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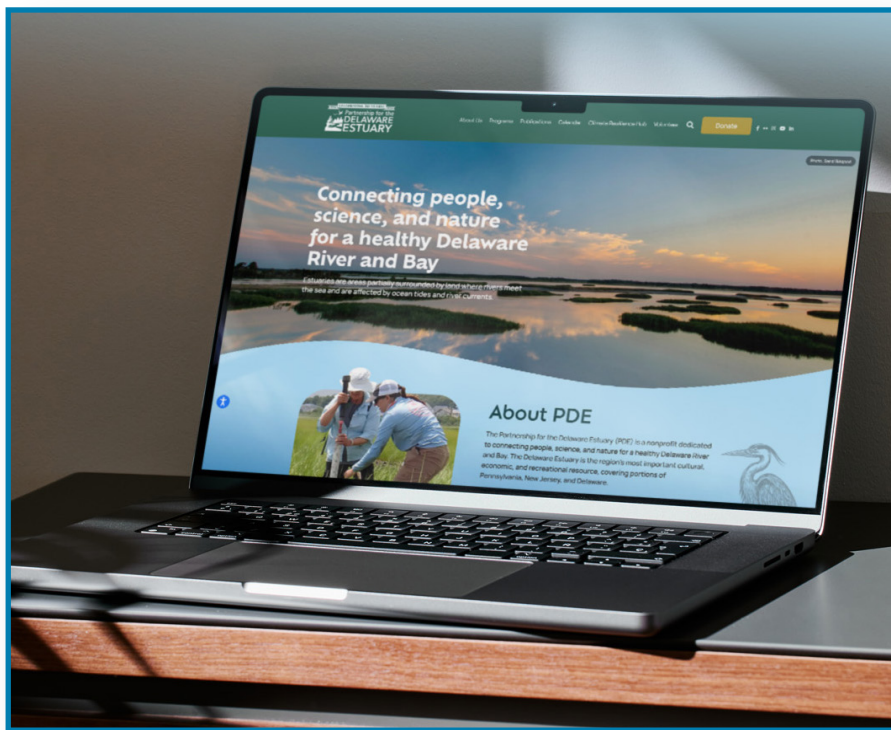
ESTUARY NEWS

Take a Peek:

Our Shiny New Website!

On April 1, PDE officially launched a newly redesigned website – and no, that’s no April Fools joke. Last redesigned in 2017, the new website retains essential information about PDE’s science and engagement programs, the Delaware Estuary, and our board and committees. It also includes new features such as a centralized document library, a climate resilience hub, and spotlights the amazing places, events, and wildlife that make our estuary and region so special. The new site also includes accessibility features and other enhancements designed to make the experience more welcoming for all visitors. In honor of our 30th anniversary, we invite you to explore three decades of work, programs, and impact. Take a look, click around, and tell us what you think. Our web address is the same: DelawareEstuary.org.

“We are so proud of our new website,” said PDE Executive Director Kathy Klein. “Launching it during our 30th anniversary year makes this milestone especially meaningful. I invite everyone to visit us online and explore everything from our volunteer page to recent blog posts, and a page celebrating our history.”



COMMITTEES CONTACT LIST

Meetings conducted by the Delaware Estuary Program’s implementation and advisory committees occur on a regular basis and are open to the public. For meeting dates and times, please contact the individuals listed below:

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ON THE COVER

The dense green canopy of leaves from wild celery (*Vallisneria americana*) grows in an aquarium for study. In the wild, it provides shelter for fish and invertebrates, as well as food for waterfowl and small animals in the Delaware River and Estuary. See Page 6.

FOLLOW US ON:



Downstate Artists Take Top Prizes in Delaware Art Contest

For the second year in a row, a downstate Delaware artist took the top prize in the annual Delaware Trash Into Treasure Art Contest. Smyrna resident Angelina Smith claimed first place for her painting “Deer in the Winter,” while Frederica resident Sharon Naccarato – last year’s first-place winner – earned second place for her mixed-media work “Birds of a Feather Collect Trash Together.” Claymont resident Apeksha Jain placed third with an untitled mixed-media piece depicting a woman sitting in a river surrounded by trash.



First Place, “Deer in the Winter,” by Angelina Smith.

“I’m beyond ecstatic!” Smith said. “Thank you and the Partnership for the Delaware Estuary for this amazing opportunity.”

Now in its fourth year, the contest runs in conjunction with the Christina River Watershed Cleanup, held this year on April 11 (see Page 8). It welcomes all artistic mediums, provided the subject matter reflects the importance of keeping waterways clean. This year’s submissions ranged from paint and pen-and-ink to mixed media incorporating physical items such as



Second Place, “Birds of a Feather Collect Trash Together,” by Sharon Naccarato.



Third Place, “Untitled,” by Apeksha Jain.

buttons, beads, and recycled materials including cut up plastic jugs. All Delaware residents were eligible, and PDE received a record number of submissions – with entries from all three Delaware counties.

“Each year, the contest continues to grow, and we love seeing that momentum,” said PDE Executive Director Kathy Klein. “It’s a natural complement to the Christina Cleanup, underscoring the importance of clean water while showcasing incredible creativity.”

Winners were chosen by public vote, drawing nearly 600 ballots. Prizes ranged from \$150 to \$350.

30 Years in Focus

Three Decades of Photos, Stories, and Impact

This year, as we celebrate our pearl anniversary, we invite you to journey with us through three decades of milestones, memories, and moments that have shaped who we are. Like a pearl, each layer of effort, collaboration, and discovery has

brought us to where we are today. Through all four issues of Estuary News, we'll take a look back at the photos that tell our story. This edition takes us from 2004 to 2011, and the next issue will take us from 2012 to 2019. 🌊

2004 to 2011



2005 - The first Delaware Estuary Science & Environmental Summit was a two-part conference hosted in Wilmington and Cape May, New Jersey. This conference has been held every-other year since then and has spearheaded many of PDE's key scientific initiatives, and helped solidify PDE's identity as a science-based organization. The next summit is taking place in February 23 and 24 at the Clayton Conference Center in Newark, Delaware, with the call for abstracts coming later this summer!



2008 - PDE and Rutgers Haskin Shellfish Research Lab staff installed a living shoreline along eroding marshes of the Maurice River in New Jersey as part of the Delaware Estuary Living Shoreline Initiative. While living shorelines are now an established restoration tactic, they were still an emerging approach at the time and one we are proud to have helped advance since 2008.



2009 - The Delaware Bay Oyster Restoration Task Force received a Coastal America Partnership award, the only environmental award given by the White House. Among those in attendance were former PDE Executive Director Jennifer Adkins; former Delaware River Basin Commission Deputy Director Bob Tudor, Collin O'Mara, then secretary of the Delaware Department of Natural Resources and Environmental Control; the late U.S. Rep. Michael N. Castle; and Eric Powell, the former director of the Rutgers University Haskin Shellfish Research Lab.

2004 2005 2006 2007 2008 2009 2010 2011



2008 - PDE staff, board, and partners traveled to the Brandywine River to learn about freshwater mussels from the late Danielle Kreeger, Ph.D (right). Past PDE Board members Rob Goldman (left) and Kevin Donnelly, along with Amie Howell, PDE's former EPA Program Coordinator.

continued on page 5



2011 - More than 800 students submitted original drawings and videos to the Protecting Philadelphia's Hidden Streams Art Contest. The drawings and videos focused on clean water and encouraging dog owners to pick up after pets. PDE continues this tradition of using art as an inspiration for environmental appreciation and stewardship through annual contests and the pilot Artist in Residence Program, which will conclude this fall.



2011 - PDE hosted the 14th annual Delaware Estuary Teachers' Watershed Workshop. For a week in July, teachers explored the Estuary and learned about the plants, animals, and waterways that make our region unique. Here, teachers participate in a seining activity at Cape Henlopen State Park in Lewes, Delaware.

Dive Into the World of Wild Celery

By Jessica (Jecy) Klinkam, Community Ecology Research Fellow

The Delaware Estuary is full of natural, hidden wonders. In just a little time spent along the rivers, you will often encounter waterfowl or a small mammal, such as a muskrat ambling through the underbrush. At the riverbank, you can see flitting

fish, hidden freshwater mussels, or a snail the size of your fingernail. And as you keep looking, you'll notice the green backdrop of submerged aquatic vegetation (SAV) that connects all of these organisms, from the ducks flying high above to those tiny snails.

A dominant member of this underwater green community is *Vallisneria americana*, more commonly known as wild celery.

Wild celery is a native plant that lives entirely underwater. Its dense canopy of leaves provides shelter for fish and invertebrates and food for waterfowl and small mammals. These underwater meadows support entire food webs, making them a foundation species in the Delaware Estuary. When SAV, such as wild celery, declines, the effects ripple outward, resulting in less resilient ecosystems.

Wild celery's long leaves help to improve water clarity by slowing water movement, which allows suspended sediment to settle. These leaves also improve water quality by producing oxygen and absorbing excess nutrients like nitrogen and phosphorous. The plant's dense roots stabilize sediment, helping to reduce erosion. In the Delaware Estuary, with a long history of industrialization and urbanization, these ecosystem services are invaluable.

Scientists at PDE and partner

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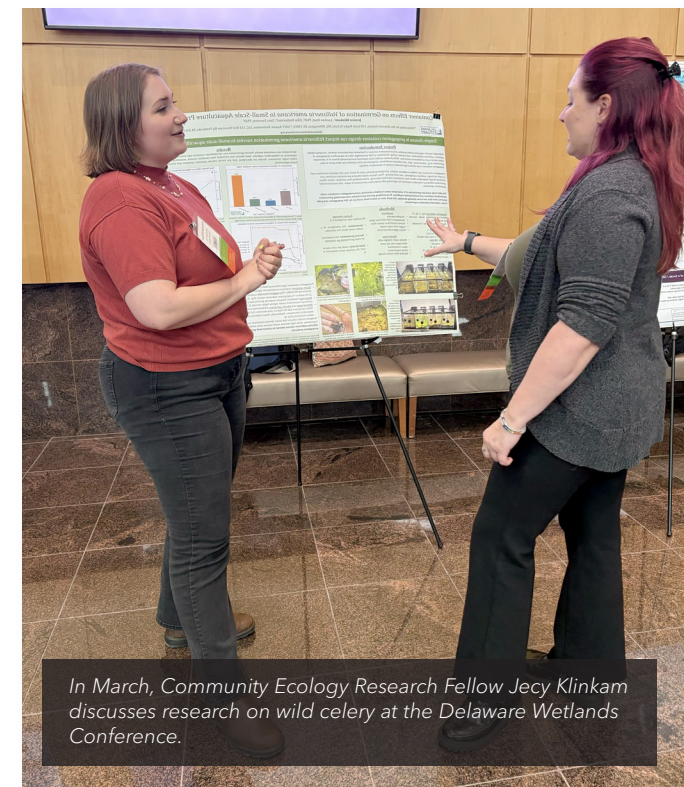


A tiny snail sits in the dense, green canopy of wild celery (*Vallisneria americana*). This underwater plant provides food and shelter for many creatures in the Delaware River and Estuary, including snails, fish, invertebrates, and waterfowl.

Wild Celery from page 6



The tops of long wild celery leaves float near the surface of the Brandywine Creek in Delaware.



In March, Community Ecology Research Fellow Jecy Klinkam discusses research on wild celery at the Delaware Wetlands Conference.

organizations are working to protect, enhance, and restore wild celery in the Delaware River and beyond. For example, through funding from the National Fish and Wildlife Foundation, PDE has recently installed one of the first living shorelines in the Delaware River at the Camden County Municipal Utilities Authority's Water Treatment Plant in Camden, New Jersey. As part of the living shoreline design, PDE will plant native wild celery to enhance existing submerged aquatic vegetation meadows and further bolster the essential ecosystem services of submerged aquatic vegetation. By protecting foundational plant species, such as wild celery, we can make a big difference in the health of the Delaware Estuary for all communities, human and non-human, that rely upon it.

Jecy Klinkam is studying wild celery community ecology at Drexel University and presented her findings on optimizing wild celery propagation operations at PDE in a poster session at the 2026 Delaware Wetlands Conference. 💧

Two Cleanups Make a Sweep in DE & PA this Spring

This spring, two cleanup initiatives in Pennsylvania and Delaware were a big success, thanks to the help of amazing volunteers.

On March 26, the Schuylkill Action Network hosted its annual Scrub & Pub litter cleanup in Upper Merion Township, Pennsylvania. This signature event brings together residents, businesses, and local government around a

shared goal: keeping litter out of the waterways, including the Schuylkill River, which supplies drinking water to millions. More than 35 volunteers, including partners from Aqua, an Essential Utilities



Staff from Aqua, an Essential Utilities Company, and the Children's Hospital of Philadelphia, volunteer at the annual Scrub & Pub litter cleanup in Upper Merion Township, Pennsylvania.

“The Scrub and Pub is more than just a cleanup,” said Upper Merion Township Manager Tony Hamaday. “It’s a perfect blend of community spirit and environmental stewardship, and a special opportunity for residents, nonprofits, and businesses to come together and make a tangible difference in the health of the Schuylkill River watershed.”

Company, and the Children’s Hospital of Philadelphia, collected an impressive 2.5 tons of trash. Afterward, volunteers toasted a job well done with a free beer and appetizers at Puddler’s Kitchen, courtesy of Conshohocken Brewing Co., plus an ice cream discount from Frosty Falls. Other partners included the Aqua, an Essential Utilities company, Philadelphia Water Department and PennDOT, which supplied cleanup materials.

Two weeks later, nearly 500 volunteers gathered across northern New Castle County, Delaware for the 34th annual

Christina River Watershed Cleanup – one of the region’s longest-running environmental efforts. Since 1992, the cleanup has removed more than 360 tons of tires, appliances, household items, and other debris from the Brandywine, White and Red Clay creeks, and the Christina River. This year, volunteers from all sites, stretching from Wilmington to Newark, collected roughly 8.5 tons of trash and debris, including old pipes and tires. That total included efforts from PDE’s 19 volunteers at Vandever Avenue in Wilmington who collected 640 pounds of trash. To put that in perspective: that’s about the weight of a grizzly bear.



A volunteer in Wilmington collects a bag of litter as part of the April 11 Christina River Watershed Cleanup.

It’s Nesting Season for Osprey in the Delaware Estuary



An osprey sits on its nest in Lewes, Delaware. This is the time of year when these raptors return to the Delaware Estuary to nest and hatch chicks. Often, osprey build their nests on the tops of tall dock pilings, utility poles, or special areas created for them.

Guess who’s back? Osprey have returned to the Delaware Estuary from their seasonal southward migration – and by now, they’re not just nesting. They’re hatching chicks.

Every March, osprey make their seasonal return, with nesting kicking into gear in April. These large birds – roughly the size of a goose – build impressive nests atop trees, utility poles, and specially erected platforms. They’re devoted recyclers, reusing and expanding the same nest year after year. Some nests reach six feet wide and 13 feet deep.

Osprey have a dramatic hunting style: a feet-first plunge into the water to snatch fish swimming near the surface. Oily feathers, broad wings, and a unique reversible toe help them burst back into the air – often with a fish firmly in their talons. They succeed roughly 25 to 70 percent of the time, typically taking just 12 minutes to make a catch.

Life isn’t without its hazards. Fledgling osprey can fall prey to bald eagles and great horned owls; raccoons occasionally raid their eggs; and rival raptors have been known to commandeer nests and steal freshly caught fish. Human activity adds additional pressure.

The good news: in recent years, osprey populations in the Delaware Estuary have become more stable and trended upward, thanks largely to reduced contaminants and improved conservation measures. But the work isn’t done. Despite this progress, there is growing concern that osprey aren’t reproducing as successfully as they should. While stricter regulations have reigned in legacy pollutants like DDT and PCBs, emerging contaminants are drawing new scrutiny. Current exposure levels fall below thresholds of known concern – but ongoing monitoring remains essential for understanding the long-term effects on the food chain and the broader ecosystem.

This information was largely taken from the 2022 [Delaware Estuary Technical Report for the Delaware Estuary Basin](#) and the [2023 State of the Estuary Report](#).

THINGS YOU CAN DO

- Volunteers are crucial for monitoring nests and the success of Osprey populations. To get involved, check out the [Osprey Watchers](#) and help monitor nest sites near you.
- You can also contribute data about any bird species you see by contributing to a community science program like [eBird](#).
- If bird watching is not your strength, you can still lend a hand by helping to build and maintain nesting sites near you, or learn bird calls with apps like [Merlin Bird ID](#).



BAYSIDE BASH FOR PDE'S 30TH ANNIVERSARY

Thursday, June 25, 5 to 8 p.m. Pennsville, NJ

Join us in celebrating PDE's 30th Anniversary on June 25 at The Shipyard in Pennsville, New Jersey. Enjoy spectacular river views, fire pits, and games of cornhole and shuffleboard at this casual, family-and dog-friendly event. [Get your tickets now!](#)



DELAWARE RIVER FESTIVAL

Saturday, September 26, 10 a.m. to 4 p.m., Penn's Landing, Philadelphia & Wiggins Park, Camden

Mark your calendar because the 2026 Delaware River Festival is coming back! Join us for a free day of family fun on both sides of the river, with games, crafts, and hands-on learning from environmental educators. Spend the day in Philadelphia, Camden, or make a full day of it and visit both sides of the river. Keep checking the [Riverfest website](#) for exhibitor updates and more details.



EXPERIENCE THE ESTUARY CELEBRATION

Thursday, October 8, 5 to 8:30 p.m. Vie by Cescaphe, Philadelphia

Save the date for PDE's signature annual event – and this year, it's extra special. As we mark our 30th anniversary, the Experience the Estuary Celebration brings together regional leaders, partners, and supporters for an evening of great food, meaningful connections, and a shared commitment to protecting the Delaware River and Bay. Three decades in, the work continues – and we'd love to celebrate it (our pearl anniversary) with you. Sponsorship is now available and ticket information is coming in late summer. Learn more on our [website](#).

Celebrate 30 Years With Us:

Give \$30 For 30!

This year marks the Partnership for the Delaware Estuary's 30th anniversary – our pearl anniversary, a milestone that reflects three decades of protecting and restoring the tidal Delaware River and Bay. To honor this important year, we're inviting you to join our "\$30 for 30" years campaign.

Your gift of \$30 or more will help fuel the next chapter in PDE's history of supporting clean waters, thriving habitats, and resilient communities throughout our estuary.

Your generosity keeps this work going. Thank you for being part of our story – and our future.💧



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THE PARTNERSHIP FOR THE DELAWARE ESTUARY

CONNECTING PEOPLE, SCIENCE, AND NATURE FOR A HEALTHY DELAWARE RIVER AND BAY

The Partnership for the Delaware Estuary, host of the Delaware Estuary Program, leads collaborative, science-based efforts to improve the Delaware River and Bay, which covers portions of Delaware, New Jersey, and Pennsylvania. To find out how you can become one of our partners, call PDE at (800) 445-4935 or visit our website at www.DelawareEstuary.org.

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