SHORT-TERM EFFECTS OF DENUDATION OF MANGROVES ON THE FISH AND CRUSTACEN COMMUNITIES OF THE NEGOMBO LAGOON

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A positive correlation exists between the extent of mangroves and shrimp (Martosubroto & Naamin, 1977) and fish (Gedney et al, 1977) catches. A temporal correlation between the juvenile fish and litterfall has also been recorded (Pinto, 1987). But information on the effect of destruction of mangroves on fish and crustacean communities is lacking.

While studying the fish & crustacean communities associated with the sub-habitats of the Negombo Lagoon, the mangroves of two stations were destroyed. The immediate effect of denudation was an increase in the biomass and number of fish and crustacenas due to the accumulation of detritus. Preponderance of catfishes (Tachysurus caelatus) and some species of prawns (Penaeus semisulcatus and Metapenaeus elegans) was noted at these stations. Species diversity index of fish and crustacean communities also increased immediately after the denudation.

About four months after the denudation, the biomass, number and species diversity of the fish and crustacean communities dropped significantly.

References:

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