

The Osprey



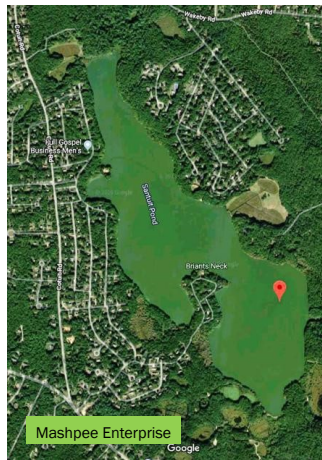
Mashpee
Land
Stewards

Conservation Department: Quick Update

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- Santuit Pond remediation efforts are occurring through multiple stakeholders to mitigate the reoccurring and persistent algae blooms affecting the pond since 2017 when a high rain event overwhelmed the SolarBees ability to keep them at bay. Efforts include:



- A year-long study with the Mashpee Wampanoag Tribe and NOAA to assess conditions affecting river herring within the system. The Tribe is also working with the Army Corps of Engineers on a dredging feasibility study (the main source of phosphorus- the limiting nutrient feeding the blooms- is coming from the bottom sediment).
- The Conservation Department has also submitted and was approved for two CPA applications for phosphorus remediation: one to purchase the Chopchaque bogs and surrounding uplands, contributing to the open space and ceasing cranberry operations; one for wetland restoration of an existing bog within Santuit Pond Preserve.

- The Quashnet River Restoration is underway. Horsley-Witten has been chosen as the consultant to complete the project, and is currently collecting data to determine how the stream restoration will occur. Improving fish habitat and passage for river herring and brook trout is the main goal of the project.



- The Sampons Mills Culvert replacement is done. This project will help improve fish passage in the Santuit River by increasing the size of the culvert. This will also increase flow, helping to scour the bottom to expose the gravel-sand substrate which is used as spawning habitat for sea-run brook trout. Undersized culverts are one of the reasons river herring numbers have dropped. The road was regraded and repaved as well.

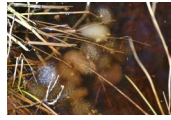


Special points of interest:

- NEW Trail Guide and History Book
- The Year of Anniversaries!
- River Herring Count program Starting soon!
- Citizen Science: Participate today!



AmeriCorps 2019-2020 Update: Cape Cod and Wampanoag



Vernal Pool Certification Work in March/April 2019- We successfully certified a vernal pool at an abandoned cranberry bog in Santuit Pond Preserve.



Mashpee River Woodlands: Fitch Property- AmeriCorps rebuilt the steps leading to the trail system at this conservation area and cleared the trail. Further improvements at this site include new plexiglass and cardboard for the kiosk and a new Conservation Area sign from Day Signs.



Mashpee River Woodlands: West and East- AmeriCorps cleared the Long River, Partridge Berry, Fox, Simons Narrows, sections of Grotze Grove, and Johnson trails of downed trees and encroaching vegetation.

Herring Count Program

The Mashpee Conservation Department is looking for volunteers to conduct annual Herring counts at Mashpee, Quashnet, and Santuit River fish ladders this upcoming spring. Herring, Blueback and Alewife are anadromous species that spawn in freshwater and spend their adult lives in saltwater. Count data is vital to assessing their populations which is indicative of our waterway's health, as river herring are a keystone species.

The program runs from April 1st to June 1st (when water temperatures reach 50 degrees F) and herring are returning to spawning grounds. Counts last 10 minutes and counting kits include an air and water thermometer, a clicker counter, and waterproof data sheets.

These data sheets are to communicate information between counters; each counter is required to keep their own data.

Count data can be entered on APCC's website. Hard copies of data also need to be mailed in to APCC (or the Conservation Department).

<<<See the Herring Count Data Results to the left from the past decade.

There have been many improvements over the last year to help river herring, including a local effort to replace an undersized culvert under Sampsons Mills Road to improve fish passage. The New England Fishery Management Council has also issued a 20-mile buffer zone for mid-water trawlers off Cape Cod, and a 12-mile buffer throughout the New England coast. This is to prevent bycatch when fishing for Atlantic Herring, as the river herring will intermingle with them at sea. The Upper Quashnet Restoration is also underway, which will improve instream fish habitat and passage.



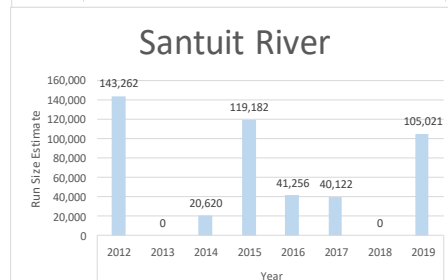
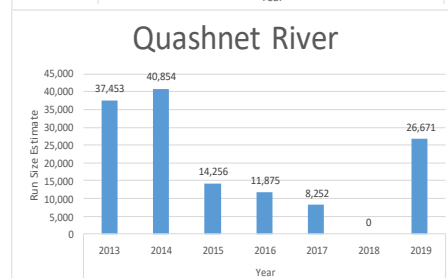
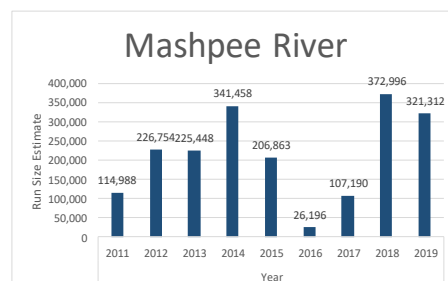
Town Update

Earth Day Events Planned:

- Mashpee Introverts Earth Day Event 4/16
- Sustainable Practices Beach Clean-up 4/19
- Jehu Pond Pollinator Garden Planting 4/22

Multiple Anniversaries:

- Mashpee's 150th Anniversary
- Mashpee National Wildlife Refuge's 25th Anniversary
- Earth Day's 50th Anniversary
- 400th Anniversary of the Mayflower Landing in Plymouth



Featured Creature: Spring Peeper (*Pseudacris crucifer*)

“PeeEP, peeEP, peeEP”..we have all heard the ubiquitous, overlapping noise signifying the end of the long winter. This loud sound comes from a tan frog that is roughly one-inch long, the smallest of our native frogs. These peeps are essentially saying, “We are single and ready to mingle” and they emanate from their wetland habitats. Peepers are identified by the “x” on their back. They almost completely freeze over the winter.



Amphibians are susceptible to pollution due to their semi-permeable skin, therefore it is important to protect their habitats and surrounding uplands. Some may find the peepers deafening at times, others find them cute and soothing, but one thing we can all agree on is we would much rather hear them than the deafening silence of a species that is no longer with us.

Featured Habitat: Atlantic White Cedar Swamps (*Chamaecyparis thyoides*)

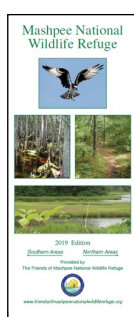
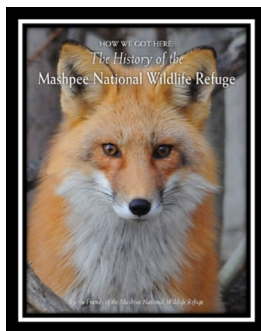


When you see an Atlantic White Cedar Swamp, it is almost as if you are stepping back in time. Now a globally-rare habitat, AWC swamps used to be common throughout the northern-mid Atlantic coast. Many of these habitats were converted to cranberry bogs and the trees were harvested for shingle mills. These habitats consist of bog peat, sphagnum moss, high-bush blueberries, and of course the cedars. These trees are significant to the Mashpee Wampanoag Tribe, and are used in their ceremonies.

You can see examples of Atlantic White Cedar Swamps off Great Hay Road (north of Red Brook Road), and at the Jehu Pond Conservation Area!

Mashpee National Wildlife Refuge Updates

NEW: “How We Got Here: The History of the Mashpee National Wildlife Refuge” is finally in publication! Written by Brian Kehrl and MaryKay Fox, this booklet chronicles the events leading up to the establishment of the Refuge in 1995. It is a compelling and important read, and really makes you appreciate how important these areas are to humans and wildlife alike.



NEW: Mashpee National Wildlife Refuge Trail Guide. This guide highlights the 8 trail systems found in the Refuge, and provides historical context, ongoing projects, and the various wildlife and habitat types found throughout. Both these projects were funded with Mashpee Community Preservation Act funds.

Conservation Lands Updates



- The Conservation Department recently acquired a future field habitat within the new Evergreen Circle development, and a new parcel off Whittings Road.
- There are multiple citizen science opportunities available to the residents of Mashpee to engage with their natural environment and contribute to real-time scientific efforts to track and monitor certain populations. Contributions to these efforts include submitting checklists to eBird, Geocaching, using the iNaturalist app, Right Whale Reporting, IFAW stranding network, Herring Count Program and the Vernal Pool Reporting System. Make the best of your time outside!
- Clean-ups continued on a few remaining areas of trash along the roadsides of the Johns Pond/Quashnet areas. Most of the trash was collected in the 2018 Great MA Clean-Up by Mohawk 4x4 Adventures and Mashpee Land Stewards.

eBird

UPCOMING EVENTS

**Questions
or
concerns
?**

Please contact
Katelyn Cadoret :

Email: kwcadoret@mashpeema.gov,
Phone: (508) 539-1400 ext. 8538.

Visit us at the
Conservation Department at Mashpee
Town Hall, 16 Great
Neck Road North.

**Check us
out on
Facebook
!!**

- Herring Count Program Informational Session and On-Site Training at the Mashpee Fish Ladder off Route 130: **Saturday, March 21st 11:00AM-1:00PM**
- Earth Day Planting at Jehu Pond Pollinator Garden with Friends of the Mashpee National Wildlife Refuge **Wednesday, April 22nd 10:00AM-2:00PM**
- Naukabout “Wild About Wildlife!” Event with Friends of the Mashpee National Wildlife Refuge: **Sunday, June 14th 1:00PM**

Photo Contest

These are the winners from the 2019 Winter Photo Contest:



WINNER (Animals): “Snowy Owl and Starlings” by Trina Frye



^WINNER (Landscape): “Popponesset Winter” by Michael Mendoza



<WINNER (People in Nature): “Footprints” by Sunny Steadman



WINNER (Plants): “Snowflake on Hydrangea” by Sue Evans