

2015 Maryland FMP Report (June 2016)

Section 13. King Mackerel (*Scomberomorus cavalla*) and Spanish Mackerel (*Scomberomorus maculatus*)

Spanish mackerel commercial harvest from the Atlantic Coast increased in 2014 after a 4-year decline from the peak in 2010 (4.3 million lbs.). Recreational harvest and release estimates from the coast decreased in 2014 but were similar to 2011 and 2012 values. Spanish mackerel migrate between Florida and New York and are found in Maryland and Virginia's waters in the warmer summer months. Florida and North Carolina are responsible for most of the commercial and recreational harvest of Spanish mackerel.¹ King mackerel are a coastal pelagic fish that seasonally are found in the lower Chesapeake Bay but are rarely caught in the Maryland. King mackerel and Spanish mackerel are managed under the same plan within the Chesapeake Bay. Based on the South Atlantic coastal stock assessments, neither species is overfished or experiencing overfishing^{1,2}

Chesapeake and Atlantic Coast FMP

The Chesapeake Bay and Atlantic Coast King and Spanish Mackerel Fishery Management Plan (CBK/SM FMP) was adopted in 1994. The plan follows the coastal management requirements. The CBK/SM FMP was reviewed in 2014 and was determined to be an appropriate framework for managing mackerel in Maryland. The two species are managed jointly under the Atlantic States Marine Fisheries Commission's (ASMFC) 1990 FMP for Spanish Mackerel and the federal Coastal Migratory Pelagics (CMP) FMP adopted in 1983 by the South Atlantic Fishery Management Council (SAFMC). Since 1985, amendments have been adopted by the SAFMC making changes to the allocation of commercial quotas, changes to at-sea transfer rules and changes that increase the total allowable catch of Spanish mackerel. Framework Amendment 2 has been finalized and went into effect in August, 2015. Amendment 2 establishes a trip limit in the southern zones; but will not affect Maryland or Virginia. Amendment 26 is in progress and will update catch limits, boundaries, commercial quotas by zone, and bag limit allowances. For specific details on each of the amendments, go to:

<http://www.safmc.net/Library/CoastalMigratoryPelagicsmackerel>. Atlantic coastal states comply with the provisions of the 1990 Spanish Mackerel ASMFC FMP, Omnibus Amendment 1 (2011) and Addendum I to the Omnibus Amendment (2013) by implementing creel limits, size limits and seasonal closures that closely mirror the SAFMC CMP FMP requirements. To view ASMFC FMP documents, go to: <http://www.asmfc.org/species/spanish-mackerel>.

Stock Status

There is no formal stock assessment for either mackerel species in the Chesapeake Bay. A stock assessment conducted by the Southeast Data, Assessment, and Review Process (SEDAR 28) in 2012 (revised in 2013) concluded that the Spanish mackerel

Atlantic stock is not overfished and overfishing is not occurring. The coastal stock was overfished in the 1980's and early 1990's, which led to harvest control regulations and a rebuilding of the depleted stocks. Management measures have been successful at rebuilding the Spanish mackerel stock. The ratio of biomass to Bmsy has been increasing.³ A stock assessment for the Atlantic king mackerel migratory group was completed in 2014 (SEDAR 38) and concluded that the stock is not overfished and overfishing is not occurring. However, there is some concern over low recruitment and possible northward shifts in distribution.²

Current Management Measures

The coastal annual catch limit (ACL) for Spanish mackerel was set at 6.063 million pounds under CMP Framework Amendment 1 to the federal FMP (2014). Fifty-five percent of the ACL is allocated to the coastal commercial fishery and 45% to the coastal recreational fishery. The commercial portion of the ACL was further divided with 19.9% going to the northern fishing area and 80.1% to the southern fishing area (Amendment 20b, 2014). The north-south split occurs at the SC-NC border. King mackerel are also managed under an ACL with an annual commercial quota. Although the Atlantic king mackerel management area extends to the mid-Atlantic region, the SAFMC is responsible for providing management oversight on catch and bag limits for the recreational fishery and catch, gear and seasonal limits for the commercial fishery.

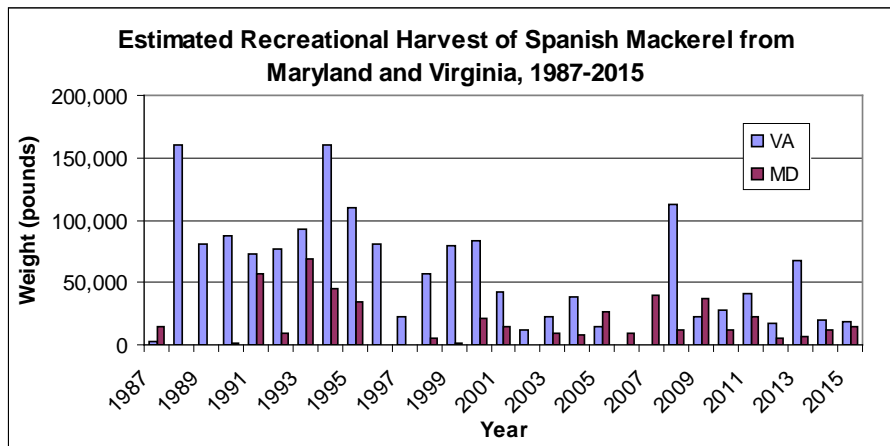
The Chesapeake Bay jurisdictions manage Spanish mackerel through size and creel limits as well as closures consistent with federal management measures. All states from New York to Florida implemented the requirements of the 2011 Omnibus Amendment for Spanish mackerel, Spot and Spotted Seatrout. Maryland and Virginia require a 14" minimum total length limit with a creel limit of 15 Spanish mackerel for recreational fishermen and a 3,500 pound per trip limit for commercial fishermen. The king mackerel size limit is 27" in Virginia with a creel limit of 3 fish for recreational fishermen in Virginia. Maryland has not developed regulations for king mackerel because they are rarely encountered in Maryland state waters. Commercial harvest reporting is required. Cull panels are used to reduce bycatch from pound nets set in the Potomac River by the Potomac River Fisheries Commission (PRFC). PRFC regulations for both species mirror those of Maryland.

Following public hearings, ASMFC approved an omnibus amendment for spot, seatrout and Spanish mackerel in August, 2011. The amendment includes an update to the coastal plan and includes commercial and recreational management measures and recommendations, adaptive management options, *de minimis* thresholds and exemptions, monitoring recommendations and requires each jurisdiction to submit an implementation plan and annual compliance report.^{4,5} The amendment also requires recreational fishermen to land their catch with the head and fins intact. Maryland changed its regulations in 2012 to comply with the omnibus amendment.

The Fisheries

In most years, the estimated recreational harvest of Spanish mackerel is greater in Virginia than in Maryland (Figure 1). Catch estimates in the recreational fishery are imprecise with proportional standard errors in excess of 50 for most years in both Maryland and Virginia. In all years, commercial landings of Spanish mackerel from Virginia waters greatly exceeded those from Maryland (Figure 2). Annual recreational landing estimates for king mackerel have been highly variable for both states, ranging from zero to 137,300 pounds in Virginia and zero to 47,000 pounds in Maryland.⁶ Over the past ten years, annual commercial landings for king mackerel have ranged from zero to 511 pounds in Virginia and zero to 249 pounds in Maryland.²

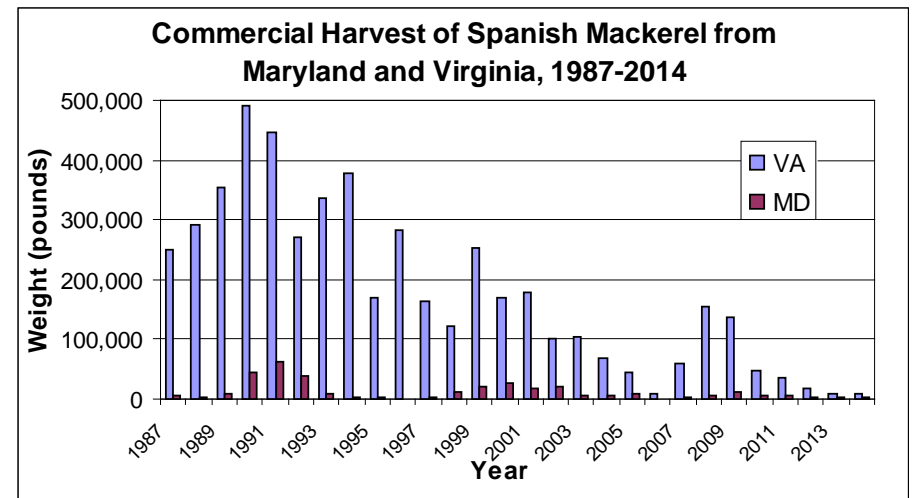
Figure 1.



Issues/Concerns

The 2014 Review of the ASMFC FMP for Spanish mackerel recommended additional research and monitoring. High priority recommendations included collecting basic fisheries data for better stock assessment accuracy; developing methods for fishery-independent monitoring; determining better estimates of recruitment, natural and fishing mortality rates and stock size; and implementing ecosystem-based management.

Figure 2.



References

- ¹ Atlantic States Marine Fisheries Commission. 2015. Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Spanish mackerel (*Scomberomorus maculatus*). Arlington, Virginia.
- ² SEDAR. 2014. SEDAR 38 - South Atlantic King Mackerel Stock Assessment Report; SEDAR, North Charleston, SC. 501pp. available online at: http://sedarweb.org/docs/sar/SEDAR_38_SA_SAR.pdf
- ³ SEDAR. 2012. SEDAR 28 – South Atlantic Spanish mackerel Stock Assessment Report. SEDAR, North Charleston SC. 444 pp. available online at: http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=28
- ⁴ 2012. Rickabaugh, H.W. Jr. Maryland's Plan for Implementing Requirements Pertaining to Spanish Mackerel within ASMFC's Omnibus Amendment for Spot, Spotted Seatrout, and Spanish Mackerel.
- ⁵ 2015. Messer, K.M. Maryland Spanish Mackerel (*Scomberomorus maculatus*) Compliance Report to the Atlantic States Marine Fisheries Commission – 2014. May, 2016.
- ⁶ Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Marine Recreational Information Program May 3, 2016.
- ⁷ Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, commercial harvest query May 3, 2016.

1994 Chesapeake and Atlantic Coast King and Spanish Mackerel Management Plan Implementation Table (update 06/16)			
Section	Action	Date	Comments
Stock Status	Action 1.1.1 A) Virginia will enforce a 14" TL minimum size limit and a 10 fish/person/day bag limit for Spanish mackerel.	1991 Continue	Minimum size and creel limits in place. Creel limit increased to 15 fish/person/day. VA implemented a 3,500 pound commercial limit in 2012. Spanish mackerel must be landed with head and fins intact.
	Action 1.1.1 B) Maryland will enforce a 14" TL minimum size limit for both the recreational and commercial fisheries and a 10 fish/person/day bag limit for Spanish mackerel.	1993 Continue	Minimum size and creel limits in place. Creel limit increased to 15 fish/person/day. MD has a commercial limit of 3,500 pounds Spanish mackerel per vessel per day. MD implemented a 3500 pound commercial limit in 2012. Spanish mackerel must be landed with head and fins intact.
	Action 1.1.2 A) Virginia will enforce a 5 fish/person/day bag limit for king mackerel.	1991 Continue	Minimum size and creel limits in place. Creel limit reduced to 3 fish/person/day.
	Action 1.1.2 B) Maryland will enforce a 5 fish/person/day bag limit for king mackerel.		MD has not developed regulations for king mackerel since most of the catch is outside state waters. Fishermen must abide by the limits imposed in the EEZ.
	Action 1.1.3. Virginia and Maryland will enforce a 20" FL or 23" TL minimum size limit for king mackerel.		Minimum size limit of 27" established in VA.
	Action 1.1.4. Virginia and Maryland will close their respective commercial and recreational fisheries for king and Spanish mackerel when such closures are in effect in Federal waters.	1995	Closures will be in compliance with South Atlantic Fishery Management Council (SAFMC) recommendations.
Monitoring catch and quotas, and research needs.	Action 2.1.1. Virginia and Maryland will require mandatory reporting of commercial landings	Continue	Both states are in compliance with reporting requirements.
	Action 2.1.2. Virginia and Maryland will supplement the Marine Recreational Statistics Program. MD will require charter boat logbooks.	Continue	Coastal charter boat logbook system was improved in 1994. Improvements in estimating recreational harvest are in progress under the NOAA Marine Recreational Information Program (MRIP)

1994 Chesapeake and Atlantic Coast King and Spanish Mackerel Management Plan Implementation Table (update 06/16)			
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	Action 2.1.3. Jurisdictions will support stock assessment research for mackerel stocks.	Continue	VA samples Spanish mackerel for length and weight. The ASMFC omnibus amendment was approved in 2011 and was implemented July 1, 2012. The amendment includes monitoring and management recommendations. The most recent stock assessment for the south Atlantic stock of Spanish mackerel was completed in December of 2012 and revised in 2013. A new King Mackerel Stock Assessment Report was completed in August 2014 for South Atlantic and Gulf of Mexico.
Waste/sublegal bycatch and hook and release mortalities	Action 3.1.1. Virginia will evaluate the use of escape panels as a means of reducing undersized bycatch. VA will enforce a 2 7/8" minimum mesh size for gill nets.	Completed	VA conducted studies on escape panels in pound nets and found they were successful at reducing bycatch.
	Action 3.1.2. Jurisdictions will support angler educational programs.	Continue	In 2008, Project FishSmart was organized by UMCES to develop a process for developing a consensus position on fisheries management options by a stakeholder group comprised of biologists, environmental organizations, tackle shop owners, charter boat operators, anglers, commercial fishermen, and tournament organizers. The pilot project species was King Mackerel and the goal of the project was to prevent overfishing and preserve a year-round fishery, with recommendations being adopted Nov 7, 2008. A report was submitted to the South Atlantic Fishery Management Council that recommended three options for consideration (UMCES, 2008), which were in its public scoping document. No new efforts have been focused on mackerel but the Bay jurisdictions continue angler education whenever possible.
	Action 3.1.3. Virginia will monitor bycatch sold as crab bait from the pound net and haul seine fisheries.	1995	

1994 Chesapeake and Atlantic Coast King and Spanish Mackerel Management Plan Implementation Table (update 06/16)			
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Habitat Issues	Action 4.1.1. Jurisdictions will continue to work with the Chesapeake Bay Programs, the Coastal Bays initiative, and water quality improvement goals for the Bay and coastal areas.	Continue 2015	The CBP completed a Chesapeake Bay Watershed Agreement in 2014, which sets new goals and outcomes for restoration and protection of the Chesapeake Bay and its watershed. A copy of the agreement can be found on the CBP website at http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-Hires.pdf The Agreement has fish habitat, forage fish, SAV and water quality outcomes that when reached will enhance habitat and prey availability for adult Spanish mackerel. During 2015, bay jurisdictions developed two-year (2016-2017) work plans for each outcome.

Acronyms:

ACL = Annual Catch Limit

ASMFC = Atlantic States Marine Fisheries Commission

CMP = Coastal Migratory Pelagics

CBP = Chesapeake Bay Program

EEZ = Exclusive Economic Zone

PRFC = Potomac River Fisheries Commission

SAFMC = South Atlantic Fisheries Management Council

SEDAR = South East Data, Assessment, and Review Process

UMCES = University of Maryland Center for Environmental Studies