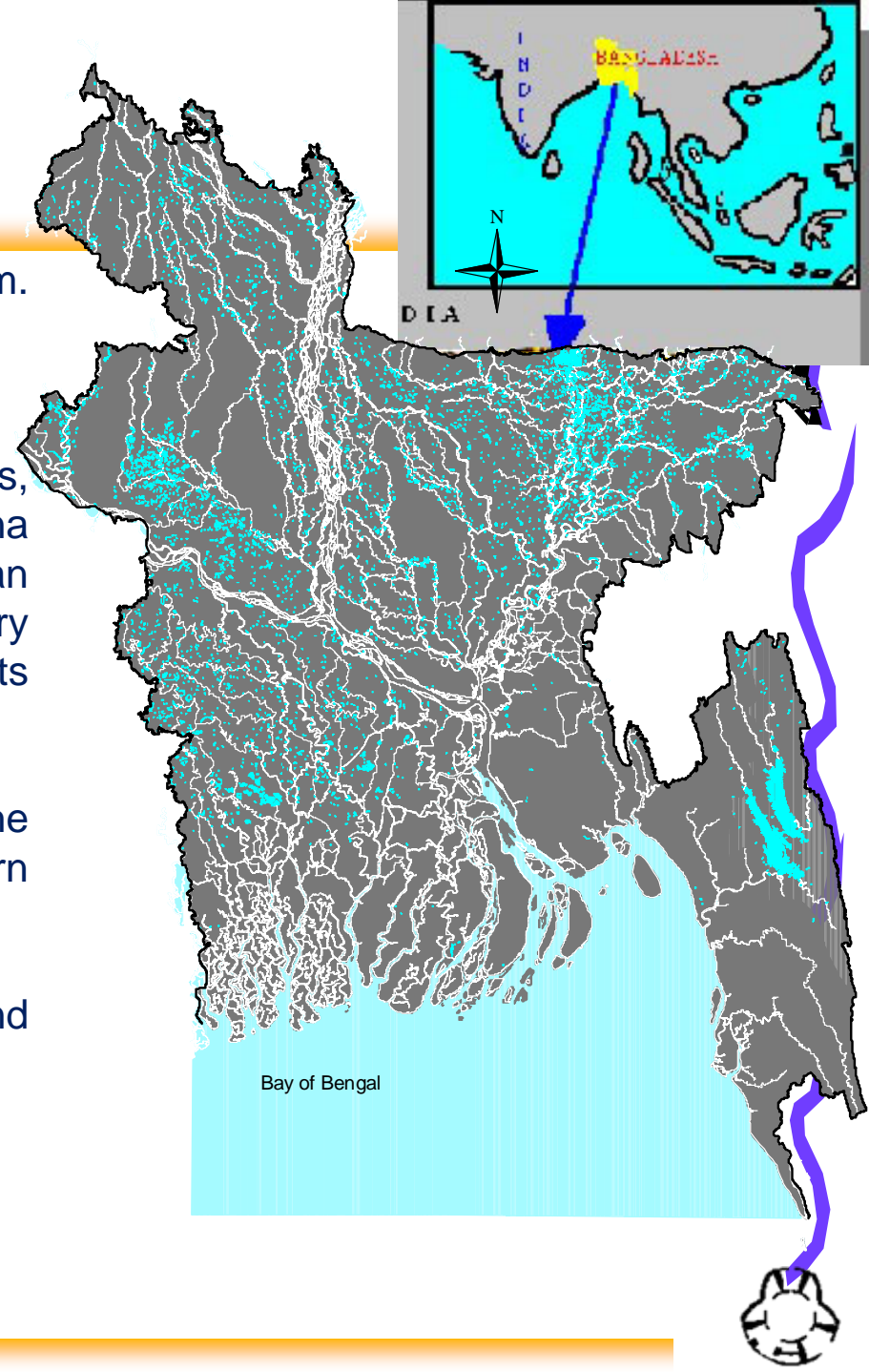
Bangladesh, an area of 144054 sq. km.

Human population: about 150 million.

The country is created by the Ganges, the Brahmaputra and the Meghna and their tributaries. More than 90% of the total area of the country is the flat lowland alluvial deposits of these rivers.

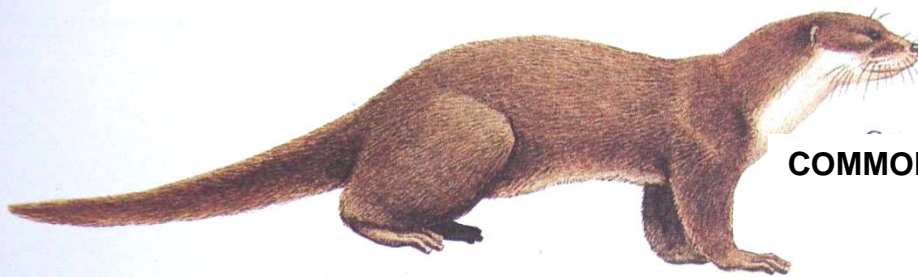
Some hilly ranges are found in the south eastern and north eastern part of the country.

Monsoonal floods are frequent and occasionally severe.





Otters of Bangladesh



COMMON OTTER/ EURASIAN OTTER *Lutra lutra*



SMOOTH-COATED OTTER *Lutra perspicillata*

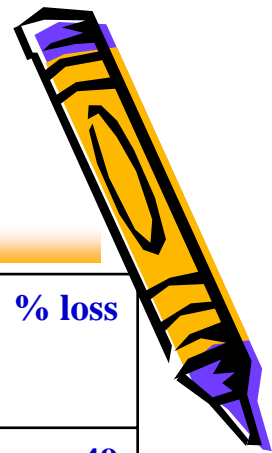


ORIENTAL SMALL-CLAWED OTTER *Aonyx cinereas*

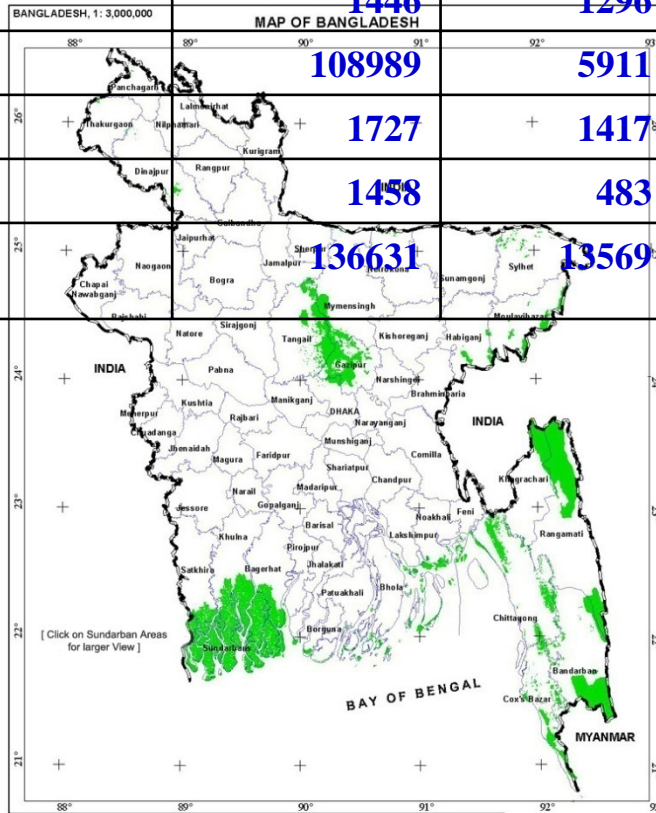




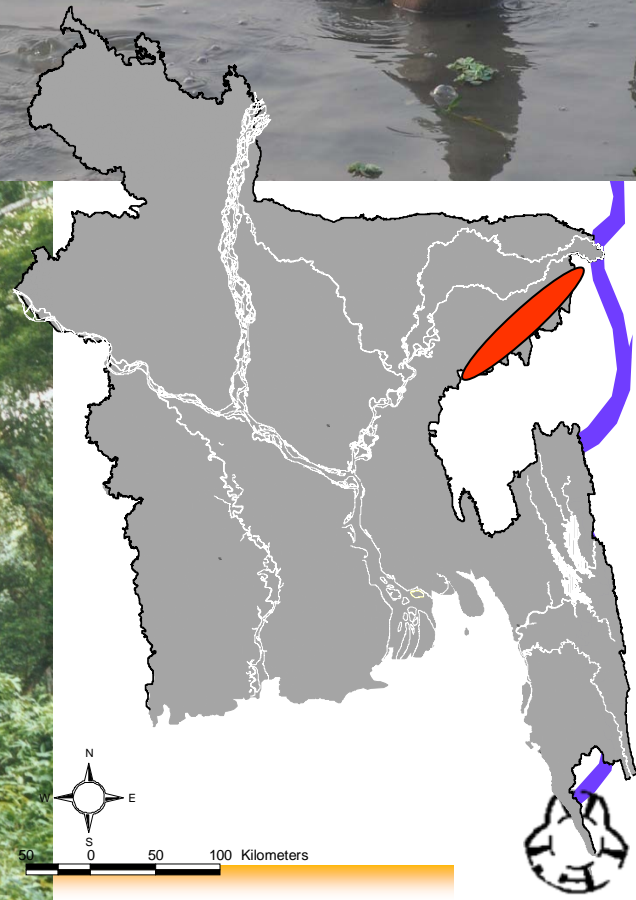
Otter habitats at a glance



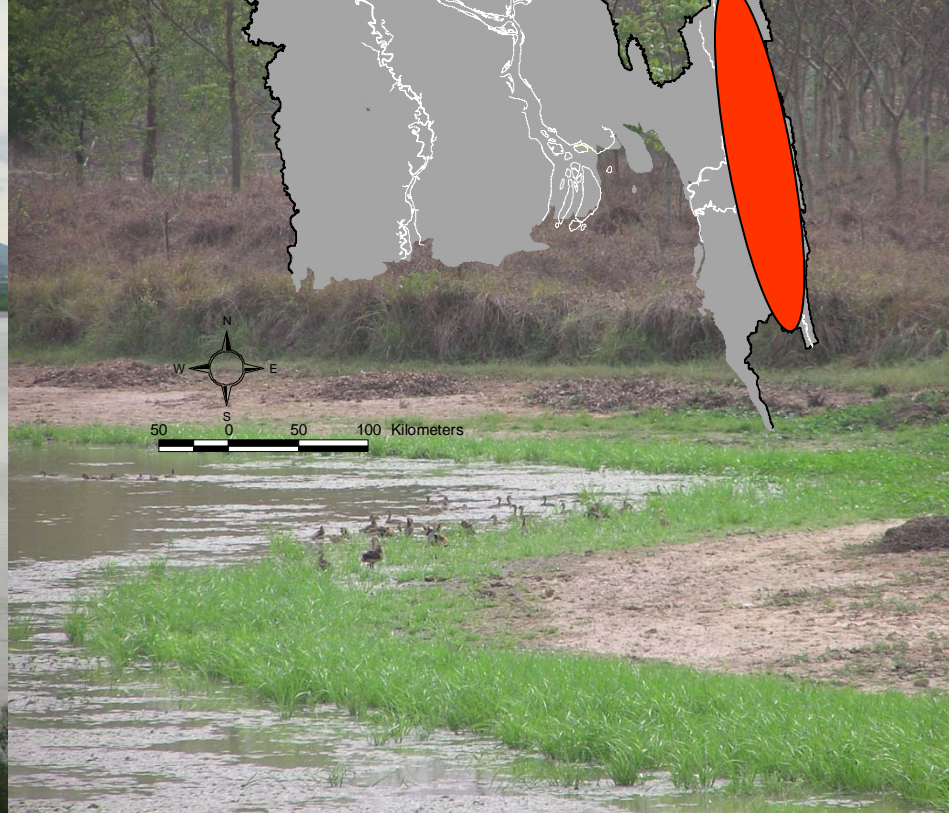
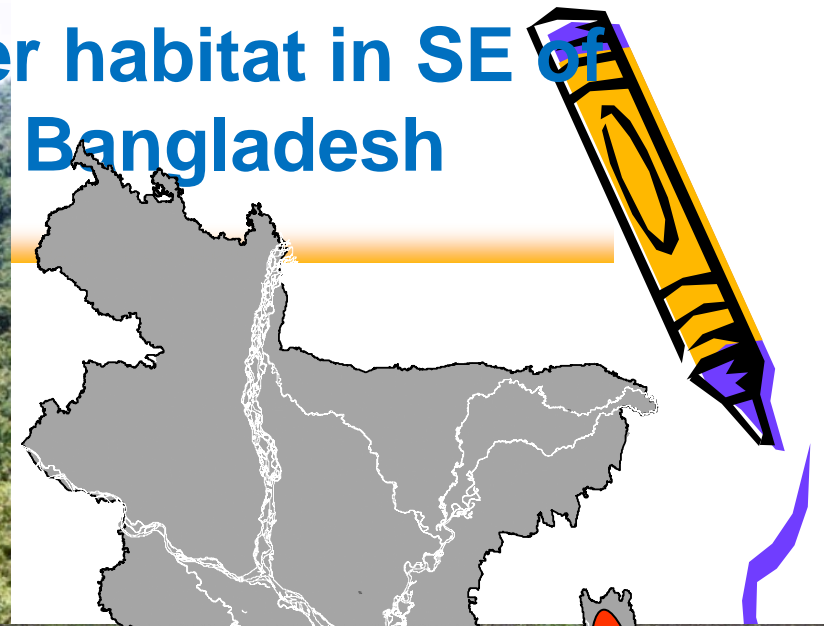
Habitat	Original (km ²)	Current (km ²)	Protected area (km ²)	% loss
Mangroves	8751	4403	364	49
Semi-evergreen	1446	1296	0	10
Tropical Moist Deciduous	108989	5911	265	95
Tropical Semi-evergreen	1727	1417	14	82
Tropical Wet Evergreen	1458	483	0	67
Total	136631	13569	643	90



Otter habitat in NE of Bangladesh

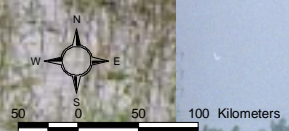
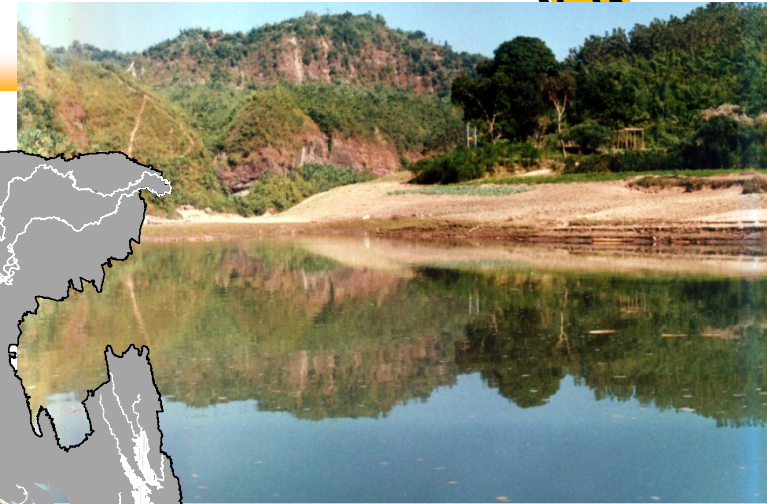
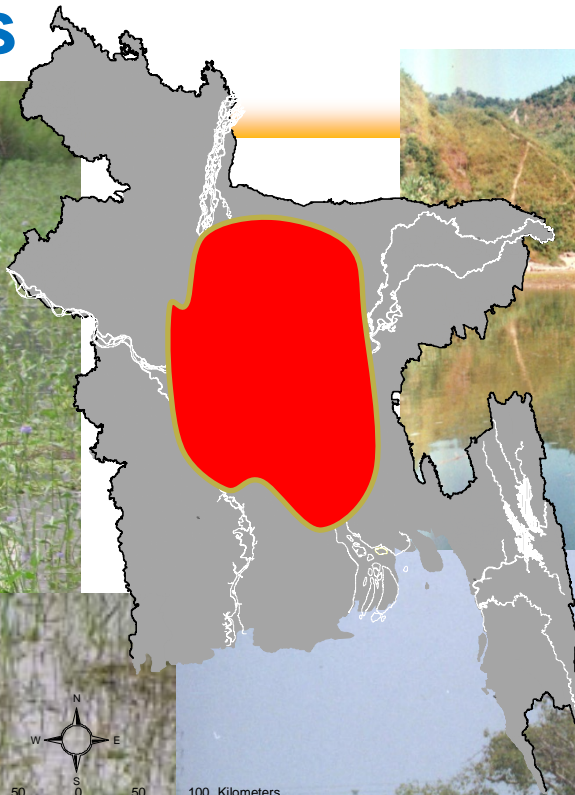


Otter habitat in SE of Bangladesh



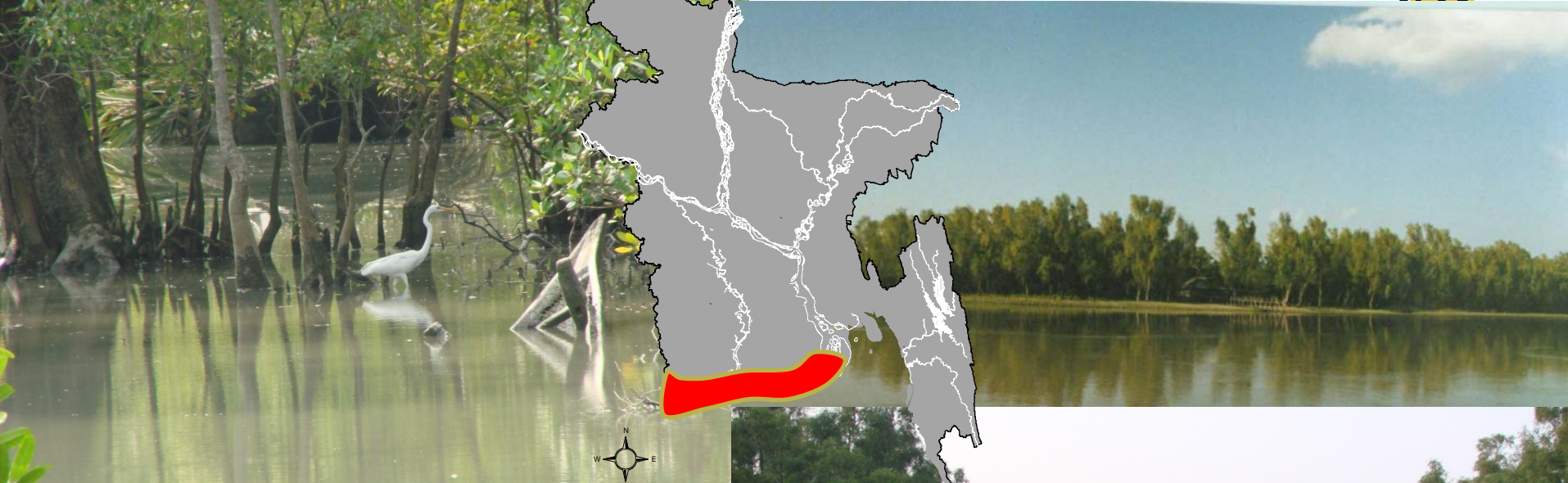
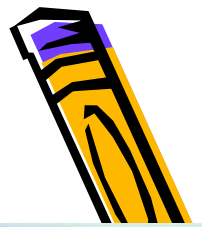


Otter habitats in central permanent water bodies

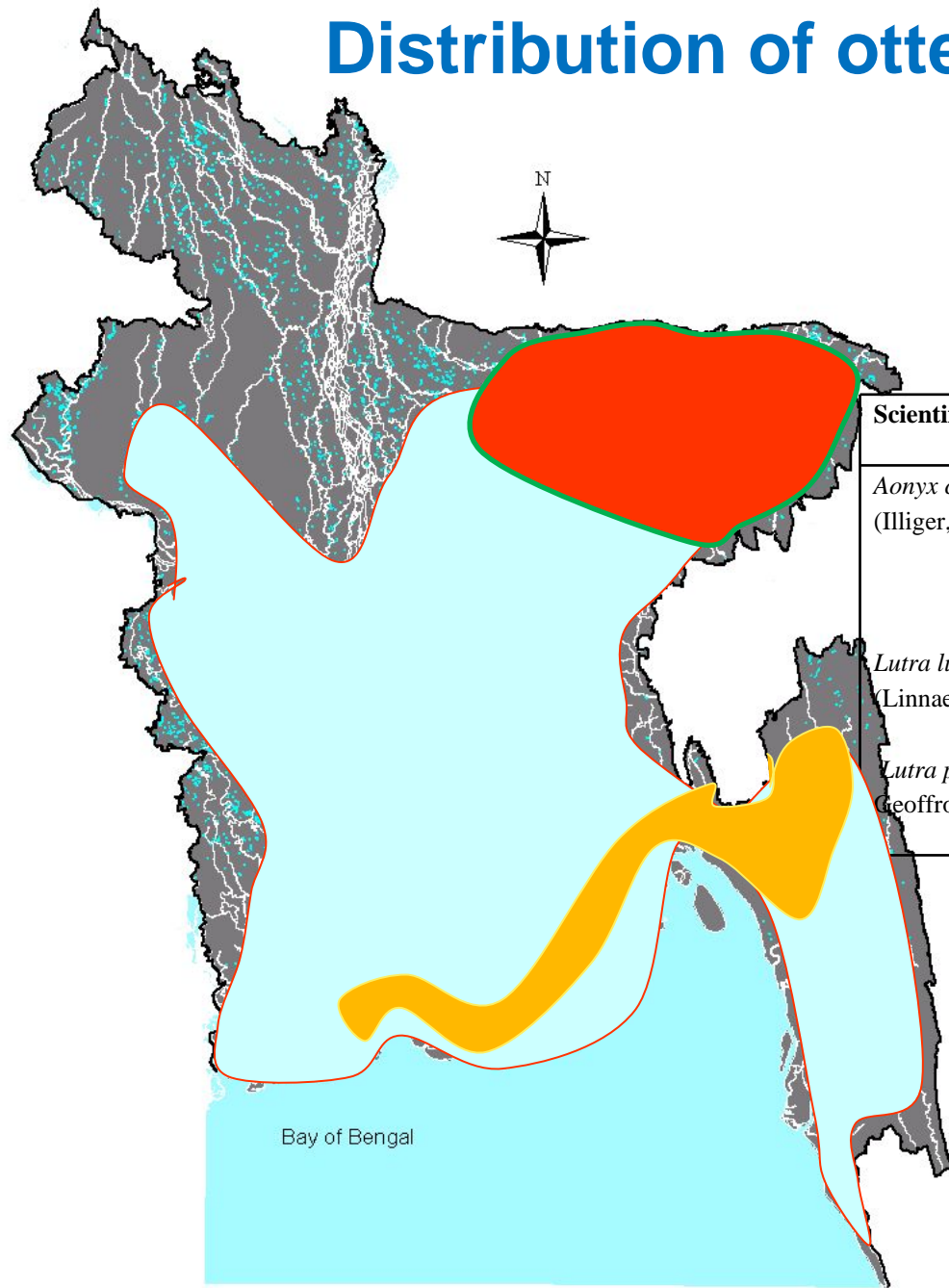




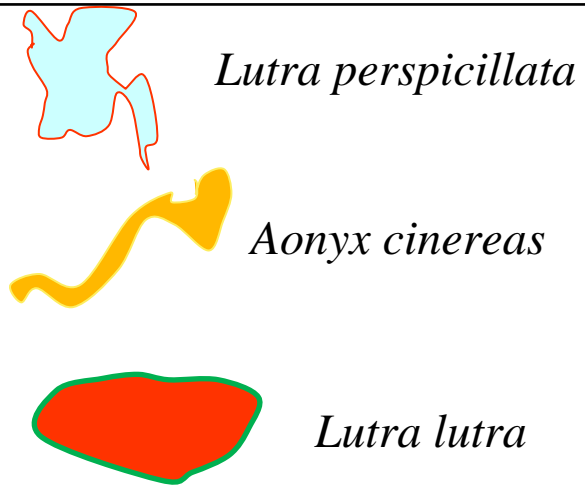
Otter Habitat in coastal areas



Distribution of otters in Bangladesh



Scientific Name	English Name	Local Name	Local Status	Distribution
<i>Aonyx cinereas</i> (Illiger, 1815)	Oriental Small-clawed Otter/Short-clawed Otter/Clawless Otter	Ud/Ud Biral/Bhodar	EN	Coasts, Khagrachari
<i>Lutra lutra</i> (Linnaeus, 1758)	Common Otter/ Eurasian Otter	Ud/Ud Biral/Bhodar	CR	Greater Sylhet & Mymensingh
<i>Lutra perspicillata</i> Geoffroy, 1826	Smooth-coated Otter/ Smooth Indian Otter	Ud/Ud Biral/Bhodar	EN	Widely





Population status

Wild otter population

Very few information is available except *Lutra perspicillata*
 Largest population of this species is found in the Sundarbans
 Estimated density of this species: 0.12/km²



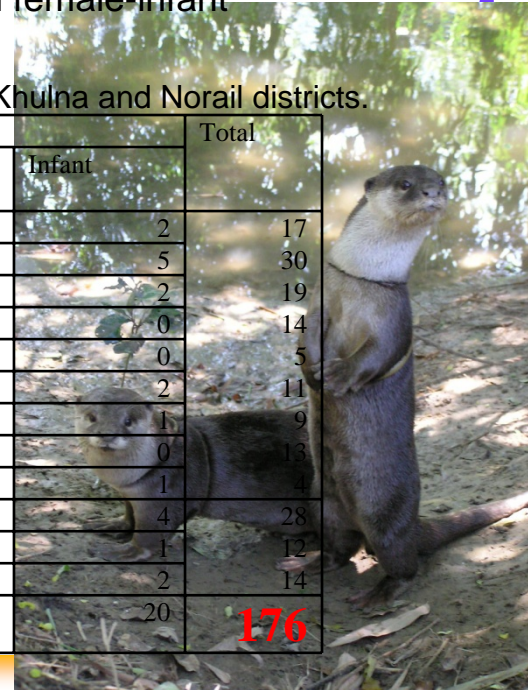
Captive otter population

A total of 176 otters of different age-sex classes were recorded in captivity from 46 fishing groups in 12 villages of two districts.

Male - female ratio was 1:1.54, adult-juvenile ratio was 1:0.33 and female-infant ratio was 1:0.28.

Group size and composition of otters found in different villages of Khulna and Norail districts.

District	Village	Age-sex classes					Total
		Adult male	Adult female	Juvenile male	Juvenile female	Infant	
Norail	Pankabila	3	6	2	4	2	17
	Gobra	8	12	2	3	5	30
	Charbila	5	8	1	3	2	19
	Chandirampur	4	7	1	2	0	14
	Panighata	1	2	1	1	0	5
	Vimvainagar	3	5	0	1	2	11
	Batuda	3	4	0	1	1	9
	Jaypur	4	5	1	3	0	13
	Dhighali	1	2	0	0	1	4
	Hariarkop	7	11	1	5	4	28
Khulna	Gajirhat	3	5	1	2	1	12
	Matiarkhul	4	4	1	3	2	14
		46	71	11	28	20	176





COMMON OTTER/ EURASIAN OTTER *Lutra lutra*
Local names **UD, UD BIRAL, BHODAR**

Status **CRITICALLY ENDANGERED**

Habitat: Streams, lakes, rivers, ditches, ponds and vegetation on the edges of these waterbodies.

Distribution: Water-bodies in the forests and in the coastal districts.

Conservation status: Included in CITES Appendix I; 3rd Schedule of BW(P)(A)A 1974.

Conservation need: Habitat protection and restoration.





SMOOTH-COATED OTTER *Lutra perspicillata*

Local names **UD, UD BIRAL, BHODAR**

Status **ENDANGERED**

Habitat: Margins of lakes and streams, large tanks, canals, flooded fields, creeks and estuaries.

Distribution: Eastern hill forests and coastal districts.

Threats: Habitat loss and change.

Conservation status: Included in CITES Appendix I; 3rd Schedule BW(P)(A)A 1974.

Conservation need: Habitat protection and restoration.





ORIENTAL SMALL-CLAWED OTTER *Aonyx cinereas*

Local names **UD, UD BIRAL, BHODAR**

Status **ENDANGERED**

Habitat: Edges of streams, canals, swamps, ponds, lakes, creeks and flooded fields.

Distribution: Eastern hill forests and coastal districts.

Threats: Habitat loss and change.

Conservation status: Included in CITES Appendix II; 3rd Schedule BW(P)(A) 1974.

Conservation need: Habitat protection and restoration.





Major threats

Habitat changes and loss

Encroachment

Poaching/hunting

Natural calamities

Pollution

Unintentional disturbance by people

Diseases

Improper implementation of Wildlife Act

Use for traditional medicine





Major threats

- Systematic logging
- Firewood collection by Individuals



Causes of habitat destruction

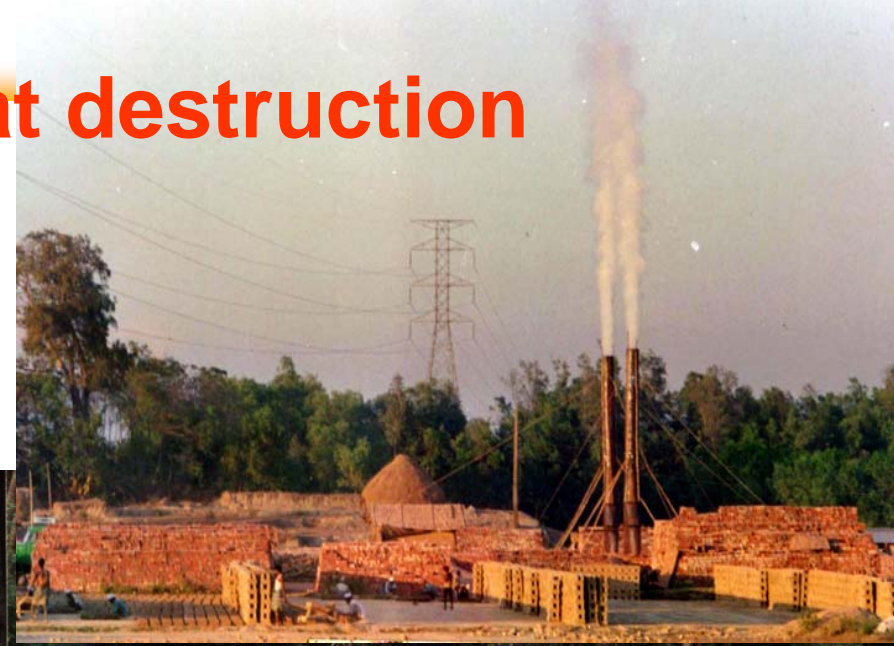
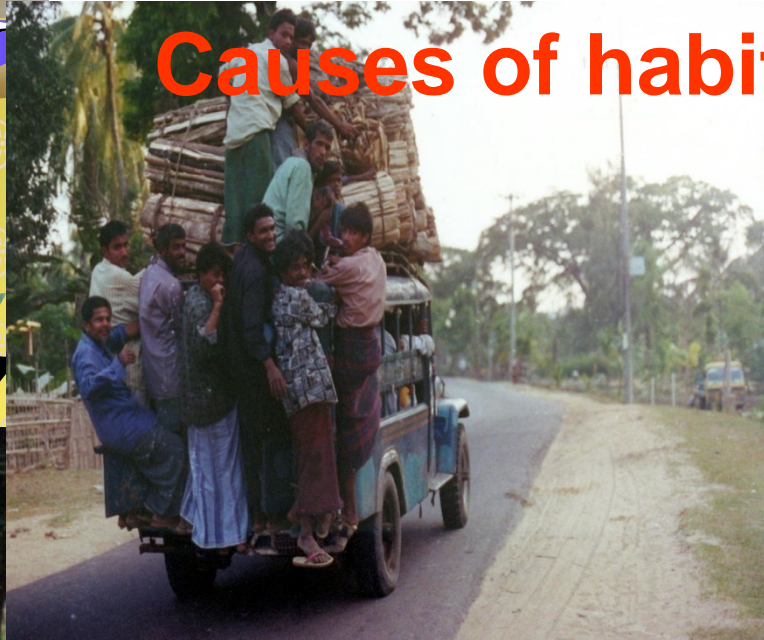




Major threats



Causes of habitat destruction



• Large scale illegal commercial logging

• Wood used in brickfield/plywood factory

Major threats



Causes of habitat destruction



• Tribal settlement inside forest

• Man made landslide because of mud removal for urban development



Major threats



Causes of habitat destruction



Slash and burn

Gas field explosion



Conversion of wetlands





Legal protection

The existing laws in Bangladesh related to otters are as follows.

Bangladesh Wildlife (Preservation) (Amendment) Act 1974. It prohibits hunting, killing, or capturing of animals designated as protected also prohibits hunting, killing, or capturing without a permit of animals designated as game animals. It provides for declaring and area as wildlife sanctuary or national park where hunting, shooting, or killing of wildlife together with other activities affecting the wildlife population are prohibited.

The Forest Act (amended in 1989). The Act prohibits hunting, shooting and fishing in the reserved forests.

East Bengal Protection and conservation of fish Act, 1950 (amended in 1982). It provides the protection and conservation of fish in the inland waters of Bangladesh.

The Haor Development Board Ordinance, 1977.





Role of Government in otter Conservation

❖ Declared Wildlife Sanctuary, National Park and Game Reserve

❖ The main wildlife management planning efforts by the Government so far are:

1978. The Sundarbans Wildlife Management Plan.

1994. Wildlife Management Plan

1995. Forest Resource Management Plan.

1997. Conservation Management Plan of the Wildlife Sanctuaries

1998. Integrated Resource Management Plan (IRMP)

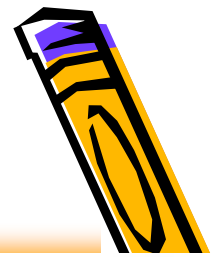
2000. Sundarban Biodiversity Conservation Project (SBCP).

2003. Coastal and Wetland Biodiversity Management at Cox's Bazar and Hakaluki Haor (CWBMP)





Our activities to conserve otters

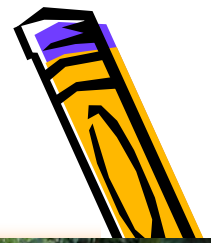


WRC and its protected habitat for otters



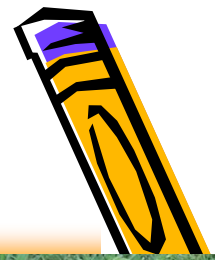


Our activities to conserve otters





Our activities to conserve otters

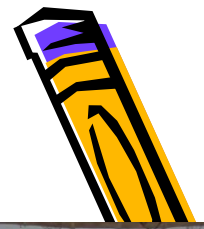


Successful captive breed in WRC





Our activities to conserve otters





RECOMMENDATIONS

Otter should be considered as flagship species of wetland and a local people participating conservation action plan should immediately be implemented to save this species

All factors accelerating habitat destruction should immediately be stopped.

People living around the Sundarbans should be encouraged for social forestry which will meet their fuel wood demand and reduce forest destruction.

Environmental education programme should be conducted among the people living in and around the Sundarbans.

The existing Bangladesh Wildlife Preservation (amendment) Act, 1974 should be updated and enforced.

Government and non-governmental organization should provide financial support to these fishermen to save this traditional conservation practice.

An *ex-situ* conservation programme should be conducted in collaboration with the fishermen using otter for fishing and Zoos.

All factors causing water pollution should be controlled.

Few wetlands should be declared as otter sanctuaries.





Involvement of national and international organizations for non-formal environmental education and awareness among the people living in and around otter habitat can potentially reduce the trend of population decline and eventually protect the otters of Bangladesh





Acknowledgements

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Thanks