

# Heronry Survey

Methodology  
&  
Data entry

# Appendix 1.

## HERONRY CENSUS FOR KERALA, PROTOCOL

### Introduction

Heronries are communal nesting places of large waterbirds, mainly belonging to the families Ardeidae, Phalacrocoracidae and Anhingidae. Kerala has about 15 species of resident and breeding waterbirds, many of which establish mixed colonies at the time of breeding. Protection of heronries is very important for the conservation and management of these species, many of which are an integral part of our agricultural ecosystem. Documentation of these heronries, information on the species breeding within our area and knowledge of the current status of our heronries are the first basic steps in the direction of chalking out a conservation strategy regarding these birds.

### Objectives

1. To identify the nesting sites of colonial waterbirds in Kerala
2. To estimate the number of breeding pairs of each species of waterbird in the state.
3. To identify the site preference of the heronries
4. To understand the nest-tree preference of the waterbirds.
5. As the census advances in the coming years, clutch size, brood size, reproductive success, nest survivorship and more details on the breeding biology of each species could be studied.

## Methods

**a. Season:** The heronries in Kerala are generally active since May, prior to the onset on South-West Monsoon and breeding will continue till October. July – August could be considered as the peak breeding season. The census should be done in the **last week of July and the first week of August**. This will give three weekends so that the volunteers will be able to count all the heronries in a locality. As the participation of the count and general interest in heronries increase in the coming years, hopefully, we can think of three repeated counts in May, July and October which may reveal interesting information.

**b. Locating the heronries:** First, look for the known heronries. A more or less comprehensive list of heronries is already available for five northern districts (Kasaragode, Kannur, Kozhikode, Malappuram and Wayanad) of Kerala and a similar list has to be prepared for the remaining districts also through the regional coordinators. **A very useful way to gather information is to give a press release on the census and an appeal for information with the telephone number of the coordinator for contact.** This should be done by all regional coordinators in the leading dailies.

**c. What to record:** During the census, each of the heronries has to be visited and all information on the number of nests of each species, details of the location, information of the nest tree (species, height etc.) are to be noted in the prescribed **data sheet**. The history of the heronry (whether new, or if already existing, for how many years), disturbances and threats, if any, also are to be noted. Whenever possible, ensure the participation of the local people and with this interaction, the problems of the heronry and the problems faced by the local people from the heronry can be understood. The overall predominant nesting stage of the heronry also needs to be noted - it could be one of these, viz. Pre-nesting, Nest-building, Incubating Eggs, Nestlings or Recent Fledglings.

In many heronries, which are located in human habitations (house, bus stop, market places etc.) the local people try to drive away the nesting birds because the bird droppings and falling food from the nest are a big nuisance to them. Putting up a plastic sheet, tarpaulin or thatch below the nest tree during the breeding season has proven to be very effective when tried in some heronries. The Forest Department will be able to do this if we can clearly suggest the heronries where this initiative is needed. This has to be kept in mind while conducting the census and please make it a point to measure the area below the nest tree(s) to be covered and should be noted down in the datasheet under "Possible Conservation Action". Feel free to add additional sheets showing a plan of the heronry and where to put the temporary roof.

Nest trees situated within 200 m are to be considered as belonging to a single heronry cluster and the data has to be entered in a single datasheet. In case of any doubt (use your discretion), treat them as different heronries and clustering can be done back from field in consultation with regional coordinator.

## **Preparation & Training**

The regional coordinator has to identify birdwatchers who will volunteer to count the nests in the heronries in their locality in all the districts of Kerala so as to get maximum coverage. Data sheets to record the information with necessary instructions and contact numbers of the Forest Dept. personnel of the respective area to provide logistic support, transportation etc. have to be sent to the participants by April itself. It would be a good idea to convene a meeting of the regional coordinator, prospective participants and the forest department personnel and explain in detail.

# Heronry Data Sheet

2	Name of the place where Heronry is situated	
3	Location (Road, Village/Town)	
4	District	
5	Date of Survey	
6	Start Time of the Survey (in 24H format)	
7	End Time of the Survey (in 24H format)	
8	Latitude (e.g. 12.25)	
9	Longitude (e.g. 78.05)	
10	Predominant Nesting Stage	
11	Habitat (Wetland, Roadside, Mangrove, Forest, Residential Compound, Non-residential Compound, Others)	
12	Disturbance and threats (Natural predation, Crackers,	
13	Possible Conservation Action (Use Additional Sheets if required)	
14	Age of the Heronry (in years)	
15	Name(s) of the Survey Team	
16	Email Address of the Contact Person	
17	Phone Number of the Contact Person	



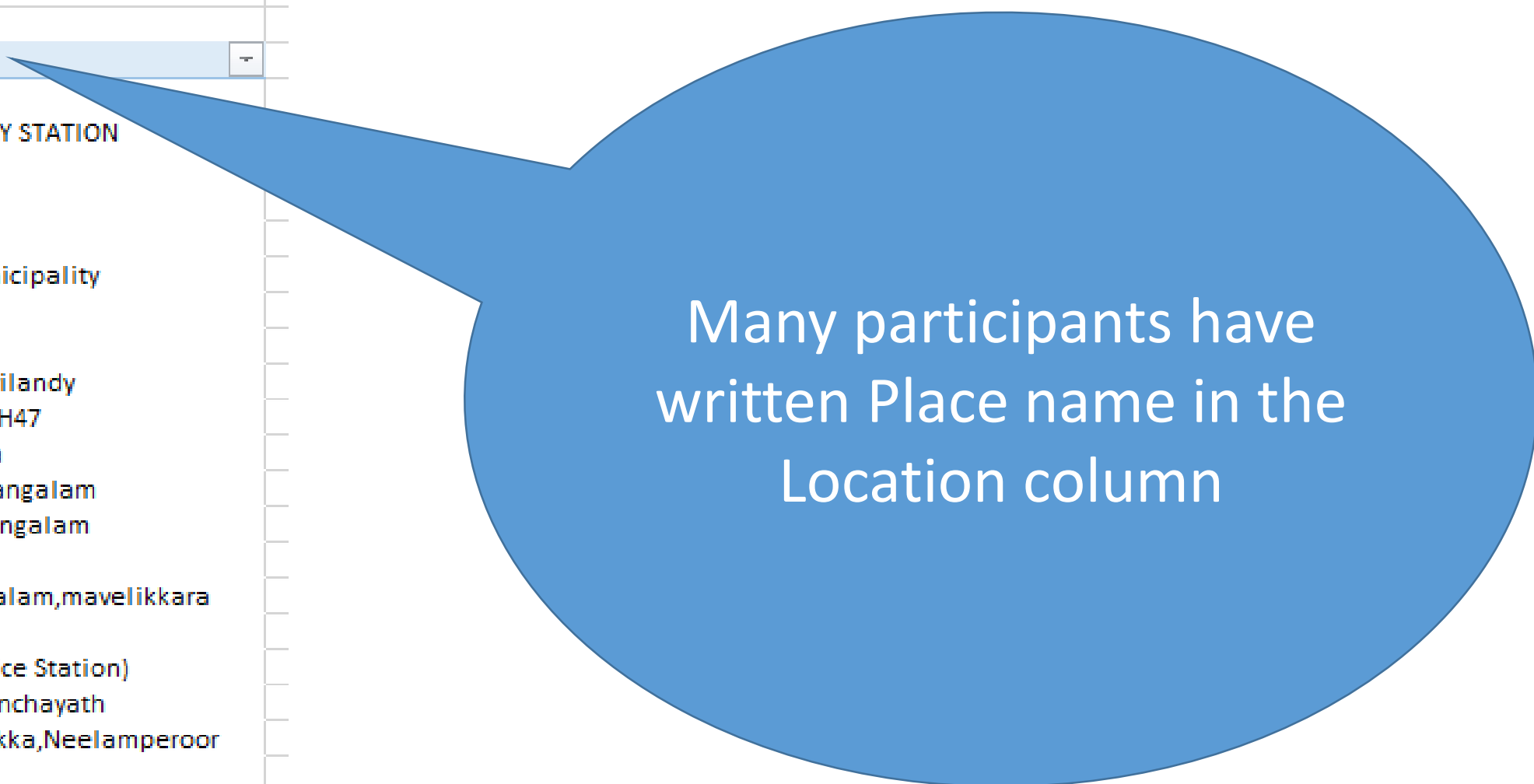
19	No	Species of Nest Tree	Height of the nest tree (meters)	Bird Species	No of nests	Owership (address of owner) of land where Nest tree stands
20	1					
21	2					
22	3					
23	4					
24	5					
25	6					
26	7					

	A	B	C	D	E	F
1	<b>Heronry Data Sheet</b>					
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18						

**Write road, town, village or wherever the nest tree is situated, not the name of the place.**

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19						
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21	2					
22	3					
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24	5					
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26	7					

1	
2	
3	Row Labels
4	11.89
5	ROAD - RAILWAY STATION
6	Adakkaputhur
7	Adichira
8	Alappuzha
9	alappuzha municipality
10	Alathur
11	Alungal
12	Anackulam, Koyilandy
13	Anakkappara NH47
14	Anakkuzhikkara
15	Anjumoorthi mangalam
16	Anjumoorthimangalam
17	Areekkadu
18	Arunoottimangalam,mavelikkara
19	Athipotta
20	Balusserry (Police Station)
21	Bhudhanoor Panchayath
22	Chakkachampakka,Neelamperoor
23	Cheruvannur
24	Chithali
25	Choorakodu Palam
26	East Nadakkavu
27	Eranhippalam Junction
28	Feroke chungam
29	Feroke Petta
30	House compound



Many participants have written Place name in the Location column



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The different types of nesting stages has been given in the filter

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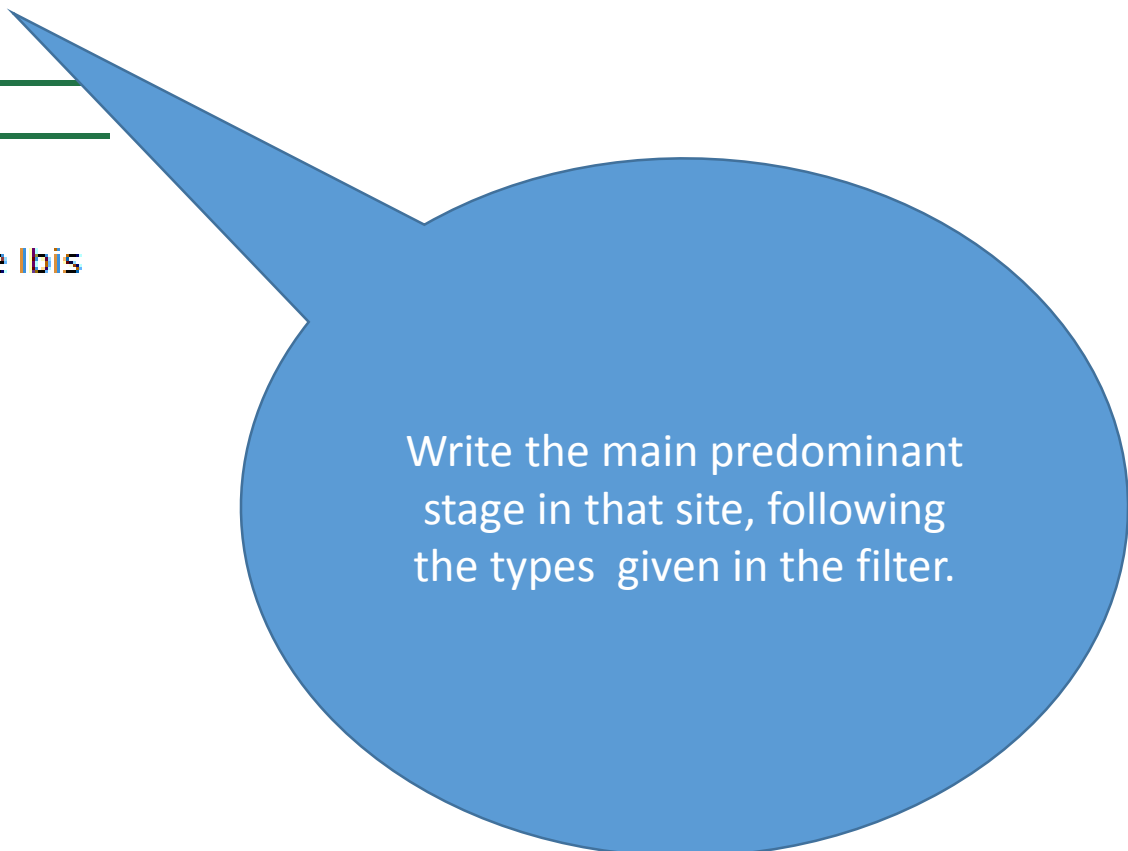
	A	B	C	D
1	<b>Species</b>	<b>Reproductive Stage</b>	<b>Districts</b>	<b>Habitat</b>
2	Painted Stork	Pre-nesting	Kasaragod	Wetland
3	Asian Openbill	Nest-building	Kannur	Roadside
4	Woolly-necked Stork	Incubating Eggs	Wayanad	Mangrove
5	Lesser Adjutant	Nestlings	Kozhikode	Woodland
6	Black-headed Ibis	Recent Fledgings	Malappuram	Residential Compound
7	Red-naped Ibis		Palakkad	Non-residential Compound
8	Glossy Ibis		Thrissur	Others
9	Eurasian Spoonbill		Ernakulam	
10	Black-crowned Night-heron		Idukki	
11	Indian Pond-heron		Kottayam	
12	Cattle Egret		Alappuzha	
13	Grey Heron		Pathanamthitta	
14	Purple Heron		Kollam	
15	Great Egret		Thiruvananthapuram	
16	Intermediate Egret			
17	Little Egret			
18	Spot-billed Pelican			
19	Little Cormorant			
20	Indian Cormorant			
21	Great Cormorant			
22	Oriental Darter			
23	Unidentified Cormorants			

Filters (Do not Edit)

Flat List (Do not Edit)



2	
3	Row Labels
4	23
5	Chicks
6	Different Stage
7	Different Stages
8	Feeding chicks
9	Feeding chicks
10	Fledgelings
11	Fledgelings for Little Cormorant and Little Egret, Nest building of Oriental White Ibis
12	Fledgling Stage
13	Fledglings
14	Fledlings
15	Fledlings, Nestlings, Incubating
16	incubating
17	Incubating and feeding
18	Incubating and young ones
19	Incubating Eggs
20	Incubating,Feeding
21	incubating,nest building
22	Incubation
23	Incubating and nestling
24	Mixed
25	Nest building & Incubation
26	nest building and incubating
27	Nest bulding and incubating
28	nestbulding,incubating ,and youngones seen in few nests
29	Nesting ,incubating,Feeding
30	Nestlings



Write the main predominant stage in that site, following the types given in the filter.

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Write the major habitat type

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7	Hospital compound	75
8	House compound	2
9	Island in Bharathapuzha River	25
10	Island in River	648
11	Mangrove	498
12	MSP compound and Road side	203
13	Non residential Compound.	8
14	Non-Residential Compound	
15	On a BSNL Tower	1
16	Others	13
17	Railway Compound	52
18	Railway station compound and premises	443
19	Railway Station premises	134
20	residential	6
21	Residential Compound	705
22	Residential Compound and bus stand	46
23	residential compound near water body	89
24	Road side	2188
25	Road side, Police station compound	32
26	Road side/riverbank	123
27	Roadside	3903
28	Roadside	11
29	Roadside & Private house compound	58
30	roadside residential compound near wetland	206
31	Roadside, Residential compound	7
32	sacred grove	22
33	Temple compound	177
34	wetland ,an island	89
35	Wetland side	46
36	wetland mangroves	158



Examples of the data entered.

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Write standard common names

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9	Cattle Egret
10	Great Cormorant
11	Great Egret
12	Grey Heron
13	Indian Cormorant
14	Indian Pond Heron
15	Indian Pond-Heron
16	Indian Pond-Heron, Little Cormorant
17	Intermediate Egret
18	Large Egret
19	Little Cormorant
20	Little Cormorant
21	Little Cormorant, Indian Pond-Heron
22	Little Coromrant
23	Little Egret

See how the names have been entered!!!

Nightmare for the person analyzing the data!!!!



# 1 Heronry Data Sheet

Any more clarification needed?

11 Habitat (Mangrove, Forest, Residential Compound, Non-residential Compound, Others)

12 Disturbance and threats (Natural predation, Crackers,

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Thank

You