DECEMBER 2020

ENVIRONMENTAL INSIGHTS

NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

SCIENCE IN THE TIME OF COVID-19: While UMCES researchers have had to limit what can be done while respecting social distancing and State guidelines, they persevere in pursuing important research.

Late-season Arctic research cruise reveals unseasonably warm ocean temperatures and active ecosystem

Arctic researchers Jacqueline Grebmeier and Lee Cooper have been visiting the Bering and Chukchi seas off Alaska for nearly 30 years, collecting information about the biological diversity of the watery world under the sea ice to understand how marine ecosystems are responding to environmental changes. This year, a late-season research cruise in October revealed a surprise. At a time of year when an ice-breaking ship is usually required to get them to some of the data-gathering outposts, scientists found nothing but open water and an unusually active ecosystem.

"The water and air temperatures were warmer, and we had ecosystem

activity that normally doesn't occur late in the season," said Jacqueline Grebmeier.

MORE

U.S. coral reefs' health assessed for the first time on a national scale

Coral reefs in both the Pacific and Atlantic oceans received a "fair" score in the first-ever condition status report for U.S. coral reefs released by the National Oceanic and Atmospheric Administration and the University of Maryland Center for Environmental Science. While the overall scores were "fair," the report highlights coral reefs are vulnerable and declining.

"These status reports clearly show the impacts people are having on coral reef ecosystems," said Heath Kelsey, program director for UMCES' Integration and Application Network. "Our work in the Pacific and Atlantic oceans shows a dire outlook for coral reef ecosystem health, from warming ocean waters, fishing, disease, and pollution from the land. Of all of these, climate change is the single biggest threat to shallow water coral reefs in the U.S. and worldwide."

MORE

Battling surging seas: Ming Li's work focuses on how to best manage our coastlines to save our communities

It is not an uncommon sight to see flooding from storm surges and high tides in some low-lying communities on the Eastern Shore of Maryland. With rising tidal ranges and threats of flooding from more intense storms, coastal communities are having to face harsh realities and decide on potential solutions to encroaching seas. Professor Ming Li's research focuses on the threats coastal communities face and potential solutions to the rising tides, as the impacts of climate change grow.

"Sea-level rise and intensifying storms in a changing climate are a global phenomenon, but sea levels in a bay or estuary depend on how we manage coastlines," said Li.

MORE

UMCES IN THE NEWS

Washington winters are rapidly warming up and feeling more Southern (Washington Post)

Report sounds an alarm on ongoing decline of US coral reefs (Associated Press)

'We packed long underwear and never wore it': Arctic scientists shocked at warming (The Guardian)

Lawmakers, environmentalists push Biden to stick to climate promises (WUSA-

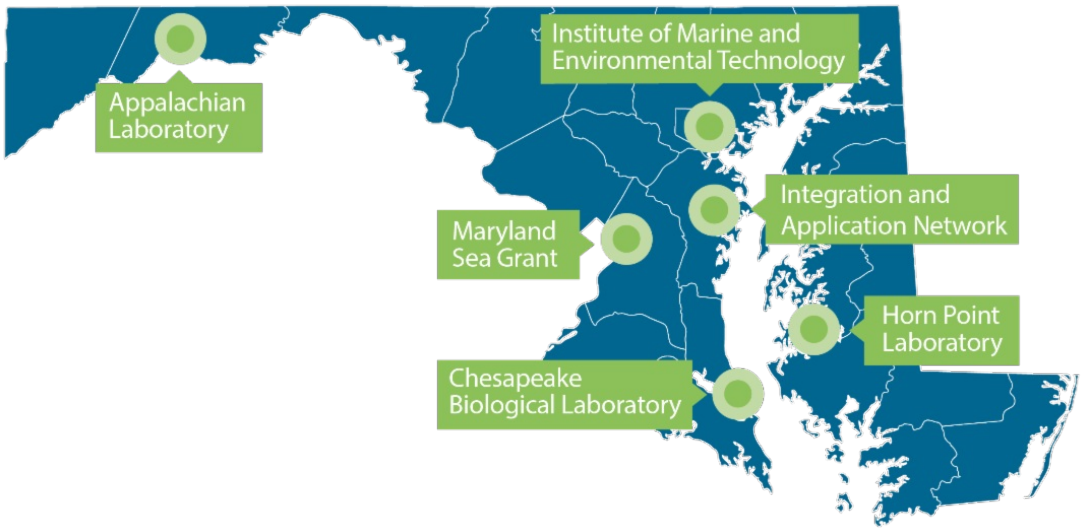
TV 9 - Washington, D.C)

Death by plastic: Bay's sea turtles, marine mammals imperiled by growing debris (Bay Journal)

Report Sounds Alarm on Ongoing Decline of US Coral Reefs (The Weekly Journal - Puerto Rico)

'eDNA' reveals what's swimming in the water (Star Democrat)

Oyster Shell Recycling Program Impacted By Pandemic (Maryland Coast Dispatch)



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