### Experiences Managing A Herring Run Count on Cape Cod

### Challenges and Benefits of A Volunteer Visual Count Program

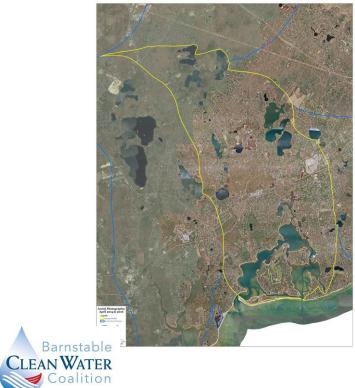


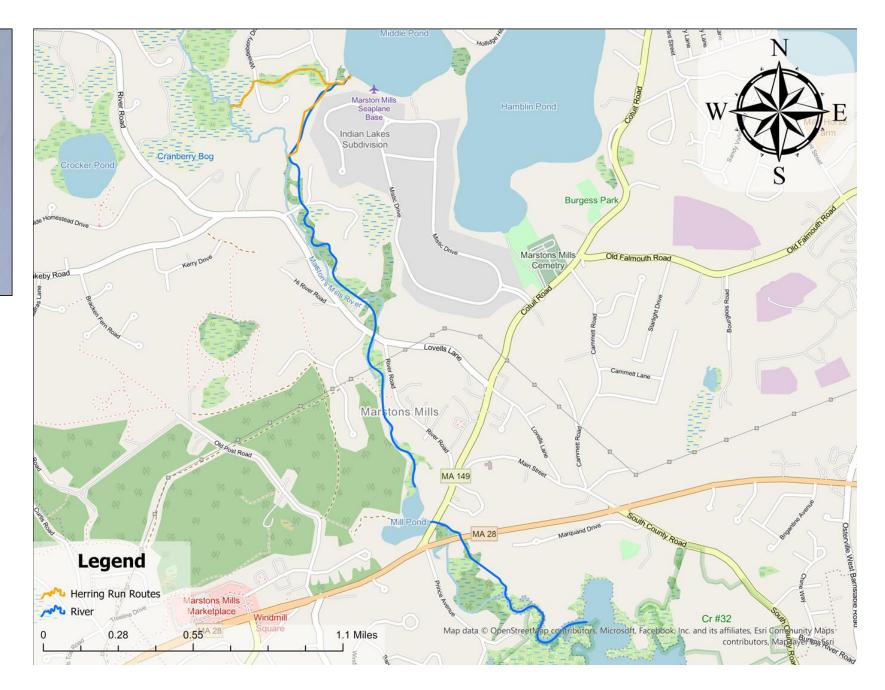












# Challenge: Site Accessibility

- Difficult due to distance and terrain especially for volunteers with mobility issues
- Limited public access
- Less volunteers capable







## Challenge: Numbers – Volunteers & Counts

- 2½ months 7 days a week 12 daily time slots 2 fish ladders = 1,824 counts
- Data gaps and less representative data
- Encourage volunteers to spread out counts

Barnstable Clean Water Coalitio							
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# Challenge: Confusion

- "Flip-flopping" fish
- Data entry and transcription errors on Google Doc Form

	<
BCWC Herring Count Volunte	eer Data
Form 2025	
Please use this form to record river herring count data from the fish ladders.	e Mill Pond and Middle Pond
If you have any questions, please contact Heather Rockwell at http://www.instruction.com/please	
hrockwell@bcleanwater.org Switch account	۵
* Indicates required question	
Where did you count? *	
Choose 👻	
Date of your count: *	





# Challenge: Volunteer Demographics

- Older, retired population on Cape Cod
- Electronic communication, scheduling and uploading data





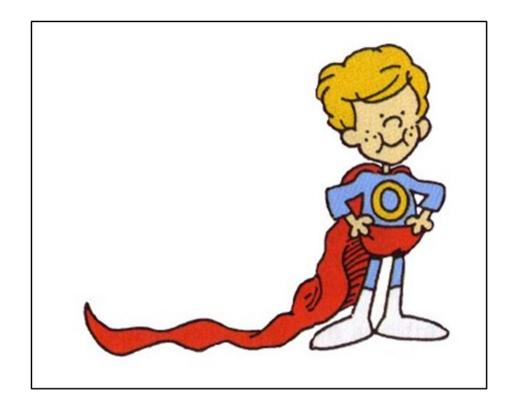
Smile For The Camera! Please take photos while you are at the fish ladders, take a selfie or have someone take a photo of you counting herring! Send your photos to treather. We use these photos for social media posts and to educate the public on the time and effort citizen scelarist fiver herring monitors	News Welcome to the Volunteer Information Center, This online feature gives you an easy way to keep-in- touch with the volunteer program. You can check your schedule, postyour volunteer service, receive messages, and much more: anytime, and from any device.	Easy Count Scheduling with VicNet App Make scheduling your herring counts and submitting your data via the Google Doc form even easier by downloading the VicNet Mobile app on your smartphone. You'll be able to access your Volgistics account easily and while on the go.
donate to collect this valuable data for BCWC and the MA Division of Marine Fisheries.	Watch this space for more volunteer news!	VicNet Mobile App Available Wirk available for the Victor, available for them a detailed and page second
	<ul> <li>Middle Pond (#90 - #110 Flume Avenue) Herring Counter (Assigned)</li> <li>Mill Pond (Rte. 149 &amp; Rte. 28) Herring Counter (Assigned)</li> </ul>	Constant of the     C
2025 Herring Count Google Doc Data Form Document Link		F 🛛
	Remember - Record Your Service Hours Please track and lecord your Service Hours for swept herring count, SMAST and PALS water sampling day, and MIMC comotifying event. From the time you leave your thouse, drive to the fish ladder, completely your 10-minute count, and arrive shopping or pickleball) - that is the total time you record for Service Hours. Thanks!	Spring Arrives In Less Than Two Months! Get ready for the annual rite of spring - the return of migrating river hering to rivers along the coast of Massachusetts. Beginning April 1st, BCWC volunteers will count the herring as they swim from Nantucket Sound through the Three Bays estuary, updates into Middle Pond.



# Challenge: Maintaining Engagement

- Excited to count fish, not zeros
- Difficult to keep volunteers engaged



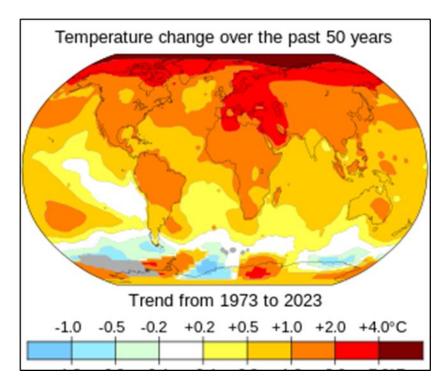




# Challenge: Environmental Conditions

- Warmer water temperatures = earlier sightings
- Missed fish counts outside of the current counting window
- Recent counts are higher earlier in the season and lower later in the season





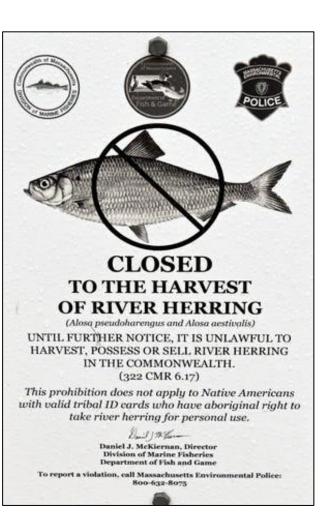


## **Challenge: Extenuating Circumstances**

- Reporting Issues
- Respecting Indigenous Tribal Member Rights

Removing
 Obstructions











## Benefit: Volunteer Recruitment

- Popular volunteer opportunity
- Flexible schedule, minimal time commitment
- Get outside, nature and wildlife





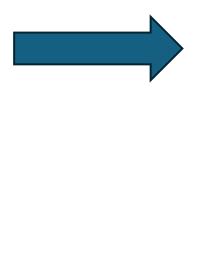
Barnstable



Barnstable Coalition Home Mail Schedule	Service	Heather 🕑 👻				
Use the next and previous options to Today < >	move to a different date range. Tuesday, April 1, 2025	🖶 Filter Day 🗸				
Your Schedule						
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( <b>③ 8:00am - 9:00am</b> ▲ You	Mill Pond (Rte. 149 & Rte. 28) Herring Counter	Remove				
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## **Benefit: New Technology**







#### BCWC Herring Count Volunteer Data Form 2025

Please use this form to record river herring count data from the Mill Pond and Middle Pond fish ladders.

If you have any questions, please contact Heather Rockwell at <u>hrockwell@bcleanwater.org</u> or 508.420.0780.

hrockwell@bcleanwater.org Switch account

\* Indicates required question

Where did you count? \*

Choose

Date of your count: \*

Date

mm/dd/yyyy 🗖

### **Benefit: Educate and Involvement**

• Students

Barnstable CLEAN WATER

Coalition

• Family Friendly













## Benefit: Organizational Education and Engagement

- Educate and engage volunteers
- Promote participation in other opportunities



Barnstable AN WATER Coalition











### Benefit: Encourage Citizen Science

- Scientific knowledge
- Community engagement
- Public trust in science
- Environmental monitoring
- Increased scientific literacy
- Free labor









## **Benefit: Build Relationships**

• Volunteers

oalition

 Barnstable Department of Natural Resources, WHOI Sea Grant, Cape Cod Cooperative Extension, MA Division of Marine Fisheries









# **Benefit: Communication**

- Community outreach
- Publicity
- Acknowledgment
- Social Media
- Photos







### JUST GET

Barnstable group ready for annual season ritual

(and fish)

to spring

Heather McCarron Cape Cod Times USA TODAY NETWORK

Spring is just a few weeks away, and for the Barnstable Clean Water Coalition that means one thing in particular. It's time to count fish. Not just any fish. River herring. The organization is putting together a team of volunteer herring monitors at fish ladders along the Marstons Mills

fish ladders along the Marstons Mills River for the annual spring migration of river herring. Counting takes place April 1 to June 1. In order to prepare, the coalition is

In order to prepare, the counton is hosting an in-person information and training session on Wednesday, March





Herring Count Volunteer Training Session Tuesday, March 4th at 4:00pm Osterville Village Library , 43 Wianno Ave., Osterville



One Fish, Two Fish- Herring Counters Needed!

Join Barnstable Clean Water Coalition (BCWC) and Barnstable Dept. of Natural Resources (DNR) to learn about river herring, the herring runs in the town of Barnstable, and volunteering your time to count herring on their annual spring migration up the Marstons Mills River.

Counting herring is easy and only takes 10 minutes. Join the team of citizen scientists who collect valuable scientific data on river herring for the Massachusetts Division of Marine Fisheries.

> For more info, contact BCWC at <u>info@bcleanwater.org</u>. <u>BCleanWater.org</u>





# In Their Own Words

Marty R.

1. I love science and love contributing data for scientists.

2. It is close to home, and I can schedule my own time.

3. It is such a bizarre thing to do. I leave my daily pickleball game at 11:30. When someone asks me to stay for just one more game, you should see their face when I tell them I must go count fish. It is truly priceless.

### Jo-Ann N.

I do it because I care about Cape Cod and its abundant life both in land and in the ocean. I do it to give back as a service to the Cape although it is a very minor thing. I love nature and the gifts God has given to us. We are stewards of this earth!

#### Lois C.

It's a magical part of Mother Nature that we're privileged to experience here on Cape Cod! Also, it's a way to support an awareness and a potential growth of our herring population.







# In Their Own Words

### Jim W.

1. It gets me out into nature to actually see some natural activity.

- 2. I go to places I wouldn't have found otherwise.
- 3. I want to contribute to Cape ecology.

4. It's fun to watch the fish swim around and flop over the ladder.

#### Mary G.

1. Giving back to the community/a civic duty

2. To assist in environment monitoring essential for Cape Codders

- 3. Personal well being enjoying nature
- 4. Contest with spouse who had the larger count

#### Herring Do Have Personalities

For the past 3 years, my wife, Susan and I have been counting herring every spring as they make their way up the waterways at Mill Pond. Having counted hundreds of these clever fish, we have noticed that they do in fact have their own personalities. Below is a list of the characteristics that we have come up with:

- 1) **Show-offs:** Those that jump from one level to the next and get some air at each jump.
- 2) **Timid:** those that need to partner up with other herring before making the leap and are usually the last one over.
- 3) **Business like:** those that cross the board in the middle and keep swimming upstream without waiting for any others to join them.
- First-timers: those that make the attempt, but have to do a lot of extra wiggling to actually make it over the board.
- Scaredy-Cats: those that hang back in the school and wait forever before making the leap and usually hug the left or right side.
- 6) Alpha males: those that lead a school of herring to the next ladder.
- Cautious ones: those that have to swim around under the board several times to make sure that everything suits their liking before leaping.
- Sheepish: those that make it over the board finally but then don't swim on until there are enough other herring for them to swim with.
- 9) **Clueless:** the herring that swim around and around below the ladder not sure about what they are even supposed to do.
- 10) **Team Players:** Those that go along with the group, and once over the board, swim around the school to, "high fin" with the others.
- 11) **Dinner:** Those that don't know how to avoid the birds of prey flying overhead and end up as sushi.

Jack Gardner 2024



## Thank You





Heather Rockwell <a href="https://www.hrefthica.com">hrockwell@bcleanwater.org</a>