

## **SUNDAY, SEPTEMBER 13, 2015**

Life is on the move in the dark, murky waters of Raritan Bay and Sandy Hook Bay, along the southern shore of New York Harbor. Small fish, some bait fish or others young-of-year (YOY) born this spring or summer, are swimming fast and foraging for food before the rush of winter starts to arrive.

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 end of the summer season to find out what species swim in the shallow part of the estuary.

The catch this time included many bait fish including Atlantic Silversides or Spearing and young-of-the-year fish (species that were born or emerged from eggs this past spring or summer). Each young sea creature provides hope for the future.

On Sunday, September 13 from 10am to 3:30pm, the annual "Seine the Bay Day" event took place. As in past years, surveys were conducted at four locations along Raritan Bay and Sandy Hook Bay: Cliffwood Beach in Aberdeen Township, the fishing beach along Front Street in Union Beach, the beach in Port Monmouth near the mouth of Pews Creek, and the beach near the mouth of Many Mind Creek in Atlantic Highlands.

With help from many volunteers a 50-foot-long net with buoys on top and weights on the bottom was dragged through murky waters and pulled towards the shore. Caught in the net was anything swimming or walking along the shallow edge of the bay.

Common catches included hundreds of spearing or Atlantic silversides, Killifish, young herring, young flounder, young Drum fish, and young crabs. Great finds were a young Needlenose fish in Cliffwood Beach, a young soft-shell Lady Crab at Union Beach, and a young Tautog at Atlantic Highlands. A crowd pleaser was a young Lookdown fish, a tropical sea creature that got caught up in the Gulf Stream and found its way in New York Harbor.

An uncommon find were salinity readings. Salinity is a measure of the amount of dissolved salts in the water. It is usually expressed in parts per thousand (ppt). In the past during Seine the Bay Day events, salinity readings at sites were in the low 20s ppt. Now due to several drier months, the bay has become unusually saltier with readings on the low to mid 30s ppt, which is more typical of salinity readings in the ocean.

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 water.

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.

The weather was partly sunny to start with cloudy conditions towards the end of the event with air temperature readings in the low 80s. Winds were light out of the southeast 5 to 10 mph. The new moon was on Sunday, September 13, so we were experiencing spring tide cycles.

Thanks and special appreciation goes to Jen Zarcone from Allenhurst, Debbie Mans from Essex County, Tom Grabowski from Keyport, Frank Huza from Aberdeen, , Dan & Casey from Keansburg, Jess & Fran from Hazlet, Joe Martin and family from Oceanport, Cindy Zipf from Rumson, Tony Copper from Holmdel, and Joe & Robin Sheridan and family from Keyport. Thanks to everyone for all your wonderful help and time.

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

Outgoing tide. Water temperature 76 degrees F.

Visibility was clear at nearly 3 feet.

Salinity = 35 ppt

Over 1,000 Spearing or Atlantic Silversides

20+ Salps

10+ Baby Soft-shell clams

2 Comb Jellies

1 juvenile Atlantic Needlefish (13 inches long)

1 juvenile Menhaden

4 Mullet

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

Outgoing tide. Water temperature 78 degrees F.

Visibility was clear at around 3 feet.

Salinity = 31 ppt

200+ Atlantic Silversides or Spearing

3 Hermit Crabs

2 Lady Crabs (one male softshell)

3 juvenile Kingfish

2 Black Drums

1 juvenile Windowpane Flatfish

1 Killifish

1 Grass Shrimp

1 juvenile Lookdown (tropical fish)

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

Outgoing tide. Water temperature 78 degrees F.

Visibility was partially turbid at 2 feet.

Salinity = 35 ppt

1,000+ Salps

50+ Atlantic Silversides or Spearing

10 juvenile Black-tipped Mud Crabs

2 Black Drums

1 Hermit Crab

1 juvenile Bluefish or Snapper

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

Low tide. Water temperature 78 degrees F.

Visibility turbid at 1 foot.

Salinity = 32 ppt

300+ Atlantic Silversides or Spearing

10 Killifish

6 Lady Crabs

5 Black-tipped Mud Crabs

4 juvenile Bluefish or Snappers

2 Hermit Crabs

1 juvenile Tautog

1 juvenile Winter Flounder

1 juvenile Black Drum

1 juvenile Kingfish