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CORRESPONDENCE



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of National Marine Sanctuaries
Stellwagen Bank National Marine Sanctuary
175 Edward Foster Rd Scituate, Massachusetts 02066

January 14, 2026

Cate O'Keefe
Executive Director, NEFMC
50 Water Street, Mill 2
Newburyport, MA 01950

Re: Sand Lance as an Ecosystem Component

Dear Director O'Keefe:

I request that the New England Fishery Management Council and its Climate and Ecosystem Steering Committee include sand lance (*Ammodytes* sp.) as an ecosystem component (EC) species under *IRA Project 3.3: Ecosystem Component Species*.

Sand lance's importance as a forage fish for Stellwagen Bank National Marine Sanctuary (SBNMS) and throughout the Gulf of Maine, merits its inclusion as an EC species. Sand lance is currently an unmanaged forage fish in New England, but is important forage for several fish, marine mammal, and seabird species in the region. Sand lance are a major prey item in SBNMS; found in the stomach contents of several commercially harvested fish species including Atlantic cod, haddock, pollock, spiny dogfish, monkfish, hakes and skates (NEFSC, 2024).¹ Juvenile sand lance are prey for herring and mackerel, both commercially harvested and important forage species themselves (Fogarty et al. 1991, Suca et al. 2014).² Incorporating sand lance as EC species would support management efforts for commercially harvested fish species and the commercial and recreational fisheries that rely on them. Additionally, considering sand lance as an EC species would complement protection efforts by the Mid-Atlantic Council and allow for contiguous management of this species.

Sand lance is an excellent candidate for EC species inclusion based on the current information available, and designation as an EC species would promote further research and studies on the importance of sand lance in the marine ecosystem. There are multiple sources of information that

1 Northeast Fisheries Science Center, 2024: Food Habits Database (FHDBS) from 2024-08-14. NOAA National Centers for Environmental Information, <https://www.fisheries.noaa.gov/inport/item/8083>.

2 Fogarty, M., Cohen, E., Michaels, W., Morse, W., 1991. Predation and the regulation of sand lance populations: An exploratory analysis. *ICES Mar. Sci. Symp.*, Vol. 193, pp. 0-124; Suca, J. J., Pringle, J. W., Knorek, Z. R., Hamilton, S. L., Richardson, D. E., & Llopiz, J. K. 2018. Feeding dynamics of Northwest Atlantic small pelagic fishes. *Progress in Oceanography*, 165, 52-62.



could inform management of sand lance as an EC species including predator and prey diet data, life history research, climate vulnerability research, and bycatch data. Sand lance are highly place-based and shifts in cod abundance and distribution within SBNMS have been correlated with sand lance abundance and distribution (Richardson et al. 2014, Silva et al. 2023).³ Sand lance are also observed by the Northeast Fisheries Observer Program as bycatch in multiple fisheries and gear types, especially in sand-rich habitats like Stellwagen Bank and the Great South Channel (dataset shared with Council staff, January 2025). SBNMS staff and collaborators have studied sand lance life history and their vulnerability to environmental and anthropogenic stressors, which could further support management decisions. The placebased nature of sand lance, their known interactions with other species, and bycatch data could inform management measures for sand lance, and complement rebuilding plans for cod, herring, and mackerel, and support management of other species.

Including sand lance as an EC species offers the Council an opportunity to assess the effectiveness of incorporating unmanaged forage fishes into fisheries management. Although additional forage fish are not included in the Council's list of potential EC species at this time, there are several other unmanaged forage fish species, such as krill, *Calanus* copepods, and benthic invertebrates, of importance in SBNMS and the Gulf of Maine, that the Council could incorporate as EC species in the future if sand lance is demonstrated to be useful in fisheries management.

I support the Council's work on *IRA Project 3.3: Ecosystem Component Species*, and support inclusion of sand lance as an EC species. My staff and I remain committed to collaborating with the Council by sharing information from our previous and future research on sand lance and contributing to any future working groups focused on sand lance as an EC species.

Thank you for considering these comments. If you have any questions regarding this input, please contact me at 781-635-0163 or at Pete.DeCola@noaa.gov.

Sincerely,

Captain Peter DeCola
U.S. Coast Guard (retired)
Superintendent

³ Richardson, D. E., Palmer, M. C., and Smith, B. E. 2014. The influence of forage fish abundance on the aggregation of Gulf of Maine Atlantic cod (*Gadus morhua*) and their catchability in the fishery. *Canadian Journal of Fisheries and Aquatic Sciences*, 71(9): 1349-1362. <https://doi.org/10.1139/cjfas-2013-0489>; Silva, T. L., Breault, T., Lowery, T. M., Calabrese, N. M., Stokesbury, K. D., Wiley, D. N., & Fay, G. 2023. Investigating spatial overlap between northern sand lance (*Ammodytes dubius*) and Atlantic cod (*Gadus morhua*) with video trawl technology. *Fisheries Research*, 265, 106746.

cc: Mike Pentony, NOAA Greater Atlantic Regional Fisheries Office

Jon Hare, NOAA Northeast Fisheries Science Center