

Conservation Value of the Protected Area

The Pong dam lake which lies between Latitude 31° 49'50''N to 32 °14'36'' N and Longitudes 76°53'31''E to 76°17'53''E is a manmade wetland. It is one of the highest earth core gravel shell dams in India, impounded across the River Beas in Kangra District of Himachal Pradesh. It was commissioned in 1974, primary for power generation, irrigation and flood control. The wetland boundary has been defined in Wildlife Sanctuary Plan at 1410 ft mean sea level.

This sanctuary was declared a wetland of National Importance by the Ministry of Environment and Forests, Government of India during 1994. The Pong Dam Lake Wildlife Sanctuary boundary was reorganized in 2013 to an area of 207 sq. km. and retained at 1410 ft amsl. An eco-sensitive zone (ESZ) with area up to 1.5 km around the boundary of sanctuary has been drafted in 2015.

Biodiversity

The biota of Pong co-exists within a mosaic of habitats within the wildlife sanctuary. Since the construction of the Dam the wetland has undergone considerable changes in its physical and hydrological regimes with corresponding drastic changes in floral and faunal diversity. This section highlights the Conservation value in terms of species in the wetland by various studies and assessments.

Planktons

A total of 45 planktonic genera were encountered from this reservoir, belonging to 9 phyla of which 4 of them were phytoplankton viz, Bacillariophyceae, Chlorophyceae, Zygnematophyceae, and Cyanophyceae while the rest 5 phyla were of zooplankton: Copepoda, Cladocera, Rotifera, Protozoa, and Insecta (CIFRI, 2020).

Phytoplanktons

Phytoplanktonic abundance ranged from 1092.48 to 2780 unit/litre, planktonic abundance was highest in the intermediate zone which is a stable sector intermingling between lentic and riverine sector, while the abundance was lowest in the lotic sector might be due to low temperature with moderate water current from upstream river Beas entering into the reservoir ecosystem.

Vegetation

The main forest type as per Champion and Seth classification is 5b/C2 Northern Dry Mixed Deciduous forests and type 9/C1, Himalayan sub-tropical pine forest with its sub-type 9/C1a lower Shivalik chil pine forest in and around the Pong dam lake bird sanctuary. This type of forest is characterized by *Anogeisus latifolia* in most of the area mixed with *Accacia catechu*, *Embllica officinalis*, *Albizzia* species, *Pyrus pashia*, *Prunus* species. *Kydia calycina* with other fruit tree species such as *Mangiera indica*, *Syngium cuminii*, *Morus alba*, *Ficus* species, *Zizyphus* species, these fruit trees species provide food to the birds and wild animals. The area surrounding the Pong reservoir is most extensively occupied by shrubs and small trees. These forests had been managed under coppice with standard and chil shelter wood system respectably depending upon the prescription of the approved work plans of the respective division. The wetland is also surrounded by *Mallotus phillipinansis*, *Nyctenthes* sps, *Dendrocalamus strictus* (grass), *Pyrus pashia* and shrubs like *Carrissa opeca*, *Dedonea viscosa*, *Woodfordia florivanda*, *Adhatoda vesica*, *Maurraya*, *conighii*, *Zizyphus* sps. *Agave*, *Euphorbia*, *Rubus* sps. etc. The grass that sprouts in and around the wetland mainly comprise of *Saccharum munja*, *Dendrocalamus* sps. *Cymbopogan*, *Arundinaria* sps. *Cynadon* and climbers mainly *Bauhinia*. The weeds that grow in and around the wetland is mainly *Lantana camara* and *Parthenium* (congress grass), *Ageratum conizoides* (Pong Dam Lake WLS Management Plan).

Birds

Pong wetland area is known to harbor more than 420 species of the birds belonging to about 56 bird families out of 77 families of the birds recorded in India. Avifauna includes the resident birds of jangle fowls, peafowl, Grey partridges, Black Partridges etc. Among the waterfowl's main species are Bar headed geese, Pintails, common Pochards, Coots, Grebes, Cormorants, Herons, Storks, Ruddy shellduck, common Teal, Shovellers, Moorhen, Stints, Lapwing, Plovers, Shank, Snipe, Gull, Terns, Kingfishers, Kites, Mallards, Gadwall, Egrets, Marsh Harriers, etc (Pong Dam Lake WLS Management Plan).

The total number of birds reported during the annual waterbird census in February 2021 was 108578 of 96 species of which 101431 were migratory waterbirds belonging to 51 species, 6433 were resident water birds belonging to 29 species and 714 other birds of 16 species. The trend since 2010 has been shown in the Figure 16 which is based on the annual waterbird census conducted by the Himachal Pradesh Forest Department.

Bar-headed Goose is the flagship species of Pong Dam Lake WLS. They migrate over the Himalayas to spend the winter in parts of south Asia. Pong Dam records the highest congregation of Bar-headed Goose in the world with population ranging from 30000 to 50000 annually. In the year 2014-2015 the highest number of Bar-headed Goose was recorded with a population count of 71877. The presence of this species is attributed to the available foraging area in the drawdown when the water recedes during winter.

Amphibians and Reptiles

The commonly found species of amphibians and reptiles contain 4 species of frogs, 4 species of turtles, 4 species of lizards, 18 species of snakes (of which venomous snakes are Spectacled Cobra, Common Krait, Common Indian Krait, Russel's Viper, and Saw Scaled Viper).

Mammals

24 species of Mammals have been recorded in Pong. Common species are common leopard, Sambher, wild boar, porcupine, small Indian mongoose, common Indian mongoose, jungle cat, common palm civet, small Indian civet, blue bull, Indian smooth otter, jackals, monkeys and langoors, three striped squirrels and many species of rats, mice and other rodents.

Ecosystem services and Livelihood

Pong dam lake offers a number of ecosystem services mainly provisioning services (water for hydropower generation, water for downstream irrigation, drawdown area for agriculture and grazing, fish), regulatory services (flood buffer, climate regulation), cultural services (tourism, spiritual significance, education and research) and supporting services (habitat for myriad species).

Spiritual value

Bathu temples, known locally as Bathu ki ladi, is a cluster of temples dedicated to goddess Parvati and Lord Shiva and lie within Pong dam lake WLS. These temples were submerged within the Maharana Pratap Sagar once the impoundment of Pong reservoir was complete in the early 1970s. Since then, these temples are only accessible from May to June when the water level decreases. The temples are accessible by boat from Dhameta and Nagrota Surian and accessible by road from Jawali. According to common local belief, it was built by local king who ruled the region. Many stories about the origin of the temples are famous among the folklore.

