

# CRITICALLY ENDANGERED SPECIES OF INDIA



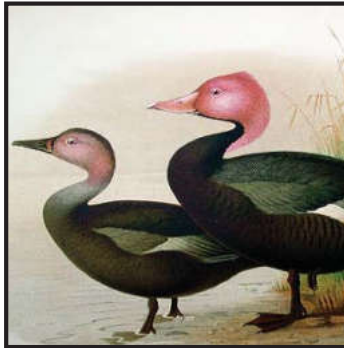
Ramki Srinivasan



**Ministry of Environment and Forests**  
GOVERNMENT OF INDIA



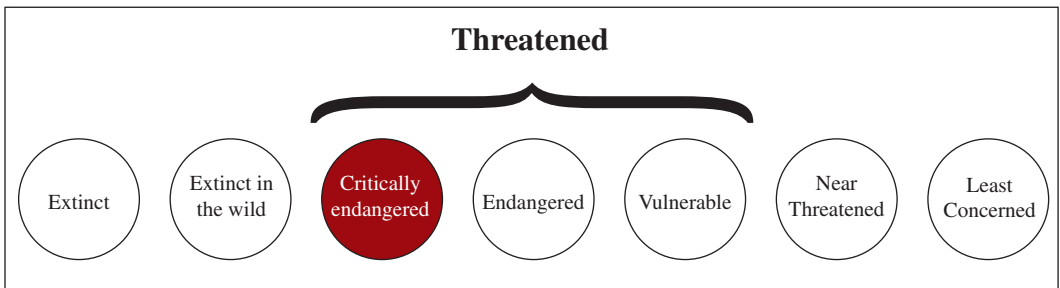
Jerdon's Courser



Pink-headed Duck



Himalayan Quail



CONSERVATION EFFORTS OFTEN FOCUS ON LARGE AND CHARISMATIC ANIMALS SUCH AS THE TIGER AND ELEPHANT THAT ARE UNDOUBTEDLY IN URGENT NEED OF PROTECTION. HOWEVER, THERE ARE A HOST OF SPECIES THAT DO NOT RANK VERY HIGH ON THE CONSERVATION TOTEM POLE, ALTHOUGH THEY ARE ALSO UNDER GREAT THREAT AND ARE CLASSIFIED AS **CRITICALLY ENDANGERED** BY THE IUCN (INTERNATIONAL UNION FOR CONSERVATION OF NATURE).

CRITICALLY ENDANGERED IS THE HIGHEST RISK CATEGORY ASSIGNED BY THE IUCN RED LIST TO WILD SPECIES. THERE ARE FIVE QUANTITATIVE CRITERIA TO DETERMINE WHETHER A TAXON IS THREATENED. CRITICALLY ENDANGERED MEANS THAT THE NATURAL POPULATION OF A SPECIES HAS DECREASED, OR WILL DECREASE, BY 80% WITHIN THREE GENERATIONS, AND ALL THE AVAILABLE EVIDENCE INDICATES AN EXTREMELY HIGH RISK OF ITS EXTINCTION IN THE WILD.

## (A) BIRDS

1. The **Jerdon's Courser** (*Rhinoptilus bitorquatus*) is a nocturnal bird found only in the northern part of the State of Andhra Pradesh in peninsular India. It is a flagship species for scrub jungle which is under extreme threat. The species was considered to be extinct until it was rediscovered in 1986 and the area of rediscovery was subsequently declared as the Sri Lankamaleswara Wildlife Sanctuary.

**Habitat:** Undisturbed scrub jungle with open areas.

**Distribution:** Jerdon's Courser is endemic to Andhra Pradesh. However, 19th century records do attribute its presence in the neighbouring areas of the State of Maharashtra.

**Threats:** Clearing of scrub jungle, creation of new pastures, growing of dryland crops, plantations of exotic trees, quarrying and the construction of the Telugu-Ganga Canal. Illegal trapping of birds is also a threat.



Simon Cook

2. The **Forest Owlet** (*Heteroglaux blewitti*) has been lost for more than a century. It has an interesting history. When not sighted for decades, posters were printed and Salim Ali, the premier ornithologist of India made a public appeal to look for the bird. After 113 long years, in 1997, the owlet was rediscovered and reappeared on the list of Indian birds.

**Habitat:** Dry deciduous forest.

**Distribution:** South Madhya Pradesh, in north-west Maharashtra and north-central Maharashtra.

**Threats:** Logging operations, burning and cutting of trees damage roosting and nesting trees of the Forest Owlet.



Ian Merrill

3. **White-bellied Heron** (*Ardea insignis*) is an extremely rare bird found in five or six sites in Assam and Arunachal Pradesh, one or two sites in Bhutan, and a few in Myanmar. It is inherently rare, and populations have never been known to be very high.

**Habitat:** Rivers with sand or gravel bars or inland lakes.

**Distribution:** Bhutan and north-east India to the hills of Bangladesh and north Myanmar.

**Threats:** Loss and degradation of lowland forest and wetlands through direct exploitation and disturbance.



Sujan Chatterjee

4. Out of nine species of vultures, population of three species (**White-backed Vulture** *Gyps bengalensis*, **Slender-billed Vulture** *Gyps tenuirostris* and **Long-billed Vulture** *Gyps indicus*) have declined by 99%. Vultures keep the environment clean, by scavenging on animal carcasses. The decline in vulture populations has associated disease risks including increased risk of spread of rabies and anthrax, besides adversely impacting the observance of last rites by the Parsis in the tower of silence.



Ramki Srinivasan

**Habitat:** Forests, habitation, villages etc.

**Distribution:** Across India.

**Threats:** A major threat to vultures is the use of the painkiller diclofenac for veterinary purposes. On consumption of carcasses, diclofenac gets into the system of vultures which they are unable to metabolize. Accumulation of diclofenac results in gout-like symptoms such as neck-drooping ultimately leading to death.



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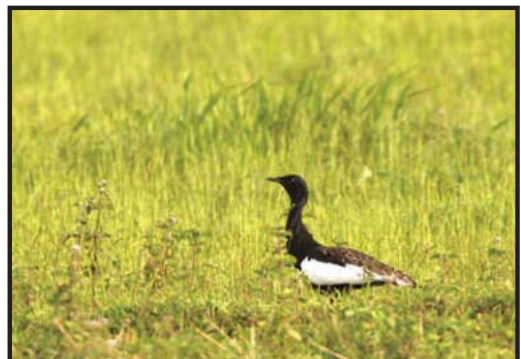
Kalyan Varma

5. **Bengal Florican** (*Houbaropsis bengalensis*) is a rare bustard species that is very well known for its mating dance. Among the tall grasslands, secretive males advertise their territories by springing from the ground and flitting in the air to and fro.

**Habitat:** Grasslands sometimes interspersed with scrublands.

**Distribution:** Native to only 3 countries in the world - Cambodia, India and Nepal. In India, it occurs in 3 States namely Uttar Pradesh, Assam and Arunachal Pradesh.

**Threats:** Ongoing conversion of the bird's grassland habitat for various purposes including agriculture is mainly responsible for its population decline.



Shashank Dalvi



## (B) MAMMALS

1. The **Pygmy hog** (*Porcula salvania*) is the world's smallest wild pig, with adults weighing only 8 kg. This species constructs a nest throughout the year. It is one of the most useful indicators of management status of grassland habitats. The grasslands where the pygmy hog resides are crucial for the survival of other endangered species such as Indian rhinoceros (*Rhinoceros unicornis*), swamp deer (*Cervus duvauceli*), wild buffalo (*Bubalus arnee*), hispid hare (*Caprolagus hispidus*), Bengal florican (*Eupodotis bengalensis*) and swamp francolin (*Francolinus gularis*). In 1996, a captive-breeding programme of the species was initiated in Assam, and some hogs have been reintroduced in Sonai Rupai area also in 2009.



Kalyan Varma

**Habitat:** Relatively undisturbed tall 'terai' grasslands.

**Distribution:** Formerly, the species was more widely distributed along the southern Himalayan foothills but now is restricted to only a single remnant population in Manas Wildlife Sanctuary and its buffer reserves.

**Threats:** The main threats are loss and degradation of grasslands, dry-season burning, livestock grazing and afforestation of grasslands. Hunting is also a threat to the remnant populations.

## (C) REPTILES & AMPHIBIANS

1. The **Gharial** (*Gavialis gangeticus*) is the most uniquely evolved crocodilian in the world, a specialized river-dwelling fish-eater. The dire condition of the gharial reflects the tragedy of our rivers where we stand to not only lose other endangered taxa such as the Ganges river dolphin (*Platanista gangetica*) but also the use of their waters for human consumption and other needs.



Suresh Chaudhary

**Habitat:** Clean rivers with sand banks.

**Distribution:** Only viable population in the National Chambal Sanctuary, spread across three States of Uttar Pradesh, Rajasthan and Madhya Pradesh in India. Small non-breeding populations exist in Son, Gandak, Hoogly and Ghagra rivers. Now extinct in Myanmar, Pakistan, Bhutan and Bangladesh.

**Threats:** The combined effects of dams, barrages, artificial embankments, change in river course, pollution, sand-mining, riparian agriculture and ingress of domestic and feral livestock caused irreversible loss of riverine habitat and consequently of the gharial.

*Andrew Leith Adams (1867) wrote: "abounds in all the great rivers of Northern India... Ten or twenty may be frequently seen together."*

2. **Leatherback turtles** (*Dermochelys coriacea*) are the largest of living sea turtles weighing as much as 900 kg. Adult leatherback turtles are excellent swimmers – they swim on an average of 45-65 km a day, travel upto 15,000 km per year and can dive as deep as 1200 m. Jelly fish are their primary prey. The population spikes of leatherbacks coincide with abundance of jellyfish, making them important top-predators in marine environments.



Kartik Shanker

**Habitat:** Tropical and subtropical oceans

**Distribution:** Found in tropical and temperate waters of the Atlantic, Pacific, and Indian Oceans.

**Threats:** High sea fishing operations, harvesting of eggs, destruction of nests by wild species and domesticated species such as cats, dogs and pigs. Artificial lighting disorients hatchlings and adult and causes them to migrate inland rather than back to the sea. Threats to habitat include construction, mining and plantation of exotics.

3. **Four-toed river terrapin** or River terrapin (*Batagur baska*) is a critically endangered turtle. The omnivorous diet of the river terrapin and other terrapin species, makes them an essential part of the efficient clean-up systems of aquatic habitats.



Indraneil Das

**Habitat:** Freshwater rivers and lakes.

**Distribution:** Bangladesh, Cambodia, India, Indonesia, Malaysia

**Threats:** Use of flesh for medicinal purposes, demand for eggs, which are considered a delicacy.

4. The **Gliding Frog** (*Rhacophorus pseudomalabaricus*) is endemic to the Western Ghats. This species is confined to the rainforests of the Western Ghats and occurs at elevations of greater than 1000 m. This species has been recently described in the year 2000.

**Habitat:** Rainforests above 1000 m altitude.

**Distribution:** Indira Gandhi National Park and surrounding areas of Anamalai hills, Tamil Nadu.

**Threats:** Conversion of forested areas for timber and non-timber plantations, and timber extraction activities.



Kalyan Varma

Manish Chandy



Nicobar Tree Shrew



Hawksbill Turtle

Indraneel Das

Ramki Srinivisan



Sociable Lapwing



Red-crowned Roof Turtle

Romulus Whitaker

## Only Critically Endangered Species in India.

### Birds

- Himalayan Quail (*Ophrysia superciliosa*)
- Pink-headed Duck (*Rhodonessa caryophyllacea*)
- Siberian Crane (*Grus leucogeranus*)
- Sociable Lapwing (*Vanellus gregarius*)
- Spoon-billed Sandpiper (*Eurynorhynchus pygmeus*)

### Mammals

- Andaman White-toothed Shrew (*Crocidura andamanensis*)
- Jenkin's Shrew (*Crocidura jenkinsi*)
- Nicobar Shrew (*Crocidura nicobarica*)
- Large Rock-rat (*Cremnomys elvira*)
- Malabar Civet (*Viverra civettina*)
- Namdapha Flying Squirrel (*Biswamoyopterus biswasi*)

### Fish

- Knifetooth Sawfish (*Anoxypristis cuspidata*)
- Ganges Shark (*Glyphis gangeticus*)
- Pondicherry Shark (*Carcharhinus hemiodon*)
- Large-tooth Sawfish (*Pristis microdon*)
- Deccan Labeo (*Labeo potail*)

### Reptiles

- Hawksbill Turtle (*Eretmochelys imbricata*)
- Red-crowned Roof Turtle (*Batagur kachuga*)

### Amphibians

- Fejervarya murthii*
- Indirana gundia*
- Philautus sanctisilvaticus*
- Raorchestes shillongensis*





Kartik Shanker



**Ministry of Environment and Forests**  
**GOVERNMENT OF INDIA**

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Front cover: Bengal Florican mating display, Manas National Park, Assam

Back cover: Leatherback turtle hatchlings, Little Andamans

Lithographs: Bikram Grewal personal collection