W&M AND VIMS RESOURCE BOXES

This flyer includes descriptions of each resource box we offer. Each box includes the necessary materials (unless specified) for 10 different environmental focused lessons.

WATER QUALITY LESSON (7TH GRADE LS)

Students test water samples collected from the Chesapeake Bay for a variety of factors. They record their data and use it to figure out where each sample was taken from along the estuarine salinity gradient. The Resource Box includes all all materials and equipment necessary to conduct this lesson except water samples. The guide provided describes how to make or collect the samples for use in this lesson. This lesson aligns with LS.1, LS.4, and LS.7.

WATERSHED MAPPING (7TH GRADE LS)

Students map the Chesapeake Bay watershed, identify key features, and identify their location within the watershed. This lesson helps students understand the concept of a watershed. This box includes laminated, blank maps of the Chesapeake Bay watershed for students to mark on and reference maps of the Bay watershed and other Virginia Watershed. SOLs LS 6.7, LS 6.8, LS 6.9, and LS. 11 are covered.

HUMAN IMPACTS ON THE CHES. BAY (MISC. GRADES)

This box includes the necessary materials for several lessons: Effects of Climate Change on Fishes, It's in Your Hands, Paper Watershed, and Effects of Ocean Acidification. Each lesson addresses a different impact that humans have on the Chesapeake Bay and its watershed. These lessons can be checked out individually, or together as a group.

BYE-BYE BYCATCH (7TH GRADE LS)

This VASEA lesson hits LS.1, LS.7 and LS.9 of the VA Science standards by allowing students to desing and construct a bycatch reduction device. This helps students better understand how conservation engineering can improve sustainable fisheries.

PROTECTING OUR BEACHES - THE SEAGRASS SOLUTION (HS ENVISCI)

This VASEA lesson for high school students hits ENV.1, ENV.4 and ENV.5 of the VA Science standards by having students relate thermal resilience of coastal habitats with the ability to hold soil in place, preventing habitat loss. To do so, student simulate waves over seagrass habitats at varying levels of percent cover and density, then graph the soil movement.

CANNIBALISM AND COMPETITION IN THE CHES. BAY (7TH GRADE LS)

This adapted VASEA lesson for 7th grade life science focuses on LS.6, a and b of the VA Science standards by teaching students a predator-prey relationship and how competition for resources,such as habitat space, can influence cannibalism in the blue crab population. Students will graph the percent cannibalism for blue crabs in a hands on predator-prey simulation.

FISHING IN THE CLASSROOM (4TH GRADE SCIENCE)

This VASEA lesson for 4th grade life/general science covers VA science standard 4.3 by having students compete to see who can collect the most fish. However, as the rounds go on, the fish become much harder to find. The leaderboard should drive students to continue to find as many fish as they can, simulating the competition for common pool resources that exists in the real world.

WETLANDS LESSON (7TH GRADE LS)

Students will perform two experiments using models of wetlands to learn about the ability of wetlands to prevent erosion, control flooding, and soak up pollutants. They will apply this knowledge in an activity using metaphors to describe a wetland. Everyting is included in this lesson except for water and dirt. This lesson aligns with SOL standards LS. 6, LS.7. LS.9 and LS.11.

OPEN WATER LESSON (7TH GRADE LS)

In this lesson, students will complete a food chain and food pyramid for the open water habitat of the Chesapeake Bay by investigating sample species from this habitat. This lesson aligns with SOL standards LS. 6, LS.7. LS.9 and LS.11.

SUBMERGED AQUATIC VEGETATION (SAV) LESSON (7TH-12TH GRADE)

Students will work in groups to determine what happened to sea grass communities during June 2010 and August 2011. Students will estimate percent cover, analyze data trends, and use water quality data to understand the trends in seagrass cover. This box includes everything needed for the lesson - including a transect line and mock SAV grid plots. SOLs include LS.1, LS.11, and BIO. 8.

WANT TO RESERVE A RESOURCE BOX?

Complete the Form

- Resource Box Form
- or email edaniel@vims.edu to contact Ellanah Daniel For more info