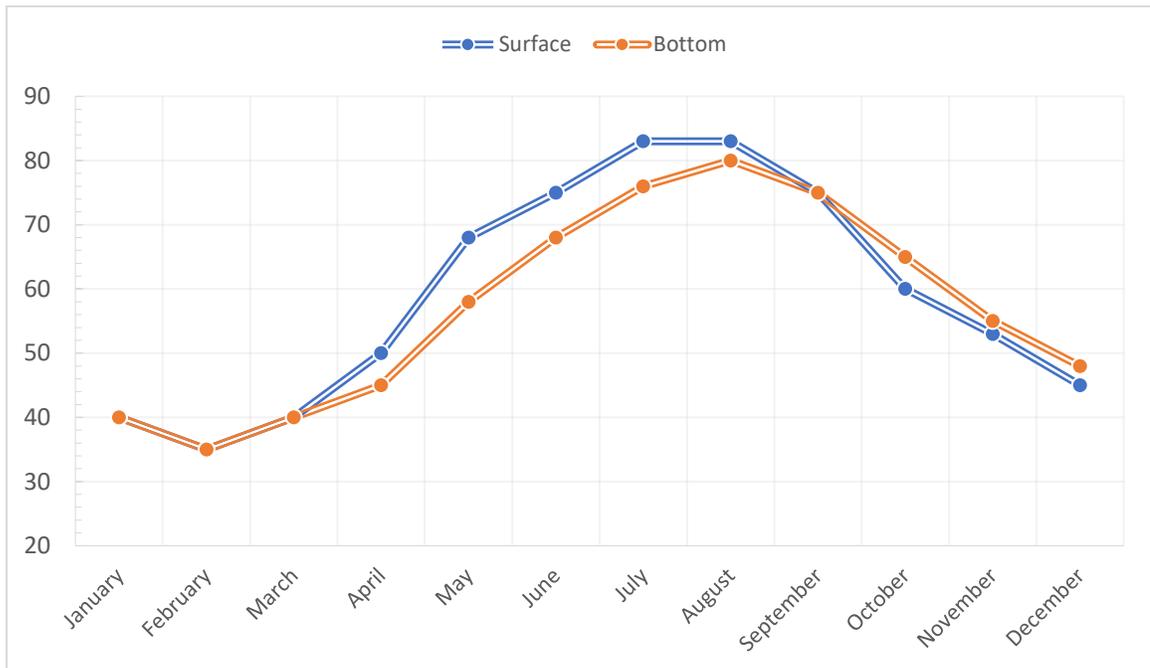


Did you know that the Maryland Department of Natural Resources provides information on the requirements and activities of a variety of Bay organisms throughout the year? Visit <http://eyesonthebay.dnr.maryland.gov/eyesonthebay/seasonalconditions.cfm> and use the information provided to answer the questions below.

1. Which fish is able to survive with the lowest dissolved oxygen levels? Spot
2. Plot the average Bay surface temperature for each month in one color, and the average Bay bottom temperature for each month in another color. Don't worry too much about plotting exact numbers, but make sure it is clear which part is warmer for each month. Which months is the surface warmer? Which months is the bottom warmer?



Surface: April – August    Bottom: October - December

3. What months are dissolved oxygen levels lowest? Why do you think this is? June through September, oxygen is lowest (only available for all organisms down to 25 feet). The high water temperatures decrease the water's ability to hold oxygen, so it escapes. The fact that the surface waters are warmer than the colder bottom waters prevents mixing of the layers (warm water rises and so stays at the top), further limiting the oxygen at the bottom. When the surface water cools, turnover between the layers takes place, helping to replenish the oxygen at the bottom.
4. How long do blue crabs stay buried the mud? About 6 months (~ October to April)

5. Which underwater grass can survive in the widest range of temperatures? Wild Celery (32 – 95 degrees Fahrenheit)
6. Which organisms could you find at 20 ppt salinity? Eelgrass, Striped Bass, Bluefish, Spot, Blue Crab, Oysters
7. Which fish are you unlikely to find among eelgrass? Yellow Perch (they prefer a salinity of 5-7 ppt, while eelgrass is only found above 10 ppt)