

# The Watershed

Vol. 27

# **The Oyster Pond Environmental Trust Newsletter**

2024

OPET Annual Meeting Thursday, August 15, 7 pm Sea Education Association

"Conservation Success Stories in Falmouth"

with Mike Tucker



Baltimore checkerspot. Photo: Mike Tucker

The town of Falmouth has thousands of acres of preserved land, managed by several organizations including OPET. Woods Hole naturalist and photographer Mike Tucker will share some of the many success stories of wildlife and other species thriving locally that are declining, threatened, or endangered on a larger scale. In his presentation, learn how land conservation and habitat restoration works and why it matters! Mike began his career with the US Fish and Wildlife Service and worked many years for the Rhode Island Audubon Society.

# A Message from Alfredo Aretxabaleta,

**OPET President** 

Dear Friends of Oyster Pond,

As we reflect on another year of preservation at Oyster Pond, I am reminded of the remarkable power of collaboration. Our achievements are a testament to the dedicated partnerships we have fostered with various organizations, each contributing their unique strengths and expertise to our shared mission of protecting and enhancing our cherished environment.

One of the highlights of this year has been our collaboration with **Americorps**. The energy and commitment of these early-career environmental professionals has been invaluable in our



conservation efforts. Their incredible hard work in the spring removing invasive honeysuckle around the majestic European linden tree, one of the most beautiful spots along the OPET trails, showcases their dedication to habitat restoration. They returned in steamy mid-July heat to clear and prune all the trails to maintain them in good walkable condition. We invite you to witness firsthand the positive impact of their work. We are truly grateful for their efforts and encourage our members to learn about and support the work Americorps does around the country.

Our work would not be possible without the support of the **Falmouth Conservation Commission**, particularly in permitting the removal of invasive plants. Their guidance and approval have enabled us to restore native habitats, fostering a healthier, more resilient environment for the diverse species that call Oyster Pond and its surroundings home. The **Falmouth Department of Public Works** has been invaluable in maintaining the inlet at Trunk River. Their tireless efforts and prompt response have ensured proper water flow, which is crucial for the health of Oyster Pond. These partnerships exemplify how local government and environmental organizations can work hand in hand to achieve common goals.

To continue our efforts to maintain the water quality of Oyster Pond, we have partnered with two organizations: the **Association to Preserve Cape Cod** (APCC) and the **University of Massachusetts - Dartmouth**. Their research and scientific insights have been crucial in understanding the complexities of the pond ecosystem and ensuring regular monitoring of its waters for nutrient and oxygen concentrations (UMass-Dartmouth) and for algae and cyanobacteria (APCC). Together, we have been able to apply research to practical conservation strategies, ensuring that our efforts are effective in keeping Oyster Pond healthy.

Finally, our partnership with the **Compact of Cape Cod Conservation Trusts** has been instrumental in our land stewardship. The advice and support they provide is fundamental for ensuring that these natural spaces are protected for future generations. Their expertise in land protection and management has been a cornerstone of our conservation efforts.

Looking ahead, I am filled with optimism and excitement for what we can achieve together. The spirit of collaboration is at the heart of our success. I am deeply grateful to all our partners. volunteers, and supporters for their unwavering commitment to protecting Oyster Pond.

# **Join OPET Today**

Your donations make it possible to continue our work to conserve and protect the natural environment and ecological systems of Oyster Pond.

#### Officers & Directors 24-25

President - Alfredo Aretxabaleta Treasurer - Matt O'Connor

Directors:
John Dowling
Jennifer Goebel
Steve Leighton

Dana Rodin Olivia Schmidt James Wilson

*Administrator* - Chris Brothers Visit our web site at

www.opet.org

Or send us an email at info@opet.org

OPET Board meetings are open to all OPET members. Meetings are at 4:30 pm on the second or third Sunday of the month at Treetops Clubhouse or through Zoom.

We are a 501(c)(3) organization. Contributions are tax deductible. Tax Id number—04-3278142





Scan this QR code to go directly to the OPET website.





Americorps volunteers spread gravel in the parking lot before heading out to clear the OPET hiking trails in July. Photo: Chris Brothers

The area around the
European linden tree cleared
of invasive honeysuckle by
Americorps volunteers in
April. Photo: Alfredo
Aretxabaleta

## Gifts in honor of:

- ♥ Wendi Buesseler by Victoria Lowell
- Michael Casso by Joseph and Jean Sanger
- Wendy Sears Child by John Child
- ♥ Dr. Mindy Hall by Leslie Hall
- **▼** Lee Turner and Family by John Frank
- ♥ Ivan Valiela by Thomas and Virginia Gregg

## Gifts in memory of:

- ♥ Leonard and Helen Beford by Melissa Beford
- ♥ Natalie Aronson Eisen by Thomas Eisen and Elizabeth Jonas
- ♥ Harry Haas by Joseph and Jean Sanger
- ♥ Barbara Lankow by Richard Lankow
- ♥ Werner Loewenstein by Birgit Loewenstein
- ♥ Julie and Stubby Rankin by Joan Rankin Berman
- ♥ Cecily Selby by Judith Fenwick
- ♥ Dr. Norman Starosta by Peter Starosta
- ♥ Jayne Starosta by Peter Starosta
- ▼ Lou Turner by John Frank
- ▼ Lou Turner by Judith Ziss
- ▼ Lou Turner by Robert and Iris Fanger
- ♥ Lou Turner by Anne Runfola

# **Oyster Pond Water Quality and Keeping Trunk River Open**

by Alfredo Aretxabaleta, OPET President

Oyster Pond's water quality is intricately tied to its connection with Vineyard Sound via Trunk River.

Maintaining this connection is one of OPET's most significant management issues. Storms frequently bring in gravel, fine sands, and dead eelgrass, which clog both Trunk River and the Lagoon, preventing both outflow from the pond and tidal inflow from the Sound. This delicate balance requires constant monitoring and maintenance to ensure a healthy exchange of water between these two bodies. The importance of Trunk River flow can be seen in at least three factors:

#### 1. Water Quality and Algal Bloom Prevention:

The flow of water out of Oyster Pond through Trunk River helps maintain targeted salinity levels between 2 to 5 g/kg. Proper salinity levels are crucial to preventing algal and cyanobacteria blooms in the Lagoon, which can severely degrade water quality and harm aquatic life.

- **2. Flood Prevention:** A flowing Trunk River can prevent water from backing up into Oyster Pond during extreme events like hurricanes and Nor'easters. By ensuring proper drainage, the risk of property damage is minimized.
- **3. Herring Population:** The resident herring population in Oyster Pond relies on an unobstructed passage through Trunk River for spawning. Adequate water flow is essential for their migration, which is a vital part of the pond's ecosystem. The Lou Turner Herring Counters are vital in keeping an eye on Trunk River and letting us know if it gets blocked.

Historically, the number and location of Oyster Pond's connections to Vineyard Sound have fluctuated due to storms, with geologic evidence suggesting that there were up to three inlets at one time. The outlet of Oyster Pond has been fixed to Trunk River since the completion of the railroad to Woods Hole in 1872. Recognizing the importance of keeping the flow open, the Town of Falmouth has included a dredging schedule for Trunk River and the Lagoon as part of their management plan for Oyster Pond. This regular maintenance helps manage the challenges posed by storm-induced blockages.



UMASS-Dartmouth scientist Sara Horvet's son James, age 8, helps her collect water samples and measure turbidity in Oyster Pond in July. Sara has been conducting water quality testing at three sites on the pond four times during the summer for several years. Photo: Sara Horvet

The ongoing coastal resiliency project by the Town of Falmouth aims to improve habitat, water quality, and tidal flushing. This initiative highlights the broader issue of inlet blockage along the south shore of Falmouth, which requires continuous and costly action from the Department of Public Works (DPW). Unlike some other locations, Trunk River has remained relatively unobstructed due to the efforts of OPET and DPW.

As sea level rises, the problem of inlet blockage is likely to worsen, necessitating more frequent and more costly interventions. Proactive monitoring and the prompt removal of blockages will be essential in maintaining optimal conditions for water exchange, ensuring both water quality and the health of the herring population. OPET is grateful for the continued collaboration with the Town of Falmouth. Together, we can ensure a healthy and vibrant Oyster Pond for future generations.

# 2024 Lou Turner Trunk River Herring Count

by Matt O'Connor, OPET Treasurer

The annual spring herring count on Trunk River, now named for long-time herring count coordinator Lou Turner, was a big success! We had more volunteer counters, 26, than we've had in recent memory. Collectively, they performed 322 10-minute sample counts between April 1 and May 27, a 44% increase over the number of counts performed in 2023.

The total number of herring counted was 4,038 this year, a 69% increase over the 2023 herring total. The count data was submitted to the Massachusetts Department of Marine Fisheries, who plugged our data into an algorithm to estimate the size of the entire spring herring run in Trunk River. DMF's estimate of the entire 2024 Trunk River spring herring run was 57,398!

The estimate for the 2023 herring run was 40,250. So, this year's estimate is 43% higher than last year's estimate and appears to mirror the fact that we had 44% more counts this year than last. We are pleased with the higher count we had this year and the higher estimate that resulted from it. But it's hard to read too much into these numbers since they cover only a two-year time frame. What will be telling is the trend we see over a multiple year period.

This year's count was not without its challenges. On the evening of April 3, a big storm deposited an enormous quantity of sand into Trunk River completely blocking the flow of the river into Vineyard Sound. Fortunately, Chuck Martinsen, Deputy Director of the Falmouth Department of Marine and Environmental Services, was able to use



The Osprey nest on Oyster Pond had three chicks this summer. Photo: Drew Forsberg Photography

heavy machinery to unclog the river the day after we contacted him. This quick response by the Department of Public Works minimized the impact of the blockage on the herring migration and count. Thank you, Chuck Martinsen and the Falmouth DPW!

We'd also like to extend our sincerest thanks to our faithful volunteer counters who were at Trunk River, rain or shine and even in the dark of night, fulfilling their counting obligations. The counters are (in alphabetical order): Alfredo Aretxabaleta, Paula Beckerle, Jim Bourdon, Samantha Broun, Jay Burnett, Brad Butman, Michael Casso, Elizabeth Davies, Jackie Ferguson, Lynn Francis, Jennifer Goebel, Gordon Juric, Pat Keoughan, Deb Maguire, Peg & Jim McGrath, Cindy Moore, Kate Morkeski, Andrew Nelson, Matt O'Connor, Rob Rosenthal, Margaret Sulanowska, Linda Taylor, Peter and Gisela Tillier, and Eric Turkington.

To volunteer as a herring counter next year, contact Matt O'Connor at oconnorscapecod@gmail.com.

I enjoyed the whole experience of counting herring this spring as they swam up Trunk River, from the unique splashes they make as they approach the river's mouth, to the personalities they show as they react to the sliver of light from my flashlight, to watching their wakes as they continue upstream. I love sighting other creatures, such as the muskrat in the nearby marsh, the seals off the jetties, an osprey overhead hoping for a final meal of the day, or a Herring Gull stationed on the jetty, ready to grab the first herring going through. That gull knows the herring will come in as soon as it gets dark.

One night, under a bright gibbous moon, I was feeling as if I wouldn't be counting any herring on my watch. About an hour later a fog bank came in, obscuring the moon making the night completely dark. Within minutes I heard the splashing of herring coming up the river. I was so relieved, as it's disappointing to get all set up to count and then the herring don't come during your time. After years of counting, I believe most herring wait until dark to come up the river. This night affirmed that belief.

Pat Keoughan, Herring Counter

Congratulations to all the Trunk River counters and to Matt for so ably organizing the program. Now we can look forward to a lot of "little herring fry" leaving the pond!

Lee Turner

# **Species Spotlight: River Otters**

by Chris Brothers, OPET Administrator

The first time I saw river otters on the Cape, I was eating lunch at a restaurant on Wellfleet Harbor. It was a sunny, blue-sky January day but had snowed overnight, and the plows had pushed up big piles of snow at the edge of the parking lot. Three otters were bounding up one side of the sparkling mountain of snow, then sliding on their bellies down the other side. There really is no other way to describe it; like kids on a snow day, they were having fun playing in the snow.

Otters are a lot more common on the Cape and in Massachusetts now than they were back then. Wildlife managers attribute this to wetland conservation efforts, reduced water pollution, and increased beaver populations as otters often use old beaver lodges as denning sites. Most active at dusk and after dark, otters are easily overlooked and are sometimes mistaken for muskrats, which do live on Cape Cod, and beavers, which do not.

A good way to find otters is to look for their signs. In the winter, otters frequently slide on the snow, leaving a distinctive, often curving trail followed by the impression of their long, tapered tails. Their tracks in the mud along the banks of a pond or saltmarsh are another good clue. A little pile of silvery scales from a fish along the edge of the pond is a dead give-away that otters have been feeding. They are carnivorous and also feed on crayfish, frogs, snakes, insects, and small mammals.



An otter on Oyster Pond. Photo: Mike Schanbacher



A curious river otter watches as a kayaker passes by. Oyster Pond residents report seeing otters on and underneath their docks. Photo: Mike Tucker

Otters create latrines, sites along a pond, river, or marsh where they socialize, rolling in the sand or grass and depositing scat and scent mounds. This is one method otters use to communicate with each other and another, somewhat "fragrant," sign otters are nearby.

Otters are members of the Mustelid or weasel family including five species that are found in Massachusetts: river otters, fishers (our species spotlight last summer), minks, and long and short-tailed weasels. The largest Mustelid in the Northeast, they range in size from 35 to 50 inches and 11 to 30 pounds. Like other weasels, they show "delayed implantation" with the fertilized embryo implanting in the uterus 10 or 11 months after their March breeding season.

The litter of one to six blind, toothless kits is born two months later. The kits are weaned at three months but typically stay with the mother for another seven months, leaving just before she gives birth to the next litter. Male otters often travel in bachelor groups and may forage up to six miles in a given night.

Fun fact: otters can close their nostrils and ears underwater and hold their breath for up to eight minutes! Their fur is waterproofed with oil they secrete and traps small air pockets, helping to insulate them underwater.

# **OPET Trail Map Now Available in Portuguese**

One of OPET's goals is to increase outreach to the Falmouth community. To this end, we recently had our trail map translated to Brazilian Portuguese and soon hope to have a Spanish translation completed. These are the most spoken languages in Falmouth after English. You can access these maps on our website and at our trailhead at the end of Fells Rd.



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A pair of Blue Grosbeaks nests at the Frances Crane a few sites in Massachusetts where they breed.

Photo: Mike Tucker

Refreshments will be served

**Sea Education Association** 171 Woods Hole Road, Falmouth

"Conservation Success Stories in Falmouth" with Naturalist Mike Tucker

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The Oyster Pond Environmental Trust P.O. Box 496 Woods Hole, MA 02543 stamp