

# NOAA's Teacher at Sea Program



2021 YEAR IN REVIEW



# 2021 Overview



## Teacher at Sea Program

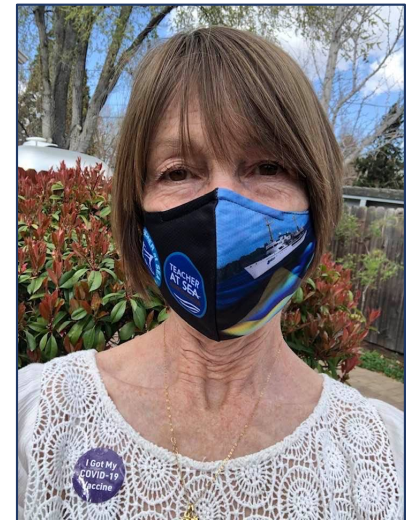
- Operations on hiatus in 2020 and 2021 due to pandemic
- Continued partnership with Alumni Association
- **Prepped for teachers sailing in 2022**

## Teacher at Sea Alumni Association

- Celebrated 10-year anniversary
- Conducted virtual workshops, book clubs
- Supported scientist/teacher partnerships
- Shared resources with teachers
- Launched TASAA at NOAA Fellowship
- Launched new website



*TAS Alumni excited for vaccines!*





# 10 Years of the Teacher at Sea Alumni Association



#FindingYourInnerExplorer

- Provides a bridge between the “at sea” experience and further engagement with NOAA staff and resources
- Strengthens alumni understanding of physical and marine oceanography
- Fosters relationships between NOAA scientists, alumni, and their students
- Encourages and supports collaboration to build a strong alumni network



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The Teacher at Sea Alumni Association is supported through a partnership with the National Marine Sanctuary Foundation.



# 10 Years of the Teacher at Sea Alumni Association



#FindingYourInnerExplorer

- 2021 Anniversary Theme: *Finding Your Inner Explorer*, inspired by **Dr. Sian Proctor** (TAS 2017)



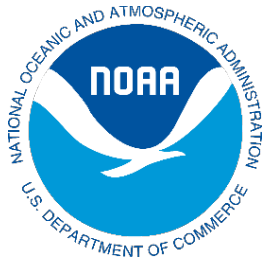
February 2020 interview  
with Dr. Sian Proctor about  
her TAS experience:

<https://vimeo.com/555268118>

“A lot of times people think that in order to be an explorer, you have to discover something new for humanity. My thing is to tell them, “No, you have to discover something new for *you*.” **If you can redefine ‘exploration’ as a personal experience**, a personal journey of discovery, **then you can see the explorer within.**” – TAS ‘17 Sian Proctor



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# 10 Years of the Teacher at Sea Alumni Association



#FindingYourInnerExplorer

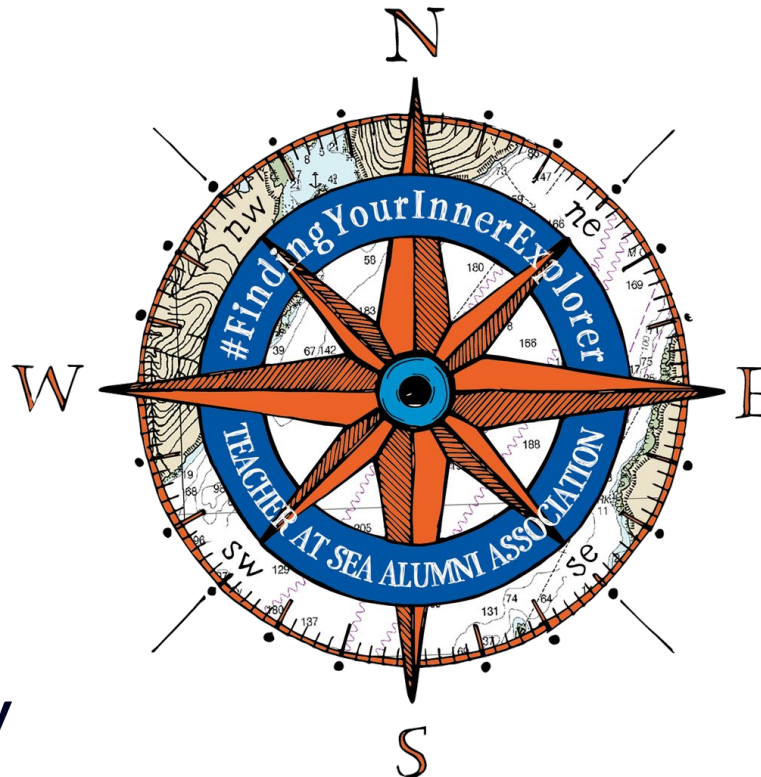
- 2021 Anniversary Theme: *Finding Your Inner Explorer*, inspired by **Dr. Sian Proctor** (TAS 2017)



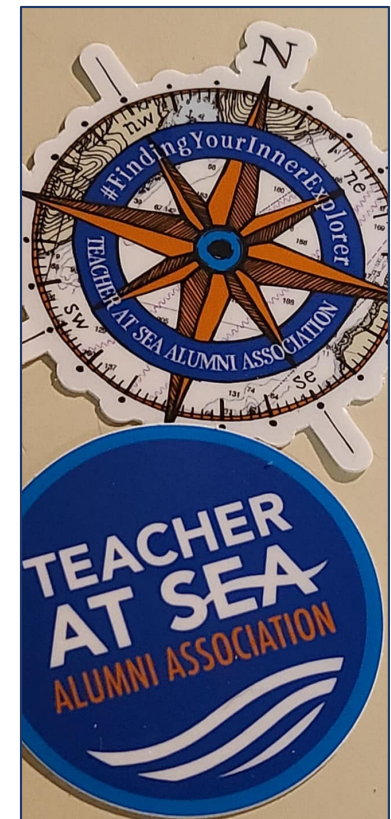
New TASAA logo



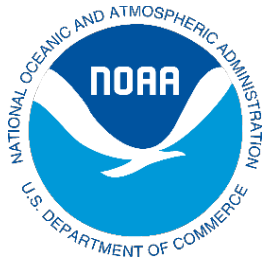
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TASAA anniversary logo



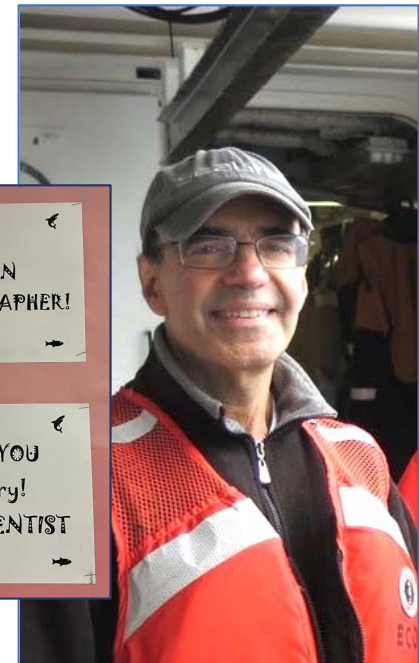
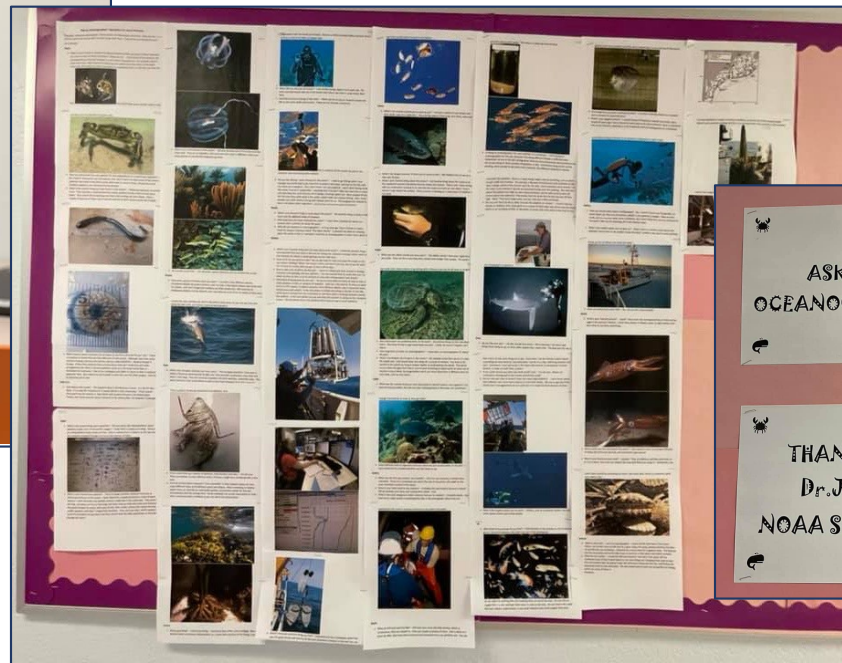
Stickers!



# Bringing NOAA to the Classroom: Ask an Oceanographer



In February, **Sue Cullumber** (TAS 2014) and her students at Banner Academy in Tempe, Arizona created a list of questions for NOAA oceanographer **Jerry Prezioso** about marine science and working at sea. He answered each, accompanied by great photos.



ASK AN  
OCEANOGRAPHER!

THANK YOU  
Dr. Jerry!  
NOAA SCIENTIST

*Photo of Jerry by TAS '15 DJ Kast*



# Bringing NOAA to the Classroom: Students Send Cups to Sea



In May, **Sue Cullumber's** students sent decorated Styrofoam cups with Jerry on the **Spring Ecosystem Monitoring Survey** aboard NOAA Ship *Gordon Gunter*. He and his team submerged the cups along with their water sampling gear to demonstrate how pressure increases with depth.

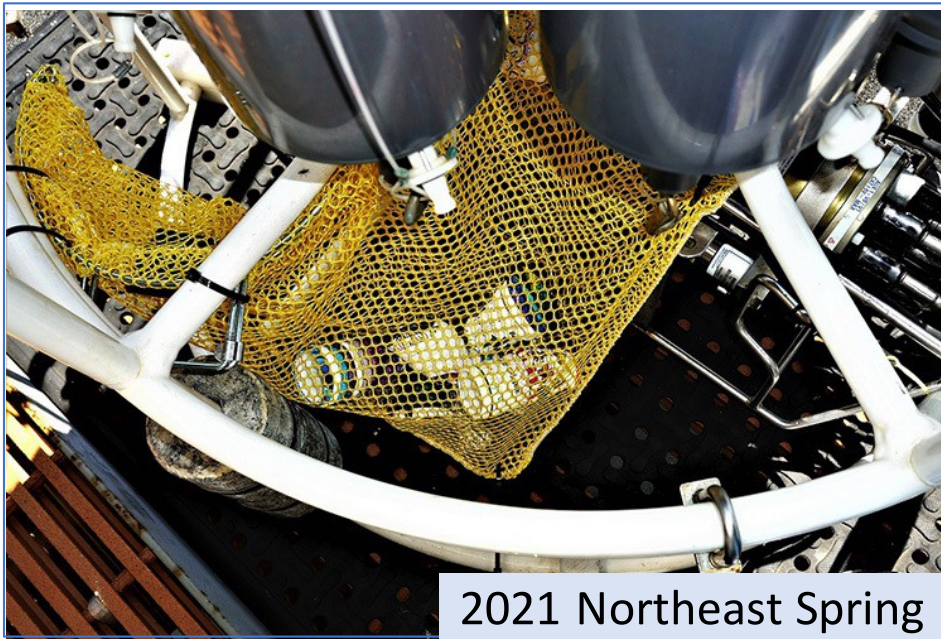


Photo by Jerry Prezioso

2021 Northeast Spring Ecosystem Monitoring Survey Completed  
<https://www.fisheries.noaa.gov/feature-story/2021-northeast-spring-ecosystem-monitoring-cruise-completed>



# From Sea to Space: TAS Alumni in High Places



In March (AFTER inspiring the TASA anniversary theme), **Dr. Sian Proctor** (TAS 2017) was selected to be a **civilian astronaut** aboard SpaceX's Inspiration4 mission. Mission preparations were documented in a 4-part Netflix series.

On September 15, 2021, Sian safely piloted the SpaceX Dragon spacecraft as it launched a 3-day flight. TAS staff and alumni across the country followed along!



*February 2020 interview with Dr. Sian Proctor about her TAS experience: <https://vimeo.com/555268118>*



*Photo of astronaut Sian Proctor courtesy of Inspiration4 via Reuters*





# From Sea to Space: Alumni Connections



**DJ Kast (TAS 2015)** first connected with Sian at the Southwest TASA Alumni Workshop in La Jolla, California in 2017.

In April, DJ invited Sian to talk with her **after-school STEAM program**, USC Wonderkids. Sian talked to the students about her lifelong interest in becoming an astronaut and led them in an art project designing mission badges.



Dieuwertje Kast shared an event.

April 6, 2021 · 🌐

Dr. Sian or 🎯 Psy Proctor, NOAA TAS alumni, is speaking to USC Wonderkids this Friday and was chosen to be an astronaut for SpaceX and will be going into space this fall! Come check it out!  
<https://fb.me/e/28K9H7IME>



FRI, APR 9, 2021

**USC Wonderkids - Space Speaker - Dr. Sian Proctor**

Shared to NOAA Teacher at Sea Alumni Association - Private



# Virtual Regional Alumni Meetings



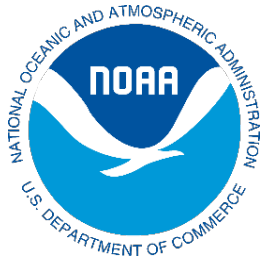
- *February:* Mid-Atlantic
- *April:* Pacific Northwest
- *May:* Gulf of Mexico
- *September:* Pacific Southwest
- *December:* Southeast



*TAS '09 Lollie Garay shows off the octopus hat she created for the virtual Gulf of Mexico Alumni meeting*



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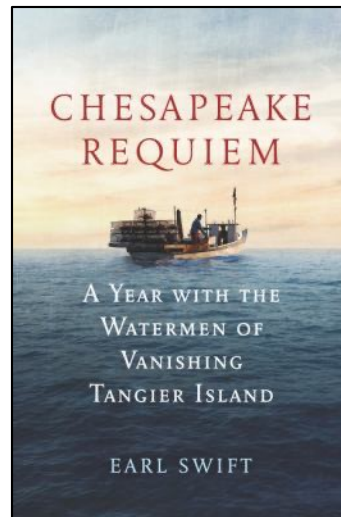


# Mid-Atlantic Teacher at Sea Alumni Meeting



February 6, 2021

- **Attendees:** 12 TAS alumni who are current or former residents of MD, DE, NJ, and D.C.
- **Agenda:** Introductions, small group discussions, virtual science museum scavenger hunt



- **Book Club:** Mid-Atlantic TASA Book Club discussion of *Chesapeake Requiem* by Earl Swift followed in May-June



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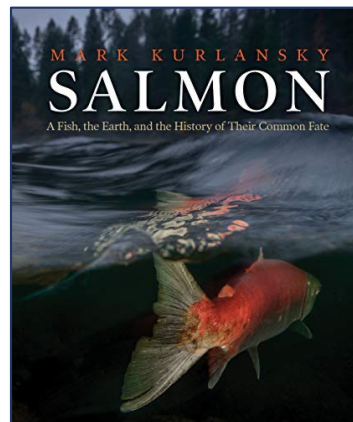


# Pacific Northwest Teacher at Sea Alumni Meeting



April 17, 2021

- **Attendees:** 13 TAS alumni from OR, WA, and AK (and 1 visiting NY TAS alum)
- **Agenda:** Introductions, small group discussions, virtual science museum scavenger hunt



- **Book Club:** Pacific Northwest TASA Book Club discussion of *Salmon* by Mark Kurlansky followed in October-December



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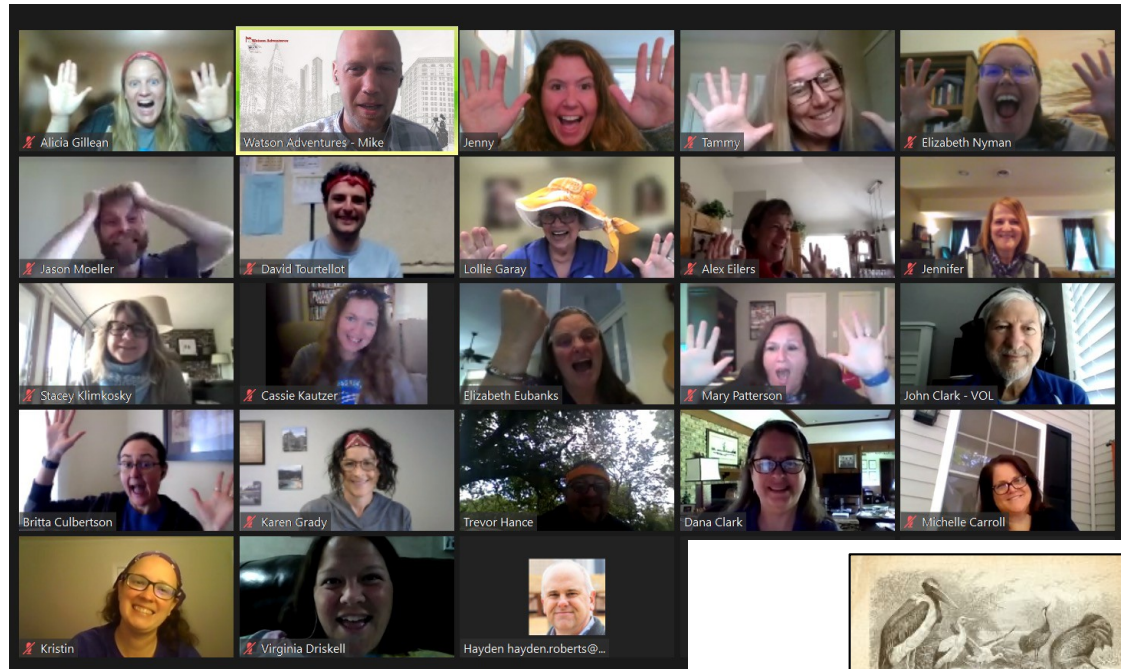


# Gulf of Mexico Teacher at Sea Alumni Meeting



May 15, 2021

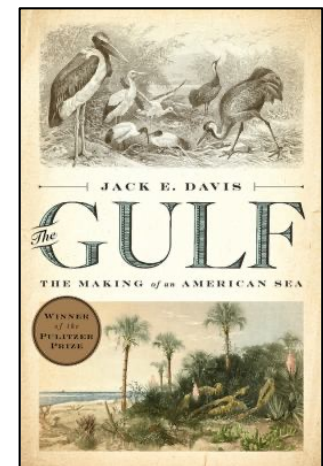
- **Attendees:** 26 TAS alumni from 7 Gulf of Mexico and central U.S. states
- **Agenda:** Introductions, small group discussions, virtual science museum scavenger hunt

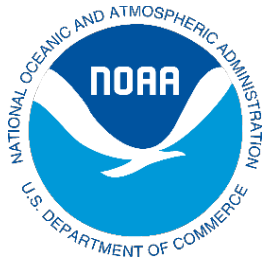


- **Next Step:** Gulf of Mexico TASA Book Club discussion of *Gulf: The Making of an American Sea* by Jack E. Davis to follow in 2022



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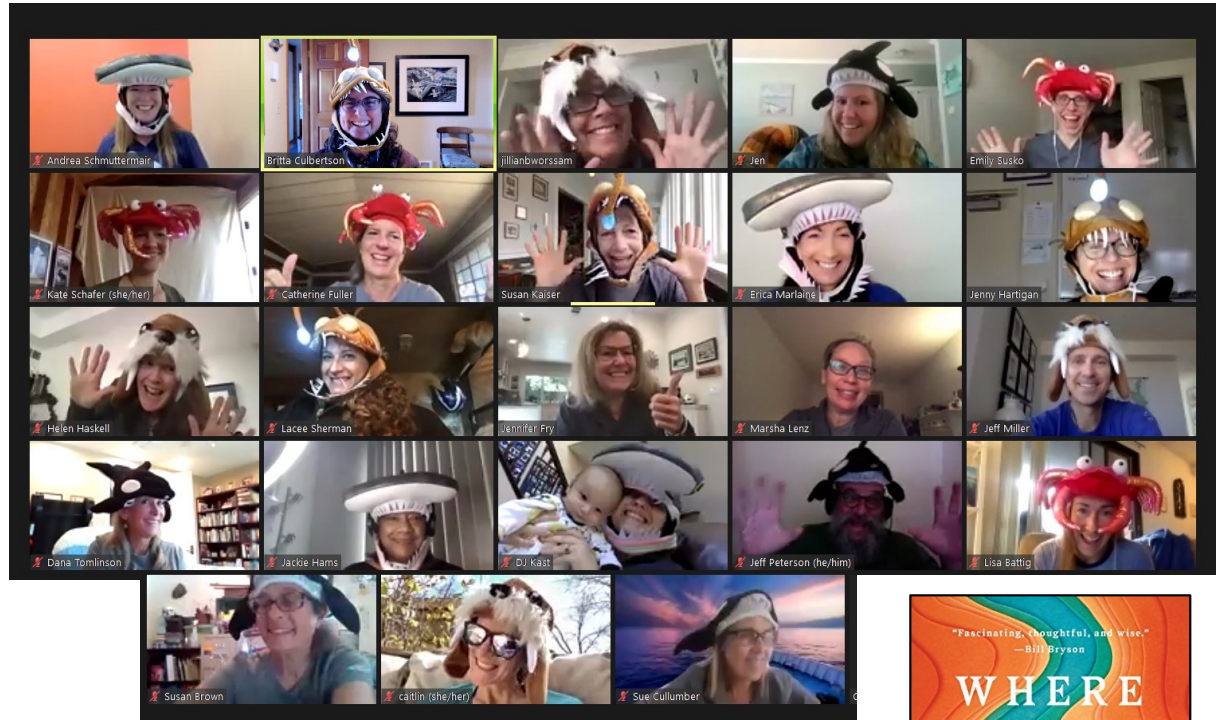


# Pacific Southwest Teacher at Sea Alumni Meeting



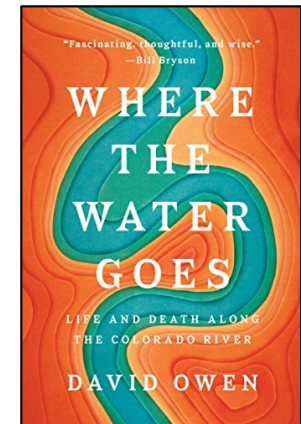
October 30, 2021

- **Attendees:** 20 TAS alumni from 5 southwest states plus Hawaii
- **Agenda:** Introductions, small group discussions, virtual science museum scavenger hunt



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- **Next Step:** Pacific Southwest TASA Book Club discussion of *Where the Water Goes* by David Owen to follow in 2022





# Southeast Teacher at Sea Alumni Meeting

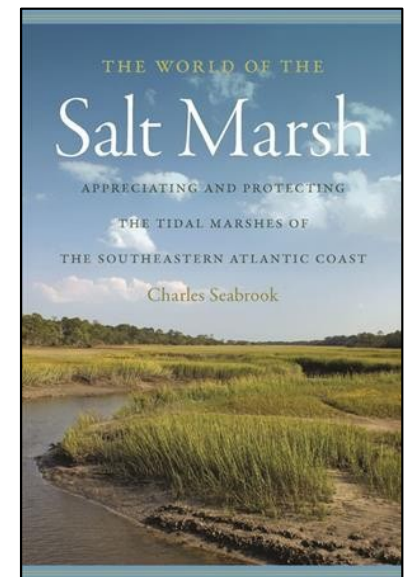


December 4, 2021



- **Attendees:** 12 TAS alumni from 6 southeast states
- **Agenda:** Introductions, small group discussions, virtual science museum scavenger hunt

- **Next Step:** Southeast TASA Book Club discussion of *The World of the Salt Marsh* by Charles Seabrook to follow in 2022



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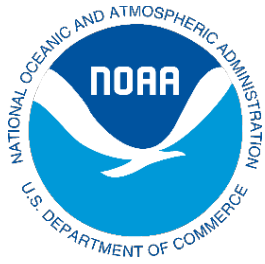
# Alumni Meeting Impacts



“I appreciate how much we are treated as professionals, have created solid friendships, and can reach out and get help, ideas and support at any time.”

– TAS '17 **Helen Haskell**





# Virtual Regional Alumni Book Clubs



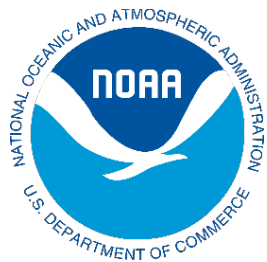
- *February-April:*  
Great Lakes/Great Plains Region
- *May-June:*  
Mid-Atlantic Region
- *October-December:*  
Pacific Northwest Region



*A “Book Bento” created by the Great Lakes / Great Plains Region Book Club while reading The Death and Life of the Great Lakes*



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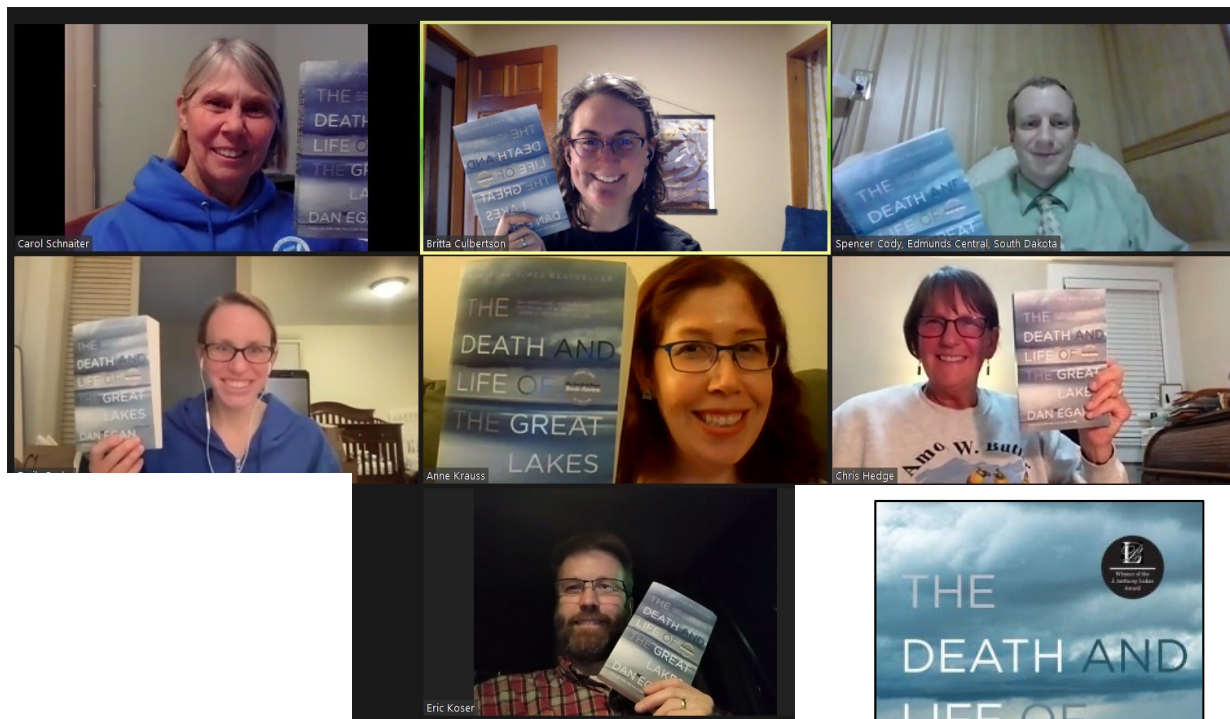


# Great Lakes / Great Plains Teacher at Sea Alumni Book Club

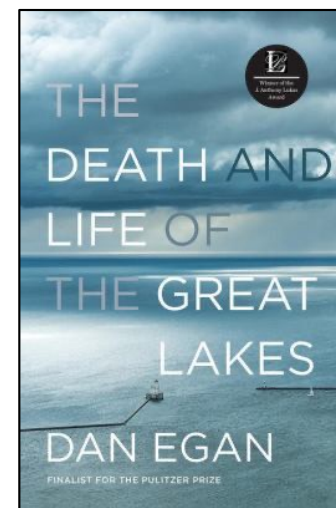


February 25 – April 22, 2021

- 11 alumni and staff participants from PA, IN, MN, WI, SD, OH, NY
- Discussed book in parts over five meetings
- Discussion moderated by TAS alumna
- Opportunity to share regional perspectives, expertise, resources



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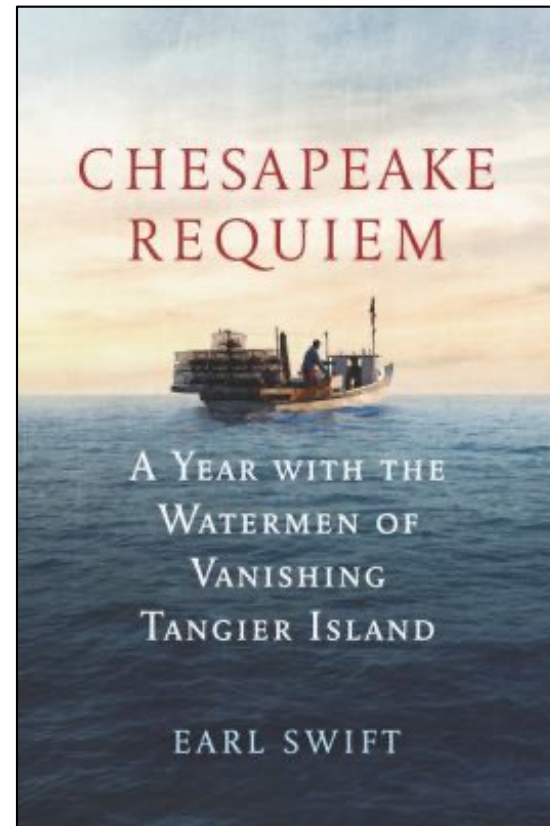


# Mid-Atlantic Teacher at Sea Alumni Book Club



May 12 – June 23, 2021

- 9 alumni and staff participants from MD, VA, D.C.
- Discussed book in parts over four meetings
- Discussion moderated by two TAS alumni
- Opportunity to share regional perspectives, expertise, resources



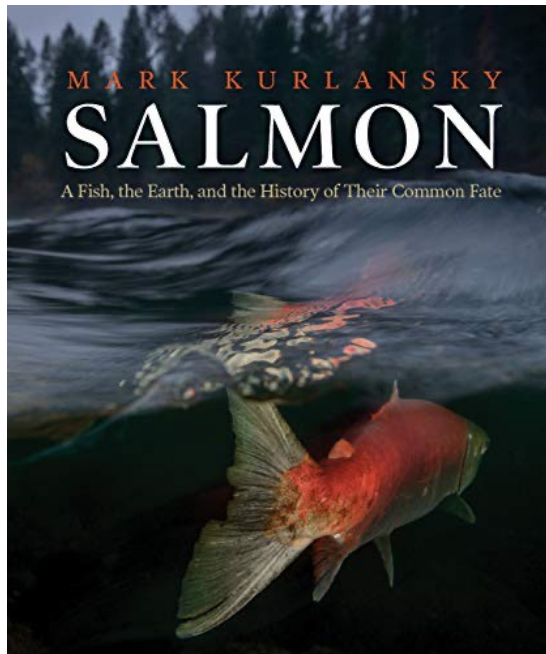
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# Pacific Northwest Teacher at Sea Alumni Book Club



October 7 – December 2, 2021



- 8 alumni and staff participants from AK, WA, OR
- Discussed book in parts over five meetings
- Discussion moderated by two TAS alumni
- Opportunity to share regional perspectives, expertise, resources

*Before the second meeting, moderator **Kirk Beckendorf** (TAS 2004) shared photos from his book club-themed dinner*



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# Book Club Impacts



**“I was able to get a lot of ideas from the book club.** I put together a NOAA Planet Stewards proposal on the subject of aquatic invasives, and it was funded.

**I will be delivering a book study on the same book starting in January** through the University of Sioux Falls for graduate credit... Teachers in any state can participate and receive credit.

**The project will culminate in a field experience for my students visiting all five Great Lakes** relating our stops to the book. The same group of teachers will have the option to follow and engage with our group virtually during the summer for an additional graduate credit. We just did a zebra mussel survey of South Dakota lakes last week.” – TAS ‘14/’16 **Spencer Cody**

## Great Lake Field Experience

•week-long field experience, July 25-31, 2022, in the Great Lakes region using the mid-sized bus including up to 13 students and two chaperons

•Monday, July 25: We will travel to Duluth, Minnesota, to visit the Great Lakes Aquarium. This is an important stop to relate native fish species to invasive fish species having displays of both. During our visit we will be doing several live feeds, where permissible, to discuss the impacts of invasive species with the teacher workshop group for the workshop Facebook page. We would then head up to Houghton, Michigan, for lodging.





# 10 Years of the Teacher at Sea Alumni Association



#FindingYourInnerExplorer

## *Finding Your Inner Explorer* Video Challenge

*Teacher at Sea Alumni Association 2021*

**#FindingYourInnerExplorer**

**Video Challenge**

Finding your inner explorer is our theme for 2021. We know all of you have stories to tell and we would like to share your stories on social media. If you would like to participate in this challenge, register below and Britta will send you a password to upload your video.

[Register here](#) by **March 5<sup>th</sup>** if you plan to participate; videos must be uploaded by **March 29<sup>th</sup>**.



- In March, TAS alumni were invited to record 3-minute videos describing times they have found their inner explorers



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# 10 Years of the Teacher at Sea Alumni Association



#FindingYourInnerExplorer

## *Finding Your Inner Explorer* Video Challenge



- 6 submissions selected for longer video features coming January 2022
- Watch the videos here: <https://marinesanctuary.org/tasaa/videos/>



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Teacher at Sea Alumni Find Their Inner Explorers  
<https://marinesanctuary.org/tasaa/blog/teacher-at-sea-alumni-find-their-inner-explorers/>



# Introducing the Teacher at Sea Alumni Association NOAA Fellowship



## **TAS Andrea Schmuttermair**

TAS '12 NOAA Ship *Oregon II*, TASA '15 NOAA Ship *Oscar Dyson*



- Consulted on several education-related projects submitted by NOAA offices and programs
- Supported alumni activities and communications
- Developed an independent project using NOAA-related resources and partnerships focused on remotely operated vehicles (ROVs)



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