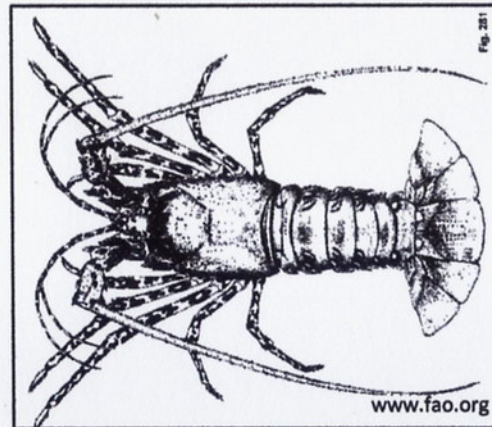




The South China Sea Fisheries *Refugia* Project: Fish Life-Cycle and Critical Habitat Linkages

Life - History Phase	Known Habitat/ Critical Area	Threat
Early - life history	Open Sea → MPA	Light from fishing vessel / Pollution.
Juvenile	Near shore / reef flat + MPA	Fishing in the near shore / reef flat - Pollution.
Pre - recruit	Coral reef / Under water rocks / Mangrove + MPA	- Fishing. - Degradation of mangrove forest.
Adult	Coral reef / Under water rocks + MPA	- Fishing. - Habitat have destroyed
Spawning	- Form the group during spawning in mud flat - bait of sharks during spawning. + MPA	- Fishing. - Predator. - Poison.



Rock lobster (*Panulirus ornatus*)

Activity descriptor: Identifying fisheries *refugia* requires an understanding of the critical linkages between the life-cycles of fish species and their habitats. This inception workshop activity aims to stimulate discussion among participants of the fisheries *refugia* concept and benchmark our collective understanding of how economically important species utilize coastal and marine areas at various stages of their life-cycles. Participants are also invited to identify any known threats to fish life-cycle and habitat linkages for the species they have been assigned.