

Turning Back the Clock

Re-wilding Developed Landscapes

We usually think of land development as a one-way street: grasslands sprout condominiums, woodlots are cleared for parking lots, and flowing rivers are interrupted by dams.

But development doesn't have to be forever. Every so often, land stewards have a chance to roll back the tape. By "rewilding" some sites—that is, removing human interventions like dams, buildings, and roads from the landscape—Mass Audubon is restoring natural lands and watching ecosystems return to their original states with just a little push.

Restoring a Brook and Its Banks

Back in 2013, Mass Audubon removed an 80-year-old concrete dam from Sackett Brook, which runs through Canoe Meadows Wildlife Sanctuary in Pittsfield. The dam had cut off fish passage and slowed the current of the brook, resulting in warmer and less oxygen-rich water.

With the dam gone, fish quickly returned—including the rare Slimy Sculpin, which is only found in long stretches of cold, fast-flowing streams.

But removing the dam wasn't the end of the job. Former landowners had also built a cabin in the brook's floodplain, with a driveway that bisected the strip of forest running along the streambank. A lawn reached down to the water's edge, and with no trees to anchor the soil, the bank was slowly eroding.

While we could have made some use of the cabin, it was just in the wrong location—a location that would better serve the sanctuary if it were restored to a natural condition. Mass Audubon chose to demolish the structure and plant native trees across the site, filling in a gap in the forested "corridor" along the bank. Now, endangered Wood Turtles can be seen moving through the woods on their seasonal movements, and mammals like bobcats and bears pass through without being disturbed by the regular presence of people.

A New Kind of Retreat

In 2019, Mass Audubon was able to add 110 acres to the Great Neck Wildlife Sanctuary in Wareham by conserving an adjacent property. The land had been a religious retreat center and included multiple buildings in addition to lovely coastal forest and waterfront along Buzzards Bay. After evaluating the site relative to program needs, we decided to demolish most of the buildings and restore the campus to a pollinator meadow. Now an area that had been abuzz with human activity for over a century once again functions as habitat for wildlife.

Stepping Out of the Flood Zone

Salt marshes will play a central role in helping wildlife and people adapt to sea level rise, as long as they can keep up with the rising sea. In many cases our salt marshes will want to migrate upslope and inland. At Rough Meadows Wildlife Sanctuary in Rowley, we removed three buildings that stood adjacent to an extensive salt marsh—part of the Great Marsh—to ensure that future salt marsh migration would not be impeded. The building footprints were restored as pollinator meadow for the time being.

Jeff Collins, Mass Audubon's Director of Conservation Science, framed demolition at Rough Meadows as part of "coastal retreat"—the practice of removing infrastructure from coastlines so that they can adapt naturally to the effects of climate change. "As sea levels rise and saltwater creeps inland, we want to make sure that the salt marsh and its inhabitants have room to move with it," he said.

With each of these building removal and restoration efforts, Mass Audubon is demonstrating that human fingerprints on the landscape need not be permanent. While some development will continue to occur, we can make deliberate choices about removing development, and help nature reclaim its place.

Up Next

Additional re-wilding opportunities exist across the state. At Cold Brook Wildlife Sanctuary in Otis, we are aiming to reconnect thousands of acres of forest by removing a former house and outbuildings. At Pierpont Meadow in Dudley, we plan to remove two structures, a dam, and a culvert. And at Broad Meadow Brook in Worcester, we are partnering with the city on a project to reconnect the eponymous brook with adjacent wetlands to provide habitat and relieve urban flooding.

Not surprisingly, demolition and restoration can be an expensive business. If you are interested in learning more and supporting this work, email conservation@massaudubon.org.



Sackett Brook Dam Removal at Canoe Meadows



Rough Meadows



Wood Turtle