



Short Communication

Preliminary Survey of Heronry at Khargone, MP, India

Kher A. and Beg I.*

Department of Botany, Government Holkar Science College Indore, MP, INDIA

Available online at: www.isca.in, www.isca.me

Received 21st March 2014, revised 20th July 2014, accepted 10th August 2014

Abstract

In the preliminary survey of heronry at four different places in Khargone city of M.P. India, 558 nests of four bird species i.e., Cattle Egret, Little Egret, Indian Shag and Little Cormorants were recorded. Breeding was almost over in the last week of September 2011. They had selected 44 plants of 21 species. Interestingly two woody climbers *Salvadora oleoides* and *Bougainvillea spectabilis* had been preferred along with bamboo plants.

Keywords: Bird nesting, avifauna, vertebrates and West Nimar.

Introduction

Heronries are communal nesting of water birds which play important role in an ecosystem. In India about 26 species of water birds are known to nest colonially. Generally they prefer densely foliated trees; abundant food material, minimum pollution and safety Patel et.al.¹ Subramanya² had reported information on over 553 nesting sites from all over India. Patel et.al.¹, Burnett³, Johnson⁴, Chhaya⁵, Krishnan⁶, Mahabal⁷, Uthaman⁸, Uttangi⁹ and Mashru¹⁰ reported important information regarding heronries and their sites. According to Subramanya² there is a need to develop a more detailed inventory of heronries at the district or state level by concerned individuals or by government and nongovernmental organizations. Khargone city is the district head quarter in West Nimar of Madhya Pradesh from where negligible report has been published regarding birds and their nesting sites so far. Therefore present work is chosen as preliminary work and gathering of data of heronries at Khargone.

Material and Methods

When posted at Government Girls College Khargone (M.P.), a survey of heronries in connection with bird species, number of nests and trees selected for nesting was worked out at four different places of Khargone city of Madhya Pradesh, India from 28th August 2011 to 28th of September 2011 in day time. During the study nests of egrets and cormorants were noted and given in the table.

Results and Discussion

During the study 558 nests of Cattle Egret (*Bubulcus ibis*); Little Egret (*Egretta garzetta*); Indian Shag (*Phacrocorax intermedia*) and Little Cormorant (*Phalacrocorax niger*) were observed. These birds preferred 41 plants included in 21 plant species of 15 families.

From the local people information about heronries was collected which indicates that heronry (L-1) is traditional and existing since last 15-20 years. This main heronry (L-1) is situated in the vicinity of government quarters which are very close to bus stand and Municipal Corporation and known as TNT complex. In the main heronry four bird species had chosen 34 plants of 19 species. Interestingly *Bougainvillea spectabilis* a woody climber and two bamboo plants (*Bambusa sp*) were also selected by Egrets for their nesting.

Surprisingly on the other road side of the main heronry, dense canopy of trees and other favorable conditions were present but there was only one big Peepal tree (*Ficus religiosa*) where 15 nests of Cormorants were recorded. One of the main reasons for it may be the presence of Bee hives in that particular area. Large number of birds specially Rosy Pastors (approximately 1000), Indian myna (500) Cormorants (100), Egrets (250) roost there and therefore this could be one of the reason of splitting of heronry. Secondly due to lack of space and competitions among themselves heronry extended into other parts (L-2-L-4). *Salvadora oleifera* is a medium sized tree which is well distributed in Khargone and other part of West Nimar but growing near old hospital area (L-2 of table-1) as woody climber. This plant was also selected for nesting by Egrets.

Present study supports the statement of Patel et.al.¹ that the traditional heronries prefer "a safe nesting site" with abundance of food availability and other suitable conditions. They also think that women and children are commonest enemies of the nests. But we disagree with this statement. Subramanya² reported 53% of the nesting sites of heronries either within or close to human habitation. However we suggest that traditional heronries are safe as people of the society including men, women and children do not mind such habitats. Secondly the present heronry is situated in the mid part of the city facing noise pollution of vehicles therefore reason of noise pollution should not be the cause of large heronry as pointed out in case of Atul

chemical industrial complex¹. They could not find any nest on Eucalyptus, Mango and Mast trees however we recorded 9, 28 and 6 nests on these plants respectively and even on plants like Bougainvillea and Casuarina which are not very dense. Similarly Mashru¹⁰ reported few other trees therefore we can say that selection of plants during breeding season is secondary than safe nesting place with abundant food.

Conclusion

Preliminary study shows important information about these ecologically important creatures therefore detailed investigations of these heronries should be worked out in this eco-region which has been neglected so far.

Table-1
Survey of Heronry at Khargone, MP, India

S. no.	Place/ Locality	Name of Tree	Family	Total number of plants	Total no. of nests	Total no. of nests of Cattle Egret/Little Egret	Total no. of nests of Little Cormorant/ Indian Shag
1	TNT Complex (L-1)	<i>Eucalyptus kamaldulensis</i>	Myrtaceae	01	09	09	00
2		<i>Leucaena leucocephala</i>	Mimosaceae	03	15	05	10
3		<i>Mangifera indica-</i>	Anacardiaceae	02	28	23	05
4		<i>Albizia lebback</i>	Mimosaceae	01	05	00	05
5		<i>Acacia nilotica-</i>	Mimosaceae	01	20	20	00
6		<i>Azadirachta indica-</i>	Meliaceae	04	34	34	00
7		<i>Bambusa sp</i>	Poaceae	02	09	09	00
8		<i>Casuarina equisetifolia</i>	Casuarinaceae	01	09	09	00
9		<i>Polyalthia longifolia</i>	Annonaceae	02	06	06	00
10		<i>Bougainvillea spectabilis</i>	Nyctaginaceae	01	05	05	00
11		<i>Millingtonia hortensis</i>	Bignoniaceae	01	05	05	00
12		<i>Pithecelobium dulce</i>	Mimosaceae	06	144	144	00
13		<i>Emblica officinalis</i>	Euphorbiaceae	01	25	25	00
14		<i>Moringa oleifera</i>	Moringaceae	02	09	09	00
15		<i>Tamarindus indica</i>	Caesalpiniaceae	01	01	01	00
16		<i>Ficus benghalensis</i>	Moraceae	01	39	20	19
17		<i>Psidium guajava</i>	Myrtaceae	01	02	02	00
18		<i>Ficus religiosa</i>	Moraceae	02	25	00	25
19		<i>Sterculia urens</i>	Sterculiaceae	01	01	01	00
20	Old Hospital /Tahsil Parisar /(L-2)	<i>Salvadora oleioides</i>	Salvadoraceae	01	27	27	00
21		<i>Azadirachta indica</i>	Meliaceae	04	38	38	00
22		<i>Pithecelobium dulce</i>	Mimosaceae	01	20	20	00
23	Radha Vallabh Market/ (L-3)	<i>Azadirachta indica-</i>	Meliaceae	03	52	52	00
24	Govt. P.G.P. College Campus/ (L-4)	<i>Prosopis zyliflora - 01</i>	Mimosaceae	01	23	23	00

References

1. Petel P., Patel N. and Jat M., Survey of Heronry at Atul Chemical Industrial Complex, **40(2)**, 15-17 (2000)
2. Subramanya S., Distribution, status and conservation of Indian Heronries, *J. Bombay nat.Hist.Soc.*, **93(3)**, 459-486 (1996)
3. Burnett J.H., Photographing a colony of egrets (*Bubulcus ibis* and *Egretta garzetta*) in Assam, *J. Bombay nat. Hist. Soc.*, **55**, 565-566 (1959)
4. Johnson J.M., The heronry at Koonthakulam, Tirunelveli district, Tamil Nadu, *Newsletter for Birdwatchers* **11(8)**, 1-3 (1971)
5. Chhaya Y.H., Breeding colony of Waterbirds near Seelaj, *Newsletter for Birdwatchers*, **20(4)**, 12-13 (1980)
6. Krishnan M., The availability of nesting materials and nesting sites as vital factors in gregarious breeding of Indian water-birds, *J. Bombay nat. Hist. Soc.*, **77**, 1143-1152 (1980)
7. Mahabal A., Heronries of Raigad District, Maharashtra-a preliminary survey, *J. Bombay nat. Hist. Soc.*, **87**, 137-138 (1990)
8. Uthaman P.K., Breeding of egrets in Kerala, *J. Bombay nat. hist. Soc.*, **87**, 139 (1990)
9. Uttangi J.C., Save the heronry at Mathikere, *Newsletter for Birdwatchers*, **38(6)**, 104-105 (1998)
10. Mashru A., Heronries around Rajkot city, Gujrat, *Newsletter for Birdwatchers*, **44(5)**, 74-75 (2004)