



Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901-3910
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: February 5, 2016
To: Council
From: Julia Beaty
Subject: FMAT comments on EOP Committee list of unmanaged forage species

The Unmanaged Forage Fishery Management Action Team (FMAT) spent several months developing a comprehensive list of 285 unmanaged forage taxa found in the diets of Council-managed predators and other predators in the Mid-Atlantic, including highly migratory species and marine mammals. The FMAT developed this list to inform Council discussions on the taxa to include in the Unmanaged Forage Omnibus Amendment. The FMAT recommended that the list be prioritized based on importance in the diet of Council-managed predatorsⁱ, presence in Mid-Atlantic Federal waters, size of adults, and catch in the Mid-Atlantic (both bycatchⁱⁱ and landings). Depending on how the list is prioritized, between 47 and 110 taxa can be considered high priorities for consideration.

The Ecosystem and Ocean Planning (EOP) Committee discussed the FMAT's list and recommended 17 taxa for consideration by the Council. The FMAT reviewed the EOP Committee's list and provided the following comments.

Several FMAT members said it was not clear why certain taxa are on the Committee's list and others are not. For example, trachipteridae (ribbonfish) and hemiramphidae (halfbeaks) are included in the Committee's list but were not identified as prey of Council-managed predators or as bycatch in Council-managed fisheries. It was not clear to the FMAT why these taxa were selected by the Committee.ⁱⁱⁱ The FMAT is not opposed to the Council making a policy choice to include taxa not identified by the FMAT as priorities; however, they recommend that the Council provide justification for doing so (bearing in mind that the forage species included in the amendment must be linked to the Council's FMP fisheries either as prey for managed species or as bycatch in FMP fisheries).

The FMAT documented whether each taxa on their list could be considered important or potentially important in the diet of Council-managed predators. They defined "important" as comprising more than 0.1% of the relative mean stomach weight of any Council-managed predator based on food habits data from the Northeast Fisheries Science Center's (NEFSC) bottom trawl survey or the Northeast Area Monitoring and Assessment Program (NEAMAP) bottom trawl survey.^{iv} The FMAT defined "potentially important" using a threshold of 0.001% relative mean stomach weight.^v The FMAT's list includes several taxa which meet this lower threshold, but not the higher 0.1% threshold. Several EOP Advisory Panel members, as well as a few Council members, have expressed concern about the use of this lower threshold. The FMAT

noted that four families on the EOP Committee list - argentinidae (argentines), atherinopsidae (neotropical silversides), chlorophthalmidae (greeneyes), and sternoptychidae (marine hatchetfish/pearlsides) - meet this lower threshold, but not the higher 0.1% threshold. None of these four families have been found in observer data as bycatch in Council-managed fisheries.

EOP COMMITTEE LIST

(This list is not meant to include managed taxa and those not found in Federal waters.)

- Engraulidae (anchovies)
- Clupeidae (herrings, sardines) – round and thread herring/Spanish sardines
- Argentinidae (argentines)
- Atherinopsidae (silversides)
- Ammodytidae (sand lances)
- Sternoptychidae (pearlsides)
- Moronidae (perches)
- Chlorophthalmidae (greeneyes)
- Trachipteridae (ribbonfish)
- Scombridae (chub, bullet, frigate, little tuna “false albacore”)
- Scomberesox saurus (Atlantic saury)
- Hemiramphidae (halfbeaks)
- Peprilus paru (harvestfish)
- Tautogolabrus adspersus (cunner),
- Ophidiiformes (cusk eels)
- Pelagic molluscs (squids, cuttlefish etc.)
- Copepods, Krill, Amphipods and any other species under 1 inch as adults

Several taxa identified as high priorities by the FMAT were not included on the Committee’s list. Some FMAT members recommended that the Council provide justification for not including these taxa; however, other FMAT members said this is not necessary because the Council has indicated that they wish to include a relatively short list of taxa in the amendment and plan to modify the list through future framework actions if necessary.

Examples of taxa identified as high priorities by the FMAT, but not included on the Committee’s list include: smallmouth flounder, Gulf Stream flounder, triglidae (the sea robin family), fourbeard rockling, and lanternfish, as well as several invertebrate taxa including several taxa of shrimp, decapod crabs such as lady crabs, rock crabs, and hermit crabs, and echinoderms such as brittle stars, sea cucumbers, urchins, and sand dollars.

For a complete list of taxa identified as priorities by the FMAT, but not included on the EOP Committee’s list, please compare the Committee list with the full FMAT list, which is available at: <http://www.mafmc.org/briefing/february-2016>. The FMAT recommended that the public hearing documents and Environmental Assessment for this amendment include a version of the FMAT’s list as an appendix.

ⁱ The FMAT defined “important” prey as those which made up at least 0.1% of the relative mean weight of stomach contents for Council-managed predators either in the NEFSC or NEAMAP food habits database.

ⁱⁱ To date, the FMAT has only examined Northeast Fisheries Observer Program data for bycatch in bottom trawl tows where the primary target species was a Council-managed species.

ⁱⁱⁱ The Committee member who proposed the list agreed upon by the Committee wished to include Atlantic saury (*Scomberesox saurus*), which he said is sometimes locally referred to as a halfbeak. Atlantic saury is in the saury family (scomeresocidae), not the halfbeak family (hemiramphidae). The Committee decided to include both Atlantic saury and hemiramphidae on their list because of the confusion caused by this incongruity between the scientific and local names.

^{iv} The FMAT examined NEFSC bottom trawl survey data from offshore strata in Southern New England and the Mid-Atlantic (strata 01010-01120 and 01610-01760) in the years 1973-2015. The FMAT examined stomach content data from the entire NEAMAP survey area, which includes depths from about 20 to 90 feet from Aquinnah, Massachusetts to Cape Hatteras, North Carolina, for the years 2002-2015.

^v This lower threshold used only NEFSC food habits data and did not include NEAMAP data.