



SPANISH MACKEREL

Scomberomorus maculatus

Life History and Habitat Needs

Geographic Range

Spanish mackerel are found along the U.S. Atlantic coast from New York to the Florida Keys. Spanish mackerel are sometimes found in southern New England, and occasionally will stray as far north as the Gulf of Maine.

Movement/Migration

Spanish mackerel migrate north-south seasonally along the Atlantic coast. They move in large schools over great distances but stay close to shore. In spring, as water temperatures warm along the Atlantic coast, Spanish mackerel migrate north. They usually reach the Carolinas by April or May and the Chesapeake Bay by May or June. In the fall, as waters cool, Spanish mackerel migrate back to Florida waters for the winter.

Spawning

Spanish mackerel spawn in batches over the inner continental shelf. Spawning starts in April off the Carolinas occurs from July to September off Florida, and from late August to late September in the northern part of the range.

Habitat Use

Larvae are found in inshore waters with temperatures ranging between 20 – 30°C and salinities of 28 – 37. Juveniles are found in estuarine and coastal waters. Juveniles can tolerate salinities as low as 5 but prefer waters with salinities over 10. Adult Spanish mackerel inhabit tidal estuaries and coastal waters out to the edge of the continental shelf. Spanish mackerel prefer open water and spend most of their life cycle in the ocean, but are sometimes found over deep seagrass beds and reefs, as well as throughout shallow water estuary habitats. Temperature and salinity are believed to be the most important factors determining adult distribution. Spanish mackerel prefer water temperatures of 21 – 27°C, and they are rarely found in waters cooler than 18°C.

Threats to Habitat

- Habitat alteration (e.g., wetlands converted to agricultural use, bulkheads, proliferation of docks and marinas)
- Dredging and dredge spoil placement
- Point and nonpoint source pollution
- Ocean dumping of sewage sludge
- Hydrological modifications (ditching, channelization, freshwater flows)

ASMFC Fish Habitats of Concern

Spawning grounds and areas where eggs and larvae develop are important habitat for Spanish mackerel, but need to be identified (see Habitat Research Needs). Estuaries and nearshore coastal waters are important nursery areas, however, juveniles do not readily recruit to estuaries along the east coast of Florida.

Recommendations to Improve Habitat Quality

- Prohibit the use of any fishing gear having a negative impact on Spanish mackerel habitat within Fish Habitats of Concern (e.g., trawling in spawning areas or primary nursery areas should be prohibited).
- Develop permitting conditions and planning considerations to avoid or mitigate adverse impacts to habitat areas of particular concern (e.g., dredging windows to reduce impacts to locations of eggs and spawning activity).
- Coordinate development and implementation of nonpoint source pollution control plans.
- Review adequacy of water quality standards to protect all life-stages of Spanish mackerel.
- Restore and enhance estuarine and nearshore seagrass, oyster reefs, and natural hardbottom communities.

Habitat Research Needs

- Identify habitat requirements for all life-history stages of Spanish mackerel.
- Map, characterize, and quantify spawning areas and areas of larval and newly recruited young of the year abundance to better define nursery habitats for Spanish mackerel.
- Investigate minimum and maximum tolerances for parameters such as dissolved oxygen, temperature, and salinity.

Additional Information

Spanish mackerel are managed jointly by the ASMFC and the SAFMC. The Interstate Fishery Management Plan for Spanish Mackerel is current to Addendum I (2013) to the Omnibus Amendment to the Interstate Fishery Management Plans for Spanish Mackerel, Spot, and Spotted Seatrout (2011). The FMP and related documents are available on the ASMFC website at www.asmfc.org or by contacting the ASMFC Habitat Program Coordinator at 703.842.0740..

