

Impact

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Fall 2018 / Winter 2019 Newsletter

Virginia Institute of Marine Science

SHARK SURVEY ENCOUNTERS TWO GREAT WHITE SHARKS

When Jeff Eckert of the VIMS Shark Survey called out that the team had caught a great white shark, graduate student Kaitlyn O'Brien wasn't buying it.

"I didn't believe him at first and I had to lean over the rail to see it myself," said O'Brien. You can excuse her skepticism—the capture of the 8½-foot immature male was only the fifth great white shark captured by researchers in the survey's 45-year history of longlining in the waters off the Virginia capes.

Within the week, history repeated itself, as the survey crew encountered another, even larger, great white. "When the second one came up, we noticed that lines were all tangled," says O'Brien. "Keith [marine engineer Keith Mayer] yelled 'Something big down there's messing it up,' and when we saw the head, it was huge compared to the first one. We were all kind of in shock – it was once in a lifetime." The survey crew estimates the second shark, a mature male, stretched from 12 to 13 feet long.

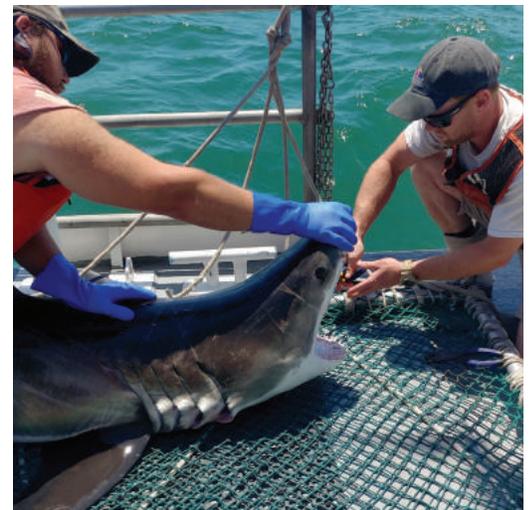
Begun in 1973, the VIMS Shark Survey now stands as the one of the longest-running studies of shark populations in the world. It brought global attention to declines in shark populations due to overfishing, and led to the first U.S. management plan for sharks, in 1993. As regulations help shark populations rebound in U.S. waters, data from the survey and other components of VIMS' Shark Monitoring and Assessment Program continue to inform stock assessments and fishery management plans at federal and state levels.

Professor Rob Latour, who directs the Shark Monitoring and Assessment

Program at VIMS, says the back-to-back capture of a white-shark pair is unusual, but not a sign of any direct risk to ocean enthusiasts.

"It's a rare occurrence, but not really any more meaningful than seeing two pink cars going down the road," says Latour. "Unfortunately," he adds, "observing a rarely seen shark often comes with a negative or fearful connotation, but the risk hasn't really increased. The animals have always been there."

During the annual summer survey, researchers fish a 100-hook longline at eight stations off the Virginia coast. Each caught shark is measured, tagged, sampled for DNA, then released.



Jeff Eckert (left) holds the immature male great white shark as Taylor Moore de-hooks it before release. © K. O'Brien/VIMS

RESEARCHERS ISSUE FIRST SEA-LEVEL REPORT CARDS

Researchers at VIMS have launched new web-based "report cards" to monitor and forecast changes in sea level at 32 localities along the U.S. coastline from Maine to Alaska. They plan to update the report cards in January of each year, with projections out to the year 2050.

The lead on the project, emeritus professor John Boon, said the report cards are designed to add value by providing sea-level updates that are more frequent and localized than those generated by NOAA and others. Boon and colleagues also took a statistical approach that incorporates evidence for recent acceleration in the rate of sea-level change at many U.S. tide-gauge stations.

Boon and his team stressed their use of relative sea-level measurements – changes in water level relative to the land surface on which people live and work – rather than the absolute sea-level measures used in many global models and predictions. Relative sea level is increasing in Virginia and other East and Gulf Coast areas due to both rising water and sinking land.

Joining Boon on the project were Molly Mitchell and Derek Loftis. Mitchell is lead author on the 2012 sea-level report requested by Virginia's General Assembly, while Loftis helps direct StormSense, a project to monitor and model coastal flooding in and

Continued on page 2

WELLS GIFT HONORS IMPACT OF STUDENTS

Since coming to campus 14 years ago, John and Patsy Wells have come to appreciate many things about VIMS. One aspect they find especially notable is how important students are to the institution.

"Students add vibrancy, intellectual content, new energy, new ideas, and diversity to VIMS," said John Wells, director of VIMS and dean of its School of Marine Science. "They help us meet our mission and represent us very well."

"I am impressed with their outreach work and willingness to interact with the community," Patsy added. "As they graduate and begin their careers, they

carry that important tradition with them."

For John and Patsy, establishing a student fellowship was a way to show their support for those promising students.

"Because our students add essential institutional capacity in support of our research and advisory service mandates, they will always be woven into the fabric of VIMS," John said. "Their success is one measure of the quality of our academic program."

Each year VIMS offers fellowships to help provide financial support to its students. This helps the school attract the best students with the greatest potential to be highly successful. "VIMS is one of the world's foremost marine science institutions," John noted. "Many of our students have gone on to become leaders in areas such as aquaculture, fisheries management, storm surge



Patsy and John Wells

modeling, and water quality research. Others are influential in guiding marine and environmental policy and management decisions."

"I hope this gift will encourage other VIMS faculty who, as they are able, may decide to also establish support for our students."

SHELLFISH AQUACULTURE CONTINUES TO STRENGTHEN ECONOMY

A report released by VIMS and Virginia Sea Grant this summer indicates that the shellfish aquaculture industry in Virginia is continuing to grow and create a significant economic impact for the state.

Oysters are the most rapidly developing sector of Virginia's shellfish aquaculture, according to the report, and Virginia is first on the East Coast for eastern oyster production. The report puts the value of Virginia's 2017 oyster crop at \$15.9 million.

Clams remain the biggest contributor to Virginia's shellfish aquaculture economic value, with a value of \$37.5 million. Virginia is number one in the United States for hard clam production.

VIMS research and advisory services help sustain the growing oyster and clam aquaculture industries in Virginia, as well as the offshore sea scallop fisheries. Improved culture techniques and disease-resistant seed are among VIMS' contributions to shellfish aquaculture.

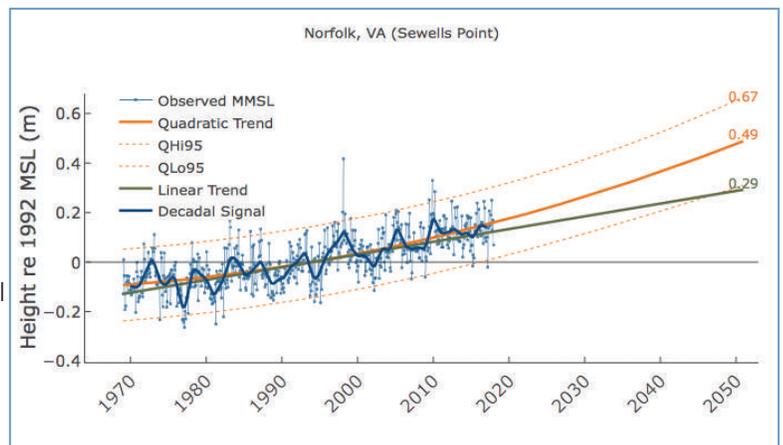
The Virginia Shellfish Aquaculture Situation and Outlook Report contains results of the 2017 Shellfish Aquaculture Crop Reporting Survey conducted by VIMS. The full report is available at www.vims.edu.

Sea Level Report Card, continued from page 1

around Hampton Roads. Boon created VIMS' popular Tidewatch network and provides expertise on tides and tidal currents.

The VIMS team purposefully took a more localized and timely approach, one designed to add maximum value for coastal residents, businesses, and government agencies.

Said Boon, "Our report cards show what sea level has been doing recently, what's happening now at your locality. Numerous studies show that local rates of sea-level rise and acceleration differ substantially from the global rates published by the IPCC and NOAA—a key result because local rates of relative sea-level rise give a



This screenshot shows the 2050 projection of sea level in Norfolk, VA.

direct indication of the extent to which homes, buildings, and roads are at risk of flooding."

VIMS' Sea-Level Report Cards have three components: the projection of sea-level height to the year 2050, a display of recent trends in the rates of sea-level change, and an explanation of processes affecting sea level at each locality.

The report cards can be found at www.vims.edu/sealevelreportcard.

DAVIS HALL DEDICATION HONORS FOUNDER

©S. Maylone, Courtesy Moseley Architects

On a sunny spring day, VIMS dedicated its new building on the banks of the York River in honor of Dr. Donald W. Davis, VIMS' founder. Hundreds of guests, faculty, staff, and students were on hand for the opening of Davis Hall, including Virginia Davis Falconer, Dr. Davis' daughter.

The 32,000-square-foot facility is the first LEED-certified building on the Gloucester Point campus, and its Gold certification shows VIMS' commitment to healthy, highly efficient, and cost-saving green building. Davis Hall centralizes and upgrades research

and office space for faculty and staff in VIMS' Center for Coastal Resources Management, Information Technology and Network Services, Marine Advisory Services, News & Media Services, and Virginia Sea Grant.

VIMS Dean & Director John Wells recognized the building's namesake in his dedication remarks. "Dr. Davis was truly Virginia's first champion of marine science," said Dr. Wells. "As early as 1925 he envisioned a state institute that would conduct original research, help improve shellfish industry practices, train marine scientists, and provide unbiased science to decision makers in the Commonwealth."

Sharing remarks at the ceremony were William & Mary President Taylor Reveley, Virginia Secretary of Education Atif Qarni, Secretary of Natural Resources and VIMS alumnus Matthew Strickler, Sue Gerdelman from the W&M Board of Visitors, and VIMS



Members of the Davis Family were on hand for the dedication. ©Capture Photography/VIMS

Foundation President Stephen Johnsen.

A highlight of the day was the special dedication of the Owens-Bryant Board Room in Davis Hall, honoring long-time friends and VIMS supporters, Carroll Owens, Jr., and Arthur "Bunny" Bryant. Many members of the Owens and Bryant families were in attendance, and everyone was touched by the heartfelt words Carroll Owens had in memory of his best friend, Bunny. The state-of-the-art conference room provides much-needed space for the VIMS Foundation Board as well as other groups on campus.



Bonnie Bryant and Carroll Owens cut the ribbon for the Owens-Bryant Board Room.



VIMS students enjoy dedication festivities.



Matthew Lambert and the Gerdelmans



Bentley Andrews and Morgan Massey



NEW GRADUATE SCHOOL CLASS BEGINS STUDIES

Fourteen new graduate students were welcomed to the Gloucester Point campus this fall. With their arrival, enrollment at the School of Marine Science at VIMS now stands at 78 students.

The 2018 incoming class consists of nine master's students and five doctoral students. Of these, three are from Virginia, 10 are from another state, and one is an international student.

"This incoming class of graduate students brings diverse experiences and research interests to our campus," said Professor Linda Schaffner, Associate Dean of Graduate Studies. "We are excited to see how their perspectives will further enrich our program at VIMS."

The new students bring a remarkable list of both academic and personal achievements. Students in the matriculating class of 2018 have conducted research around the globe, gained certification as open-water divers, authored academic articles, and held leadership positions on athletic and educational teams.

"Our incoming students have distinguished themselves as community and scientific stewards, helping to improve the world around them," said Schaffner.

Home to William & Mary's School of Marine Science, VIMS offers one of the top estuarine and coastal marine science training programs in the world.



The matriculating class of 2018 (from left): Shantelle Richards, Alexander Smith, Stephanie Peart, Matthew Fair, Kayla Martinez-Soto, Michelle Woods, Jackson Martinez, Cristin Wright, Kristen Sharpe, Derek Detweiler, Anthony Himes, and Jilian Xiong. Missing: Nicole Cai and Joseph Matt. ©C. Katella/VIMS

JOHNSEN HONORED BY W&M

Steve Johnsen was one of six new honorary alumni inducted into the William & Mary Alumni Association at its annual ceremony. Honorary alumni are non-graduates of W&M who are chosen in recognition of their exceptional service, support, advocacy, and commitment on behalf of W&M and its schools, departments, organizations, and boards.

Johnsen served as president of the VIMS Foundation Board for two terms, during which time the VIMS campaign

grew by more than \$10 million. Under his leadership the foundation launched robust oversight initiatives, including new Audit and Governance Committees, and he helped VIMS secure public funding to build out the Eastern Shore campus. Johnsen also oversaw the successful merger of three VIMS boards, which brought a new level of cooperation and greater effectiveness to the foundation's work.

He led an initiative to establish the Bonnie Sue summer internship program on the Eastern Shore and, along with his wife Barbara, helped bring the research vessel Peregrination to the Eastern Shore to support field research. Johnsen strengthened, and



Steve Johnsen (left) is welcomed as an honorary W&M alumnus by Chancellor Robert Gates.

FOR THE BOLD CAMPAIGN

Goal:
\$35 Million



Every gift to the VIMS Foundation underpins efforts to better understand and protect precious marine environments. Become a VIMS supporter by making a gift of any size at www.vims.edu/giving or by using the enclosed envelope.

continues to strengthen, relationships between VIMS and the larger W&M and Eastern Shore communities through his many leadership roles throughout the state.

ENDOWING GRADUATE STUDENT FELLOWSHIPS, A NATURAL NEXT STEP FOR THE LATOURS

It would be difficult to find a couple more deeply rooted in VIMS than Rob and Jennifer Latour. "So many important moments of my life – personal and professional – can be traced back to VIMS," said Rob. He and Jennifer both began their professional careers at VIMS, and it is where they met each other.

Jennifer arrived first. Having grown up in Gloucester, she was familiar with VIMS. While a student at Christopher Newport University, she took a part-time job washing glassware in a VIMS chemistry lab. After graduation, she went on to hold professional roles in finance and administration, advancing to chief financial and administrative officer.

Rob heard about a postdoctoral opportunity at VIMS while he was still a grad student. After completing his post doc work here in 2001, he stayed on to become a researcher and a professor at the School of Marine Science. Among his many projects, Rob designed and implemented the Chesapeake Bay Multispecies Monitoring and Assessment Program and runs the VIMS Shark Research Program.

When she was budget director, Jennifer worked with new faculty startup funds and needed to meet with



Jennifer and Rob Latour

the newly hired Dr. Latour. Because she was busy with another project, she asked a colleague to handle the meeting instead. When she finally met him she remembered thinking, "You dummy! Why in the world did you pass that file to someone else?! Dr. Latour is handsome. And he's single!" Rob said soon he was thinking up finance questions as an excuse to stop by Jennifer's office.

Today they are parents to Caroline and Connor and enjoy "spirited conversations" as they share faculty member vs. administrator perspectives.

Each knew they wanted to give back. "Both Jennifer and I hold VIMS as a special place," Rob said. "We believe in all aspects of the mission–

education, research, and advisory." It only seemed natural for the couple to establish the Robert and Jennifer Latour Fellowship.

The Latours had a particular desire to support students with an interest in marine ecosystems. Through the new fellowship, VIMS will be able to offer more competitive incentives for prospective graduate students in that area of study.

"Responding to tomorrow's challenges is going to require highly critical, interdisciplinary people," Rob said. Every day, through the lab, in the classroom, and on the water, he is preparing young scientists to be those problem solvers.

Creating the fellowship when they are mid-career provides Rob and Jennifer with more opportunities to see their gift at work. "We want to enjoy the dividends now," Rob said. "Meeting the students who receive the fellowships, we will experience the more human dimension of what this endowment makes possible."

In early 2018, Jennifer returned to her alma mater, becoming CNU's vice president for strategy and planning. "But you never really leave VIMS," she said. "It is a tight-knit community – VIMSers are lifers."

COMPETITIVE SPIRIT REWARDED ON ONE TRIBE ONE DAY

One Tribe One Day 2018 was a huge success thanks to the generosity and competitiveness of VIMS supporters. On this single day of giving VIMS raised \$50,000, won the category of "most improved" in the William & Mary Gerdeman School & Unit Competition, and met a challenge from the VIMS Foundation Board.

Giving on One Tribe One Day comes from alumni, friends, board members, staff, faculty, and students. This year an all-time high of 71% of VIMS faculty, staff, and students contributed. After a day of friendly competition on campus, the inaugural Golden Clam trophy was presented to the VIMS team that had

71% of VIMS faculty, staff, and students contributed

the highest percentage of participation: 85%.

In addition, a Foundation Board challenge created by members Guy Chapman, Charlie Natale, Jeanette

McKittrick, Travis Massey, and Anne Whittemore helped to stimulate giving and highlighted the board's generosity.

The unrestricted gifts to the VIMS Impact Fund made on OTOD will provide flexibility to underpin basic institutional needs that support the work VIMS does for the marine environment and coastal communities everywhere.



Team captains Celia Cackowski, Carol Tomlinson, and Abigail Hils celebrate winning top OTOD honors with Dean & Director John Wells. Team captain Adrienne Washington not pictured.

VIMS FACULTY RECEIVE HONORS

Professors Christopher Hein and Matthew Kirwan were selected as recipients of 2018 **Plumeri Awards for Faculty Excellence** at William & Mary.

Hein's research focuses on the links between climate change, river sediments, and the global carbon cycle. He and his students study how past changes in climate and sea-level affect the flow of river and nearshore sediments within and through the coastal zone, and how barrier-island

environments respond to changes in sea level and sediment supply.

Kirwan is a W&M alum ('02) who joined the VIMS faculty in 2013, where he leads an internationally recognized research and education program devoted to understanding the dynamics of coastal landscapes. His research combines geomorphology and ecology to investigate the response of wetlands to sea-level rise and human impacts.

Dr. Carl Hershner was honored with the **Erchul Environmental Leadership Award** by the Virginia Military Institute's Center for Leadership and Ethics. The annual award recognizes a Virginian who has made significant individual efforts to improve the environment. Hershner is a VIMS professor and director of the Center for Coastal Resources Management.

Professor Robert "JJ" Orth was honored by Virginia Governor Ralph Northam as one of Virginia's three **Outstanding Scientists for 2018**. Dr. Orth is an internationally recognized leader in seagrass ecology who led the successful effort to restore seagrass to Chesapeake Bay and Virginia's Eastern Shore.

ROBINSON NAMED CFO

DaNika N. Robinson has joined VIMS as chief financial officer. Robinson previously worked for Virginia Commonwealth University (VCU) in various leadership roles, most recently as associate director for finance and administration/chief of staff for VCU Student Commons and Activities. There she managed a departmental budget of more than \$10 million dollars and provided oversight for 180 employees. Prior to that, Robinson managed a budget of approximately \$80 million dollars as assistant administrator for the VCU Human and Molecular Genetics Department.

The new VIMS CFO has extensive experience in budget development, financial management and analysis, program evaluation, resource allocation, policies and procedures development, and with the entire grant administration process. She holds a B.S. degree in Business Administration, an M.S. degree in Public Administration, and a Ph.D. from the Education Leadership program at VCU.

VIMS Dean & Director John Wells said, "I am most pleased that DaNika accepted the position as chief financial officer. She has a zeal for success and is adept at thinking strategically and working collaboratively. She will be a great addition to our staff."



Stay connected with VIMS by signing up for the monthly e-Tidings newsletter on the website: www.vims.edu. Be the first to know about what is happening on the VIMS campus from tours to lectures, and enjoy videos and news stories curated for you each month.

FOUNDATION BOARD WELCOMES NEW MEMBERS

This summer the VIMS Foundation welcomed four new members onto its board. Joining the board for their first meeting were Rick Hill, Chip Hortenstine, Carl Strock, and Anne Waleski.

Rick Hill is vice president for industry technology for the Mortgage Bankers Association and executive vice president of MISMO, the standards development body for the mortgage industry. He is a graduate of William & Mary.

Chip Hortenstine was president and founding member of Henry R. Hortenstine, III, CPA, PC, now Hortenstine and McCown, CPAs, PC, in Richmond, VA. He is a graduate of University of Richmond and a licensed Certified Public Accountant in Virginia.

Carl Strock retired as a principal vice president of the Bechtel Corporation. Prior to joining Bechtel, he served in the U.S. Army for more than 36 years, culminating as commanding general of the U.S. Army Corps of Engineers. He is a graduate of the Virginia Military Institute.

Anne Waleski is executive vice president for Markel Corporation, Richmond, VA, where she has worked for 25 years. She holds degrees from William & Mary and University of Richmond, and is a graduate of the Advanced Management Program at Duke University's Fuqua School of Business.

This year the foundation board is led by President Phyllis Cothran of Richmond, VA. Jeanette McKittrick, also of Richmond, began her first term as vice president. Adrian "Casey" Duplantier, Jr., of Williamsburg, VA, continues his term as treasurer, as does Bill Strickland, secretary, from Deltaville.

Leaving the board this year and joining the ranks of distinguished board alumni are Stephen Johnsen, Hon. Morris Busby, Guy Chapman, Cliff Cutchins, Teresa DiMarco, Henry George, Pete Lalor, Travis Massey, David Meeker, Hon. Harvey Morgan, Marshall Orr, and Stetson Tinkham.



DaNika Robinson



FREEMAN HONORED AT MAURY SOCIETY EVENT

©S. Retzbach

VIMS celebrated top donors at the annual Maury Society reception and dinner held in their honor on April 13. Festivities began with the dedication of David and William Turner's sculpture, "Generations: A Family of Dolphins," brought to VIMS through the generosity of Steve and Barbara Johnsen. David Turner was on hand for the dedication as the Johnsens unveiled the life-size sculpture and recognized the Eastern Shore sculptor and W&M alumnus.

About 100 guests enjoyed an elegant dinner in Watermen's Hall followed by comments from VIMS Dean & Director John Wells. VIMS Campaign Chair Marshall Acuff emceed the evening and joined

Dr. Wells in thanking donors who gave major gifts in 2017. Long-time supporter Peg Freeman accepted the Pathfinder Award, given in recognition of the Freeman Family Foundation's groundbreaking leadership in marine plastics. The foundation has funded the first-ever fully privately funded graduate student fellowship at VIMS, and its focus is marine plastic pollution. Thanks to this unique investment, VIMS is leading the way on marine plastic research.

Also honored at this year's event were Bruce Bradley, Phyllis Cothran and Arnie Stolberg, Amy Dick, Brent Halsey, Rob and Jennifer Latour, Althea MacWhorter, Morgan and Jean Massey, Jim and Bootsie Rogers, Ann and Jerry Sanford, Bill Strickland, Anne Waleski and Dale Smith, Harry and Judy Wason, and Anne Whittemore.



John Wells (left) and Marshall Acuff honor Peg Freeman. ©Capture Photography/VIMS



Maury Scholar Kristen Omori offers a toast.



Barbara and Steve Johnsen unveil the sculpture they donated to VIMS.



Sculptor David Turner celebrates the dedication of Generations: A Family of Dolphins.



Harry (left) and Judy Wason are honored for the generosity to VIMS.

SAVE THE DATE

Discovery Lab:
Animal Tagging
Tuesday, Jan. 22, 6-8pm
All ages

After Hours Lecture:
Thursday, Jan. 31, 7-8pm
Adults and 10+

Discovery Lab:
Sustainable Fisheries
Tuesday, Feb. 19, 6-8pm
All ages

After Hours Lecture:
Thursday, Feb. 28, 7-8pm
Adults and 10+

Discovery Lab:
Marine Careers
Tuesday, March 19, 6-8pm
All ages

After Hours Lecture:
Thursday, March 28, 7-8pm
Adults and 10+

Public tours of R/V Virginia
Take a tour of VIMS' new
research vessel
Saturday, April 27
Times to be announced

Marine Science Day
Saturday, May 18
10am - 3pm
Open house: tours, exhibits,
activities, costume contest,
and more
All ages

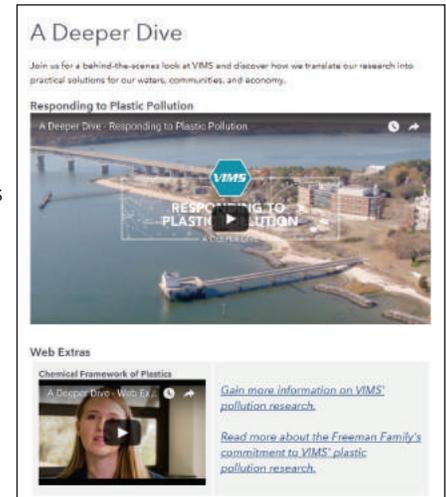
No charge for events. Reservations required for most events.
Visit www.vims.edu/events or call 804.684.7061

HAVE YOU TAKEN A DEEPER DIVE?

The Deeper Dive video series provides an insider's look at different areas of VIMS. Viewers learn about the institute's researchers and students who are finding practical solutions to challenges facing marine life and coastal communities throughout the world.

Videos have explored the challenge of "Building a Living Shoreline" that will both stop erosion and maintain the natural beauty of the shoreline and "Responding to Plastic Pollution." The most recent video, "Forecasting Tidal Flooding," looks at how VIMS is using tide gauge data and advanced computer models to provide coastal residents with accurate predictions to help prepare for flooding.

New videos are distributed to everyone on the VIMS email list, so sign up at www.vims.edu or by texting "VIMS" to 22828.



www.vims.edu/impact

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