Wenham's Great Swamp

Its history,
resources,
animals,
vegetation
and lore.

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Jack E. Hauck



Wenham's Great Swamp

Wenham's Great Swamp is not only in Wenham. Portions also are in Hamilton, Topsfield and Ipswich. In total, the swamp covers about two thousand acres, and is the largest fresh-water marsh on the north shore.

The last glacier formed the swamp, when it receded from the North American continent, about 10,000 years ago. As it receded, it deposited soil and rocks – called till - in the massive kettle hole that the glacier had cut though the bedrock.

Some deposits formed elevated areas, which became islands of various sizes and shapes.

Several drumlins make up the swamp's most conspicuous high ground. They are long, rounded hills molded by glaciers as they moved. They point in a parallel to the glacier's path. Pine Island is a drumlin.

Other features include:

Kettle-hole ponds, such as Cedar Pond in Wenham, were shaped by big chunks of ice, broken off the glacier and buried in the soil. When the ice melted, a pond basin was formed.



Drumlins make up the swamp's most conspicuous high ground. Photo, Bing Maps

Eskers, such as Fowler's Island, are the sediment left behind as a glacier melts, often in the shape of a low winding ridge.

Kames, such as Fox Island, are similar to Eskers, since they also originated from the sediment dropped by melting glaciers into depressions, which slowly grew into small hills.

The material of these elevated areas is "till," which consists of an assortment of boulders, pebbles and fine sand and clay.

Over the centuries that followed, vegetation grew on the islands, and in shallow areas. These plants and trees died and accumulated to form marsh areas.

With the run-off of the melting ice, brooks and streams formed in the swamp. The result is a huge natural aqua filter.

Wetland vegetation provides a natural filter, to which micro-organisms grow and which break down organic materials. These microorganisms are called the periphyton, which is responsible for about 90% of pollutant removal and waste breakdown.

Water

Water in the nearby Great Pond, what we now call Wenham Lake, came from several underground springs, and, indirectly, drain off from the great swamp.

The water from the swamp was naturally purified, before it reached the great pond. Thus, the Great Pond became known around the world for its unmatched purity and clarity.

In the 1800s, man interfered with nature, and the Great Pond began to be filled with less pure water.

Around 1880, a canal – more accurately, a ditch – was dug to drain Cedar Pond, which adjoins the swamp, and the surrounding area, into Wenham Lake.

Next, from 1914 to 1918, the Beverly and Danvers Water Board dug a canal straight across the Wenham Swamp, from the Ipswich River. The canal delivers water to the northern end of the lake, at Cedar Street.

Water quality deteriorated with the addition of this extra supply, and it was necessary, in 1935, to build a large water purification plant, in North Beverly.



Cedar Pond, a kettle hole, was formed when glacier melted. Photo, Bing Maps

Wenham does not draw gracer mered. Photo, Bing Maps water from Wenham Lake. Wenham's water comes from two gravel-packed wells (approximately 50-feet deep), located at the south end of Pleasant Pond, off Pleasant Street.

The wells draw water from the aquifer below the Great Pond. The periphyton provides a natural filter; thus we do not need a filtration plant.

Lately water problems have developed. Measures taken to keep the water safe have recently affected the taste and smell. The Massachusetts Department of Environmental Protection says Wenham has the last distribution system, of its size in Massachusetts that does not add chlorine. In the future, chlorine will be added.

Fuel and Lumber

For the early settlers, the Great Swamp was a valuable source of fuel – called peat – used for cooking and heating.

Most peat bogs grow slowly, at the rate of about a millimeter per year. At one time, the peat beds in the great swamp were as much as fifteen feet deep. That works out to they were, at the bottom level, nearly 5,000 years old. More commonly the beds are from five to eleven feet thick.

Back when peat was being harvested, it was generally done between the middle of August and the middle of September, just after the swamp's dry period. The water level receded allowing easier access to the peat beds.



Fowler's Island, an esker, was formed by sediment left behind as a glacier melted. Photo, Bing Maps

After being dug from the bog, the water-logged peat blocks were placed on dry areas alongside the bog. When thoroughly dried and much lighter, the blocks were carried to a "turf house," for storage. Many turf houses (wooden barns), in the 1800s, were built alongside Valley Road, in Tops-field, and the Wenham causeway.

Peat was a substitute for wood, and not for coal. Anthracite coal was not intro-

duced into New England until 1828. Peat was dirty to handle and burned with a peculiar odor and a brisk fire could not be made from it.

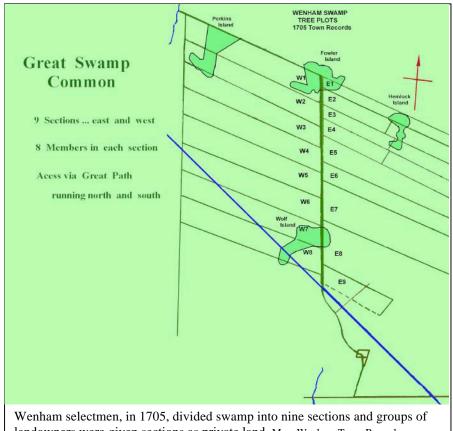
Peat was not the only valuable resource. When settlers first ventured into the Great Swamp, they found that its many islands had very broad and tall trees, suitable for building houses. Also, many smaller trees, which could be burned for heat, grew in the marsh areas. These resources were important. Since most of the trees on dry lands had been harvested or were on private land.

George Washington, visiting Essex County in 1789, wrote in his diary, "The Country (*between Boston and Salem*) seems to be in a manner entirely stripped of wood."

Initially, the Great Swamp was considered to be common land, which all people could access for farming, grazing for their live stock and collecting timber and fire wood. However, as the 18th century began, the town government decided that the Great Swamp should be divided among designated groups of the town's people. There had been many arguments about who could take wood from the Great Swamp.

The selectmen divided the swamp into nine sections, each fifty feet wide and 200 feet long. Groups, called companies, with eight land owners in each, were formed. This was done Nov. 18, 1705.

Wood removal began by cutting from the front and working back. It was thought that by time the back was reached, new trees would have grown at the front and the cutting would begin again from the front. This was a very optimistic program, since large trees were cut down faster than planted trees grew to equal sizes.



landowners were given sections as private land. Map, Wenham Town Records.

Islands

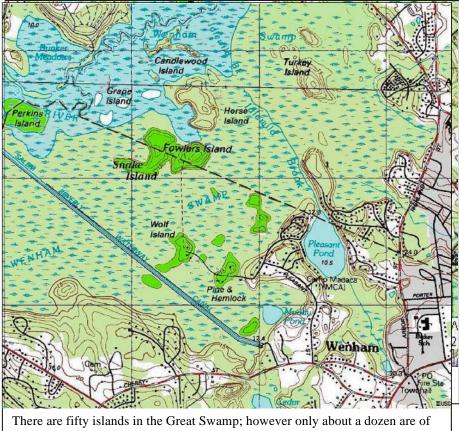
There are fifty islands in the Great Swamp; however only about a dozen are of any appreciable size. Islands within Wenham include:

Pine and Hemlock Knoll has large stands of hemlock, white pine, and black birch. A half-mile trail loops around the perimeter of the knoll, now owned by the Hamilton Wenham Open Land Trust.

Wolf Island is not as big as it originally was. When the Ipswich-Salem Canal was dug, it cut the island in two.

The name came from early settlers seeing some wolves on it. The wolves did not last long for, in 1644, there was a bounty of twenty shillings on them.

Woodside Lane, which leads to Wolf Island, originally was known as The Way to Wolf Island. At Wolf Island, the path intersected with the main road, called The Highway, which went to Fowler's Island.



any appreciable size. USGS Topo Map

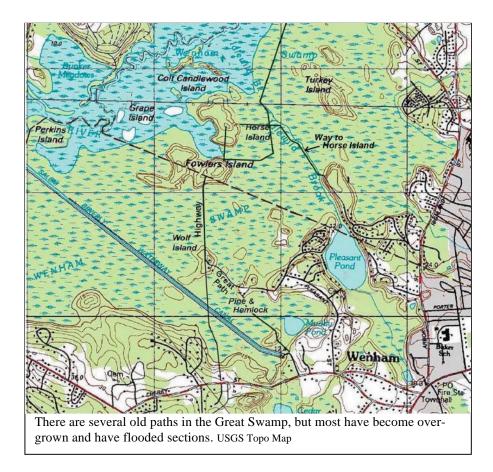
Huckleberry Island, also called Perkins Island, in 1703 was involved in the purchase of a new meeting house bell in Wenham. It was "Voted Ensign Fairfield, Lt. Thomas Fiske, or Ens. John Porter are appointed a committee to sell our old bell and to agree with Zacheus Perkins for the sale of our commons on Huckleberry Island and to fetch our new bell home & see to the hanging of it."

Snake Island, which is in Wenham, got its name from the large number of snakes found on it. The island, off the southwest tip of Fowler Island, only can be reached by boat.

Fowler Island, which is mostly in Wenham and partly in Hamilton, is the largest island in the Great Swamp. Originally, Joseph Fowler, of Wenham, owned it. The highest spot is 66 ft.

Perkins Island, aka Huckleberry Island, which is in Topsfield and Wenham, originally, 1639, was owned by John Perkins. It only can be reached by boat.

There are two granite town boundary markers on the island.



Islands in other towns include:

Turkey Island, which is in Hamilton, got its name from the large number of wild turkeys on it. The highest spot is 75 ft.

Horse Island, which is in Hamilton, is not named for it horse head shape. The origin of the island's name is not known. At one time, it could be reached by a trail that ran beside the Idlewild Brook, but this is no longer possible. The highest spot on the island is 35 ft.

Colt Island, close to Horse Island, is privately owned, however, the owner permits the use of the facility for day trips and overnight camping.

The island, which is in Hamilton, has well-maintained and defined walking paths. No reference was found with regard to the origin of the name.

Candlewood Island, which is in Hamilton, draws its name from the resinous Candlewood Trees that are on it and that were used for torches and candle substitutes.



Rail Trail entrance off of Rte. 97, heading toward Topsfield, is open to hikers and bicyclists. Photo, J. Hauck.

The island affords a spectacular view of the swamp. The highest spot is 79 ft.

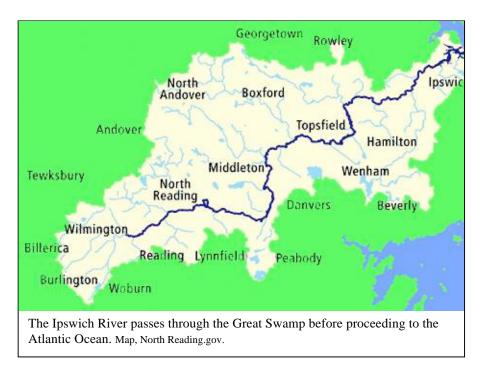
One of the larger islands in the swamp, covering two acres, Candlewood Island is owned by the Hamilton Wenham Open Land Trust. During the dry season, the island is accessible by foot, from Colt Island.

Pine Island is in Topsfield. Its high spot is 56 ft. It only can be reached by boat.

Grape Island, which is in Ipswich, is quite small and low and only can be reached by boat.

Fox Island, a very small kame between Averill's Island and Pine Island, is in Topsfield. Information could not be found concerning the source of its name. It only can be reached by boat.

Averill's Island, which is in Topsfield, can be reached by an unpaved road connecting the island with the mainland, from Bradstreet Hill to the Steward School on Perkins Road. The highest spot on the island is 46 ft.



The Ipswich Wildlife Sanctuary owns most of the Great Wenham Swamp. In addition, the Trustees of the Reservations owns Pine and Hemlock Knoll; and the Hamilton-Wenham Open Land Trust owns Candlewood Island.

Trails

There are several old paths in the Great Swamp, but most have become overgrown and have flooded sections.

The Great Path, across Pine & Hemlock Knoll and out to Wolf Island, is no longer useable.

Salem-Beverly Waterway, dredged and widened in 1974, has gravel roads on each side, which provide good paths through the swamp. Make sure you walk along the left side, for the bank on the other side has several breaks in it.

The paths can be reached at the end of Old Town Way, which is off of Cherry Street. It is about a mile to the end of the path, on the left side of the canal.

The Highway is still carried as a Wenham town road, but it is overgrown and overflowed in several stretches.

The Way to Horse Island no longer is intact all the way to Horse Island.



The small brooks are fascinating, both to see and hear. Sunlight flashes off the rivulets and there is a melodic babbling. Photo, J. Hauck

Pine & Hemlock Knoll has a short trail around its circumference, as well as paths crossing the island.

There is a driveway, 93R, off of Pleasant Street that leads to the knoll. The trail begins at back of the Blanchette property. Best thing is to call ahead and ask them to allow you to park on their property, and walk the trail to Pine & Hemlock Knoll.

The Rail Trail is a new path through the swamp.

There once was a rail line, the Newburyport Railroad, running through the swamp, on its Topsfield side. It ran from Newburyport to Georgetown, in 1849 and 1850, and west to the B&M, at Bradford, in 1851. Through a couple of mergers, the line eventually ran to Wakefield.

Starting in 1941, sections of the line were abandoned. The first to go was the line from Newburyport to Topsfield, which ran through the Wenham Swamp.

In 2009, plans were initiated to create a bike and pedestrian path for about a mile of the abandoned Newburyport RR through the Wenham Swamp. The Rail Trail, completed in 2011, stretches from Danvers to Salisbury.

The old tracks and ties were removed by the Iron Horse Preservation Society, at no cost to the towns. Mass Highway constructed the bicycle/pedestrian crushed stone path.

Under the terms of the lease agreement, Wenham agreed to lease its portion of the Rail Trail for 99 years, and to be responsible for maintaining the trail.

In Wenham, there are two sections of the Rail Trail. One goes north to Topsfield, off of Rte. 97. The other goes south, off of Rte. 97, to Danvers.

Streams

As many avid canoeists will attest, there are several intriguing streams running through the Great Swamp.

Two of the larger ones are:

The Ipswich River, 45-miles long, begins at the junction of Lubber and Maple Meadow brooks in Wilmington. It passes through the towns of Reading, North Reading, Middleton, Topsfield, Hamilton, and flows into the Atlantic Ocean at Ipswich.

Idlewild Brook exits Pleasant Pond, at its north end. It snakes its way through the swamp and, eventually, intersects with the Ipswich River, near Candlewood Island. The water does not run rapidly, so paddling back will not be too tiring.

Animals

In effect, the Great Swamp is a natural zoo. There are a great many different creatures living in, on and over the Great Swamp. However, you will have to be very alert to see or hear them.

Many of the creatures and plants in the Great Swamp are considered rare or endangered, in Massachusetts.

The Eastern coyote, at first glance may look like a mangy dog.

Coyote dens are located on slopes, banks, or rocky ledges, and are often hidden under downed trees, stumps, or in culverts.

They can be active night or day, and sightings at dawn or dusk are common. At such times, they communicate with their characteristic howling.

Fishers, incorrectly called "fisher cats," belong to the weasel family, which includes mink and otters. Adult male fishers weigh 8 to 16 pounds and measure approximately 3 feet from head to tail.

They tend to be active at night and during the hours at dusk and dawn.

The cry of a fisher cat sounds a bit like a person screaming when the victim of a violent attack. Once you've heard one, you will not forget the sound.

River otters are long, streamlined animals with short legs, webbed feet, and a wide, rounded head with small ears.

A typical adult weighs 11 to 23 pounds, and is 3 to 4 feet in length. To communicate, river otters whistle, growl, chuckle, and screech.

Mink are relatively small animals, generally only about a foot in length. They are nocturnal creatures.

Turtles, of the smaller species, are often seen basking on a log.

Eastern box turtles, an endangered species, are slow crawlers, extremely long lived, slow to mature, and have relatively few offspring per year.

And, yes, turtles make sounds ... something like coughing.

Here, quickly, are some other animals you may see in the Great Swamp:

The *red fox* is usually recognized by its reddish coat and black "leg-stockings." The red fox is 22 to 32 inches in head and body length, and the tail is 14 to 16 inches long.

The *gray fox* has rusty-red fur, on its ears, ruffs and neck. Overall coloration is gray, and the darkest color extends in a suggested stripe along the top of the back down to the end of the tail. Compared to red fox, grays have shorter muzzles and shorter ears, which are usually held, erect and pointed forward. Many grays are about 15 inches tall at the shoulders and overall lengths are around 40-44 inches, including a tail of 12 to 15 inches. The gray fox is the only fox that climbs trees.

Woodchuck, the name comes from the Algonquin word, ockqutchaun; they also are called groundhogs. They are excellent burrowers and hibernate during the winter. Adults are 20-28 inches in total length, with the tail about 4-7 inches. They can swim and climb trees. Woodchucks communicate making "chuck-chuck" noises. However, when alarmed, they use a high-pitched whistle to warn the rest of their colony.

Algonquin is a name French settlers gave to the Indians. The French were trying to pronounce the native word, "Algoomaking." The Algonquin call themselves *Anishnabek*, which means original people."

Opossum, the name comes from the Algonquin word, wabissim. They basically are nocturnal. Their tail is prehensile and is able to hold or seize objects. When confronted, an opossum will show its teeth, hiss and growl.

Skunk, the name comes from the Algonquin word, seganku. On very warm nights, skunks will be out searching for food. When temperatures are below freezing, they sleep to conserve energy. When threatened, a skunk will turn its hind-end towards the threat and eject a stream or fine mist at the threat. Skunks have many predators, including Great-horned owls, coyotes, foxes and domestic dogs.



Pine & Hemlock Knoll has a well defined trail. Photo, J. Hauck

Raccoon, the name comes from the Algonquin word, arakun. The raccoon is identified by its black face mask, outlined in white, and its bushy tail with alternating black and gray rings. Raccoons are mostly active at dawn and dusk and at night. They make a wide range of sounds, often sounding like birds.

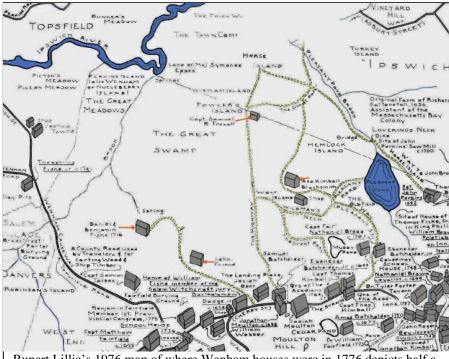
White-tail deer have long, slender legs; large ears; and a tail that, when the deer is alarmed, flares erect to reveal the white underside. White-tailed deer are most active at dawn and dusk. Deer make many different sounds, including grunts, burping, and one that sounds like the blowing of one's nose.

Cats, abandoned domestic animals, are in the Great Swamp. Many have short lives, for they are killed by predators.

New England **c**ottontail rabbits are becoming very rare. They are active at dawn, dusk and during the night. The New England cottontail rabbit is a semi-aquatic animal. Its watery habitats offer food and protection from predators.

Snakes of several different types, as would be expected, are in the swamp. There include: Garter snakes, black snakes, brown snakes, green snakes, and water snakes.

Frogs, of many different types are in great abundance in the Great Swamp.



Rupert Lillie's 1976 map of where Wenham houses were in 1776 depicts half a dozen houses in The Great Swamp.

Salamanders of many types can be seen, including the blue-spotted salamander, which is an endangered species.

If you are a bird watcher, then the Great Swamp is a special place for you. There is not enough time to mention all the different species, but a few are worthy of note.

The *Great White Egret* has a very unusually sound, almost like deep gurgling. Take the time to watching them stealthily and slowly pursue their prey.

The *Bald Eagle* is unmistakable. Once very large in number, there now are very few ... DDT was their undoing.

Wild turkey ... the official state game bird of Massachusetts ... Benjamin Franklin wanted it to be the national bird, rather than the eagle. No, it does not make the gobble-gobble sound ... it clucks.

Several types of *hawk* inhabit the Great Swamp. Look for the male Cooper's Hawk. Females are up to one third larger than males. The Cooper's Hawk is listed as an endangered species.

Trees and Vegetation

Trees dominate the swamp, especially in the summer and fall.

Ash, both white and green, are generally found in groups.

Birch, mostly white, yellow and gray. Birch sap is distilled to make birch oil which with carbonated soda makes birch beer.

Cedar once were in great number, but this is no longer the case.

Hemlock are everywhere. Hemlock sap was used to kill Socrates.

Maples are the most dominant tree. These are mainly swamp maple, but there also are red maples, Norway maples and silver maples.

Red maple is the most familiar swamp tree. Its brilliant fall foliage lights up the watershed's extensive swamps in September and early October.

Oak, both white and red, are few in number. Once there were many.

Spruce also are everywhere.

Pine, both white and red. In colonial times, the tall white pine were called *mast pines*. Some masts were as high as 120 ft., and 4 ft. in diameter, at the base.

There are far too many different types of vegetation for me to go into in this presentation, but there was one species that I should mention. It's called "weed."

Back in 1966, a local newspaper article described how \$1 million worth of marijuana plants – aka weed - were discovered growing in the Great Wenham Swamp. People wondered how the cash crop could have escaped detection for so long. The Tree Warden, Al Dodge, denied having any involvement in growing the plants.

Some of the low and non-woody plants which you'll see in wetlands throughout this region are skunk cabbage, a harbinger of spring; many other ferns; as well as wildflowers too numerous to list. Look for skunk cabbages beginning to emerge even in the snow of late winter – they can do this because they produce their own heat, keeping the core of the plant about 36 degrees F warmer than the outside air temperature!

Two plants which you really should learn, if you are going to explore the swamp, are poison ivy and poison sumac.

Poison ivy's distinctive 3-part leaf varies considerably in shape, color, glossiness and edging.

Poison sumac is even more toxic, though less common.

Jewelweed is another plant you may wish to know about. The juice of this plant is said to be an antidote to the toxins in the poison ivy and poison sumac.

The Adder's Tongue, though not a snake, is another plant to keep a keen eye out for. Though it doesn't look like one, it's a fern. An old ointment for wounds, called "Green Oil of Charity," is made from it.

Former Inhabitants

Former inhabitants, yes, at one time, there actually were people living in the swamp, included:

Asa Kimball, a resident of Boxford, he was a blacksmith;

John Friend, who was very active in Wenham's government and a deacon in the church:

Daniel & Benjamin Fiske In 1736, Daniel Fiske sold land to the town to build a school-house for the children in the western part of Wenham.

Capt Samuel Russell Trevett, a resident of Marblehead, had a house on Fowler's Island. He served at the battle of Bunker Hill.

William Fiske was a member of the Salem witch trial that convicted and hung Sarah Good, Jul. 19, 1692.

John Perkins, Jr., as a young man, lived in a hut on his father's island, Perkins Island. While there, he is said to have prevented an Indian plot to attack Salem and Ipswich.

Great for Hiking

There is so much more to see in the Great Swamp.

Butterflies and other insects. Fish. Amphibians. Town boundary markers.

There also are tales of ghosts living in the Great Swamp. Perhaps people that became lost and were never found. Indian medicine men are said to have gone into the swamp to gather magic elixirs.

In December 1964, a husband and his wife, who lived on Pleasant Street, became lost in the Great Swamp. That evening, the couple were found, however, the pregnant woman, unable to walk back, was evacuated to a hospitable by a helicopter. ^{13, 14}

Well, are you now excited about taking a walk through the Great Swamp?

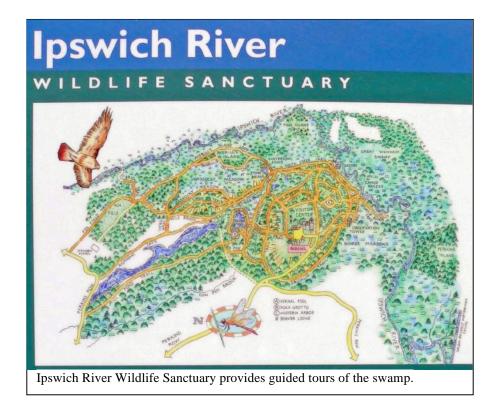
The best time would be in late fall, after a heavy frost.

The bugs are gone, especially the mosquitoes.

Before starting on a hike, you'd be advised to bring the following things:

High-top walking boots - Some places, along the way, will be soggy.

Gloves – There are some large branches that will need to be moved off the path.



Hat with a bill – The sun's glare can get quite strong, on bright days. Actually, the best kind of hat is the acacia hat.

Water – If you get thirsty, and you probably will, there are no water fountains in the swamp.

Binoculars – There will be things out in the wet areas that you'll want to more closely look at.

Phone – If help is needed, you'll want to be able to call someone.

First aid kit – Nothing is likely to happen, but safety is always the best precaution.

Bug spray – Just in case a few are still around.

Knapsack – You'll need something in which to carry all your stuff.

There is one basic rule: leave the swamp the way that you found it.

Don't leave garbage.

Don't take anything, other than photos.

Don't mark anything.

OK, you're ready to go.

One last suggestion.

Some trails are easy to find, some have markers, but for most you'll likely need a good guide, for there are no maps.

There once were trail markers, but these are gone for the most part.

You can go to the Mass Audubon's Ipswich River Wildlife Sanctuary, 87 Perkins Row, Topsfield, for guided tours of the swamp. There are 10 miles of trails.

Updated 06-01-2014

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Addendum A:

Lots Drawn in Wenham Swamp Common ³

First lot

Barr, John Batchelder, David Dodge, Josiah Fairfield, Walter Fisk, Sr. Thomas Hutton, Richard Symonds, Robert Symonds, Jr., Robert

Second lot

Berry, John Edwards, Benjamin Edwards, Thomas Gott, John Herrick, John Herrick, Joseph Knowlton, Richard Larcom, Mordecai

Third lot: W3 & E8

Coy, John Edwards, John Fisk, William Fowler, Joseph Friend, James Kimball, Sr., Samuel Kimball, Thomas Stewart, John

Fourth lot:

Dodge, Mary

Dodge, Ruth, for her husband's

estate. Fisk, Benjamin Fisk, Jr., Samuel Fisk, Sr., Samuel, Haggett, Henry Knowlton, William

Moulton, Jonathan

Fifth lot

Dodge, William, one share Fairfield, Walter, two shares Fisk, Thomas, two shares Goldsmith, Zaccheus, one share. Waldron, Nathaniel, two shares

Sixth lot

Dodge, Richard Gott, Jr. Charles Kilham, Daniel Patch, Sr. Thomas Patch, Stephen Perkins, John Rogers, William Trowt, Tobias

Seventh lot: W7

Batchelder, Ebenezer Batchelder, John Dennis, John Fisk, William Jr. Hooker, Joseph

Hull, ??

Kimball, Samuel Jr.

Leech, John

Eighth lot: W8

Batchelder, Joseph Kilham, John Kimball, Caleb Kimball, Ephraim Maxey, David Patch, Timothy Rix, Theophilus Wallis, Joshua

Ninth lot

Cue, widow, one share. Fisk, Theophilus, one share.

Gerrish, one share.

Porter, Lt. John, three shares. White, Thomas, one share.

Addendum B:

Endangered Species⁵

Vegetation

Adder's-tongue fern Atlantic white cedar Broom crowberry Dwarf mistletoe Hall's bulrush Lion's foot

New England blazing star

Pale green orchis Pod-grass Red pine Reed bentgrass River birch River bulrush

Seabeach needlegrass Slender cottongrass Small burreed

Small yellow showy lady's

slipper Tiny cow-lily Variable sedge

Fish
Bridle shiner
Amphipod

Mystic Valley amphipod Eastern pond mussel **Butterflies**

Kennedy's emerald Hessel's hairstreak (67 butterfly species have

been recorded)

Reptiles

Blanding's turtle Eastern box turtle Spotted turtle Amphibians

Blue-spotted salamander Four-toed salamander Marbled salamander Spotted salamander

Birds

Cooper's hawk Coppery emerald Golden-winged warbler Pied-billed grebe

Least tern
Least bittern
Northern harrier
Piping plover
Other Insects
Coppery emerald