

## **SUNDAY, JUNE 14, 2015**

If you live near or visit the waters of Raritan Bay or Sandy Hook Bay, along the southern shore of New York Harbor, you might often wonder what lives in the murky, turbid tidal waters. What sort of sea creatures would want to dwell downstream from New York City?

For the past several years, the all-volunteer Bayshore Watershed Council has been conducting a seining survey of Raritan Bay and Sandy Hook Bay at the start of the summer season to find out what species survive in these rich tidal waters. The catch this time around included many juvenile and young-of-the-year fish (species that were born or emerged from eggs this past spring). Each young sea creature provides hope for the future.

On Sunday, June 14 from 10am to 3pm, the annual "Seine the Bay Day" event took place. As usual, surveys were conducted at four locations: Cliffwood Beach in Aberdeen Township, the fishing beach along Front Street in Union Beach, the beach in Port near the mouth of Pews Creek, and the beach near the mouth of Many Mind Creek in Atlantic Highlands.

With help from local kids and adults, a 50-foot-long net with buoys on top and weights on the bottom was hauled by watershed volunteers through murky waters and pulled towards the shore. Caught in the net was anything hanging out at the time along the shallow edge of the bay.

Common catches included young spearing or Atlantic silversides, young herring, young pipefish, and young blue-claw crabs. Great finds were a young flounder at Union Beach and a young drum fish at Cliffwood Beach. A crowd pleaser was an adult American eel found along the shores of Atlantic Highlands.

Turbidity was poor at all sites, the color of tea. In fact, bay water was so cloudy that people knee-high in the water couldn't even see their feet. Perhaps it was caused by a combination of too much runoff from recent rainstorms and an increase in plankton populations.

There is no doubt the more watershed members conduct these public seining events, the better picture people get of the bay. Seining is a method of taking the pulse of a local ecosystem. It's a way to gain an insight into the health of the near shore environment where many people swim and enjoy the bay.

All fishes, crabs, and other aquatic creatures were identified, cataloged, and returned to the water. In addition to seining, water temperature, salinity, and turbidity information were documented by volunteers at each site.

Below are the details of the event. Species found and data collected are listed beneath each seine location. The weather was mostly sunny with air temperatures in the mid 80s. Winds were light out of the southeast 5 to 10 mph.

Thanks and special appreciation goes to Shannon, Tom, Frank H, Dan & Casey, Matthew and his brother, Fran, Ron, Beth and family & friends, and Joe & Kari Martin and family for all their wonderful help and time.

**10am - Aberdeen Township/Cliffwood Beach**

Outgoing tide. Water temperature 78 degrees F.

Visibility was cloudy at a foot or less.

Salinity = 22 ppt

150+ Spearing or Atlantic Silversides, including over 100 YOY or young-of-the-year fish at less than 1 inch in length.

10 to 15 juvenile Blueback or Alewife river herring

50+/- mud snails

10 +/- isopods or aquatic insects

9 juvenile pipefish

2 adult male Horseshoe Crabs

2 juvenile Blue Claw Crabs (3 inches & 1 inch)

1 juvenile Black Drum fish

**11:30am - Union Beach/Conaskonck Point**

Outgoing tide. Water temperature 80 degrees F.

Visibility was cloudy at a foot or less.

Salinity = 22 ppt

200+ Mud Snails

100+ juvenile Spearing or Atlantic Silversides

50+ Shore Shrimp

20+ Hermit Crabs

10+ Isopods or aquatic insects

4 Black-tipped Mud Crabs

4 juvenile Blue-claw Crabs

1 Soft-shell Blue Crab (4 inches wide)

1 juvenile Winter Flounder

1 Pipefish

1 juvenile Hard Clam or Quahog

1 adult male Horseshoe Crab found on beach

1 adult pair Horseshoe Crabs mating on beach

**1:00pm: Middletown Township/Port Monmouth - Pews Creek**

Incoming Tide. Water temperature 80 degrees F.

Visibility was less than 6 inches.

Salinity = 25 ppt

50+ Mud Snails

Masses of Mud Snail eggs attached to debris

10+ Hermit Crabs

10+ juvenile spearing or Atlantic Silversides

10+ isopods or aquatic insects

10+ shore shrimp

2 Pipefish

1 Salp

**2:30pm: Atlantic Highlands/Mouth of Many Mind Creek**

Incoming tide. Water temperature 83 degrees F.

Visibility less than 6 inches.

Salinity = 25 ppt

500+ juvenile spearing or Atlantic Silversides

50+ Hermit Crabs

50+ Shore Shrimp

50+ Mud Snails & eggs

10+ isopods or aquatic insects

10+ adult Spearing or Atlantic Silversides

1 American eel (at least 15 inches long)

1 juvenile Lady Crab

1 adult Pipefish