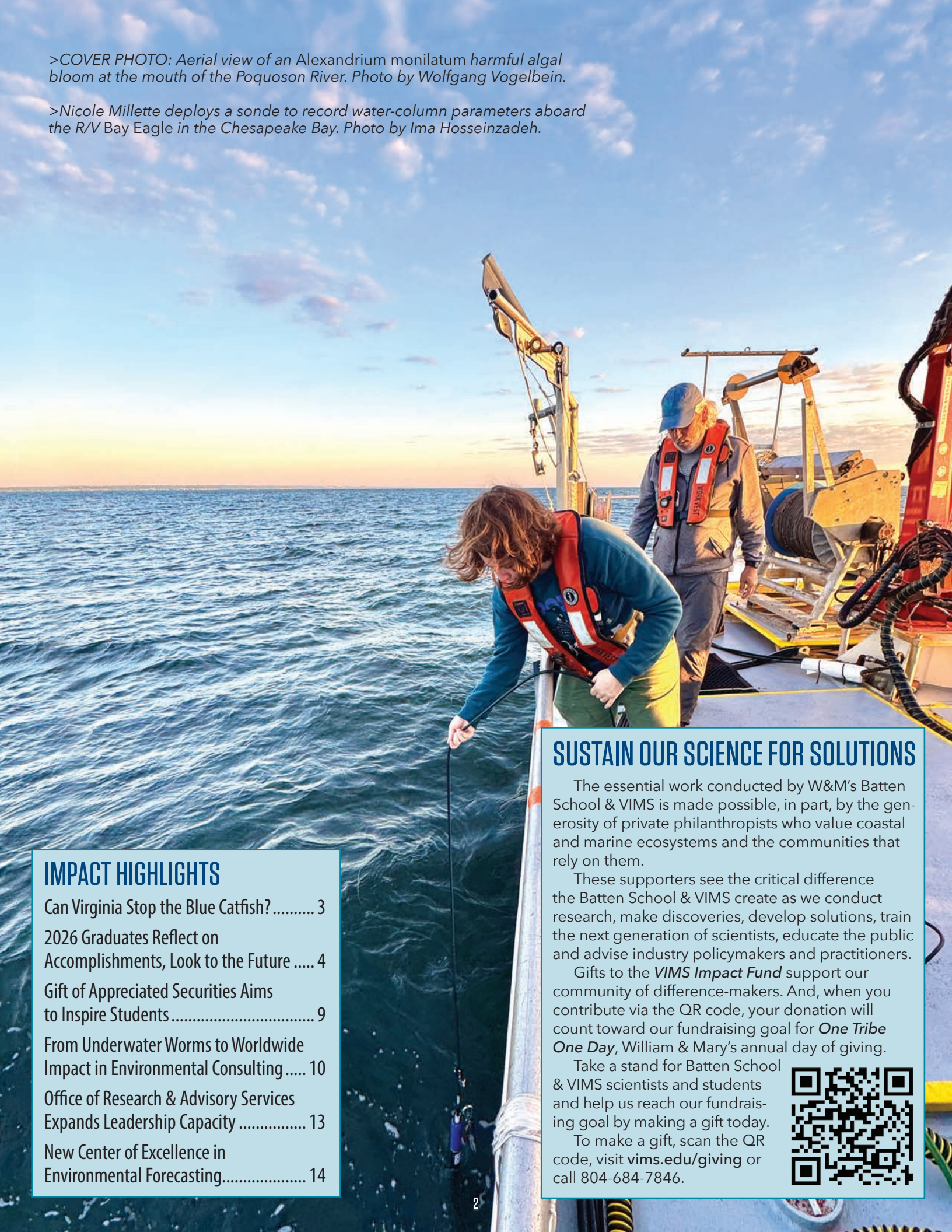
Impact

SPRING 2026

VIMS | William & Mary

Virginia Institute of Marine Science



>COVER PHOTO: Aerial view of an Alexandrium monilatum *harmful algal bloom at the mouth of the Poquoson River. Photo by Wolfgang Vogelbein.*

>Nicole Millette deploys a sonde to record water-column parameters aboard the R/V Bay Eagle *in the Chesapeake Bay. Photo by Ima Hosseinzadeh.*

IMPACT HIGHLIGHTS

SUSTAIN OUR SCIENCE FOR SOLUTIONS

The essential work conducted by W&M's Batten School & VIMS is made possible, in part, by the generosity of private philanthropists who value coastal and marine ecosystems and the communities that rely on them.

These supporters see the critical difference the Batten School & VIMS create as we conduct research, make discoveries, develop solutions, train the next generation of scientists, educate the public and advise industry policymakers and practitioners.

Gifts to the ***VIMS Impact Fund*** support our community of difference-makers. And, when you contribute via the QR code, your donation will count toward our fundraising goal for ***One Tribe One Day***, William & Mary's annual day of giving.

Take a stand for Batten School & VIMS scientists and students and help us reach our fundraising goal by making a gift today.

To make a gift, scan the QR code, visit **vims.edu/giving** or call 804-684-7846.

CAN VIRGINIA STOP THE BLUE CATFISH?

NEW RESEARCH SHOWS THE CHESAPEAKE BAY'S TOP INVADER IS HARD TO CONTROL

For decades, the Chesapeake Bay's rivers and tributaries have been home to a troublesome guest whose presence continues to ripple through the ecosystem. The blue catfish – first introduced in the 1970s for recreational fishing – has since become an ecologically disruptive force in Virginia waters. In response, scientists at William & Mary's Batten School & VIMS are making critical discoveries about blue catfish biology, ecological impact and commercial market potential, and playing a key role in advising how the commonwealth can respond.

A GROWING ECOLOGICAL TOLL IN THE BAY

Through the long-running Juvenile Finfish Trawl Survey, Batten School of Coastal & Marine Sciences & VIMS Professor Mary Fabrizio, along with her students and colleagues, has documented both the spread of blue catfish and the corresponding decline of native species.

"As the blue catfish population started to increase in our tributaries, we saw a decline in the native white catfish and white perch, likely due to predation or competition for resources," she said. "And some of our colleagues in Maryland have evidence suggesting the blue catfish may be impacting striped bass."

According to Fabrizio, another icon of the Chesapeake Bay may also be threatened: "The other effect is that blue catfish, especially the medium-sized fish, are preying on blue crabs. And because there are so many medium sized blue catfish, that translates into a lot of removals. They're eating a lot of blue crabs."

To investigate that interaction, Fabrizio recently led a two-year diet study, published in *Marine and Coastal Fisheries*, which found that blue catfish predate on blue crabs year-round. Stomach content analysis also showed that they specifically target juvenile crabs; "the juveniles that Virginia counts on to sustain the future blue crab population," said Fabrizio.

HELPING VIRGINIA RESPOND TO — AND EAT — BLUE CATFISH

The Virginia Institute of Marine Science serves as a nonpartisan advisor to the commonwealth, with a statutory mandate to provide unbiased data to the lawmakers and regulators who ultimately determine policy. As such, several Batten School & VIMS researchers are involved in a variety of collaborative initiatives developing innovative solutions to the blue catfish issue.

One key contributor to this important work is Marine Business Specialist Shelby White Ph.D. '23, who led the Batten School & VIMS' participation in the Virginia Department of Agriculture and Consumer Services' (VDACS) Blue Catfish Work Group. "It's a broad collection of researchers, fishermen, processors and state agencies," she said. "We're trying to increase the market, while balancing stakeholder interests and minimizing impacts to the Chesapeake Bay."

Within the Marine Advisory Program (MAP) at the Batten School & VIMS, White is the primary investigator studying how to expand the commercialization of blue catfish in Virginia. Working with Associate Professor Andrew Scheld, a marine resource economics

Continued on page 8

>By increasing consumer demand, as well as watermen and processor participation, a growing market for blue catfish could help decrease the population of the invasive species. Photos by Aileen Devlin, Virginia Sea Grant.

2026 BATTEN SCHOOL & VIMS GRADUATES REFLECT ON ACCOMPLISHMENTS, LOOK TO THE FUTURE

In 2026, the Batten School & VIMS are celebrating the graduation of 31 students from the Batten School of Coastal & Marine Sciences. These young scientists have developed notable expertise in a variety of research areas within coastal and marine sciences, preparing them well for successful and consequential careers in scientific research, education, communication and more. With a range of exciting possibilities in front of them, these graduates know they can rely on both a strong academic foundation and supportive alumni network in the years ahead.

The official ceremony in May will honor graduates from January, May and August, but we invite you to get to know just a few of these remarkable students now:

Graduation

- 6 *January graduates*
- 14 *anticipated May graduates*
- 11 *anticipated August graduates*

Sub-Concentrations

- 3 *students concentrating in Marine Policy*
- 5 *students concentrating in Shellfish Aquaculture (new!)*

Degrees

- 6 *M.A. degrees*
- 8 *M.S. degrees*
- 17 *Ph.D. degrees*

Maya Thomas

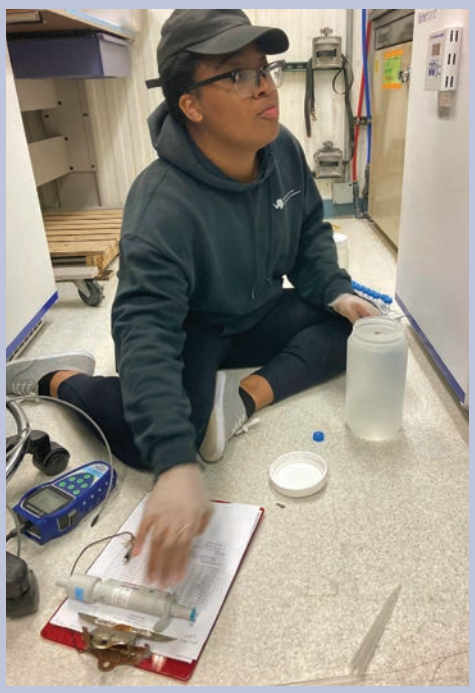
Degree: Ph.D.
Advisor: Debbie Steinberg
Anticipated graduation: August
Undergrad: Nova Southeastern University

On her most memorable moments:

"I went to Antarctica four or five times, and that first time – leaving from the tip of South America, going through the Drake passage, seeing Antarctica, walking around and seeing penguins and seals – it's hard to describe how special and magical that was, even though we were also working really hard at the research."

On her primary field of study:

"I study zooplankton ecology – those small, weird, more animal-like drifters that can't swim against the current – in the Western Antarctic Peninsula, one of the fastest warming places on Earth. As part of the Palmer LTER, we examine how climate change is affecting zooplankton, especially Antarctic krill, and the ripple effects across the food web. I also study how zooplankton waste moves carbon through the 'biological pump,' looking at where it goes and how deep it sinks in the ocean."



On advice for new graduate students:

"Take a break, sometimes. You need a good work-life balance. When you take a real break, take real time off, you can come back with even more energy to do your work. And when you're here, stay involved in the community. Say yes to things, because you never know what you'll enjoy or what opportunities will come from that."

Matthew LaGanke

Degree: Ph.D.
Advisor: Bill Walton
Anticipated graduation: May
Undergrad: UNC Wilmington

On choosing the Batten School & VIMS:

"I grew up snorkeling every summer off Cape Cod with my grandfather, so I was pretty set on marine science from an early age. I stuck with it through undergrad, and even studied coral reefs during a study abroad in Australia. Then, I worked for Florida Fish and Wildlife during the Apalachicola Bay oyster collapse; watching oysters die as a 'conservation' tech had a profound impact and I wanted to do more. I started studying aquaculture under Bill Walton, and actually followed him from Auburn to the Batten School & VIMS."

On the supportive community:

"It would be hard to think of anything negative. The community is the first thing I bring up when talking to prospective students. We've all grown really close to one another. Beyond my cohort, I've had a really good time starting a student group – the Aquaculture Collective, which is part of the U.S. Aquaculture Society – and we've engaged students across William & Mary and got them more involved in marine science. I've been able to build a mentorship network outside of school, within industry, which is truly unique."

On being among the first to graduate with the shellfish aquaculture sub-concentration:

"It's opened so many doors and I've learned so much, not only about the intricacies of shellfish aquaculture, but also the realities of it. You can ask big questions about shellfish aquaculture, but more than that, you learn how to help the farmers. Through these classes, I've learned the social dimensions of aquaculture. And there are great people in this concentration who will be lifelong colleagues and friends."

Bayleigh Albert

Degree: M.A.
Advisor: Molly Mitchell
Graduation: January
Undergrad: William & Mary

On the supportive community:

"What's really special about the Batten School & VIMS is that everyone genuinely wants to see you succeed and will do everything they can to help you find opportunities. After interning here as an undergrad, coming back to the community was a huge draw as a grad student. That's what sets the Batten School apart from other programs: everyone knows and supports each other. If someone can't help you, they'll connect you to someone who can, and you end up exactly where you're meant to be."

On invaluable mentorship:

"I was mentored by Nicole Millette in the Phytoplankton Ecology Lab, Molly Mitchell as program director, Lisa Lawrence through my assistantship and Brookie Crawford at the Virginia Department of Health – and every single one of them showed up for me. Whether it was reading drafts, finding funding or opening other doors, they made time. And they were all accomplished women, which was just really powerful to see and be surrounded by as role models for working hard and succeeding in a male-dominated field."

On what's next:

"I just accepted a position at Virginia Sea Grant as their digital storyteller. In this position, I will be writing stories, taking photographs, doing videography and running our various social media accounts. I get to tell the story of the impact that Virginia Sea Grant has through funding different events and people doing important work."

Javier Pujols

Degree: M.S.
Advisor: Emily Rivest
Anticipated graduation: May
Undergrad: University of South Florida

On choosing the Batten School & VIMS:

"I grew up in the Dominican Republic, surrounded by the ocean, so that curiosity started early. In high school, I worked in a coral physiology lab inside an open museum, which meant not just doing research on coral stress responses, but explaining it to visitors all day. That really shaped me. Later, after more interdisciplinary training during undergrad, I connected with Emily Rivest. I knew I wanted to study with her, but the community and collaboration here also stood out to me."

On his most memorable moments:

"Grad school is always throwing stuff at you, so it's hard to choose, but my most meaningful moments have been out in the field and in the lab – seeing science in action, running incubations, samples – treating every little task as pivotal because I'm learning so much. I also love sharing that work in outreach; sparking curiosity in someone else's eyes makes it clear that the possibilities in science are almost limitless. And my cohort is so close; I'll have them forever and they'll have me."

On his primary field of study:

"I came in under the Chesapeake Carbon and Alkalinity Study, this big interdisciplinary effort to understand how carbon and alkalinity are cycled in estuarine systems. My thesis focuses on live, shell-building invertebrates by running seasonal incubations to measure their physiological rates and how their metabolic activity influences biogeochemical cycling. It's field work in wetlands, the York and Potomac Rivers, piecing together how those organismal-scale processes scale up and fit into the broader blue carbon puzzle."

Blue Catfish, continued from page 3

expert, White has explored commercial watermen's interest in what is currently a relatively small fishery, even though watermen can harvest blue catfish year-round with more flexibility than other commercial species.

In a pair of recent publications, White and Scheld, along with additional co-authors, found that while low dockside prices and limited processors were the biggest barriers for watermen to harvest blue catfish, a majority of consumers have eaten or would be willing to eat blue catfish. They also found that messaging centered around the positive ecological impact of eating the invader significantly increased consumers' willingness to try it.

Batten School & VIMS researchers have additionally collaborated with VDACS' Marine Products Board, which markets the state's seafood. "We've worked with them a lot on our research and helped create outreach materials," said White. She compares current marketing for "Virginia wild-caught blue catfish" to the once-disregarded Patagonian toothfish, which was rebranded in the 1970s and is now sold as the high-end "Chilean sea bass."

"People sometimes think of catfish as the muddy bottom fish, but we've been working hard to transform that perception," she said. "We need people to eat blue catfish, chefs to prepare it, processors to process it and watermen to catch it. Trying to do all those simultaneously is the trick."

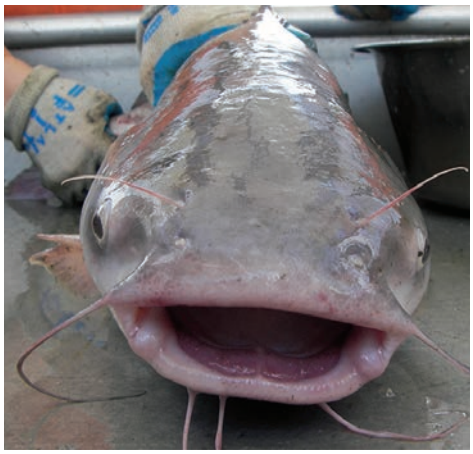
BLUE CATFISH ARE HERE TO STAY

A confluence of species characteristics has made the blue catfish a nightmare for ecological preservation, including dietary flexibility, a long lifespan and a protective nesting strategy. Energetic modeling work, led by Batten School & VIMS alumnus Vaskar Nepal Ph.D. '20 and recently published in *Ecological Modelling*, revealed that the species can thrive – and reproduce – even when food is scarce. Still other studies have indicated an increasing tolerance of brackish conditions, which could allow the species to further expand from freshwater into estuarine habitats. In short, it's a perfect storm of invasive advantages.

>Batten School & VIMS scientists holding specimens of blue catfish. From left to right: Laboratory Specialist Aimee Comer, former Lab Specialist Jennifer Conwell and former student Justine Woodward M.S. '09. Photo provided by Mary Fabrizio.

When asked if the blue catfish can ever be eradicated, Fabrizio doesn't hesitate. "Not possible," she said. "No question, we cannot get rid of them all. I'm sorry it's not a happy end to the story, but there's not enough money, not enough people, not enough time to do what would need to be done. And with climate change, these fish are pushing north; they're already in Delaware Bay."

Scheld similarly cautions that any expansion of the commercial market will likely be gradual. "The market will probably remain relatively small. Yes, there's some increase in consumer awareness and that may contribute to seafood dealers expanding sales, perhaps outside of our immediate region, but it will be slow."



>The blue catfish represents a perfect storm of invasive advantages. Photo provided by Mary Fabrizio.

Still, new research continues. White and Scheld are currently working with North Carolina officials to test blue catfish for contaminants, meet with processors to understand factors influencing their participation and dig deeper on consumer preferences by having individuals sample products and provide feedback. They also have proposals under review to expand that work into Virginia. Meanwhile, Fabrizio is working with fellow Professor Grace Chiu to study how predator-prey overlaps have shifted over time in the Bay.

There are also promising experimental solutions, beyond fishing removals, that could still be attempted. Fabrizio identified the "Trojan Y Male" method as a theoretical strategy for reducing the population over time by genetically influencing the fish to produce all-male offspring. However, she remains pragmatic: "You can't just do one thing. It's gotten out of control for too many years for there to be a single silver bullet, easy answer."

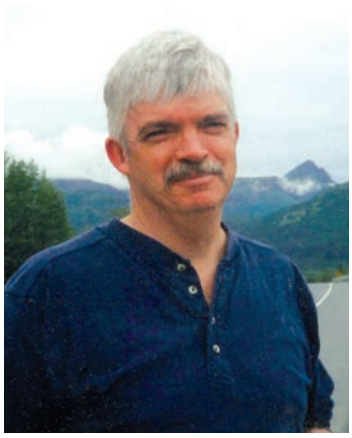
Referring to blue catfish in Virginia as a cautionary tale, Fabrizio encouraged citizens to give voice to the issues and solutions they care about. "It's not up to science; we only provide the data," she said. "It's up to the people who live and work and play in this area to decide what they want and if we will try to minimize the impact of blue catfish on the Chesapeake Bay."

PROVIDING A SPARK AND CALLING OTHERS TO ACTION

JILL BURRUSS HOPES HER RECENT GIFT, MADE VIA APPRECIATED SECURITIES, INSPIRES STUDENTS TO PURSUE SCIENCE AND MOTIVATES OTHERS TO GIVE TO THE BATTEN SCHOOL & VIMS

Jill Burruss recently documented a $50,000 gift to the Batten School & VIMS through appreciated securities, an act of generosity that honors her late husband, Dr. Robert "Bob" Burruss, and their shared belief in the transformative power of science education. By establishing the High School Marine Science Career Exploration Fund (6112), Jill intends to encourage both students and those who might make similar gifts.

"Bob and I ended up in science because we had been encouraged from a very early age via educational programs, so I hope this gift provides a new generation with that spark, that reassurance and that delight," she said. "And I hope the larger community sees that this is important, it's easy to do and it's a way that we can all make an impact, no matter the amount."



>A recent contribution for educational programming from Jill Burruss (left, photo by John Wallace) is a tribute to her late husband, Dr. Robert Burruss (right, photo provided by Jill Burruss).

INSPIRING STUDENTS TO SHARE A LOVE FOR SCIENCE

For the Burruss family, the Batten School & VIMS has long been a special place of research and learning. The Catlett-Burruss Research and Education Laboratory on campus bears Robert's family name, but the connections run even deeper.

Robert spent childhood summers in the area before dedicating his career to science, culminating in over three decades as a research scientist at the U.S. Geological Survey. Robert was also a Water Steward within the James City County/Williamsburg Master Gardener program. Jill, meanwhile, grew up with a passion for marine science before becoming a lifelong educator, including time as a professor at W&M before working for the Department of Defense.

"We often talked about how educational programs inspired our interest in science," Jill reflected, "so we understand the importance of encouraging that and helping students find a like-minded community. The Batten School & VIMS is the place where you can talk about your passions, do really neat experiments and expand your worldview so significantly that it will bolster your belief in yourself and your continuation in the field."

The new fund is designed to expand hands-on field and lab experiences for adolescents with the goal of fostering early interest in marine science careers and building a pipeline of skilled professionals committed to serving coastal communities and environments.

"Bob and I always loved the ocean, and we discussed how science was taking a hit at the moment and some schools were cutting their science programming," Jill said. "My desire is that this keeps students going regardless of what's happening in the world around them."

That's a hope shared by Sarah Nuss Ph.D. '24, director of the Office of Outreach & Engagement at the Batten School & VIMS. "We are extremely grateful for additional support for high school educational programming from Jill Burruss," she said. "Through this gift, we plan to increase offerings available to high school students, including expanding students' understanding of career opportunities within marine science."

APPRECIATED SECURITIES ARE A POWERFUL PHILANTHROPIC TOOL

Appreciated securities are investment assets, such as stocks, bonds or mutual funds, that have increased in value since their original purchase. The profits on these assets are unrealized until sold, at which point they become a taxable capital gain. However, those taxes can be avoided if the assets are donated directly to a qualifying charitable organization. This allows the donor to make a larger donation than they could with cash while claiming an income tax deduction for the full market value of the securities.

Jill's decision to make a gift via appreciated securities came after careful consultation. In the wake of Robert's passing, she worked with her attorney and financial advisors to consolidate accounts and responsibly plan her philanthropy. Appreciated securities offered both flexibility and simplicity, allowing Jill to make a meaningful gift while thoughtfully managing her financial future.

Richard Lafferty, retired certified financial planner and current treasurer of the VIMS Foundation Board, emphasized why this approach can often be the best avenue for making a gift.

"Over a 47-year career advising families and managing charitable gift accounts for major educational institutions, I saw firsthand that one of the smartest ways to give is through appreciated securities," he said. "Shares held for twenty or thirty years can accumulate such significant gains that the client's true cost of the

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FROM UNDERWATER WORMS TO WORLDWIDE IMPACT

KERSEY STURDIVANT PH.D. '11 INVENTED THE "WORMCAM" WHILE STUDYING AT W&M'S BATTEN SCHOOL & VIMS, LAUNCHING A GLOBAL ENVIRONMENTAL CONSULTING CAREER

When Kersey Sturdivant arrived at the Batten School & VIMS, he was already certain of one thing: it was going to be about worms.

"I grew up landlocked in North Carolina," he said, "so when I developed a passion for science and the environment, I very much thought my interests would be terrestrial." However, after not enjoying an ecology camp where insects were especially prevalent, Sturdivant pivoted to marine science and enrolled at the University of Maryland.

Sturdivant rigorously pursued a range of undergraduate internships, seeking exposure to every realm of marine science, from sea turtles and coral reefs to what became his eventual passion: marine worms.

"That's how I ended up here; it was the worms that drew me in," Sturdivant said of choosing the Batten School of Coastal & Marine Sciences & VIMS. Under the mentorship of Professors Robert Diaz and Rochelle Seitz M.A. '91, Ph.D. '96, he studied how human activity affects the health and function of soft-bottom marine systems.

Sturdivant was specifically focused on how hypoxia affected the function of infauna, aquatic organisms that live within the sediment of the sea floor. Yet it was not just a research question that would shape his future — it was a device.

>Today, Kersey Sturdivant is Vice President of Data Acquisition at the environmental consulting firm he co-founded. Photo provided by Kersey Sturdivant.

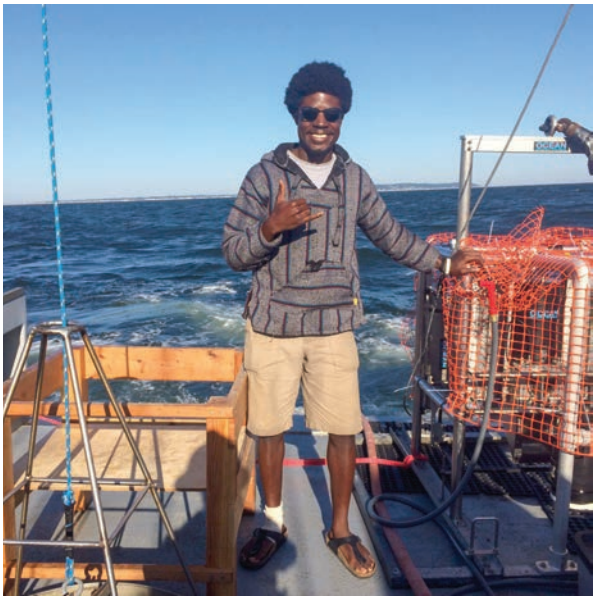
"My most memorable academic moment was when we finally got the Wormcam to work," he said. The invention, an underwater imaging system designed to observe organisms in situ within benthic sediments, required persistence to finally achieve full functionality. In fact, after nearly two years, Diaz was ready to deprioritize the project, "but I just felt like it could work," Sturdivant said.

The breakthrough finally came in the lab. "I remember thinking about the issues we were having, and finally realizing, 'Oh, what if we put this groove here and add in an O-ring,' and that was the answer all along." The solution successfully transformed a metal prototype into a functional plastic version that could withstand prolonged deployments of multiple months in the mud, saturated in a corrosive environment (seawater).

For Sturdivant, the Wormcam did more than collect data; it reshaped his scientific worldview. "It kind of made a name for me, but more than that it opened my mind to the value and the power of visual observation of cryptic systems," he said. Observing organisms directly in their natural environment often challenged assumptions drawn from literature or lab experiments. That lesson would become foundational for his career.

After graduation, a National Oceanic and Atmospheric Administration fellowship became a full-time equivalent position in San Francisco, but Sturdivant was quickly drawn back to academia. He transitioned to Duke University, where he held a creatively structured faculty role that allowed him to build a lab and secure grants without immediately starting the tenure clock. During this period, Sturdivant began contracting applied science work for private clients, an approach he had seen modeled at the Batten School & VIMS.

That entrepreneurial spark eventually led to a pivotal decision. Rather than accept a traditional tenure-track path, Sturdivant joined two seasoned



>Sturdivant "hanging out" on the continental shelf of the Atlantic Ocean while conducting sediment profile imaging in 2021. Photos provided by Kersey Sturdivant.

>Images captured by the Wormcam. From left to right: a mud crab in its burrow; an oyster toad fish inspecting the device; a penaeid shrimp preying on a worm. Photos provided by Kersey Sturdivant.

consultants to form what became INSPIRE Environmental. While the move carried uncertainty, he saw opportunity in applying rigorous science to real-world environmental challenges. And the Wormcam became central to that work.

After getting their start in dredge material management and seafood waste monitoring, the company played a critical role in offshore wind development in the United States, including Block Island Wind Farm, the nation's first offshore wind project. Using Wormcam technology, Sturdivant and his team helped establish environmental monitoring standards that shaped permitting and best practices nationwide. In 2022, the firm was acquired by a U.K.-based offshore wind services company, reflecting its leadership in the global market.

"It's kind of surreal," Sturdivant said of building a global career rooted in benthic worms. Now a Vice President of Data Acquisition, his path was anything but predictable. "My mother often says that it's hard to believe a career studying worms can take you so far. And that's how I feel when I look around at everything I'm doing now."

Today, Sturdivant oversees large-scale field operations and business development across international markets, and he continues to engage in academic endeavors. Though his role has evolved, his identity has not changed. "I'm definitely a mix of all of them," he replied when asked if he identified more as being a scientist, inventor, academic or entrepreneur, "but at my core, I'm a scientist."

Sturdivant credits the Batten School & VIMS as a cornerstone to his success. "It was so instrumental in my individual maturation as a scientist," he reflected. "It's such a solid foundation that even as everything is piled on top, it's just rock solid."

>Sturdivant giving a lecture during an invited visit to Pace Academy. Photo provided by Kersey Sturdivant.

Remaining deeply connected to the community, Sturdivant returns to campus when he can, visits Diaz annually and stays close with former classmates. He regularly attends campus events and has met with Dean & Director Derek Aday to explore ways he might support entrepreneurial thinking among students, "either within the structure of the pedagogy or just through encouraging students to pursue innovative careers."

For current students, Sturdivant's primary advice is to avoid paralyzing comparisons to advisors, older lab mates, or cohort peers. "You are not behind. If it feels difficult, that's because it's supposed to be difficult, so you're right where you should be. And no matter what you do, keep perspective. Don't lose yourself in the long journey of a career. It's important you have a life outside of science."

And for those considering unconventional paths?

"Almost every step of my journey, there have been doubters and detractors," he said, "so be ready for that. But be honest with yourself and don't stay in a place where you're not happy or fulfilled. Don't be afraid to take calculated risks. Pursue your passion, because if you do so earnestly and with an open mind, it really can take you places far outside of what your initial conception might've been."

Sturdivant gives that advice with the confidence of someone who knows firsthand that the path from underwater worms to worldwide impact begins with simply refusing to give up on risky ideas that just might work.

MEET YOUR ADVANCEMENT TEAM

The Office of Advancement at the Batten School & VIMS is tasked with securing resources to ensure our scientists, students, faculty and staff have the support necessary to continue their critical work, make new discoveries and meet emerging challenges. We work collaboratively with new and longtime supporters alike to match donor interests with the Batten School & VIMS' greatest areas of need.

>Jill Pongonis

>Sree Kothim

Jill Pongonis
Assistant Director of Donor Relations & Stewardship

Jill Pongonis joined the Batten School & VIMS in February 2026, bringing more than 30 years of experience in strategic marketing, public relations and community engagement. Her professional background includes leadership roles with Consociate Media, Visit Williamsburg, Busch Gardens, the Jamestown-Yorktown Foundation and W&M's Mason School of Business Center for Corporate Education. Jill lives in the Williamsburg area and enjoys boating, painting and spending time with her family.

"This role brings together everything I value: strategic storytelling, meaningful engagement and the opportunity to champion work that truly matters. I am proud to support the Batten School & VIMS mission and the transformational impact it has on coastal communities."

Contact Jill at jpongonis@vims.edu.

Sree Kothim
Assistant Director of Data & Board Support

Sree, who also started at the Batten School & VIMS in February 2026, holds an MBA in Supply Chain Management and Business Analytics from W&M. She brings experience in data analytics and advancement work from roles at W&M's University Advancement office, Dollar Tree and Amazon. Sree lives in Williamsburg and enjoys reading, writing stories, baking and watching films and TV shows. She also loves taking walks through Colonial Williamsburg, soaking in the history right outside her door.

"I've always been drawn to work that matters beyond the numbers – and that's the case at the Batten School & VIMS. The research happening here directly shapes how we understand and protect our waterways, and I'm genuinely excited to support that mission by making sure data works harder for the team."

Contact Sree at skothim@vims.edu.

If you're interested in supporting the Batten School & VIMS, or if you are already a supporter but have not yet met our newest advancement team members, please reach out! We'd love to meet you and discuss how new and ongoing support keeps the Batten School & VIMS thriving in a rapidly changing world.

Providing a Spark and Calling Others to Action, continued from page 9

donation is far outweighed by the capital gains tax avoided – which, for high-income individuals, can be as high as 23.8% of the gain."

For Jill, the experience of working with the Batten School & VIMS Office of Advancement made the process seamless. "It's been an absolute pleasure," she said. "They've been great to work with and everybody's been so nice in terms of getting me the information that I need to try to make a decision about things while I'm in the midst of all the other chaos of life."

ENCOURAGING OTHERS TO JOIN THE MOMENTUM

In addition to inspiring students, it's Jill's wish that others are motivated to join her in supporting the Batten School & VIMS. "It doesn't have to be a large amount; it can be a few thousand dollars or a few hundred dollars. Even if you can only give something to support an intern for one summer, you make a difference. We need to stand up for what is important, what needs to be protected, what needs to be encouraged and continued. This is something we can all do as the common man and woman."

For those considering making gifts via appreciated securities, "the best approach is to consult with your CPA or tax advisor to get their advice on the most tax efficient way to make gifts," said Lafferty. "For appreciated securities, do so well in advance, select low cost-basis shares and transfer the securities in kind directly to the institution. When you give the appreciated securities to the entity and let them sell it, the organization recognizes the gain and you realize the full tax-saving benefit – maximizing both your philanthropic impact and your financial efficiency."

Ultimately, Jill's contribution is more than philanthropy; it's a personal tribute to her late husband. "I think Bob would smile to see this gift," she said. "He would be pleased that it's something for the local community and that it can have ripple effects across the larger Chesapeake Bay area. And I'm happy as well; the Batten School & VIMS is already listed in our trust and wills, but this lets me do something to honor Bob now."

If you would like more information about making a gift through appreciated securities or any other means, please contact the Advancement Office at 804-684-7099.

RESTRUCTURE AND NEW HIRES EXPAND LEADERSHIP CAPACITY IN THE OFFICE OF RESEARCH & ADVISORY SERVICES

The Office of Research and Advisory Services (ORAS) at the Batten School & VIMS is entering a new chapter designed to strengthen both its research efforts and its long-standing advisory mission to the Commonwealth of Virginia.

In January, the Batten School & VIMS welcomed Megan La Peyre M.A. '95 as she assumed the role of associate dean of research and advisory services. Then, in February, David Rudders M.S. '99, Ph.D. '10 stepped into the role of assistant dean, a newly created position that brings additional oversight to advisory services and will allow La Peyre to dedicate more time to advancing research.

"Work in the ORAS underpins strategy and drives outcomes across two of our three institutional mission areas," said Derek Aday, dean of the Batten School and director of VIMS. "As we have nearly doubled research expenditures over the last five years while simultaneously growing and expanding our advisory work, it became clear that we could benefit from additional leadership across these endeavors."

La Peyre echoed those sentiments: "There's a new landscape of federal funding, state priorities and public perceptions of science. Research is becoming more collaborative and multidisciplinary, funding relies more on large grants and the growth of research and advisory services at the Batten School & VIMS has been both rapid and dramatic."

Rudders most recently served as associate director of the Marine Advisory Program (MAP) and sees his new role as an opportunity to continue and expand that work.

>David Rudders began his new role of assistant dean of research and advisory services in February, 2026. Photo by John Wallace.

>A recent reception honored the leadership of former dean Mark Luckenbach. From left to right: Rudders, La Peyre, Luckenbach, Batten School Dean & VIMS Director Derek Aday. Photo by Candace Johnson.

>Megan La Peyre began her tenure as associate dean of research and advisory services in January, 2026. Photo by John Wallace.

"Research directions and state needs don't always follow each other," he said, "but they can certainly go hand–in–hand and inform each other. Our office can be that conduit."

The hiring of La Peyre and Rudders marked a change in the traditional organizational structure of the ORAS, catalyzed by Aday in collaboration with the Batten School & VIMS Faculty Council following the retirement of former dean Mark Luckenbach.

Throughout his 13-year tenure leading the ORAS, Luckenbach strengthened interdisciplinary collaboration, mentored numerous scientists and helped ensure that VIMS' advisory service remained trusted, responsive and grounded in the best available science.

"We are deeply grateful to Mark Luckenbach for his many years of dedicated service, which helped strengthen our research enterprise and reinforce VIMS' vital advisory role for the commonwealth," said Aday.

Looking to the future, La Peyre says their overarching goals are for the Batten School & VIMS "to continue to be a leader in providing science-based information, and to be on the cutting edge of new innovations in not only coastal and estuarine research, but also in solutions and decision-making. We will continue to grow our research capacity while also being a reliable resource for technical advice based on the best available science."

NEW CENTER OF EXCELLENCE IN ENVIRONMENTAL FORECASTING ADVANCES COASTAL RESILIENCE EFFORTS

A new Center of Excellence in Environmental Forecasting (CEEF) at the Batten School & VIMS has been established to turn long-term datasets, environmental sensors and advanced computer modeling into user-friendly forecasting tools that enhance coastal resilience and inform daily decision-making across Virginia and beyond.

"Environmental forecasting is a core strength of the Batten School & VIMS, grounded in decades of coastal data collection, advanced numerical modeling and applied research," said Batten School Dean and VIMS Director Derek Aday. "This new Center will expand the reach, usability and impact of our expertise for the benefit of communities across the commonwealth and beyond."

On March 13, U.S. Rep. Rob Wittman visited the Gloucester Point campus and presented Aday with a ceremonial check for $1.6 million, representing federal funds he secured in support of the Center. CEEF received strong bipartisan support from federal legislators, and it has also received backing from state representatives. Signaling an ongoing need for enhanced environmental forecasting capabilities, Virginia has allocated more than $800,000 in support of CEEF.

"I am thrilled to deliver my $1.6 million funding request for the VIMS Center of Excellence in Environmental Forecasting," said Wittman. "Forecasting is one of the most important ways we translate environmental data into useful tools – bringing together data from many sources and turning it into information that scientists, communities and policymakers use to make critical decisions. Whether it's protecting the public, managing marine resources or strengthening coastal resilience, this funding and the Center they support will allow us to take that work a step further."

>U.S. Rep. Rob Wittman (left) recently visited the Gloucester Point campus to present a ceremonial check to Batten School Dean & VIMS Director Derek Aday (right) representing $1.6M in federal funds he secured for CEEF with strong bipartisan support. Photo by John Wallace.

TURNING DATA INTO DECISIONS

CEEF brings together not only experts, but also several dynamic tools developed by researchers across multiple units at the Batten School & VIMS. Already in use by local, national and global communities, these solutions exemplify how proven science can inform decision-making and drive solutions.

"We use TideWatch and StormSense for emergency planning purposes. We've also used SCHISM to model things like water quality impacts when planning a large-scale coastal protection system," said Kyle Spencer, the City of Norfolk's chief resilience officer. "That's a multi-billion-dollar project that we're just getting started on, and the inundation modeling through SCHISM was part of the report that helped get it authorized by Congress and secure some initial funding."

The same modeling capabilities also power tools used by agencies across the commonwealth. For example, the Center for Coastal Resources Management at the Batten School & VIMS collaborates with the Virginia Department of Transportation to model how flooding could affect road networks from the present day through the end of the century, identifying road segments at risk and informing both emergency response and long-term planning strategies.

For others, Batten School & VIMS data products help with planning a day at the beach or out on a fishing boat. One example is Captain Walt, whose business Light Tackle Charters provides guided fishing and tours on the Chesapeake Bay.

"I pull up CBEFS every night or morning before I take people fishing," said Walt. "I look at dissolved oxygen levels, harmful algal blooms and turbidity, and using those three variables combined with the weather forecast I can pretty much tell you where the fish are going to be in a 12-hour window."

>A harmful algal bloom near Fleets Island, Virginia. Using CEEF tools such as CBEFS, users can access five-day forecasts of HABs and other water-quality conditions. Photo by Wolfgang Vogelbein.

GET INVOLVED AT THE BATTEN SCHOOL & VIMS

> *Young attendees examine some of the live specimens on display at Marine Science Day. Photo by Ethan Smith.*

Throughout the year, the Batten School & VIMS host a variety of on-campus events that are open to the public, including family friendly Discovery Labs, adult-oriented After Hours lectures and our Marine Science Day open house. We also frequently have exhibit booths at public fairs and festivals in the Coastal Virginia area and throughout the commonwealth.

Visit **vims.edu/newsandevents** or scan the QR code to explore upcoming events and make your plans to connect with the Batten School & VIMS.

DEVELOPING THE INFRASTRUCTURE BEHIND THE FORECASTS

A significant portion of CEEF funding will support high-performance computing resources at William & Mary. These investments will allow researchers to run higher-resolution models, process larger datasets and scale existing tools for broader public use.

Additional funds will support improvements to existing platforms and the development of new web-based tools, informed by public research and user-experience testing to ensure accessibility and usability.

"The combination of expertise and our state advisory mandate uniquely positions the Batten School & VIMS to lead not just our region but our nation in environmental modeling and the development of new tools to help coastal communities and businesses adapt to a rapidly changing world," Aday said. "We will steward these investments for the benefit of the public to enhance our ongoing efforts to help build and maintain resilient coastal communities."

>Drivers in Hampton Roads, Virginia, navigate tidal flooding. Tools such as StormSense and TideWatch can help communities prepare and plan around flooding events. Photo by Derek Loftis.

More information about CEEF and available data products can be found at vims.edu/ceef.

— TOP FIVE CEEF TOOLS —

Chesapeake Bay Environmental Forecasting System (CBEFS)

- Advanced modeling system that provides real-time and predicted conditions in the Bay, including ph, salinity, wave height, sea nettles and more.
- Utilized by a range of users, from the Environmental Protection Agency to recreational boaters and commercial fishers.

Sea Level Report Cards

- Data product that uses long-term data from tidal gauges at 36 U.S. localities to predict future sea levels and the factors that influence them.
- Delivered through an interactive dashboard used by communities nationwide to understand and plan for sea level rise.

StormSense

- Flood monitoring and forecasting system initially developed with seed funding from the Dean & Director's Innovation Fund.
- Used by local municipalities for emergency planning purposes.

Tidewatch

- Tool that provides a three-day forecast of water levels through interactive maps and chart-based displays.
- Used by communities and residents to anticipate flooding or track tidal conditions for business, recreation or emergency planning.

Semi-implicit Cross-scale Hydroscience Integrated System Model (SCHISM)

- Open-source hydrodynamical model that simulates how water moves across landscapes and through estuaries in order to forecast tidal flooding, storm surge, runoff and water-quality changes.
- Used by researchers, government agencies and communities around the world.

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NEW, INTERACTIVE TOOL VISUALIZES VIRGINIA'S OYSTER POPULATIONS

A new, interactive data platform developed at the Batten School & VIMS in collaboration with the Virginia Marine Resources Commission (VMRC) is transforming how scientists, managers, watermen and the public understand Virginia's wild oyster population. The tool was conceived as part of a Research Experience for Undergraduates (REU) project led by recent W&M alum Ellen Rowe '25.

Named the Virginia Oyster Stock Assessment and Replenishment Archive (VOSARA) 2.0, it converts more than two decades of fishery-independent oyster survey data into a dynamic, GIS-based visualization tool. The platform allows users to explore changes in variables such as oyster abundance, shell volume and harvest status across Virginia's public oyster grounds from 1998 to 2025.

"Ellen is essentially a genius for being able to take a dataset with 2 - 3 million data points and turn it into a GIS-based tool," said Batten School & VIMS Professor Roger Mann when previewing the tool at VMRC's Shellfish Management Advisory Committee (SMAC).

>VOSARA 2.0 allows users to visualize more than 20 years of oyster fishery data in Virginia waters.

Rowe worked tirelessly with data managed by Senior Marine Scientist Melissa Southworth, who works alongside Mann in the Molluscan Ecology Laboratory at the Batten School & VIMS. There was still work to be done as Rowe's May 2025 graduation date neared, so Mann and Southworth used funds from their lab and a grant from VMRC's Marine Fisheries Improvement Fund to hire Rowe as a GIS analyst through June 2026.

"The goal was to make something you could explore visually instead of having to dig through spreadsheets," said Rowe, who also collaborated on the project with Professor Shannon White, associate director at W&M's Center for Geospatial Analysis. "The main feature is a time slider that allows you to see changes at the reef level on a year-by-year basis. When you press play, you can watch the different variables change over time."

After two years of development, VOSARA 2.0 is ready to guide Virginia's ongoing management of one of its most important natural resources. Its launch stands as an example of the ingenuity and possibilities that arise when combining academics at W&M with the Virginia Institute of Marine Science's scientific advisory role.

"This tool is a great advertisement for what an undergraduate can do when you give them access to long-term programs and real data," said Mann. "To develop this type of tool while launching a bright career – all thanks to an initial $8,000 in National Science Foundation funding for an REU – is quite a return on investment."

>Ellen Rowe began developing VOSARA 2.0 as part of a Research Experiences for Undergraduates project. Photo by John Wallace.

>An annual patent-tong survey is one of the methods by which W&M's Batten School & VIMS and VMRC use to survey public oyster reefs. Photo by Andrew Button.