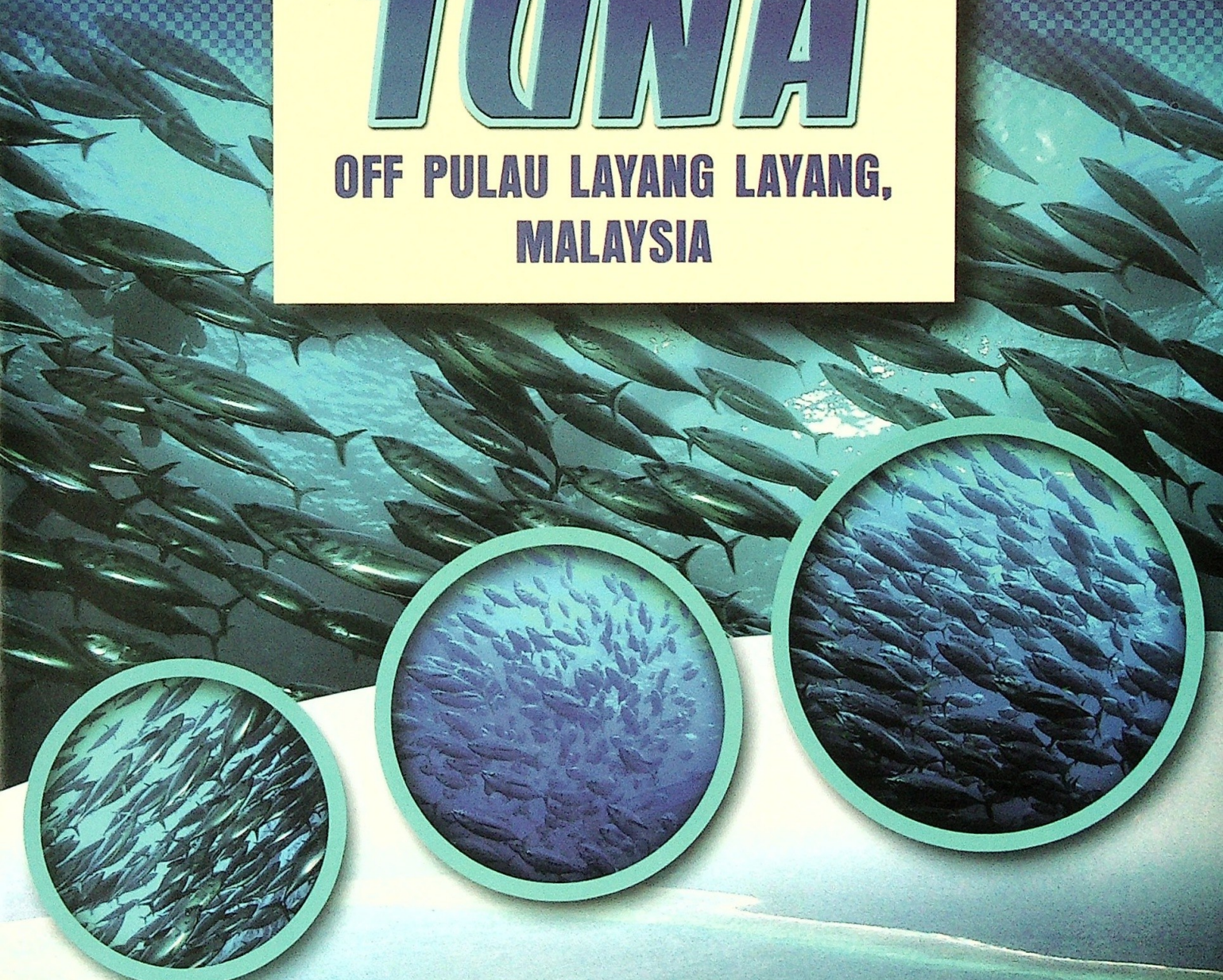




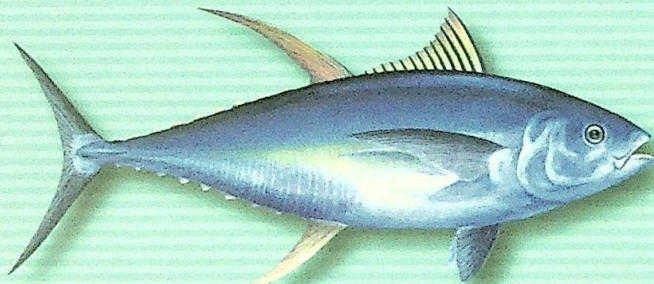
# THE CATCHING OF LIVE **JUVENILE TUNA**

## OFF PULAU LAYANG LAYANG, MALAYSIA

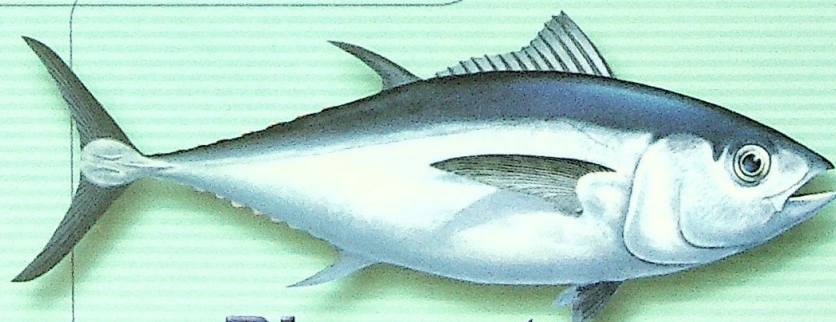


# INTRODUCTION

Pulau Layang Layang waters is known as a nursery ground for Yellowfin tuna (*Thunnus albacares*) and Bigeye tuna (*Thunnus obesus*). Juveniles of the species are abundant in the area from January to September.



**Yellowfin tuna**



**Bigeye tuna**

These species have great potential for aquaculture since the individuals can grow to more than 50 kg. Studies have been conducted to catch live juveniles of these species in waters of Pulau Layang Layang to promote the area as a source of seed supply for the industry.



# PROCESS OF CATCHING LIVE JUVENILE TUNA

The catching of live juvenile tuna involves four steps:

1. Installation of payao
2. Fishing of live juvenile tuna by purse seine
3. Transferring of live juvenile tuna into towing cage
4. Towing of live juvenile tuna to culture ground and transferring them into acclimatization or rearing cages

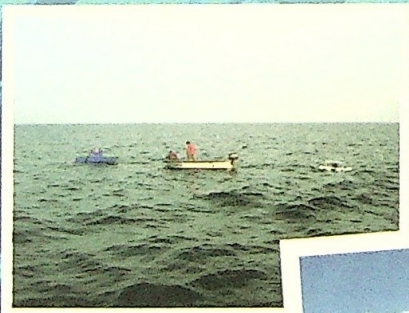
## INSTALLATION OF PAYAO

Payao is installed a few days prior fishing at about 15 nm off Pulau Layang Layang, to aggregate juvenile tuna. Components of payao comprise of a raft made of PVC drum, an attractant made of coconut leaves, an anchor line made of PP rope about 2 km in length and sinkers made of two drums filled with concrete cement, are released into the water in sequence. Vessel K.K SENANGIN II is deployed in the installation of payao.



# **FISHING OF LIVE JUVENILE TUNA BY PURSE SEINE**

Fishing operation by purse seine is conducted at night. Vessel K.L CERMIN is deployed in the fishing operations. Light rafts are attached to payao to concentrate the aggregation of juvenile tuna. The lit rafts are then allowed to drift away from the payao. This makes the aggregated juveniles swim away from payao and follow the lit rafts. The purse seine net is then shot encircling the lit rafts and juveniles.



# **TRANSFERRING OF LIVE JUVENILE TUNA INTO TOWING CAGE**

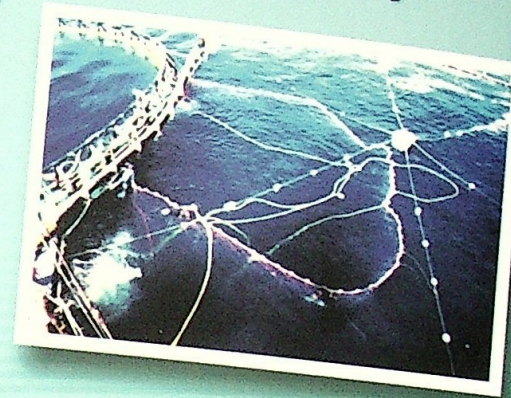


A special cage is used in transferring the live juveniles. The size of the cage is 20 m in diameter and 10 m depth. Once about two third of the purse seine net is hauled and the juveniles are trapped in the net, the cage is then attached to the purse seine net. Openings (diameter about 2 m) which are made each at both net of purse seine and the net of the cage, are laced and joint together. The juveniles trapped in purse seine net are guided by divers to swim into the cage through the opening.



# TOWING AND TRANSFERRING LIVE JUVENILE TUNA INTO THE ACCLIMATIZATION/ REARING CAGE

SEAFDEC/



The cage containing live juvenile tuna is towed at a speed of 1 knot to the culture ground. The condition of the juveniles are monitored during the towing. The juveniles are then transferred into the acclimatization/rearing cage by applying the same method of transferring. The openings which are made in both cages are attached and laced together. The live juveniles are then guided in by divers to enter the acclimatization/rearing cage.



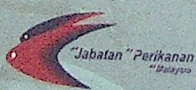
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