

Atlantic States Marine Fisheries Commission

Winter Flounder Technical Committee

Report on the Southern New England/Mid-Atlantic Winter Flounder Stock and Recommendations for 2015 Fishing Year

October 17, 2014

Revised on October 23, 2014

Participants

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The Winter Flounder Technical Committee (TC) met via conference call to review recent trends in survey indices for the Southern New England /Mid-Atlantic (SNE-MA) and the recent operational assessment for Gulf of Maine (GOM) stocks. The TC discussed specifications for the 2015 fishing season relative to updated information for both stocks. The TC compiled data from fisheries-independent surveys (bottom trawl surveys) conducted by state and federal agencies to produce indices of abundance and biomass for SNE/MA winter flounder. Paul Nitschke (Northeast Fisheries Science Center) provided an overview of the operational stock assessment update for Gulf of Maine winter flounder completed in August 2014. This assessment is updated through 2013.

Review of Biomass and Abundance Indices for SNE/MA Winter Flounder

The Southern New England Mid-Atlantic stock was last assessed at SARC 52 in June 2011. The terminal year of the assessment was 2010. The TC examined a variety of survey indices covering a broad geographic area. Nearly all the survey indices are near time-series lows (Figures 1-4). The TC concludes that the SNE-MA winter flounder biomass remains near time-series low. Young of year indices generally remain low, although a few indices have improved in recent years. Rebuilding is likely to be slow (if at all) especially if recruitment remains poor. Advisory panel's observations of larger fish, but fewer small fish is consistent with low recruitment indices.

Total catch has been less than the commercial annual catch limit in recent years. Based on comments from Advisory Panel members, the reason for lower catches is due to fewer fish and less interest in this species in recent years. The New England Fisheries Management Council had selected a constant catch approach.

The TC did not have latest catch information and did not have time to examine changes in length distribution or age structure. This is more appropriately done when updating the assessment (tentatively scheduled for Fall 2015).

Trends in eight young-of-the-year (YOY) survey indices for Southern New England Mid-Atlantic winter flounder are shown in Figure 5. Note that the surveys cover different time frames (Table 1). Four of the surveys, CT Seine, RI Coastal Pond, RI Narragansett Bay, NY

Peconic Bay) are at or near the 25th quantile in recent period 2012-13). The MA Seine survey shows a modest increase from record low abundance during 3 year period (2008-10) and has varied between the time series 25th quantile and median for the past four years (2011-14). The NY seine surveys in Jamaica Bay, Littleneck Bay and Manhasset Bay of Long Island show divergent trends, with Manhasset and Littleneck increasing to near or above median recruitment and Jamaica Bay remaining at or near record lows for the last 4 years of the series (2010-13).

2015 Fishing Year Recommendations

- **Gulf of Maine:** The Northeast Fisheries Science Center completed an operational stock assessment for the GOM stock in August 2014. At the time of the TC's meeting via conference call, the NEFMC Scientific and Statistical Committee had not set the ABCs for the GOM stock, but the TC expects a 50% reduction in the ABC and comparable reduction in the state-water sub-component. The NEFMC's SSC committee recommends setting OFL=688 and ABC=510 mt based on their meeting on October 20, 2014.
- **Southern New England/Mid-Atlantic:** The specification for this stock remain unchanged. The the TC recommends maintaining status quo management measures for this stock because trawl surveys indicate that no rebuilding. Based on personal communication with NOAA Fisheries staff, the ABC will be maintained at 1,676 mt, but the state waters sub-component may be changed.

Figure 1. Trends in biomass indices for four bottom trawl surveys. Note that y-axis scales vary among panels and time series length varies among indices. Solid red line is time series median. Dashed red lines are the 75th and 25th quantiles.

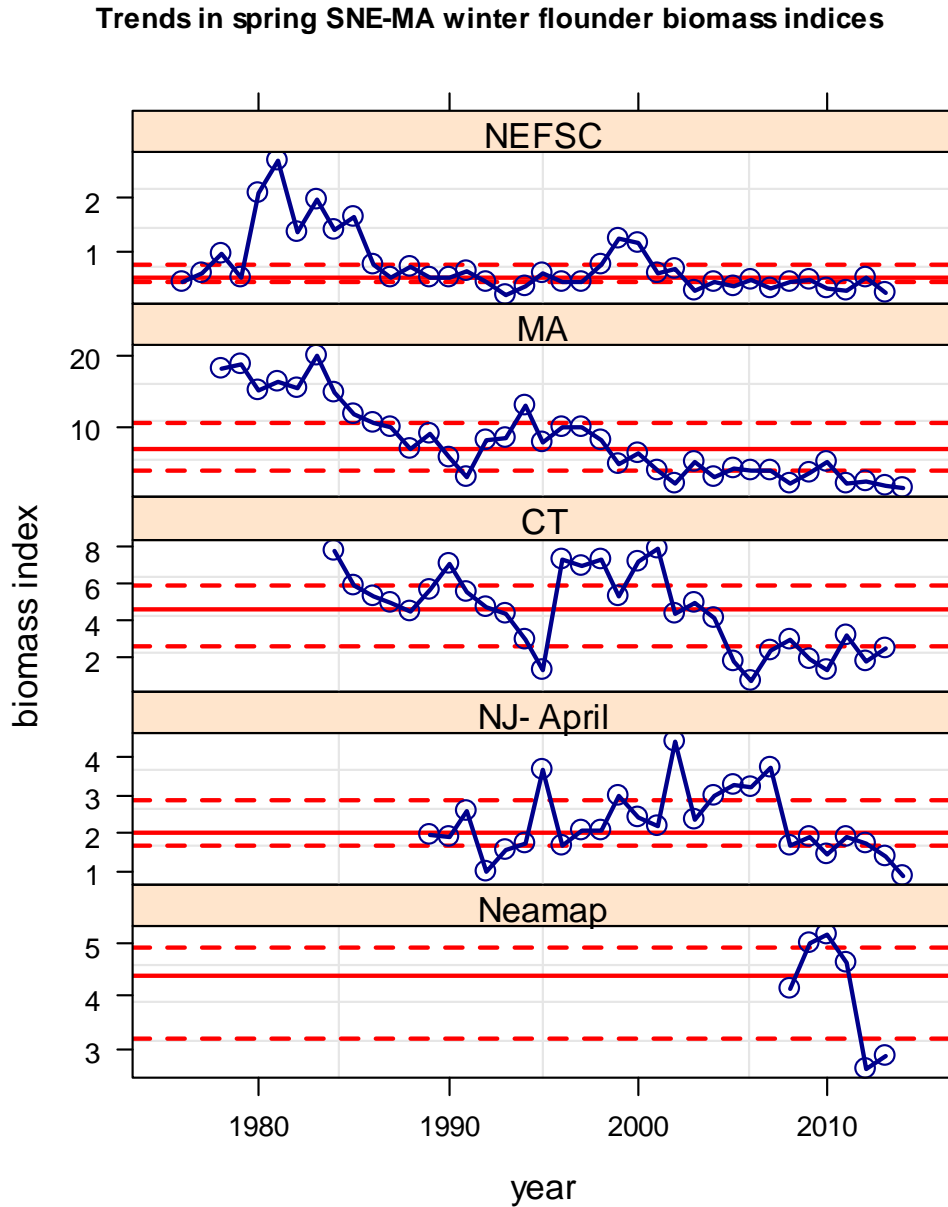


Figure 2. Trends in abundance indices for five bottom trawl spring surveys. Note that y-axis scales vary among panels. Solid red line is time series median. Dashed red lines are the 75th and 25th quantiles.

Trends in spring SNE-MA winter flounder abundance indices

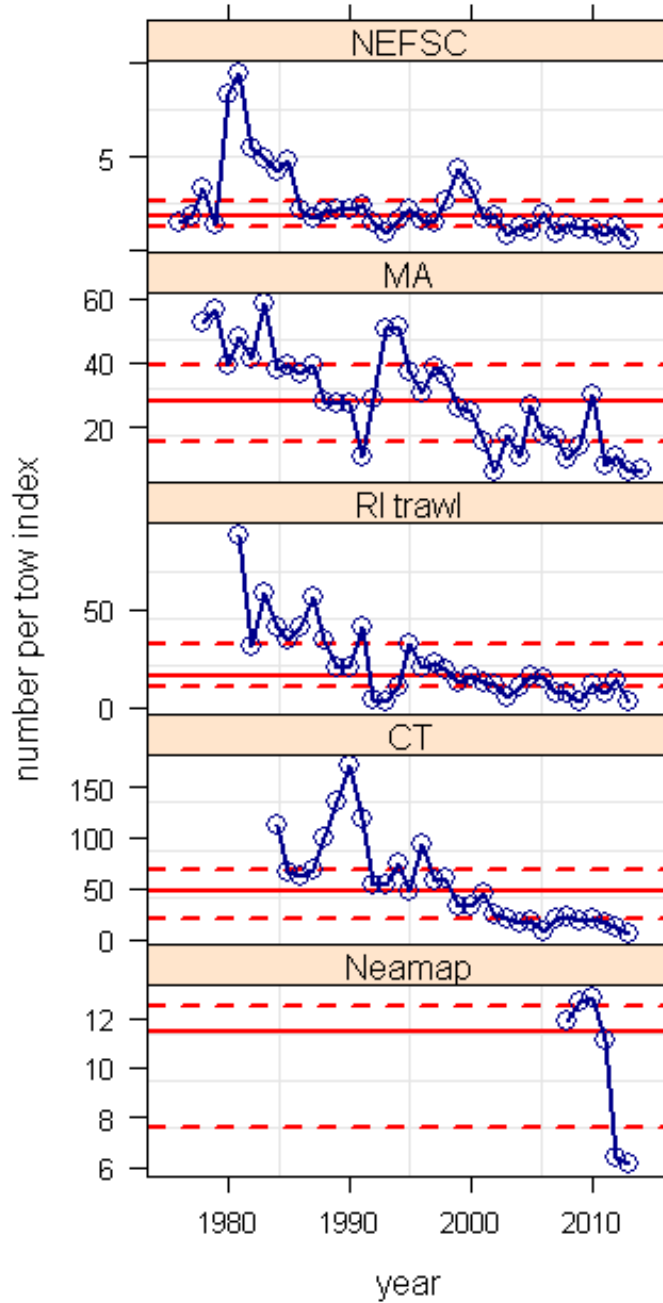


Figure 3. Trends in biomass indices for five bottom trawl fall surveys. Note that y-axis scales vary among panels. Solid red line is time series median. Dashed red lines are the 75th and 25th quantiles.

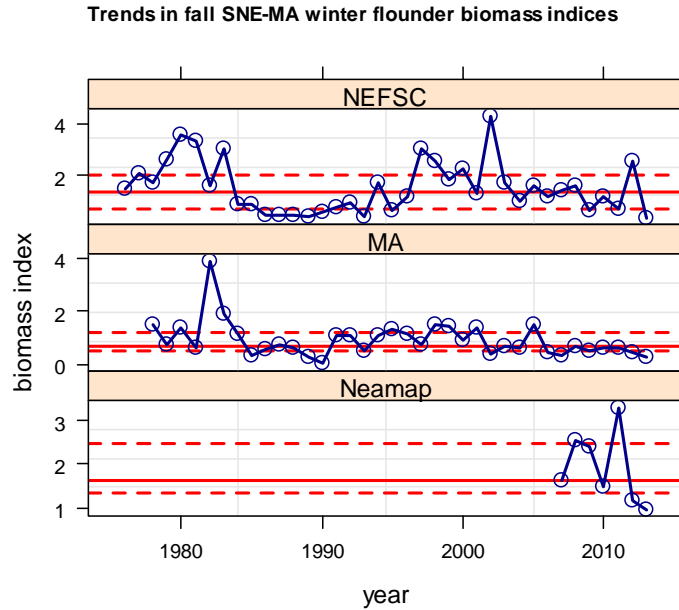


Figure 4. Trends in abundance indices for five bottom trawl fall surveys. Note that y-axis scales vary among panels. Solid red line is time series median. Dashed red lines are the 75th and 25th quantiles.

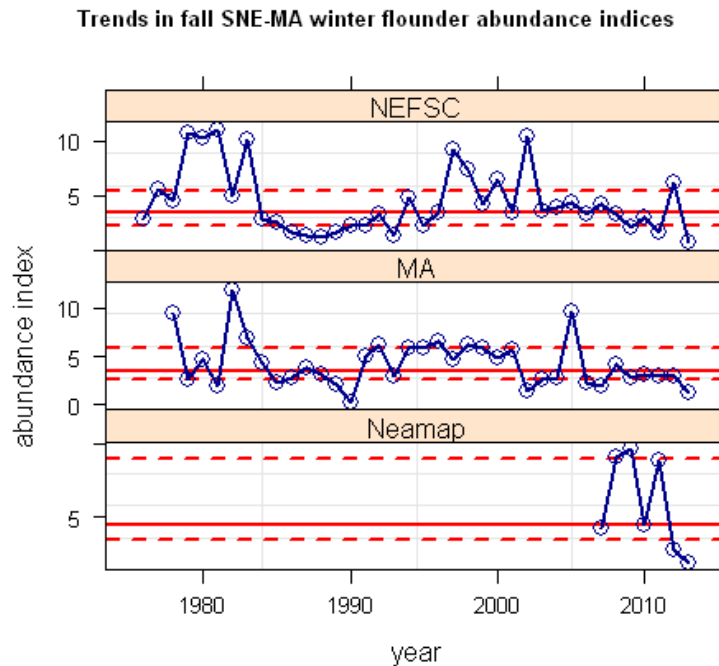


Figure 5. Trends in eight young of the year survey indices for Southern New England- Mid-Atlantic winter flounder. Y axis is logarithmic and varies among panels. Solid red line is time series median, dashed lines are 25th and 75th quantiles (interquartile range). Black line is a fit from a gam. Gray shaded area represents approximately 95% confidence interval on fitted value. Note that year of last data varies among surveys (see Table 1).

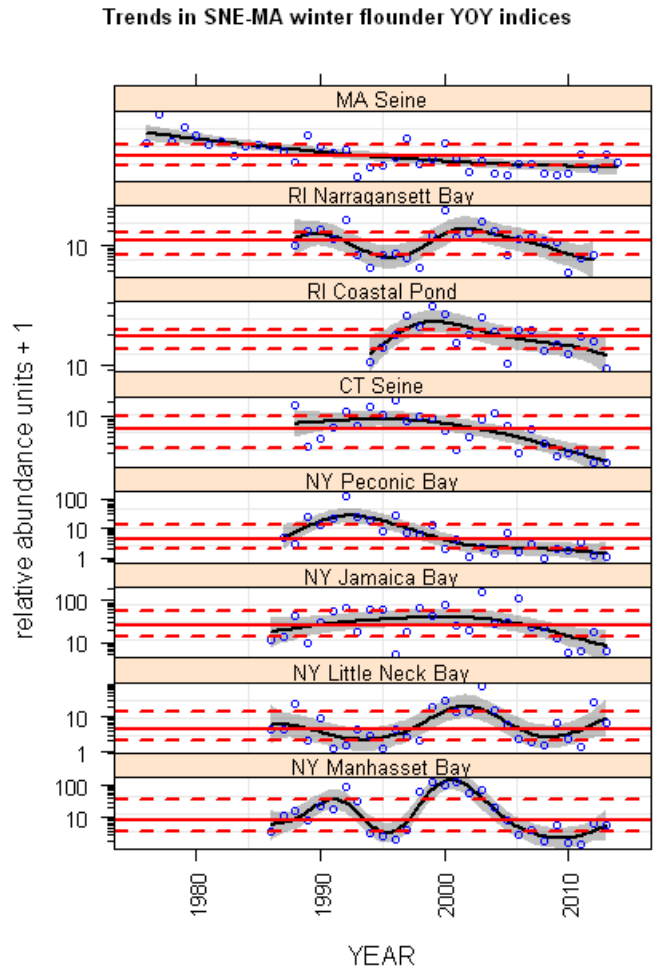


Table 1. Starting and most recent year for eight YOY indices for SNE-MA winter flounder.

Survey	Starting year	most recent year
Ma seine	1976	2014
RI coastal pond	1994	2013
RI Narragansett Bay	1988	2012
CT Seine	1988	2013
NY Peconic Bay	1987	2013
NY Jamaica Bay	1986	2013
NY Little neck	1986	2013
NY Manhasset	1986	2013

Atlantic States Marine Fisheries Commission

Winter Flounder Advisory Panel Report on the Winter Flounder Fisheries October 15, 2014

Participants

Harold Brown (AP Chair)
David Goethel (NH)
Tom Siciliano (NJ)
Charles Wittek (NY)

George Allen (RI)
Don Swanson (NH)
Ritchie White (Management Board Chair)
Melissa Yuen, ASMFC Staff

The Winter Flounder Advisory Panel (AP) met via conference call to share recent observations of the inshore winter flounder stocks and provide recommendations for the Board's consideration as it sets the 2015 fishing year specifications.

Updates by State

- **Maine:** As with the previous year, there is not much winter flounder.
- **New Hampshire:** Fishermen caught more winter flounder last year, but this year focused on mackerel. The winter flounder appear to be larger, and there is not as much smaller fish. The NH AP member is involved in a study led by Dr. Elizabeth Fairchild at University of New Hampshire. The study tested the assumption that these fish spawn in estuaries. Researchers placed acoustic tags on offshore flounder and followed their movement to shore using acoustic listening devices, including devices attached to estuaries entrances to detect fish entering and leaving those areas. They found that winter flounder are not spawning in estuaries, rather are reproducing in near shore areas over hard sand habitat. Only two fish went in one river for one day the rest moved to the near shore environment where they stayed for the duration of the study. In May, the fish appear to be feeding in estuaries. Perhaps the winter flounder season should be adjusted to avoid spawning fish.
- **Rhode Island:** There has been negligible change in the winter flounder stocks in Rhode Island waters since last year. Essentially, the spawning stock biomass remains in a near collapsed condition. That doesn't mean we shouldn't continue to move forward with management efforts to try and restore this fishery. The Division of Marine Fisheries is continuing to revalidate the historic spawning areas in Narragansett Bay. Once this study is done, we will have a discussion with stakeholders about establishing winter flounder spawning sanctuaries which would prohibit bottom tending gear in these areas. This program won't solve all the issues that affect spawners as well as juveniles, such as increased water temps, natural predation, low oxygen levels, etc., but it's a start. With regard to the disparity in catch levels between federal and state waters, there has been some recent discussions within the RI Marine Fisheries Council about recommending lower catch limits in federal waters. My comment from the audience was essentially that we must keep the state water catch limits status quo, and any effort to reduce catch limits in federal waters and transfer some of that catch to state waters would be a huge mistake.
- **New York:** Some fishermen still look forward to the winter flounder season, but most have abandoned the fishery. Party boats still go out, but in many areas, for much of the season,

fares often do not catch the two-fish per person limit. Last year, New York did not adjust the regulations to extend the season as the FMP allowed. Inbreeding is a big issue for winter flounder in New York waters. A Stony Brook University tagging study in Shinnecock Bay demonstrated that some fish never leave the bay and are identifiable; they stay in the bay year-round. There also appears to be two peak periods of larval deposition in Shinnecock Bay, spaced a few weeks apart, which suggests the existence of two spawning populations. Similar studies have not been conducted in other bays, so it's unknown whether multiple spawning populations might exist elsewhere.

- **New Jersey:** Few people fish for winter flounder in New Jersey, but party boat fishermen “love” being able to keep a few winter flounder with the one fish incidental limit. The fish appear to be good sized (3 - 4 lbs). In a Rutgers seine survey, a young flounder measuring two-to-three inches long was captured, which was unexpected. Dr. Ken Able from Rutgers published a study on winter flounder recruitment (Journal of Marine Science, June 2014).

AP Recommendations to the Board

- **Gulf of Maine:** An AP member shared that NOAA Fisheries will likely reduce the ABC by one-third of the amount from previous year’s ABC (1,078 mt). Therefore, AP members in the GOM states recommend reducing the bag limit (currently 8 fish creel limit) proportional to the federally specified ABC.
- **Southern New England/Mid-Atlantic:** AP members in the SNE/MA states repeat the recommendation from last year: a moratorium on fishing. The reasons for supporting no fishing is because of concerns with the population inbreeding and impacts from the increased commercial trip limits. AP members are concerned these impacts will drive the stock to extinction.