

July 2020

Bay Water Quality



Marsh Restoration



Oyster Restoration



## Brief...but Interesting

Highlights from Horn Point Laboratory

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.**



## Research Team Receiving \$10M to Transform Shellfish Farming with Smart Technology

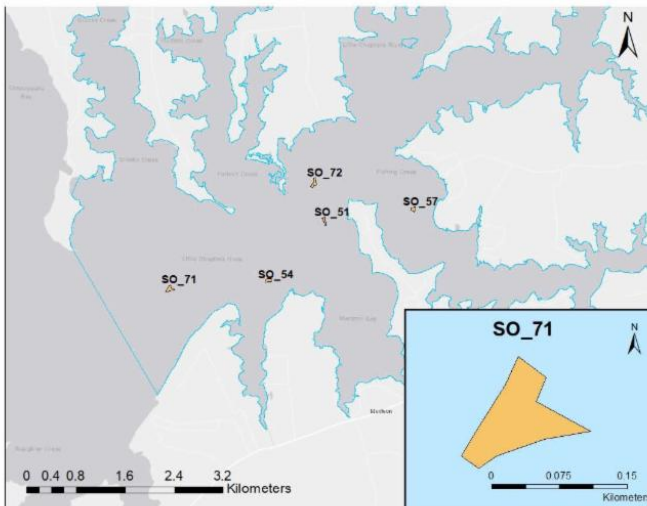


researcher [Matt Gray](#) and a group of University of Maryland researchers and institutions throughout the U.S. received a \$10 million grant from the [United States Department of Agriculture \(USDA\) National Institute of Food and Agriculture \(NIFA\)](#) to bring advanced technology to the domestic shellfish aquaculture industry, with a specific focus on improving bottom-culture of oysters. The five-year project seeks to develop an autonomous underwater vehicle that can help with management of crops, improve understanding of lease conditions, and do all of this while having a low environmental impact.

[MORE](#)

Get to know more about Matt in a recent [UMCES faculty profile](#)

## Little Choptank Completion! Approximately 358 acres and 1.7 Billion Spat on Shell!



| Year | Acreage | SOS planted (millions) |
|------|---------|------------------------|
| 2014 | 22.5    | 72.1                   |
| 2015 | 35.5    | 150.8                  |
| 2016 | 123.6   | 592.0                  |
| 2017 | 57.1    | 304.0                  |
| 2018 | 99.7    | 544.4                  |
| 2019 | 7.9     | 44.6                   |
| 2020 | 6.7     | 42.2                   |

All final plantings in 2020. Planting SO\_71 on Thursday **June 25**

## Little Choptank oyster restoration project reaches completion

Chesapeake Bay Program partners are working to restore oyster habitat and populations to 10 tributaries by 2025 as part of the [Chesapeake Bay Watershed Agreement](#). June 25, 2020 was a momentous day as the Little Choptank became the third tributary to complete its restoration project. Harris Creek, MD and LaFayette Creek, VA are the other two completed restoration projects. HPL's hatchery grows nearly all the oyster larvae, and sets them on oyster shell, "spat", for the restoration project. *"Completion of the restoration work in the Little Choptank, with the restricted work conditions because of the pandemic, is a tribute to the hard work and dedication of the Horn Point Laboratory oyster hatchery team".* - Mike Roman, HPL Director

[MORE](#)





## The life of an oyster: spawning

To date, the hatchery has deployed 125 million larvae off the boat for restoration projects, and over 1 billion mature, eyed larvae have gone directly to the oyster industry (both private and public fisheries). Even meeting the challenges of the pandemic, these numbers are inline with previous best years. This spawning video gives you an introduction to the critical role of spawning to the success of HPL's hatchery efforts to support restoration and aquaculture.

*The following interview was done earlier this year, and spawning has been conducted under strict adherence to social distancing guidelines.*

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**Make the choice, choose to refuse  
single-use plastic, today and everyday!**

**Plastic Free July** is a global movement that helps millions of people be part of the solution to plastic pollution – so we can have cleaner streets, oceans, and



beautiful communities. [Christine Knauss](#), PhD student at HPL, is committed to protecting marine life for future generations and studies the impact of plastics on oysters.

Christine says, *"Plastic pollution impacts the environment from top to bottom, including many of the iconic, local organisms, such as oysters, blue crabs, fish, and seabirds, that we value so much in the Chesapeake Bay. There are also serious implications for human health. Going plastic free for the month of July is an eye-opening challenge that I think we all should try. Even taking smaller steps such as evaluating your plastic footprint is important for understanding your plastic habits and reducing how much plastic you use. If there are more people demanding alternatives to plastic products then the industry will have to change too."*

Why only July? Make the commitment permanent, and choose to refuse!

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## Events

Horn Point Laboratory presents

# CHESAPEAKE BAY 101:

a series of virtual seminars to dive  
into science and see the Bay in a whole new way

Grab a beverage and meet our faculty and students for 30-minute seminars  
with opportunity for conversation and questions from the audience.

Five headshots of speakers are shown in a row. To the right is the logo for the University of Maryland Center for Environmental Science, Horn Point Laboratory.

There is still time to join us to dive into science and see the Bay in a whole new way, with 2 seminars remaining in our *Bay 101 with HPL* virtual seminar series. Seminars will be every Wednesday from 5 to 5:30 pm, running thru August 5.

Pour your favorite beverage, get comfortable, and join us to learn about the science of the Chesapeake Bay.

Free and registration is required.

**July 8:** *"Chesapeake Bay's currents and winds for sailors and water enthusiasts"* Bill Boicourt [view recording](#)

**July 15:** *"News on living shorelines to protect our waterfronts"* Cindy Palinkas [view recording](#)

**July 22:** *"Bolstering the Maryland oyster aquaculture industry"* Shannon Hood [view recording](#)

**July 29:** *"Modeling: what it is and how it helps predict the future of the Chesapeake Bay"* Kenny Rose

**August 5:** *"Chesapeake Bay underwater grasses"* Lorie Staver

[Register](#)

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## Student Spotlight

HPL students giving back to





## Cambridge

HPL graduate students are collecting **127 pounds of plastic caps and lids** (plastic numbers 1, 2 and 5) that will be transformed into a 6 ft weather resistant park bench. Students will donate the bench to the town of Cambridge. The bench will be produced by a company located in Wilmington, DE, [Eco Plastics Products of Delaware](#). They are a small nonprofit that collects discarded plastic to turn into useful and sustainable products. A reminder that we are NOT encouraging purchasing more plastic! This project provides an opportunity to recycle the caps/lids on food or household items, otherwise not recyclable.

*Brief...but Interesting* will take a break in August. Please stay safe and we look forward to connecting again in September.



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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