# WINTER NEWSLETTER

December 2025

## NOTE FROM THE PRESIDENT

I am pleased to present our Winter 2025 Newsletter to our HRES members and friends. The Holiday Season in the Hudson Valley has always been very special to me and to my family, especially after moving down from the snowbelt of Central New York State many years ago. I appreciate the unique opportunities that I have had living, working and retiring in the Valley.

We had a very successful, well attended symposium in October, covering habitat restoration on the Hudson River Estuary. Our annual Leadership Awards dinner is scheduled for February 2026. Our annual McKeon student research grant program will be announced soon.

My family and I wish all of you a safe and healthy holiday season.

Jim Morrison - HRES President

**HRES Membership:** Our 2026 Membership renewal period is now active at

https://HRES2026Membership.eventbrite.com

The memberships of people who signed up at our October 2025 symposium are valid until October 2026. To avoid the Eventbrite fees, you can print out the application online at www.hres.org and mail with your check to: HRES, PO Box 279, Marlboro, New York 12542.

## 2025 HRES FALL SYMPOSIUM: STATE OF AQUATIC HABITAT RESTORATION ON THE HUDSON RIVER ESTUARY

It had been thirty years since the State of New York and the Army Corps of Engineers identified the needs for an estuary-wide restoration plan to restore some of the habitats lost due to the extensive dredging and filling that occurred in the 20th century. Since then, many state, federal, and NGO staff have worked collaboratively to develop plans to establish restoration goals and identify priority restoration needs.

On October 23rd, 2025 the Hudson River Environmental Society held the 2025 Hudson River Symposium, the State of Aquatic Habitat Restoration on the Hudson River Estuary, at the Taconic Regional New York State Parks Office in Staatsburg, New York. The day's activities included expert presentations of several habitat restoration projects followed by breakout sessions where participants shared their thoughts on how restoration could address the challenges of climate change, sea level rise, and changing biodiversity.

**Rob Pirani** (Hudson River Foundation) and **Heather Gierloff** (NYSDEC) opened the symposium with an overview of how the New York, New Jersey Harbor Estuary Program and the New York State Department of Environmental Conservation are working collaboratively to assure that planning efforts consider the restoration needs of the entire estuary. Much of the estuary has been impacted by dredging, filling, the release of industrial contaminants, and watershed scale changes in hydrology. The challenges to restore any portion of the estuary are immense so it is critical that the state and federal governments work as a team to identify priorities and seek and direct funding.


*(Photo courtesy of Anne Morrison)*

**Dan Miller** of NEIWPCC and the NYSDEC Hudson River Estuary Program provided an update on the back-channel restoration at Gays Point on the east side of the estuary in Columbia County. Funded as a mitigation project for the Tappan Zee Bridge replacement project, this was a first attempt to restore a tidal channel. The takeaway message from Dan was that costs and project design trade-offs are unavoidable and it is necessary to recognize that changing estuary conditions will define restoration achieved.

**Sarah Fernald,** Hudson River National Estuarine Research Reserve & NYSDEC, and **Ashley Morris,** NYSDEC provided an update on efforts to restore water celery beds (Vallisneria americana) in the freshwater tidal portion of the estuary. Success is proving challenging, and more research is needed to determine the environmental conditions and planting methods best suited to assure success. Future plans include targeting areas that had supported SAV beds in the past with the hopes of improving success.

*(Photo courtesy of Anne Morrison)*

**Mike McCann** from the Billion Oyster Project provided an overview to the historical extent of oysters in the estuary and the efforts being undertaken by the Billion Oyster Project to bring back a self-sustaining population. Oysters have been restored to many acres of the estuary but mortality is still outpacing recruitment. The issue is likely scale and what is needed are larger, interconnected sites to create a meta-population to allow for greater recruitment success. The program is investing in larger production facilities and will invest more in comprehensive site selection, larval modeling, and conduct more surveys.

**Edwin McGowan** from New York State Parks discussed the extensive control of common reed (Phragmites australis) in the Iona Marsh. In recent years common reed had dominated the tidal marsh and was likely responsible for the dramatic loss of nesting marsh birds between 1987 and 2004. With much of the common reed now eliminated, early results show a resurgence of marsh breeding birds but a more thorough study is needed. Lessons learned from this project include: 1. Early intervention is best for managing the spread of common reed; 2. Restored habitat can result in natural recolonization by mobile, marsh dependent species; 3. Planting is not necessary if seed source/bank is present; and 4. Long-term success requires vigilance and adaptive management.

**Scott Cuppett**, Cornell Water Resources Institute and NYSDEC Hudson River Estuary Program, discussed his work on directing dam removal projects to restore aquatic connectivity with the estuary. Though there is sufficient funding and the benefits to the ecosystem are well documented, it is challenging to have old, derelict dams taken down. There is resistance from dam owners and the regulatory process can be challenging. There needs to be a directed outreach campaign to both dam owners and communities along waterways with derelict dams pointing out the tremendous benefits of removing old dams. Often, the owners and the community are focused on the unlikely negative effects of removing dams and not the ecological, resilient, and aesthetic benefits.

**Rebecca Swadek**, New York City Department of Parks and Recreation gave a presentation on her work managing shoreline and shallow water restoration in the New York Harbor. The shoreline at several New York City parks have been eroding with loss of intertidal habitats. About a dozen sites are either in design, construction, or have been completed to date. Presenting one project as a case study, erosion of the site proved most challenging but the installation of coir logs did provide the protection necessary from plants to establish. Biodiversity increased quickly after restoration.

After the presentations were completed, participants split up into the following six restoration topic workgroups: Back Channels and Shallows, Submerged Aquatic Vegetation, Oyster Reefs, Biodiversity, Dams and Barriers, and Shorelines and Harbor Shallows. Each breakout group considered how restoration can address the challenges of climate change, sea level rise, and changing biodiversity focusing on the following three questions:

- What are the expectations & opportunities for restoration over the next decade;
- What technical, outreach, and scientific methods could be used to address these challenges; and
- How can we align science, policy, outreach, and regulation to ensure success?

The following table identifies six shared needs where more effort or resources were identified as necessary for the long-term success of habitat restoration.

| ***Restoration Type*** | ***Education & Outreach*** | ***Funding*** | ***Public Engagement*** | ***Mitigation Banking*** | ***Simplify Regulatory Process*** | ***Advance Scientific Knowledge*** |
|---|---|---|---|---|---|---|
| *Back Channels & Shallows* | X | X | X | X | X | X |
| *Submerged Aquatic Vegetation* | X | X | X | X | | X |
| *Oyster Reefs* | X | X | | | | X |
| *Biodiversity* | X | X | | | | |
| *Dam Removal* | X | | | | X | X |
| *Shoreline & Harbor Shallows* | X | X | X | | X | |

All six breakout groups identified the need to better educate the public on the need and benefits of restoration. For dam removals, a better, targeted education program is needed for dam owner acceptance and for those living along the impounded stream. Public engagement in the form of citizen science was also identified as a way to better convince the public that habitat restoration is important and necessary.

Thank you to all who helped us develop and deliver the program for the day! We are especially grateful for the support from the Hudson River Foundation, New York State Parks, New York-New Jersey Harbor Estuary Program and New York State DEC.


*(Photo courtesy of Anne Morrison)*

## 2026 AWARDS DINNER

On February 12, 2026 at Mahoney's Irish Pub & Steakhouse in Poughkeepsie, HRES will be honoring **Amanda Higgs**, NYSDEC/Cornell, and **James Lodge**, Hudson River Foundation, for their dedication and leadership to gather the information needed to protect and manage the natural resources of the Hudson River estuary. Amanda will be receiving the Outstanding Environmental Researcher Award for monitoring the status, trends, and movements of the Atlantic Sturgeon population in the Hudson River Estuary. Jim will be receiving the Outstanding Practitioner Award for his leadership in developing the Hudson River Lower Food Web Monitoring Program currently being implemented by Cary Institute of Ecosystem Studies. We will be posting the event soon on Eventbrite and hope you can join us to honor Jim and Amanda for their outstanding dedication and leadership!

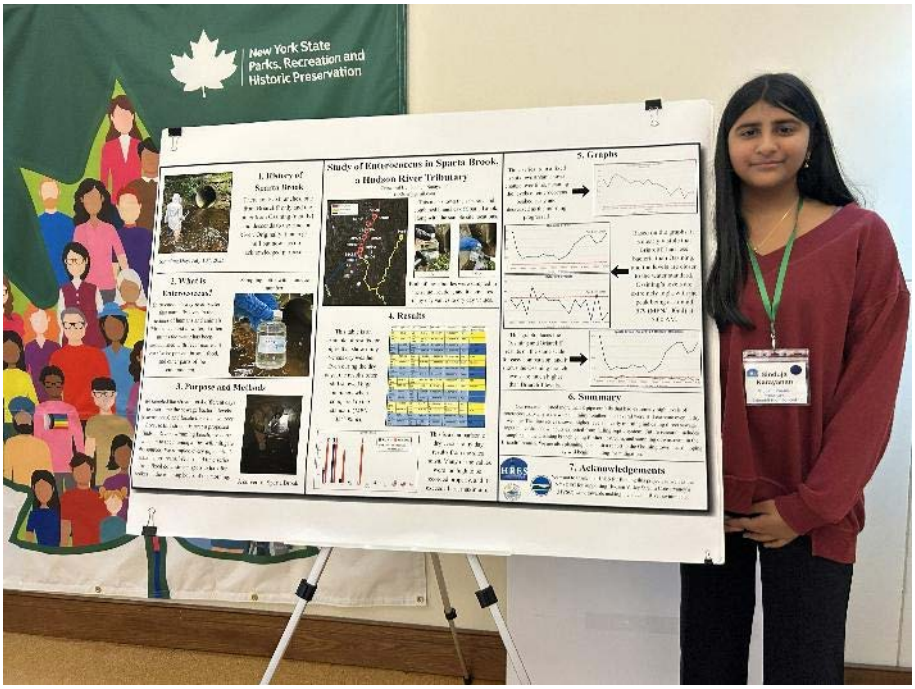
# 2025 MCKEON STUDENT RESEARCH GRANT

The McKeon Student Research Grant Program awards up to $1,000 annually to encourage high school and undergraduate college students to undertake projects relating to environmental research topics in the Hudson Valley. Proposals submitted to HRES are reviewed and evaluated by **Secretary Lucy Johnson, PhD**, and board members **Margie Turrin** and **Bernadette Connors, PhD**. We are pleased to announce that the 2025 McKeon grants were awarded to **Sinduja Narayanan** and **Gianna Maltbie**.

Unfortunately, Ginna had to reschedule her project, "Swimming with Bacteria: The Enterococcus Challenge in Water Recreation" until 2026. We will report on her progress next year.

Sinduja, a ninth grader at the Briarcliff High School, is conducting research on the "Study of Enterococcus in Sparta Brook, a Hudson River Tributary" located in Ossining and Briarcliff Manor, NY. Sinduja's research project is being overseen by her mentor, **Gareth Hougham**, the President of the Hudson Valley Stream Conservancy. The objective of her study was to identify specific sources of sewage entering Sparta Brook from the towns of Briarcliff Manor and Ossining, and to compare the results to determine which of the streams contribute to the highest level of Enterococcus. Sinduja plans to present her data to the two municipal boards with a list of recommended next steps.

Congratulations to Sinduja for receiving the 2025 HRES McKeon grant. We were pleased to see her project presented during the student poster session at this year's symposium. As her mentor, Gareth Hougham wrote in his recommendation letter, "Sinduja is a motivated future mover-and-shaker." After meeting Sinduja at our symposium, we at HRES concur with his comments.




*Sinduja Narayanan with her poster "Study of Enterococcus in Sparta Brook, a Hudson River Tributary" at the 2025 HRES Fall Symposium. (Photo courtesy of Anne Morrison)*

**To learn more about HRES's annual symposium, Leadership Awards and McKeon Student Grant programs, visit the HRES website at [www.hres.org](http://www.hres.org).**

# WELCOME HRES BOARD MEMBER RICHARD PENDELTON

Please join us in welcoming HRES's newest board member **Richard Pendelton**! If you attended our fall symposium, you probably saw Rich jumping in and providing huge energy for our organization. We are thankful to have Rich on the Board and to benefit from the wealth of knowledge and experience he will bring to our efforts. For those who might not know, Rich conducts fisheries research for the New York State Department of Environmental Conservation Hudson River Fisheries Unit. The Hudson River Fisheries Unit, nested within the Hudson River Estuary Management Program and Division of Marine Resources, is responsible for monitoring and managing the iconic migratory species of the Hudson such as Atlantic sturgeon, striped bass, American shad, and river herring. Rich started with the unit in 2016 and specializes in the conservation and ecology of Atlantic and shortnose sturgeon and non-native species monitoring and research. He currently leads the Hudson River Aquatic Invasive Species Task Force to coordinate invasive species prevention, monitoring, and control with other state and federal partners. Some of his ongoing research includes round goby predation and population dynamics, grass carp movement, and juvenile Atlantic sturgeon movement and occupancy.

***HRES: As a biologist, what do you see as the most critical area of environmental research that is still needed for the Hudson River?***

**"Broad topics like climate change jump to mind, but I might debate we still have plenty to learn and understand about the Hudson River ecosystem as a whole. We are very fortunate to have a plethora of long-term data from fishes to water quality to submerged aquatic vegetation, but there is still a lot to learn on these topics, let alone some less studied aspects of the ecosystem such as nutrient cycling, phytoplankton, and zooplankton. In my heart, I am a fish squeezer, but the better we understand all of the components of the ecosystem and how they interact over time, the better equipped we will be to tackle critical issues facing the Hudson today and years to come."**

**Rich Pendleton**

# PHOTOGRAPHY FROM THE HUDSON VALLEY

More stunning photography from **HRES Vice President Chuck Nieder**...

***From Top to Bottom**: Great Egret along the Erie Canal; Blackhead Mountain in the Catskills; river ice at Nutten Hook (Columbia County).*

If you have photos of Hudson River Valley scenes that you would like us to consider for future newsletters, please email them to david.davis@hdrinc.com

*We need your help. Interested in volunteering your time to support the HRES mission?*

*Contact an HRES Board Member today!*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*Founded in 1970, the Hudson River Environmental Society is a nonprofit, non-advocacy organization that delivers the science behind Hudson Valley issues to citizens, scientists, and decision makers. We enable objective discussions, provide forums for rigorous science, connect disparate views, and showcase the region's natural heritage. We are academic researchers, government officials, nonprofit scientists, private consultants, teachers, students, and interested residents who find real solutions.*