

The Story of Outer Cape Cod and of Wellfleet's 'In Town' Conservation Areas, Creeks and Waterways

The Story of Outer Cape Cod begins about 18,000 years ago with the melting of a glacier that at the peak of the last ice age covered this coast to a depth of 10,000 feet. With sea level 300 feet lower than today, the "Cape Cod" land mass extended many miles farther east all the way to the present George's Bank, at that time a dry-land extension of the continent. Picture a wall of ice hundreds of feet high to the north of us, with large melt-water streams pouring out of it and carrying massive loads of sand and gravel southward to form an "outwash plain", the land mass we now know as outer Cape Cod. Remnant ice blocks that survived for a time in the wake of the melting glacial wall became buried in the out washed sediment, slowly melting over hundreds of years to leave holes in the outwash - our dry kettle holes and freshwater ponds.

For perhaps a thousand years after glacial retreat, the bare landscape remained very cold, dry and windswept. The first vegetation to

colonize was tundra plants, arctic willow and ground-hugging spruce, grazed by ice-age mammals like mastodons. Spruce-fir forests succeeded the tundra about 10,000 years ago.

With continued warming, by 9000 years ago pitch pine became established in sheltered locations, with bearberry and broom crowberry forming a heathland community on sites exposed to strong winds. Deciduous maples, beech and oaks grew in wetter lowland locations.

Glaciers continued to melt and sea level continued to rise throughout the world, submerging and eroding coastal plains and forming the Cape Cod landform that we know today. The Cape's salt marshes that are so prominent a feature today were established as recently as 4000 years ago, when sea-level rise slowed enough to allow the marshes to keep above the rising sea. By that time, the pitch pine and oak forest that presently dominates the Cape was well established.

Native Americans arrived on this peninsula at least 6000 years ago, finding a landscape populated with black bears, wolves, turkeys and beavers, and seemingly unlimited finfish and shellfish. They frequently set small fires, accidentally or perhaps intentionally, that helped to maintain the pitch pine "fire climax" plant community. [With modern forest fire suppression, the shade-sensitive pitch pine are being overtopped and replaced by fire-sensitive black and white oaks.] European settlement from 1630 to the mid-nineteenth century profoundly altered the outer Cape landscape. Uplands were deforested for fuel and for house and boat building, and grazed by cattle and sheep; actual tillage and crop cultivation was limited by the poor, sandy soils

and centered on lowlands where soils were more fertile. By the mid-1800s, the Outer Cape was practically treeless. Meanwhile, these settlers used and highly valued the resources of coastal wetlands, shellfish, finfish, and salt hay, as had the Indians before them.

A decline in human occupation and less reliance on local forests for wood since the 1800s has allowed the forests of Wellfleet to recover. The oldest pitch pines here (1-2) feet in diameter) began their lives in open fields about 150 years ago. A resurgence in population throughout the twentieth century, along with the burgeoning tourist industry, greatly altered the landscape with new roads and residential development except within happily-extensive conservation lands. However, much of the recovering outer Cape forest and wetlands remain, providing habitat for the return of native animals, such as box turtles, white-tailed deer, covotes, and river otters.



Just as the history of Outer Cape Cod is the story of both the natural world and man's impact upon it, so too the story of Wellfleet traces the intimate interaction between man and the land.

Before the days of roads, railways and dikes dissecting Wellfleet's estuaries, the center of Wellfleet was made up of a series of upland islands, surrounded by an interconnected chain of tidal creeks and coastal marshes. It is 5

difficult to know exactly how the town of Wellfleet looked, but maps and photographs from the late 19th century show a downtown Wellfleet navigable by sail and oar more than horse and buggy. At the time those maps were made, Duck Creek was one of the most prominent harbors, combining access by land from mainland Cape Cod and by boat from the Wellfleet Islands.

Duck Creek led boaters from Wellfleet Harbor to the town meeting house (the town's second) completed in 1740 at the head of the creek where the town center was informally located at the time. Between the 1830s and the 1850s wharves in the area of Uncle Tim's Bridge serviced as many as 39 schooners. In the 1870s the railroad made its way through Wellfleet partially blocking tides into Duck Creek's salt marshes and tidal flats. Across the creek from Commercial Street on Uncle Tim's Bridge is Hamblen's Island, also known as Cannon Hill. In 1931 Annie Hopkins gifted this 12 acre parcel of land to the inhabitants of the Town of Wellfleet, to be held as a public park for all time.

Waterways also provided access to individual houses, like the many farm-houses that dotted the hillsides near Mayo Creek, including the Taylor Farm.

The Head of Mayo Creek Conservation Area combines the Wellfleet Conservation Trust owned marshland and part of the old railroad bed to the north of Chequessett Neck Road with the town-owned, Land Bank-funded upland area that abuts the marsh.

The present day thicket was historically part of the Mayo Creek salt marsh system which extends south of Chequessett Neck Road to Wellfleet Harbor, although nearly all tide and saltwater was blocked at Commercial Street about 100 years ago. The diked flood plain was partially filled and now includes a trailer park and the town owned Baker's Field. With the blockage of tides and seawater, this original 40-acre estuary gradually changed from tidal salt marsh to brackish marsh; most native plants and animals were thereby eliminated.

Despite the loss of salt marsh, and very poor water quality in remaining surface waters, the wetland does provide shrubby habitat for songbirds. Most of the vegetation is exotic, however, and was likely planted by settlers in the adjacent uplands and spread around by birds that eat the seeds. When the salt water was blocked, the fertile and moist flood plain became favorable to many of these species. Exotic Bittersweet, Multiflora Rose, Blackberry and native Black Cherry are all invasive species here.

A habitat shift like the one at Mayo Creek is not unique to this property in Wellfleet. In fact, about half of Wellfleet's native coastal wetlands have been diked and drained. Examples include much of the existing lowland in central Wellfleet, from Pole Dike Creek, over to the Herring River and Griffin Island, and all the way north to Duck Harbor and Bound Brook Island. Efforts are underway here and throughout the world to restore salt marshes that have been damaged in this way.

We hope this guide will help to enrich your walk in the present with a sense of the past.

<u>Please stay on the trails</u> to protect fragile plants in these areas and to respect private properties.

Directions to areas mentioned in this guide:

To Uncle Tim's Bridge which leads to trails on Hamblen's Island: Heading North on Rte 6 follow green signs for Wellfleet Center; take the first left off Main Street onto Commercial Street; Uncle Tim's Bridge is on Commercial Street on the left: there's a sign pointing to public parking 400 feet further on. Park and walk back to Uncle Tim's Bridge from there.

<u>To The Head of Mayo Creek Conservation</u> Area:

Heading North on Rte 6 in Wellfleet, follow green signs for Wellfleet Center onto Main Street. Travel one mile through town and continue straight, uphill, as Main Street turns into Old Chequessett Neck Road. As the road begins to make a sharp turn to the right, the driveway and parking for the conservation area are on your left. There is a sign, Head of Mayo Creek Conservation Area, on the left. Please park along the left side of this driveway.

Thank you to the Hamblen, Hopkins and Oliver families for their contribution to conservation of "In Town" open space in the Town of Wellfleet.

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