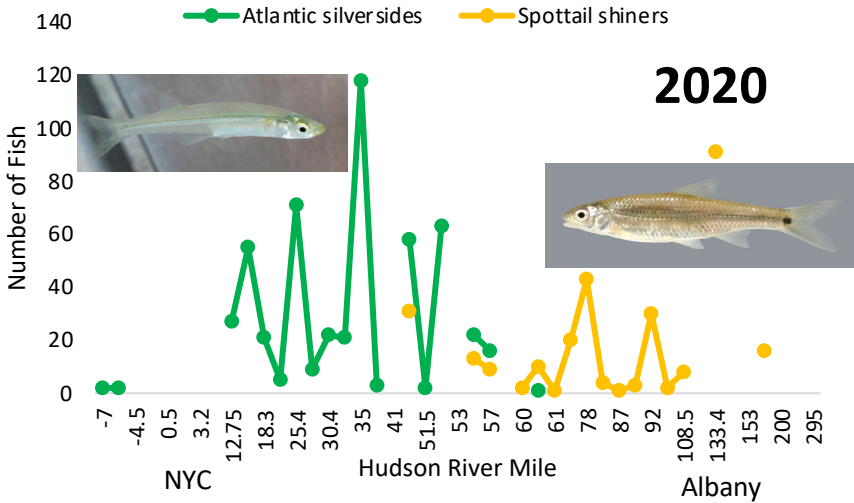


# A Day in the Life of the Hudson and Harbor 2020: Fishing

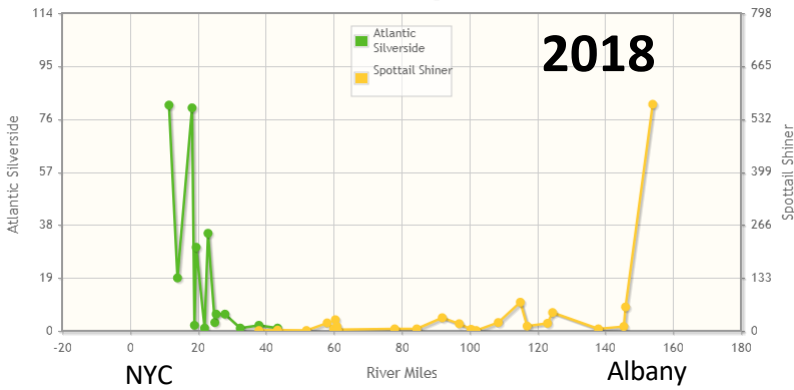
Just as Atlantic silversides are found in salty water up to the salt front, spottail shiners prefer the freshwater, rarely travelling below the **salt front** (defined as 100 ppm Cl<sup>-</sup> or a trace amount of total salt). You can use where the ranges of those two species of fish meet to predict the location of the salt front.



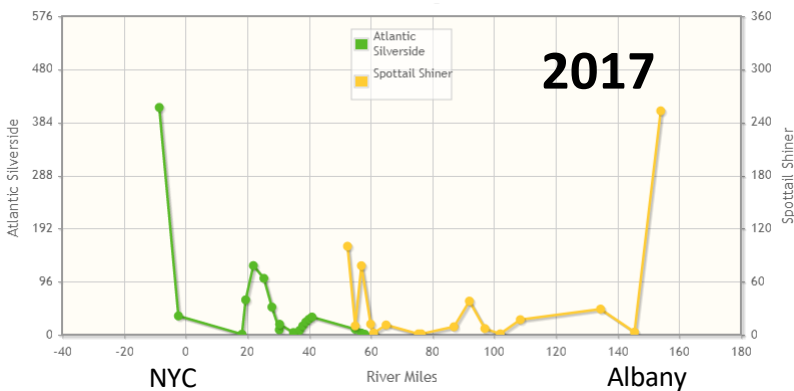
Data on distributions of Atlantic silversides and spottail shiners from 2020's Day in the Life of the Hudson and Harbor are shown in the graph to the left. What Hudson River Mile (starting at lower Manhattan) do you estimate the salt front was located on October 22<sup>nd</sup>?

**2020 salt front (100 ppm Cl<sup>-</sup>):**  
River Mile \_\_\_\_\_

Below are graphs from 2018 and 2017 also showing where Atlantic silversides and spottail shiners were caught. Where do you predict the salt front was in those years?



**2018 salt front (100 ppm Cl<sup>-</sup>):**  
River Mile \_\_\_\_\_



**2017 salt front (100 ppm Cl<sup>-</sup>):**  
River Mile \_\_\_\_\_

What could cause the difference in the location of the salt front from year to year?