

Fishery Management Report No. 33a of the
ATLANTIC STATES MARINE FISHERIES COMMISSION



Addendum I

**To Amendment 1 of the Interstate Fishery
Management Plan for Atlantic Sea Herring**

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Addendum I to Amendment 1 to the Interstate Fishery Management Plan for Atlantic Sea Herring

INTRODUCTION

Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Sea Herring was approved by the Commission's Atlantic Herring Section in January of 1999. The Amendment was developed in close cooperation with the New England Fishery Management Council (Council) as it prepared a plan for managing herring in federal waters. The two plans were designed to be complementary and contained many of the same management measures. The Council's FMP was partially approved by the National Marine Fisheries Service in October 1999. Several measures were disapproved including the spawning closures for Management Area 1A (inshore Gulf of Maine). Addendum I re-addresses the spawning closure measures in the Commission's Amendment 1 and changes the due date for annual state compliance reports to February 1st. The Atlantic Herring Section approved these measures on July 12, 2000 with a two-step implementation process. The new spawning season regulations, including the tolerance provision (see *Section 4.2.1.5a*) are to be implemented by the states by August 15, 2000. This tolerance provision is to be implemented for only the remaining fishing year (2000). This measure is to be replaced with the bycatch allowance (see *Section 4.2.1.5b*) for future fishing seasons and is to be implemented by January 1, 2001. As with all Commission plans developed under the Atlantic Coastal Act, states may be more restrictive than the management measures outlined here.

STATEMENT OF THE PROBLEM

Fishermen, scientists and managers have expressed concern over the susceptibility of Atlantic herring to fishing when they aggregate for spawning. Fishing on spawning aggregations not only results in high catch rates, but may interfere with the spawning behavior of the herring not caught. This is also the time when herring are their most valuable, as the fat content of the fish is generally at its peak. The economic reasons to allow fishing on spawning herring, however, are offset by the conservation concerns. Another factor to consider is that herring in the latter stages of spawning are not fit for some markets and if harvested, may be discarded, thereby increasing the overall mortality while contributing nothing to the fishery.

Amendment 1 implemented a strategy of spawning area restrictions for state waters in the Gulf of Maine (Management Area 1A, in part) from August 1 to October 31. These restrictions included a tolerance provision intended to allow a limited fishery on herring during the spawning season. This strategy was deemed to be an important component of Amendment 1 in that the Council's Atlantic Herring FMP was to implement a month long closure during the spawning season in federal waters. The Commission's strategy would allow some herring to come to shore during the spawning season, thereby ensuring continuity of product for both the sardine canneries and the bait market for the lobster fishery. Due to enforcement concerns, the states decided to monitor all herring coming to shore from the Gulf of Maine using the tolerance provision under Amendment 1. The end result was a lack of herring coming to shore due to the fishermen's inability to locate and target schools in Gulf of Maine waters that would be legal under the new tolerance provisions set forth in Amendment 1. Further compounding this problem was a lack of herring from offshore waters, i.e. Georges Bank, at the very same time. Based on public testimony in January 2000, this situation resulted in unforeseen shortages of herring and increased expenses as herring had to be imported from Canada to meet the demand. Another concern raised by fishermen was that the spawning restrictions in Amendment 1 prevented one sector of the fishery,

midwater trawl vessels, from operating in the Gulf of Maine during the restricted period. Addendum I liberalizes the spawning area restrictions set forth in Amendment 1 in order to decrease the likelihood of herring shortages in the future, while minimizing the risk to individual spawning aggregations and the stock complex as a whole.

MANAGEMENT CHANGES TO AMENDMENT 1

The following material is intended to update and replace the corresponding sections (*in italics*) in Amendment 1.

4.2 COMMERCIAL FISHERIES MANAGEMENT MEASURES

4.2.1 Spawning Area Closures

Atlantic herring schools are especially susceptible to fishing when they aggregate for spawning. This is also when herring are most valuable, as fat content is generally at its peak. The economic reasons to allow fishing on spawning herring, however, are countered by conservation concerns. Fishing on spawning herring not only can result in high catch rates, but may also interfere with the spawning behavior of those herring not caught. Herring in the latter stages of spawning may not be fit for some markets. Therefore, Addendum I defines specific measures which are designed to reduce the exploitation and disruption of herring spawning aggregations, while providing a limited opportunity to harvest herring during that time of the year.

4.2.1.1 Delineation of Spawning Areas (Figure 1a)

The spawning areas for Management Area 1A (Inshore Gulf of Maine) shall be defined as:

Eastern Maine

All waters bounded by the following coordinates:

Maine coast	68° 20' W
43° 48' N	68° 20' W
44° 04.4' N	67° 48.7' W
44° 06.9' N	67° 52.8' W
44° 31.2' N	67° 02.7' W
North along US/Canada border	

Western Maine

All waters bounded by the following coordinates:

43° 30' N	Maine coast
43° 30' N	68° 54.5' W
43° 48' N	68° 20' W
North to Maine coast at 68° 20' W	

Massachusetts/New Hampshire

All waters bounded by the Massachusetts, New Hampshire and Maine coasts, and 43° 30' N and 70° 00' W.

4.2.1.2 Determination of Starting Date for Spawning Closures

Closures in a given area will begin based on the spawning condition of Atlantic herring as determined from commercial catch samples. Commercial catch sampling shall begin by at least August 1 for the Eastern and Western Maine areas, and by at least September 1 for the Massachusetts/New Hampshire area. If sufficient samples are not available, closures will begin on a specified date (see 4.2.1.3 Default Closure Dates) and extend for at least four (4) weeks. Closures in a given area will begin seven days after the determination that female herring in ICNAF gonadal stages III - V from that specific area have reached the following spawning conditions: female herring greater than 28 cm in length have reached a mean gonadosomatic index (GSI) of 20%; or female herring greater than 24 cm and less than 28 cm in length have reached a mean GSI of 15%. Length refers to the mean natural total length, measured from the tip of the snout to the end of the caudal fin in normal position. "GSI" shall mean gonadosomatic index calculated by the following formula:

$$[\text{Gonad Weight} / (\text{Total Body Weight} - \text{Gonad Weight})] \times 100 \text{ percent}$$

If sufficient sample information is not available for reliably estimating mean GSI in either of the size categories, the restrictions will go into effect automatically on the default closure dates (see 4.2.1.3). "Sufficient sample information" shall mean at least two (2) samples of 50 fish or more, in either length category, taken from commercial catches during a period not to exceed seven days apart.

4.2.1.3 Default Closure Dates

In the event of insufficient sample information, closures would commence on the following default dates:

Eastern Maine:	August 15
Western Maine:	September 1
Massachusetts/New Hampshire:	September 21

4.2.1.4 Duration of Closures; Determination of Continuance

Closures would initially last for four (4) weeks. Catch sampling of the fishery will resume at the end of the initial closure period. If catch sampling indicates significant numbers of spawn herring are being harvested, closures would resume for an additional two weeks. Closures would resume if catch sampling determines that 25% or more mature herring, by number, have yet to spawn. Mature or "spawn" herring shall be identified as Atlantic herring in ICNAF gonadal stages V and VI.

4.2.1.5a Tolerance Provision (effective for 2000 season only)

Any vessel may fish for, take, land, or possess "spawn" herring, as identified below, from or within a restricted spawning area as long as such herring comprise less than 20% by number of the amount of herring possessed onboard at any time. "Spawn" herring shall be identified as Atlantic herring in ICNAF gonadal stages V and VI.

A bycatch allowance of up to 2,000 pounds of herring per trip for non-directed fisheries shall be in place during the spawning closures. This bycatch allowance will not be subject to the tolerance provision, i.e. vessels may land "spawn" herring over the 20% by number as long as said vessel lands no more than 2,000 pounds. The amount of herring landed by one vessel in a day, as a bycatch allowance, shall not exceed 2,000 pounds (this prohibits a vessel from making multiple trips in one day to land more than the bycatch allowance). A trip shall be based on a calendar day basis.

Any vessel may fish for, take, land, or possess "spawn" herring from a management area outside of those identified in Section 4.2.1.1. Any herring vessel having onboard spawn herring over the tolerance limit

and which were caught outside of a management area that is under a herring spawning closure, may transit the closed area only if all of its fishing gear has been stowed.

4.2.1.5b Bycatch Allowance (to be implemented January 1, 2001)

No directed fisheries for Atlantic herring shall be allowed in a management area subject to a spawning closure. A bycatch allowance of up to 2,000 pounds of herring per trip for non-directed fisheries shall be in place during the spawning closures. The amount of herring landed by one vessel in a day, as a bycatch allowance, shall not exceed 2,000 pounds (this prohibits a vessel from making multiple trips in one day to land more than the bycatch allowance). A trip shall be based on a calendar day basis.

Any herring vessel transiting a management area that is under a herring spawning closure must have all of its fishing gear stowed.

5.0 COMPLIANCE

[The following is intended to update the compliance schedule in Amendment 1. All participating states should have implemented management measures pursuant to the schedule of Amendment 1 at this time.]

5.1.2 Compliance Schedule

States must implement the management measures set forth in this addendum by **August 15, 2000**.

Those states choosing to implement the Tolerance Provision in Section 4.2.1.5 for the 2000 fishing season must replace that with the Bycatch Allowance by January 1, 2001.

Reports on compliance should be submitted to the Commission by each jurisdiction annually, no later than **February 1st** of each year, beginning in 2001. All states, including those states granted *de minimis* status, are required to submit an annual compliance report. States should include requests for continuation of *de minimis* status as part of their annual compliance report.

Figure 1a. Spawning areas for Management Area 1A.

