

Wildlife of Sindh

Prospects and Trends



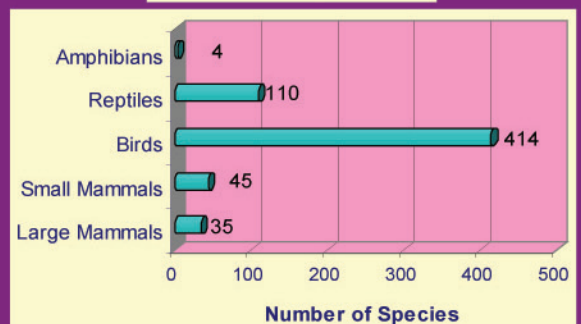
The geographic and ecological diversity of Sindh has given rise to a variety of habitats, ecosystems and several unique species of wildlife. Among the major ecosystems are the coastal and marine ecosystems, forests (mangrove, riverine and irrigated plantation), fresh and brackish wetlands, main river course, desert and irrigated landscapes.

The coastal ecosystems including the Indus Delta and River Indus and associated wetlands in the lower Indus Basin are categorized among the most critical ecosystems in Pakistan.

The faunal diversity of Sindh comprise of 80 species of mammals (45 small mammals and 35 large mammals), more than 414 species of birds, 110 species of reptiles, and 4 species of amphibians.

Like the other areas of Pakistan the human use of wildlife in Sindh Province are illegal hunting, persecution (in response to livestock/ crop losses), falconry, domestication, medicinal purposes and decoration.

Faunal Diversity of Sindh



Mammals

Some important species of mammal in Sindh are Sindh Ibex (Sarah, Pahari Bakra), Afghan Urial (Gad, Pahari Dumba), Indian Desert Gazelle / Chinkara (Hiran), Black Buck (Kala Hiran), Hog Deer (Phara, Barasingha), Blue Bull / Nilgai, (Neel Gai, Rojh), Indian Wild Ass (Khur Jungli Gadha), Striped Hyaena (Charkh), Indian Desert Wolf (Bherria, Bagharr), Indian Desert Fox (Lomrri, Lomarr), Caracal / Red Lynx (Siah Gosh, Harola), Jungle Cat (Jungli Billi), Fshing Cat (Machhi khor billi), Small Indian Civet (Mushk Billi, Rasse), Honey Badger (Bijju, Gor Pat), Scaly Anteater / Pangolin (Chiunti Khor), Indus Blind

Dolphin (Bulhann, Andhy Dolphin), Smooth Coated Otter (Udh Bilao, Luddharr) and Flying Fox / Fulvous Fruit Bat (Urta Lomrri, Meva Khore, Chimgadar).

The widely represented family of wildlife in Sindh is Cervidae consisting of Deer such as Hog Deer, Chinkara and Black Buck. The Hog Deer once widely spread in the riverine forests and swamp areas, have now become endangered. This is mainly due to the loss of their habitat owing to the lack of inundation in the River Indus.

| Type | Species | Order | Family | Status |
|---------------|---------|-------|--------|--------------------------|
| Large Mammals | 35 | 5 | 16 | 2 Endangered |
| | | | | 3 Vulnerable |
| Small Mammals | 45 | 4 | 10 | 2 Conservation dependant |
| | | | | 4 near Threatened |
| | | | | 3 Data deficient |
| | | | | 1 Endangered |
| | | | | 1 Vulnerable |

Source: Ghalib et al. 2004. Current Status of Mammals of Sindh. J. Nat. Hist. Wildl. Vol.3 (i) : 1-5



The other fast declining mammals species are Common Gazelle, Black Buck, Sindh Ibex and Afghan Urial. Their population is at risk due to illegal hunting, poaching and encroachment in their habitat.

The Indus River dolphin (*Platanista minor*), one of the world's rarest cetacean is endemic to the River Indus. Only a few animals exist today in a small fraction of their natural habitat, i.e. the lower reaches of the Indus River. Construction of irrigation infrastructures on the River Indus, Harmful fishing practices, use of agrochemicals near dolphin habitat and water pollution are threats to the dolphin population.

There has been a considerable decline in the number of black bears and according to a WWF's survey conducted in 1993, around 1600 animals were captured. Persecution, killing adults and capturing the cubs for public entertainment by the nomadic gypsies are major causes of their population reduction.



Reptiles and Amphibians

The important reptile species of Sindh are Marsh Crocodile or Muggers, Gharials or Gavials, Indian Cobra, Oxus Cobra and the Indian Python. There is a large population of freshwater turtle in wetlands of Sindh. Major cetaceans occurring in Pakistan's oceans along the Sindh coastline include five whale species, one porpoise species and five dolphin species. The Sandspit beach in Karachi is an important breeding place for the endangered Green turtle.



Poaching and persecution, killing animals for the body parts, illegal hunting and habitat fragmentation are the major cause of the declining populations of these animals. The Gharials have now become extinct in the wild as the areas they inhabited were dammed up for both irrigation and hydroelectric purposes and male Gharials were hunted for their snouts that are said to have aphrodisiac qualities. Killing by being caught in the fishermen's net is another reason for their decline.



Birds

Throughout the Indus Ecoregion the avifauna is represented by both migratory and resident species. Sindh serves as caravanserai for Eurasian avifauna travellers and birds from the South Asian subcontinent, East Africa, Europe and much of Asia are found in here during the migratory seasons.

The variety of habitats such as coastal areas, mangrove forests, swamps and marshes, the River Indus, riverine forest, freshwater and brackish wetlands and the tropical thorn forest and deserts provide staging, wintering and breeding grounds for a variety of birds.

Species: 414

Orders: 18

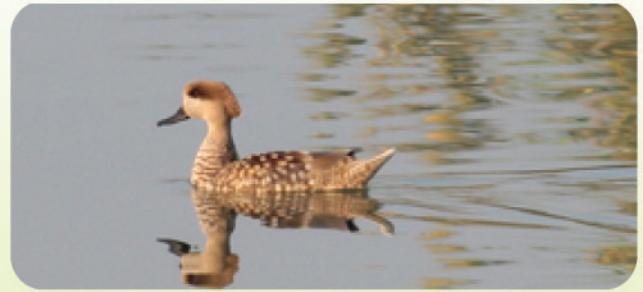
Families: 70

Status:

- Out of 185 species of water birds of Pakistan 157 are found on the wetlands of Sindh
- 150 Resident
- 264 Migratory
- 8 Vulnerable
- 12 Near threatened
- 1 Conservation Dependent

Source: Ghalid et al. 2002. Current Status of Birds of Sindh. J.Nat.Hist.Wildl: 37-57

Sindh has four resident species of ducks of which three are tree ducks like the Lesser whistling teal, Cotton teal and Marbled teal; while the Spotbill duck is a marsh duck. Despite their protected status under the Sindh Wildlife Protection Ordinance 1993, they continue to be hunted, posing a serious threat to their population.



© Rab Nawaz/ WWF Pakistan

Among game bird the black and grey partridge, for being a delicacy face indiscriminate shooting despite a bag limit given for the sport hunters. Moreover, the black partridges also affect by pesticides when they inhabit near agricultural fields.



© Ghulam Rasool Mughal/ WWF Pakistan

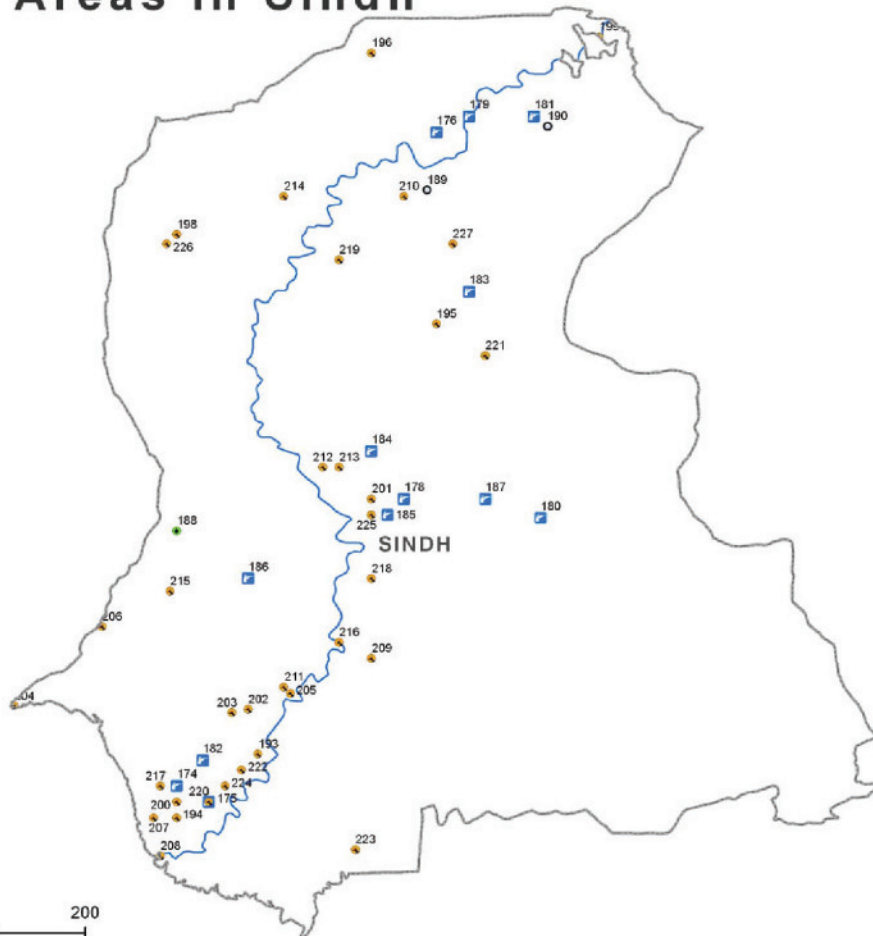
In coastal areas such as Keti Bunder one can find the typical shore-line birds such as Oystercatcher (*Haematopus ostralegus*), Common Whimbrel (*Numenius phaeopus*) and Redshank *Tringa totanus*. There have also been sightings of rarer species such as Painted Stork (*Mycteria leucocephala*) and Adjutant Stork (*Leptoptilus dubius*), the latter being absent from Pakistan since the 1960's. Other species that have been thought to be rare restricted range have actually turned out to be more common than thought, highlighting the need for regular surveys of all the wildlife, not just migratory birds. One example is the Pallas's Fishing Eagle (*Haliaeetus leucoryphus*) which has always been considered to be rare in Pakistan yet it has been observed breeding at various places including east of Keenjhar Lake, on the old Palace of the Mir's at Chotiari Reservoir and near the Forest Rest House at Pai Forest.



© Ghulam Rasool Mughal/ WWF Pakistan

Protected Areas in Sindh

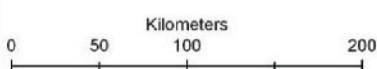
| PA No. | PA Name |
|--------|--------------------------|
| 174 | Deh Jangisar |
| 175 | Deh Khalifa |
| 176 | Dosu Forest |
| 177 | Ghamot |
| 178 | Hala |
| 179 | Indus River |
| 180 | Khipro Forest |
| 181 | Mando Dero |
| 182 | Mirpur Sakro |
| 183 | Nara |
| 184 | Pai Forest |
| 185 | Sahib Samo |
| 186 | Surjan, Sumbak, Eri and |
| 187 | Tando Mittha Khan |
| 188 | Kirthar |
| 189 | Khairpur Game Reserve |
| 190 | Khanpur |
| 191 | Pir Mahfooz Game Reserve |
| 192 | Pir Pagara Game Reserve |
| 193 | Bijoro Chach |
| 194 | Cut Munarki Chach |
| 195 | Deh Akro-II |
| 196 | Dhoung Block |
| 197 | Dograyon Lake |
| 198 | Drigh Lake |
| 199 | Ghandak Dhoro |
| 200 | Gullel Kohri |



| PA No. | PA Name |
|--------|--------------------------|
| 201 | Gulsher Dhand |
| 202 | Hadero Lake |
| 203 | Haleji Lake |
| 204 | Hawks Bay/Sandspit Beach |
| 205 | Hilaya |
| 206 | Hub Dam |
| 207 | Keti Bunder North |
| 208 | Keti Bunder South |
| 209 | Khadi |
| 210 | Khat Dhoro |
| 211 | Kinjhar (Kalri) Lake |
| 212 | Kot Dinghano |
| 213 | Lakhat |
| 214 | Langh (Lungh) Lake |
| 215 | Mahal Kohistan |
| 216 | Majiran |
| 217 | Marho Kohri |
| 218 | Miani Dhand |
| 219 | Mohahat Dero |
| 220 | Munarki |
| 221 | Nara Desert |
| 222 | Norang |
| 223 | Runn of Kutch |
| 224 | Sadnai |
| 225 | Samno Dhand |
| 226 | Shah Lanko |
| 227 | Takkar |

Legend

- Rivers
- Game Reserve
- National Park
- Unclassified
- Wildlife Sanctuary



Conservation Initiatives

Keeping in view the deteriorating condition of habitats and dwindling population of wildlife, an extensive network of protected areas has been established in the region. According to the Biodiversity Action Plan (2000) the total protected areas in Sindh are 54 (1 national Park, 35 Wildlife Sanctuaries, 14 Game Reserves and 4 Unclassified) covering an area of 1,307,575 hectares.

Moreover, the civil society organisations are also helping the concerned government department in protecting the precious wild resources of the Province. Indus Ecoregion Programme, initiated by WWF Pakistan in 2006 with support of the Government of Sindh is a long-term vision for biodiversity conservation and livelihood improvement among the local communities in the lower Indus Basin. The Indus ecoregion comprises of about 65% area of the Sindh Province and partly or fully covers most of the districts in the Province.

The first 6-year (2006-2012) implementation phase of the Indus Ecoregion Programme is known as the Indus for All Programme. Funded by the Embassy of the Kingdom of the Netherlands, the programme is operational in four priority ecosystems including Keti Bunder and Keenjhar Lake in District Thatta, Pai Forest in District Shaheed Benazir Abad and Chotiari Wetlands Complex in the District Sanghar.

One of the objectives of the Indus for All Programme is to conserve the wildlife of the Indus ecoregion through local community participation and meaningful engagement of other stakeholders. In this regard, the Programme is proactively engaged in enhancing the capacity of both the communities and the line departments at various levels. The Programme has established a comprehensive ecological baseline covering both the fauna and flora of the ecoregion. In addition, the Programme has developed Natural Resource Management Plans for the four priority ecosystems and Species Recovery Plans for the endangered species. By implementing upon the NRM and Recovery Plans with the participation of the stakeholders, the Programme expects to reverse the current declining trends in the population of wildlife in Sindh.

Indus for All Programme, WWF - Pakistan Programme Management Unit (PMU)

606, 607 Fortune Centre, Block-6
P.E.C.H.S. Shakra-e-Faisal, Karachi.
Tel: 021-4544791-92, Fax: 021-4544790
www.foreverindus.org, www.wwf-pak.org

Programme Implementation Units (PIU)

Chotiari Wetlands Complex

House # 129/2, Housing Society,
Near Government Boys High School,
Nawabshah Road, District Sanghar,
Sindh.
Tel: 0235-542837
Fax: 0235-542791

Keenjhar Lake

House # B/112,
Hashimabad Society Makli,
District Thatta, Sindh.
Tel: 0298-772318, 772319, 610426

Keti Bunder

Keti Bunder Town, P.O. Keti Bunder
via P.O. Mirpur Sakro,
District Thatta, Sindh.
Tel: 0298-607685, 620291

Pai Forest

House # A-3, M.U.C.E.T. Employees
Co-operative Housing Society,
District Nawabshah, Sindh.
Tel: 0244-366364,
Fax: 0244282496