



St. Croix Alewives: Native Fish in Peril

The size of alewife population in the St. Croix River has dropped precipitously, to an alarming level. Alewives, native to the state, are vital to Maine's ocean groundfisheries and lobster industry, and are essential for healthy rivers and wildlife populations. We have seen tremendous benefits from the restoration of the Kennebec River, where each spring, more than 2 million alewives now return. Once complete, the Penobscot River Restoration Project will likewise result in a healthy river system, including increased

numbers of alewives and other fish and wildlife. The St. Croix provides the largest and most important alewife habitat in the state. Swift and appropriate action must be taken to restore a healthy run of alewives to the St. Croix. Doing so will help Maine's environment and economy.

NRCM is urging the Maine Legislature to act this year to overturn a 1995 law that blocks alewives from reaching their ancestral breeding grounds.



Alewives are a native Maine fish essential to the Gulf of Maine groundfisheries and lobster industry, and an important part of healthy rivers and watersheds. (Photo courtesy of Doug Watts)

<u>Background</u>: In 1995, the Maine Legislature passed a law to allow the blocking of alewives on the St. Croix River. Since then, a plywood board is inserted every year at the fishway for the Grand Falls Dam to prevent alewives from reaching their ancestral spawning grounds. Within just a few years, the alewife population crashed from almost 3 million fish to less than two thousand.

Osprey and Bald Eagle populations have since plummeted in the St. Croix estuary. The decline of the alewife run has also likely had negative impacts on other wildlife in the region that feed on alewives, including whales, porpoises, dolphins, otters, mink, cod, halibut, and striped bass.

The Legislature's harmful 1995 decision blocking alewife passage on the St. Croix was in response to pressure from a small group of sport fishing guides who mistakenly believed that alewives caused a decline of the smallmouth bass populations in Spednic Lake during the 1980s. The real causes, however, were drought and excessive drawdown of the lake in order to



Where alewives thrive, so does other wildlife such as Osprey and Great Blue Herons. (Photo by Linwood Riggs)

produce hydroelectricity at down-stream dams. This caused the lake to shrink and exposed the nesting areas of smallmouth bass to the sun, killing their eggs.

In 2001, NRCM and our allies tried unsuccessfully to overturn the St. Croix alewife law. In 2008, NRCM helped convince the Legislature to allow alewives to return to the Woodland impoundment between the Woodland Dam and the Grand Falls Dam. This is only a tiny portion—two percent—of their historic habitat. Since then, alewife numbers have rebounded to approximately 20,000 fish—an improvement, but not sufficient to provide the ecological and economic benefits of a thriving alewife run.

Benefits of a Restored St. Croix Alewife Run: Maine scientists have linked the disappearance of coastal cod stocks to the dramatic decline in the number of alewives compared to historic levels.



Alewives spend their lives at sea and swim up rivers to spawn in the spring. Large numbers of cod used to follow these fish close to shore. Here, the cod were caught more easily, supplying the Maine fishing industry with a lucrative catch and providing tremendous economic benefit to the state.

Alewives are important to the health of Maine's commercial fishing industry. (Photo by Allison Wells)

Alewives are the preferred spring bait for Maine's lobster industry. Licensing fees lobstermen pay to harvest alewives for bait help support local economies. Alewives are especially important to lobstermen now, as the federal government has dramatically lowered the allowable catch of other bait species, such as Atlantic herring and menhaden, in recent years. With fewer alewives, Maine lobstermen must import bait from away. This is expensive, and using fish from distant places increases the likelihood of importing exotic diseases. At times, Maine lobstermen have had to resort to using cowhides due to bait shortages.

In the spring, healthy populations of alewives returning from the ocean buffer juvenile Atlantic salmon as they migrate out to sea. Strong alewife runs provide food for fish-eating birds like Bald Eagles, Osprey, and Great Blue Herons, and for seals, porpoises, and other river- and oceandwelling mammals. In the absence of alewives, these predators are much more likely to eat endangered Atlantic salmon.



Removal of the Fort Halifax Dam from Sebasticook River has resulted in the largest alewife run on the eastern seaboard about 3 million in 2012. Restoring the St. Croix would cost almost nothing and could result in a run of 25 million alewives. (Photo by JBerk/NRCM)



Lobstermen harvesting alewives, important as bait, from the Sebasticook River in Benton, Maine. (Photo AWells/NRCM)



Alewives are an important food source for harbor seals and many ocean- and river- dwelling wildlife species. (Photo AWells/NRCM)

For 10 years, NRCM helped lead efforts to restore the Kennebec River. In 1999, we saw removal of the Edwards Dam in Augusta. In 2008, our hard work and persistence resulted in removal of the Fort Halifax Dam from the Sebasticook (an important tributary of the Kennebec). The once-devastated alewife runs have since bounced back. Today, the Kennebec/Sebasticook alewife run is considered the largest on the eastern seaboard, numbering an estimated 3 million fish in 2012. Restoration of the Penobscot River has begun, with the Great Works Dam in Bradley removed in 2012, and plans for additional dam removal and fishways well underway. Once complete, the benefits of restoration of the alewife run to these two great Maine rivers will be massive.

Yet the alewife potential for the St. Croix River could equal that of the Kennebec and Penobscot combined, possibly hosting as many as 25 million alewives. The benefits of this number of fish to the once-prosperous Gulf of Maine groundfisheries could be tremendous. Compared to the Kennebec and Penobscot rivers, restoring the St. Croix alewives would be far less



Benefits of a restored St. Croix alewife run to Gulf of Maine groundfisheries would be tremendous. (Photo by David Wilkins)

expensive. The fishways are already built and ready to go. All that remains is permanent removal of the plywood board that is dropped into place to block passage of alewives upstream.

Momentum is Building for Restoration: Scientists at the National Marine Fisheries Service and the U.S. Fish and Wildlife Service support the free passage of alewives throughout the St. Croix watershed and oppose the plan for limited reintroduction that Maine's Governor Lepage says he supports. The U.S. EPA has ruled that Maine's 1995 alewife law violates the Clean Water Act. All of Maine's tribal leaders and the chief of the Passamaquoddy tribe in Canada have also asked the Governor to support free passage for St. Croix alewives. The Natural Resources Council of Maine and 50 other fishing, conservation, and First Nation organizations in the U.S. and Canada, including the Maine Lobsterman's



NRCM is working hard for passage of a bill this session to restore alewives to the St. Croix River. (Photo by Allison Wells)

Association, have called for full restoration of alewives in the St. Croix.

In 2013, the Passamaquoddy Nation, NRCM and a host of other groups will ask the Maine Legislature to overturn the 1995 law once and for all. This legislative session, a bill has been introduced: "An Act to Reopen the St. Croix River to River Herring (LD 72)." NRCM fully supports this bill and will do all we can to ensure its passage so that alewives can return to their ancestral spawning grounds. Such a move would bring tremendous benefits to Maine's fish, wildlife, and economy.