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## “DIVERSITY AND POPULATION OF WADERS IN THE CATCHMENT AREA OF EKRUKH WATER RESERVOIR, (HIPARGA LAKE) OF NORTH SOLAPUR TAHSIL SOLAPUR DISTRICT. (M.S.)”

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### ABSTRACT

**E**krukh water reservoir is the largest historic man made earthen dam, located closely to Solapur city in North Solapur. The water from this reservoir is mainly used for drinking and irrigation. It is constructed in 1871. It covers the gross length of 2360m providing the best platform for variety of resident and migratory birds, aquatic and terrestrial birds.

The present study is endeavored to prepare a checklist of waders from the Ekrukha water reservoir over the period of 12 months. i.e. from June 2015 to May 2016. The study was carried out by arranging monthly

survey camps early in the morning. 17 species belonging to 7 families have been recorded in this reservoir.

**KEYWORDS:** Waders, reservoir, catchment area, irrigation, storage capacity, M.Cu.Ft

### INTRODUCTION

The term Wader is used to refer to long-legged wading birds. It is one of the major groups of water birds that are habituated near water bodies. They have long legs with modified toes. As most these species spend much of their time near bodies of water, many have long legs suitable for wading. The majority of species

eat small invertebrates picked out of mud or exposed soil. Different lengths of bills enable different species to feed in the same habitat. There are about 210 species of waders, most of which are associated with wetland or coastal environments. Waders include the members of the family Jacanidae, Charadriidae, Rostratulidae, Recurvirostridae, Glareolidae, Scolopacidae, etc. The smallest member of this group is the least sandpiper. Ekrukha water reservoir is one of the historical man made water reservoir constructed very close to Solapur city in Maharashtra. Water from Ekrukha water reservoir is utilized for the purpose of irrigation and drinking. The water body contains a diverse assemblage of resident and migratory birds. Till now, different researchers have studied avifauna of Solapur in both aquatic and terrestrial habitat. Avifauna of Solapur was studied by Rahmani (1989) and Mahabal (1989) and Kumbhar et.al (2013). Checklist of birds of Solapur was published by Gaikwad et.

al. (1997). Anecdotes of avifauna were discussed by Prasad (2003). Survey of impact of changes in Water reservoir Ecosystem on the population and breeding status of avifauna of Ekrukh lake was conducted by Hippargi et.al (2012). Survey of waders in the catchment area of Ujani dam was done by Kumbhar et.al. (2015). Avifaunal diversity of Belar lake of south Solapur Tehsil was studied by Chougule and et. al. (2015).

#### MATERIAL AND METHODS:



Fig. 1 Map of the study site

The Ekrukh water reservoir is located at 17.7402569°N 75.9149802°E. The site is located at tale Hipparga. Ekrukh water reservoir is an earthen dam constructed in the Basin of Krishna River. It covers the gross length of 2360m. It has a total capacity of 3,330 M.Cu.Ft. This reservoir commands a gross area of 17,152 acres.

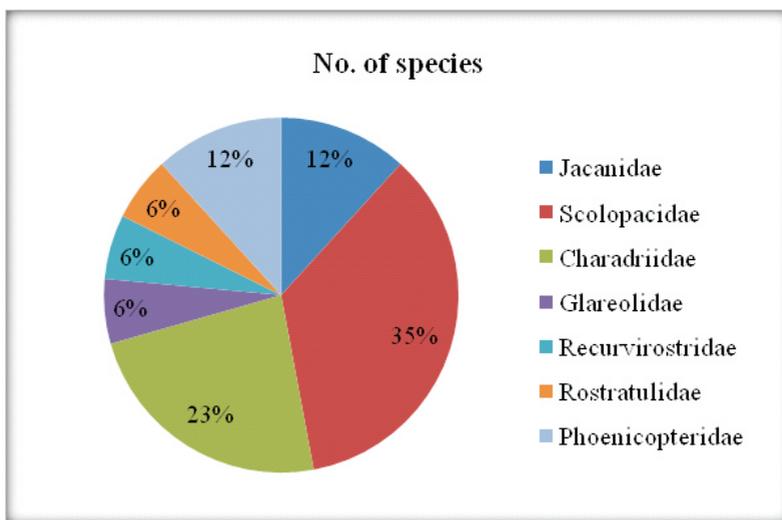
The present study was completed by arranging monthly bio monitoring surveys at morning and evening time at study site, scheduled from June 2015 to May 2016 to find out diversity and abundance of waders. Observation of the birds was done by Celestron G2 Up-close (10 X 50) binocular. Photography was done with the help of CANON EOS 1100D and zoom lenses (110-255 mm). The observed birds were identified with the help of field guides and pictorial literature, the book of Indian birds Salim Ali, 1912. field guide By Anand Banerjee, etc.

#### RESULTS AND DISCUSSION:

In the present study, total 17 species of the waders were recorded from 7 families. These families are Jacanidae, Charadriidae, Rostratulidae, Recurvirostridae, Glareolidae, Scolopacidae, Phoenicopteridae, etc. The abundant population of the birds was noticed throughout the study period. In overall population, the contribution of family Scolopacidae was more. Out of 17 species, 6 species were from the family Scolopacidae. Details about all these species are summarized in following table.

Sr. No.	Family	Common Name	Scientific Name
1	Jacanidae	Pheasant tailed jacana	<i>Hydrophasianus chirurgus</i>
2		Bronze winged jacana	<i>Metopidius chirugus</i>
3	Scolopacidae	Common redshank	<i>Tringa tetanus</i>
4		Marsh Sandpiper	<i>Tringa stagnatilis</i>
5		Common sandpiper	<i>Actitis hypoleucos</i>
6		Spotted redshank	<i>Tringa erythropus</i>
7		Wood sandpiper	<i>Tringa glareola</i>
8		Common greenshank	<i>Tringa nebularis</i>
9	Charadriidae	Common ringed plover	<i>Charadrius hiaticula</i>
10		Kentish plover	<i>Charadrius alexandrinus</i>
11		Red wattled lapwing	<i>Vanellus indicus</i>
12		Little ringed plover	<i>Charadrius dubius</i>
13	Glareolidae	Pratincole	<i>Glareola lactea</i>
14	Recurvirostridae	Black winged stilt	<i>Himantopus himantopus</i>
15	Rostratulidae	Common snipe	<i>Gallinago gallinago</i>
16	Phoenicopteridae	Greater Flamingo	<i>Phoenicopterus roseus</i>
17		Lesser Flamingo	<i>Phoeniconaias minor</i>

Table: List of waders recorded from the catchment of Ekrukh water reservoir



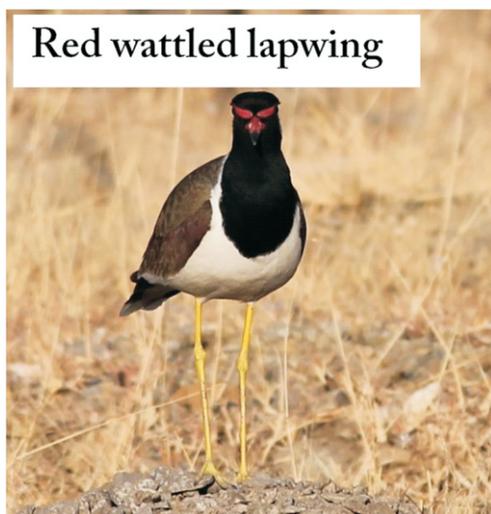
**CONCLUSION:**

Total 17 species of waders belonging to 7 families have been recorded at Ekrukh wetland during the period of 12 months from June 2015 to May 2016. It can be concluded that this wetland is rich in variety of food that attracts different types of birds. The water level of wetland is moderate with vast area for feeding habitat. The poaching is not noticed in the study period. The Ekrukh wetland is an excellent water body for the winter visitors and local birds. It must be protected from human interference and to be kept free from effects of pollution.

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