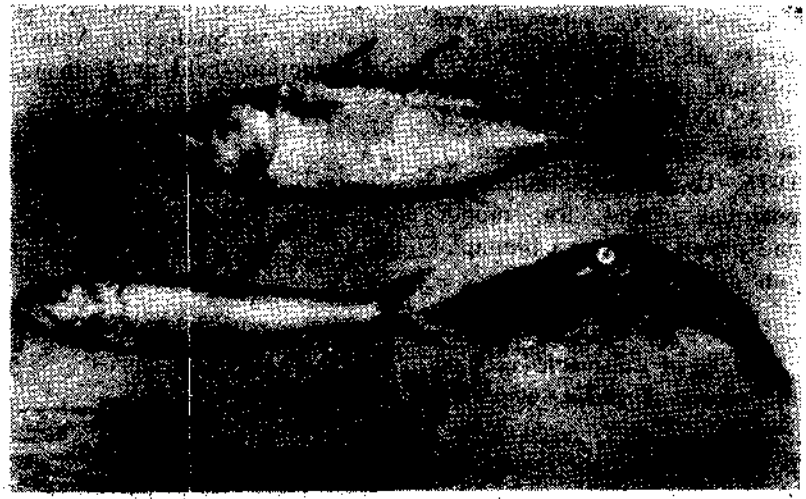
NATIONAL PROGRAMME ON FISH AND PRAWN TAGGING

Large-scale tagging of oil sardine and mackerel, which together form a third of our country's exploited marine fish wealth, and prawn, our prime marine product for export, has been successfully started as envisaged. The shoals of oil sardine and mackerel, almost the entire catch of which is sold on the domestic markets, appear along the coast every year during the post-monsoon months. But the harvest is subject to almost unpredictable quantitative fluctuation the cause of which is still not fully known to scientists. The recovery of a fairly reasonable fraction of these mark-released fishes is expected to provide the much-wanted information on the size and composition of their stocks, growth rates and migration patterns.

The National Programme on Tagging, which would cost over 1.5 lakhs of rupees, is at present centred at Cochin, with Dr. P. Vijayaraghavan, Jr. Fishery Scientist as its Leader and Shri A. Noble and Dr. M. M. Thomas, Asstt. Fishery Scientists as Associate Leaders. All the scientists at Headquarters are actively participating in the programme which is likely to be extended to other centres, if found necessary.

The tags are indigenously made coloured, flat plastic bits attached to thin nylon threads. The tag which is used to mark the fishes is the Loop Tag which is fastened on the back of the fish. The Disc Tag, by which the prawns are marked, consists of two round discs and is fixed like a button to the anterodorsal end of the abdomen. Each tag bears a number. Over 2,000 fish have been tagged and further tagging is in progress. As the recovery of the tagged fish could be while capture at sea or at any of the stages of handling from landing place until it reaches the hands of the housewife, the success of the project is determined by the cooperation of the public as well as the maritime State Governments, the fishing industry and organizations involved in exploratory and experimental fishing.



Tagged mackerel (above), oil sardine (below left) and prawn

A reward of Rs. 3|- is offered for the return of each recovered fish with the tag intact and Re. 1|- for the return of tag alone either to our Headquarters at Cochin or to any of our Substations or Centres. The large number of the Institute's survey staff

OUR STEP FORWARD

Experiments on mass production of prawn seeds for commercial farming have been initiated at Narakkal under the ad hoc Scheme on Marine Prawn Culture and Propagation. Mature females collected from the sea have spawned in the laboratory tanks and the eggs were successfully mass-cultured up to last Mysis stage by feeding them with plankton collected from the culture-ponds. Experiments to further their growth up to the stage at which they can be stocked in culture-ponds are under way.

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Pamban and Athankarai Estuary were surveyed to assess the available stock of fish and prawn seeds. A total of 35,000 m^2 was surveyed during November-December 1975. The results indicate a potential ground for mullet and prawn seeds at Chinnapalam creek at Pamban.

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Elvers of cultivable eels of the genus *Anguilla* were recorded in abundance from Athankarai Estuary of River Vaigai, since the implementation of the 'Elver Resources Survey' at Mandapam in December 1975.

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The Institute has presented two papers viz. "Standardization and Intercalibration Trials with ^{14}Carbon Isotope" by P.V. Ramachandran Nair & K.J. Joseph and "Application of Carbon Isotope Technique in Fishery Research in the Seas around India" by E. G. Silas, P. V. Ramachandran Nair and C. P. Gopinathan at the Symposium on 'Use of Radiation and Radioisotopes in Studies of Animal Production' held at Izatnagar during December 16-18, 1975. The Symposium was organised by Food and Agriculture Committee, Department of Atomic Energy, Government of India.

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A mixed-culture raft has been moored in the open sea at a depth of 5 m, off the Institute Substation at West Hill beach, Calicut, under the Institute's Project for investigating the possibilities of industrializing the composite culture of mussels, oysters and seaweeds in the open sea. Ropes on which the mussel seeds were transplanted were suspended from the raft in December. Observations at the end of a fortnight shows encouraging results.

The mixed-culture raft moored off West Hill Calicut.

posted all along the coasts are also authorised to receive the tags. The cooperation of the public, the State Governments, the fishing industry and other organizations is solicited to make this important national venture a success which will be a breakthrough in our knowledge of these important sea-resources.

We thank the Central Institute of Fisheries Technology, Cochin, for the generous offer of the boat facilities for carrying out the tagging programme.