# Arlington Conservation News Fall 2015

#### Window on the Mystic



Arlington has Conservation Land on the shore of the Upper Mystic Lake where people can come to view the water, or engage in more active endeavors. There are now steps down to the shore line for easy access (including kayak launching) thanks to the scouts of Troop 306. In recent years the lakes have become known for seasonal sightings of Bald Eagles, Red-Tailed Hawks, Kestrels, and other raptors, as well as many species of ducks, shorebirds, and other fauna.



Window on the Mystic is located on Mystic Street just north of Robin Hood Road near the Winchester town line. One can walk, bike or paddle to the spot, or park along Mystic Street.



### What's Happening to Carp in the Mystic River?

Thursday, June 18, 2015 at 03:03PM MyRWA

Many big carp have died recently on the Mystic River. Dead carp have been sighted all up and down the river, from Lower Mystic Lake all the way to the Amelia Earhart dam. The Mystic River Watershed Association (MyRWA) has reported the event to state agencies including the Department of Environmental Protection (Mass DEP) and had conversations with fish experts at the Division of Fisheries and Wildlife.

The state experts' best understanding of this is that it is a natural die off resulting from stresses from spawning in combination with some environmental factor (changes in water temperature, bacteria or virus that specifically affects carp, etc.).

It is important to note that seemingly all the fish are one species (carp) and one size class (large). This leads the fish scientists to ask what might affect a group of fish at once like this, in this pattern. Spawning is a huge energy cost to fish, and the stress of spawning leaves them vulnerable to infections and other stresses from the environment. All the fish affected have been in the same physiologically stressed condition and all intolerant of whatever led to death. If these were spawning fish subject to stress or infection that has spread through their community, this would explain both why one size class seems to be dying more or less all at once.

MyRWA does not believe that there is evidence that this die-off is the result of pollution. In the past two weeks, two slicks were reported to DEP at specific locations in the lower stretches of the river, something MyRWA has also been tracking. But the fish die-off phenomenon extends all up and down the river and affects only large carp. If a pollutant were the cause, the effect would not be limited to one species and one size of fish. So this event calls for another kind of explanation.

MyRWA also do not believe that the cause is low dissolved oxygen levels (another common cause of fish kills). There is no evidence of dramatically low dissolved oxygen levels along the length of the Mystic, and carp are, in any case, among the most resilient fish in the face of low oxygen.

So the evidence suggests that this is a rare, but essentially "natural" die-off, affecting only one species. It's a dramatic event. These are large fish. But MyRWA do not believe that it is the result of water quality issues in the Mystic, and does not think that wildlife in general or people are at risk from whatever is causing it.

MyRWA is keeping an eye on the situation and will report any new information in our website (www.mysticriver.org).

Posted by Andrea Ritte

#### Invasive Clam found in Spy Pond



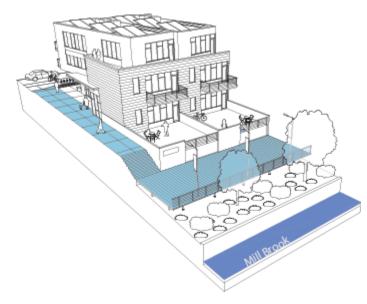
This Asian clam was found along the shoreline of Spy Pond this summer. Many ponds and lakes in Massachusetts are threatened by invasive animal or plant species. One way that these invaders get transferred from one place to another is by hitchhiking on boats and other aquatic gear. Please thoroughly clean any boats, gear trailers etc. when you remove it from the water. Simple precautions such as this can prevent big problems in the future.

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#### Mill Brook corridor redevelopment

Arlington's design standards are being drafted to enhance the economic vitality of the Town through attractive and consistent design. They are being created as an outgrowth of the public facilities and services, historic and cultural resource areas, and economic development goals identified in the Arlington Master Plan (adopted February, 2015). The proposed design standards would apply to the primary commercial areas in Arlington, as well as properties along the Minuteman Bikeway and the Mill Brook. In regard to Mill Brook the design standards would allow open space along the Mill Brook to be activated through public walkways, plazas, pocket parks, or other open space

amenities. The standards would also help to preserve existing open space along the brook as well as create new open space areas to be used by the public through setbacks and walkways facing the brook. The standards propose that new development on underutilized sites adjacent to the waterway must be designed in a manner that simultaneously capitalizes on its natural beauty and potential as a publicly accessible pedestrian corridor, but also protects the site against potential flooding.



-written by David Fields, Technical Planner and GIS Analyst, Arlington Planning and Community Development



#### Englemann's Sedge at Spy Pond

We should consider ourselves lucky to be the home of a state threatened plant, the Englemann's Umbrella Sedge. Our Spy Pond shoreline hosts only one of nine locations where this diminutive grass-like plant is found.

It can appear and disappear, based upon the feeding patterns of waterfowl, anywhere along the shoreline. The best advice for homeowners of waterfront parcels is to create a natural shoreline by allowing vegetation to grow in along the waterfront. Let everything grow in along the waterfront for at

least a 10 feet wide zone along the shore. (also known as a "fluffy fringe", which describes the complexity of plant layers and structures that constitute habitat niches for invertebrate, insects, and critters) This zone gives the Englemann's Umbrella Sedge enough room to continue its role in filtering our water, feeding waterfowl and keeping our Arlington wild!

When allowing for the "fluffy fringe" described above, invasive plants (purple loosestrife, wild indigo, Japanese knotweed, phragmites, garlic mustard, etc) should be kept in check, by selective hand removal.



## Community Preservation Committee forming

A new 9-member committee is being formed to coordinate the use of the monies in the Community Preservation fund. The town of Arlington adopted the Community Preservation Act last fall. Funds will support open space, recreation, historic preservation, and affordable housing projects. Chuck Tirone will serve as the Conservation Commission's representative.



#### Arlington Land Stewards

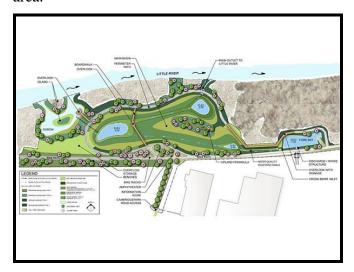
Arlington has approximately 30 acres of Conservation Land. This land is in over twenty parcels scattered throughout the town. But who takes care of this land? The resources of Town government are limited.

Under these conditions, involvement on the part of Town residents is essential to care for this land. The Arlington Conservation Commission (ACC) sponsors the Arlington Conservation Land Stewards (ACLS) group to provide support and guidance for citizen volunteers to take an active role in the protection of public land.

**If interested** please contact the Conservation Administrator, Cori Beckwith at <a href="mailto:cbeckwith@town.arlington.ma.us">cbeckwith@town.arlington.ma.us</a>. Or call the Conservation Office at 781-316-3012

#### Alewife Stormwater Wetland

The city of Cambridge and DCR recently completed construction of a stormwater management basin in order to eliminate Combined Sewer overflows (CSOs) to the Alewife Brook as it enters Arlington from the Little River. The constructed wetland and detention basin to provide detention and treatment while meeting the habitat and recreational functions needed in the Alewife Brook Reservation in this area.



The Plan (image above) called for a 3.34 acre wetland

The wetland increases base flows in the brook and enhances the health of adjacent natural wetlands. At the same time the wetland is designed to minimize flooding of the Alewife Brook by retaining stormwater to shave peak flows during major storm events.

The goals of the project were:

- 1. Integration of bioengineering techniques and conventional structures.
- 2. Habitat enhancement
- 3. Education opportunities
- 4. Pedestrian access and recreational opportunities.



Community Planting day in main wetland basin, Alewife Brook – July 2012



Alewife Reservation Path though Wetlands- 2013

#### <u>From MBTA Alewife Station – Intersection of</u> <u>Alewife Brook Parkway and Cambridge Park Drive</u>

- Exit Alewife Station to Alewife Station Access Rd.
- Turn RIGHT out of Alewife Station going NORTH under parking structure overpass, approx. 500 ft.
- Turn LEFT to cross Alewife Station Access Rd. going WEST to Alewife Greenway Extension, approx. 80 ft.
- Stay STRAIGHT on Alewife Greenway Extension going WEST to Basin Amphitheater, approx. 1300 ft



Conservation Questions? - Please contact the Conservation Administrator, Cori Beckwith at <a href="mailto:cbeckwith@town.arlington.ma.us">cbeckwith@town.arlington.ma.us</a>. Or call the Conservation Office at 781-316-3012.