

Birds of Rampara Wildlife Sanctuary, Gujarat

KETAN BHALODIA¹, S.M. DAVE³, V.C. SONI¹, TUSHAR SANGHANI² and VINOD PANDIA²

¹Department of Biosciences, Saurashtra University, Rajkot-360 005;

²NICE PEOPLE, 'Natraj', 3 / Bhaktinagar, Rajkot-360 002; and

³Department of Biotechnology, Hemchandracharya North Gujarat University, Patan- 384 265 (Gujarat).

E-mail : davesanjay@gmail.com

There are 8,600 species of birds all over the world, of which 1,200 species occur in the Indian subcontinent (Ali & Ripley, 1983). Total 454 species of birds are reported from Gujarat (Pilo & Pathak, 1996), which form 37.83% of the total avifauna of India. The abundance of various bird species at a place determines the part of biodiversity and the fluctuations in species composition signify the adaptation of the species for its existing environment.

Study Area

Rampara Wildlife Sanctuary (RWS) (Fig. 1) is located between 22°31'82" N to 22°34'88" N latitude and 70°55'54" E to 70°58'59" E longitude, in Wankaner taluka of Rajkot district in Saurashtra peninsula. The sanctuary is a compact block of 1501 ha area. The highest peak in the sanctuary is 216 m above msl. The average altitude of the sanctuary is about 150 m above msl.

Climate : The climate of the sanctuary is tropical and semi-arid. During monsoon season, rainfall duration in the area is short and rainy days are few, having a mean of 26 rainy days in the entire season. However, the area is drought-prone and variation in rainfall from year to year is considerable. The average annual rainfall of the area is 549 mm. During winter season, January is the coldest month and minimum temperature is 10°C. In the summer season, hot days generally occur in the month of May-June when temperature rises to 41°C.

Water : Water remains in some pockets and nallahs only up to winter. Water scarcity is the main shortcoming of the habitat as not a single water hole persists upto summer. More than half a dozen check dams have been constructed across nallahs by the Forest Department of Gujarat. The check dams of the sanctuary provide suitable habitat for water birds.

General Vegetation : Rampara had a mixed dry deciduous forest, scrub forest and savannah type vegetation. It has taken a shape of thorny forest after notification of the sanctuary. Singh & Tatu (1999) recorded 265 species of plants in the sanctuary, which includes 52 tree species, 39 shrub species, 39 grass species, 41 species of climbers, twiners and creepers and 94 species of herbs. *Acacia senegal*, *A. nilotica*,

Phoenix sylvestris, *Butea monosperma*, *Cassia auriculata*, *Zizyphus nummularia* are dominant tree species of the sanctuary.

Methodology

The study was carried out from February 1998 to January 1999. Usually one visit was conducted every month. Binoculars (7x 50) were used to identify and count the birds. Bird's counts were generally done visually. Status is shown with following abbreviation: R= Resident; RM = Resident with migratory habits; and M = Migratory.

Results and Discussion

Birds of RWS are represented by 115 species belonging to 16 orders and 42 families (Table 1), which is 25.33 % of total avifaunal species found in Gujarat (454). Status wise, 76 species (66.08%) are residents, 28 species (24.35) are residents with migratory habit, and 11 species (9.57%) are migratory (Table 2). Out of total 90 species of terrestrial birds in the sanctuary, 63 (70%) are resident, six (6.67%) are migratory, whereas 21 (23.33%) are resident migrant birds for the Indian sub-continent. Thus, the proportion of resident species is the highest comparing with migratory and resident

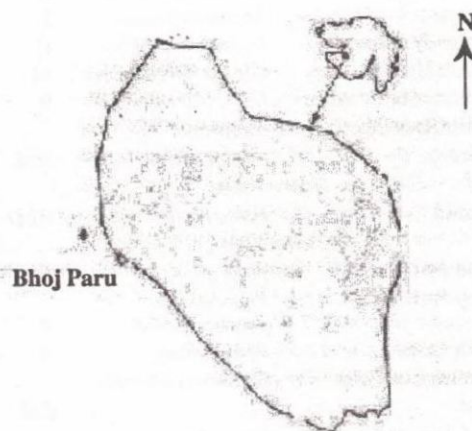


Figure 1. Map showing Rampara Wildlife Sanctuary. (Map not to the scale).

Table 1. Check list of birds in the Rampara Wildlife Sanctuary, Gujarat.

Common Name	Scientific Name	Status
Podicipedidae		
1 Little Grebe	<i>Tachybaptus ruficollis</i>	R
Phalacrocoracidae		
2 Little Cormorant	<i>Phalacrocorax niger</i>	RM
Ardeidae		
3 Cattle Egret	<i>Bubulcus ibis</i>	RM
4 Little Egret	<i>Egretta garzetta</i>	R
5 Pond Heron	<i>Ardeola grayii</i>	R
6 Grey Heron	<i>Ardea cinerea</i>	RM
7 Night Heron	<i>Nycticorax nycticorax</i>	R
Ciconiidae		
8 Whiteneked Stork	<i>Ciconia episcopus</i>	R
9 Black Stork	<i>Ciconia nigra</i>	M
Threskiornithidae		
10 White Ibis	<i>Threskiornis aethiopica</i>	R
11 Black Ibis	<i>Pseudibis papillosa</i>	R
Anatidae		
12 Spotbill or Grey Duck	<i>Anas poecilorhyncha</i>	RM
13 Shoveller	<i>Anas clypeata</i>	M
14 Nakta or Comb Duck	<i>Sarkidiornis melanotos</i>	R
15 Common Teal	<i>Anas crecca</i>	M
Accipitridae		
16 Osprey	<i>Pandion haliaetus</i>	RM
17 Common Pariah Kite	<i>Milvus migrans</i>	R
18 Blackwinged Kite	<i>Elanus caeruleus</i>	R
19 Shikra	<i>Accipiter badius</i>	R
20 White-eyed Buzzard	<i>Butastur teesa</i>	R
21 Marsh Harrier	<i>Circus aeruginosus</i>	M
22 Whitebacked Vulture	<i>Gyps bengalensis</i>	R
23 White Scavenger Vulture	<i>Neophron percnopterus</i>	RM
Falconidae		
24 Kestrel	<i>Falco tinnunculus</i>	RM
Phasianidae		
25 Common Peafowl	<i>Pavo cristatus</i>	R
26 Grey Partridge	<i>Francolinus pondicerianus</i>	R
27 Bush Quail	<i>Perdica sp.</i>	R
28 Common or Grey Quail	<i>Coturnix coturnix</i>	RM
29 Blackbreasted or Rain Quail	<i>Coturnix coromandelica</i>	R
Turnicidae		
30 Little Bustard-Quail	<i>Turnix sylvatica</i>	R
Charadriidae		
31 Red-wattled Lapwing	<i>Vanellus indicus</i>	R
32 Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	R
33 Curlew	<i>Numenius arquata</i>	M
34 Little Ringed Plover	<i>Charadrius dubius</i>	RM
Scolopacidae		
35 Marsh Sandpiper	<i>Tringa stagnatilis</i>	M
Recurvirostridae		
36 Blackwinged Stilt	<i>Himantopus himantopus</i>	R
Burhinidae		
37 Stone Curlew	<i>Burhinus oedicephalus</i>	R
Laridae		
38 River Tern	<i>Sterna aurantia</i>	R
Pteroclididae		
39 Indian Sandgrouse	<i>Pterocles exustus</i>	R
40 Painted Sandgrouse	<i>Pterocles indicus</i>	R
Columbidae		
41 Blue Rock Pigeon	<i>Columba livia</i>	R
42 Ring Dove	<i>Streptopelia decaocto</i>	R
43 Little Brown Dove	<i>Streptopelia senegalensis</i>	R
44 Red Turtle Dove	<i>Streptopelia tranquebarica</i>	R
Psittacidae		
45 Roseringed Parakeet	<i>Psittacula krameri</i>	R
46 Blossomheaded Parakeet	<i>Psittacula cyanocephala</i>	R
Cuculidae		
47 Crow-Pheasant	<i>Centropus sinensis</i>	R
48 Koel	<i>Eudynamis scolopacea</i>	R
49 Common Hawk-Cuckoo	<i>Cuculus varius</i>	R
50 Pied Crested Cuckoo	<i>Clamator jacobinus</i>	RM
Strigidae		
51 Indian Great Horned Owl	<i>Bubo bubo</i>	R
52 Spotted Owlet	<i>Athene brama</i>	R
Apodidae		
53 Indian Edible-nest Swiftlet	<i>Collocalia unicolor</i>	R
Alcedinidae		
54 Whitebreasted Kingfisher	<i>Halcyon smyrnensis</i>	R
55 Small Blue Kingfisher	<i>Alcedo atthis</i>	RM
56 Pied Kingfisher	<i>Ceryle rudis</i>	R

	Meropidae				Muscicapidae	
57	Small Green Bee-eater	<i>Merops orientalis</i>	R	84	Large Grey Babbler	<i>Turdoides malcolmi</i> R
	Coraciidae			85	Common Babbler	<i>Turdoides caudatus</i> R
58	Roller or Blue Jay	<i>Coracias benghalensis</i>	R	86	Redbreasted Flycatcher	<i>Muscicapa parva</i> M
	Upupidae			87	Tickell's Blue Flycatcher	<i>Muscicapa tickelliae</i> R
59	Hoopoe	<i>Upupa epops</i>	RM	88	Paradise Flycatcher	<i>Terpsiphone paradisi</i> RM
	Capitonidae			89	Ashy Wren-Warbler	<i>Prinia socialis</i> R
60	Crimsonbreasted Barbet	<i>Megalaima haemacephala</i>	R	90	Streaked Fantail Warbler	<i>Cisticola juncidis</i> R
	Picidae			91	Plain Wren-Warbler	<i>Prinia subflava</i> R
61	Wryneck	<i>Jynx torquilla</i>	M	92	Jungle Wren-Warbler	<i>Prinia sylvatica</i> R
62	Pigmy Woodpecker	<i>Picoides nanus</i>	R	93	Paddyfield Warbler	<i>Acrocephalus agricola</i> RM
	Alaudidae			94	Blue Rock Thrush	<i>Monticola solitarius</i> RM
63	Singing Bush Lark	<i>Mirafra javanica</i>	R	95	Blue Chat	<i>Erithacus brunneus</i> RM
64	Blackbellied Finch-Lark	<i>Eremopterix grisea</i>	R	96	Pied Bush Chat	<i>Saxicola caprata</i> R
65	Crested Lark	<i>Galerida cristata</i>	R	97	Isabelline Chat	<i>Cenanthe isabellina</i> RM
	Hirundinidae			98	Bluethroat	<i>Erithacus svecicus</i> RM
66	Dusky Crag Martin	<i>Hirundo concolor</i>	R	99	Lesser Whitethroat	<i>Sylvia curruca</i> M
67	Common Swallow	<i>Hirundo rustica</i>	RM	100	Black Redstart	<i>Phoenicurus ochruros</i> RM
68	Wiretailed Swallow	<i>Hirundo smithii</i>	R	101	Indian Robin	<i>Saxicoloides fulicata</i> R
	Daniidae			102	Desert Wheatear	<i>Oenanthe deserti</i> RM
69	Rufousbacked Shrike	<i>Lanius schach</i>	R	103	Tailor Bird	<i>Orthotomus sutorius</i> R
70	Grey Shrike	<i>Lanius excubitor</i>	RM		Motacillidae	
71	Baybacked Shrike	<i>Lanius vittatus</i>	R	104	Paddyfield Pipit	<i>Anthus novaeseelandiae</i> R
	Corvidae			105	Indian Tree Pipit	<i>Anthus hodgsoni</i> RM
72	Tree Pie	<i>Dendrocitta vagabunda</i>	R	106	Yellow Wagtail	<i>Motacilla flava</i> RM
73	House Crow	<i>Corvus splendens</i>	R	107	Forest Wagtail	<i>Motacilla indicum</i> RM
	Campephagidae			108	White Wagtail	<i>Motacilla alba</i> RM
74	Common Wood Shrike	<i>Tephrodornis pondicerianus</i>	R		Nectariniidae	
75	Blackheaded Cuckoo-Shrike	<i>Coracina melanoptera</i>	RM	109	Purple Sunbird	<i>Nectarinia asiatica</i> R
76	Small Minivet	<i>Pericrocotus cinnamomeus</i>	R		Ploceidae	
	Oriolidae			110	Baya Weaver Bird	<i>Ploceus philippinus</i> R
77	Golden Oriole	<i>Oriolus oriolus</i>	RM	111	Whitethroated Munia	<i>Lonchura malabarica</i> R
	Dicruridae			112	Spotted Munia	<i>Lonchura punctulata</i> R
78	Black Drongo	<i>Dicrurus adsimilis</i>	R	113	House Sparrow	<i>Passer domesticus</i> R
	Sturnidae			114	Yellowthroated Sparrow	<i>Petronia xanthocolis</i> R
79	Brahminy Myna	<i>Sturnus pagodarum</i>	R		Emberizidae	
80	Rosy Paster	<i>Sturnus roseus</i>	M	115	Blackheaded Bunting	<i>Emberiza melanocephala</i> M
81	Indian Myna	<i>Acridotheres tristis</i>	R			
	Irenidae					
82	Iora	<i>Aegithina tiphia</i>	R			
	Pycnonotidae					
83	Redvented Bulbul	<i>Pycnonotus cafer</i>	R			

migrant bird species. It is observed during the study period of twelve months that the sanctuary is very rich in terrestrial bird diversity and numbers due to suitable habitat for terrestrial birds.

In the sanctuary and its environs total 25 water bird species are recorded, of which five (20%) are migrant spe-

cies, seven (28%) are resident migrant species, and 13 (52%) are resident species. Water bird diversity is low because of paucity of water bodies in the sanctuary. Since the PA is very poor in wetland habitat, it cannot attract wintering waders (Sonobe & Usui, 1993).

The largest order present is Passeriformes with 15 families and 53 species, followed by Ciconiiformes with three families and nine species and Falconiformes with two families and nine species (Table 2).

Rampara Wildlife Sanctuary is a typical thorny forest of the Saurashtra region which harbors 115 bird species belonging to 16 orders and 42 families (25.33 % of total avifaunal species found in Gujarat). Status wise, 76 species (66.08%) are resident, 28 species (24.35) are resident with migratory habit and 11 species (9.57%) are migratory.

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Table 2. Status of birds recorded in the Rampara Wildlife Sanctuary.

Order	No. of families	No. of species	Status		
			R	RM	M
1 Podicipediformes	1	1	1	--	--
2 Pelecaniformes	1	1	--	1	--
3 Ciconiiformes	3	9	6	2	1
4 Anseriformes	1	4	1	1	2
5 Falconiformes	2	9	5	3	1
6 Galliformes	1	5	4	1	--
7 Gruiformes	1	1	1	--	--
8 Charadriiformes	5	8	5	1	2
9 Columbiformes	2	6	6	--	--
10 Psittaciformes	1	2	2	--	--
11 Cuculiformes	1	4	3	1	--
12 Strigiformes	1	2	2	--	--
13 Apodiformes	1	1	1	--	--
14 Coraciiformes	4	6	4	2	--
15 Piciformes	2	3	2	--	1
16 Passeriformes	15	53	33	16	4
Total	42	115	76	28	11

The Key to Happiness

You can have a desire. Put in your best effort to fulfil it. But make sure you enjoy the effort rather than its fruits. There are those who make the effort grumbling, and are happy only when the desire is achieved. There are others who exhaust themselves making the effort to such a degree that they have no strength or enthusiasm left to enjoy the fruits of their labour. The third method seems a better option.

Enjoy the effort no matter what the effect. I see nothing wrong with having a desire. But if you are using fulfilment as a condition for contentment, you may be reducing your chances of happiness altogether.

You decide that you will be happy only when you become the managing director of the company you are working for. Now you are postponing the moment of your happi-

ness to a point in the future. You will be happy only if and when you attain that position. You are not happy engaged in the process of trying to reach the position.

The third way celebrates the journey towards the destination. Sure, if the destination is reached, we will be happy. Even if it is not reached, nobody can take away the sense of thrill at having run the race, the delicious fatigue in the process. My happiness is derived not from reaching a goal, but from the struggle and my attempt at reaching it.

Enjoy the effort; give your best. Ensure that you will be working smart, not just hard. Don't go fishing in the bath tub. Don't try to work up lather in a running stream. Instead, fish in a stream and work up lather in a bath tub.

—Swami Sukhabodhananda