

A Biodiversity Assessment Report of Poredam Temple Sacred Grove, Chadayamangalam, Kollam, India

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ABSTRACT

Sacred groves are areas of vegetation that have been conserved because of a religious or cultural custom. Spiritual convictions safeguard them. The biodiversity of the area where sacred groves are located benefits greatly from their exceptional habitat. Very few studies have been of the fauna from India's holy woods. The study is based on the documentation of faunal diversity in Poredam Temple Sacred Grove, Chadayamangalam, Kollam. 127 faunal species were recorded in the study area. The faunal diversity consisted of 4 Mammals, 52 Aves, 8 Amphibians, 10 Reptiles and 27 Odonates and 29 Butterflies.

Key words: Sacred groves, Fauna, Biodiversity

Introduction

Sacred Groves (SGs) are areas of the landscape marked off and protected by human societies because it is thought that keeping them in their largely untouched state is an expression of a significant relationship with the divine or nature. They contain trees, other types of life, and geographical features (Hughes and Chandran, 1998). SGs are small areas of woodland that the local population tends to maintain by long-standing customs. They have been given priority for providing ecological services and preserving biodiversity in local areas. These public lands are regarded as a repository for the region's biodiversity. While the specific fauna found in SGs may vary, depending on their location and habitat type, they generally exhibit higher species diversity compared to surrounding areas due to their protected status (Jamir and Pandey, 2003; Kandari *et al.*, 2014; Negi, 2010; Singh *et al.*, 2017). Numerous stud-

ies conducted worldwide demonstrate that managed forests lack the richness of natural forests that SGs do and that they are crucial to the preservation of biodiversity, which in turn helps to maintain the stability of the local ecosystem (Khumbongmayum *et al.*, 2006 and Pradhan *et al.*, 2019). Examining the holy groves' role in biodiversity conservation sheds light on their potential as a paradigm for environmental protection.

SGs in India are remnants of plants that have endured under various ecological conditions. With 13,720 holy groves distributed over 19 States, India is incredibly rich in SGs (Malhotra *et al.*, 2001). In Kerala, SGs are known as "sarpakavu" or "serpent groves." These groves are dedicated to serpent deities and are considered sacred by the local communities, especially those practising traditional beliefs. Kerala has between 1500 and 2000 SGs, ranging from 0.004 hectares to >20 ha (Menon, 1997). According to Induchoodan (1988), 361 SGs in Kerala

have an area larger than 0.02 hectares.

Many holy groves are presently in danger and have seen changes to their size, vegetation structure, and species composition due to shifting socio-economic situations and land use patterns. Recent studies show they are in danger due to land shortage, soil depletion, fast population expansion, cultural changes, pressure to use natural resources, modernisation, and others (Chandrakanth *et al.*, 2004; Ormsby and Bhagwat, 2010; Singh *et al.*, 2017). As a result, there is currently a great deal of stress on these local biodiversity management sites (Mishra *et al.*, 2004; Rajesh *et al.*, 2020). No statistics are available to determine the status of the numerous little holy groves that have vanished in recent years. Biodiversity assessment has proved to be useful for identifying declining biodiversity. Measures for preservation may only be performed after assessment. In Poredam, Chadayamangalam, Kollam, we are trying to evaluate the biodiversity of one such holy forest.

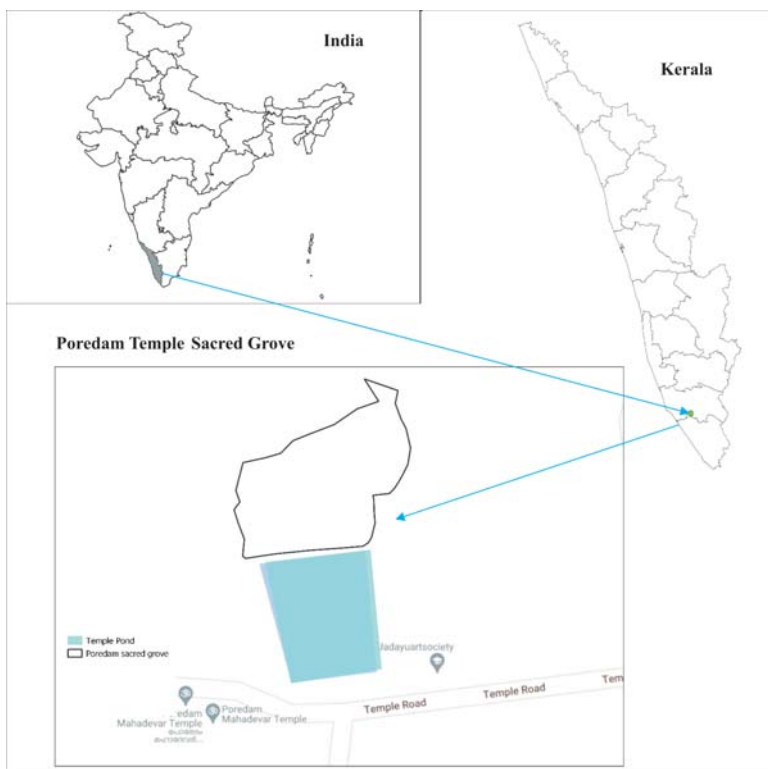
Study Area

This study was done in the Poredam Mahadevar temple SG and pond of Kollam District (8°51' 22" N latitude; 76°50'10" E longitude), which experiences a

humid tropical climate with a temperature range of 23 to 36 °C. History and details of this SG were collected through field visits, personal interviews with members of the temple trust and confirmed scrutinising the temple records.

Materials and Method

Field survey of the SG located in Chadayamangalam panchayat was undertaken systematically. The SG of Poredam Temple, Chadayamangalam, Kollam, was visited regularly from October and January to include seasonal species. The grove and pond were surveyed using visual encounter method from 08.00 AM to 12.00 PM during the morning and 05.00 PM to 07.00 PM during the evening. The presence of fauna, including mammals, birds, herpetofauna, odonates, and butterflies, was identified and recorded. Faunal species were recorded by using various techniques. The fauna was recorded by direct sighting, indirect sighting, voice identification, pug marks, excreta identification, and indirectly by questioning the local people. The point count method was used to study SGs birds (Bibby, 2000). The birds were identified using binoculars, and the identification of birds was confirmed following the field



guide of Grimmett *et al.* (1998). Mammals were recorded by direct sighting, pug marks, excreta identification, and indirectly by questioning the local residents. The Reptiles and snakes were recorded by direct sighting and interviewing the local residents. The butterfly species were also photo-documented during the study period. Species identity was confirmed with the help of the field guides by Kunte (2000) and Kehimkar (2008), and taxonomy and nomenclature were updated after Kunte *et al.* (2011). For Odonates, individual specimens were photo-documented, and these images were cross-checked with standard references and field guides on odonates such as Fraser (1933, 1934 and 1936), Subramanian (2005, 2009) and Kiran and Raju (2013). Systematic arrangement and the taxonomy followed in the checklist is after Subramanian (2014) and common names after Subramanian (2009). The amphibians were identified with the help of standard references such as Biju and Bossuyt (2014), Biju *et al.*, (2011, 2014ab), Dinesh *et al.*, (2015), Dahanukar *et al.*, (2016), Garg and Biju (2016), and Garg *et al.*, (2017). For confirming the identification of reptiles, the following literature was consulted: Das (2002), Whitaker and Captain (2004), Mahony (2011), Agarwal and Karanth (2015), Agarwal *et al.* (2016), Lajmi *et al.*, (2016). After the survey, the fauna was classified according to family and tabulated.

Results

Mammals

Four mammals belonging to 4 families were encountered in the SG area during the survey period (Table 1).

Birds

In the case of aves, 52 species of birds were encountered in and around the SG as presented in Table 2. Four species of raptors and four species of owl were recorded during the present study.

Amphibians

This study recorded eight frog species in five families in the area (Table 3).

Reptiles

About 10 reptiles in six families were recorded from the SG including three snakes (Table 4).

Odonates

Twenty-seven species of Dragonflies and Damselflies in 6 families were sighted in this SG and pond (Table 5).

Butterflies

A total of 29 butterflies in five families were identified from the SG (Table 6).

Discussion

Poredam kaav is a patch of woodland surrounded by plantations and rural households. The area is rich in vertebrate fauna, with four species of mammals, 52 species of birds, 8 species of amphibians, and 10 species of reptiles. The patch supports a roost for a colony of Indian Flying Fox bats (*Pteropus medius*), which is significant because the loss in habitat and roost availability of fruit bats can result in viral spillovers (Walsh *et al.*, 2017).

A study by Jyothi and Nameer, 2015 reported 107 bird species belonging to 48 families and 17 orders in 15 selected SGs of Kannur and Kasargod districts of northern Kerala. In the present study, out of 52 species of birds observed in Poredam SG, canopy insectivores and carnivores were the dominant feeding guilds accounting for 19% and 15%, respectively (Fig. 2).

Like many others in Kerala, the deity worshipped inside this SG is a serpent. This, along with a good prey population supported by the adjacent temple pond, makes it a good habitat for snakes and other herpetofauna.

There are few to no studies conducted on invertebrate diversity in SGs of Kerala. In the present study in Poredam SG, we observed 27 species of Odonates and 29 species of butterflies. In the case of odonates, the SG have 15.5% of all odonate species found in Kerala (Gopalam *et al.*, 2022), in which fam-

Table 1. Checklist of Mammals in Poredam Temple SG

Sl No	Common Name	Scientific Name	Family
1	Common Palm Squirrel	<i>Funaqmbulas palmaram</i>	Sciuridae
2	Indian Flying Fox	<i>Pteropus medius</i>	Pteropodidae
3	Indian grey Mongoose	<i>Herpestes edwardsii</i>	Herpestidae
4	Wild Boar	<i>Sus scrofa</i>	Suidae

Table 2. Checklist of Birds in Poredam Temple SG

SI No	Common Name	Scientific Name	Family
1	Asian Emerald Dove	<i>Chalcophaps indica</i>	Columbidae
2	Asian Koel	<i>Eudynamys scolopaceus</i>	Cuculidae
3	Asian Palm-Swift	<i>Cypsiurus balasiensis</i>	Apodidae
4	Banded Bay Cuckoo	<i>Cacomantis sonneratii</i>	Cuculidae
5	Barn Owl	<i>Tyto alba</i>	Tytonidae
6	Black Drongo	<i>Dicrurus macrocercus</i>	Dicruridae
7	Black Kite	<i>Milvus migrans</i>	Accipitridae
8	Black-hooded Oriole	<i>Oriolus xanthornus</i>	Oriolidae
9	Black-naped Monarch	<i>Hypothymis azurea</i>	Monarchidae
10	Black-rumped Flameback	<i>Dinopium benghalense</i>	Picidae
11	Brahminy Kite	<i>Haliastur indus</i>	Accipitridae
12	Bronzed Drongo	<i>Dicrurus aeneus</i>	Dicruridae
13	Brown Hawk Owl	<i>Ninox scutulata</i>	Strigidae
14	Brown-capped Pygmy Woodpecker (Indian Pygmy Woodpecker)	<i>Yungipicus nanus</i>	Picidae
15	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae
16	Common Iora	<i>Aegithina tiphia</i>	Aegithinidae
17	Common Myna	<i>Acridotheres tristis</i>	Sturnidae
18	Common Tailorbird	<i>Orthotomus sutorius</i>	Cisticolidae
19	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	Ramphastidae
20	Greater Coucal	<i>Centropus sinensis</i>	Cuculidae
21	Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i>	Dicruridae
22	Green Bee-eater	<i>Merops orientalis</i>	Meropidae
23	Grey-fronted Green-Pigeon	<i>Treron affinis</i>	Columbidae
24	Indian Peafowl	<i>Pavo cristatus</i>	Phasianidae
25	Inidan Pond-Heron	<i>Ardeola grayii</i>	Ardeidae
26	Jungle Babbler	<i>Argya striata</i>	Leiothrichidae
27	Jungle Owlet	<i>Glaucidium radiatum</i>	Strigidae
28	Large-billed Crow	<i>Corvus macrorhynchos</i>	Corvidae
29	Lesser Whistling-Duck	<i>Dendrocygna javanica</i>	Anatidae
30	Little Swift (Indian House Swift)	<i>Apus affinis</i>	Apodidae
31	Oriental Magpie-Robin	<i>Copsychus saularis</i>	Muscicapidae
32	Pale-billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>	Dicaeidae
33	Purple Sunbird	<i>Cinnyris asiaticus</i>	Nectariniidae
34	Purple-rumped Sunbird	<i>Leptocoma zeylonica</i>	Nectariniidae
35	Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriidae
36	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	Pycnonotidae
37	Rock Pigeon (Feral Pigeon)	<i>Columba livia</i>	Columbidae
38	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Psittaculidae
39	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Corvidae
40	Shikra	<i>Accipiter badius</i>	Accipitridae
41	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Rallidae
42	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae
43	Indian Golden Oriole	<i>Oriolus kundoo</i>	Oriolidae
44	Blue-throated Flycatcher	<i>Cyornis rubeculoides</i>	Muscicapidae
45	Brown-breasted Flycatcher	<i>Muscicapa muttui</i>	Muscicapidae
46	Yellow-billed Babbler	<i>Argya affinis</i>	Leiothrichidae
47	Booted Eagle	<i>Hieraaetus pennatus</i>	Accipitridae
48	Indian Scops Owl	<i>Otus bakkamoena</i>	Strigidae
49	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	Meropidae
50	White-checked Barbet	<i>Psilopogon viridis</i>	Ramphastidae
51	House Crow	<i>Corvus splendens</i>	Corvidae
52	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae

Table 3. Checklist of Amphibians in Poredam Temple SG

SI No	Common Name	Scientific Name	Family
1	Common India Toad	<i>Duttaphrynus melanostictus</i>	Bufoidea
2	Indian Skittering Frog	<i>Euphlyctis cyanophlyctis</i>	Dicroglossidae
3	Indian Bull Frog	<i>Hoplobatrachus tigerinus</i>	Dicroglossidae
4	Fork-tongued frog sp.	<i>Minervarya sp.</i>	Dicroglossidae
5	Narrow-mouthed frog sp.	<i>Microhyla sp.</i>	Microhylidae
6	True frog sp.	<i>Indosylvirana sp.</i>	Ranidae
7	Western Tree-Frog	<i>Polypedates occidentalis</i>	Rhachophiridae
8	Wynaad Bush Frog	<i>Pseudophilautus wynaadensis</i>	Rhachophiridae

Table 4.. Checklist of Reptiles in Poredam Temple SG

SI No	Common Name	Scientific Name	Family
1	Oriental Garden Lizard	<i>Calotes versicolor</i>	Agamidae
2	Green Forest Lizard	<i>Calotes calotes</i>	Agamidae
3	Many-keeled Skink	<i>Eutropis carinata</i>	Scincidae
4	Dussumuer's Forest Skink	<i>Sphenomorphus dussumueri</i>	Scincidae
5	Asian House Gecko	<i>Hemidactylus frenatus</i>	Gekkonidae
6	Spotted House Gecko	<i>Hemidactylus parvimaculatus</i>	Gekkonidae
7	Common Krait	<i>Bungarus caeruleus</i>	Elapidae
8	Checkered Keelback	<i>Xenochrophis piscator</i>	Colubridae
9	Common Rat Snake	<i>Ptyas mucosa</i>	Colubridae
10	Indian Black Turtle	<i>Melanochelys trijuga</i>	Geoemydidae

Table 5. Checklist of Odonates in Poredam Temple SG

SI No	Common Name	Scientific Name	Family
1	Blue Darner	<i>Anax imacculifrons</i>	Aeshnidae
2	Brown Darner	<i>Gynacantha dravida</i>	Aeshnidae
3	Black-tipped Forest Glory	<i>Vestalis apicalis</i>	Calopterygidae
4	Clear-winged Forest Glory	<i>Vestalis gracilis</i>	Calopterygidae
5	White Dartlet	<i>Agriocnemis pieris</i>	Coenagrionidae
6	Pygmy Dartlet	<i>Agriocnemis pygmaea</i>	Coenagrionidae
7	Orange-tailed Marsh Dart	<i>Ceriagrion cerinorubellum</i>	Coenagrionidae
8	Marsh Dart sp	<i>Ceriagrion sp.</i>	Coenagrionidae
9	Orange Marsh Dart	<i>Ceriagrion rubiae</i>	Coenagrionidae
10	Yellow Bush Dart	<i>Copera marginipes</i>	Coenagrionidae
11	Blue grass Dart	<i>Pseudagrion microcephalum</i>	Coenagrionidae
12	Common Clubtail	<i>Ictinogomphus rampax</i>	Gomphidae
13	Asian Trumpet-tail	<i>Acisoma panorpoides</i>	Libellulidae
14	Rufous-backed Marsh Hawk	<i>Brachydiplax chalybeae</i>	Libellulidae
15	Ditch Jewel	<i>Brachythemis contaminata</i>	Libellulidae
16	Amber-winged Marsh Glider	<i>Hydrobasillus croecus</i>	Libellulidae
17	Fulvous forest Skimmer	<i>Neurothemis fulvia</i>	Libellulidae
18	Pied paddy Skimmer	<i>Neurothemis tullia</i>	Libellulidae
19	Brown-backed Red Marsh Hawk	<i>Orthetrum chrysis</i>	Libellulidae
20	Tricoloured Marsh Hawk	<i>Orthetrum luzonicum</i>	Libellulidae
21	Crimson-tailed Marsh Hawk	<i>Orthetrum pruinatum</i>	Libellulidae
22	Green Marsh Hawk	<i>Orthetrum sabina</i>	Libellulidae
23	Rufous Marsh Glider	<i>Rhodothemis rufa</i>	Libellulidae
24	Common Picturewing	<i>Rhyothemis variegata</i>	Libellulidae
25	Crimson Marsh Glider	<i>Trithemis aurora</i>	Libellulidae
26	Black Bambootail	<i>Prodasineura verticalis</i>	Platycnemididae
27		<i>Crocothemis servilia</i>	Libellulidae

Table 6. Checklist of butterflies in Poredam Temple SG and their host plants

SI No	Common Name	Scientific Name	Family	Host Plant(s)
1	Chestnut Bob	<i>Lambrix salsala</i>	Hesperiidae	<i>Axonopus compressus</i> , <i>Bambusa bambos</i> , <i>Bambusa wamin</i> , <i>Brachiaria mutca</i> , <i>Setaria barbata</i>
2	Common Grass Dart	<i>Taractrocera maevius</i>	Hesperiidae	<i>Poaceae</i>
3	Coon	<i>Psolos fuligo</i>	Hesperiidae	<i>Maranta arundinacea</i> , <i>Indianthus virgatus</i> , <i>Stachyphrynium spicatum</i>
4	Pava Dart	<i>Potanthus pava</i>	Hesperiidae	<i>Bambusa</i> , <i>Ochlandra travancorica</i>
5	swift sp	<i>Pelopidas sp.</i>	Hesperiidae	
6	Tree Flitter	<i>Hyarotis adrastus</i>	Hesperiidae	<i>Calamus</i> , <i>Calamus hookerianus</i> , <i>Calamus rotang</i> , <i>Licuala</i> , <i>Phoenix acaulis</i>
7	Water snow Flat	<i>Tagiades litigiosa</i>	Hesperiidae	<i>Dioscorea alata</i> , <i>Dioscorea oppositifolia</i> , <i>Dioscorea pentaphylla</i> , <i>Dioscorea wallichii</i> , <i>Shorea roxburghii</i>
8	Angled Pierrot	<i>Caleta decidia</i>	Lycaenidae	<i>Ziziphus oenopolia</i> , <i>Ziziphus rugosa</i>
9	Common Pierrot	<i>Castalius rosimon</i>	Lycaenidae	<i>Ziziphus jujuba</i> , <i>Ziziphus oenopolia</i> , <i>Ziziphus rugosa</i> , <i>Ziziphus xylopyrus</i>
10	Common Quaker	<i>Neopithecops zalmora</i>	Lycaenidae	<i>Glycosmis mauritana</i> , <i>Glycosmis pentaphylla</i>
11	Dark Grass Blue	<i>Zizeeria karsandra</i>	Lycaenidae	<i>Amaranthus spinosus</i> , <i>Amaranthus tricolor</i> , <i>Amaranthus viridis</i> , <i>Geissaspis cristata</i> , <i>Zornia diphylla</i> , <i>Zornia gibbosa</i> , <i>Oxalis corniculata</i> , <i>Polygonum plebeium</i>
12	Lesser Grass Blue	<i>Zizina otis</i>	Lycaenidae	<i>Amaranthus viridis</i> , <i>Alysicarpus vaginalis</i> , <i>Desmodium heterophyllum</i> , <i>Desmodium triforum</i> , <i>Sesbania bispinosa</i> , <i>Zornia diphylla</i> , <i>Zornia gibbosa</i> , <i>Zornia reticulata</i> , <i>Tribulus terrestris</i>
13	Red pierrot	<i>Talicauda nyseus</i>	Lycaenidae	<i>Kalanchoe</i> , <i>Kalanchoe blossfeldiana</i> , <i>Kalanchoe calycinum</i> , <i>Kalanchoe laciniata</i> , <i>Bryophyllum delagoense</i> , <i>Bryophyllum pinnatum</i>
14	Chocolate pansy	<i>Junonia iphita</i>	Nymphalidae	<i>Barleria cristata</i> , <i>Dipteracanthus prostratus</i> , <i>Hygrophila</i> , <i>Hygrophila auriculata</i> , <i>Justcia micrantha</i> , <i>Justcia neesii</i> , <i>Ruellia elegans</i> , <i>Ruellia simplex</i> , <i>Ruellia tuberosa</i> , <i>Ruellia tweediana</i> , <i>Strobilanthes</i> , <i>Achimenes grandiflora</i> , <i>Strobilanthes callosus</i> , <i>Strobilanthes ciliata</i>
15	Clipper	<i>Parthenos sylvia</i>	Nymphalidae	<i>Zanonia indica</i> , <i>Tinospora sinensis</i> , <i>Adenia hondala</i>
16	Common Bushbrown	<i>Mycalesis perseus</i>	Nymphalidae	<i>Oplismenus compositus</i> , <i>Oryza satva</i>
17	Common castor	<i>Ariadne merione</i>	Nymphalidae	<i>Ricinus communis</i> , <i>Tragia hispida</i> , <i>Tragia involucrata</i> , <i>Tragia plukeneti</i>
18	Common Fivering	<i>Ypthima baldus</i>	Nymphalidae	
19	Common Furring	<i>Ypthima huebneri</i>	Nymphalidae	<i>Axonopus compressus</i>
20	Common Sailer	<i>Neptis hylas</i>	Nymphalidae	<i>Bombax ceiba</i> , <i>Hevea brasiliensis</i> , <i>Canavalia ensiformis</i> , <i>Canavalia gladiata</i> , <i>Flemingia</i> , <i>Lathyrus</i> , <i>Mucuna purpurea</i> , <i>Paracalyx scariosus</i> , <i>Rhynchosia</i> , <i>Vigna cylindrica</i> , <i>Vigna unguiculata</i> , <i>Xylia xylocarpa</i> , <i>Nothapodytes nimmoniana</i> , <i>Corchorus</i> , <i>Grewia</i> , <i>Helicteres isora</i> , <i>Urena lobata</i>

Table 6. Continued ...

SI No	Common Name	Scientific Name	Family	Host Plant(s)
21	Dark-banded Bushbrown	<i>Mycalesis mineus</i>	Nymphalidae	<i>Setaria barbata</i>
22	Rustic	<i>Cupha erymanthis</i>	Nymphalidae	<i>Glochidion eriocarpum</i> , <i>Flacourta</i> , <i>Flacourta indica</i> , <i>Flacourta jangomas</i> , <i>Flacourta montana</i>
23	Common Mormon	<i>Papilio polytes</i>	Papilionidae	<i>Aegle marmelos</i> , <i>Atalanta racemosa</i> , <i>Citrus aurantifolia</i> , <i>Citrus maxima</i> , <i>Citrus limon</i> , <i>Citrus medica</i> , <i>Clausena anisata</i> , <i>Correa</i> , <i>Glycosmis</i> , <i>Glycosmis pentaphylla</i> , <i>Murraya</i> , <i>Murraya koenigii</i> , <i>Murraya paniculata</i> , <i>Ravenia spectabilis</i> , <i>Triphasia</i> , <i>Zanthoxylum</i> , <i>Zanthoxylum rhetsa</i>
24	Common rose	<i>Pachliopta aristolochiae</i>	Papilionidae	<i>Aristolochia</i> , <i>Aristolochia bracteolata</i> , <i>Aristolochia grifithii</i> , <i>Aristolochia indica</i> , <i>Aristolochia tagala</i> , <i>Thotea siliquosa</i> , <i>Braganta wallichii</i> , <i>Dioscorea wallichii</i>
25	Southern Birdwing	<i>Troides minos</i>	Papilionidae	<i>Aristolochia grifithii</i> , <i>Aristolochia indica</i> , <i>Aristolochia tagala</i> , <i>Braganta wallichii</i> , <i>Thotea siliquosa</i>
26	Common Emigrant	<i>Catopsilia pomona</i>	Pieridae	<i>Bauhinia racemosa</i> , <i>Butea monosperma</i> , <i>Cassia</i> , <i>Cassia fstula</i> , <i>Dalbergia latifolia</i> , <i>Senna tora</i> , <i>Senna siamea</i> , <i>Sesbania grandifora</i>
27	Common Grass Yellow	<i>Eurema hecabe</i>	Pieridae	<i>Acacia</i> , <i>Aeschynomene americana</i> , <i>Albizia procera</i> , <i>Albizia saman</i> , <i>Caesalpinia</i> , <i>Caesalpinia mimosoides</i> , <i>Caesalpinia pulcherrima</i> , <i>Caesalpinia sappan</i> , <i>Cassia</i> , <i>Cassia fstula</i> , <i>Senna tora</i> , <i>Mimosa pudica</i> , <i>Moullava</i> , <i>Moullava spicata</i> , <i>Peltophorum pterocarpum</i> , <i>Pithecellobium dulce</i> , <i>Senna alata</i> , <i>Senna obtusifolia</i> , <i>Sesbania</i> , <i>Sesbania bispinosa</i> , <i>Sesbania grandifora</i> , <i>Sesbania sesban</i> , <i>Smithia conferta</i> , <i>Smithia sensitva</i>
28	Psyche	<i>Leptosia nina</i>	Pieridae	<i>Capparis</i> , <i>Capparis baducca</i> , <i>Capparis spinosa</i> , <i>Capparis zeylanica</i> , <i>Crateva adansonii</i> , <i>Crateva religiosa</i> , <i>Cleome viscosa</i> , <i>Azima tetracantha</i>

ily Libellulidae dominated with 14 species among Anisoptera (Dragonflies) and family Coenagrionidae was the dominant family with seven species among Zygoptera (Damselflies). The Fulvous Forest Skimmer (*Neurothemis fulvia*) sighting is particularly interesting because it's usually seen in forests and forest edges (Kiranand Raju, 2013). Temple Pond is visually polluted due to the oil and soap used while bathing by residents nearby. The presence of the dragonfly "Ditch Jewel" (*Brachythemis contaminata*) in the study also points

towards polluted water. In the case of butterflies, Family Nymphalidae (brush-footed butterflies) dominated the butterfly fauna of the SG with 8 species, followed by HesperIIDae (skippers) with 7 species.

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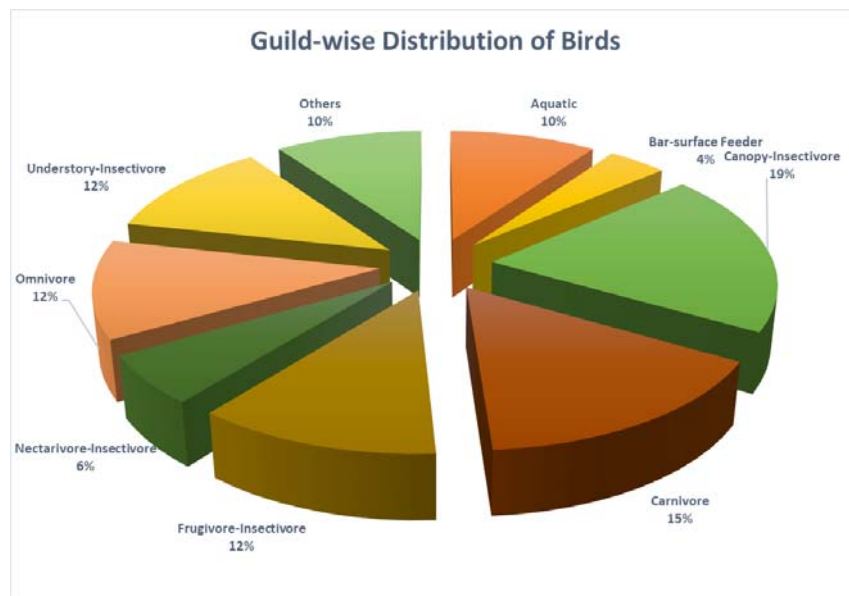


Fig. 2. Feeding guild of birds in Poredam Temple SG

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