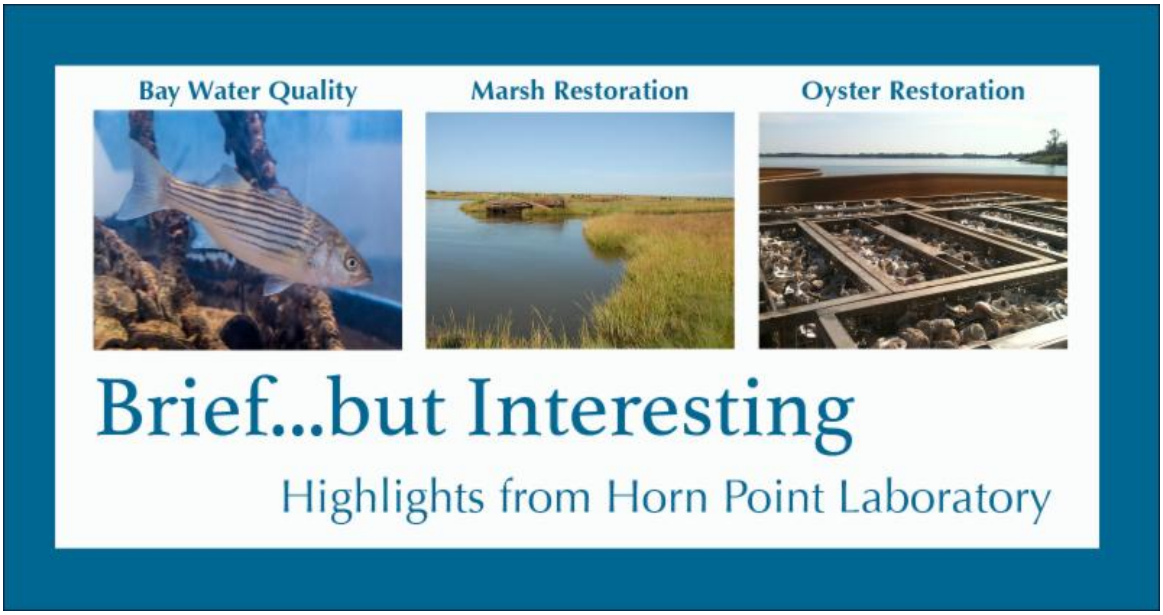
NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE –
Horn Point Laboratory

January 2020



Located in Cambridge, MD, Horn Point Laboratory is part of the University of Maryland Center for Environmental Science -- a fully-accredited graduate school and research facility conducting environmental research on a variety of ecosystems. From dealing with the effects of climate change to oyster restoration and other science-based efforts that lead to a healthier Chesapeake Bay,
Horn Point Laboratory *IS* environmental science.

Ocean deoxygenation is one of the most pernicious, yet under-reported side-effects of human-induced climate change. Scientists warn that the loss of oxygen from the world's ocean is increasingly threatening fish species and disrupting ecosystems. Image Credit: Adrian Jones, IAN

MARINE LIFE, FISHERIES INCREASINGLY THREATENED AS THE OCEAN LOSES OXYGEN

Experts from Horn Point Laboratory, including Director **Mike Roman**, Professor **Kenny Rose**, and Associate Professor **Jamie Pierson**, authored chapters in a ground-breaking new report by the International Union for Conservation of Nature (IUCN) exploring the causes and consequences of ocean deoxygenation and how we, as a planet, must react. **READ MORE**

Horn Point Laboratory researchers Court Stevenson, Jeff Cornwell (pictured center), and Lorie Staver are part of the Poplar Island Working Group, a task force of experts who monitor and advise the restoration project while it is underway.

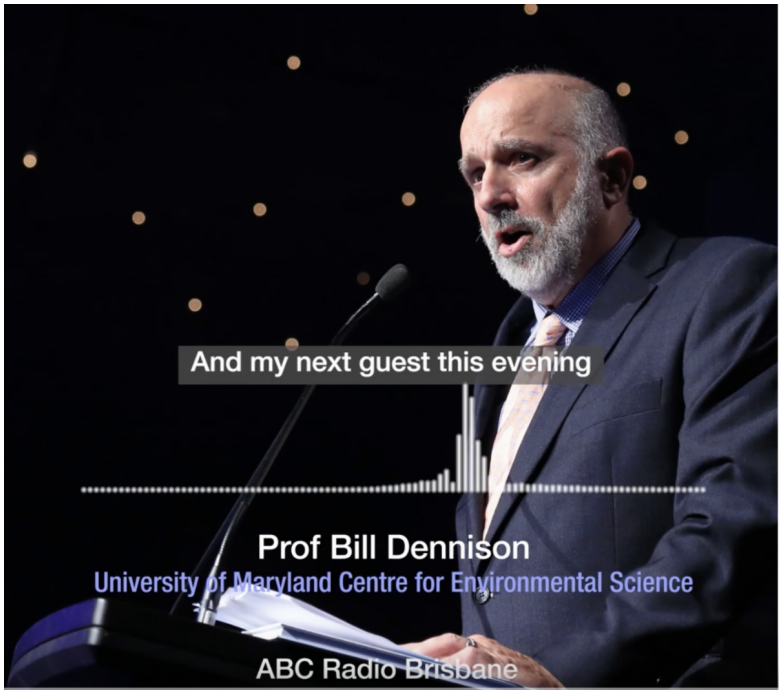
POPLAR ISLAND:A CHESAPEAKE RESTORATION SUCCESS STORY

Poplar Island has seen a vast change in its landscape over the last century. An island that in 1847 spanned more than 1,100 acres and was home to a population of 100 people was reduced to just about four acres of land in the 1990s. The cause? Erosion and sea-level rise in the Chesapeake Bay. The remnants of the island were bought and sold until it was finally retained by the State of Maryland as part of a Federal-State beneficial use of dredged material ecosystem restoration project. “Over 500 islands have eroded away in the Chesapeake Bay since settlement, and Poplar Island now provides habitat for ground and colonial nesting birds. These island’s tendency to be free of predators, or at least have low populations of predators, provides critical habitat for some of these species,” said **Lorie Staver**, a plant ecologist who studies the establishment of marsh grasses on the island. **READ MORE**

Note: Scroll down to see details about a free, local event where HPL's Lori Staver will be speaking in detail about the Poplar Island restoration process.

WARMING CLIMATE WILL IMPACT DEAD ZONES IN CHESAPEAKE BAY

In recent years, scientists have projected increasingly large summer dead zones in the Chesapeake Bay, areas where there is little or no oxygen for living things like crabs and fish to thrive, even as long-term efforts to reduce nutrient pollution continue. Researchers warn that climate may also have significant impact that could change the equation for nutrient reduction goals. Researchers including **Ming Li** and **Wenfei Ni** from University of Maryland Center for Environmental Science factored in local impacts of climate change to make projections of what the oxygen content of the Chesapeake Bay will look like in the future. **READ MORE**



RESTORING WATERWAYS AND THE

CHALLENGES OF COMMUNICATING SCIENCE

Integration and Application Network's (IAN) **Bill Dennison** talks to ABC Radio Brisbane about the Chesapeake Bay--one of the most studied estuaries in the world--and the challenges in restoring ecosystems and communicating science. **Did you know**? IAN, an initiative of the University of Maryland Center for Environmental Science, has its own building right here on the Horn Point Laboratory campus. **LISTEN TO INTERVIEW**

Flooding from stormwater and sea level rise are among the climate-related problems facing the Chesapeake Bay region. Photo by Dave Harp

CLIMATE CHANGE IN SPOTLIGHT AS MARYLAND, VIRGINIA LAWMAKERS CONVENE

Maryland and Virginia lawmakers are gearing up for renewed debate in the coming weeks over renewable energy and how their states should deal with the looming threats of climate change. With both states' annual legislative sessions having recently started, their lawmakers will also revisit old controversies over protecting the environment and restoring the Chesapeake Bay, including nagging fights over fisheries management. **READ MORE**

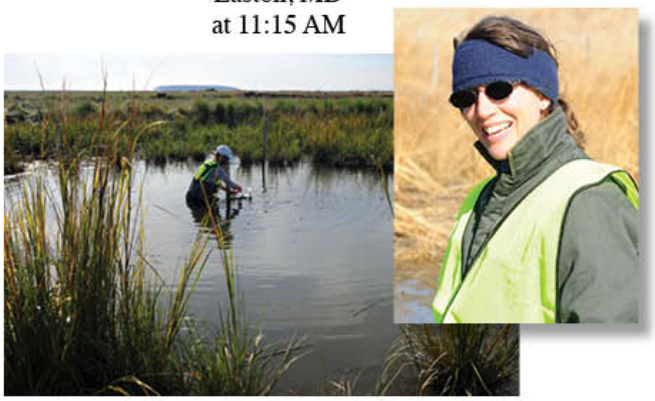
OTHER EVENTS that connect science with the environment...

GARDEN CLUB
of the
EASTERN SHORE
Presents:

Restoration at Poplar Island

with **Lorie Staver, Ph.D.**
Associate Research Scientist at Horn Point Laboratory
U of MD Center for Environmental Science

Wednesday, February 12, 2020
Open to the public
Talbot County Free Library
Easton, MD
at 11:15 AM



Poplar Island at one time supported about 100 people, several farms, a school, a church, post office and a saw mill. As more and more of the island in the 1920s became the victim of erosion, residents began leaving. All that remained by the early 1990s was about 4 acres of inlets rising just above the water line.

The environmental restoration of the island has become an international model for the use of dredged material. With this material collected from approach channels to the Baltimore Harbor, the project has reestablished the island and its upland and tidal habitat.

GARDEN CLUB of the EASTERN SHORE Founded 1963

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With ongoing research programs spanning from the estuarine waters of the Chesapeake Bay to the open waters of the world's oceans, Horn Point Laboratory is a national leader in applying environmental research and discovery to solve society's most pressing environmental problems.
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