Monitoring buoy to detect whales off Atlantic Coast

An ocean buoy launched this summer will monitor and provide daily reports of whales detected off Maryland’s Atlantic coast to support the state’s ongoing efforts to understand how marine mammals may be impacted by offshore wind development. The buoy system has an underwater listening device that will record marine mammal calls. These real-time detections are available on the Whale Alert and Ocean Alert apps so mariners can see when whales are in the area and slow down to help avoid collisions with whales.

"It's wonderful to be able to use this state-of-the-art technology to provide alerts about endangered whale species offshore of Maryland. Many people don't realize that whales pass by the Maryland coast during their winter migration," said Helen Bailey.
Virtual tour of Horn Point Oyster Hatchery

As one of the largest oyster hatcheries on the East Coast, the Horn Point Oyster Hatchery produces a variety of oyster larvae for use in oyster research, oyster restoration, and educational projects. Over the past decade, spawning oysters here have resulted in the deployment of more than one billion oyster spat to the waters of the Chesapeake in the hopes of slowing oyster decline and restoring the health of the Bay. Join Hatchery Manager Stephanie Alexander for a behind-the-scenes virtual hatchery tour. WATCH
Graduate students earn prestigious Knauss Fellowship

Three UMCES graduate students have been named finalists of the prestigious 2022 John A. Knauss Marine Policy Fellowship program sponsored by Sea Grant and NOAA. In January, Ben Frey, Ana Sosa, and Amber Fandel will be placed in a position in either the executive or legislative branches of government to work on coastal and marine science policy for one year.

“We are once again proud to have UMCES students selected to be a part of the prestigious Knauss Fellowship program and to have the opportunity to learn about making an impact on coastal and marine science policy,” said UMCES President Peter Goodwin.

MORE
“Instead of trying to prevent wildfires or fight them when they occur in human-inhabited landscapes, we should be managing landscape conditions to keep future fire behavior manageable during extreme weather conditions. Current policies fail to account for how fire and vegetation are linked. Either we need to adjust landscapes where people live to burn less intensely or adapt human habitation to endure ever worsening wildfires.”

Mark Cochrane on managing wildfires
Read more in “Manage fire regimes, not fires” in Nature

Measuring nitrogen to improve its management

A new paper published in Nature Food offers the first comprehensive comparison of the most advanced international efforts to measure how nitrogen is managed in agriculture. The results were synthesized from nearly 30 researchers from 10 different research groups across the world, including universities, private sector fertilizer associations, and the United Nations Food and Agriculture Organization.
"This project enables researchers, agronomists, and policy makers to identify where we can improve nitrogen budget estimates," said lead author Xin Zhang. "This knowledge is the basis for improving sustainable nitrogen management and for addressing food security and environmental pollution challenges." MORE

New leadership team appointed at Appalachian Laboratory

UMCES’ Appalachian Laboratory welcomes a new leadership team selected from the faculty this August. David Nelson will serve as Director of the Appalachian Laboratory, and Matt Fitzpatrick has been named as the first Associate Director for Research. Both joined the faculty in 2009, where they now hold the rank of Professor. Previous Director Eric Davidson will serve as a Jefferson Science Fellow with the Bureau of Oceans and International Environmental and Scientific Affairs at the U.S. State Department during the 2021-2022 academic year. MORE
UMCES IN THE NEWS

Bay health still a cause for concern (Virginian-Pilot)

Researchers predict smaller Chesapeake dead zones (Associated Press)

New buoy monitors whales off Maryland's Atlantic Coast (Chesapeake Bay magazine)

Mysterious blue crab shortage spawns big-time sticker shock (E&E News)

New study measures how nitrogen in managed in agriculture around the world (Phys.org)

Artists, community celebrate new bird mural (Star Democrat)

SHARE THE SCIENCE BEHIND THE NEWS
Sign up the Environmental Insights newsletter HERE.
SUPPORT SCIENCE

Your tax-deductible gift will help us continue unbiased scientific research and the education of the next generation of science leaders. DONATE

University of Maryland Center for Environmental Science

Appalachian Laboratory - Chesapeake Biological Laboratory
Horn Point Laboratory - Institute of Marine and Environmental Technology
Integration and Application Network - Maryland Sea Grant

AN INSTITUTION OF THE UNIVERSITY SYSTEM OF MARYLAND