

Studies of some Endangered Birds and conservation strategies to conserve them - I

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Abstract

IUCN lists 460 endangered birds in December 2019. 10999 species are known. 10947 assessed. 9461 not threatened. 1533 threatened. 183 extinct. 5 extinct in wild, 19 possibly extinct (PE).

Extinct in wild (EW) -5, Critically Endangered (CR) 223, EN (endangered 460, Vulnerable (VU) 798, Near Threatened (NT) 1,001, Least Concern (LC) 8460, DD (Data Deficient) 53 species. Population of birds is decreasing due to water scarcity, Global warming & Anthropogenic activities.

Key words : Endangered ,Birds ,Conservation.

Introduction

Number of birds are decreasing due to habitat loss, Anthropogenic activities, Water, air, land and noise pollution, cutting of plants, urbanization. We studied some endangered and critically endangered birds and planned their conservation by water conservation and planting trees.

Materials and Methods

Field observations were made during March 2015 to November 2022 in different areas and varied habitats like cultivated areas, agriculture areas, open fields, vegetable areas, parks, mountains, hilly areas.

Observations and Results

Following species of Endangered and Critically Endangered Birds were observed :

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1. *Vireo bellii* .



Image 1 : *Vireo bellii*

Belongs to family *Vireonidae*

It is a song bird. It migrates from north west America to Central & South America in winters. Color is dull olive above and white below.

Nesting sites are Vines ,Shrubs , Toxicodendron diversilobum (Poison oak). Populus fremontii (Fremont cottonwood), Mugwort (Artemisia douglasiana), Rosa californica (Wild rose), Baccharis glutinosa (Mulke fat), Salix (Willow). Nest is camouflaged. Brown headed cowbird parasites vireo bellii. Listed endangered IUCN .

2.*Grus americana* (Whooping Crane)
Belongs to order gruiformes , family Gruidae .



Image 2 : *Grus americana*

Known for its whooping sound . life 24 years . became endangered due to hb loss & hunting . captive breeding is done to recover sp. There number is 800 .
Listed endangered by IUCN.

3. *Lanius lodovicianus* (Loggerhead shrike)
Passerine bird .



Image 3 : *Lanius lodovicianus*

Shrike family lives in North America .

Also found in Siberia .eats small mammals , small birds , reptiles , amphibians and insects.

Population of bird is decreasing in N. America . Listed critically endangered IUCN in N. America .

Wildlife Preservation Canada is working for conservation of wildlife . Captive breeding is also practised.

4. (*Setophaga kirtlandii*) Kirklands warbler

Belongs to family Parulidae.

common name Jack pine warbler or Jack pine bird.Listed endangered by IUCN . It was extinct before 50 years. Due to conservation efforts population recovered.

To conserve the bird water conservation and flora conservation is necessary. These Birds Migrate in winters south (Cuba).



Image 4: *Setophaga kirtlandii*

5. *Charadrius melodus* (Piping Plover)



Image 5.: *Charadrius melodus*

Charadrius melodus belongs to family *Charadriidae*. It is found in North America.

Small, sand color, found in Gravel beaches. It is found in North America. The color of the bird exactly resembles the beach. Breeding habitats shores of Canada, N. America. The species is listed Threatened. Eat sea worms, insects & crustaceans.

6. *Sternula antillarum* (Least Tern)
Tern native North America & South America.



Image 6 : *Sternula antillarum*

Belongs to Charadriiformes family Laridae.
L-24 cm, Wg 52 gm.
Black cap on forehead.
Migratory, Migrate central America in winters.
Listed endangered by IUCN.

7. *Tympanuchus cupido* (Greater Prairie Chicken) Belongs to Galliformes, family Phasianidae. Also known as boomer.

Pinnate grouse. Greater prairie chicken. Became rare due to habitat loss. Captive breeding and other conservation measures are practiced, mating rituals called booming.



Image: 7. *Tympanuchus cupido*

8. *Leuconotopicus borealis* Red- cockaded Woodpecker



Image 8 : *Leuconotopicus borealis*

Small, medium size.

Belongs to piciformes family : picidae.

Native N. America . US , Virginia ,Oklahoma ,Texas ,New Jersey ,Maryland ,Florida . Has black color cap ,

White stripes , common name cockade.

Length - 23cm.

Listed threatened by USFWS & IUCN .

9. *Setophaga chrysoparia* (Golden-cheeked Warbler)

Belongs to *Passeriformes* , *Family Parulidae* , Yellow cheeks on black throat.

Native Palo Pinto County ,Central Texas, Kinney county ,Edwards Plateau

,Mexico ,nest Juniper Oak tree.



*Image 9 :Setophaga chrysoparia
Lives Atlantic coast Europe.*

10. *Sterna dougallii* (Roseate Tern)

Belongs to *Charadriiformes* family

Laridae .



Image 10. :Sterna dougallii

It is white fronted tern .

Black naped tern . Red & Black bill.

Summer underparts pink .

Found in Dublin ,Ireland ,Carribbean . Length 36 cm.

Eat fish .



Egg .
Listed Endangered by IUCN.

11. *Ammospiza maritime* (Seaside Sparrow)



Image11 : *Ammospiza maritime*

Belongs to *Passerellidae* , family *Ammospiza* . Grey brown color ,
Found in South Carolina ,salt marshes ,
US , makes cup nest *Spartina* grass.

Eat insects . migrate south in winters.

Listed Endangered IUCN.

12. *Rostrhamus sociabilis* (Snail Kite).



Image 12.: *Rostrhamus sociabilis*

Slender billed kite.

Belongs to *Accipitriformes* , Family *Accipitridae*

Also known as snail kite ,slender billed kite .found in South America ,US ., Caribbean ,Florida .

Nest in bush ,give 4 eggs.

Listed Endangered . Eat apple snail.

13. *Phoebastria albatrus* (Short-tailed Albatross)

Belongs to *Procellariiformes* family *Diomedidae* .



Image13 . : *Phoebastria albatrus*

Phoebastria albatrus

Can become extinct due to feather trade.

Nasal passage attached upper bill naricorn . excrete salt from nose.

Found Muko -Jima , Bonin ,Nishino Shima ,Yomejima ,Kita -no- shima,Enewetak Atoll, Kobishi , Senkaku Island , Torishima , Minami kojima ,Kure , N.W. Hawaii .

Eat squid . Make nest on *Miscanthus sinensis*.

Conservation : Listed Vulnerable IUCN .Total Population 4200.

Volcanic eruptions and Anthropogenic activities are threat.

14. *Empidonax traillii* (Willow flycatcher)



Image14. : *Empidonax traillii*

Belongs to family Tyrannidae.
Insectivorous. Found in North America.
Adults have olive upper parts & white underparts.
L 150 mm, Wt. 13-14 gm.

Breeding site deciduous places willows
Near water. Birds migrate in winters Ecuador, Mexico and S. America.
It is found in Utah, Texas, New Mexico, Nevada, Colorado, California, Arizona. Became Endangered due to invasive species, Habitat loss, Habitat alteration, Anthropogenic activities.

15. *Vireo atricapilla* (Black capped Vireo)

Belongs to Passeriformes family Vireonidae .



Image 15. : *Vireo atricapilla*

Found in United States & Mexico.

In United States it was Listed Endangered



16. *Polioptila californica* (*California Gnat Catcher*)



Image 16: *Polioptila californica*

Belongs to *Passeriformes* family *Poliptilidae* . it is 11 cm long bird .

It is spider & insect eating bird.

It is grey color ,black crown & black beak ,black tail. It is found from south California to Baja California. Non migratory bird. Listed threatened by US FWS .

17. *Pterodroma cahow* (Bermuda Petrel)



Image17. : *Pterodroma cahow*

Belongs to order *Procellariiformes*, family *Procellariidae*. It is a nocturnal bird, it is a ground nesting bird.

Also known as gadfly petrel.

National bird of Bermuda. Medium body size, long wings, grey upper wings & white under wings & upper tail, 2nd rare seabird. Grey-black crown & collar. It was thought for more than 300 years that this bird is extinct. It was 18 nest pairs were found in 1951.

Enlarged nesting habitats were made on Nonsuch island.

Eat *crustaceans*, *shrimps*, *squids*, *small fishes*. Endangered due to invasive species & habitat degradation. Nesting season from last week December to June. Female lay 1 egg in 1 season. 50% eggs fail & do not hatch. Inviolate eggs were buried after 67 days.

Conservation done by eradication of hogs & rats. Installed wooden bafflers were used to conserve bird.

Cedar (*Juniperus bermudiana*), Palm (*Sabal bermudana*), olive (*Cassine lanceanum*) were planted to conserve nature & bird.

18. *Gymnogyps californianus* (California Condor)



Image 18. :*Gymnogyps californianus*

Belongs to *Accipitriformes* , family
Cathartidae .

This is largest N. American land bird.

It was extinct in 1987.

It is listed Critically Endangered by IUCN. Listed Critically Imperiled by Nature Serve.

Black plumage . bald head ,9-10 ft wingspan.

12 kg wt. Scavenger . age 60 yrs.

Population decreased due to anthropogenic activities , DDT ,Habitat loss ,poaching ,
Lead poisoning & environment pollution .

No increased by captive breeding .

Now December 2022, 538 individuals are there.

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. Image 19. :Juvenile feeding.

It is new world vulture .

It became extinct in 1987.

Conclusion

Total 18 species were observed .

Which belong to different families :as Galliformes , *Poliopitilidae* , *Accipitriformes* , *Cathartidae* , *Passeriformes* , *Poli,opitilidae*

Procellariiformes , *Procellariidae* ,

Passeriformes , *Vireonidae* ,

Procellariiformes , *Diomedidae* .

Vireonidae ,

gruiformes , *Gruidae* .

Passerellidae , *Ammospiza* .

Passeriformes , *Poliopitilidae*

Parulidae , *Galliformes* ,

Phasianidae ., *Charadriiformes* ,

Laridae ., *Tyrannidae*. Conservation plan is needed to conserve the Endangered species . To conserve flora conservation of flora is needed and to conserve flora conservation of water is needed because due to global warming water scarcity is becoming great problem in arid and semiarid regions.s

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