FORAGE FISH

FACT SHEET

FEBRUARY 2021

The NOAA Fisheries definition of Forage fish "are small schooling species that serve as prey for larger commercially and recreationally important fish, as well as for marine mammals and sea birds. Anchovies, herring, chub mackerel, and sardines are some common forage fish".

Forage fish are a fundamental part of marine food webs but are also used by humans for a variety of purposes. Ninety percent of the forage fish catch in the World is used to produce fishmeal or fish oil for use in the agriculture, aquaculture, pet food, and other industries. Forage fish also serve as bait or attractant for larger commercially and recreationally important fish. Forage species used to fish are also called baitfish.

The marine fishery ecosystem in the Caribbean has a great biodiversity that goes beyond the species caught and served in our plates. Due to the great number of species present on the Caribbean Region the definition of forage species can be complex.



SOME OF THE MOST COMMON FORAGE FISH SPECIES IN THE CARIBBEAN



Ballyhoo (Hemiramphus brasiliensis) are nearshore surfaceswimming species that form dense schools, often in association with each other.



Scaled Herring (*Harengula jaguana*) is a gregarious species inhabiting the neritic environment and commonly schools around mangrove shorelines, seagrass beds, and surf zones.



Red Ear Herring (Harengula humeralis) is a gregarious species inhabiting the neritic environment and commonly schools around mangrove shorelines and seagrass beds.



Threadfin Herring (Opisthonema oglinum), commonly found forming dense schools in the upper 3m of the water column; feeding primarily by filtering copepods from the water column, shrimps and prawns, small finfish and benthos including copepods, crabs, worms, sponges and tunicates and detritus.

SOME OF THE MOST COMMON FORAGE FISH SPECIES IN THE CARIBBEAN



White Mullet (Mugil curema), found in sandy coasts and littoral pools, brackish lagoons and estuaries., sometimes found in rivers and on coral reefs. Adults frequently form schools and are omnivorous, feeding on benthic algae and seagrass.



Yellowfin Mojarra (*Gerres cinereus*), moves between fresh, salt and brackish waters. They inhabit shallow coastal waters in open sandy and surf areas, seagrass meadows, mangrove channels, and coral reefs.



Striped Mojarra (Eugerres plumieri), inhabits shallow coastal waters and commonly occur in brackish waters, often swimming a considerable distance into freshwaters. They are found mostly over mud bottoms in mangrove-lined creeks and lagoons.



Blue Runner (Caranx crysus) is a schooling fish that lives inshore and offshore up to the insular drop off and feed on smaller fishes and invertebrates. Juveniles are commonly found associated to floating debris or Sargassum weed patches.

A very important and essential component of this ecosystem is the forage fish, also known as small pelagic -fish and invertebrates-that feed on plankton (herbivorous or carnivorous) and occupy an important place from the shore to the open sea in marine food webs.

Forage fish play a fundamental role in marine ecosystems by converting energy from lower trophic levels into food for larger fish, marine mammals, seabirds and humans. They are a critical part of the marine food webs, thus the need to monitor them, due to their connections with other species that are under management regimes.

Recognizing the challenge and the overwhelming number of forage species, the research on those species or species indicators is a good practice utilized in many regions, to strengthen the Ecosystem Based Management approach.

