### **SWS MAC Newsletter**

Winter 2024

Hi all,

Happy Winter 2024!

For those of you who don't know me, I'm your new MAC President. I work for the State of Maryland in the tidal wetland regulatory realm (since 2014) following a career in private consulting performing wetland and forest delineation, permitting, and wetland mitigation design. I live in Annapolis, Maryland where we've just had inches of snow for the first time in years -- exciting times for us snow lovers!

As part of an effort to connect us as wetland scientists in MAC, please enjoy our winter MAC newsletter. You'll find newsletter entries on the upcoming DE Wetlands Conference, a blog entry (from my public-facing blog) featuring the oyster, information on SWS's Wetlands of Distinction, and promotions for a MAC president-elect and MAC volunteering. If you have any ideas or anything you'd like to contribute to future MAC newsletters or the MAC, please let me know. In the meantime, I hope you're enjoying winter adventures in the great outdoors!

Bill Morgante MAC President



Photo: Winter Peace by David Graff

#### 10th Delaware Wetlands Conference



Join professionals from around Delaware and the region for a two-day conference focused on Delaware's wetlands.

In previous years, the <u>Delaware Wetlands</u>
<u>Conference</u> has brought together over 400
attendees, 50 different presentations and poster displays, and 30 exhibitors and sponsor tables.
For more information, please contact <u>Olivia</u>
<u>Allread</u>. Registration closed on January 19.

**Dr. Rob Brooks Memorial Student Scholarship Fund Silent Auction**. Please join us during the Delaware Wetlands Conference this February where one of the many offerings will be a silent auction to fund future student attendance at the Conference in honor of Dr. Robert Brooks, known by "Rob" to most. Rob was a dedicated wetland scientist, conservationist, and advocate for his students to attend conferences of all kinds to grow their network and engage in the wetland community. To remember his dedication to students, the Delaware Wetlands Conference is hosting a silent auction to raise money for future students who would otherwise not be able to attend. If you didn't know Rob, he was always passionate about all things wetlands, and helping people find the joy of the outdoors. Rob always made people feel included and always helped those who asked (including those who didn't even know they needed help). Please join us for the silent auction and bid generously to help those who may otherwise not be able to join this fantastic DE Wetlands Conference."

# Some Chesapeake Bay Natural History, featuring the Bay Oyster!

by Bill Morgante. Ethan Glaudemans, UMD Class of 2019, contributed reporting & research



More than a mile under the floor of the Chesapeake Bay, scientists have found ancient seawater, trapped there by an asteroid impact 35 million years ago.

Around 35 million years ago life was humming along in the Chesapeake Bay when BAM, a meteor struck in the area of Cape Charles, VA. This one to three mile wide meteor exploded in its descent through the atmosphere before crashing down. Within seconds a depression 17 miles across was created. The depression formed a basin that gradually expanded to 56 miles across, as the water inside repeatedly froze and thawed – creating the Chesapeake Bay. (USGS Fact Sheet 049-98)

Fast forward 34+ million years. As global sea levels rose, the Chesapeake's rivers and channels were carved out. Coastal wetlands and hardwood forests characterized the Bay area 11,000 years ago when Native Americans began to colonize the area.

The oyster, an important component of the Bay's ecology today, began to colonize local waters alongside fish around 5,000 years ago. (The Oyster in Chesapeake History, Dr. Henry Miller)

When in 1608 Englishman John Smith departed Jamestown, VA the first English colony in the States, to explore the Chesapeake Bay, he described the Bay as a place "heaven and earth seemed never to have agreed better to frame a piece for man's commodious and delightful habitation." Smith, of course, was not the first to stumble across the 4,400 square mile Bay -- many Native Americans had already populated its margins. The name Chesapeake translates from the Native American language to mean "mother of waters" or "great shellfish bay." Later the area around the Bay became populated with settlers who took advantage of its waters bursting with oysters. As the local population grew, so did the popularity of the oyster – oyster harvests peaked in the late 1800's. (The Oyster in Chesapeake History, Dr. Henry Miller)

- 1608 -- John Smith wrote oysters lav as "thick as stones"
- 1880's 17,000,000+ oyster bushels/year harvested
- 2016 -- 400,000 oyster bushels/year harvested.

One constant in the Chesapeake Bay over the last 100+ years – oysters are important. While in the past they were loved both by watermen harvesting them and consumers relishing their salty taste, today we have an additional reason to love them. They help us clean the Bay!

In 2016, the Bay watershed was home to 18.1 million people – 6.08 million in Maryland. Development pressure on the Bay watershed is enormous -- we love living, fishing, recreating, and farming near the Bay and we consequently compromise its water quality. The three major contributors to the poor water quality of our streams, rivers, and the Bay – nitrogen, phosphorus, and sediment are a tough pollution mix to combat. The 83,000 farms located in the Bay watershed (8/9/18 Bay Journal) contribute nitrogen pollution to the Bay (45% according to the CBF website), yet air pollution, stormwater runoff, and wastewater treatment are also major contributors. Since most of us are part of creating the waste stream for the latter three items – our daily habits can help curb pollution from these three!

Oysters help clean up Bay waters since they are filter feeders. They pump water through their gills, trapping particles of food as well as nutrients, suspended sediments and chemical contaminants (Chesapeake Bay Program). Whether you personally like eating oysters or not, they filter more than 50 gallons of water in a single day! Next time you enjoy an oyster with a dash of horseradish, appreciate the job they are doing to help clean up the Bay!



Photo: Winterberry by Jason Smith

#### **Wetlands of Distinction**

SWS's Wetlands of Distinction (WoD) is an initiative intended to raise public awareness of wetlands and their many benefits to human health and the environment. To meet this goal, SWS has created a one-stop-shop for information on the biology, ecology, conservation status, and public access for high-functioning wetlands.

The WoD initiative is creating an inventory of wetlands that have been deemed important by agencies and organizations and is accepting applications for new sites from wetland professionals, wetland enthusiasts, organizations, and individuals. The first step is to submit an application. Once an application is submitted, it is reviewed by a team of wetland professionals to ensure that the criteria for SWS Wetlands of Distinction status are met. MAC has a wetland specialist waiting to assist you with your application.

Please email the committee at <a href="mailto:swswetlandsofdistinction@gmail.com">swswetlandsofdistinction@gmail.com</a> with any questions. Please visit <a href="mailto:http://www.wetlandsofdistinction.org">http://www.wetlandsofdistinction.org</a> to learn more about the initiative, see existing Wetlands of Distinction, create an account, and hopefully file an application for your favorite wetland.

## **SWS MAC Opportunities**

#### Call For Nominations: SWS Mid-Atlantis Chapter – President-Elect

The Mid-Atlantic Chapter is currently seeking nominations for the office of President-Elect. The elected candidate for President-Elect will serve a one-year term beginning in 2025 and will then fulfill consecutive one-year terms as President and Past-President. The Chapter officers handle the normal operations of the Chapter, including communications with members, newsletters, field trips, and an annual conference, as well as coordination of Chapter activities with the international activities of SWS. The duties and responsibilities of the offices are outlined in the Chapter bylaws. Please email nominations to <a href="mailto:bill.morgante@maryland.gov">bill.morgante@maryland.gov</a> by March 31, 2024, with the subject line reading "MAC SWS Nominations." Self-nominations are acceptable and encouraged. Nominees will be contacted to provide additional information needed for elections.

What Can You Do For MAC? Pre-pandemic individual members organized happy hours; canoe and kayak trips through some of our region's finest wetlands; tours of wetland restoration and research sites; and other sorts of opportunities to meet, network, and exchange ideas and information about wetlands and wetland science. Any interest in any of the above? We strongly encourage anyone with an idea to step up and select a date, time, and location, and we'll get the word out to chapter members so they can participate. All of us, to one extent or another, bird, botanize, kayak, canoe, hike, bike, eat, and drink. The MAC offers a ready-made community of likeminded individuals with similar interests across a large and important portion of the eastern United States. We understand that while these events will typically be attended by local members, you never know who might be on vacation or traveling near you and may be looking for opportunities to meet other wetland scientists and see interesting new places. When you do get together, please send us a picture and blurb to be included in future newsletters, and perhaps on the Chapter website. Also, if you have an interest in volunteering with the MAC, whether you already know what you want to do or just want to help with existing tasks, please contact Bill Morgante at bill.morgante@maryland.gov.



Photo: Pocono Bog by Jason Smith