

Sustainable Seafood Guide in Zanzibar

Issues surrounding sustainable seafood are not black and white. In fact, it is very difficult to establish conclusively what species we should and shouldn't be eating, especially considering the importance of small scale fisheries here in Zanzibar.

Therefore, on Chumbe we have implemented a sustainable seafood purchasing policy to ensure we purchase only sustainably sourced marine products from local fishermen, and avoid species that are overfished or have been caught using destructive fishing techniques.

Some general top tips for consumers:

- ❖ Eat local and fresh
- ❖ Eat lower on the food chain
- ❖ Avoid larger, longer lived species
- ❖ Ask questions before you buy or eat seafood
- ❖ Diversify your choice and try other species that are under less pressure



The following „Green“, „Yellow“ and „Red“ lists provide more background information that allow for a clearer understanding of our decision-making. All names are given in English, Latin (family or species name) and [Kiswahili](#).

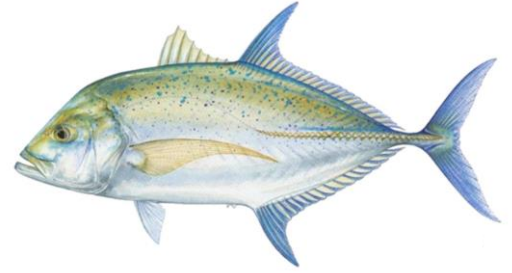
Green–Good choices

Trevally

(*Carangidae*)

Kolekole, Karambizi

The Bluefin Trevally is a fast predator that occurs in schools along deeper coral reef drop-offs. In Zanzibar it is mainly fished by hook and line and has firm, dense meat.



Kingfish

(*Scombridae*)

Nguru

Also known as the Spanish Mackerel, this is a highly valued fish throughout its Indo Pacific range. It is fished locally using traditional hand lining methods. The meat is oily and rich in omega-3 fatty acids.



Wahoo

(*Acanthocybium solandri*)

Ngurungazija

This species is also a member of the mackerel family but its flesh is white and mild. Its stock status is generally unknown but wahoo grow and reproduce quickly which help them withstand fishing pressure.



Dolphinfish/Dorado/Mahi Mahi

(*Coryphaena hippurus*)

Pange

This is fast-growing and short-lived species, occurring in most tropical waters worldwide. Bright in colour with a blunt and flat head, there is no connection between a dolphin and a dolphinfish, aside from their confusing English name. The Hawaiian name 'Mahi Mahi' literally means 'strong strong'. The flesh is soft and flavoursome, ideal for grilling and curries.



Cobia

(*Rachycentridae*)

Songoro

This is a carnivorous marine fish with a large head and almost shark-like body shape. Cobia has very rapid growth rates and is caught in small quantities due to its solitary behaviour. The fillets are white and not very oily.



Green – Good choices

Barracuda

(*Sphyraenidae*)

Tengezi, Mjira

This is a slim, missile shaped predator that is also found in the Atlantic and Pacific Oceans. At least 7 species are known in the region with no indication of overfishing. It has a full, meaty flavour and moderate fat content.



Skipjack Tuna

(*Scombridae*)

Sehewa

This is a relatively small tuna (max. 1 meter length) that is landed by artisanal fishermen. Though it is heavily fished in other areas, skipjack is considered relatively abundant because it is fast-growing, short-lived and very fecund. It is listed as 'Least Concern' on the IUCN Red List.



Reef Octopus

(*Octopus cyanea*)

Pweza

Octopus are the marine world's James Dean: they live fast and die young! This species, which accounts for 99% of octopus catch in the Western Indian Ocean, lives between 9-18 months and can weigh over 10kg. If managed correctly, octopus fisheries in Zanzibar can be highly sustainable as temporary fishing ground closures in Pemba have shown very promising results. A lack of targeted management, however, might result in overfishing as there is a high demand for octopus not only from local communities but also from the hospitality industry nationally and internationally, as well as export countries.



Cigale/Slipper or Flathead Lobster

(*Thenus orientalis*)

Cigale

It is commonly mistaken with its close cousin, the lobster. However, the slipper lobster is a member of another family and unlike its cousin; it has a flat body and pairs of long antennae. Slipper lobsters also prefer soft substrate such as sand or mud and occur at 10-50m depth. Due to their wide geographic distribution, high fecundity and well-connected populations via long-lived larvae, IUCN rates them as 'Least Concern'.



Yellow – Choices with Caution

Black Marlin/Swordfish

(*Makaira indica*)

Nduaro

It is the fastest and largest billfish species and a highly prized gamefish. Stock status in the Indian Ocean is 'not overfished' but the last assessment has been conducted in 2014. Marlin meat is dark in colour and mild in flavour with a moderate fat content.

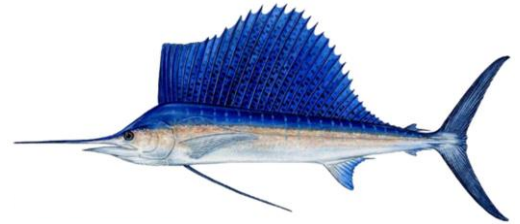


Sailfish

(*Isophorus platypterus*)

Mbasi

This billfish has a characteristic erectile dorsal fin, which often stretches the entire length of the back. Sailfish are known for their incredible jumps and speed. This species is widespread in the Atlantic and Indo-Pacific. It is primarily caught in sport and artisanal fisheries and currently there is no indication of a widespread decline according to the Indian Ocean Tuna Commission (IOTC, 2015).



Important note: billfish species are large and long living apex predators that can accumulate higher levels of mercury by eating other fish and should therefore, be avoided while pregnant or breastfeeding!

Yellowfin Tuna

(*Thunnus albacares*)

Jodari

This highly migratory tuna is torpedo-shaped with very long, bright yellow anal and dorsal fins. Juveniles often school with adult skipjack tuna and are increasingly caught as bycatch by vessels that target skipjack. The removal of these juveniles before they have a chance to spawn has already resulted in overfished yellowfin populations globally. In Zanzibar, however, yellowfin tuna is still caught by artisanal fishermen that target big adults without bycatch and therefore, it is considered as a locally sustainable fish choice. Avoid eating Yellowfin tuna if you don't know where and how it was caught.



Prawns/Shrimps

(*Penaeidae*)

Kamba

Shrimp fisheries in Tanzania are based on four major species (white prawns, giant black prawns, tiger prawns and brown shrimp) and comprise artisanal and commercial fisheries. Conflicts between different fisheries are well known (e.g. artisanal nets have been damaged by trawlers when operating very close the shore; prawn stocks have been reduced and habitat destroyed by trawlers). Prawn stock size has been fluctuating over time along the coastline of Tanzania, although fisheries regulations have been in place since 1987. Recent studies indicate a slight improvement of the prawn stock biomass in Tanzania.



Red – Avoid Eating

Parrotfish

(*Scaridae*)

Pono

Parrotfish are keystone species in coral reefs as they prevent algae from smothering coral reefs, thus large-scale removal can be severely detrimental to tropical reef ecosystems.



Grouper

(*Serranidae*)

Chewa

These predatory reef fish are largely overfished, not managed and often caught with fishing methods detrimental to their vulnerable reef habitat.

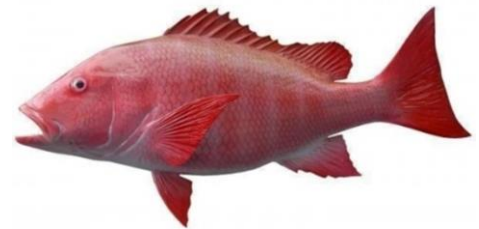


Reef Snapper

(*Lutjanidae*)

Janja, Fatundu, Tembo, Mbawa

Snappers have slow growth rates and a low natural mortality and reach sexual maturity at high age. The combination of these factors makes this species vulnerable to overexploitation.



Emperor

(*Lethrinidae*)

Changu

Although emperors are widely distributed, they are relatively large-bodied and long-lived, which may cause them to be susceptible to overexploitation.



Spiny Lobster

(*Palinuridae*)

Kambakochi

Spiny lobsters live in shallow tropical reefs and have two pairs of long antennae. Even though they are globally not threatened, they are fully exploited and localised declines can occur, especially in tourism areas. In Zanzibar it is common that fishermen catch undersized lobsters or berried females, which threatens the sustainability of the population by removing lobsters before they have the chance to breed.



Red – Avoid Eating

Sharks and Rays

(*Carcharhinidae, Dasyatidae and Mobulidae*)

Papa and Taa

Sharks and rays are critical for the health of both coastal and oceanic ecosystems. Particularly, sharks are powerful predators and vulnerable to overfishing because they grow slowly, mature late, and produce few young. Unfortunately, most shark and ray fisheries are unregulated, very few are subject to strict fishing limits, and often sharks are caught as bycatch in inshore or long-line fisheries. Every year approximately 100 million sharks are killed in commercial fisheries.

Historically sharks were not considered important species to fisheries managers and conservationists because they were not economically important and very little was known about them. However, as data became available, it became clear that shark populations were declining and conservation measures were needed for many species. Currently, there are several conservation and management initiatives underway, and plans that operate on many levels from international conventions to local laws. For example, in March 2013 the global conservation community celebrated a historic achievement with the successful listing of seven heavily traded, threatened shark and ray species in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Shark-based tourism provides economic benefits in areas that can support sustainable tourism ventures with adequate infrastructure and relatively reliable shark sightings. In Zanzibar, however, it is very rare for tourists to see sharks or large rays, with the exception of the Chumbe marine protected area, where small reef sharks are safe and truly protected.

Unfortunately, the most likely places to find sharks and rays in Zanzibar are in the fish markets.

Please do not buy any shark or ray products at the local market!



Thank you very much for making wise choices for a sustainable future!
The Chumbe Island Team