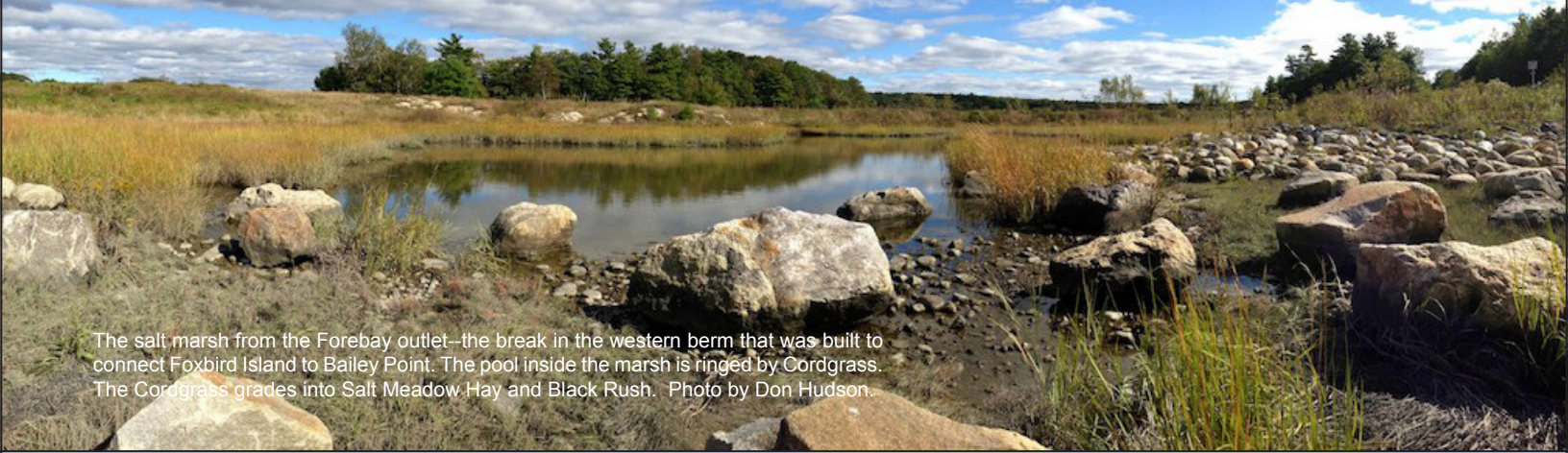


Flourishing Environment at Maine Yankee

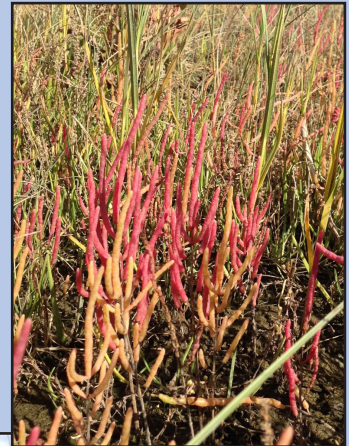


The salt marsh from the Forebay outlet—the break in the western berm that was built to connect Foxbird Island to Bailey Point. The pool inside the marsh is ringed by Cordgrass. The Cordgrass grades into Salt Meadow Hay and Black Rush. Photo by Don Hudson.

In September 2013, Don Hudson, Chair of the Maine Yankee ISFSI Community Advisory Panel (CAP), toured the salt marsh in the former Forebay area of the MY site. After the visit, Hudson shared analysis and photos illustrating that the former Forebay now hosts a diverse and complete saltwater ecosystem after nearly ten years of development. Hudson holds a Ph.D. in Ecology and Evolutionary Biology. His specific experience and expertise with the ecosystems around MY are linked to his work at Chewonki in Wiscasset, where he first served as a trip leader in the 1960s and 70s, then returned after graduate school to become Head Naturalist, and eventually served as President for nearly 20 years. He has been a member of MY CAP since its establishment in 1997. His report and photos follow.

“The restoration of the Forebay was designed to create proper land grades, allowing salt-tolerant plants to colonize the bare ground. During restoration work, coarse woody debris and organic mulch were spread over exposed gravel to benefit grasses and flowering plants inhabiting the Forebay area above the tidal line. This debris and mulch began to erode with each tide cycle and did not contribute to the marsh’s development. In the first year, tides from neighboring salt marshes carried seeds and plant fragments, which established root. Each tide cycle continued to bring in fine sediments that steadily accumulated around the plants’ growing root systems. Nearly ten years later, the marsh is well established. Minnows such as Mummichogs (a small killifish) and Sticklebacks can be seen in the pool, and the tracks of wading birds feeding on the fish are visible everywhere in the mud. Snails typical of salt marshes and mudflats are present, and in June, horseshoe crabs deposit their eggs in the gravelly area at the outlet. The same types of phytoplankton found in the waters of Montsweag Bay are present in the pool of the new marsh.”

Photo, left: Seaside Goldenrod grows with roots primarily above salt water. Photo, below: The clear demarcation between the taller Cordgrass and the Salt Meadow Hay/Black Rush mix (left). Far left is upland vegetation boundary, which has a similar ecosystem encountered in older Maine fields. Photos by Don Hudson.



Photo, above right: Glasswort, a flowering plant with fleshy stems to store fresh water that grows closer to salt water. Photo, above left: Sea Lavender grows throughout the high marsh. Photos by Don Hudson.

