

Fish in the Weir River – Part 2

This is the second of two articles about fish in the Weir River and its estuary leading up to a talk by Massachusetts Fish and Wildlife Commissioner Mary Griffin on “River Restoration” sponsored by the Weir River Watershed Association at 7 pm on Wednesday, November 10, 2010 at the Weir River Estuary Center, 333 George Washington Blvd.

The Weir River fish are now quite different from what they were in early colonial times. Last week we described the fish that were likely common in the Weir River during early colonial years: smelt, herring and eels, all anadromous fish whose life cycles depend on both fresh and saltwater, and brook trout, white sucker and tessellated darter, which are freshwater fish.

As with most of the rivers and streams in Massachusetts, the colonists first, then the industrial revolution brought changes to our rivers. The need for power for mills and foundries resulted in the damming of our rivers. In the Weir River this occurred in multiple places. Foundry Pond, Triphammer Pond, Fulling Mill Pond are all impoundments of the Weir River or its tributaries made by a dam, now leftover from the industrial revolution. The impact to the river was to change its habitat from free flowing cold water rich in oxygen to a series of ponds with warm water and less oxygen, where the impoundments became a repository for sediments and nutrients (both natural and manmade) that would have normally flowed to the estuary.

In 1999 a study done by a consultant on the Weir River took fish samples throughout the Weir River. Seven species were documented at eight sites, two of which were in the estuary and six were in the main stem and its tributaries. The species found included brown trout (a stocked fish from Europe), brook trout, largemouth bass, red fin pickerel, bluegill, pumpkinseed sunfish and American eel. The report explained the findings this way, *“The species sample represent habitat generalists and/or species common to ponds and pools. However, this system is highly fragmented due to the presence of impounded reservoirs and dewatered reaches. As a result, a number of species indigenous to southeastern Massachusetts streams with life stages dependent on riffle and run habitats were not detected, although they would normally be relatively abundant in streams such as the Weir River. These include: alewife, blueback herring, rainbow smelt, white sucker and tessellated darter (GZA 2000).”*

More recently in the spring of 2009 the Hingham Conservation Commission worked with the Mass Division of Marine Fisheries to determine the health of the herring run into Foundry Pond from the estuary. There is a fish ladder on the Foundry Pond dam to aid the herring upstream in their spring migrations. That study revealed some dishearteningly low numbers of herring returning to the Weir River--less than 30 herring were caught.

The smelt run, too, at the base of the dam to Foundry Pond, once known to be so robust, was decimated when the stream below the dam was widened during the emergency dam repairs done in 1999. Since then smelt return to spawn, but the mortality of the eggs left

at the base of the dam is high because literally the eggs are left high and dry at low tide due to the stream channel being widened.

The changing or loss of fish species that rely on rivers is not uncommon. This same pattern of river alteration can be seen in most every New England stream if not the entire nation and world. In fact it is hard to find a stream that hasn't been altered by man. In 2009, the state Division of Fish and Wildlife published a report entitled "Target Fish Communities" that examined eleven rivers and their fish populations throughout the Commonwealth. Ten rivers had severe loss of fish species. They found that only one of the rivers – the Westfield River – was considered to be in good condition and had the closest to what an unaltered river's fish species composition should be.

The good news is that there are ways to restore our rivers and the fish that rely on them. The Weir River Watershed Association invites you to find out more when Massachusetts Fish and Wildlife Commissioner Mary Griffin speaks on "River Restoration" at 7 p.m. on Wednesday, November 10, 2010 at the Weir River Estuary Center at 333 George Washington Boulevard near the bridge.

Visit www.weirriver.org to find out more.

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