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AVIFAUNA DIVERSITY RECORDED AT HAMIRSAR LAKE, BHUJ, KACHCHH, GUJARAT

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ABSTRACT:

Bhuj experiences low rainfall, but is blessed with a bowl-shaped topography with a large city lake (the Hamirsar) at the lowest point, in the center of the city, next to the walled city. A collective term for all the birds in a particular region. Avifauna may be used to refer to birds in a geographic region (the Southwest), a habitat region (boreal forest), a political boundary region (Australia) or even a time period (migration). Ornithologists and conservationists study a region's avifauna for both short and long term changes that may indicate population shifts, evolutionary adaptations or the rise or fall of threatened species. About 82 avian genera in 33 families have been recorded with the help of honorable wildlife warden, Bhuj, Gujarat State.

KEY WORDS: Kachchh, Hamirsar, Avifauna, Birds.

INTRODUCTION:

Kachchh region is rich with avian fauna and noted ornithologist Dr. Salim Ali (1945) has given an exhaustive list of birds of in his book “ Birds of Kachchh” published by the oxford university press (UK). A mere glance at the Hamirsar lake, one would see hundreds of birds in and around the lake. Fact this place is not noteworthy in Gujarat as it is often visited by the migratory birds.

STUDY AREA:

Bhuj experiences low rainfall, but is blessed with a bowl-shaped topography with a large city lake (the Hamirsar) at the lowest point, in the center of the city, next to the walled city. The historic rulers of Kachchh had established a system of interlinked water bodies and water channels that at one time ensured that even in a moderate rainfall year, the Hamirsar would fill up with run-off from catchments, also boosting groundwater recharge. The section on open

spaces, water bodies and the environment proposes the revival of this traditional system, thus reducing vulnerability to floods, drought and problems related to groundwater depletion.

MATERIALS AND METHODS:

The work was carried out as regular visits during the study. The birds and there occurrence were noted using wide-range Binoculars and a Sony DSLR camera with zoom lenses. Birds sighted during the study period were categorized according to their status. A Primary Checklist of Hamirsar was made which has been shown in the results part. Bird identification was followed based on Ali and Ripley (1996), and Grimmett *et. al.*, (1999).

RESULTS AND DISCUSSION:

The following birds were recorded at the lake during the period of investigation:

COMMON NAME	SCIENTIFIC NAME
Little Grebe	<i>Podiceps ruficollis</i>
Cormorant	<i>Phalacrocorax carbo</i>
Little Cormorant	<i>p. niger</i>
Darter	<i>Anhinga rufa</i>
Grey Heron	<i>Ardea cinerea</i>
Purple heron	<i>Ardea purpurea</i>
Pond Heron	<i>Ardea grayii</i>
Little Egret	<i>Egretta garzetta</i>
Cattle Egret	<i>Bulbulcus ibis</i>
Large Egret	<i>Ardea alba</i>
Small Egret	<i>Egretta intermedia</i>
Painted Stork	<i>Mycteria leucocephala</i>
White Ibis	<i>Threskiornis oethiopica</i>
Black Ibis	<i>Psuedibis papillosa</i>
Spoonbill	<i>Platalea leacordia</i>
Flamingo	<i>Phoenicopterus roseus (rare)</i>
Lesser whistling teal	<i>Dendrocygna javanica</i>
Pintail	<i>Anas acura</i>
Common teal	<i>Anas crecca</i>
Spot billed Duck	<i>A. Poecilorhyncha</i>
Showller	<i>Anas clypeata</i>
Comb duck	<i>Sarkidiornis melanotos</i>
Brahminy Kite	<i>Haliastur indus</i>
Indian White Backed Vulture	<i>Gyps bengalensis</i>
Marsh Harrier	<i>Circus aeruginosus</i>
Grey Partridge	<i>Francolinus pondicerianus</i>
Common peafowl	<i>Paro cristatus</i>
Moor hen	<i>Gallinule chloropus</i>
Coot	<i>Fullica atra</i>
Pheasant tailed Jacana	<i>Hydrophasianus chirurgus</i>
Black winged Stilt	<i>Himantopus sp.</i>

COMMON NAME	SCIENTIFIC NAME
Red wattlebird	<i>Venellus indicus</i>
Little ringed Plover	<i>Charodrius dubius</i>
Black tailed Godwit	<i>Limos sp.</i>
Red shank	<i>Tringatotanus</i>
Green Shank piper	<i>Tringa ochropus</i>
Green shank	<i>Tringa nebularia</i>
Marsh Sandpiper	<i>Tringa stagnatilis</i>
Common Shank Piper	<i>Tringa Hypoleucos</i>
Little stint	<i>Calidris minuta</i>
Ruff and reeve	<i>Philomachus pugnax</i>
Whiskered turn	<i>Chlidonias hybrida</i>
River tern	<i>Sterna aurantia</i>
Gull Billed	<i>Gelochelidon nilotica</i>
Caspian tern	<i>Hydroprogen caspa</i>
Indian Sandgrouse	<i>Pterocles exustus</i>
Blue rock pigeon	<i>Coloumba livia</i>
Indian ringed dove	<i>Streptopelia decaocto</i>
Little brown dove	<i>Streptopelia senegalensis</i>
Rose ringed parakeet	<i>Psittacula Krameri</i>
Koel	<i>Eudynamys scolopacea</i>
crow pheasant	<i>Centropus sinesis</i>
Common kingfisher	<i>Alcedo atthis</i>
White breasted kingfisher	<i>Halcyon smyrensis</i>
Pied Kingfisher	<i>Ceryle rudis</i>
Green bee-eater	<i>Merops orientalis</i>
Hoopoe	<i>Upapa epops</i>
Indian roller	<i>Coracias benghalensis</i>
Swallow	<i>Hurundo rustica</i>
Wire tailed swallow	<i>Hurundo smithii</i>
Black Drongo	<i>Dicrurus adsimilis</i>
Brahminy Myna	<i>Sturnus pagodarum</i>
Common Myna	<i>Acridotheres tristis</i>
Bank myna	<i>Acridotheres ginginianus</i>
Rosy starlings	<i>Sturnus roseus</i>
Red vented bulbul	<i>Pycnonotus cafer</i>
White cheeked bulbul	<i>Pycnonotus leucogenys</i>
Common babbler	<i>Turdoides caudatus</i>
Lesser white throat	<i>Sylvia curruca</i>
Black redstart	<i>Phoneicurus ochruros</i>
Pied chat	<i>Oenathe picata</i>
Indian robin	<i>Saxicoloides fulicata</i>
Yellow wagtail	<i>Motacilla flava</i>
Grey wagtail	<i>Motacilla cinerea</i>
White wagtail	<i>Motacilla alba</i>
Large pied wagtail	<i>Motacilla maderaspatensis</i>
Purple sunbird	<i>Nectarinia asiatica</i>
House sparrow	<i>Passer domesticus</i>
White throated munia	<i>Lonchora malabarica</i>

COMMON NAME**SCIENTIFIC NAME****House crow*****Corvus splendens***

About 82 avian genera in 33 families have been recorded with the help of honorable wildlife warden, Bhuj, G.S. It is to be noted that all the genera were not found throughout the year time but were observed at different times depending on their period of migration. The above list of birds indicate the occurrence of different genera probably due to availability of food and around hamirsar lake. There is a great deal of variation in form and function adaption in different groups of these birds. Herons, egrets, darters and cormorants with long necks to thrust in water in order to catch fishes, pelicans with gular sacs, wrabblers with small forcep shaped beaks to catch insects, various types of ducks with beak for straining food from mud etc. are the glaring examples of modifications according to their food habits. The birds are carnivorous or waders, insectivorous or graminivorous or frugivorous. Infact the birds of hamirsar show variations in their beak, claws and food. A good abundance of these birds indicates availability of food at hamirsar in form of fishes, insects, crustaceans, and molluscs etc. the presence of large number of birds at hamirsar seems to play an important role in ecosystem of the lake. The release of faecal pellets by birds include dissolved inorganic and organic compounds rich in phosphorus, nitrogen and other elements which are directly usable by producers. Birds thus significantly play a role in regenerating and recycling of vital nutrients in water body.

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