BY MARTIN SILVERSTONE

HONOUR SYSTEM

IN MAINE, REMOVING OLD DAMS TAKES MONEY AND HEAVY MACHINERY, BUT ALSO A KNACK FOR DIPLOMACY.

EVERYTHING WENT WELL UNTIL THE STICKY BUN INCIDENT.

Don't get me wrong, I'm no angel when it comes to keeping things neat and clean. Okay, I admit it, I'm a slob. Maybe I shouldn't have been surprised when Chris Murray did not want to let me back in his Ford Ranger with the sugary, gooey roll. Despite my best efforts, I'd already spilled coffee, ground chocolate into the seat and now there would be cinnamon and sugar all over the once spotless vehicle.

I felt bad, Murray was doing me a solid, driving me down to Maine via Connecticut on a sort of working vacation for both of us. The plan was to visit a few salmon rivers under restoration, to see a couple of dams and experience first-hand some of the issues ASF was in the process of trying to resolve. Now after a couple of days on the road, we found ourselves following Andy Goode, ASF vice-president, U.S. programs, to the first of two old, but still impressive mill dams on the Sheepscot River. This one was at Head Tide in Alna and when we parked just outside the village, Goode described to us how his plan to overcome a political and legal impasse over the future of the dam, now had a better than even chance of getting approval from the town's selectmen.

All over Maine and elsewhere in New England thick, impenetrable stone and concrete dams still block rivers, a legacy to the shingle, bucket, and saw log mills that helped settle and support these rural communities. Today, many communities still value their presence as part of their cultural identity. Yet these relics are also responsible, in part, for why so many of our migratory fisheries are at less than 1% of their historical abundance. To Atlantic salmon conservationists like us, taking out these neglected dams to improve fish passage is a no-brainer. Strangely enough, big dam projects, like the recently completed Penobscot removals, may be easier to build a consensus around. Along smaller rivers that pass through little towns and hamlets, approval means winning the trust of locals.

"For some townspeople, the dam is purely an emotional attachment or as simple as the dam having always been there, so why change it?" Goode says, pointing to the cliff on the opposite shore. "Or maybe, they might have remembered, as children, jumping in that swimming hole right there."





At Coopers Mills, the dam removal will allow access to miles of prime Atlantic salmon habitat. By understanding and accepting local concerns over safety issues like water sources, Andy Goode (with old hydrant, top) was able to propose a better dry hydrant system for fire trucks to use. In the end, both people, and salmon that will have access to clean spawning gravel (above), will benefit.





It's like a good detective novel. At Head Tide, the selectmen could not agree to taking down a dam that to them simply had historic and nostalgic value. But, as it was built in 1916, repairs were needed, and the town's financial position did not allow it to spend the kind of money required. There was also an ancient agreement in the original deed between the dam's builder and the town. The dam was never to come down—thus the impasse.

With ASF footing the bill, however, Goode, working with engineers, landscape designers, and a local committee, came up with an attractive proposal to improve fish passage. It would remove about 20 feet of the dam where the old water control gate housing was badly deteriorating, keeping the dam's main features intact. "We would

In small town Maine, locals often rely on the honour system to sell goods like eggs and butter. ASF's Andy Goode (above) uses his own people skills to convince the same residents that the goals of dam removal are honourable and beneficial to all.

also improve public safety and access, and preserve the crumbling mill foundations along the bank for future generations to enjoy, something which doesn't exist at present," he says, pointing out serious erosion along the bank that he plans to mitigate as well.

Just a few days after submitting the proposal, the town lawyer responded that he thought this cooperative approach might just work. As we got back into our vehicles to head to the Coopers Mills site, it occurred to me that Goode had been successful in convincing the town that he would be improving the dam instead of removing it. I thought to myself that in addition to knowing about fish passage, engineering and people skills, a little magic doesn't hurt when removing dams.

And dam removal remains key to salmon recovery in Maine. As a graphic example, a day earlier, Murray and I had met up with Steve Gephard. In the Spring edition of the magazine, I had written about the salmon that had been found spawning in the Farmington River in Maine. The torrent of emails correcting me (my weak defense: there is a Farmington, Maine, near the Sandy River which is also under restoration) was enough to make me want to do due penance and go check out the site, which is actually in Connecticut. Plus, it probably goes without saying, but having worked on my first salmon study way back in 1980, anything to do with this formidable species will always fascinate me.



Despite funding cuts Steve Gephard hopes that the current stocking program can conserve the remnant of the Connecticut River salmon population.

Gephard was kind enough to take the time to meet us along the Farmington River (sorry, exact location secret). I immediately recognized in him a kindred spirit. He has been involved with the salmon restoration effort for close to 40 years. It must have been tough when, in 2012—the year various U.S. departments threw in the towel—the massive stocking of fry came to an abrupt end.

Still, the State of Connecticut biologist was as fascinated as anyone else by how the fish returned on their own

power. But he is also very pragmatic. There are two schools of thought on the return of these few salmon. One feels it is basically meaningless, the eggs laid mere "footnotes," as one writer called them, in an irreversible downward trend. The other line of thinking, which Steve seemed to favour, is more optimistic. "These fish lived in the river, then swam out in the ocean all the way to the coast of Greenland, and back," he told us. Their tenacity highlights the presence of rivers with good water quality and adequate spawning habitat, and salmon that seem to know how to find them.

His optimism finds an outlet in a legacy program for Connecticut salmon which sees 250,000 fry still released into tributaries each year to maintain the genetic line, and some hope. We leave the mall parking lot and I struggle to keep up with the spry 63-year-old as we scramble down to the river bank. The river is wide here, you can see some gravel bars and Gephard points out the spots where salmon used their tails to dig out bathtub-sized nests or redds.

It's not your typical spawning area, in the middle of such an urban milieu. The fish here could have come from fry stocked before the program ended, but more likely they were from a group of broodstock fish released five years ago, when room was needed at the White River hatchery.

ON MANY RIVERS, DAM REMOVAL REMAINS KEY TO SALMON RECOVERY IN MAINE.

When salmon in many rivers in Maine were listed as endangered, the Connecticut River fish were left out because they weren't deemed indigenous to the river. In the early years the restoration effort had used Newfoundland fish, then later Penobscot stock. Still, these fish had found their way back from Greenland, around Cape Cod, and into the mouth of the Connecticut to here. "These are pretty much Connecticut stock now," is one of the last things Gephard says to me, his tone dripping with regret that the U.S. had largely chosen to abandon the program.

Murray and I follow the Farmington upstream, noting the clear water and improving spawning habitat as we drive north. But the reason no fish spawn here is obvious. Dams. At Collinsville, a large concrete one arcs across the river, originally there to serve a now abandoned machete and axe factory. Gephard had mentioned there were plans to breach it to improve fish passage. Another ray of hope for a beleaguered run, if the salmon could only hold on that long.

Next day, and four hours to the north, Goode leads us to our second stop on the Sheepscot. We're in backroads Maine, where there are no malls and no asphalt parking lots. Less developed, the river looks wild with gravelled beds ready for salmon to spawn, if they can reach them.





The Head Tide Dam, built in 1916, is cherished by townspeople but in dire need of repairs, thus offering an opportunity to improve fish passage (top). ASF is working with local partner the Midcoast Conservancy to remove the Coopers Mills Dam on the Sheepscot River (above). CHRIS MURRAY (2)

I've been given the boot from Murray's pickup, but my hands are still sticky as we follow the winding routes. Goode shares Gephard's passion, and perhaps because he understands what is at stake, there seems to be a certain urgency to the task at hand.

At the Whitefield General Store, where I bought the "guilty" sticky bun, he is on familiar terms with the girls at the counter. He orders a quiche for breakfast and more maple syrup than one person could ever possibly hope to ever consume. There's a method to his consumptive madness, however. He works hard to send a message that ASF isn't here to knock down a couple of dams and then disappear. He wants locals to know we are here for the long haul, even after work on the dam is completed.

The Coopers Mills Dam is an impressive old, laid stone mill dam and taller than Head Tide, yet Goode has already found a point to build consensus around. Countless council and committee meetings are mostly behind him as are the many nighttime drives, in all kinds of weather, along these small, curvy, deer-filled roads.

THE LARGEST SALMON EVER CAUGHT IN MAINE WAS ON THE SHEEPSCOT.

The Sheepscot River is midsized, certainly nowhere near the size of the Penobscot. On June 14th a celebration to mark the completion of the Howland Dam bypass will signal the end of major works on that river's giant restoration project. ASF's involvement will continue on habitat improvements on the headwaters and tributaries of the Penobscot, as well as on monitoring. Other rivers, like the East Machias and the Kennebec, also have active restoration programs being run by diverse ASF affiliates, with help from ASF staff.

One reason ASF has recently got involved directly with the Sheepscot is that there wasn't much interest from other parties in taking on the task. For the past 75 years, no one has been able to make any progress addressing the two mill dams on the main stem of the river. Why bother working to fix the blocked road crossings or providing passage into the lakes if the fish could not reach them? That thinking has only made it even more of a priority for Goode and ASF. If this ignored river can be restored, it will give hope to the dozens of other dam-choked streams in the Northeast.

And there is another reason, perhaps a little more romantic. "The largest salmon ever caught in Maine was on the Sheepscot," Goode tells me. This was a 28-lb fish caught at the Tidal Falls Pool in 1980. We can all dream. There was once an Atlantic salmon hatchery on the river and a Sheepscot River Salmon Club, too. When they disbanded a few years ago, they had around \$1200 saved in their bank account, which they donated to ASF, to keep that dream alive.

From what I can tell, it looks like they are getting their money's worth.

"We've already spent 60,000 dollars here," Goode says his hand sweeping along the Coopers Mills Dam. "All on studies and plans, not a piece of dam has been touched yet." Just like Goode discovered that one of the key consensus points at Head Tide was the heritage and nostalgic value of the dam, he also narrowed in on one of the town's major concerns. The headpond behind the dam is a critical source of water for fighting fires in Whitefield and the surrounding communities. Goode was sympathetic, recognizing that when you are a selectman facing questions from citizens, it's hard to answer when someone asks: "Is a fish more important than a person whose house is on fire?"

Of course not, and Goode found the answer in a technology known as dry hydrants. He showed me where a new fire lane would be built just upstream to a standpipe that will draw water through underground piping extending out into the river. In much greater detail, he explained to the local citizen committee, how this source and another new dry hydrant nearby would be a vast improvement over the current system that is often inoperable and vulnerable to complete loss if the ageing, leaking dam fails. Patiently, he had to answer questions on flow rates, and fire truck pumper capacities. "Yes, I probably know more about dry hydrants than I ever could have imagined," Goode, whose background is more in river ecology than hydrant engineering, tells me as he chuckles. At both sites, he is more at home explaining how improving fish passage will help runs for salmon, alewives, shad and sea lampreys.

It's all part of the magic. Once again, here at Coopers Mills, in response to local concerns he has found a way to approach dam removal in a way that develops the right package of community benefits to improve both the fisheries and the needs of the local community. The restoration of salmon, it seems, is as much about people as it is about just fixing fish passage. On March 19th, the citizens of Whitefield voted overwhelmingly to accept ASF's and the Midcoast Conservancy's proposal to remove the dam.

And here too, Goode doesn't forget the details, as he suddenly remembers he needs eggs to go with his maple syrup. Across the road from the dam site, there is a small roadside stand. The sign reads: organic eggs \$5, with a box for the money—it's the honour system. He puts money in the slot, then he is gone, off for a meeting with a town engineer upriver in the town of Windsor, where ASF is going to help with some culvert replacements to ensure adequate fish passage into the smaller Sheepscot tributary streams.

I reach for a dozen as well, but Murray catches my eye. He is willing to forget the sticky bun incident, but if I want a ride home, I'd better forget the eggs.

Martin Silverstone is editor of the Atlantic Salmon Journal. He travelled to Connecticut and Maine in April 2016.