

2000 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR
WEAKFISH
(Cynoscion regalis)

Plan Review Team

Heather Stirratt, ASMFC, Chair
Rick Cole, DE
Louis Daniel, NC
Charles Lesser, DE
Rob O'Reilly, VA

October 2000

2000 REVIEW OF THE ASMFC FISHERY MANAGEMENT PLAN FOR WEAKFISH (*Cynoscion regalis*)

I. Status of the Fisheries Management Plan

The Atlantic States Marine Fisheries Commission (ASMFC) adopted its first Fishery Management Plan for Weakfish in 1985. Amendment #1 to the FMP, which superseded the original plan, was adopted in 1992, and Amendment #2 was adopted in October 1994. Weakfish are currently managed under the guidelines contained in Amendment 3, which was approved by the Commission in May 1996 and completely replaces all previous amendments.

The goals of Amendment #3 are to utilize interstate management so that Atlantic coastal weakfish recover to healthy levels which will maintain commercial and recreational harvest consistent with self-sustaining spawning stock and to provide for restoration and maintenance of essential habitat. The management objectives are: 1) to restore the weakfish population over a 5-year period; 2) to reach and maintain a target fishing mortality rate of 0.5; 3) to restore the expanded age and size structure; 4.) to achieve compatible and equitable management measures among jurisdictions; 5.) to promote cooperative interstate research, monitoring and law enforcement; 6) to promote identification and conservation of habitat; and 7) to establish standards and procedures for both the implementation of Amendment 3 and for determination of states' compliance with provisions of the management plan.

Weakfish are managed under this plan as a single stock throughout their coastal range. All states from Massachusetts to Florida and the Potomac River Fisheries Commission have a declared interest in the Weakfish FMP. Responsibility for the FMP is assigned to the Weakfish Management Board, Plan Review Team, Technical Committee, Stock Assessment Sub-Committee and Citizen's Advisory Panel.

II. Status of the Stock

The status of the stock was updated in the fall of 1999 based upon new information and recommendations from SAW 26. The new stock assessment, as peer reviewed by the 30th Stock Assessment Review Committee (SARC), confirms preliminary trends of increasing abundance, spawning stock biomass, expanding age structure, and decreasing fishing mortality rates. Data extending through terminal year 1998 was considered by the 30th SARC in determining current fishing mortality. The SARC approved 1998 fishing mortality estimate of 0.20 is below the management plan's projected 2000 rebuilding goal of $F = 0.50$. Caution should be afforded in acceptance of the SARC approved fishing mortality estimate in that terminal year estimates are commonly associated with higher degrees of scientific uncertainty.

In addition to the peer review, the ASMFC Technical Committee also reviewed the status of Weakfish stocks. The Technical Committee estimated fishing mortality to be around 0.28 for 1998. This estimate is also well below the management plan's projected 2000 rebuilding goal of $F = 0.50$. Caution should be afforded in acceptance of the Technical Committee approved fishing mortality estimate in that terminal year estimates are commonly associated with higher degrees of scientific uncertainty.

III. Status of the Fishery

Commercial landings increased steadily from 7.1 million pounds in 1995 to 8.3 million pounds in 1998. A slight decrease in commercial landings occurred in 1999 (6.9 million pounds). Landings from North Carolina, Virginia and New Jersey combined accounted for 55% of commercial landings in 1999, with 40% coming from North Carolina and New Jersey.

According to MRFSS, 1999 recreational harvest was 1,651,554 fish, or 3.1 million pounds, which represents a decline in number of fish from 1998 (2,386,345 fish) as well as a decrease in the weight from 1998 (4 million pounds). Recreational landings intensified by 120% between the years 1995 and 1998. Most of the increase was due to landings from the states of Delaware, Maryland, New Jersey and Virginia. Landings from these states accounted for 90% of recreational landings in 1998.

IV. Status of Research and Monitoring

North Carolina, New Jersey and Delaware conduct small trawl surveys to determine a juvenile index for weakfish. Delaware, Maryland, Virginia and North Carolina collect age, size and weight and CPUE data from large trawl surveys. North Carolina, Delaware, and Maryland monitor size and age composition of their commercial fisheries. Virginia also monitors sex, size, and age from commercial fisheries and sex and size from recreational fisheries. North Carolina samples juvenile abundance and continues to evaluate by catch in shrimp trawls equipped with BRDs.

The Gulf and South Atlantic Fisheries Development Foundation is evaluating the overall finfish by-catch in shrimp trawls. North Carolina and South Carolina, with the assistance from several other states and federal partners, are reviewing different aging methods for weakfish. Georgia is conducting fishery independent and fishery dependent sampling of shrimp trawl bycatch.

V. Status of Management Measures

Each state is required to implement harvest reduction strategies designed to recover weakfish over a 5-year period. Restoration of historic age and size structure, as represented by the average percentage of fish numbers at each age from 1979 to 1994, is also a plan goal. Table 1 describes the necessary reductions under Amendment #3 for fishing years 1996-2000. According to the 26th SAW, the projected fishing mortality for 1996 was achieved and according to the most recent stock assessment fishing mortality is below 0.50. However, the Board has discussed

modifying the fishing mortality target to be consistent with the new stock assessment methods.

Table 1: Required reduction schedules for fishing mortality rates (F) for Atlantic Coast weakfish, 1996 - 2000. All reductions in F are based on a 12-inch minimum size limit.

| | Fishing Year | | | | |
|--------------------|--------------|------|------|------|------|
| | 1996 | 1997 | 1998 | 1999 | 2000 |
| Projected F | 1.27 | 1.27 | 1.01 | 0.76 | 0.50 |

Table 2 shows the average percentage of fish numbers at each age (age 0 to 7 and older) from 1979 to 1994. The fishing year is currently defined as April 1 through March 31. A summary of state weakfish regulations for the 1999 recreational and commercial fishery is also included (Appendix 1).

Table 2: Average percentage of fish numbers at each age (age 0 to 7 and older) from 1979 to 1994. Data comes from the 1994 Virtual Population Assessment model.

| | Percentage of Weakfish at each Age | | | | | | | |
|------------------|------------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 and Older |
| Average % | 68.45 | 20.98 | 7.28 | 2.09 | 0.69 | 0.29 | 0.10 | 0.12 |

VI. Current State-by-State Implementation per Compliance Requirements as of (fishing year established date)

As of October 11, 2000, all states were in compliance with Amendment #3 to the Weakfish Fishery Management Plan. The states of Florida, South Carolina, and Georgia remain *de minimis* states as defined in Amendment #3. Their landings for 1998 and 1999 are well below the standard for *de minimis* of 1% of coastwide commercial and recreational directed landings for 1998 and 1999. In addition, the states of Massachusetts and Connecticut also meet the standard for *de minimis* status.

VII. Status of Assessment Advise

Upon conclusion of the 1999 Weakfish stock assessment peer review, the 30th SARC confirmed that fishing mortality in 1998 was below the management target for the year 2000 ($F_{\text{target}} = 0.5$).

The SARC also noted that while stock rebuilding is occurring, the size and age structure has not been fully restored. As a result, the 30th SARC recommended that managers maintain a low fishing mortality rate to enhance age and size structure expansion. In accordance with these recommendations, the Technical Committee has recommended revised reference points of $F_{\text{target}}=0.31$, $F_{\text{threshold}}=0.5$, and $SSB_{\text{threshold}}=20\%=14,400$ metric tons for consideration in the development of Amendment 4.

VIII. Recommendations

The Plan Review Team recommends that:

1. States continue to maintain harvest levels.
2. Review the Evaluation Manual and if necessary make changes that will clarify mortality adjustments and an appropriate baseline period.
3. The appropriateness of recreational creel limits should be examined and revised if necessary.
4. The criteria, procedures, and requirements for *de minimis* status should be revisited.