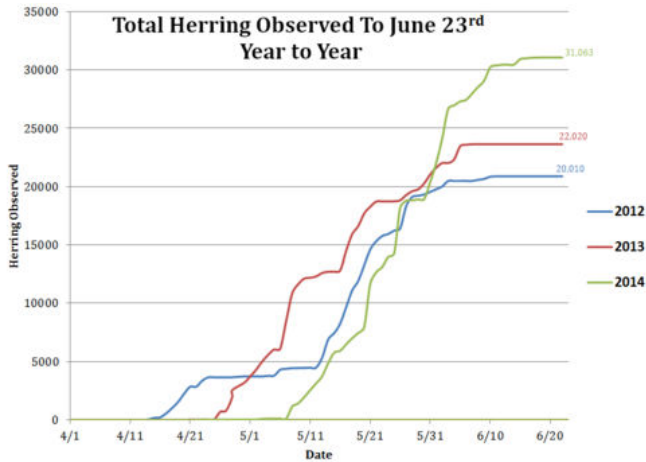


Arlington Conservation News

Fall 2014

2014 Alewife Count Increases at Upper Mystic Lake Dam fish ladder

This spring, an increased number of herring returned to spawn in the Upper Mystic Lake, as they do every year. The graph below documents the continued increase from the previous years. While encouraging, the Mystic River and Mystic Lakes and their watershed continue to need our protection and attention.

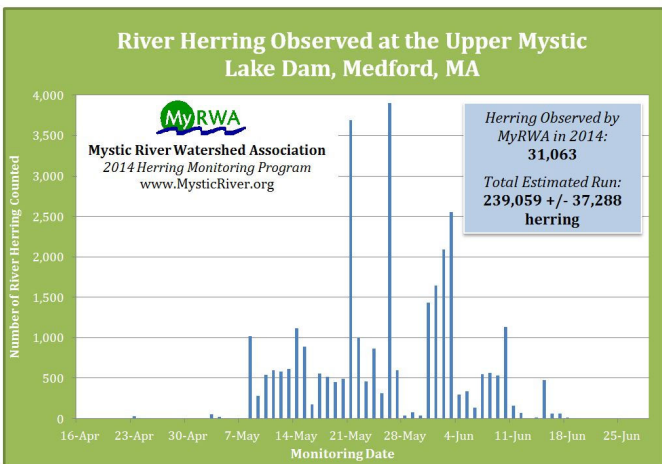


Go to the Mystic River Watershed Association's webpage, mysticriver.org for more information on how you can help these fish continue to return to in their spawning area.



Friends of Symmes Woods

People have been moving into the new housing built at the 17-acre old Symmes Hospital site in central Arlington. Part of this redevelopment of this site included setting aside almost half of the site for preservation and public access: the Symmes Woods and two park areas: the Hattie Symmes Park and the Nora Brown Park, both offering spectacular views. A new Friends group has formed to help monitor and manage the Woods. Anyone interested in joining this group should contact Land Stewards Coordinator Cheryl Miller at landstewardcoord@gmail.com





Land Stewards Activities

In the spring, Land Stewards Coordinator Cheryl Miller organized a project to identify and remove instances of invasive garlic mustard on conservation lands. Populations of garlic mustard were located and completely or partially removed on four sites. As part of the effort, Cheryl held a workshop on garlic mustard at McClennen Park, during which she, three volunteers, and one interested passerby pulled 52 pounds of garlic mustard! Future plans include identification and removal of black swallow-wort and vines (such as oriental bittersweet and English ivy) which are smothering trees.



What is the Conservation Commission?

The Conservation Commission is charged with protection of natural resources in the Town of Arlington, such as lakes, rivers, ponds, streams, wetlands and floodplains. These areas have habitat values for the animals and plants that live there as well as filter our air and water.

If you have any more questions; try our new Conservation webpage at arlingtonma.gov



Tour the sewers

By Cori Beckwith, Conservation Administrator

Imagine that you were the size of a cat... Wouldn't it be an interesting exploration of our town and neighboring communities, if you could walk through our sewers? It would be fascinating to wander through the pipes of our stormdrains and sanitary sewers (alright, imagine you are a cat with a stuffed nose).

Large wooden ball used to clean the Paris sewers

Great cities, like Paris, let the public



tour the sewer system. The Cambridge Water Works building at Fresh Pond holds tours on occasion. Our fresh water in Arlington comes from the MWRA system from the Quabbin reservoir and is one of the best planned early water source systems in the world. It came about with some controversy and pain to the four towns that were uprooted and moved out of the reservoir site. But our delicious fresh clean drinking water out of the faucet is the result.

After we are done with it, the sewer water is piped away downstream to be treated at Deer Island and ultimately pumped out to the ocean. There are historical quirks of the system, like the old stormwater and sanitary sewers that were installed all over Cambridge as combined sewer overflow, or CSO. They are being replaced at this very moment (much to the dismay of anyone traveling on Huron Ave). These old sewers were installed one on top of the other so that when one of them needed to overflow, the other set of pipes could take the water. The immediate benefit is that all small stormwater flows (called the first flush, which is the dirtiest) are conveyed by the sanitary sewer, taken to Deer Island for treatment and then to the ocean. The larger problem is that during large storms, all of the pipes overflow and the stormdrains discharge human sewage into our streams and rivers (Alewife Brook and Mystic River). This happens right at the time that the waters are flooding the adjacent properties next these waterways.

The new wetland complex built in the Alewife Reservation is one large step in the long list of fixes for this problem. The wetland and basin will take the first flush of dirty stormwater and clean it up, by slowing it down, having plants filter it through the sediments, and break down the pollutants in the sunshine. This will hopefully result in cleaner water for the fish, birds, bugs and critters who live there.

As they say, we don't own the water, we only rent it. It's a dynamic system and we need to work to protect each part of the system (from our yards, our sidewalks, our streets, to our streams, our lakes, our ocean) in part and whole. The details matter as much as the larger picture. I wish we could also tour our sewers.

Cleanup was performed as required based on the Massachusetts Contingency Plan (MCP), under supervision of a Licensed Site Professional (LSP) from Clean Harbors. Water skimming devices, shore-based vacuum trucks, and oil-absorbent pads



and booms were used in the cleanup. By Sunday, over 90% of the fuel was cleaned up.

Three days after the spill, following the cleanup

of the floating diesel fuel, water samples were collected in the Mystic River. Low levels of diesel components were detected in downstream samples; however, all levels were less than concentrations that would cause adverse impacts to aquatic organisms. No fish kills were observed.

In the Fall of 2013, Clean Harbors removed debris, some sediment, and moss on Arlington side riverbank areas where oil sheens were observed. Riverbank sediment sampling and analysis was conducted to evaluate residual spill contamination on the Arlington and Medford sides of the River. Though some sediments showed low-levels of oil constituents, these were consistent with Mystic River background sediment samples.

During cleanup and assessment activities, the Arlington Conservation Commission actively participated in site inspections with MassDEP and Clean Harbors. In addition, the Commission reviewed documents and reports Clean Harbors submitted to DEP that evaluated potential impact to the Mystic River and its banks.

The Commission thanks John Fitzgerald, MassDEP, for permission to reproduce spill response pictures and for his assistance in providing air and water data.

For more information enter RTN 3-31576 at <http://public.dep.state.ma.us/SearchableSites2/Search.aspx>



Mystic River Oil Spill Response & Cleanup

By: Susan D. Chapnick, Commission Board Member

At approximately 4:15 PM on Friday, May 31, 2013, a 10,000 gallon tanker filled with red-dyed diesel fuel overturned at the rotary at the intersection of Mystic Valley Parkway and Medford Street in Arlington, immediately adjacent to the Mystic River. All but about 400 gallons of fuel spilled from the tanker onto the roadway, where it flowed into catch basins and then directly into the Mystic River.



The Mass DEP Field Assessment and Support Team, with contain

ment booms and on-site air analysis, were up and running within 2 hours of the spill. With considerable assistance from local fire services personnel and Clean Harbors (cleanup firm contracted by oil tanker owner, J.P. Noonan), 9 booms were placed in the river to contain the spill, spanning upstream of the Medford St Bridge to downstream of the Harvard Ave/River St Bridge. These booms successfully contained the spread of the diesel fuel to allow for cleanup.

Air samples were analyzed the day of the spill, in an on-site lab trailer by MassDEP. While the air levels of diesel chemicals were not considered a human health risk, there was a pronounced fuel oil odor throughout the area, even 6 hours after the spill. This is because most people can smell diesel fuel at concentrations lower than those that would pose a short-term risk – our nose is more sensitive than many analytical instruments.

Consider groundcovers instead of lawn - and help soak up the rain!

Why not convert a patch of your lawn to some of these herbs or alternatives:



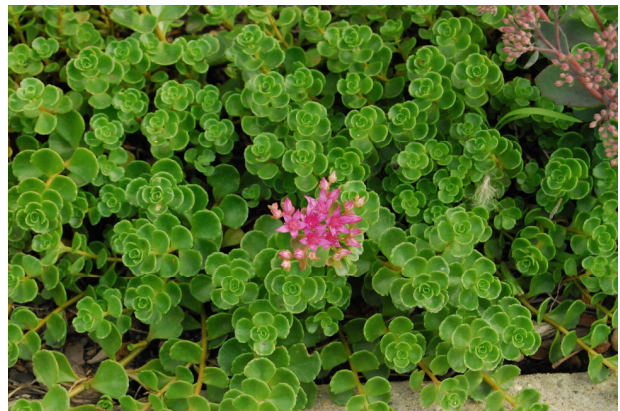
Lavender – This hardy plant can be loved too much. They do well with less watering, once established. Their beauty when blooming is only surpassed by their lovely aroma.



Bunch grasses- The fluffy tops of these plants give your yard a softer look, while holding more water in your garden to give it time to soak into the ground during rain events. Blue fescue (above) is a favorite. And you don't have to mow them! Papyrus is a fun one to consider (yes, the plant that paper originally came from).



Verbena- This herb has lovely flowers (Blue Vervain is our hardy verbena) and the butterflies also appreciate them. Lemon verbena is lovely scent to add to your garden, but is an annual for us.



Sedum- These hardy little succulents come in so many different shapes and forms. They bloom at different times.



Thyme- Another fragrant alternative, its low growing habit is a nice lawn replacement. The lowest kinds can be walked on and the tangy spicy scent follows you through the garden.