



Guide's Guide

Fort Hill

Location Summary

Directions: Traveling north, Fort Hill (marked by brown and white signs) is to the right side of Route 6, in Eastham one mile past the Orleans/Eastham rotary.

Safety: Parking and turning around are difficult in designated lots. Buses are advised to unload at the junction below the Penniman house. Use extreme caution when returning to Route 6. **Watch out for ticks and poison ivy in this area.**

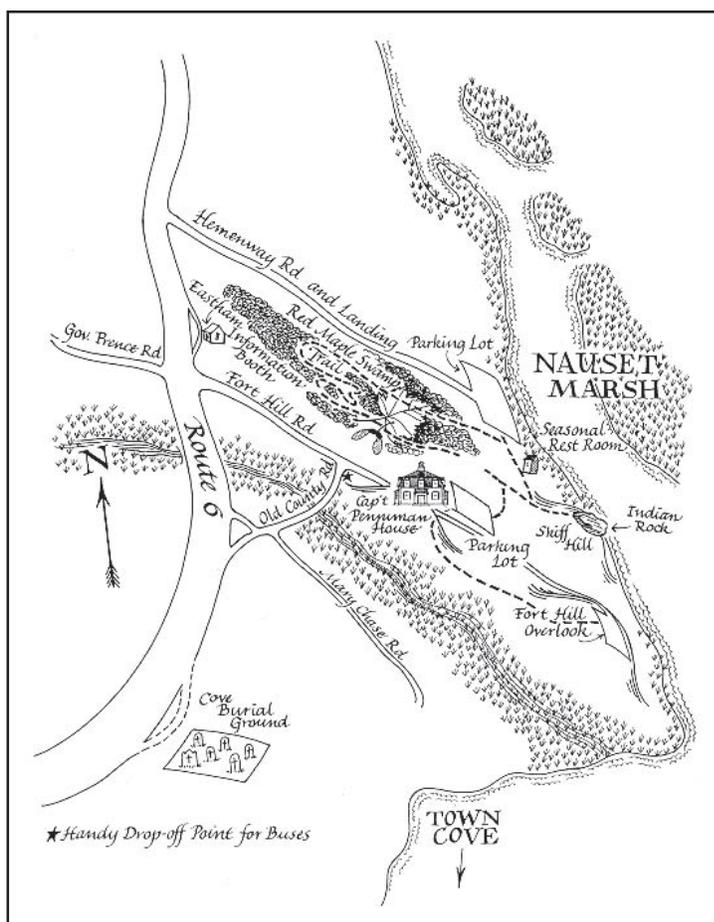
Other: No restrooms on site. Seasonal restrooms are located near Skiff Hill, a short distance from the town of Eastham parking lot at Hemenway Landing. It may be preferred to wait until reaching Salt Pond Visitor Center.

Tips: Start telling the Fort Hill story after leaving the Orleans/Eastham rotary.

Time Frame: Five-minute narration on board bus. Ten to twenty minutes if stop is made at the overlook, or for outside tour of the Penniman house and grounds.

Notes for Educators: Fort Hill and Red Maple Swamp nature trails are located here. Allow one hour to walk both trails.

Highlights: Gateway to Cape Cod National Seashore
Old Cove Burying Ground (three Mayflower passengers) Whale jawbone arch
Penniman House Nature trails Scenic overviews



Fort Hill

Prominent Natural Features

The Fort Hill Trail is a 1.5 mile series of connected pathways that lead across fields, through cedar/oak forests, and along the edge of Nauset Marsh. The main starting point is the parking lot across from the Penniman House.

The .75 mile **Red Maple Swamp Trail**, which adjoins the Fort Hill Trail, contains a boardwalk loop through the heart of swamp, which is wheelchair accessible from the Hemenway entrance.

Skiff Hill, reached by footpath from the Penniman parking lot, or via a paved walkway from Hemenway Landing, offers magnificent vistas of Nauset Marsh. Exhibit panels describe marsh life, Native Americans and Champlain's visit to the area in 1605. The Skiff Hill site also contains a sharpening rock used by native people for tool maintenance.

The **Fort Hill Overlook** is located at the end of the roadway beyond the Penniman House. This spectacular vista overlooks Nauset Marsh, adjacent fields, Coast Guard Beach and Nauset Spit. The main inlet into the marsh is prominently visible from this location.

Birdwatching is popular in this vicinity, and both the Fort Hill and Skiff Hill overlooks are superior for this activity. A variety of species can be seen from these locations, ranging from shorebirds working the nearby Nauset Marsh to birds of prey soaring overhead. Common sightings include mergansers and bufflehead ducks in fall and late winter, warblers and various inland songbirds in the spring, and great blue herons and yellowleg sandpipers in summer.

An **upland portion of Nauset Marsh**, located between Hemenway Landing and Fort Hill, can also be walked, and offers close-up views of mussels, marsh grasses, and other salt marsh life forms.

Hemenway Landing (operated by the Town of Eastham) at the end of Hemenway Road is an excellent area to study tidal flats and salt marsh ecosystems.

Fort Hill

Touring Script

Eastham is the gateway to Cape Cod National Seashore for those traveling north along Route 6. The Park boundary, which extends some forty miles from Chatham to Provincetown, is located just to the right of the roadway.

Also visible after passing the Orleans/Eastham rotary is Town Cove, the first saltwater vista from Route 6 on the Outer Cape.

One mile further on the right is the Old Cove Burial Ground. Three *Mayflower* passengers are buried here, along with other prominent historical personalities. This was also the location of the first Congregational meeting house.

The Town of Eastham was settled by Pilgrims in 1644, but was originally known as Nauset, in recognition of the local natives.

Somewhat further on the right is the Fort Hill area which offers a rich array of natural and historic features. Native Americans frequented this location for several thousand years, living off the diversity of resources provided by the marsh and uplands. When Champlain charted this site in 1605, he drew dozens of beehive shaped huts along the edge of Nauset Marsh, attesting to the area's productivity.

Reverend Samuel Treat, who ministered to both Nauset and Pilgrim settlers in the early 1700's, was given a parcel of twenty acres here, and succeeding generations of Treat, Knowles and Penniman families built homesteads in the vicinity.

When the landscape underwent dramatic changes during the 1800s and the soil became impoverished, local families were often faced with difficult choices. Moving away was one option, going to sea another.

Captain Edward Penniman was a local boy who made good in the whaling industry. As he became more successful, the Captain often took his wife and children to sea with him, and built an elaborate French Second Empire style home at this site in 1867-1868.

The open fields of Captain Penniman's days are now maintained by the National Park Service. The area also hosts a variety of trails and wayside exhibit panels that describe features, such as the area's picturesque Red Maple Swamp, prehistoric sharpening rock at Skiff Hill, and the marine resources of the neighboring Nauset Marsh.

Fort Hill

Fort Hill/Skiff Hill

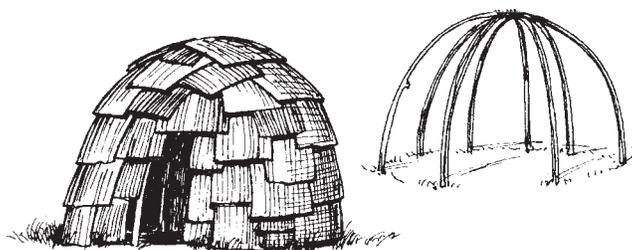
Native Americans

The Nauset Indians, who were living in the Eastham/Orleans area in 1600, were Wampanoags (Algonquin stock). It is not known how long they lived here perhaps three-to-five thousand years, although earlier settlement sites dating back 8,000 years have been found in adjoining areas. The Nausets were primarily agriculturists and fishermen, supplementing their diet with game. They grew beans, corn and squash. Succotash, a mixture of beans and corn, was the principal dish to which any available meat was added. Shellfish was used extensively.

Houses were of the “beehive” type, historically described by Gosnold (1602), Champlain (1605), and others. These simple structures were built of saplings tied together and covered with sedge grass. Beds were simple-slightly raised bunks, with skin or grass covered padding. Wooden bowls and spoons, baskets, and conical clay pots (bullet shaped) were fashioned by the squaws. Projectile points, scrapers, knives, stone axes, and harpoon heads were made in profusion.

Until September 1965, a twenty-ton granitic glacial boulder, used by Native Americans for tool sharpening, was located on the marsh just south of Hemenway Landing. Due to shoreline retreat, the boulder was almost lost in the marsh, so it was

moved about 100 feet to the top of Skiff Hill. The original site is now under water. Studies revealed that the stone was probably used for sharpening bone items such as harpoon heads and fishhooks (note the long, moon-shaped grooves) and stone axes (wide, smooth depressions which, in some cases, show “pecking” to make them rough).



Samuel De Champlain

Before this was New England, it was known by the French as New France. In 1605, a French expedition under the leadership of Sieur de Monts, with Champlain as cartographer, sailed from St. Croix, in Acadia, to find a more suitable location for the struggling French colony. The voyage of exploration took them south along the New England coast until July 20, 1605, when they dropped anchor at Port de Mallebarre-or Nauset Harbor. It was a provident world. The soil supported cultivated crops, fresh water was at hand, and, if one knew how, the bay yielded a rich harvest. The Nausets reaped this concentration of energy, and, over the years, used it to build their extensive settlement.

Champlain carefully prepared a map of the harbor on which he noted Indian villages, fish traps, corn fields, etc. As his map of 1605 shows, Nauset Harbor was *entirely surrounded by little houses around each one of which was as much land as the occupant needed for his support ... Before reaching their cabins, we entered afield planted with Indian corn ... (which was) five and a half feet high-their cabins are round and covered with heavy thatch made of reeds.*

Fort Hill

Fort Hill was the highest point adjacent to the meetinghouse erected by Pilgrim residents of Nauset (later called Eastham) shortly after they settled the area in 1644. Scholars still speculate on the naming of Fort Hill, but similar names were given to high points at other settlements along the eastern seaboard during that time period. A hill of this sort would serve as a natural point of defense (with or without a structure) from which defenders could shoot downward at attackers. The most probable threat to the Pilgrim residents during that time period was from fellow European settlers such as the Dutch in New Amsterdam (New York).

Some of the farmland in this area was undoubtedly the former property of Governor Thomas Prence (Prince) who governed the colony from Eastham for some years. The Reverend Samuel Treat was called to Eastham in 1672. He also owned about twenty acres of land at Fort Hill. The boundaries were marked by a stone inscribed with a “T”, and the northwest marker still exists.

Treat, the son of the governor of Connecticut, became famous as a preacher and defender of the “Praying Indians.” While serving his Eastham parishioners, he worked to win the confidence and support of the Indians by learning their language and attending their feasts. He was so successful, there were 500 praying Indians under his protection. These Indians maintained their own villages within Eastham, their own churches, schools, magistrates and courts. Reverend Treat labored throughout his life to improve the welfare of the Indians, and encouraged others to follow. The good preacher died at the height of a blizzard in 1717.



Few objects in this era were not used as resources. Salt hay was harvested from the marsh in barges; the Atlantic White Cedar Swamp north of Fort Hill and the Red Maple Swamp were cleared of trees; and as local wood disappeared, an Irish-born minister taught residents how to dry and burn peat. Even the salt of the sea was gathered—first by boiling (a costly, wood-consuming practice), and then by solar evaporation. This activity grew until in 1830 salt vats dotted the water’s edge of Nauset Marsh.

Changes occurred. Within three decades of settlement, the Eastham forests had become the Eastham plains. Only at Fort Hill was there any semblance of soil. Dairy farming continued here until the 1940’x, and now, again, a forest creeps in. But the pastures are still kept open as a reminder of those yesterdays.

Fort Hill

The Pilgrims in Eastham

First Sightings of the New World

Eastham is a centerpiece of the Pilgrim story. The first sighting of the New World from the *Mayflower* was the Eastham shoreline. The scene was met with prayerful jubilation. It was also near here that the *Mayflower* encountered the Pollock Rip, and nearly sank. It was then that the Pilgrims elected to settle in New England rather than continue south (to the northern extent of Virginia Colony) where they were originally authorized to establish their colony.

After the *Mayflower* anchored in the vicinity of Provincetown harbor, and the Mayflower Compact was signed on November 11, 1620, explorations were initiated. Three “discoveries” (expeditions) were subsequently made, the first two in the Provincetown and Truro areas. The “Third Discoverie,” starting out on December 6, consisted of a band of ten Pilgrims and eight sailors under the direction of Captain Myles Standish. The group used the company’s oar and sail powered shallop to voyage southward, eventually making landfall on the bayside flats of Eastham. At this point they set up camp for the night. The next day was spent exploring. A number of native dwellings were observed, but no contacts were made. A second night was spent on the beach, but with more dramatic consequences: In the early morning the Pilgrims heard loud “whooping” and “hollering” noises, and with much confusion, took up defensive positions. Shots were fired by one side and arrows by the other. In the dazed aftermath, amazingly, there were no injuries to report on either side. It was a frightening, but nonrecurring incident probably based on the Pilgrims’ earlier pilfering of native corn reserves and dwellings. The Pilgrims named this place “First Encounter.” The “Third Discoverie” party continued westward in the shallop, despite bad weather, to an area known previously by the *Mayflower’s* pilot, Robert Coppin, as Thievish Harbor. The open fields and proximity to fresh and navigable water made this site their choice for settlement—hence the beginnings of Plymouth Colony. But it was not long after that some of the original Pilgrims desired to return to Cape Cod, and more specifically the Eastham area.

Another Departure

In April of 1644, seven families obtained permission to depart from the Plymouth area to resettle in the Nauset area of Cape Cod. It was originally hoped to resettle the entire Plymouth township, with its leadership and authoritative functions as well, to the Nauset area, but this was determined unfeasible. However, seven families felt the need to move onward, and so took advantage of this parcel of Cape Cod which was one of only three remaining tracts set aside for the “Old Comers” of Plymouth Colony. And thus, the Court of Plymouth granted that *all those that goe to dwell at Nosett be given ... all the land between sea and sea*. At first the area was known as Nauset, sometimes spelled “Nosett” or “Nawsett.” Within two years the settlement was incorporated. An undated list of freemen in the 1640s includes the names of Thomas Prence, John Doane, Edward Banks, Nicholas Snow, John Jenkins, Josiah Cooke, Samuel Hicks, John Smalley, and Richard Higgins. On June 7, 1651, the Plymouth Court ordered the town’s name changed to Eastham (based on various petitions).

Nauset soil was reported to be the best soil in the colony, and attracted a number of prominent citizens. Unfortunately, over-exploitation of the soil and forests eventually led to degradation of the local environment. But in the early days of settlement, there was prosperity. Tracts of land given out here were designed to provide settlers with bay, ocean, forest and field resources, often granted in linear strips thus accounting for why Eastham does not have a well-defined “town center.”

Three *Mayflower* passengers selected Eastham as their final settlement, and are buried in the old Cove Burying Ground. They were Constance Hopkins Snow, Giles Hopkins, and Joseph Rogers. Constance and Giles were both members of the Hopkins family (brother and sister), a “stranger” family that boarded the *Mayflower* (i.e. not part of the Pilgrim Old World congregation). Joseph Rogers was a lieutenant, under Myles Standish, in the colonial militia. It is hard to imagine what these pioneers thought when looking out to sea from the Eastham shoreline and reflecting on that first vista of this landscape while on board the *Mayflower* in 1620.

Another prominent citizen was Thomas Prence. Prence arrived in 1621 on the *Fortune*, at the age of 21, and quickly rose to prominence, becoming one of the eight Plymouth Colony “Undertakers” (financial overseers) in 1627. He was appointed governor in 1634, and served as either governor or assistant governor until his death in 1673. He was one of the original settlers of Eastham, holding extensive acreage in the Fort Hill area, and purportedly ran the colony at times from his Cape Cod residence. In 1665 he was required by the Court, as an official, to reside in Plymouth, for which he was compensated. With the death of Governor Bradford in 1657, Prence became the most influential personality in the colony.

Prominent Pastor

The Reverend Samuel Treat was another prominent citizen in the early days of the town. He was born in Milford, Connecticut in 1648. He graduated from Harvard in 1669, and spent some time in New Jersey along with his father and other relatives. In 1672 he was called to become the pastor of the church in Eastham. His starting salary was fifty pounds, with enough wood for his use to be brought to his door. He also received parcels of meadows, marsh, an island at Billingsgate, twenty acres of upland and a house at the head of Town Cove (Fort Hill area). Reverend Treat was renowned partly for his harsh, howling sermons, but equally for his earnest and compassionate nature. He treated the local Nauset Native Americans as full members of the community, and extended his service to them. In 1693 there were reportedly five hundred natives to whom Reverend Treat preached.

Fort Hill

The Penniman House and Family

The Penniman House was built at the end of the Victorian Age and styled after the French Second Empire Period (1855-1870). The house was designed by an unknown architect, built by local artisans using the finest available materials, and sited on land purchased from Captain Penniman's father.

Completed in 1868 for the family's use while the Captain continued his whaling career, the house included every known comfort and many innovative ideas. The foundation was laid on the existing ground, the basement walls built up, and fill brought in to raise the surrounding land by eight feet. This provided excellent drainage, ensuring a dry basement, and raised the windows of the cupola high enough for the Captain to observe the ships passing in both Cape Cod Bay and the Atlantic Ocean.

The first floor contains a parlor, sitting room, dining room, kitchen and pantry. A center hall divides these rooms and contains the stairs to the second floor. A rear door gives access to the kitchen and the back stairs.

Upstairs, four bedrooms are separated by a center hall. A small bathroom and stairs to the attic and cupola are at the rear.

Two chimneys served the wood/coal stoves in the eight rooms. By 1897, a coal-fired furnace was installed in the basement, with pipes running to the parlor, sitting room and dining room. Floor grills are still visible in each of the rooms. The stoves continued to be used as supplementary heat in the spring and fall. About 1915, all the stoves except the kitchen range were removed, and the three-pipe furnace was replaced by a central coal-fired warm air furnace in the basement with a floor grill in the center hall. By 1940, the coal furnace was replaced by the existing oil furnace.

A novel water collection system supplied the kitchen and bathroom. Drinking water came from a deep well in the rear yard. This house had the first kitchen and bath with indoor plumbing in Eastham and the first indoor flush toilet in town.

Carpeting, stained glass windows, fine woodwork, running water and an efficient heating system made it one of the finest homes in town.

The Penniman family occupied this fine home for nearly one hundred years, except for when the captain was at sea or when Mrs. Penniman took one or another of the children along on one of the whaling voyages.

Mrs. Penniman's family occupied three homes adjacent to the Penniman house. Her parents' home was located where the parking lot is today. Sylvanus Knowles owned the house across the road from the Penniman house, and Seth Knowles had the big house at the bend in the road where the road ascends Fort Hill. The Knowles family farmed the land between Fort Hill and Skiff Hill to the north. Some of this land was originally given to Reverend Treat, the first minister in Eastham, and before that, had a long history of Native American use.

The Life of Captain Edward Penniman, 1831-1913

1831	Born at Eastham, August 16, the second of nine children of Betsey (Mayo) Penniman.
1842	At age 11, shipped as cook on a schooner bound for fishing on the Grand Banks. Wrecked near Nauset Light, crew and cargo saved. Continued as a local fisherman until 1852.
1852-1855	Boatsteerer on the whaling bark Isabella , 3 years, 2 months.
1855-1859	Mate on the whaler <i>Minerva</i> , 3 years, 10 months.
1859	Married Betsey Augusta Knowles of Eastham, daughter of William Freeman Knowles, Jr. and Betsey Augusta Doane Knowles.
1860-1864	Captain of the whaler <i>Minerva</i> , 3 years, 11 months.
1860	Son Eugene Blanchard Penniman born at Eastham, September 11, 1860.
1864-1868	Captain of the whaler <i>Minerva</i> , 3 years, 5 months. Narrowly avoided capture by the Confederate raider <i>Shenandoah</i> in the Arctic. Mrs. Penniman and Eugene along on this voyage.
1867-1868	The Penniman house was built on Fort Hill Road in Eastham.
1868	Daughter Betsey Augusta Penniman born at Eastham, September 2, 1868.
1870	Son Edward Damon Penniman born at Eastham, March 25, 1870.
1874-1875	Captain of the whaler <i>Cicero</i> , 1 year, 7 months.
1876-1879	Captain of the whaler <i>Europa</i> , 3 years, 2 months. Mrs. Penniman and Edward along on this voyage.
1881-1884	Captain of the whaler <i>Jacob A. Howland</i> , 3 years, 1 month. Mrs. Penniman and Betsey along on this voyage.
1884	Retired from the sea to the family home at Eastham at age 53, hoping for ten years of retirement as a gentleman farmer.
1913	Died at home, October 16. Buried in Evergreen Cemetery, Eastham.

During the 32-year period between 1852 and 1884, each of Captain Penniman's seven voyages and over apporximately three years, two months, for a total time at sea of over 22 years. Mrs. Penniman spent more than nine years at sea over a twenty year period. Captain Penniman's vessels produced 4,237 bbls. of sperm oil, 12,096 bbls. of whale oil, and 166,871 lbs. of whalebone.

After the Captain's death, Mrs. Penniman and their daughter, Betsey, continued to live in the home. Mrs. Penniman's died in 1921. Betsey Penniman, who never married, stayed around and raised her niece, Irma. Upon Betsey's death in 1957, the home was left to Irma Penniman Broun. Irma and her husband sold the house with twelve acres to the National Park Service in 1963 when the Cape Cod National Seashore was formed.

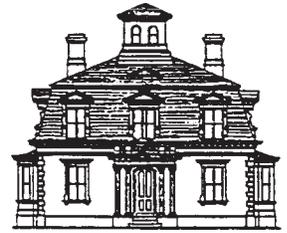
After the sons, Eugene and Edward, had completed their careers, they retired to the home in Eastham until they died. All are buried in Evergreen Cemetery, Eastham.

Fort Hill

Background of Penniman House

Architecture

The Penniman House was built by Captain and Mrs. Edward Penniman in 1868. The most conclusive documentation for this date of construction is the entries in Captain Edward Penniman's account book for the expenses he incurred building the house from June 17 through December 8, 1868. Original drawings and specifications for the house also exist; unfortunately, they bear neither the signature of the architect nor a date. The last two pages of the specifications, where the date and name of the architect probably were written, have been lost.



The Penniman House is a 2.5 story, wood-frame structure with a mansard roof. The mansard roof is the characteristic feature of French Second Empire style architecture in mid-19th century America.

Although the architect of the Penniman House remains unknown, it seems likely that a Boston architect prepared these drawings and specifications. The theory that the plans for the house were either brought by the Captain from France, or ordered by him directly from France, is not supported by any evidence. There are no records of Captain Edward Penniman ever traveling to France. From September 11, 1864, to April 2, 1868—the years immediately preceding the building of the house—Penniman served as Captain of the *Minerva*, and was on a whaling voyage around the world.

The master builder of the Penniman House was Nathaniel Nickerson. His name is written on the back of one of the original drawings of the house, suggesting that they were the drawings and specifications from which he worked. Nathaniel Nickerson was also the most highly paid of the men who worked on the construction of the house.

Setting

The property that Captain Penniman purchased from his father in 1867 consisted of approximately twelve acres of land, on which were located a dwelling house, two barns, and several outbuildings.

By 1880, however, all of the pre-1867 structures had disappeared. The earliest photograph of the property shows only the present house and the mansard-roofed barn built by the Pennimans in 1880. The old house, barn, and woodhouse thus must have been taken down between 1878 and 1880.

Soon after the barn was built, a greenhouse was constructed along the north wall of the courtyard. It was a rectangular structure of wood and glass that extended along the full length of the courtyard's north stone wall. With the building of this greenhouse, Captain Penniman appears to have completed his master plan for the property; all of the old buildings had been demolished and three new structures erected.

In the 1920's, the greenhouse was destroyed in a hurricane; it was not rebuilt. With this exception, the property retains its late 19th-century site plan.

Interior

The interior layout consists of four rooms on the first floor, two on each side of a central hall, four bedrooms and a bathroom on the second floor, a finished bedroom in the attic, and a cupola above. The interior woodwork and finishes are ornate and of high quality. Windows in the southwest parlor, northwest parlor, and dining room have molded, recessed panels below them extending from window apron to baseboard. The front stair has a handsome mahogany newel, handrail, and turned balusters. Doors on both the first and second stories have fine, hand painted grained finishes. The northwest parlor retains the design scheme applied when the flocked wallpaper and ceiling paper were hung in 1885.

The house was built with interior plumbing. The kitchen contained two sinks, and a full bath was located on the second story. Water was supplied to this system by two cisterns, one located in the attic and the other underground at the northeast corner of the house. The kitchen retains its original marble sink and cabinet.

The original heat source for the house was eight wood or coal stoves. They stood in front of the marble mantles in each of the rooms, and were piped directly into the two chimneys. In the 1890's, a three-pipe, coal-fired furnace was installed to supplement the stoves. Floor grills are still visible in the parlor, sitting room and dining room. In the early 1900's, the furnace and all the stoves (except the kitchen range) were replaced by a central coal-fired warm air furnace with a floor grill in the center hall. Later, the coal furnace was replaced by the existing oil furnace.

When first built, the house was lighted with kerosene lamps. Electricity was introduced in the 1930s, but most of it was removed when the house was restored.

In the 1980's, the National Park Service installed reproduction wallpaper based on original designs documented by photographs and physical remainders. A collection of some one hundred glass plate negatives of turn-of-the-century scenes of the house and family serve to allow visitors to the house to envision how rooms were furnished and life was lived in the Penniman family days.

Fort Hill

Trail Guide

The Fort Hill Trail is 1.5 miles long. It connects with the Penniman House, the Red Maple Swamp and Skiff Hill by walking in the following sequence (from the parking lot across from the Penniman Family Home):

1) Cross the road and walk to the Penniman house. This is the home of Captain and Mrs. Edward Penniman, and is Eastham's best example of 19th century Victorian era architecture. The Pennimans built the house here in 1868 because of the marvelous view of the ocean and bay. Penniman was a very successful whaling captain.

2) Walk down the trail to the barn where a horse and cow were kept. After he retired from whaling, Captain Penniman farmed a few acres of land. He would probably be called a "gentleman farmer" today because he did not depend on farming for a living.

3) About 200 feet down the trail notice some fruit trees on the left. These are survivors from the Penniman's orchards.

4) In the fields to your left is a farm house. Built by an early member of the Knowles family about 1826, this is the oldest house in the vicinity. The earliest Knowles probably obtained their original twenty acres for farming from the Treat family.

5) Proceed uphill to the Fort Hill overlook. To the right is Town Cove. Nauset Marsh lies before you, and beyond the dunes is the Atlantic Ocean. Native Americans were the first people to live in the area. In the 1600's, they lived in beehive-shaped huts around the marsh. In 1605, French explorers (including Champlain) sailed into Nauset Harbor (now Nauset Marsh). They were searching for a more suitable place to settle than their site in Canada. The shallowness of the harbor and the presence of many natives discouraged them. Pilgrims from Plymouth Colony settled here in 1644. The town was called Nauset (the old Indian name) and was one of the four original towns founded on Cape Cod (the others being Sandwich, Yarmouth and Barnstable). These first settlers were attracted to the Nauset area by the abundant forests, the fresh water springs, and rich soils to be found here. After the land was cleared, however, farming began and the good soil was quickly depleted. When the land no longer produced crops, the fields were used as pasture for cattle, goats and sheep. But this too had a severe effect upon the land. Overgrazing had become a problem in Eastham.

6) Walk down to the large boulder before you. This boulder, a glacial erratic, was possibly used by settlers for anchoring and pulling in barges containing salt marsh hay. Salt marsh grasses were cut and brought to the shore by barges or by horsedrawn wagons. The dried hay was used to feed livestock. Nauset Marsh has been developing for several hundred years. It is being built up by silt, sand and decomposing marsh grasses. Salt marshes produce food for ocean fish, birds and other wildlife, as well as for humans. Decaying marsh plants and animals become food for microscopic animals in the marsh which, in turn, are fed upon by small fish. They then become food for large fish, both in the marsh and out in the ocean. The commercial fisheries of the world depend upon healthy salt marshes and estuaries.

7) When you come to the first rock wall, note the variety of grasses and plants near the trail. One of these is the large nonnative shrub known as the salt spray rose. During the summer it produces pinkish flowers and reddish-colored fruits (rose hips) which can be made into rose hip jelly. A prominent native shrub with an edible fruit is the beach plum, which is also used in making jelly.

Bayberry also has a useful berry and is used for making candles. You can capture the real fragrance of bayberries by rubbing your fingers on a leaf, then smelling your fingers. Poison ivy abounds with its leaves in groups of threes.

8) To your left you will pass a small bog which was probably a kettle pond originally. In 1826, this site possibly was the location of a salt works owned by Mr. Knowles. During the fishing era of the 1860s, there were hundreds of these salt-making structures on the Outer Cape. The salt was used in preserving fish for market. Windmills were often used to draw saltwater up from the sea or marsh, and then to transfer the water to wooden vats where it evaporated, leaving the salt.

9) Proceed to the next rock wall. Here the Knowles family's 19th-century farm was divided into several plots. The area around the pond bog and inland was the corn field. A vegetable garden lay just beyond the wall, while an upland hay field was to the northwest. The rest of the farm was in pasture.

10) This field, also farmed by the Knowles, has the potential of growing into a forest. If the fields you have just walked through were not occasionally cleared, they would soon become overgrown.

11) Continue on to the Skiff Hill shelter. The interpretive sign will tell the story of the rock which was possibly used for sharpening tools (such as arrows and knives). This misplaced boulder (glacial erratic) was moved to this location from the marsh below as it was in danger of being buried by mud and grass.

12) After a short walk down the paved path, turn sharply left and enter the Red Maple Swamp. You are now entering the third natural community along this trail: the freshwater lowlands. This was once a white cedar swamp similar to the one still standing near the Marconi Site in South Wellfleet. Now no white cedar trees can be found in the Red Maple Swamp. They were cut down for timber. Then the floor of the swamp was dug up for peat. The peat became an important fuel supply as the forests were cut and wood became scarce. By 1800, almost all the woods in Eastham had been cut down, and there were few trees to be seen.

13) It is difficult to imagine flocks of sheep grazing in Eastham, but once they were. The Fort Hill area was better managed than most and retained much of its productivity. The establishment of the Cape Cod National Seashore saved the Fort Hill area from being subdivided and developed. Now it belongs to the public and can be enjoyed by all.