

# The Great Backyard Bird Count February 2017

## Kalivelli Lake and Ousteri Bird Sanctuary



Photo credit: Victor Mukherjee

*The Great Backyard Bird Count or GBBC is described as "The first on line citizen-science project to collect data on wild birds and to display results in near real-time. Since then, more than 100,000 people of all ages and walks of life have joined the four-day count each February to create an annual snapshot of the distribution and abundance of birds." It was launched in 1998 by the Cornell Lab of Ornithology and National Audubon Society.<sup>1</sup>*

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<sup>1</sup><http://gbbc.birdcount.org/>

# Introduction

The Great Backyard Bird Count<sup>2</sup> (GBBC) is the largest birding event in the world in which 2,14,018 volunteers from 147 countries participated in 2017. This was the 20th year of the event globally and the fourth year in India. GBBC India<sup>3</sup> is the Indian implementation of the global Great Backyard Bird Count, which runs for four days every February.

The GBBC at Pondicherry was Conducted between the 17th and 20th of February in three of the largest water bodies in the region, namely the Kalivelli, Ousteri and Bahour lake. All three water bodies attract a host of migratory species of birds during the winter, in addition to a large number of resident species. The more spectacular of these include the Greater Flamingo (*Phoenicopterus roseus*), Painted Storks (*Mycteria leucocephala*), the Spot Billed Pelican (*Pelecanus philippensis*) various raptors including the Eurasian Kestrel (*Falco tinnunculus*), the Eurasian Marsh Harrier (*Circus aeruginosus*) and the Pallid Harrier (*Circus macrourus*) and a variety of ducks including Garganey (*Anas querquedula*), Ruff (*Philomachus pugnax*), Eurasian Wigeon (*Anas penelope*) and Spot billed duck (*Anas poecilorhyncha*).

The event was attended by 30, 9 and ## persons at Kalivelli, Ousteri and Bahour lakes respectively. This included ## students from # schools, ## volunteers and ## students from Pondicherry University. The main resource persons for the event were students from Pondicherry University, mainly from the Dept. of Ecology and Environmental Sciences. Permissions to conduct the event were extended by the Department of Forests from both Tamil Nadu and Pondicherry. FERAL coordinated the event at Kalivelli and Ousteri while the CERD coordinated the event at the Bahour Lake. A total of 48 and 28 species were identified at Kalivelli and Ousteri. Four teams conducted the count at Kalivelli and three at Ousteri at different locations between the 18th and 19th of February. This year, the event was opened to schools for the first time and students participated enthusiastically. We intend to build upon this in future iterations of the GBBC. A split between the awareness/outreach and survey is being considered.

This report cover the bird counts held at Kalivelli and Ousteri lakes.

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<sup>2</sup><http://gbbc.birdcount.org/>

<sup>3</sup><https://birdcount.in/event/gbbc2017/>

# Kalivelli

## Location

Located just ## km North of Pondicherry town and just south of the town of Marakannam, Kalivelli is a designated bird Sanctuary and wetland covering about 40 sq.km. Kalivelli lies in the Villupuram district of Tamil Nadu. The fresh water lake receives water from a chain of minor irrigation tanks in largely agricultural watersheds which is discharged into the Ediyanthittu estuary via a thin neck called the Uppukalli creek. The vegetation around the wetland comprises tall reeds and grasslands. There are agricultural fields further into the periphery of the lake and small patches of native tropical dry evergreen forests either in reserve forests or sacred groves. Students from Pondicherry University, Gandhi Higher Secondary School Thiruchtrambalam Kootroad, Volunteers from Auroville and members of FERAL took part in surveying four regions of the wetland.



Location of the counts at Kalivelli.

## Observations

A total of 48 species were observed of which the most individuals comprised of Northern Shoveler (*Anas clypeata*) followed by Spot-billed Pelican (*Pelecanus philippensis*), Intermediate Egret (*Mesophoyx intermedia*) and Painted Stork (*Mycteria leucocephala*). Given the sheer size of the wetland, these observations comprised of individuals within a few hundred metres of the bird watchers. There were carpets of ducks and flamingos out of the range of the binoculars which were not included into the count.



Black Tailed Godwit (left) and the Northern Shoveller, in Kaliveli. Photo credit: Victor Mukherjee

## Concerns

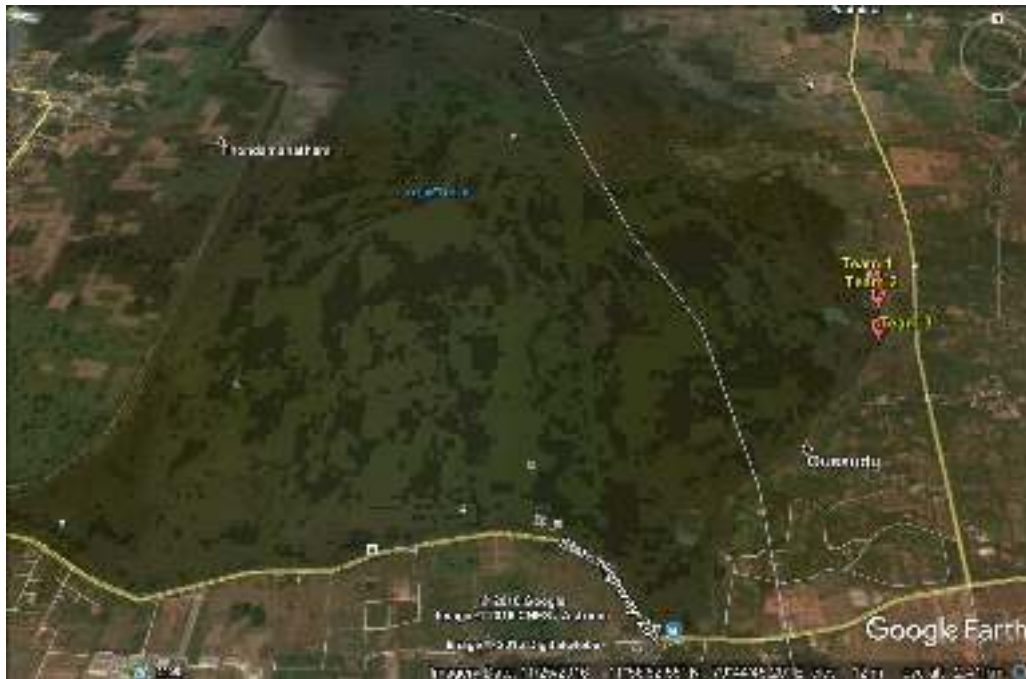
A number of paddy fields along the creek and in the periphery of the wetland have been converted into shrimp farms in the past decade. This has received a sudden increase since the past year. All these aquaculture farms utilise the wetland both as a source of water and for their discharge. This alters the environmental conditions in the wetland causing an increase in salinity, nutrients and chemicals utilised to control diseases and encourage growth, including probiotics and growth hormones.

An additional cause for concern is the increased abundance of the exotic invasive *Prosopis juliflora* both in the periphery as well as in the water-spread area of the wetland.

# Ousteri

## Location

The Ousteri Bird Sanctuary falls in both Pondicherry and Tamil Nadu. This large irrigation tank measuring about 400ha is fed from a free catchment of 15.4km<sup>2</sup> but is mostly reliant on surplus flows diverted from the Veedur dam. It has been perennial since 2004, although it exhibited seasonality until 2003 with the driest months being June to September<sup>(1)</sup>. The lake lies about 10km west of Pondicherry town and is bordered on its southern side by a highway and on the other sides by primarily agricultural areas and farm houses.



Location of the bird counts at Ousteri.



## Observations

A total of 28 species of birds were observed at Ousteri, where the count was limited to the eastern edge of the lake due to fewer participants. Most of the individuals recorded were Black-winged Stilt, Purple Swamphen (*Porphyrio porphyrio*) and Little Egret (*Egretta garzetta*). The bird count was led by volunteers from Auroville and students from Pondicherry University with other participants from FERAL and a few school students.



Mixed flock in Ousteri lake. Photo credit: Victor Mukherjee

## Concerns

The growth of tourism in Pondicherry has had its impacts on the lake. These include direct disturbance due to boating and un-checked tourist activities. Another evident threat to the bird life is fishing activities. Abandoned nets as well as nets deliberately left overnight often trap and drown waterbirds. Finally, the invasion of *Ipomea aquatica*, and exotic species, is choking out natural vegetation.



A dead spot billed duck, probably drowned by a fishing net left overnight. The fisherfolk collect their nets and catches in the morning, throwing the dead birds aside.

# Bibliography

- [1] B. Anjan Kumar Prusty, PR Arun, S Bhupathy, M Murugesan, Rachna Chandra. 2011. 'Comprehensive Management Action Plan for Conservation of Ousteri Lake, Puducherry'. Sálim Ali Centre for Ornithology and Natural History (SACON), Moongilpallam, Anaikatty (PO), Coimbatore - 641108, Tamil Nadu.



# Appendix I - List of species

## Kalivelli Lake

Sl.no	Species	Team 1	Team 2	Team 3	Team 4	Total
1	Ashy-crowned Sparrow-Lark ( <i>Eremopterix griseus</i> )	0	2	0	1	3
2	Asian Openbill ( <i>Anastomus oscitans</i> )	15	0	0	0	15
3	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )	0	1	0	3	5
4	Barn Swallow ( <i>Hirundo rustica</i> )	5	4	0	3	14
5	Black Drongo ( <i>Dicrurus macrocercus</i> )	0	1	0	1	2
6	Black-headed Ibis ( <i>Threskiornis melanocephalus</i> )	10	16	76	92	194
7	Black-shouldered Kite ( <i>Elanus caeruleus</i> )	0	0	1	2	3
8	Black-winged Stilt ( <i>Himantopus himantopus</i> )	0	0	40	38	78
9	Common Kingfisher ( <i>Alcedines</i> )	0	0	0	2	2
10	Common Sandpiper ( <i>Actitis hypoleucos</i> )	0	3	13	22	38
11	Common Snipe ( <i>Gallinago gallinago</i> )	0	1	0	1	2
12	Common Tern ( <i>Sterna hirundo</i> )	0	1	1	0	2
13	Crow sp. ( <i>Corvus sp. (crow sp.)</i> )	22	0	20	10	52
14	Eurasian Curlew ( <i>Numenius arquata</i> )	1	0	8	0	9
15	Eurasian Kestrel ( <i>Falco tinnunculus</i> )	0	0	1	0	1
16	Eurasian Marsh Harrier ( <i>Circus aeruginosus</i> )	0	1	8	0	9
17	Eurasian Marsh Harrier ( <i>Circus aeruginosus</i> )	0	1	5	3	8
18	Garganey ( <i>Anas querquedula</i> )	12	0	0	0	12
19	Great Egret ( <i>Ardea alba</i> )	21	5	100	1	127
20	Gray Heron ( <i>Ardea cinerea</i> )	10	1	29	29	69
21	Greater Flamingo ( <i>Phoenicopterus roseus</i> )	0	90	204	195	489
22	Indian Cormorant ( <i>Phalacrocorax fuscicollis</i> )	0	56	51	15	122
23	Indian Cormorant ( <i>Phalacrocorax fuscicollis</i> )	40	0	5	0	45
24	Indian Cormorant ( <i>Phalacrocorax fuscicollis</i> )	369	43	52	155	619
25	Jerdon's Bushlark ( <i>Mirafra affinis</i> )	0	1	0	2	3
26	Little Cormorant ( <i>Phalacrocorax niger</i> )	19	0	33	62	114
27	Little Cormorant ( <i>Phalacrocorax niger</i> )	40	0	4	32	76

Sl.no	Species	Team 1	Team 2	Team 3	Team 4	Total
28	Little Cormorant ( <i>Phalacrocorax niger</i> )	36	55	385	445	921
29	Oriental Darter ( <i>Anhinga melanogaster</i> )	0	0	66	4	70
30	Oriental Skylark ( <i>Alauda gulgula</i> )	0	0	4	0	4
31	Painted Stork ( <i>Mycteria leucocephala</i> )	106	37	52	110	305
32	Pallid Harrier ( <i>Circus macrourus</i> )	0	1	0	1	2
33	Pied Kingfisher ( <i>Ceryle rudis</i> )	2	0	2	1	5
34	Pied Kingfisher ( <i>Ceryle rudis</i> )	10	0	1	5	16
35	Red-rumped Swallow ( <i>Cecropis daurica</i> )	0	18	5	12	35
36	Red-wattled Lapwing ( <i>Vanellus indicus</i> )	0	0	4	12	16
37	Spot-billed Pelican ( <i>Pelecanus philippensis</i> )	48	7	334	340	729
38	Spotted Dove ( <i>Streptopelia chinensis</i> )	22	1	23	2	48
39	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )	0	2	1	1	4
40	Wood Sandpiper ( <i>Tringa glareola</i> )	9	0	1	1	11
41	Little Stint ( <i>Calidris minuta</i> )	15	0	0	0	15
42	Eurasian Wigeon ( <i>Anas penelope</i> )	12		4	8	24
43	Ruff ( <i>Philomachus pugnax</i> )	12	0	0	0	12
44	Tern ( <i>Sternidae</i> )	15	4	4	17	40
45	Zitting Cisticola ( <i>Cisticola juncidis</i> )	4	0	0	5	9
46	Zitting Cisticola ( <i>Cisticola juncidis</i> )	0	1	0	0	1
47	Brahminy Kite ( <i>Haliastur indus</i> )	0	0	0	1	1
48	Curlew ( <i>Numenius</i> )	0	0	0	4	4
49	Darter ( <i>Anhinga</i> )	0	0	0	33	33
50	Sky lark ( <i>Alauda arvensis</i> )	0	0	0	2	2
51	Gull billed tern ( <i>Gelochelidon nilotica</i> )	0	0	0	2	2
52	Indian Bushlark ( <i>Mirafra erythroptera</i> )	0	0	0	1	1
53	River tern ( <i>Sterna aurantia</i> )	0	0	0	1	1
54	Spot billed duck ( <i>Anas poecilorhyncha</i> )	0	0	3	25	28
55	Whiskered tern ( <i>Chlidonias hybrida</i> )	0	0	0	4	4
56	Whiskered tern ( <i>Chlidonias hybrida</i> )	0	0	0	1	1
57	Pond Heron ( <i>Ardeola</i> )	0	0	0	5	5
58	Acrocephalm Sp.	0	0	0	1	1

## Ousudu Lake

Sl.no	Species	Team 1	Team 2	Team 3	Total
1	Ashy-crowned Sparrow-Lark ( <i>Eremopterix griseus</i> )	0	0	2	2
2	Asian Openbill ( <i>Anastomus oscitans</i> )	0	0	1	1

Sl.no	Species	Team 1	Team 2	Team 3	Total
3	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )	0	0	4	4
4	Barn Swallow ( <i>Hirundo rustica</i> )	8	0	0	8
5	Black Drongo ( <i>Dicrurus macrocerus</i> )	0	0	2	2
6	Black-winged Stilt ( <i>Himantopus himantopus</i> )	27	2	1	30
7	Blue Tailed Bee Eater	5	5	5	15
8	Blyth's reed warbler	0	0	5	5
9	Common Kingfisher ( <i>Alcedines</i> )	4	0	3	7
10	Common Myna	0	5	0	5
11	Crow sp. ( <i>Corvus sp. (crow sp.)</i> )		61		61
12	Eurasian Curlew ( <i>Numenius arquata</i> )	0	0	2	2
13	Eurasian Marsh Harrier ( <i>Circus aeruginosus</i> )	0	1	1	2
14	Gray wagtail	0	0	2	2
15	Gray Heron ( <i>Ardea cinerea</i> )	0	0	3	3
16	Indian Cormorant ( <i>Phalacrocorax fuscicollis</i> )	3	0	1	4
17	Indian Pond Heron	4	0	5	9
18	Indian Roller ( <i>Coracias benghalensis</i> )	0	0	1	1
19	Little tern	0	0	5	5
20	Paddy field pipit	0	0	5	5
21	Pheasant tailed Jacana	0	5	5	10
22	Purple Heron	7	0	5	12
23	Purple Swamphen ( <i>Porphyrio porphyrio</i> )	15		10	25
24	Red-vented Bulbul ( <i>Pycnontus cafer</i> )	0	0	10	10
25	Red-rumped Swallow ( <i>Cecropis daurica</i> )	0	0	6	6
26	Rosy Starling	0	0	200	200
27	Spot billed pelican ( <i>Pelecanus philippensis</i> )	3	0	3	3
28	Spot billed duck ( <i>Anas poecilorhyncha</i> )	3	0	4	7
29	White-throated kingfisher	1	0	3	4

## Appendix II - List of participants

1. Abhijit Dey (Pondicherry University)
2. Victor (Pondicherry University)
3. Arjun Kannan (Pondicherry University)
4. Girija Sankar Samal (Pondicherry University)
5. Atmeeya Uday Nayak (Pondicherry University)
6. Jabir A. (Pondicherry University)
7. Madhuraj (Pondicherry University)
8. Joanica (Pondicherry University)
9. Ujali Shirodkar (Pondicherry University)
10. Arvind P.S. (Pondicherry University)
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12. Kumaran.K (FERAL)
13. Veeraragavan (Teacher – (Gandhi Higher Secondary School, T.C.Kootroad)
14. Gautham (Gandhi Higher Secondary School, T.C.Kootroad)
15. Dinakaran (Gandhi Higher Secondary School, T.C.Kootroad)
16. Sriman (Gandhi Higher Secondary School, T.C.Kootroad)
17. Sanjay (Gandhi Higher Secondary School, T.C.Kootroad)
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19. Pannir (Gandhi Higher Secondary School, T.C.Kootroad)
20. Murugan (Gandhi Higher Secondary School, T.C.Kootroad)
21. Gowsik (Gandhi Higher Secondary School, T.C.Kootroad)
22. Muneesan (Gandhi Higher Secondary School, T.C.Kootroad)
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