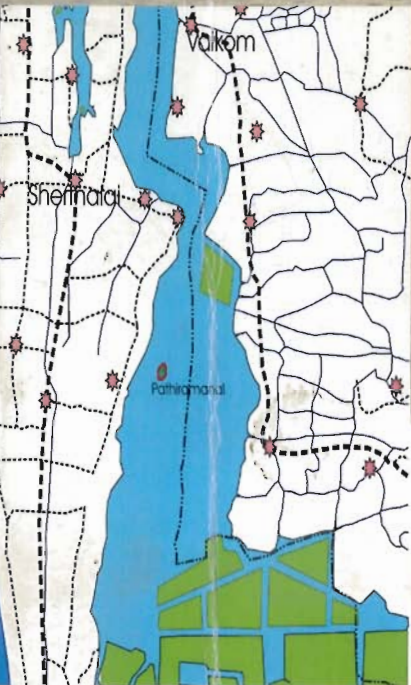


**A study of bird habitats
at the Pathiramanal Island, Vembanadu Lake, Kerala
in view of the proposed eco-tourism project**

PR61

15-06-05



SACON Library



PR61



Report Submitted to

GOVERNMENT OF KERALA

PA Azeez, S Bhupathy, P Balasubramanian, PR Arun

Sálim Ali Centre For Ornithology & Natural History

Coimbatore, Tamil Nadu

November 2004





**STUDY OF BIRD HABITATS AT THE PATHIRAMANAL
ISLAND, VEMBANAD LAKE, KERALA IN VIEW OF THE
PROPOSED ECO-TOURISM PROJECT**

**Report Submitted to
Government Of Kerala**

PA AZEEZ, S BHUPATHY, P BALASUBRAMANIAN AND PR ARUN



**Sálim Ali Centre For Ornithology & Natural History
Coimbatore, Tamil Nadu
November 2004**

| | | |
|---------|---|----|
| 1 | BACKGROUND | 1 |
| 1.1 | The Project | 1 |
| 2 | THE PRESENT STUDY | 2 |
| 2.1 | Scope..... | 2 |
| 2.2 | Objectives | 2 |
| 2.3 | Study area..... | 2 |
| 3 | METHODS | 7 |
| 3.1.1 | Field Survey | 7 |
| 3.1.1.1 | Flora | 8 |
| 3.1.1.2 | Fauna..... | 8 |
| 4 | OBSERVATIONS | 9 |
| 4.1 | Flora | 9 |
| 4.1.1 | Shoreline Vegetation..... | 10 |
| 4.1.1.1 | Tree strata..... | 10 |
| 4.1.1.2 | Shrub strata | 11 |
| 4.1.1.3 | Herb layer..... | 11 |
| 4.1.2 | Inland Vegetation..... | 12 |
| 4.1.2.1 | Tree strata..... | 12 |
| 4.1.2.2 | Shrub strata | 13 |
| 4.1.2.3 | Herb layer..... | 14 |
| 4.2 | Fauna..... | 15 |
| 4.2.1 | Butterflies..... | 15 |
| 4.2.2 | Vertebrates | 17 |
| 4.2.2.1 | Bird faunal diversity | 18 |
| 4.2.2.2 | Migratory birds | 23 |
| 4.3 | Peoples' livelihoods | 24 |
| 5 | ECOLOGICAL ISSUES OF PATHIRAMANAL AND ITS ENVIRONS..... | 26 |
| 5.1 | Visitors to the island | 29 |
| 5.2 | Endemic species..... | 29 |
| 5.3 | Ecological impacts of the project..... | 30 |
| 6 | SUMMARY AND CONCLUSION | 39 |
| 7 | REFERENCE..... | 41 |
| 8 | APPENDICES | 46 |
| 9 | ACKNOWLEDGEMENTS..... | 68 |

6 SUMMARY AND CONCLUSION

The government of Kerala proposes an ecotourism project of international standard at Pathiramanal Island of Vembanadu Lake near Kumarakom in Alappuzha district. In connection with the execution of the Pathiramanal ecotourism project, the government decided to conduct a study on the project area to suggest measures to implement the project, protecting the birds in Pathiramanal and its adjoining areas. At the request of the government of Kerala, SACON undertook the study that covered all seasons for full one-year period.

The Pathiramanal Island that was privately owned reverted to government ownership in late seventies. 14 families who were later rehabilitated in the mainland earlier occupied the island. Considering the size of the area the Pathiramanal Island is rich in biodiversity, with considerable number of plant and animal species residing on it and using it as occasional haven for rest and other activities. It is also a type locality for one subspecies of fish. Currently the island is in a process of succession, reverting back to a wild ecological community.

From an ecotourism point of view the only marketable resource on the island is its scenic beauty. To support an ecotourism project all other essential resources have to be brought in from the mainland. If executed, the ecotourism project is likely to be a major intervention on the island ecosystem and it is likely to change the ongoing natural succession of the island ecosystem. Therefore no permanent construction may be allowed on the island as that will lead to permanent and furthering damages to the



system. Further prior to executing any ecotourism project in the island a detailed project report (DPR) may be developed and a Comprehensive cumulative Environmental Impact Assessment (CIA) may be conducted taking it into consideration.

From an ecological point of view it is better that the island is left protected for its natural return to wilderness. Permanent construction and facilities required for a premium ecotourism center may be avoided. However tourists may be brought in for visits. All essential steps should be adopted for waste management and ecologically benign resources usage.

A number of trees have to be planted along with the shoreline and also inland area to better bird and other animal habitats. Exotic species may be avoided in the area. A coastal protected area upto a distance of 100 m from the coast is proposed so that it functions as a sanctuary for fishes, other aquatic species and also birds. Round the clock surveillance is recommended so that illegitimate and undue exploitation of natural resources on the island and also illicit activities are avoided. The suggestions put forth in the present report is intended at conservation of the bird habitats in and around the island. Hence, it may not be taken as an Environmental Impact Assessment (EIA) of the proposed project.