

## How important are seaweed habitats for small-scale tropical fisheries?

Canopy forming seaweeds are common in the Ningaloo lagoon, often creating large meadows which provide shelter and food for a range of fish and invertebrate species. Of particular interest are emperors (Family Lethrinidae) and cods (Family Serranidae), which are an integral component of the recreational fisher catch.

Annual surveys conducted by scientists from the DBCA and the AIMS focusing on seaweeds and coral reefs have quantified how often these fish can be found in the different habitats along the Ningaloo Coast, during both adult and juvenile stages of their lives. Combining this with fisheries catch data, periodically collected by the Department of Primary Industries and Regional Development, DBCA have estimated that seaweed associated fishes regularly account for most of the recreational catch at Ningaloo.

Since 1998, there have been four published assessments of

the catch composition at Ningaloo and seaweed associated fish have always represented more than 60 percent of reef fish retained by recreational fishers (primarily Spangled emperor and Charlie-court cod). Seaweed associated species are also important to fisheries in the Philippines and Kenya, whilst in many island nations in the Pacific, they are less important. Information from 133 fisheries, collected from 28 countries, indicate that seaweed associated fishes typically account for about a quarter of the catch, suggesting seaweed habitats are a valuable contributor to fisheries around the world. However, very few species rely on a single habitat type and sound management of the reef and associated services should consider all habitats and how they are connected to each other.

These findings have been recently published in the journal Fish and Fisheries which can be downloaded from <https://onlinelibrary.wiley.com/doi/10.1111/faf.12653>



**Above:** *Lethrinus nebulosus*, commonly known as spangled emperor from the family Lethrinidae.



**Above:** *Epinephelus rivulatus*, often referred to as chinaman cod, halfmoon grouper or Charlie Court are from the family Serranidae.