

Congregation of Sarus Crane (*Grus Antigone*) In Unnao District, Uttar Pradesh

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Abstract: *The world's tallest flying bird Indian Sarus Crane (*Grus antigone*), is globally 'Vulnerable' species as per IUCN Red List of Threatened Species. It is only residential breeding crane in India. The present study concerns the survey of Sarus Crane in Unnao district. It is a monogamous bird and known as the eternal symbol of unconditional love and devotion and good fortune. It is believed that if one bird of the pair were to die, then the other follows the path towards starvation by refusing any food or water. The Sarus cranes preferred habitat like marsh areas that are filled with water during monsoon season, the abundantly irrigated paddy rice fields, grassland and riverbanks. They are omnivorous, eating insects (especially grasshoppers), aquatic plants, fish perhaps only in captivity, frogs, crustaceans and seeds. Sarus crane is the symbol of a healthy wetland ecosystem. Sarus crane is an omnivorous bird and maintains the food chain and food web give strength to wetlands ecosystem. The present survey was carried out during April 2013- April 2015.*

Keywords: Ecosystem, Wetlands, Monogamous Bird, Omnivorous

1. Introduction

The world's tallest flying bird Indian Sarus Crane (*Grus antigone*), is globally 'Vulnerable' species as per IUCN Red List of Threatened Species. It is only residential breeding crane in India. The name Sarus came from Sanskrit term "sarasa" which means "bird of the lake. The present study concerns the survey of Sarus Crane in Unnao district. It is a monogamous bird and known as the eternal symbol of unconditional love and devotion and good fortune. It is believed that if one bird of the pair were to die, then the other follows the path towards starvation by refusing any food or water. The adult Sarus crane is very large with grey wings and body; exposed red head; a greyish crown; and a long greenish-grey beak. A crane can appraise about 2-meter in height (over 6 ft), with wingspan up to 2.5-meter wide (about 8 ft) having weight of 7 to 10 kg (Ali and Ripley, 1980; Singh and Tatu, 2000). The Sarus cranes preferred habitat like marsh areas that are filled with water during monsoon season, the abundantly irrigated paddy rice fields, grassland and riverbanks. They are omnivorous, eating insects (especially grasshoppers), aquatic plants, fish perhaps only in captivity, frogs, crustaceans and seeds (Singh and Tatu, 2000, Johnsgard, 1983; Meine and Archibald, 1996b). Sarus crane is the symbol of a healthy wetland ecosystem. Sarus crane is an omnivorous bird and maintains the food chain and food web furnish strength to wetlands ecosystem. Various anthropogenic activities, habitats are under threat of degradation and alterations are the main cause of declining of Sarus crane population (Jha & McKinley, 2014). Sarus cranes generally assembly during pre-monsoon and winter season (Singh and Tatu, 2000; Sundar and Chaudhary, 2008).

2. Material and Methods

The study was conducted during April 2013- April 2015 in Sakran and Purva oochgaaon Village, Bichia Block of Unnao district of Uttar Pradesh. This district lies between 26°33'0"N and 80°28'48"E. The maximum temperature recorded was 45.5 °C and minimum was 2.5 °C. The average rainfall recorded for was 850 mm. Observation and

monitoring was done regularly. Morning counts were done during the crane feeding period (06.00h – 07.30h). Evening counts (17.00h – 19.30h) were also accomplished at the same sites. A point count method was utilized. Observations and monitoring were done with the aid of an Olympus 10x50 binocular and photography was done with 70 D SLR Canon camera.

3. Results and Discussion

The study was performed during April 2013- April 2015 in Sakran and Purva oochgaaon Village, Bichia Block of Unnao district of UP. Sarus is a social bird seen in family group, pairs and also in congregation during study period (Fig 1 & 2).



Figure 1: A flock of Sarus Crane in open fields



Figure 2: A flock of Sarus Crane in wetland

During study period Sarus cranes were seen in pairs or family group in whole year but during non breeding season (pre-monsoon and winter season) for mate finding or pair formation the congregation of Sarus from 411-503 in numbers. There are several workers works on social organizational behaviour of Sarus Cranes seen in pairs, or family groups, and congregation up to 200 birds during non-breeding season for mate finding (Gole, 1991a & b; Singh and Tatu, 2000; Sundar et al., 2000b; Vyas, 1999; Prasad et al; 1993). They engage in social displays to facilitate the pairing of unmated birds and to establish a pecking order among families. Male attracts the female to display dance like movement.

Table 1 shows the status and distribution of Sarus cranes in pre-monsoon and winter season from April 2013- April 2015. This was surprising to see such a large numbers of Sarus cranes in our study area. Such a large number make a hope that declining population of Sarus crane will definitely increase.

Table 1: Status and distribution of Sarus cranes in pre-monsoon and winter season from April 2013- April 2015

S.N.	Year	Number of Sarus cranes in Village Sakran		Number of Sarus cranes in Village Poorva Oochgaon	
		Pre-monsoon season	Winter season	Pre-monsoon season	Winter season
1	2013	188	135	311	287
2	2014	234	366	397	277
3	2015	407	422	503	389

4. Conclusion

The main threats are a combination of loss and degradation of wetlands; as a result of drainage and conversion to agriculture in study areas. As these study sites abode a good number of Sarus cranes that indicate healthy ecosystem for cranes for breeding and roosting. For the conservation of Sarus crane, the study recommends the declaration of breeding and roosting zone as “**Sarus Safe Zone**” with regular monitoring of these sites. Provision should include protecting eggs and chicks from predators. Awareness amongst the local people regarding wetlands habitat conservation for Sarus Cranes as well as to stop the activities such as egg stealing and hunting.

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