

Saturday, June 11, 2011

The day started off misty, overcast, and humid. It was dead low tide near the mouth of Whale Creek in Cliffwood Beach, part of Aberdeen Township and next to Raritan Bay. Winds were blowing out of the east up to 15 knots and waves were two feet high. The water was so turbid it was difficult to see your feet while just standing in a foot of water. Not the best of seining conditions.

Yet, a small group of about 6 volunteers from the Bayshore Regional Watershed Council were not dissuaded. They had gathered to seine as part of the watershed's annual free summer seining fish monitoring program.

Watershed members were citizen scientists. A 50-foot seine net was dragged through the water to discover the seasonal abundance of fish, crabs, shrimp, and other estuarine species that use the near shore waters of Lower New York Bay as feeding and/or nursing area. All fishes, crabs, and other aquatic creatures were identified, cataloged, and returned to the water; and aquatic vegetation in the area was noted.

The plan was to sample 4 sites from west to east over a tidal period from low to high: Cliffwood Beach, Conaskonck Point in Union Beach, Port Monmouth in Middletown Township, and the mouth of Many Mind Creek in Atlantic Highlands.

Unfortunately, the weather did not cooperate. Only Cliffwood Beach and Conaskonck Point were sampled. By mid-afternoon, the wind and waves were starting to intensify while the mist had turned into a steadier rain. Loud claps of thunder could be heard in the distance.

Weather conditions in the morning, however, allowed for two hauls with a 50' seine on an incoming tide at both Cliffwood Beach and Conaskonck Point. Water temperatures were warm, with readings in the high 60s to low 70s along the edge of the bay.

Hauled into the net were 9 species of fish and crabs, and 3 species of shrimp and isopods. Four species of seaweed were observed. The results are below:

Cliffwood Beach/Near the mouth of Whale Creek- First Haul at 10:20am

80 Shrimp (Sand)

40 Silversides or Spearing

20 Blueback herring

4 Blue-claw crabs (2 juveniles & 2 soft-shell)

4 Northern Pipefish (2 juvenile & 2 adult)

3 Windowpane flatfish

Sea Lettuce & Green Hair Weed were noted algae species

Second Haul at 10:45am

100 Shrimp (Sand)

50 Silversides or Spearing

25 Blueback Herring
3 Blue-Claw Crabs (2 juveniles & 1 adult)
3 Windowpane flatfish
3 Northern Pipefish (2 juveniles & 1 adult)
1 Isopod

Conaskonck Point/Union Beach - First Haul 12pm noon

40 Shrimp (Shore & Sand)
40 Bay Anchovies
10 Striped Killifish
4 Windowpane Flatfish
2 Northern Pipefish (1 adult & 1 juvenile)
2 Blue-Claw Crabs
2 Hermit Crabs
1 Spider Crab

Sea Lettuce, Green Hair Weed, Irish Moss, and Red algae were observed. Evidence of Red Beard Sponge was also present along the edge of the bay.

Second Haul at 12:25pm

80 Bay Anchovies
45 Shrimp (Shore & Sand)
3 Windowpane Flatfish
2 Pipefish
1 Grubby or Little Sculpin (adult)

In addition to fish, crabs, and shrimp, the NJ State endangered Black Skimmer was observed. Up to 4 of these beautiful coastal birds were seen flying close to the water to forage for small fish at both Cliffwood Beach and Conaskonck Point.

Perhaps the most interesting find in the net was on the last haul of the day. We discovered a small Grubby or Little Sculpin fish. At first we thought we had a juvenile Sea Raven, but upon closer inspection, a Grubby has a dark saddle along with two short spines on the top of the head above each eye, while a Sea Raven has prickly skin and many fleshy tabs. This was my first sight of a Grubby in Lower New York Bay, though this little fish is common from the Gulf of St. Lawrence to the estuarine waters of New Jersey. A Grubby can grow up to 7 inches in length and will feed on small crabs, worms, and the juveniles of many fish. There may be prettier fish in the bay than a Grubby, but none so fascinating. I could have observed that fish all day.

As we slid the net up on the sand for the final time that day in Port Monmouth, the wind and waves were whipping up the bay. We tried to do one more haul, but the waves were coming into our waders and pushing down.

Our shoreline adventure was done for the day. Just in time before the thunderstorms arrived and torrential rains fell. We will try to pick up again in the fall when the waters are warmer and

perhaps jam-packed with a diversity of life in this ever-changing coastal environment of Lower New York Bay.