Whale shark, *Rhincodon typus* landed at Kalamukku fish landing centre, Kerala

Thomas, V.J., Hezhakiel, K.C., Molly Varghese and Sreekumar, K.M.  
*Central Marine Fisheries Research Institute, Kochi*

A whale shark, *Rhincodon typus* caught by a trawl boat landed at Kalamukku fish landing centre on 23rd May 2013. This fish was accidently entangled in a trawl net operated off Kochi at a depth of 70 m. The fish did not have external injuries on its body. It was having a total length of 5 m (Fig. 1) and other measurements could not be taken as the information received was at a later stage and the specimen was already thrown back to the sea.

It is locally known as “Thimingala sravu” and is listed as an endangered species as per the IUCN Red list. *Rhincodon typus* is a protected species included under Schedule-I of Indian Wildlife Protection Act, 1972.

---

Migrant women labourers in Puffer fish processing

Swathi lekshmi, P.S. and Chaniappa, M.  
*Mangalore Research Centre of CMFRI, Mangalore*

Puffer fish *Lagocephalus inermis* is found occurring in multi-day trawl catches off the coast of Karnataka. Incidence of puffer fish landing has been recorded at Mangalore and Malpe harbours. The peak season of puffer fish landing at Mangalore harbour was during the months of October (1653 t), November (1270 t) and December (955 t) in multi-day trawls, during the year 2012. At Malpe harbour the landings of puffer fish was 1786 t during October, 750 t in November and 687 t during December, 2012. These months provide additional employment for the women migrant labourers who are otherwise employed in the secondary sector which includes loading / unloading of fish, sorting, peeling and other processing activities. Around 75
women migrants from Tamil Nadu are engaged in the processing of puffer fish at Mangalore harbour once, it has landed. The working hours are from 7 to 9 am (3-4 h). A woman cuts 200 kg of puffer fish during this time. The cutting charges are ₹50/box. The capacity of a box is 40 kg and a woman can handle 4-5 boxes during 3-4 h. The average earning of a woman labourer is ₹250/day.

The cost of puffer fish at the landing centre varies from ₹13-17/kg. The processing of the puffer fish involves removal of the head, skin, ovaries and liver of the fish by cutting and separating these body parts. The skin, ovaries and liver of this fish contain the poison tetrodotoxin (TTX), which is a neurotoxin and is found to shut down the central nervous system of the victim within 4-6 hours of consuming the fish. Though a delicacy in Japanese cuisine, only specialized cooks in Japan are certified to clean, cut and prepare the dish to ensure the safety standards in consumption. “Fugu” is the Japanese word for puffer fish and the dish prepared from it. Normally species of genus Takifugu, Lagocephalus, or Sphoeroides, or porcupine fish of the genus Diodon are used. Though the fish is popular in oriental cuisine, the fish is not known to be preferred in the Indian domestic fish market. At Mangalore harbour the price of puffer fish varies from ₹13-17/kg and at Malpe harbour in Udupi it is as low as ₹10/kg. In the fish markets at Udupi, the price is ₹15/kg. At Malpe harbour, the entire catch of puffer fish goes to the fishmeal plants.

At Mangalore harbour, puffer fish of weight more than 200 g are cut. Twenty percent of the fishes are taken by local agents for dry fish making. The rest (80%) are taken to Tamil Nadu, where the market price is ₹40/kg. In Tamil Nadu there is demand for the meat of puffer fish in the local wine shops where it is cooked and consumed as Kababs. The rest of the puffer fish from Tamil Nadu finds its way to fish markets in Malaysia and China. Once ignored by fishermen as a low value fish, the puffer fish catches are slowly gaining the attention of export markets and if the migrant women work force are effectively utilised, it could lead to the growth of small export houses exclusively for puffer fish processing along the Karnataka Coast.

Occurrence of picnic seabream, *Acanthopagrus berda* (Forsskal, 1775) along Visakhapatnam coast, Andhra Pradesh

Pralaya Ranjan Behera, Loveson L. Edward, Shubhadeep Ghosh and Jonna Krishna
Visakhapatnam Regional Centre of CMFRI, Visakhapatnam

The picnic seabream, *Acanthopagrus berda* (Forsskal, 1775) is a sparid bream, common in Western Indian Ocean, South Africa, Mozambique, the Red Sea, Persian Gulf, India, Phuket and Malaysia. There are about 139 species belonging to family sparidae distributed in World Oceans and about 10 species has been reported from Indian waters. The genus *Acanthopagrus*, now widely recognized as a valid Indo-West Pacific genus was first proposed as a subgenus of *Chrysophrys* by Peters (1855). The type-species of the genus is *Chrysophrys vagus* Peters (1852) was later synonymized with *A. berda* by Smith & Smith (1986). There are 16 currently recognized species of *Acanthopagrus* of which *A. berda* is the most widespread. From Indian waters, three species of *Acanthopagrus* viz. *A. berda*, *A. latus* and *A. bifasciatus* have been reported so far. The species feeds on invertebrates, including worms, molluscs, crustaceans and echinoderms and small fish. It is a protandrous hermaphrodite species.