Fish in the Weir River – Part 1

This is the first 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.

In the Weir River estuary and its associated Hingham and Hull Bays, the colonists upon first arriving to this area would have found many of the same species that we have today. Winter flounder, striped bass, bluefish, Atlantic silverside, ninespine stickleback, mummichug and northern pipefish all were most likely common then as they are now.

However, the freshwater part of the Weir River would have been a very different system than the one we know today and thus would have supported different fish than we have in the river today. Starting from the estuary (where the freshwater and saltwater meet) going upstream to where Foundry Pond is today, the fish that would have frequented this area would have included rainbow smelt. In fact this fishery was so abundant it was considered one of the largest smelt runs in the state up until the late 1990s. Like herring, smelt are anadromous, living their lives in salt water and returning to freshwater streams to spawn. Anadromous fish are important to the ocean food chain.

Herring were also prevalent. Both alewife and river herring would return to spawn in the spring to the freshwater parts of the Weir River, presumably going all the way to the headwaters and into the tributaries. The adults would leave their fertilized eggs and return to the saltwater. Over the summer the eggs would hatch to small fry who would migrate out to the ocean in the fall.

American eel, too, would have also been seen in the Weir River. The American eels have a particularly interesting life cycle, changing shape and size along the way. Eels from Greenland to Central America all migrate out from their resident freshwater streams in the autumn and return to the Sargasso Sea to spawn and die. Their offspring return to the freshwater streams as glass eels (so called because they are transparent). Some eels are thought to live for up to 30 years.

Other kinds of freshwater fish would have been more prevalent moving upstream into the main stem of the Weir and its tributaries, the Plymouth River, Crooked Meadow Brook, Accord Brook, Fulling Mill Brook, Eel River and Tower Brook. In these cold freshwater rivers besides the young alewife and river herring would be Brook Trout, White Sucker and Tessellated Darter.

Watch for next week's article on today's Weir River and its fish. Visit <u>www.weirriver.org</u> to find out more.

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Image captions:

Herring

Smelt

American eel life cycle