

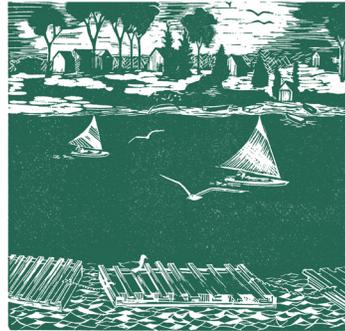
Nauset Marsh Trail



Cape Cod is an ever-changing land. And while deposits of the great glaciers laid the basis of the Cape's distinctive formation, the ocean, wind, plants, animals, and humans have all contributed to the Cape as you see it now. This process is still evolving, and is most evident in the Nauset Marsh area.

Salt Pond - A Kettle of Sea Water

As the glaciers of the last Ice Age receded about 18,000 years ago, huge chunks of ice were left scattered across the landscape. When these ice blocks melted, they left depressions in the earth. Then, as the Cape's water table rose, numerous "kettle ponds" began to appear.



Salt Pond was originally a freshwater kettle pond, but eventually the ocean broke through and formed a narrow channel connecting it to Nauset Marsh.

Enriched twice daily by tidal action, Salt Pond has become a diverse community of marine life. Quahogs, oysters, mussels, fish, shorebirds, plants of the marine environment, and animals – including humans – all mark the change from fresh to saltwater.

But Salt Pond is continuing to change, its entrance gradually filling in with sand. Perhaps we will witness the formation of a closed, fresh water system. More likely, the ocean will claim the pond for its own as it edges closer to the interior landscape.

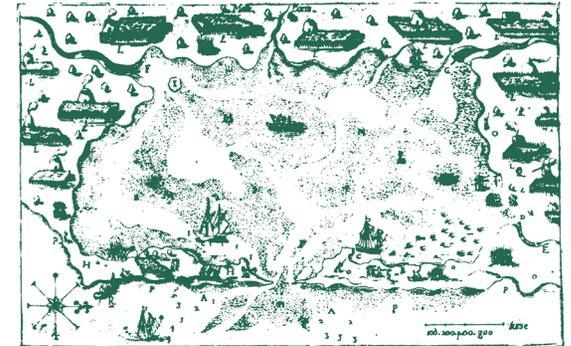
The Dike Across Tidal Waters

Originally constructed to impound brackish water, the dike adjoining Salt Pond has ceased to function.

Sheltered, and within range of the changing tides, the area was once the site of a tide-powered mill. The dike, however, was added in more recent years to attract waterfowl. If left contained, the water here would turn fresh, a fact attested to by the fresh ground water seeping out of the hillsides.

Today, human uses of the pond are more subtle, devoted mainly to occasional boaters, hikers, and Sunday clammers. The rafts and floats in Salt Pond serve as seed beds and ensure a bountiful return of a once virtually depleted resource of quahogs, mussels, scallops, and other shellfish.

Nauset Marsh Overlook: Champlain's Vision



Charted by the French explorer Samuel de Champlain in 1605, Nauset Marsh was then a navigable bay. The explorer also noted a number of beehive-shaped homes and fields on the hillsides, placed there by the native Nausets. As time passed, the ocean continued to develop a narrow stretch of sand along the outer shore.

We now know this as Nauset Spit. The spit acted as a protective arm, or barrier beach, and this allowed the extensive salt marsh to develop.

Typical of salt marshes, the area is a full-scale nursery for oceanic fish, shellfish, and microscopic plankton. It also serves as an important habitat for shorebirds, wading birds, and migratory waterfowl.

Shallow enough to allow marsh grasses to establish roots, the tidal flats are actually stabilized by the extreme conditions that exist there. Ranging from hourly changes in the water level, to infrequent but often catastrophic winter storm effects, the salt marsh environment is uniquely suited for specific organisms. Nourished then flushed twice daily by the tides, the marsh yields abundant nutrients, especially from decaying salt marsh and salt meadow cord grasses, which feed into a vast food chain. The aromas of this activity are most noticeable during the fall season.

Starting with tiny plankton, which are food for fish and shellfish, that are in turn food for crabs, birds, and humans, the life support services of the marsh range from many miles inland to hundreds of miles out to sea.

The Cedar Links of Nauset



Traveling inland from the marsh, the landscape changes rapidly into an area of red cedar and aromatic bayberry. The red cedars (actually junipers) are sun-loving trees, quick to take over open fields and barren grounds of the Cape. But here they also serve as clues to a past human influence.

Until the early 1940s, a private golf course was here, complete with sand traps, open fairways, and putting greens. Evidence of this past activity can still be seen amid the landscape.

Once abandoned, the cedars quickly filled in the golf course, as their seeds were distributed by gravity, birds, and animals. Red cedars, however, do not tolerate shade. And as the area fills in, other trees such as white and black oaks begin to dominate. Eventually, maple and beech trees, with seedlings that grow well under their own shade, will once again be the most prevalent trees on Cape Cod.

The Old Farmstead

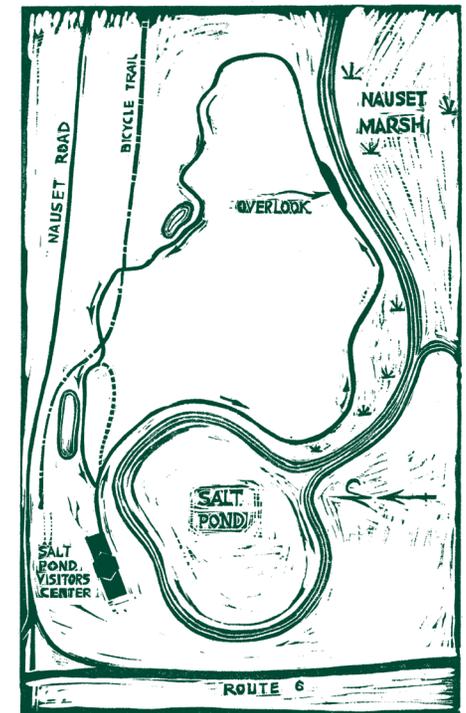


Between the bicycle path and the roadway is an extensively altered landscape that was once a farm. As vital soil nutrients were removed by continual use and reuse, the land lost fertility and had to be abandoned. Black locusts, with their ability to fix nitrogen into the soil, were introduced to replenish the land. Today, these tall, thin trees manage to perpetuate their own setting by allowing little or no undergrowth.

Black locust, originally from the southern United States, shares this area with other non-native plants, including the smooth-barked tree of heaven, fruit trees, and garden plants, amid remnants of old man-made structures. Diversified areas like these, and fringe areas of beach plum, black cherry, bayberry, and pitch pine, provide important habitat for song birds,

quail, raccoons, rabbits, foxes, squirrels, and deer. Humans, too, are part of this environment. And through lighthouses, windmills, old homes, and fields, we intentionally preserve certain reminders of our past.

But the rest of the Cape is still changing. And if you read the Cape's landscape by looking for its past and present influences, look carefully – for it will never appear exactly the same the next time you ramble these footpaths.



Remain on designated trails to reduce exposure to disease-carrying insects, poison ivy, and other risks. Observe trail conditions and be aware of tree roots, stumps, and other naturally occurring hazards.



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