



Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: May 28, 2021
To: Chris Moore, Executive Director
From: Julia Beaty, staff
Subject: Unmanaged Landings Update

The following materials are provided behind this tab for consideration during the June 2021 Council meeting.

1. Annual report on unmanaged commercial landings from Maine through North Carolina.
2. Exempted fishing permit (EFP) application submitted by Lund's Fisheries, Inc. to NOAA Fisheries.

The following additional materials are not included with this tab but are linked as supplemental materials. They were submitted by Lund's Fisheries and provide additional information related to their EFP application.

1. Morson JM, Grothues T, Able KW. 2019. Change in larval fish assemblage in a USA east coast estuary estimated from twenty-six years of fixed weekly sampling. PLoS ONE 14(10): e0224157. Available [here](#).
2. Smith J W. 1994. Biology and fishery for Atlantic thread herring, *Opisthonema oglinum*, along the North Carolina coast. Marine Fisheries Review. 56(4). Available [here](#).
3. Pristas PJ and Cheek RP. 1973. Atlantic thread herring (*Opisthonema oglinum*) - movements and population size inferred from tag returns. Fishery Bulletin. 71(1): 297-301. Available [here](#).

The intent of this EFP application is to carry out a project to demonstrate the potential for a federal waters commercial purse seine fishery for Atlantic thread herring. Thread herring are subject to the 1,700 pound commercial possession limit in Mid-Atlantic Federal waters implemented through the [Unmanaged Forage Omnibus Amendment](#). The goal of the Forage Amendment was to prohibit the development of new and expansion of existing directed commercial fisheries on unmanaged forage species in mid-Atlantic federal waters until the Council has had an adequate opportunity to assess the scientific information relating to any new or expanded directed fisheries and consider potential impacts to existing fisheries, fishing communities, and the marine ecosystem. When taking final action on the amendment in August 2016, the Council agreed that use of an EFP, and Council review of that EFP, should be a first step towards considering expanded fisheries for these species.

NOAA Fisheries is currently processing the Lund's Fisheries EFP application. A Federal Register notice will be published with an associated comment period. The Council may wish to

submit comments; however, the timing of the comment period may not align with future Council meetings. Therefore, Lund's has provided their EFP application for this briefing book to allow for Council consideration prior to publication in the Federal Register. If the Council wishes to submit a comment letter, Council staff can work with the Ecosystem and Ocean Planning Committee to draft a letter after the Federal Register notice has published. The timing of publication the Federal Register notice is unknown at this point in time.



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2021 Unmanaged Commercial Landings Report

June 2021 Council Meeting

Prepared By: Julia Beaty, Council Staff and Ashley Weston, NOAA Fisheries
May 28, 2021

Background

The Council requested annual updates on commercial landings of unmanaged species as a follow on action to the [Unmanaged Forage Species Omnibus Amendment](#). The goal is to monitor for signs of developing unmanaged commercial fisheries in the Mid-Atlantic. New or growing fisheries could develop in response to changing species distributions, changing market factors, changes in other fisheries, or for other reasons. The information contained in these annual reports can serve as a high level summary to help determine if further evaluation is needed and if consideration of a management response may be warranted.

The tables on the following pages summarize commercial landings of unmanaged species from Maine through North Carolina. This information was compiled by staff at the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) Analysis and Program Support Division.

In this context, “unmanaged landings” refers to landings of species from Maine through North Carolina only in locations where they are not managed at the state or federal level with a possession limit, size limit, seasonal closure, and/or limited access. For example, the blue crab landings in this report represent only those landings in states where blue crab is not managed.

Data

The data were accessed from the Atlantic Coastal Cooperative Statistics Program Data Warehouse. Both state-only and federal dealer reports are included. The data account for state-only permitted dealers located in the northeast as well as all dealers with GARFO permits, regardless of location.

Table 1 contains the top 25 unmanaged species by weight landed during 2015-2020. Table 2 contains the top 25 unmanaged finfish species by weight landed. Table 3 lists landings of Mid-Atlantic Council ecosystem component species (i.e., those species subject to the possession limit implemented through the Unmanaged Forage Species Omnibus Amendment). Table 4 shows species with increasing rank order of landings every year from 2017 through 2020. Table 5 shows species with increasing landing (though not necessarily increasing rank order) every year from 2017 through 2020.

In all tables, species are listed in descending order of average 2015-2020 landings. Confidential values are not counted in the averages.

Species with Highest or Increasing Unmanaged Commercial Landings

Blue catfish (an invasive species) had the highest unmanaged commercial landings in 2019 and 2020. Mussels had the highest unmanaged landings each year from 2015 through 2018. Hagfish were in the top five species by landings in weight each year from 2016 through 2020 (Table 1).

When ranked from lowest to highest unmanaged commercial landings from 2015 through 2020, four species had an increasing or stable rank every year: blue catfish, sugar kelp, oysters, and gray triggerfish. When considering only 2017-2020, nine species had a stable or increasing rank each year: blue catfish, Atlantic cutlassfish, sugar kelp, oysters, penaeid shrimp, bonito, mantis shrimp, armored sea robins, and gray triggerfish. Landings of these species are summarized in Table 4 and Figure 1.

Changes in rank order can indicate species with noteworthy increases in landings relative to other species from one year to the next. However, species with steady but more incremental increases in landings may also be of interest. Oysters, Atlantic cutlassfish, penaeid shrimp, mantis shrimp, and armored sea robins had both increasing landings each year from 2017 through 2020 (Table 5) and increasing rank order in those years (Table 4).

Green crabs (an invasive species), crevalle, and sea urchins had increasing landings each year from 2017 through 2020, though they did not have increasing rank order each year (Table 5). Nearly all sea urchin landings in Table 5 occurred in Massachusetts. Crevalle are a South Atlantic species. The majority (i.e., 74%) of the crevalle landings shown in Table 5 for 2017-2020 were landed in North Carolina.

Nine other species had increasing landings each year during 2017-2020 (though not increasing rank order) but had low overall landings and are therefore not shown in this memo. Annual landings of each of these nine other species did not exceed more than about 2,000 pounds in any year and averaged 131 pounds per year.

Changes in Management Measures Since 2020 Update

All management measures through 2020 are captured in this report thanks to input from the states of Maine through North Carolina. These measures are updated on an annual basis. This section summarizes changes made in this report, as well as known changes effective for 2021 and beyond which will be captured in future versions of this report. There may be other changes in management measures for 2021 in addition to those summarized below.

Sand lance are ecosystem component species subject to the possession limit in Mid-Atlantic federal waters implemented through the Unmanaged Forage Omnibus Amendment. Massachusetts implemented a commercial sand lance possession limit in state waters, effective as of May 2020. This is accounted for in the data summarized on the following pages. Rhode Island implemented a sand lance possession limit which will be effective in 2021. This will be accounted for in next year's unmanaged landings report.

As previously noted, gray triggerfish had increasing rank of unmanaged landings every year from 2017-2020. Virginia has discussed the potential for managing gray triggerfish but has not yet determined their preferred path forward.

Penaeid shrimp have also increased in rank order of unmanaged landings every year from 2017-2020. Virginia has allowed an experimental penaeid shrimp fishery in recent years and is in the process of developing regulations for a limited access commercial penaeid shrimp fishery off Virginia Beach. The state intends to continue to allow an experimental penaeid shrimp fishery off the eastern shore area. Most landings are of white shrimp and to a lesser extent exotic tiger shrimp and brown shrimp. Maryland is also considering developing commercial management measures for penaeid shrimp.

Table 1: Top 25 Unmanaged Species Annual Landings, 2015-2020

Report Run on: 2021-05-11. Values are in pounds.

Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2015	2016	2017	2018	2019	2020	Avg
MUSSELS	781	15,342,427	11,578,754	10,480,326	5,642,701	879,771	1,486,785	7,568,461
CATFISH, BLUE	67	3,697,016	4,123,309	5,199,117	5,093,158	5,120,580	4,360,167	4,598,891
HAGFISH	150	2,204,603	1,871,105	1,558,251	C	C	C	1,877,986
CONCHS	775	2,666,958	1,066,324	1,234,770	2,368,253	1,901,907	1,103,881	1,723,682
QUAHOG	748	3,113,556	3,028,273	159,961	57,390	23,238	41,426	1,070,641
CRAB, BLUE	700	2,580,077	3,450,444	0	0	0	0	1,005,087
OTHER FISH	526	1,810,527	1,291,616	656,646	844,650	753,287	122,996	913,287
STRIPED MULLET	235	612,729	461,742	778,353	832,924	896,851	691,531	712,355
WHITING, KING	197	564,373	582,919	814,345	327,756	487,327	431,707	534,738
CRUSTACEANS NK	834	0	160,171	234,650	170,342	527,698	447,935	256,799
TUNA, LITTLE	468	212,072	220,244	279,355	232,494	246,951	259,370	241,748
CUTLASSFISH, ATL	99	183,313	61,042	50,840	158,763	287,906	514,328	209,365
MOLLUSKS NK	804	619,872	96,249	179,234	170,703	103,211	38,808	201,346
HARVEST FISH	165	237,082	209,841	172,931	130,037	99,184	102,781	158,643
JOHN DORY	188	206,857	209,695	246,233	122,198	102,405	61,267	158,109
CLAM, BLOODARC	743	113,270	104,888	212,229	98,894	128,042	97,503	125,804
KELP, SUGAR	833	0	C	101,571	99,301	256,646	C	114,380
SEA ROBINS	341	122,319	206,341	149,469	77,456	70,839	30,955	109,563
PERCH, WHITE	506	135,060	139,261	79,294	99,326	117,733	86,474	109,525
OYSTERS	789	0	44,590	79,442	106,065	144,679	174,927	91,617
CRAB, ROCK	712	376,418	57,746	41,900	43,332	10,989	11,916	90,384
CATFISH(SEA)	69	122,786	94,736	C	50,650	43,274	126,630	87,615
PUFFER, NORTHERN	429	91,413	102,934	100,913	70,606	88,364	29,689	80,653
SHRIMP (PENAEID)	738	C	C	C	12,629	44,624	162,457	73,237
HERRING (NK)	167	C	49,567	C	C	54,697	95,906	66,723

Table 2: Top 25 Unmanaged Finfish Species Annual Landings, 2015-2020

Report Run on: 2021-05-11. Values are in pounds.

Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2015	2016	2017	2018	2019	2020	Avg
CATFISH, BLUE	67	3,697,016	4,123,309	5,199,117	5,093,158	5,120,580	4,360,167	4,598,891
HAGFISH	150	2,204,603	1,871,105	1,558,251	C	C	C	1,877,986
OTHER FISH	526	1,810,527	1,291,616	656,646	844,650	753,287	122,996	913,287
STRIPED MULLET	235	612,729	461,742	778,353	832,924	896,851	691,531	712,355
WHITING, KING	197	564,373	582,919	814,345	327,756	487,327	431,707	534,738
TUNA, LITTLE	468	212,072	220,244	279,355	232,494	246,951	259,370	241,748
CUTLASSFISH, ATL	99	183,313	61,042	50,840	158,763	287,906	514,328	209,365
HARVEST FISH	165	237,082	209,841	172,931	130,037	99,184	102,781	158,643
JOHN DORY	188	206,857	209,695	246,233	122,198	102,405	61,267	158,109
SEA ROBINS	341	122,319	206,341	149,469	77,456	70,839	30,955	109,563
PERCH, WHITE	506	135,060	139,261	79,294	99,326	117,733	86,474	109,525
CATFISH (SEA)	69	122,786	94,736	C	50,650	43,274	126,630	87,615
PUFFER, NORTHERN	429	91,413	102,934	100,913	70,606	88,364	29,689	80,653
HERRING (NK)	167	C	49,567	C	C	54,697	95,906	66,723
EEL, CONGER	116	44,874	47,459	57,568	90,772	49,819	55,257	57,625
CUSK	96	82,397	58,323	56,440	48,825	42,775	50,778	56,590
BONITO	33	69,033	47,030	51,819	41,514	63,548	59,855	55,467
SILVERSIDE, NK	363	61,286	120,019	37,976	28,314	13,482	23,710	47,465
SILVERSIDE, ATLANTIC	362	20,810	32,470	23,132	16,805	68,371	54,914	36,084
SPADEFISH	381	21,664	23,690	35,844	25,988	30,485	25,989	27,277
RIBBONFISH	98	36,573	15,376	11,615	6,459	49,869	39,185	26,513
HERRING, ATL THREAD	174	C	C	30,482	11,515	13,432	C	18,476
MULLET	234	10,480	15,408	28,951	7,864	11,737	29,306	17,291
RAY, COWNOSE	285	C	C	C	C	16,924	C	16,924
TUNA, BLACKFIN	464	14,834	11,361	15,255	15,882	19,985	19,926	16,207

Table 3: MAFMC Ecosystem Component Species Annual Landings, 2015-2020

Report Run on: 2021-05-11. Values are in pounds.

Cells marked with a 'C' are confidential. Averages do not include confidential data.

Other ecosystem component species had no reported commercial landings during 2015-2020.

Common Name	Code	2015	2016	2017	2018	2019	2020	Avg
MOLLUSKS NK	804	619,872	96,249	179,234	170,703	103,211	38,808	201,346
HERRING (NK)	167	C	49,567	C	C	54,697	95,906	66,723
SILVERSIDE, NK	363	61,286	120,019	37,976	28,314	13,482	23,710	47,465
SILVERSIDE, ATLANTIC	362	20,810	32,470	23,132	16,805	68,371	54,914	36,084
HERRING, ATL THREAD	174	C	C	30,482	11,515	13,432	C	18,476
SQUIDS, LOLIGINIDAE	803	659	10,940	4,526	C	1,418	1,936	3,896
EEL, SAND (LAUNCE)	206	3,367	C	C	C	C	0	1,684
HERRING, ROUND	166	0	0	C	C	70	844	229
ARGENTINE	171	C	0	0	0	0	0	C
BAY ANCHOVY	6	C	C	C	C	C	C	C

Table 4: Species with Stable or Increasing Rank of Landings Every Year During 2017-2020

Report Run on: 2021-05-11. Values are in pounds.

Cells marked with a 'C' are confidential. Confidential data were accounted for in the rankings, but not in the averages shown below.

Common Name	Code	2015	2016	2017	2018	2019	2020	Avg
CATFISH, BLUE	67	3,697,016	4,123,309	5,199,117	5,093,158	5,120,580	4,360,167	4,598,891
CUTLASSFISH, ATL	99	183,313	61,042	50,840	158,763	287,906	514,328	209,365
KELP, SUGAR	833	0	C	101,571	99,301	256,646	C	114,380
OYSTERS	789	0	44,590	79,442	106,065	144,679	174,927	91,617
SHRIMP (PENAEID)	738	C	C	C	12,629	44,624	162,457	73,237
BONITO	33	69,033	47,030	51,819	41,514	63,548	59,855	55,467
SHRIMP (MANTIS)	737	358	12,171	8,203	13,378	37,279	57,580	21,495
SEA ROBIN, ARMORED	343	C	C	C	C	2,774	C	2,774
TRIGGERFISH, GRAY	457	0	0	C	898	2,121	1,456	895

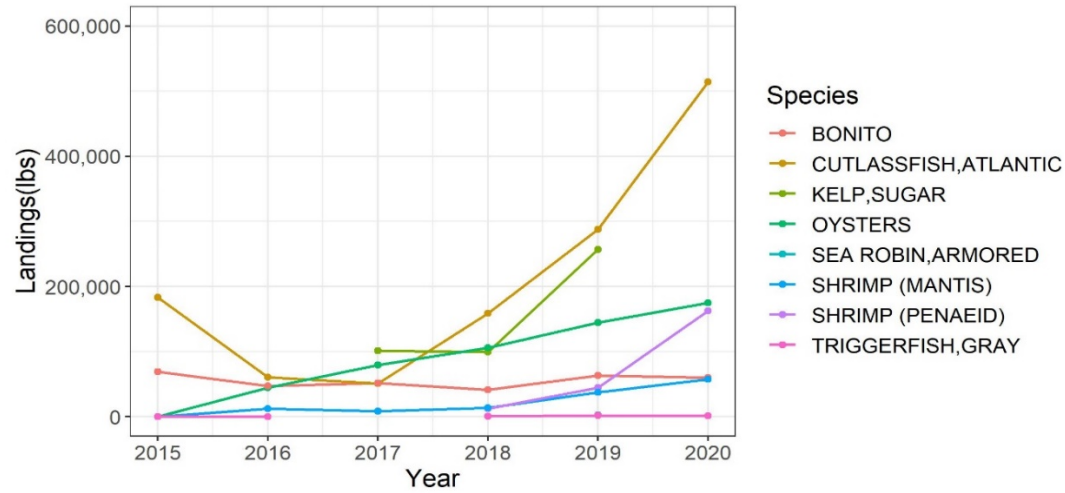


Figure 1: Landings for Species with Increasing Rank Order of Landings Each Year, 2017-2020.

Confidential landings are not shown.

Blue catfish also had increasing rank order but is not shown on this figure due to a much higher scale of landings.

Table 5: Species Increasing Landings Every Year During 2017-2020

Report Run on: 2021-05-11. Values are in pounds.

Cells marked with a 'C' are confidential. Confidential data were accounted for in the rankings, but not in the averages shown below.

Nine additional species also had increasing landings every year during 2017-2020 but are not shown due to low overall landings (i.e., annual landings did not exceed more than about 2,000 pounds in any year and average landings across all nine species were 131 pounds per year).

Common Name	Code	2015	2016	2017	2018	2019	2020	Avg
CUTLASSFISH, ATL	99	183,313	61,042	50,840	158,763	287,906	514,328	209,365
OYSTERS	789	0	44,590	79,442	106,065	144,679	174,927	91,617
SHRIMP (PENAEID)	738	C	C	C	12,629	44,624	162,457	73,237
CRAB, GREEN	708	26,873	23,849	14,888	52,592	64,729	115,607	49,756
SEA URCHINS	805	49,941	56,548	C	23,984	26,044	28,370	36,977
SHRIMP (MANTIS)	737	358	12,171	8,203	13,378	37,279	57,580	21,495
CREVALLE	87	5,844	7,959	3,959	7,424	8,355	16,998	8,423
SEA ROBIN, ARMORED	343	C	C	C	C	2,774	C	2,774

LUND'S FISHERIES



Wild caught product of USA

Lund's Fisheries, Inc.
997 Ocean Drive, Cape May, NJ 08204
www.lundsfish.com

Atlantic Thread Herring Exempted Fisheries Permit Application Project Description – April 26, 2021

Project Objectives:

The intent of the project is to demonstrate the potential for a federal EEZ commercial purse seine fishery for Atlantic thread herring (*Opisthonema oglinum*), VTR Code HRAT, one of several emerging southern species exhibiting increased occurrence in local waters in response to warming water temperatures.

See: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0224157>
<https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/MFR/mfr564/mfr5641.pdf>

Project Start and End Dates:

The project start date would be May 2, 2022 and the project end date would be November 1, 2022. The project would take place during the period of the normal operation of the New Jersey Atlantic menhaden purse seine fishery. A 3000-metric ton (6.6 million pound) catch limit is requested for the first year of this project. A multi-year EFP is requested, to maximize biological data-gathering opportunities for estimating stock size potential and allow investments in the gear for this new fishery to be recouped.

Project Location:

The project would take place throughout the geographic area encompassing the normal operation of the region's menhaden purse seine fishery, in Federal waters from Ocean City, MD, north to Montauk, LI, NY and within the management jurisdiction of the Mid-Atlantic Fishery Management Council. The fishery would take place from 3 to 30 miles offshore in water approximately < 30 fathoms deep.

Number and Duration of Trips:

Trips would be < 24 to 48 hours in length and up to 5 trips/week can be attempted. One to five sets per day are anticipated, depending upon daily fish availability, with about 1.5 hours needed between setting and hauling back the net.

Estimated Weight of Catch (per trip):

An average trip can be estimated as landing 80-100,000 pounds.

Description of the Gear:

A purse seine, of approximately 2000' in length and 180' in depth, of 1" mesh (25 mm), is used by the catcher vessel. A purse boat, towed by or on-board the catcher vessel, is operated by that vessel's crew to deploy and retrieve the net. A carrier vessel is used by each catcher vessel to pump the catch on board and carry the fish to the dock for sale and processing.

Landing Catch for Sale and Sampling Protocols:

All catch will be landed at Lund's Fisheries' Cape May freezer plant and will be recorded and inspected, according to ongoing plant protocols, which includes length and correlating weights. All catch is reported according to SAFIS requirements.

Any bycatch will be recorded although very little bycatch is anticipated, as is the case in the Atlantic menhaden purse seine fishery.

The goal of this project is to create a successful, environmentally sustainable fishery from an emerging resource in a warming ocean, which can respond to existing demand from food markets, recreational bait markets and markets catering to animals in zoos, aquariums, and marine rescue centers.

Regulatory Exemption Request:

This application is consistent with the intent of the MAFMC's 2017 Mid-Atlantic Unmanaged Forage Omnibus Amendment (50 CFR Part 648 § 648.2 - § 648.352). Specifically, at § 648.12, the opportunity for experimental fishing "contributing to the development of new or expansion of existing fisheries for Mid-Atlantic forage species" is provided. Further, an exemption from the § 648.351 Mid-Atlantic forage species possession limit, "of up to 1,700 pounds of all Mid-Atlantic forage species combined per trip in or from the EEZ portion of the Mid-Atlantic Forage Species Management Unit" is requested with this application.

Respectfully submitted:

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