

Sunday, June 2, 2013

On Sunday, June 2 from 10am to 4pm, the annual Start-of-the-Summer seining event took place.

A 50-foot-long net, with buoys on top and weights on the bottom, was hauled by watershed volunteers through the water and pulled towards the shore, catching what lived along the shallow edge of the bay. The catch included many common estuarine creatures including Bay Anchovies, Mud Snails, Pipe Fish, Hermit Crabs, and Blue-Claw Crabs. There were also a few surprises: YOY (young-of-the-year or born this year) river herring, fat Kingfish and Sea Robins, and masses of Salps, an unusual clear gelatinous looking creature, about the size of a dime, that does not sting and eats plankton.

Turbidity was poor at all sites, the color of tea. In fact, bay water was so cloudy and hazy that people knee-high in the water couldn't see their feet. Perhaps the combination of abundant Salps and the muddled water was an indicator of an plankton bloom.

Another surprise was the lack of shrimp to be found. Last year, each site had 50 or more shrimp, but this time there were only a handful to be found mostly in the eastern part of the bay. Local species of small bay shrimp, including the Common Shore Shrimp, Grass Shrimp, and Sand Shrimp, frequently inhabit the intertidal zone and are an important food source for many fish and coastal birds. The scarcity of shrimp was a mystery, but might have been caused by turbidity or fluctuations in salinity.

There is no doubt the more the watershed council conducts 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.

The presence, condition and numbers of types of fish, crabs, shrimps, plants, and other organisms provide important information about the health of the estuary. Studying biodiversity is a way of evaluating the health of a body of water. Biodiversity surveys are often undertaken by schools and volunteer groups to find out what organisms exist in a given area, especially since identification of many species is already known by large numbers of people.

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

People on hand not only had a fun time seeing what interesting life lived in the bay, but many people had a good time holding different species of fish, such as flounders, Hermit Crabs, Pipefish and more before releasing them into the estuary. Each haul of the seine net brought something new to discover.

Below are the details of the event. Species found and data collected are listed beneath each seine location. The weather was mostly sunny to partly cloudy with air temperatures in the upper 80s. Winds were breezy out of the southeast 10-15 mph.

Thanks and appreciation goes to Gene and Panse, Charlie O, Christine B, Frank H, Casey R, and Rebecca M, and Jeff D for all their wonderful help.

10am - Aberdeen Township/Cliffwood Beach

Low Tide. Water temperature 72 degrees F.

Visibility was cloudy six inches and less .

300+ Salps

200+ Spearing or Atlantic Silversides

200+ Bay Anchovies

100+ Mud Snails

25 Oyster Drills

20 juvenile River Herring,

1 Red Beard Sponge

12 Noon - Union Beach/Conaskonck Point

Incoming Water temperature 73.5 degrees F.

Visibility was cloudy a foot or less .

300+ Salps

200+ Bay Anchovies

30+ Spearing or Atlantic Silversides

25+ Hermit Crabs

5 Shore Shrimp

2 adult Sea Robins two feet or more in length

1 juvenile Windowpane Flounder

1 adult Pipefish

2:00pm: Middletown Township/Port Monmouth - Pews Creek

Incoming Tide. Water temperature 74 degrees F.

Visibility was less than 6 inches.

100+ Salps

40+ juvenile River Herring

20+ Hermit Crabs

10 Bay Anchovies

4 Sand Shrimp

1 Kingfish, about 28 inches in length

1 adult female Blue-claw Crab

Masses of Mud Snail eggs attached to debris

3:30pm: Atlantic Highlands/Mouth of Many Mind Creek

High Tide. Water temperature 72 degrees F.

Visibility less than 6 inches . Lots of seaweed located along the edge of the water.

50+ Hermit Crabs

50+ Comb jellies

50+ Mud Snails

5 Sand Shrimp

1 Bay Anchovy

1 Northern Quahog

1 juvenile Summer Flounder

1 juvenile River Herring

1 Mating pair of Horseshoe Crabs spotted on beach