

Cape Cod Volunteer Herring Count Program

Instructions for Conducting Visual Counts of Herring and Reporting Data

Due to the ongoing COVID-19 pandemic, count coordinators and volunteers are urged to read and follow the recommendations contained in the “Recommendations for Counting Herring During a Pandemic” posted on our website.

If you’re a herring count volunteer, thank you for your efforts! Your herring counts provide valuable information about river herring populations on Cape Cod. This information is used by local, state, and federal fisheries managers for protection and management of river herring.

Background information: For background information on river herring and why counts are important, visit APCC’s **Herring Run Program** website at: <https://apcc.org/our-work/science/community-science/herring/> . This webpage contains information on river herring, a summary of Cape Cod herring run sizes, fact sheets, video on counting, and other information:

- “Cape Cod Herring Run Summary 2007-2021”, a summary of herring run sizes, number of herring counted, and other herring count statistics for Cape Cod herring runs;
- Video on “How to Count Herring”;
- Fact sheets:
 - “Herring Identification Guide”;
 - “Volunteer Counts – Why and How”;
 - “Fish Run Restoration Fact Sheet”;
- Link to APCC’s webpage on “Freshwater Ponds”. Freshwater ponds provide spawning, nursery and feeding habitat for herring; for that reason, protecting and restoring pond water quality and habitat is important for the health of herring.
- Instructions for counting and count form – see below.

Instructions and count form: These instructions and a count form are available for download on the right side of the webpage under **Herring Count Volunteers:** <https://apcc.org/our-work/science/community-science/herring/herring-count-volunteers/> . From here you can also access our online data submission system here (“**Enter herring count data online**”) – but see the direct link below.

Counting method: We use a method developed by the Massachusetts Division of Marine Fisheries (<https://www.mass.gov/files/documents/2016/08/om/tr-25.pdf>). This method has been used for volunteer herring counts for years. The method is summarized below:

Start date for counting: April 1 or when herring are seen, whichever occurs first.
End date for counting: June 15 or a week after the last herring are seen moving upstream, whichever occurs first.
Time of day to do counts: Between 7 AM and 7 PM.
Length of time for count: 10 minutes.
Number of counts needed: 9 counts per day, 7 days a week, distributed among volunteers.
The 9 counts per day should be done as follows:

- 3 counts between 7 am and 11 am,
- 3 counts between 11 am and 3 pm, and
- 3 counts between 3 pm and 7 pm.

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Hint: The more volunteers there are, the fewer counts each volunteer needs to do.

Equipment needed: Clicker counter, water thermometer on a cord*, air thermometer (keep dry), pen or pencil, blank count form, timepiece, and polarized sunglasses.

Recording data: For each 10-minute count, write down your data in a **Count Form** or in your notebook:

Your name

The name of the run you're monitoring

Date

Start time for 10-minute count (use 24-hour "military" time)

End time for 10-minute count (use 24-hour "military" time)

Number of herring counted in a 10-minute period (even if it is a "0")

Water temperature (degrees Celsius) – optional.

Air temperature (degrees Celsius) – optional.

Weather code (see the Count Form for possible weather conditions and codes)

Comments – anything else you think may be interesting or important. Optional.

Reporting data: Please enter your count data using APCC's online data entry system at our website and save paper, postage and hassle! Here are the directions:

- Click on this hyperlink: [Enter Herring Count Data Online](https://apcc.org/our-work/science/community-science/herring/herring-count-volunteers/herring-count-data-form/) , or click on this URL: <https://apcc.org/our-work/science/community-science/herring/herring-count-volunteers/herring-count-data-form/>) . If that doesn't work, copy and paste the URL into your browser.
- Enter the password (**alewife**), then click **Submit**.
- You should see a list of herring runs. Click on your run.
- You should see an electronic **Count Form for your run**. Fill out the form for each count done, referring to your paper Count Form where you recorded your counts. Use your cursor or Tab to move from one box to the next (i.e., don't hit "RETURN"). To enter your start and end times, use 24-hour time (e.g., 8:00 am is 0800, 12:30 pm is 12:30, 1 pm is 13:00, 4 pm is 16:00, etc).

When you've finished entering your data, hit "**Submit**". Your count will be automatically saved to an Excel spreadsheet. You can then click on your run to enter more count data, choose another run to enter data, or exit the APCC website.

The counting season ends June 15. If you are using our online data entry system, please make sure you have entered your counts by June 30, 2022. Once you have entered your data, please mail your completed count forms to Jo Ann Muramoto at the address below. Thank you for your participation in this important program!

Contact: Dr. Jo Ann Muramoto, 482 Main Street, Dennis, MA 02638.
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