

# A SURVEY ON UPPALAPADU VILLAGE BIRD SANCTUARY, GUNTUR (DT.), A.P

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**Abstract-** The Biosphere has complex collections of innumerable organisms, known as the Biodiversity, which constitutes the chief life support for survival of human race. One of the major problems in 21<sup>st</sup> century is the proper maintenance of this Biodiversity in natural habitat. This problem is faced by each and every city, town, village etc in any country leading to loss of Biodiversity in the place and finally extinction of species results. Area Surveyed for the present study is Uppalapadu Bird Sanctuary, Uppalapadu Village, Guntur (dt.), A.P. where birds from various foreign countries fly, breed and leave along with their off springs. The area has high range of aesthetic sense. But, the migration of birds to the area is depleting day by day as it is being polluted by waste dumps and some environmental problems. If this is unchecked then in near future the complete Aesthetic sense would be lost. Hence, there is strong need for conservation of biodiversity. If conservation is done then Extinction of species can be stopped to a certain extent. Loss of valuable Flora and Fauna can be checked. Aesthetic needs can be fulfilled. For the maintenance of birds artificial nests and trees are installed in the area which when increased in number can serve a gainful purpose i.e. protecting the birds. In order to create social awareness the residents of the area were interviewed. They said that the sounds made by the birds is causing nuisance which can be reduced by afforestation programmes. They expressed that the water in the area is getting polluted due to bird droppings which can be checked by using of proper technology (like Protein Skimming, Trickling filters, Anaerobic digesters etc.).

**Keywords** - Climate Change; Global Climate Model; Statistical Model; Meteorological Observations; Agriculture, IPCC scenarios.

## Introduction

Uppalapadu is a small village in Guntur district Andhra Pradesh, India. It's having an area of 14 acres. About 7 acres of tank is set apart and declared as a bird protected area by Department of Forest, Government of A.P. This is a report of a survey conducted for Uppalapadu Bird Sanctuary, A.P. It was conducted over the course of four separate visits in November 2012, January 2013, May 2013 and June 2013. During the first, second and third survey in May 2013 we explored the full area of the Sanctuary and took photographs of the area along with the birds. During the fourth Survey in June 2013 we conducted Social survey i.e. interaction with the people around about the problems, their solutions etc. In the surveyed area we encountered that the Bird Center is a part of the village, just after the village entrance. Painted Storks, Spot-billed Pelicans and other birds migrate from various countries such as Siberia, Australia and use the center for nesting (Ali and Ripley, 2003). The water tanks in the village are unique as they provide refuge to many bird species including endangered Spot-Billed Pelicans and Painted Storks. The Statistical bird population in these tanks used to be around 12,000 previously, however lately only about 7000 birds roost in this dwindling habitat through the year. Besides this 6 pintail ducks a few cormorant 5 red crested pochard (*Rhodonesa rufina*), common coot, common teal, black-headed ibises, 2 stilts were also sighted. They were all inhabited on the Kikar trees (*Prosopis velutina* and vernacular name: Mulla tumma) and some installed artificial trees which are the main stay of the birds.

## Location

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It is located in Uppalapadu, Guntur(dist), Andhra Pradesh, India.



## Threats to Uppalapadu Bird Sanctuary

- In Uppalapadu, death of nesting trees in and around the tank due to excessive excrement of birds. Anthropogenic disturbances like Opposition from local populace due to pollution of water by bird excrement, leading to skin diseases.
- Continuous shrinking of the area, which has been reduced from 30 acres to 6 acres.
- Presence of Algal blooms in the pond water.
- The reduction in tank area is due to the village settlements increasing around it.
- The vegetation of the tank is slowly dying due to overcrowding of breeding and roosting birds throughout the year. Droppings of thousands of birds pollute the tank water.

- The villagers of the area put forth the following Problems:
  - The ever increasing demand of land both for building and cultivation by the villagers.
  - Location of a Zilla Parishad High School within the pelicanary.
  - Denuation of Kikar tree (*Prosopis velutina*) which is the main stay of the pelican and stork colony, are imminent threat to this center.
  - The villagers have also made numerous complaints about the Center being too close to the village which causes noise pollution too in the area due to chirping of the birds.
  - The main issue is that the birds use the same water body that is being used by the villagers for domestic purposes where water pollution occurs by waste and droppings.

#### Latitude and Longitude of a Point

Clear / Reset Remove Last Blue Marker Center Red Marker

**Get the Latitude and Longitude of a Point**

When you click on the map, move the marker or enter an address the latitude and longitude coordinates of the point are inserted in the boxes below.

Latitude:

Longitude:

	Degrees	Minutes	Seconds
Latitude:	<input type="text" value="16"/>	<input type="text" value="18"/>	<input type="text" value="30.4988"/>
Longitude:	<input type="text" value="80"/>	<input type="text" value="30"/>	<input type="text" value="50.3168"/>

#### Measures to Curb The Problems

- Change of location of the Zilla Parishad High school which is in the vicinity of Pelicinary.
- Replanting of the Kirkar trees for increasing the pelican and stork population and reducing noise pollution.
- Increasing more artificial trees.
- Installing feeding and watering implements.
- Fish is the staple food of the birds for it *Labeo rohita* fish spawn can be instilled in the area.
- Instead of erecting wire mesh artificial-trees the forest department can plant more *Prosopis velutina* in and around this swamp.
- The algal blooming can be stopped by using techniques like introduction of zooplankton, protein skimming etc.

#### Recent Developments Recorded

- In 2009, the large wire mesh trees which were provided by the Forest department are being used for nest making by the pelicans, although they did not do so in the initial years.
- This pelicanary has completed ten years operation in 2009. Some pelicans have now opted to use another pond at Ramchandrapalem which is about 4 km from this site towards Guntur.

Result: We recorded the problems of the people and suggested necessary measures to solve the problems.

#### APPENDIX: Survey notes Visit 1: 23<sup>rd</sup> November 2012

We started the travel from Guntur at 6:30am by bus and reached the spot by 7:00am. Our team consisted of eight people.

Weather: the weather was mostly clear and sunny except in the afternoon of the following day.

Record: The chief birds of the area were the Pelicans (approximately 7000 birds). The whole day went on counting them. There is a presence of high range algal blooms in the pond where the birds rest.

#### Visit 2: 13<sup>th</sup> January 2013

This time we used the same process. During this survey we counted the other birds excluding the Pelicans.

Weather: The minimum temperature recorded was 28°C at 0500 hrs

Records: Spotted to be 6 Pintail ducks a few cormorant, 5 red crested Pochard (*Rhodonesa rufina*), common coot and common teal.

#### Visit 3: 17<sup>th</sup> May 2013

This time also we used the same route.

Weather: Clear during most of the trip. It was prickly hot from 1200 hrs till the evening.

Records: We recorded the number of Black headed Ibises i.e. 24 and Glossy ibises were 17.

#### Visit 4: 20<sup>th</sup> June 2013

We started at 10:00 am in the morning. This survey was different from the others because it was a social survey i.e. interaction with the people around the sanctuary.

Weather: The weather was supportive and was slightly cloudy.

#### Conclusion

If the above problems are unchecked then in near future the aesthetic sense of an area would be lost which in turn leads to the loss of many biodiversified organisms.

#### Acknowledgement

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Different migrant birds are given in the following table 1.

S.No	Name of the Bird	Size in	Distribution	Type Of Food	Nesting season	Nesting Places	No. of eggs laid
1.	Spot Billed duck (Anas poecilorhyncha)	58-63	Throughout India. Also available in Pakistan, Bangladesh, Srilanka and Myanmar.	Mainly vegetarian comprising aquatic plants and seeds occasionally feed on insects.	July-December	Near in pod of grass and weeds in dense, vegetation at Margins of ponds or tanks.	6 - 12
2.	Spot Billed or Grey Pelican (Pelecanus philippensis)	140-150	Throughout India. Local migratory also available in Pakistan, Bangladesh, Srilanka and Myanmar.	Mainly fish	-	Large nests on trees with twigs	3(Vulnerable)(Bird Life International, 2001)
3.	Purple Swamp Hen (Porphyrio porphyrio)	45-50	Resident,common throughout plains of India. Also available in Pakistan, Bangladesh, Srilanka	Mainly vegetarian comprising shoots and vegetable matter, also Molluscs and insects	July - September	Nests in large pod of reads on floating debris or amongst matted reads slightly above water level	3 - 7
4.	Painted stork (Myceteria leucocephala)	93 - 100	Throughout India. Local migratory also available in Pakistan, Bangladesh, Srilanka and Myanmar.	Mainly fish (also frogs)	October - April	Large nests on trees with twigs.	3 - 5
5.	Darter or Snake bird (Anhinga melanogaster)	85-77	Throughout India. Resident also available in Pakistan, Bangladesh, Srilanka and Myanmar.	Chiefly fish	July - December	-	3 - 4 (near threatened)(BirdLife International,2001)
6.	Black headed Ibis (Threskiornis melanocephalus)	75	Throughout India. Resident local migratory also available in Pakistan, Bangladesh, Srilanka and Myanmar.	—	—	-	—
7.	Glossy Ibis	52	Partly resident, partly winter visitor in North-East India. Also available in Pakistan, Bangladesh.	Molluscs, insects etc.	May- July	Nests on trees with twigs	-
8.	Openbill Stork (Anastomas oscitans)	70	Throughout India. Also available in Pakistan, Bangladesh, Srilanka and Myanmar.	Mainly snails, also frogs, crabs etc.	July - November	Nests on trees with twigs	2 - 4
9.	Little cormorant (Microcarbo niger)	51	Throughout India. Resident, local migratory. Also available in Pakistan, Bangladesh, Srilanka and Myanmar.(Baker,1932-1935)	Exclusively fish	July - September	Nests on trees with twigs	1 - 5

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