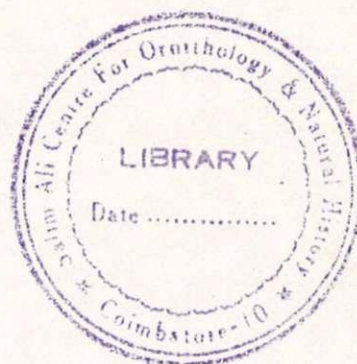


# **FAUNA AND FLORA OF THE ENVIRONS OF PERIYAKULAM ERI, VELLODE, PERIYAR DISTRICT**

*A report  
Submitted to the Tamil Nadu Forest Department*

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## INTRODUCTION

The Environmental Impact Assessment (EIA) Division of Salim Ali Centre for Ornithology and Natural History (SACON) has conducted a flora and fauna survey in and around the Periyakulam Eri (Map 1), Vellode, Periyar District in the second week of July 1995. Apart from Periyakulam Eri near by agricultural fields were also covered in the survey. Direct observation method was used to observe fauna and flora. The present report is based on the short survey in the area and hence is preliminary in nature.

## PERIYAKULAM ERI

The Periyakulam Eri is located near Vellode village, Periyar district and is almost 10 km from the Erode town. The eri has about 77 ha. water spread area. It receives water from rain and from Lower Bhavani Project main canal. Maximum water depth during the survey was 3-5 meters.

## FLORA

Nineteen water dependant plants were recorded in and around the wetland (Table 1). The wetland had dense floating and submerged vegetation (Plate). Hydrophytes such as *Hydrilla verticillata*, *Nymphaea nouchali*, *Ottelia alismoides* and *Marsilea quadrifolia* are frequent in the area. A number of other aquatic and semi-aquatic species such as *Ipomoea carnea*, *Alternanthera sessilis*, *Commelina* sp., *Eichhornia crassipes*, *Limnophyton obtusifolium*, *Panicum* sp., *Phyla nodiflora*, *Potamogeton nodosus* and *Typha angustata*, were also recorded in this area. The abundant aquatic vegetation indicate the potentialities for the area to support a good waterfowl population. One side of the wetland have a thick monoculture plantation of Babul *Acacia arabica* planted in 1977 by the Social Forestry Department. The water of the wetland is thick and have high phyto and zooplankton populations. 32 species of phytoplankton is reported from the eri by Babu (A survey of the aquatic eco-system of Periyakulam pond - Vellode - S.

MAP - I  
Periakulam, Vellore

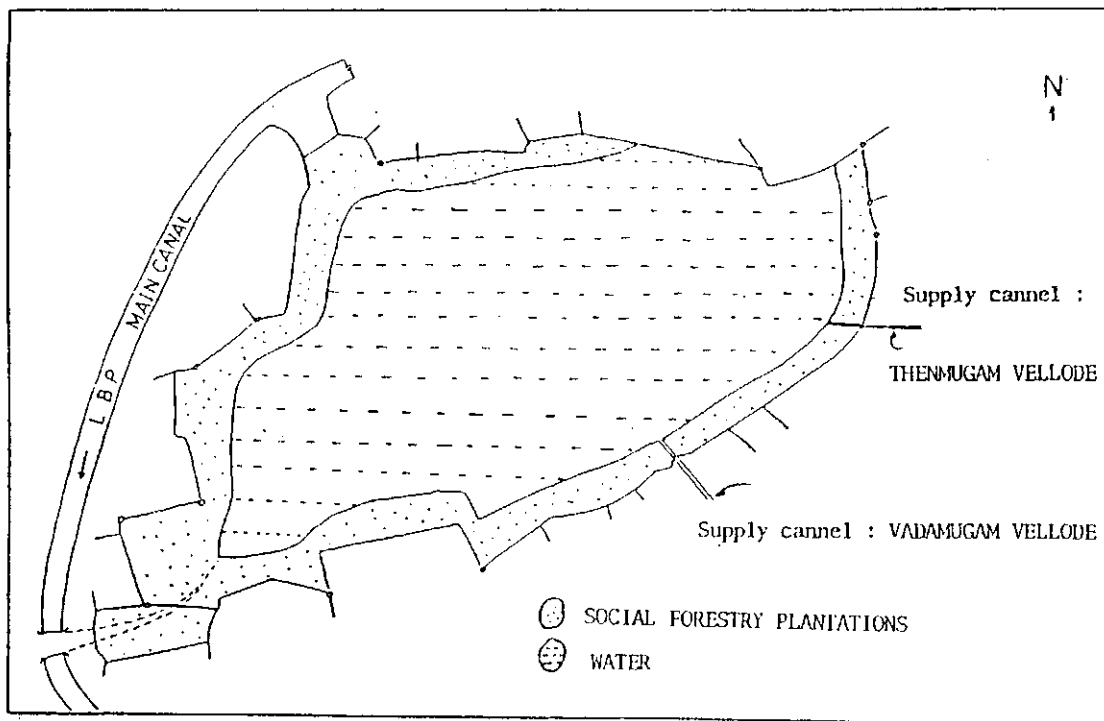




Plate : Periyakulam wetland, Vellode, Periyar Dist.



Saravana Babu, in: *Into the Sky - a checklist of birds in Periyar District - Institute of Nature studies, Erode 1995*). Babu (op. cit) also reports high concentration of phosphates and nitrates in the eri water.

Table-I. Aquatic and semi-aquatic plants recorded in the Periyakulum Eri, Vellode	
Species	
<i>Acacia nilotica</i>	<i>Marsilea quadrifolia</i>
<i>Ipomoea carnea</i>	<i>Nymphaea nouchali</i>
<i>Ipomoea sp.</i>	<i>Ottelia alismoides</i>
<i>Alternanthera sessilis</i>	<i>Panicum sp.</i>
<i>Alysicarpus vaginalis</i>	<i>Phyla nodiflora</i>
<i>Commelina sp.</i>	<i>Phyllanthus amarus</i>
<i>Eclipta prostrata</i>	<i>Potamogeton nodosus</i>
<i>Eichhornia crassipes</i>	<i>Typha angustata</i>
<i>Hydrilla verticillata</i>	<i>Vallisneria natans</i>
<i>Limnophyton obtusifolium</i>	

## FAUNA

### i) Fishes

No attempt was made to conduct an extensive sampling of the wetland for fishes. However, a few gill nets set by villagers were examined. The common species caught on the nets were *Tilapia mosambica*, *Channa marulius*, *Channa striatus*, *Cyprinus carpio*, *Labeo kontinus*, *Ctenopharyngodon idella* (table 2).

Table-2. Fishes recorded in the Periyakulum Eri, Vellode	
Scientific name	
<i>Tilapia mossambica</i>	<i>Cyprinus carpio</i>
<i>Channa marulius</i>	<i>Labeo kontinus</i>
<i>Channa striatus</i>	<i>Ctenopharyngodon idella</i>

## ii) Amphibians

One species of toad and six species of frogs have been observed or heard (calls) during the present survey (Table 3). Among them Common Indian frog, Indian green frog and Indian skipper frog are common.

Table-3. Amphibians recorded in the Periyakulam Eri, Vellode	
Scientific name	Common Name
<i>Bufo melanostictus</i>	Indian Toad
<i>Rana cyanophlyctis</i>	Common Indian Frog
<i>Rana hexadactyla</i>	Indian Green Frog
<i>Rana limnocharis</i>	Indian Skipper Frog
<i>Rana breviceps</i>	Indian Burrowing Frog
<i>Rana tigerina</i>	Indian Bull Frog
<i>Microhyla ornata</i>	Ornate Microhyla

## Reptiles

Ten species of reptiles were recorded in and immediate surroundings of the wetland (Table 4). Indian flapshell turtle, Checkered keelback water snake and Garden lizards were common. The number of fishes, reptiles and amphibian species are under estimate due to the cryptic and secretive nature of these animals and the short duration of the survey.

## iii) Birds

Seventy four bird species were recorded during the present survey in and around the Periyakulam Eri (approximately 10 km radius, Table 5). About Fifty more species, mainly migrants could be added to the list, if surveys are conducted during winter ie. November-February. During the two hours of intensive search in the aquatic area, 36 species of birds were recorded of which 20 are totally water dependant. A number of



water birds such as Dabchick, Indian moorhen, herons, egrets and cormorants were breeding during the period of visit. The Vellode Periyakulum Eri may be one of the important habitats for a number of water birds during summer in this region.

Table-4. Reptiles recorded in the Periyakulum Eri, Vellode

Scientific name	Common Name
<i>Lissemys punctata</i>	Indian Flapshell Turtle
<i>Melanochelys trijuga</i>	Indian Black Turtle
<i>Hemidactylus frenatus</i>	House Gecko
<i>Hemidactylus leshnaulti</i>	Bark Gecko
<i>Calotes versicolor</i>	Garden Lizard
<i>Sitana ponticeriana</i>	Fanthroated Lizard
<i>Mabuya carinata</i>	Common skink
<i>Mabuya trivitata</i>	Skink
<i>Varanus bengalensis</i>	Common monitor
<i>Xenochropis piscator</i>	Checkered keelback

Table-5. Birds recorded in the Periyakulum Eri, Vellode

Scientific name	Common Name
<i>Podiceps ruficollis</i> #	Little Grebe
<i>Phalacrocorax niger</i> #	Little Cormorant
<i>Anhinga rufa</i> #	Darter or Snake-bird
<i>Ardea cinerea</i> #	Grey Heron
<i>Ardea purpurea</i> #	Purple Heron
<i>Ardeola grayii</i> #	Pond Heron or Paddy bird
<i>Bubulcus ibis</i> #	Cattle Egret
<i>Egretta garzetta</i> #	Little Egret
<i>Nycticorax nycticorax</i> #	Night Heron
<i>Threskiornis aethiopica</i> #	White Ibis
<i>Platalea leucorodia</i> #	Spoonbill
<i>Nettapus coromandelianus</i> #	Cotton Teal
<i>Elanus caeruleus</i>	Blackwinged Kite

Scientific name	Common Name
<i>Pernis ptilorhyncus</i>	Honey Buzzard
<i>Milvus migrans</i>	Pariah Kite
<i>Haliastur indus</i> #	Brahminy Kite
<i>Accipiter badius</i>	Indian Shikra
<i>Francolinus pondicerianus</i>	Grey Partridge
<i>Pavo cristatus</i>	Common Peafowl
<i>Amauornis phoenicurus</i> #	Whitebreasted Waterhen
<i>Gallinula chloropus</i> #	Indian Moorhen
<i>Fulica atra</i> #	Coot
<i>Hydrophasianus chirurgus</i> #	Pheasant-tailed Jacana
<i>Vanellus indicus</i>	Redwattled Lapwing
<i>Columba livia</i>	Blue Rock Pigeon
<i>Streptopelia chinensis</i>	Spotted Dove
<i>Streptopelia decaocto</i>	Indian Ring Dove
<i>Psittacula krameri</i>	Rose-ringed Parakeet
<i>Clamator jacobinus</i>	Pied Crested Cuckoo
<i>Cuculus canorus</i>	Cuckoo
<i>Eudynamys scolopacea</i>	Koel
<i>Rhopodytes viridirostris</i>	Greenbilled Malkoha
<i>Centropus sinensis</i>	Crow-Pheasant
<i>Athene brama</i>	Spotted Owlet
<i>Cypsiurus parvus</i>	Palm Swift
<i>Ceryle rudis</i> #	Lesser Pied Kingfisher
<i>Alcedo atthis</i> #	Small Blue Kingfisher
<i>Halcyon smyrnensis</i> #	Whitebreasted Kingfisher
<i>Merops orientalis</i>	Small Green Bee-eater
<i>Coracias benghalensis</i>	Indian Roller
<i>Upupa epops</i>	Hoopoe
<i>Megalaima haemacephala</i>	Crimsonthroated Barbet
<i>Dinopium benghalense</i>	Goldenbacked Woodpecker
<i>Eremopterix grisea</i>	Ashycrowned Finch Lark
<i>Ammomanes phoenicurus</i>	Rufoustailed Finchlark
<i>Galerida cristata</i>	Crested Lark



Scientific name	Common Name
<i>Alauda gulgula</i>	Skylark
<i>Artamus fuscus</i>	Ashy Swallow Shrike
<i>Oriolus oriolus</i>	Golden Oriole
<i>Dicrurus adsimilis</i>	Black Drongo
<i>Dicrurus caerulescens</i>	Whitebellied Drongo
<i>Acridotheres tristis</i>	Common Myna
<i>Acridotheres ginginianus</i>	Brahminy Myna
<i>Dendrocitta vagabunda</i>	Tree Pie
<i>Corvus splendens</i>	House Crow
<i>Corvus macrorhynchos</i>	Jungle Crow
<i>Tephrodornis pondicerianus</i>	Common Wood Shirike
<i>Aegithina tiphia</i>	Common Iora
<i>Pycnonotus leucogenys</i>	Whitecheeked Bulbul
<i>Pycnonotus cafer</i>	Redvented Bulbul
<i>Turdoides affinis</i>	White Headed Babbler
<i>Prinia socialis</i>	Ashy Wren Warbler
<i>Orthotomus sutorius</i>	Tailor Bird
<i>Copsychus saularis</i>	Magpie Robin
<i>Saxicola caprata</i>	Pied Bush Chat
<i>Saxicoloides fulicata</i>	Indian Robin
<i>Anthus sp.</i>	Pipit
<i>Motacilla caspica</i> #	Grey Wagtail
<i>Motacilla alba</i> #	Pied or White Wagtail
<i>Nectarinia zeylonica</i>	Purplerumped Sunbird
<i>Nectarinia asiatica</i>	Purple Sunbird
<i>Passer domesticus</i>	House Sparrow
<i>Petronia xanthocollis</i>	Yellowthroated Sparrow
<i>Lonchura striata</i>	White Backed Munia
Note: # water dependent birds	

### Suggestions for Conservation

A detailed study is required on the Periyakulum eri before undertaking any major management programmes. SACON has plans to conduct further ecological studies on this wetland ecosystem. The Periyakulum wetland is used by local fishermen. It is reported that as many as 50 fishermen families depend on this wetland for their livelihood. The wetland also irrigates 300-400 acres of land. In management of the wetland these points may be considered. The Periyakulam eri can be developed into an important wetland and waterfowl reserve in this region with proper management. The feasibility of creating mounds with trees such as *Acacia nilotica* to facilitate nesting birds may be explored. Few bird attracting plant species such as *Alangium salvifolium*, *Azadirachta indica*, *Ficus benghalensis*, and *Zizyphus oenoplia* may be planted along the banks of the wetland.