

Fish Communities in the Hudson

Many kinds of fish live in the Hudson. However, not all of these fish live everywhere in the river. People live in different sorts of **communities**, and so do fish. Some like **salt water**; others like **fresh**. Some prefer to live among plants; others prefer open water.

During the Day in the Life of the Hudson River event each fall, students catch fish at many places along the river. Then they compare results to see where different kinds of fish live. The location of each place is given in **Hudson River Miles**. River Mile 0 is in New York City. Going north towards Albany, the mile numbers get higher. Yonkers is at Hudson River Mile 18. Beacon is at Hudson River Mile 61.



Seine nets can be used to catch fish in shallow water.

These fish were caught and released at Green Island, Hudson River Mile 152.



The white perch is often caught in seine nets.



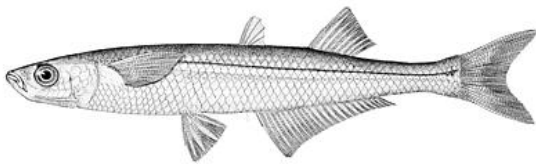
This table shows 2006 fish catches. Use it to answer questions 1-3 below.

Hudson River Fish Caught on October 12, 2006

Hudson River Mile	14	18	25	28	41	61	85	97	102	115	124	Totals
spottail shiner			1			1	6	23	2	11		44
Atlantic silverside	1	5	87	21	1							115
white perch	1	3	13		3	5	1	3		8	3	40
striped bass		1	15		17	6	1	3	8	1	1	53
pumpkinseed						1	29		1	2		33
smallmouth bass						2	1					3
tessellated darter							1	1	2	10		14

Salt front located at HRM 53 ↑

1. Which fish was caught in greatest numbers on October 12, 2006?
2. Which two fish were caught in the most places on October 12?
3. The Hudson River **estuary** is influenced by salt water pushing in from the Atlantic Ocean. The salt's influence is strongest near New York City. Moving **upriver**, the water becomes fresh. The **leading edge** of salty seawater entering the river is called the **salt front**. On this day, the salt front was at Hudson River Mile 53. In the table, look at where each of these fish was found. **Does it prefer fresh water or salt water?**



(a) Atlantic silverside _____

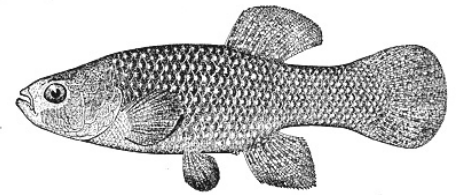


(b) tessellated darter _____



(c) pumpkinseed _____

4. In 2006, students caught mummichogs only at Inwood Hill Park in Manhattan. Not far away, in Yonkers and Alpine, students did not find mummichogs. Look at the pictures of each place.



How is Inwood Hill Park different?

What do mummichogs like about Inwood?



Inwood Hill Park is near Hudson River Mile 14.



Yonkers is on the east side of the Hudson at Hudson River Mile 18.



Alpine is on the west side of the Hudson at Hudson River Mile 18.

Species	Average catch per site
spottail shiner	6
Atlantic silverside	52
white perch	5
striped bass	4
pumpkinseed	3
smallmouth bass	1
tessellated darter	3

5. This table shows the **average** catch per site over four years of Days in the Life of the Hudson Estuary. Use the table to answer the questions below.

(a) Which fish is most likely to live in **schools** (groups of fish)?

(b) Which is least likely to live in schools?

(c) Which is more likely to travel in schools—the spottail shiner or the tessellated darter?