

Avifauna of Mayiladuthurai Taluk, Tamil Nadu

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The Indian subcontinent has diverse avian fauna with 1300 bird species (Grimmet *et al.*, 1999). Of late there is an increased awareness to prepare checklists of birds on a wider scale, although such work are often confined to sanctuaries and forest ranges (Kannan, 1998; Mahabal, 2000). Collective checklist of birds for specific regions like lakes (Robertson & Jackson, 1992), wetland (Sivaperuman & Jayson, 2000; Ravindran, 1995), wildlife sanctuaries (Mahabal, 2000) and university campuses (Palot & Pramod, 2000; Nameer *et al.*, 2000) have also been published. The present survey was undertaken around the human habitation to quantify the diversity of avifauna in Mayiladuthurai Taluk.

The Mayiladuthurai Taluk (10° 46' N and 79° 5' E), Nagapattinam District is generally called as 'granary' of South India because of very large scale of agricultural operations involving cultivation of paddy, sugarcane, cotton, groundnut, banana, pulses and other cereal. The river Cauvery and its *viz.*, kollidam, uppanar, vellar, manjalar, arasalar, etc., as the major perennial water sources of the study area. The north-east monsoon usually brings rain to the study area during October-December (65% of the total rainfall in a year). The area covered for the study comprised of a) 3000 x 100m agricultural lands, b) 3000 x 100m river banks (river Cauvery) and c) 15.31ac of A.V.C. College campus.

The predominant wood plant species found in the study area *Cocos nucifera*, *Borassus flabellifer*, *Madhuca indica*, *Mangifera indica*, *Samanea saman*, *Tamarindus indicus*, *Ficus benghalensis*, *Ficus religiosa*, *Thespesia populnea*, *Acacia arabica*, *Odina wodier* and *Azadirachta indica*. Important shrub species are *Prosopis juliflora*, *Jatropha glandulifera*, *Adhathoda vesica*. Plantations of *Casuarina equisetifolia*, *Tectona grandis* and *Bamboosa arundinacea* are also found in the study area.

Observations were made from 6.00 to 8.00hrs and 16.00 to 18.00hrs once a week in each habitat for a period of one year Jan 2005- Dec 2005. The birds were observed either by a binocular (7' x 50") or by naked eyes depending on the distance of the object. The identification, nomenclature and feeding habits (Ali and Ripley 1983, Manakadan and Pittie 2002) of the birds were carried out.

In the entire study area 73 species (47% passerine and 53% non-passerine birds) of birds belonging to 41 families in 13 orders were observed (Table 1). Among these, 34 belonged to the order Passeriformes, seven to Ciconiiformes, six to Coraciiformes, five each to Falconiformes and Cuculiformes, three each to Charadriiformes and Columbiformes, two each to Galliformes,

Strigiformes, Apodiformes and Piciformes and one each to Gruiformes and Psittaciformes. Out of these 73 species, 26 (35.6%) were omnivores, 25 (34.2%) insectivores, 16 (21.9%) carnivores and 3 (4.1%) each to granivores and frugivores. Totally 14 species were recorded only certain months of the year and it's mostly observed October to February. The breeding activities (nest and eggs) were recorded 39 bird species during the study period.

The maximum of 61 species (21 omnivores, 20 insectivores, 14 carnivores, 3 each to granivores and frugivores) were recorded in riverine habitat, because of greater vegetation densities and food availability (Asokan *et al.*, 2003). On both sides of the river banks many species of large wooded trees, scrub and bush type with short and stumpy vegetation were distributed and it is suitable nesting-sites for many bird species. DeGraaf and Wentworth (1986) reported a strong association between the measures of tree cover and bird distribution.

In the agricultural lands 45 species of birds were recorded (14 insectivores, 14 carnivores, 13 omnivores, 3 granivores and one frugivore). Gole (1982) reported 34 species of birds in the standing crops jowar) at Pune. Nathan and Rajendran (1982) recorded 35 bird species in the rice crop ecosystem of Pondicherry region. The Small Bee-eater, Indian Roller, Black Drongo, White-breasted Kingfisher and Common Myna were actually seen to catch and eat insects and other animal foods. Asokan *et al.*, (2007) reported that these five species were very active bio-control agents against agricultural crop pests in the study area.

In A.V.C. College campus 34 species were observed (15 omnivores, 9 insectivores, 6 carnivores, 2 each to frugivores and granivores). Jayapal (1995) reported 104 bird species in Annamalai University campus. Sundar (1998) recorded 93 species of birds in Pondicherry University campus. Nameer *et al.*, (2000) recorded 135 species of birds in Kerala Agricultural University campus. The reason for recording lesser diversity of birds in the A.V.C.

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Table 1: Systematic list of the recorded species of birds in the study area

Scientific name	English name	Vernacular name	Feeding habit	Habitat
Podicipedidae				
<i>Tachybaptus ruficollis</i>	Little Grebe	Mukkulipan	IN	2
Ardeidae				
<i>Egretta garzetta</i>	Little Egret	Vellai Kokku	CV	1,2
<i>Casmerodius albus</i>	Large Egret	Periya Kokku	CV	1,2
<i>Bubulcus ibis</i>	Cattle Egret	Mattu Kokku	CV	1,2
<i>Ardeola grayii</i>	Indian Pond-Heron	Madaiyan	CV	1,2
<i>Ixobrychus sinensis</i>	Chestnut Bittern**	Sengkokku	CV	2
Ciconiidae				
<i>Anastomus oscitans</i>	Asian Openbill-Stork**	Nathai-kothi Narai	CV	1
Accipitridae				
<i>Elanus caeruleus</i>	Black-shouldered Kite	Parunthu	CV	1,2,3
<i>Milvus migrans</i>	Black Kite*	Pariah Paraunthu	CV	1,2,3
<i>Haliastur indus</i>	Brahminy Kite*	Karudan Paraunthu	CV	1,2,3
<i>Accipiter badius</i>	Shikra*	Semparaunthu	CV	1,2,3
<i>Accipiter nisus</i>	Eurasian Sparrowhawk	Parunthu	CV	1,2
Phasianidae				
<i>Francolinus pondicerianus</i>	Grey Francolin	Kowtharai	OM	2
<i>Pavo cristatus</i>	Indian Peafowl	Mylil	OM	2
Rallidae				
<i>Amauromis phoenicurus</i>	White-breasted Waterhen*	Kanankozhi	OM	2
Charadriidae				1
<i>Vanellus vanellus</i>	Yellow-wattled Lapwing**	Manjal-mooku Aalkatti	IN	1,2
<i>Vanellus indicus</i>	Red-wattled Lapwing+	Chivapu-mooku Aalkatti	IN	
Scolopacidae				1,2
<i>Actitis hypoleucos</i>	Common Sandpiper**	Ullan Kuruvi	IN	
Columbidae				1,2,3
<i>Columba livia</i>	Blue Rock Pigeon*	Maada Purah	GR	1,2,3
<i>Streptopelia chinensis</i>	Spotted Dove*	Mani Purah	GR	1,2
<i>Streptopelia decaocto</i>	Eurasian Collared-Dove	Sambal Purah	GR	
Psittacidae				1,2,3
<i>Psittacula krameri</i>	Rose-ringed Parakeet*	Paehaikilli	FR	
Cuculidae				2,3
<i>Clamator jacobinus</i>	Pied Crested Cuckoo**	Kondai Koel	OM	2
<i>Hierococcyx varius</i>	Braintree Bird	Koel	OM	1,2,3
<i>Eudynamis scolopacea</i>	Asian Koel	Koel	OM	2
<i>Phaenicophaeus viridirostris</i>	Small Green-billed Malkoha**	Koel	OM	1,2,3
<i>Centropus sinensis</i>	Greater Coucal*	Senbaham	CV	
Tytonidae				1
<i>Tyto alba</i>	Barn Owl*	Kottan / Chavukuruvu	CV	
Strigidae				
<i>Athene brama</i>	Spotted Owlet*	Pullianthai	IN	1,3
Apodidae				
<i>Cypsiurus balasensis</i>	Asian Palm swift*	Uzhavara Kuruvi	IN	1,2,3
<i>Apus affinis</i>	House Swift*	Uzhavara Kuruvi	IN	1,2
Alcedinidae				
<i>Alcedo atthis</i>	Small Blue Kingfisher	Meankothi	CV	2
<i>Halcyon smymensis</i>	White-breasted Kingfisher*	Ven-marbu Meankothi	CV	1,2,3
<i>Ceryle rudis</i>	Lesser Pied Kingfisher*	Vellai Meankothi	CV	1,2
Meropidae				
<i>Merops orientalis</i>	Small Bee-eater*	Chinna Panchurutan	IN	1,2,3
Coraciidae				
<i>Coracias benghalensis</i>	Indian Roller*	Panaggadai	IN	1,2,3
Upupidae				
<i>Upupa epops</i>	Common Hoopoe	Saval Kuruvi	IN	1,2,3
Capitonidae				
<i>Megalania haemacephala</i>	Coppersmith Barbet	Chinna Kukkuvam	FR	2,3

Scientific name	English name	Vernacular name	Feeding habit	Habitat
Picidae				
<i>Dinopium benghalense</i>	Lesser Golden-backed Woodpecker*	Markkothi	OM	2,3
Pittidae				
<i>Pitta brachyura</i>	Indian Pitta**	Arumani Kuruvi	IN	2
Alaudidae				
<i>Alauda arvensis</i>	Eurasian Skylark	Vanambadi	OM	1
Hirundinidae				
<i>Hirundo rustico</i>	Common Swallow**	Thailan	IN	1
<i>Hirundo daurica</i>	Red-rumped Swallow**	Thailan	IN	1
Motacillidae				
<i>Motacilla maderaspatensis</i>	Large Pied Wagtail	Karuppuvalati	IN	1,2
<i>Anthus rufulus</i>	Paddyfield Pipit*	Nettaikali	IN	1
Campephagidae				
<i>Pericrocotus cinnamomeus</i>	Small Minivet	Milagai Chitu	IN	2
<i>Tephrodornis pondicerianus</i>	Common Woodshrike*	Kassappakaram	IN	2
Pycnonotidae				
<i>Pycnonotus cafer</i>	Red-vented Bulbul*	Kondai Kuruvi	OM	1,2,3
Irenidae				
<i>Aegithina tiphia</i>	Common Iora*	Chinna Mambazhakuruvi	OM	2
Turdinae				
<i>Copsychus saularis</i>	Oriental Magpie Robin*	Vannathikuruvi	IN	2,3
<i>Saxicolides fulicata</i>	Indian Robin*	Carukuruvi	IN	2,3
Timaliinae				
<i>Turdoides caudatus</i>	Common Babbler*	Thavitu Kuruvi	OM	1,2,3
Sylviinae				
<i>Prina socialis</i>	Ashy Prina*	....	IN	2
<i>Acrocephalus dumetorum</i>	Blyth's Reed Warbler**	....	IN	2
<i>Orthotomus sutorius</i>	Common Tailor Bird*	Thaiyalkara Kuruvi	IN	2,3
<i>Sylvia hortensis</i>	Orphean Warbler**	....	IN	2
Monarchinae				
<i>Terpsiphone paradise</i>	Asian Paradise Flycatcher**	Rajawall Kuruvi	IN	2
Dicaeidae				
<i>Dicaeum erythrorhynchos</i>	Tickell's Flowerpecker	Pakku Chittu	FR	2
Nectariniidae				
<i>Nectarinia zeylonica</i>	Purple-rumped Sunbird*	Manjal Thenchittu	OM	2,3
<i>Nectarinia asiatica</i>	Purple Sunbird	Thenchittu	OM	2,3
Estrildidae				
<i>Lonchura malabarica</i>	White-throated Munia*	Thiinai Kuruvi	OM	1
<i>Lonchura malaca</i>	Black-headed Munia*	Thiinai Kuruvi	OM	1,3
Passerinae				
<i>Passer domesticus</i>	House Sparrow*	Chittu Kuruvi	OM	3
Ploceinae				
<i>Ploceus manyar</i>	Streaked Weaver*	Thukkanan Kuruvi	OM	2
<i>Ploceus philippinus</i>	Baya Weaver*	Thukkanan Kuruvi	OM	1,2
Sturnidae				
<i>Sturnus pagodarum</i>	Brahminy Starling*	Kondai Myna	OM	2,3
<i>Acridotheris tristis</i>	Common Myna*	Narathan Kuruvi	OM	1,2,3
Oriolidae				
<i>Oriolus oriolus</i>	Eurasian Golden Oriole	Mambazhakuruvi	OM	1,2,3
Dicruridae				
<i>Dicrurus macrocercus</i>	Black Drongo*	Karuvatuvali	IN	1,2,3
Artamidae				
<i>Artamus fuscus</i>	Ashy Woodswallow**	....	OM	1
Corvidae				
<i>Dendrocitta vagabunda</i>	Indian Tree Pie*	Val Kakkai	OM	1,2,3
<i>Corvus splendens</i>	House Crow*	Manikagam	OM	1,2,3
<i>Corvus macrorhynchos</i>	Jungle Crow*	Andakagam	OM	1,2,3

*Breeding activities recorded (nest & eggs); **Seasonally recorded; IN - Insectivores; CV - Carnivores; GR - Granivores; FR - Frugivores; OM - Omnivores; 1 - Agricultural lands; 2 - River banks; 3- College campus

College campus may be due to human interference and habitat destruction (buildings construction).

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