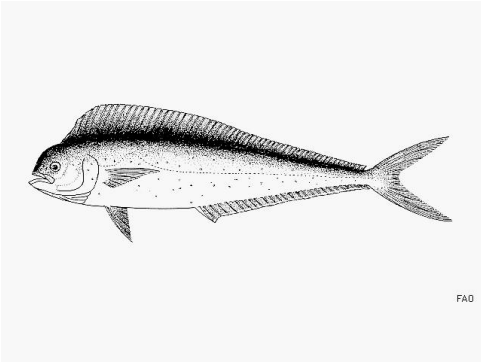


# Common dolphinfish Eastern Pacific Ocean

Fishery:  Eastern Pacific Ocean  IATTC  Costa Rica  Mechanized lines

## IDENTIFICATION



### SCIENTIFIC NAME

*Coryphaena hippurus*

### SPECIES NAME(S)

Common dolphinfish, Mahi-mahi

### STOCK IDENTIFICATION

The stock structure of the species is not truly known at a global scale. Díaz-Jaimes et al. (2010) studied the inter-oceanic divergence of Atlantic, Indian, Pacific and Mediterranean populations but the genetic differentiation is not conclusive. The population structure in the eastern Pacific Ocean is unclear (*IATTC 2014*). Here, the separation of the Eastern Pacific and the **Western Central Pacific** stocks is based in the genetic heterogeneity found in the Pacific Ocean by Rocha-Olivares et al (2006) and due to differences in fisheries and management.



### RELATED LINKS:

- [Inter-American Tropical Tuna Commission \(IATTC\)](#)

## ASSESSMENT

### Strengths

- Mahi mahi are fast growing and tend to be resilient to fishing pressure.
- The Inter-American Tropical Tuna Commission (IATTC) has started a collaborative research plan for mahi mahi in the eastern Pacific Ocean (EPO).
- Some information on catch rate trends for mahi mahi in the EPO is available.
- The IATTC has conducted a stock assessment and Management Strategy Evaluation on mahi mahi in the EPO

### Weaknesses

- There are few to no management regulations at international or national levels.
- There are no reference points in place so the status of mahi mahi in the EPO is currently unknown.
- Longlines, which are used to target mahi mahi in the EPO, can have negative interactions with protected, endangered, or threatened (PET) species and information on these interactions and their impacts is limited.
- IATTC requires only 5% observer coverage in the longline fleet. Mahi mahi are also incidentally captured in purse seine fisheries operating in EPO.
- Although limited information is available on longline fisheries (Whoriskey *et al.*, 2011), there is a shortage of catch, bycatch, discard and fishing effort data for mahi mahi from both industrial and artisanal handline and troll fleets in Costa Rica waters.
- Catches of mahi mahi from small-scale and recreational vessels are not adequately quantified. There appears to be substantial illegal fishing of pelagic fish including mahi mahi from foreign and unregistered domestic fleets in Costa Rica's EEZ and beyond.
- Spawning grounds of mahi mahi are poorly known in the Pacific Ocean (Alejo-Plata *et al.*, 2011b).
- Costa Rica has implemented a number of IATTC sea turtle management measures but has had some compliance issues with regard to providing data on sea turtle interactions to IATTC.

## SCORES

### Management Quality:

Management Strategy	Managers Compliance	Fishers Compliance
< 6 to ≥ 6	≥ 6 to ≥ 8	< 6 to ≥ 6

### Stock Health:

Current Health	Future Health
NOT YET SCORED	NOT YET SCORED

## FIPS

No related FIPs

## MSC

No related MSC fisheries

## RECOMMENDATIONS

### RETAILERS & SUPPLY CHAIN

- Work with IATTC Members and Cooperating Non-Members (CPCs) to:
  - Immediately adopt formal limit and target reference points and develop a harvest control rule.
  - Support continued work towards a full stock assessment of mahi mahi in the eastern Pacific Ocean including improved catch, effort, discard and biological data reporting for the target species at the national and IATTC level, including through measures such as electronic logbooks from all fleet segments of the fishery and for the fishery north of the equator.
  - Support continuation of improved catch, effort, and biological data reporting for bycatch species at the national and IATTC level, including through measures such as electronic logbooks from all fleet segments of the fishery and for the fishery north of the equator.
  - Strengthen compliance processes and make information on non-compliance public and continue to provide evidence of compliance with all IATTC Conservation and Management Measures in a timely manner.

- Increase compliance with the mandatory minimum 5% longline observer coverage rates by identifying and correcting non-compliance. Aim to increase longline observer coverage rates to a minimum of 20% within 5 years and with a long-term goal of 100% (which could include electronic and human observers) on vessels greater than 20 meters length.
- Identify and mandate the use of best practice bycatch mitigation techniques such as those outlined in the [Best Practices in Tuna Longline Fisheries Report](#).
- Ensure all products are traceable back to legal sources. Verify source information and full chain traceability through traceability desk audits or third party traceability certification. For fisheries without robust traceability systems in place, invest in meaningful improvements to bring the fisheries and supply chain in compliance with best practices.