



Atlantic States Marine Fisheries Commission

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Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015

MEMORANDUM

September 10, 2012

To: Winter Flounder Management Board
From: Winter Flounder Technical Committee
RE: Review of Massachusetts Winter Flounder Proposal

The Board tasked the Technical Committee (TC) to review the Massachusetts proposal that proposed the following changes to the Gulf of Maine (GOM) winter flounder fishery: (1) opening the recreational closed seasons to open year round and (2) increasing the commercial trip limit to 500lbs. The Board asked the TC to evaluate if these changes were implemented would the state waters sub-ACL be exceeded. Note that the state waters sub-component comprises catch from both recreational and non-federally permitted commercial vessels fishing within state waters. The state waters sub-component differs from sub-ACL's by the lack of accountability measures.

Currently, there is a 250-lb trip limit for winter flounder in the Gulf of Maine, which states were required to implement by November 1, 2009. Even before the trip limit, the approximately 73% of trips that landed winter flounder landed less than 50 lbs (Table 1 and 2). Prior to the trip limit, about 44% of non-federally permitted landings came from trips that landed more than 250 lbs; after the trip limit, only 8% came from trips landing more than 250 lbs (Table 1Table , Figure 1 and 2).

Recreational closed seasons for winter flounder in the Gulf of Maine were implemented in 2010 and vary by state. Maine's closed season is from October 1 – June 30 (Waves 1, 2, 3, 5, and 6). New Hampshire's closed season is from May 15 – May 24 (part of Wave 3). Massachusetts's closed season is from September 1 – October 30 (Wave 5). From 2000 – 2011, the majority of directed trips for winter flounder (defined as trips that either harvested or targeted winter flounder) originated in Massachusetts (Table 4). Most trips occurred in Waves 3 and 4, both before and after the season closures (Figure 3).

With the proposed change, catch would still be subject to the state-waters ACL set for 2012 (272 MT), but that limit might be reached faster under a higher trip limit. Prior to the 2009 trip limit, about 19% of non-federally permitted landings came from the 2% of trips that landed more than 500 lbs (Table 2).

To look at the potential effects of the increase, two scenarios were considered for the 2010 and 2011 commercial trip data. One scenario assumed, in effect, no change in behavior: landings for trips that were close to the old trip limit (those that landed 200 – 500 lbs) were increased to 500 lbs, while landings less than 200 lbs were not changed, to reflect the assumption that those trips

are not directing on winter flounder and would not have caught the higher limit. The second scenario assumed that behavior would substantially change as a result of the new limits and targeting of winter flounder would result in all trips retaining the new limit of 500 lbs. For both scenarios, trips that landed more than 500 lbs were not changed. The recreational landings of winter flounder for Gulf of Maine states were then added to each of these scenarios; no changes were made to recreational landings. Given the small proportion of directed trips that occurred before the seasonal closures were implemented in 2010, the TC concluded that eliminating the closed seasons would likely not significantly impact total recreational landings for winter flounder.

The cumulative sum of the landings by two month wave was plotted over the course of a year for both scenarios, along with the observed cumulative sum under the 250 lb trip limit, the annual state-waters sub-component, and the higher 2012 sub-component.

In 2010 and 2011, the combined recreational and non-federally permitted landings were close to the state-waters ACL. Increasing only trips that were already close to the 250 lb trip limit did not significantly change this. Under the scenario where all trips met or exceeded the 500 lb trip limit, the total landings exceeded the 2010 and 2011 state-waters sub-component (60 mt) by Wave 3 (May-June). However, the total annual landings under this scenario remain below the 2012 state-waters sub-component (272 mt).

Conclusion

After a review of the available data the TC concluded that the state waters sub-component would not be exceeded with the proposed change in regulations, unless there is a significant change in effort. The TC cannot predict the change in effort with the current available data. Median trips in the commercial fishery harvest 17 pounds per trip (Table 3). The reduction in the trip limit has made the state water's fishery mostly a bycatch fishery. There is a possibility the increase in the trip limit could possibly change the fishery from bycatch to a directed fishery. Because the TC cannot predict possible changes in effort, we recommend the Board adopt in-season accountability measures such as trip limit triggers, trip limit adjustments, and/or season closures. These accountability measures would prevent large overages of the state waters sub-component if significant increases in effort were to occur. States would need to implement timely reporting in order for in-season accountability measures to be effective, particularly in Massachusetts where the majority of the commercial harvest is occurring (Table 4). The TC also recommends the Board adopt a payback provision or other accountability measures that could be implemented if the total state waters sub-component is exceeded.

Table 1: Cumulative distribution of trips and landings by landings per trip bins for non-federally permitted vessels landing in Gulf of Maine states after implementation of the 250 lb trip limit.

Winter flounder landings (per trip)	Cumulative percentage of trips (2010 - 2011)	Cumulative percentage of landings (2010 - 2011)
<50 lbs	75.4%	24.3%
50 – 99 lbs	87.8%	43.8%
100 – 250 lbs	99.2%	92.2%
251-500 lbs	99.7%	96.0%
>500 lbs	100.0%	100.0%

Table 2: Cumulative distribution of trips and landings by landings per trip bins for non-federally permitted vessels landing in Gulf of Maine states prior to the implementation of the 250 lb trip limit.

Winter flounder landings (per trip)	Cumulative percentage of trips (2005 – 2008)	Cumulative percentage of landings (2005 – 2008)
<50 lbs	67.1%	14.9%
50 – 99 lbs	81.0%	30.0%
100 – 250 lbs	93.3%	56.8%
251-500 lbs	98.1%	81.1%
>500 lbs	100.0%	100.0%

Table 3: Summary statistics for winter flounder landings per trip (lbs) for non-federally permitted vessels landing in Gulf of Maine states (MA, NH, ME).

Year	Minimum	25 th Quantile	50 th Quantile	Mean	75 th Quantile	95 th Quantile	Maximum
2005	1	10	39	80	96	290	1025
2006	1	5	13	40	39	145	1350
2007	1	8	20	57	55	260	1145
2008	0.5	7	25	84	85	397	1035
2009*	1	7	24	82	119	309	960
2010	1	6	15	48	45	240	1185
2011	1	6	15	37	47	155	330
Pre-Trip Limit (2005-2008)	0.5	7	24	68	70	300	1350
Post-Trip Limit (2010-2011)	1	6	17	54	59	240	1185

*The 250 lb trip limit was not required to be implemented until November 1, 2009.

Table 4: Percentage of non-federally permitted landings of winter flounder by state and year.

Year	Massachusetts	New Hampshire	Maine
2009	99.4%	0.6%	0.0%
2010	99.8%	0.2%	0.0%
2011	99.6%	0.4%	0.0%

Table 5: Percentage of recreational directed trips for winter flounder by state and year.

Year	Massachusetts	New Hampshire	Maine
2000	95.3%	4.7%	0.0%
2001	89.9%	8.6%	1.4%
2002	89.2%	10.2%	0.6%
2003	85.4%	9.5%	5.1%
2004	93.1%	5.1%	1.8%
2005	71.5%	12.4%	16.1%
2006	78.7%	17.1%	4.2%
2007	77.0%	23.0%	0.0%
2008	87.6%	12.0%	0.4%
2009	81.6%	13.8%	4.7%
2010	91.2%	6.8%	2.0%
2011	81.5%	17.3%	1.2%

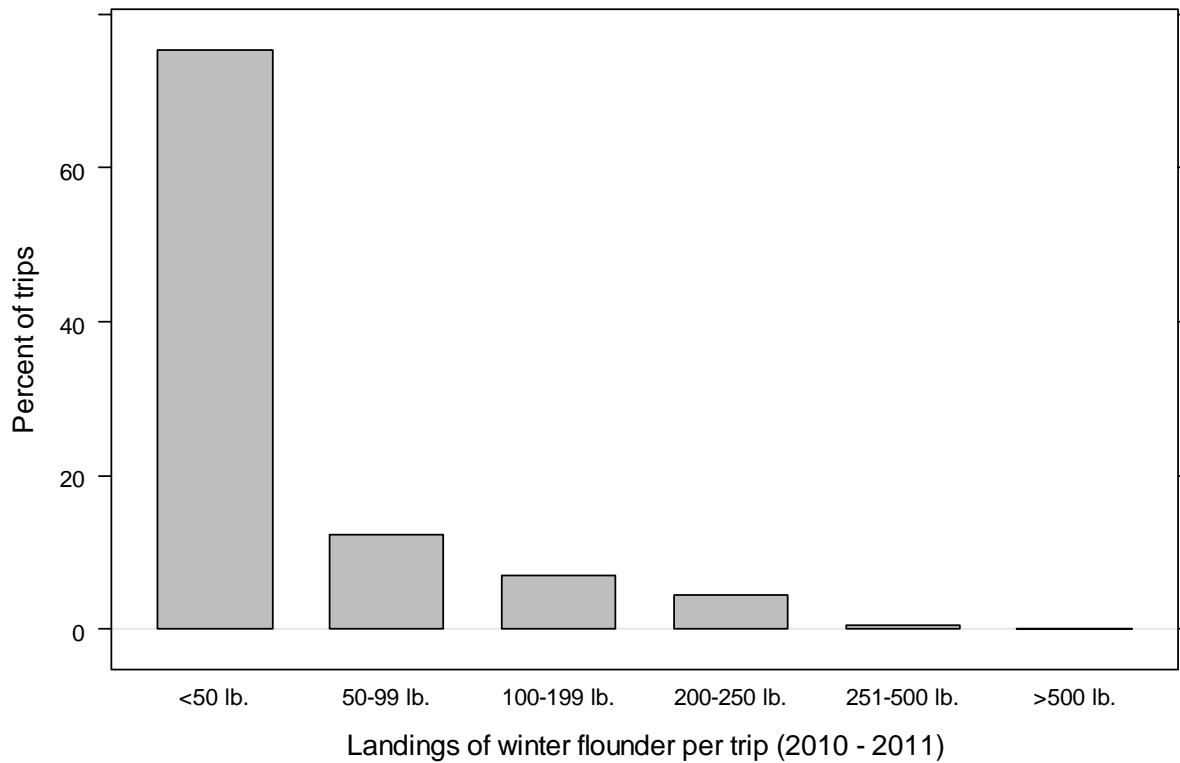


Figure 1: Distribution of winter flounder landings per trip for Gulf of Maine states only (MA, NH, ME) for 2010 - 2011.

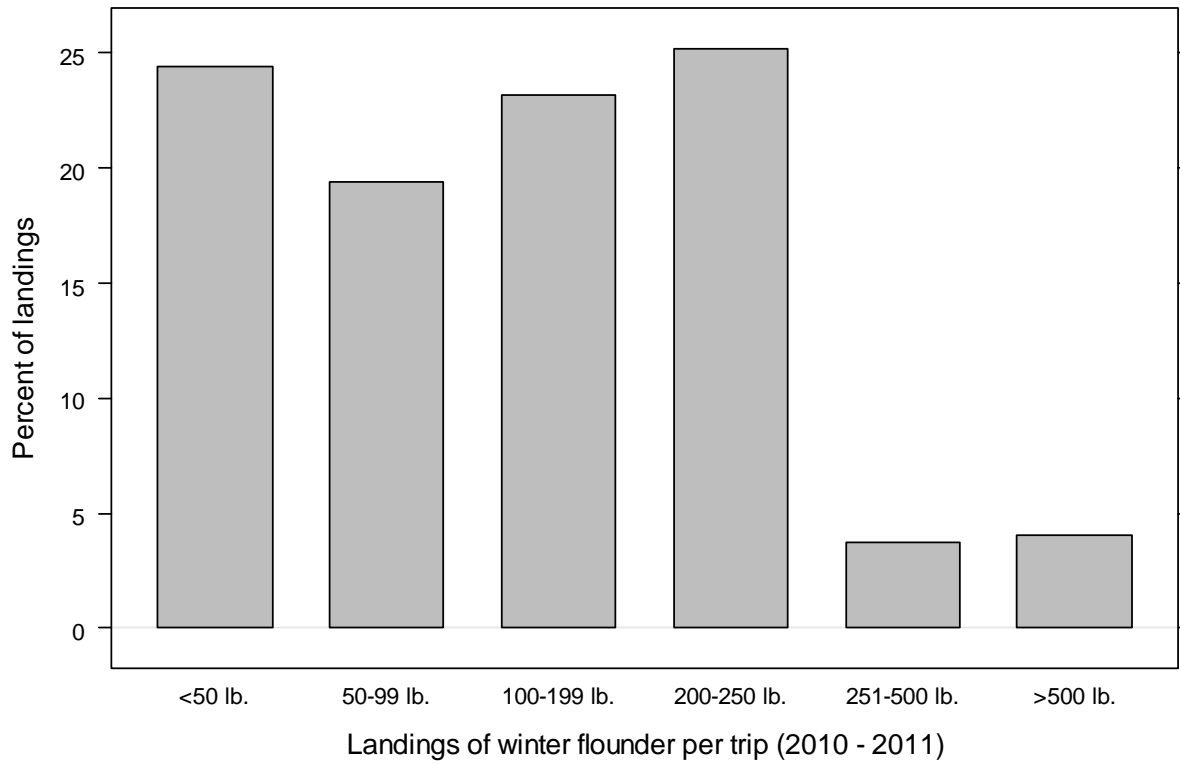


Figure 2: Percentage of total landings from each landings-per-trip bin for Gulf of Maine states only (MA, NH, ME) for 2010 - 2011.

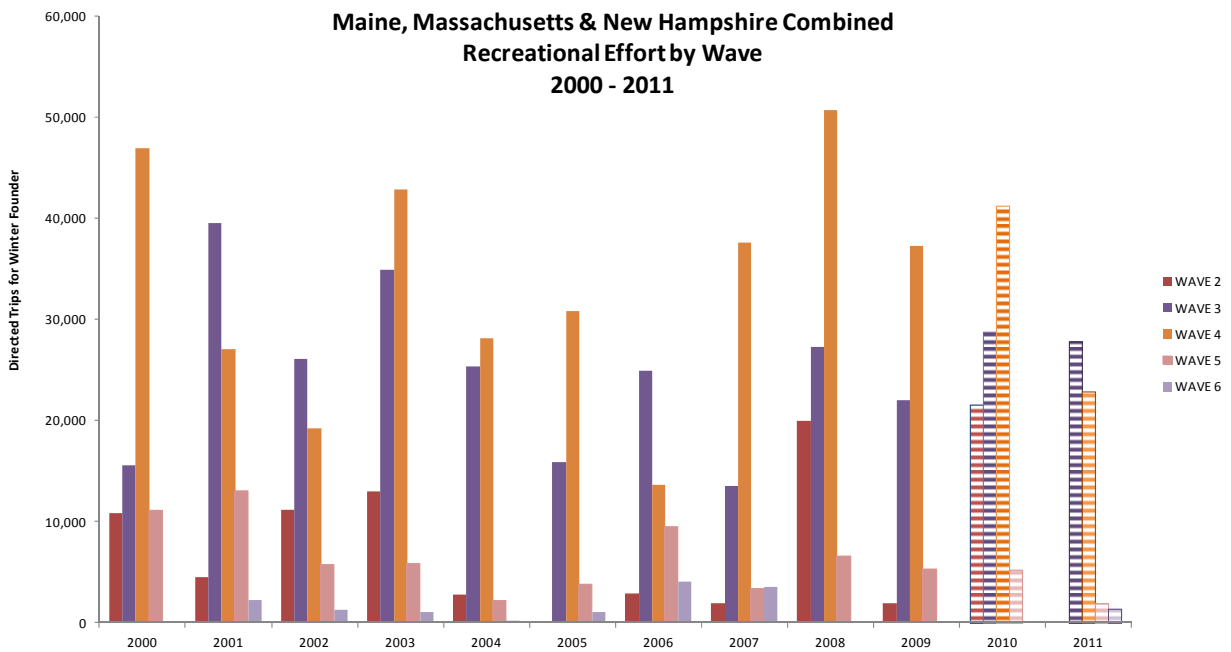


Figure 3: Number of directed winter flounder trips by wave and year for Gulf of Maine states only (MA, NH, ME) for 2000 – 2011. Dashed bars represent years with recreational closed seasons.