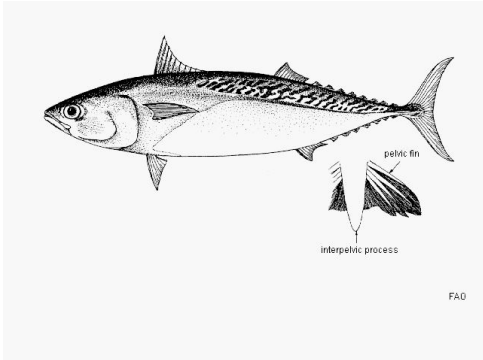


# Frigate tuna Ecuador

Fishery: [Ecuador](#) [Ecuador](#) [Purse seines](#)

## IDENTIFICATION



### SCIENTIFIC NAME

*Auxis thazard*

### SPECIES NAME(S)

Frigate tuna

### STOCK IDENTIFICATION

The stock structure of frigate tuna in Eastern Pacific is not known, but management in Ecuadorian waters is conducted by the Subsecretary of Fishery Resources (Ministry of Aquaculture and Fisheries).



### RELATED LINKS:

- [Ecuador Ministry of Agriculture, Livestock, Aquaculture and Fisheries \(MALAF\)](#)
- [National Fisheries Institute of Ecuador \(INP\), Vice Ministry of Aquaculture and Fisheries of Ecuador \(MAGAP\)](#)

## ASSESSMENT

### Strengths

- Fishing of small pelagic fishes is banned two months per year to allow the recovery of the species.
- There is a regulation on mesh size and some spatial protection measures have been adopted to protect reproductive phases, as advised.
- Three acoustic surveys have been recently conducted (March and November 2018, March 2019) providing updated information on abundance and biomass.
- Except for recreational and particular traditional fisheries tThe first mile from coast is closed to fishing in order to protect the reproduction of aquatic species.
- Marine habitats and bottom types have been identified an mapped.
- There is a national plan for the conservation of sea turtles and a national plan for the conservation of sharks.

### Weaknesses

- There is no information on stock structure of *Auxis thazard* in the Eastern Pacific Ocean so there is no evidence of the existence of a stock off Ecuador.
- There is no formal link between scientific advise and management.
- Specific technical measures such as a minimum landing size have not been established in spite of being repeatedly advised by the National Institute of Fisheries of Ecuador.
- Frigate tuna are not managed by any Regional Fishery Management Organization in the region.
- Some impacts of the fishery on ETP and seabed habitats have been reported, but are not regularly assessed. Ecosystem impact of this fishery and the role of frigate tuna in the ecosystem of the area where this fishery operates have not been evaluated

## SCORES

### Management Quality:

Management Strategy	Managers Compliance	Fishers Compliance
< 6	≥ 6	<b>DATA DEFICIENT</b>

### Stock Health:

Current Health	Future Health
<b>DATA DEFICIENT</b>	<b>DATA DEFICIENT</b>

## FIPS

No related FIPs

## MSC

No related MSC fisheries

## RECOMMENDATIONS

### RETAILERS & SUPPLY CHAIN

- Support current improvement efforts and encourage development of a formal, national, Ecuador small pelagic fishery improvement project (FIP) that includes the following activities:
  - Work with scientists to develop a research programme to determine the stock structure and its distribution, and then develop adequate stock assessment models that take into consideration environmental variables.
  - Work with regulators to develop a management strategy based on the best scientific advice, including appropriate harmonisation for transboundary stocks (e.g. through the Inter-American Tropical Tuna Commission).
  - Develop formal decision-making frameworks, which should establish:
    - sources of information and scientific research for decision making,
    - consultation and inclusion of relevant stakeholders, institutions, and organizations in decision making,
    - transparent reporting of research outcomes and consultation processes and
    - a public strategy to implement decisions.
  - Work with regulators to implement a consistent system for regular collection and publication of fisheries and observer data from all fleet segments and gear types, especially for the artisanal fleet.
  - Encourage regulators to improve the monitoring, control, and

surveillance to ensure compliance with regulations.

- Ask managers to review both the process and scientific basis used to implement temporal closures and evaluate the results of this management approach.
- Work with regulators to establish a minimum landing size as advised by National Institute of Fisheries of Ecuador (INP).