

Table 1: Summary of seine catch data of 11 year time series. Species are arranged by number of individuals caught, number of seine hauls where at least one individual of the species was encountered (Encounters), and number of years where at least one individual of the species was encountered (Years encountered). The percentage of total catch (number caught divided by 159,590 total organisms enumerated) and percentage of encounters (number of seine hauls seen divided by 659 total seine hauls) are also calculated.

Common name	Scientific name	Individs.	% of total catch	Encounters	% of encounters	Years encountered
Cunner	<i>Tautogolabrus adspersus</i>	1	<0.01	1	0.2	1
Eastern Silvery Minnow	<i>Hybognathus regius</i>	1	<0.01	1	0.2	1
Spotted Hake	<i>Urophycis regia</i>	1	<0.01	1	0.2	1
Summer Flounder	<i>Paralichthys dentatus</i>	1	<0.01	1	0.2	1
Northern Puffer	<i>Sphoeroides maculatus</i>	2	<0.01	2	0.3	2
Red Hake	<i>Urophycis chuss</i>	2	<0.01	2	0.3	2
American Eel	<i>Anguilla rostrata</i>	3	<0.01	3	0.5	3
Crevalle Jack	<i>Caranx hippos</i>	3	<0.01	2	0.3	2
Lumpfish	<i>Cyclopterus lumpus</i>	3	<0.01	2	0.3	2
American Plaice	<i>Hippoglossoides platessoides</i>	4	<0.01	1	0.2	1
Shortfin Squid	<i>Illex illecebrosus</i>	4	<0.01	1	0.2	1
Atlantic Butterfish	<i>Peprilus triacanthus</i>	5	<0.01	4	0.6	4
Rainbow Smelt	<i>Osmerus mordax</i>	5	<0.01	3	0.5	2
Striped Bass	<i>Morone saxatilis</i>	6	<0.01	6	0.9	3
Smallmouth Bass	<i>Micropterus dolomieu</i>	7	<0.01	3	0.5	2
White Hake	<i>Urophycis tenuis</i>	7	<0.01	2	0.3	2
American Shad	<i>Alosa sapidissima</i>	8	0.01	4	0.6	4
Largemouth Bass	<i>Micropterus salmoides</i>	9	0.01	4	0.6	3
Permit	<i>Trachinotus falcatus</i>	9	0.01	2	0.3	1
Atlantic Cod	<i>Gadus morhua</i>	10	0.01	2	0.3	1
White Sucker	<i>Catostomus commersonii</i>	19	0.01	6	0.9	5
Blueback Herring	<i>Alosa aestivalis</i>	20	0.01	6	0.9	3
Longhorn Sculpin	<i>Myoxocephalus octodecemspinosus</i>	20	0.01	7	1.1	2
Threespine Stickleback	<i>Gasterosteus aculeatus</i>	21	0.01	15	2.3	7
Rock Gunnel	<i>Pholis gunnellus</i>	25	0.02	11	1.7	6
Fallfish	<i>Semotilus corporalis</i>	28	0.02	3	0.5	1
Pollock	<i>Pollachius virens</i>	35	0.02	6	0.9	5
Ninespine Stickleback	<i>Pungitius pungitius</i>	42	0.03	6	0.9	4
Shorthorn Sculpin	<i>Myoxocephalus scorpius</i>	47	0.03	21	3.2	6
Northern Pipefish	<i>Syngnathus fuscus</i>	82	0.05	41	6.2	10
Grubby Sculpin	<i>Myoxocephalus aeneus</i>	83	0.05	32	4.9	6
Bluefish	<i>Pomatomus saltatrix</i>	84	0.05	21	3.2	8
White Mullet	<i>Mugil curema</i>	180	0.11	9	1.4	6
Atlantic Tomcod	<i>Microgadus tomcod</i>	231	0.15	70	10.6	10
Atlantic Menhaden	<i>Brevoortia tyrannus</i>	682	0.43	4	0.6	3
Winter Flounder	<i>Pseudopleuronectes americanus</i>	1331	0.83	247	37.5	10
Green Crab	<i>Carcinus maenas</i>	4463	2.80	446	67.7	10
Sandlance	<i>Ammodytes americanus</i>	4688	2.94	65	9.9	9
Alewife	<i>Alosa pseudoharengus</i>	10184	6.38	140	21.2	10
Mummichog	<i>Fundulus heteroclitus</i>	14579	9.14	199	30.2	10
Atlantic Herring	<i>Clupea harengus</i>	55768	34.95	97	14.7	10
Atlantic Silverside	<i>Menidia menidia</i>	66887	41.91	369	56.0	10

Table 2: Portland Harbor tide gauge temperature anomalies presented as the difference between each years average temperature and the expected annual temperature as calculated from the 2003-2020 climate reference period (CRP). Anomalies are also presented at a seasonal scale, with winter referring to December-February, spring referring to March-May, summer referring to June-August, and fall referring to September-November. Negative values are cooler temperatures than expected compared to the CRP, and positive values are warmer temperatures than expected compared to the CRP.

Year	Annual Temp. Anom. (°C)		Seasonal Temp. Anom. (°C)			
			Winter	Spring	Summer	Fall
2014	-0.74		-1.28	-1.13	-0.62	0.06
2015	-0.41		-0.74	-1.18	0.06	0.21
2016	0.69		1.34	0.26	0.57	0.6
2017	-0.37		0.3	-0.74	-1.05	0.05
2018	-0.11		-0.84	-0.06	0.58	-0.13
2019	-0.27		-0.78	-0.41	0.35	-0.24
2020	0.66		0.21	0.62	1.86	-0.08
2021	1.24		0.32	1.15	1.7	1.76
2022	0.97		0.28	0.97	1.51	1.1
2023	1.12		1.04	0.97	1.42	1.03
2024	0.9		0.91	0.95	1.09	0.64