

CRITICALLY ENDANGERED BIRDS IN INDIA

Introduction: Birds are omnipresent, add life, color and sound to our lives with their intrinsically beautiful feathers and melodious songs. They are recognized as one of the most important indicators of the State of the Environment. Changes in bird populations are often referred to as the first indication of environmental problems. A decline in bird population tells us that we are damaging the environment through pollution, human activities by destroying their habitat, habitat fragmentation and destruction, pesticides, alien or invasive species, and many other impacts.

Birds are a part of the balance of nature. There is strong interdependence between all living things in the gigantic web of life and the removal of even the smallest form of life may in time endanger the entire structure.

The IUCN Red List Categories and Criteria are intended to be an easily and widely understood system for classifying species at high risk of global extinction. The general aim of the system is to provide an explicit, objective framework for the classification of the broadest range of species according to their extinction risk. However, while the Red List may focus attention on those taxa at the highest risk, it is not the sole means of setting priorities for conservation measures for their protection⁽¹⁾.

Critically endangered is the highest risk category assigned by the IUCN (International Union for Conservation of Nature) Red List to wild species. There are five quantitative criteria to determine whether a taxon is threatened. A taxon is critically endangered when the best available evidence indicates that it meets any of the following criteria:

1. Populations have declined or will decrease, by greater than 80% over the last 10 years or three generations.
2. Have a restricted geographical range.
3. Small population size of less than 250 individuals and continuing decline at 25% in 3 years or one generation.
4. Very small or restricted population of fewer than 50 mature individuals.
5. High probability of extinction in the wild⁽²⁾.

Critically endangered birds in India under a different classification can be grouped as:

1. Migratory Wetland Species – Baer’s Pochard (*Aythya baeri*), Siberian Crane (*Leucogeranus leucogeranus*), Spoon-billed Sandpiper (*Eurynorhynchus pygmeus*)
2. Non-migratory Wetland Species – White-bellied Heron (*Ardea insignis*)
3. Grassland Species – Bengal Florican (*Houbaropsis bengalensis*), Great Indian Bustard (*Ardeotis nigriceps*), Jerdon’s Courser(*Rhinoptilus bitorquatus*), Sociable Lapwing (*Vanellus gregarius*)
4. Forest Species – Forest Owlet (*Heteroglaux blewitti*)
5. Scavengers – Indian Vulture (*Gyps indicus*), Red-headed Vulture (*Sarcogyps calvus*), Slender-billed Vulture (*Gyps tenuirostris*), White-backed Vulture (*Gyps bengalensis*).
6. Practically extinct – Himalayan Quail (*Ophrysia superciliosa*), Pink-headed Duck (*Rhodonessa caryophyllacea*) ⁽³⁾

Some of the threats to become critically endangered of these bird species could be due to clearing of forest, human interference, trapping of birds, creation of new pastures, growing of dry land crops, quarrying, construction, degradation of lowland forests and wetlands through direct exploitation and disturbance by humans. Human disturbance also leads to high incidence of nest desertion. Burning and cutting of trees, conversion of the bird's grassland habitat for various purposes including agriculture is mainly responsible for its population decline.

Critically Endangered species in India According to the Red Data Book of International Union for Conservation of Nature (IUCN), there are 47 critically endangered species in India (As of 5 September 2011)

The Red list of 2012 is out on 18 February 2012 at Rio +20 Earth Summit. Red List has listed 132 species of plants and animals as Critically Endangered from India ⁽⁴⁾. In India, there are 15 bird species which are considered to be Critically Endangered as per IUCN⁽⁵⁾. The list is given below:

Kingdom	: Animalia
Phylum	: Chordata
Class	: Aves
Order	: Anseriformes
Family	: Anatidae
Scientific name	: <i>Aythya baeri</i>
Local name	: Baer's pochard



Aythya baeri

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Strigiformes
Family : Strigidae
Scientific name : *Heteroglaux blewitti*
Local name : Forest owlet



Heteroglaux blewitti

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Charadriiformes
Family : Scolopacidae
Scientific name : *Eurynorhynchus pygmeus*
Local name : Spoon-billed sandpiper



Eurynorhynchus pygmeus

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Accipitriformes
Family : Accipitridae
Scientific name : *Gyps bengalensis*
Local name : White-backed Vulture



Gyps bengalensis

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Accipitriformes
Family : Accipitridae
Scientific name : *Gyps tenuirostris*
Local name : Slender-billed Vulture



Gyps tenuirostris

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Accipitriformes
Family : Accipitridae
Scientific name : *Gyps indicus*
Local name : Indian Vulture



Gyps indicus

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Otidiformes
Family : Otididae
Scientific name : *Ardeotis nigriceps*
Local name : Great Indian Bustard



Ardeotis nigriceps

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Otidiformes
Family : Otididae
Scientific name : *Houbaropsis bengalensis*
Local name : Bengal Florican



Houbaropsis bengalensis

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Gruiformes
Family : Gruidae
Scientific name : *Grus leucogeranus*
Local name : Siberian Crane



Grus leucoaeranus

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Charadriiformes
Family : Charadriidae
Scientific name : *Vanellus gregarius*
Local name : Sociable Lapwing



Vanellus gregarius

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Charadriiformes
Family : Glareolidae
Scientific name : *Rhinoptilus bitorquatus*
Local name : Jerdon's Courser



Rhinoptilus bitorquatus

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Accipitriformes
Family : Accipitridae
Scientific name : *Sarcogyps calvus*
Local name : Red-headed Vulture



Sarcogyps calvus

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Pelecaniformes
Family : Ardeidae
Scientific name : *Ardea insignis*
Local name : White-bellied Heron



Ardea insignis

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Galliformes
Family : Phasianidae
Scientific name : *Ophrysia superciliosa*
Local name : Himalayan Quail



Ophrysia superciliosa

Kingdom : Animalia
Phylum : Chordata
Class : Aves
Order : Anseriformes
Family : Anatidae
Scientific name : *Rhodonessa caryophyllacea*
Local name : Pink-headed Duck



Rhodonessa caryophyllacea

Efforts to conserve birds:

In order to save birds from becoming extinct, efforts has to be made to conserve birds.

Some of the methods to conserve birds are⁽⁶⁾

- Conserve the habitat types and its associated species;
- Establish, with the cooperation of the state government and local people, more conservation areas;
- Supervise and coordinate management in conservation areas;

- Follow re-introduce, translocation methods and Captive breeding methods
- Create awareness programmes for stakeholders, students, NGO's, etc.

Reference:

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3. <http://www.clearias.com/critically-endangered-animal-species-of-india/>
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5. www. <http://www.iucnredlist.org./details/>
6. Swarndeeep S. Hundal. Wildlife conservation strategies and management in india: an overview. Proc. Species at Risk 2004 Pathways to Recovery Conference. 2 March 2–6, 2004, Victoria, B.C.