

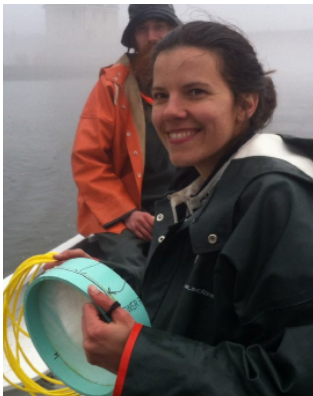


## Level 2: Fish Trawl Data From the Sloop *Clearwater*

Written by Jessica Genter, Marymount School of Manhattan

- ❖ **Background Information:** Fish trawling uses a net to catch fish off the side or the back of a boat as it moves through a body of water. Traditionally, fish trawling was used in commercial fishing as a quick way to catch a lot of a certain type of fish. Unfortunately, trawls are non-specific; they do not pick up just one type of fish, but anything that is in the water at the time of the trawl. As such, they can disrupt sensitive habitats and have been eliminated in the Hudson River for commercial usage.

But the very thing that makes fish trawling harmful when deployed in a commercial context makes it very useful for scientific data gathering. Scientists use trawls (the nets that are used for catching fish and other macroinvertebrates) to get a glimpse of exactly what is in the water at a specific moment in time. Then, the catch is released back into the water. The sloop *Clearwater* (a sloop is a type of sailboat) has been collecting fish data using trawls for 16 years in the Hudson River. These trawls are done towards the middle of the Hudson River, which might contain very different species than in



Maija Niemisto, contributing researcher.  
Credit: Hudson River Sloop Clearwater

areas found closer to shore. These nets are also able to reach the bottom of the river, so scientists can identify and count the different types of fish and macroinvertebrates living in the river, as well as ground-dwelling aquatic species.



Clearwater's educators have been collecting these data and using them to understand the long-term trends in both fish and crab distribution along the Hudson. The Clearwater team is also interested in learning how climate conditions impact this distribution and abundance. These data (collected by students!) have been instrumental in learning about the biotic health of the Hudson River.

**NOTE:** Sixteen years of data means there are a lot of questions to be answered and a lot of trends to be seen. Make sure you look through each tab in the dataset, as the data have been organized in ways that might be helpful to answering your questions. And feel free to manipulate the data in other ways to answer other questions!

