



ACTIVITY 4

ACTIVITY OVERVIEW

Graphing the Oyster and Blue Crab Harvest

Activity Description

Students will compare graphs of oyster and crab harvests over a century in Maryland, and analyze cause and effect through correlating historical and technological changes with trends in the size of the harvest. They will consider a few of the many factors that cause “ups” and “downs” in the harvest.

Materials

- Student worksheet
- Student fact sheet
- Harvest graphs (oyster and blue crab)
- Rulers

Teacher Background

It is important that students understand that many factors influence the number of oysters or crabs living in the Bay and the size of the harvest. In this activity, they will consider a few of the factors and will begin to realize that many different things impact the harvest. The story of “ups” and “downs” in the oyster and crab harvests is a complex one, not completely understood even by expert scientists in the field.

The students will work with “A Timeline of Oyster and Blue Crab Turning Points.” The timelines highlight only a few of the significant factors at work. You will see that cause and effect is a two way street. In some cases, the event on the timeline plays a role in decreasing or increasing the harvest. For instance, the legalization of crab pots – a new technology – results in a sharp upturn in the crab harvest. In other cases, the size of the harvest may actually help cause the event. For instance, Maryland passes its first law governing the size of oysters that can be caught in response to a sharp decline in oyster harvests.

It is worth noting that both watermen and scientists alike suggest that weather and climate have much to do with the cycles of boom and bust in the various fisheries. For example, cold winters are thought to keep oyster diseases at bay; especially wet springs or floods are blamed for siltation or nutrient loading that tends to kill oysters.

When looking at the “Maryland Oyster Harvests” graph with your students, you might point out that it appears the oyster harvest decreases to “zero” in 1993. In reality, 79,618 bushels (a very small amount) were harvested that year.

For advanced students, higher level questions for analyzing the Maryland Oyster and Blue Crab Harvest Graphs are available at www.averyhouse.org.