

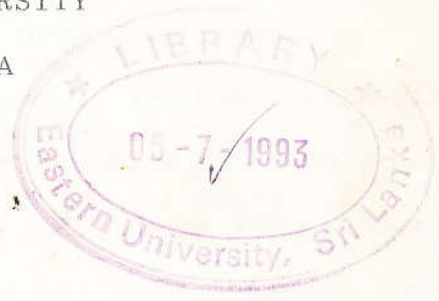
A STUDY OF
FISHES AND CRUSTACEA OF TWO
SHORE LINE LOCATIONS OF BATTICALOA LAGOON
WITH DIFFERENT SALINITY CONDITIONS

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A RESEARCH REPORT
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ABSTRACT

The large Batticaloa lagoon is considered to have a greater potential for exploitation than at present. As a contribution towards the study of the biology of the lagoon to assess its potential, fingerlings and juveniles of fishes and crustacea were collected using pole seine as gear from 1989 October to 1990 June in two shore line locations. One is close to the lagoon mouth "B" and the other is away from the lagoon mouth "A" with different hydrographical conditions. This study is designed to determine the occurrence and abundance of the above fauna and the seasonal variations if any. Water and air temperatures, and salinity were recorded for these locations.

During the north east monsoonal period, salinity was low (13.1% in early January to 5.8% in February) in location A due to fresh water inflow from rivers. In location B which is close to the lagoon mouth, salinity was high (12.85% in October to 33.5% in January). Water temperature fluctuation was less in location B than A as it received more tidal flow from sea with more stable conditions. Fishes of some species like Pertica sp. and cat fishes were found only in location A and not found in location B as they seem to prefer

✓lower salinity conditions. Where as Therapan sp., flat fishes , Leiognathus sp., and Epinephalus sp. were found only in location B and not found in location because they prefer higher salinity areas. Among Crustacea P.indicus, Carediids and Metapenaeus sp. were found in both locations A & B as they seem to have a wide range of salinity tolerance. But Mysid and Acetes sp. were found only in location A as they seem to inhabit lower salinity areas.

P.monodon, P.semisulcatus and crab were found only in location B and not found in location A, because they seem to inhabit higher salinity areas with muddy bottom conditions. Of the Penaeids, P.indicus was found throughout the study on both locations as it has a wide range of salinity tolerance. It has a wider distribution within the lagoon.

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