Data Summary of the Delaware River Seine Survey: 2024



In 2024, biologists conducted the Delaware River Striped Bass Recruitment Seine Survey from June 17 to October 23. During those five months, crews hauled 286 individual seines catching 35,185 total fish, averaging 123 fish per haul. The five most abundant species caught were: Atlantic menhaden, banded killifish, American shad, Atlantic croaker and spottail shiner.



The survey's target species striped bass was the thirteenth most abundant fish caught in 2024. In total, 512 striped bass were caught and 449 of those were young-of-year (YOY) striped bass meaning that 89% of the striped bass caught were less than 1 year old.



A geometric mean YOY index was calculated for the months of August through October. The YOY index for 2024 was 0.53, which ranks thirty-second highest out of the 45-year time series.





All water quality parameters for 2024 were within normal range. Water temperatures ranged from 16.3 to 32.5 degrees Celsius. Dissolved oxygen levels ranged from 0.1 to 9.9 milligrams per liter. Salinity values ranged from 0 to 14.9 parts per thousand. pH values collected averaged 7.6, which is considered slightly more basic than neutral (7.0).

Catch totals by species for 2024 can be found below:

2024 CATCH TOTALS

COMMON NAME	SCIENTIFIC NAME	TOTAL NUMBER	FREQUENCY OF OCCURRENCE (%)
Alewife	Alosa pseudoharengus	137	7.343%
American Eel	Anguilla rostrata	22	5.245%
American Shad	Alosa sapidissima	3,161	65.035%
Atlantic Croaker	Micropogonias undulatus	2,861	46.154%
Atlantic Menhaden	Brevoortia tyrannus	9,277	36.014%
Atlantic Needlefish	Strongylura marina	4	0.350%
Atlantic Silverside	Menidia menidia	851	29.371%
Banded Killifish	Fundulus diaphanus	5,452	55.594%
Banded Sunfish	Enneacanthus obesus	2	0.350%
Bay Anchovy	Anchoa mitchilli	2,279	34.615%
Blue Crab	Callinectes sapidus	196	32.168%
Blueback Herring	Alosa aestivalis	1,251	19.930%
Bluefish	Pomatomus saltatrix	61	12.238%
Bluegill Sunfish	Lepomis macrochirus	46	7.692%
Carp	Cyprinus carpio	2	0.699%
Channel Catfish	Ictalurus punctatus	17	4.545%
Crevalle Jack	Caranx hippos	12	3.147%
Dace Species	Rhinicthys sp.	1	0.350%
Eastern Silvery Minnow	Hybognathus regius	1,554	30.769%
Fallfish	Semotilus corporalis	5	1.049%
Flathead Catfish	Pylodictis olivaris	1	0.350%
Fourspine Stickleback	Apeltes quadracus	3	1.049%
Gizzard Shad	Dorosoma cepedianum	408	23.427%
Goldfish	Carassius auratus	5	1.748%
Green Sunfish	Lepomis cyanellus	2	0.699%
Hickory Shad	Alosa mediocris	14	0.350%
	Trinectes maculatus	88	9.790%
Hogchoker Horse-eye Jack			
	Caranx latus	4	1.049%
Inland Silverside	Menidia beryllina	187	20.979%
Largemouth Bass	Micropterus salmoides	14	4.545%
Mummichog	Fundulus heteroclitus	1,142	37.063%
Naked Goby	Gobiosoma bosc	1	0.350%
Northern Hog Sucker	Hypentelium nigricans	2	0.699%
Pumpkinseed Sunfish	Lepomis gibbosus	29	6.294%
Quillback	Carpiodes cyprinus	5	1.049%
Redbreast Sunfish	Lepomis auritus	3	1.049%
Rough Silverside	Membras martinica	194	10.839%
Sheepshead	Archosargus probatocephalus	1	0.350%
Smallmouth Bass	Micropterus dolomieu	15	3.846%
Spot	Leiostomus xanthurus	662	27.273%
Spotfin Shiner	Cyprinella spiloptera	5	1.049%
Spottail Shiner	Notropis hudsonius	2,361	37.413%
Striped Bass	Morone saxatilis	513	50.699%
Striped Mullet	Mugil cephalus	2	0.699%
Tessellated Darter	Etheostoma olmstedi	230	22.378%
Threadfin Shad	Dorosoma petenense	1	0.350%
Weakfish	Cynoscion regalis	3	0.350%
White Perch	Morone americana	2,087	57.343%
White Sucker	Catostomus commersonii	10	2.797%
Yellow Perch	Perca flavescens	2	0.699%
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American Shad	Alosa sapidissima	3,161	65.035%
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GRAND TOTAL		35,185	