## Centerpiece of the Mashpee River Woodlands

"A great river coming from a pond bearing many fish"

A Mashpee River Guide



## Mashpee Environmental Coalition Friends of the Mashpee River

Provides an organization through which forward thinking citizens can work for common goals shared by those who are concerned with the environment of the watershed.

If the current damage to our watersheds remains uncorrected, future generations will never know the natural beauty and tranquility of this historic ecological pearl. We must not deprive them of the comfort and tranquility provided by a restful and relaxing visit to this serene locale.

We must protect this resource for future generations and ourselves to enjoy. Please support our mutual efforts to protect this living resource of diverse habitats. Membership is open to everyone.

Consider joining your friends at The Mashpee Environmental Coalition. Annual dues are as low \$10.00 for a family membership.

Please make checks payable to" Mashpee Environmental Coalition" or" MEC".

Our address is: Mashpee Environmental Coalition

P.O. 274

Mashpee, MA 02649

Web Address <u>www.mashpeemec.us</u>

**Membership Options** 

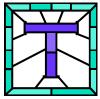
Family membership (single address)	\$10.00
Silver membership (individual)	\$15.00
Gold Membership (individual)	\$25.00
Sponsor	\$50.00

Cover: River view from the Stenberg memorial bench. (The bench is located on the river's west bank, follow the trail from Farley's camp site south.)

Mashpee Environmental Coalition, Inc. is a 501 c. 3 non-profit organization.

Permission is granted to use anything contained herein, with appropriate attribution. Mashpee Archives photos are identified in the accompanying text.

#### **PREFACE**

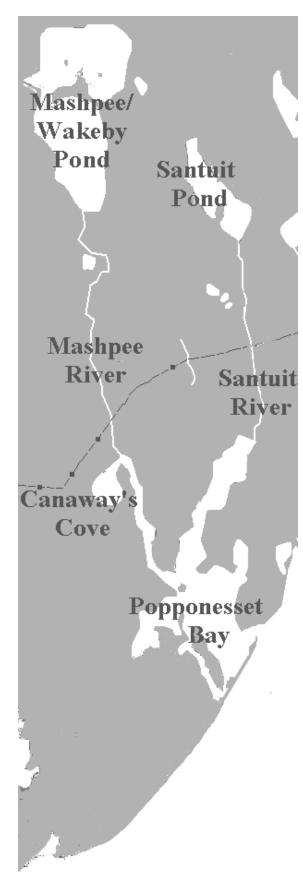


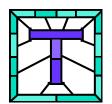
his booklet is respectfully dedicated to the memory of John W. Farley and Pemberton Whitcomb for their foresight and generosity in conserving large tracts of Mashpee River tangent lands for the protection of the river and the enjoyment of future generations.

Our gratitude also is extended to the Mashpee taxpayers from all economic levels whose unstinted support for the acquiring of additional river corridor lands with their votes, their wallets and purses added significantly to the Farley and Whitcomb generosity.

Sadly, population growth and movement to coastal areas have created significant pressures for housing and the accoutrements required to maintain an adequate living standard for the area's residents. The increased demand on the ecological well being of our surface waters is not being balanced by measures to mitigate the damage introduced by that demand. Simply stated, while people need a place to live, play and work, they also have an obligation to impact their neighbors and the environment in favorable ways. The Mashpee River Friends Sub-committee of the Mashpee Environmental Coalition believe a population informed about local ecological assets would support reasonable efforts to protect them from harm.

Consistent with this belief, the Mashpee River Friends have established an organization to familiarize the public with the Mashpee River Corridor, its watershed, status and needs. The organization will support measures that enhance and protect the river area and the public enjoyment of this unique place.





he Mashpee River from its source at the southwest shore of Mashpee/Wakeby Pond

flows into Nantucket Sound by way of Popponesset Bay.

The river channel traverses diverse habitats as it makes a winding roughly 5-mile journey down the gentle slope from its birthplace to the sea.

Notable for its attraction to sportsmen of an earlier time, the river was famous for native sea run brook trout supplemented with fish reared in the adjacent Trout Pond flowage. Local residents served as guides for the "sports from Boston". Wildlife, abundant when Mashpee had a more rural character, still frequents the river environs.

Many species of shorebirds, ducks, Canada Geese, Swans, etc. frequent the brackish areas. The marshes attract muskrats and many songbirds with the red-winged Blackbird proliferating. Occasionally in the wetted low-lying wooded area near Farley's Camp a Northern Parula visits. Deer, fox, coyote, skunk, Ruffed Grouse, rabbit, gray or red squirrel, opossum and rodents are relatively numerous. Owls and several varieties of hawk are common. Osprey's once rare are sighted daily, April through November and beyond. The river lamprey, a protected species, is found in the waters north of Canaway's Cove.

Kayaks and canoes appear on the river spring through fall, transporting visitors into the Woodlands that bear the river's name. An onlooker from the riverbank will hear exclamations of wonder and appreciation from the first time visitor while the repeat paddlers bask in the serene beauty of their surroundings.



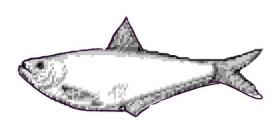
ish found in the river section south of Canaway's Cove include in addition to the numerous Mummichogs

American Eels,

the occasional Sea-run Brook Trout, Snapper Blues, Striped Bass of all sizes, Needlefish and Menhaden. North of Canaway's Cove a few Brook Trout, River Lampreys and eels are found.

The river hosts a spring Herring (Alewife) Run facilitated by 2 fish ladders at the rivers Northern end. Approximately Mid-April, when the tide is high and the day is

sunny, pods of herring will migration to Pond to create their next Family Tree. Alewives can total, become sexually between 40,000 and adults return to the sea



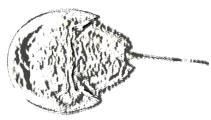
begin their Mashpee/Wakeby generation on the live about 10 years mature at 4 and lay 360,000 eggs. The soon after

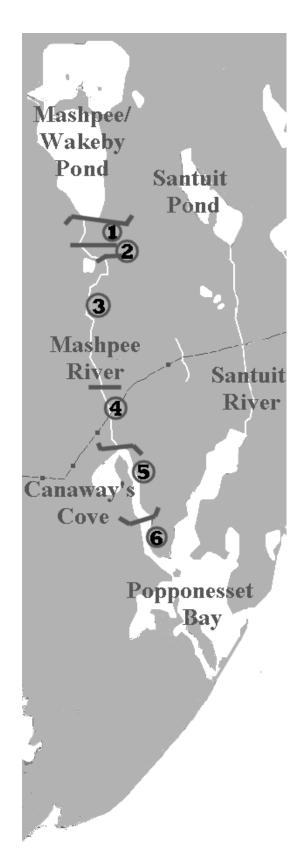
spawning while the fry remain in their birthplace until cooler temperatures signal them to head downstream to the salt-water environment. During the spawning migration a large number of adults die from various causes. The uncommon 10-year-old adult swimming up a fish ladder may have survived 7 spawning visits avoiding the numerous perils of Gulls, Osprey, stream barriers, otters and man. Utilizing commercial harvest at sea catch data in this area as a guide, herring stocks have declined seriously.



Until recently, significant quantities of Blue Crabs migrated into the river from late July through Labor Day to mate and feed. Total Crab populations now are remnants of the once numerous Blues. Many Fiddlers and an occasional invasive green or a springtime

appearing horseshoe are common.





# River Segments

(1) Outflow to Rte 130

(2) Rte 130 to Great Neck, North

(3) Great Neck, North to Rte 28

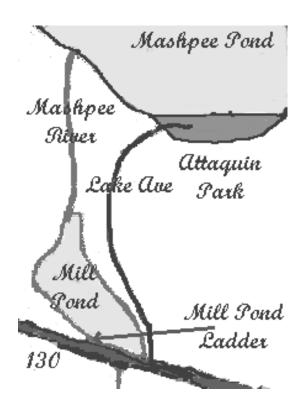
(4) Rte 28 to Canaway's Cove

(5) Canaway's Cove to the Bend

> (6) Pirates Cove



ut of 729 acre Mashpee –Wakeby Pond, the river is born. Look for the sand-catcher or groin that is in view from Attaquin Park to your left when you face the water. The pond feeds the river here by way of a small anadromous fish ladder.





The river flows southward paralleling Lake Avenue to Mill Pond.



Mill Pond has two human controlled outlets.

The fish ladder, on the right, normally has the river current flowing through it to its continuation to the second portion of the ladder as it goes under Route 130.

The remaining outlet is a sluiceway that leads to currently fallow cranberry bogs below Rte. 130 adjacent to the river.



te. 130 to Great Neck Road, North begins at the fish ladder adjacent to the Mashpee Wampanoag Indian Museum parking lot and passes

under Great Neck Road, North near Washburn Pond (a cranberry bog that is kept in a flooded condition) and the River Bend Motel or Wigwam, as it is remembered by older residents, and is now known as

Zacharys.





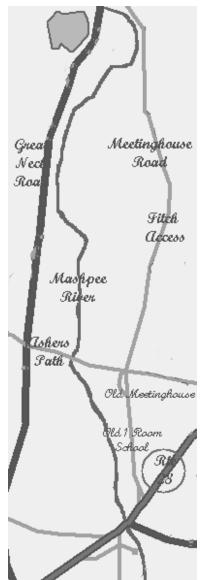
(Old disused Bogs along river)

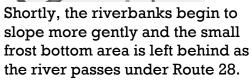
Portions of the surrounding lands are in the ownership of the Massachusetts Division of Fisheries and Wildlife.



The fish ladder on route 130 adjacent to the Mashpee Wampanoag Indian Museum is a popular spot in late April to May as the anadromous Alewife makes the 5 mile journey to the pond.

This location is the only legal point where licensed individuals may take these members of the Herring family.









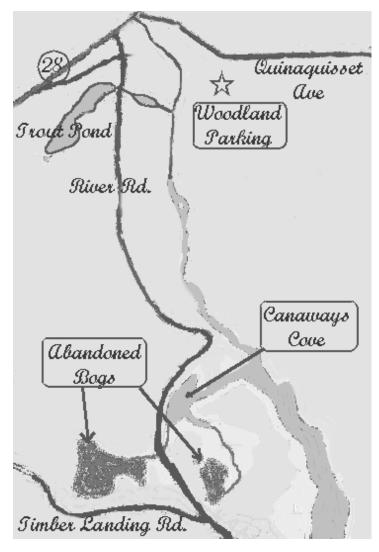
kirting a few homes, the Mashpee River travels through a mostly wooded area between Great Neck Rd, North and Meetinghouse Rd.

Ashers path, before it was gated closed, traversed the river with its convenient gravelly bottom at the crossing. Unfortunately, this section of the road is no longer vehicle accessible. Blocked roads are more common in current times, making visits to many serene, contemplative areas difficult for the elderly or handicapped.

Shortly after the river passes Ashers Path, the terrain slopes more sharply and the river valley cuts deeper into the valley floor. This, area near the Old Indian Meeting House (see "Odds and Ends) and the One Room School (below) is called a "frost bottom" as shade from trees combined with trapped pockets of over-night air create frost while more open airy areas have none.



The river at the culvert under Rte.28 receives a red staining from groundwater conveyed iron and seepage from a storm cistern as the river flows into the cracked wall passageway that has a decided lean towards the incoming waters.



Canaway's Cove is approached.

The Trout Pond outflow flows under River Road across the forest floor to a channel that joins the river. The road forms a leaky dam that tends to maintain the water level somewhat constant with the height of its "under road" overflow pipe





fter passing under Rte 28, the river traverses a second

culvert (The Great Bridge) that provides a passage under what was once Rte. 28.



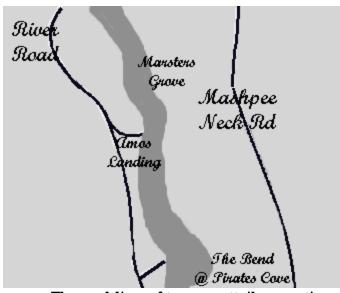
The streambed starts widening and bordering vegetation begins its change to wetted woodlands and Marsh Marigolds. Soon the banks become marsh as



(Trout Pond from River Rd.)



Downstream towards Canaways





eading downstream from Canaway's Cove towards the bend, the now tidal river

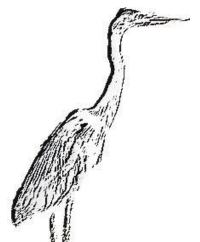
broadens and sports a side dressing of marsh and woodlands with the major marsh structure apparent on the western bank.



The melding of trees, cattails, spartina grasses and sedges combines with the estuarine fauna and changing seasons to develop ever-changing and eyepleasing visual impacts along this stretch.

(Osprey)

The more easily identified brackish water habitants are numerous along this stretch of the river. While the Osprey hunts for a meal from above, Egrets and Great Blue Herons habituate the shallow edges, bitterns and other more elusive marsh birds slip in and out of the grasses on the rivers edge.

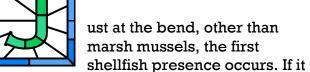


Great Blue Heron



Sedge





is between January and March the river may be open for licensed shellfishermen to harvest some soft shells. At other times of the year, the river is typically closed to harvest due to bacterial contamination.



Residential docks and boat moorings appear about 800 feet north (upstream) of

the bend and proliferate to the mouth.



Mashpee's Conservation Commission constructed a small parking area on Great Neck Rd., South near the River Rd intersection for the Derosier scenic outlook. A path leads from the parking area to a small, benched clearing where the visitor has a view to the river's mouth at Gooseberry Island.





More shore birds visit along the final stretch of the river as it flows into Popponesset Bay at Gooseberry Island. Ducks, Canada Geese and swans are common sights, while birds such as Bitterns, Plovers, etc are frequent visitors.

## Odds and Ends (along the river)

### Geology

Approximately 12,000 years ago ice sheets extending from the north had reached Cape Cod scraping along with it rocks and other debris. The effect of seasonal temperature variations over the next few thousand years caused the edge of the sheets to retreat and advance moving additional material to the edge of the ice lobe. This edge effect created the high ground north of Mashpee along route 6 in Sandwich. As the ice melted and refroze the melt-water flowed gently towards the south carrying smaller particles along forming a smooth slope to the sea. The smooth slope to the sea is called the Mashpee outwash plain. The plain had channels scoured in it by more rapid melting impacts as the ice age came to an end. Our ponds are the cavities left behind by melted glacially embedded ice blocks. The Mashpee River is explained as a scoured channel during the rapid melt period. The ice block cavities that form the ponds in the once smooth plain are recognized in the more common title of "Mashpee Pitted Outwash Plain" (Mostly taken from Oldale and Strahler)

#### Mashpee Wampanoag Indian Museum



Dating from circa 1830 and owned at that time by Captain John Phinney, the home owned next by Timothy Pocknett became the ancestral home of Mabel Avant.

The museum is currently undergoing repair and as a result is not open to the public.

The museum's parking area sits between the building and the Mashpee River and is the major access

point to the only legal Town location for the taking of herring by permitted fishers, in season.

The museum contains local artifacts and a diorama depicting Wampanoag home life.

The Museum is listed on the National Register of Historic Places.

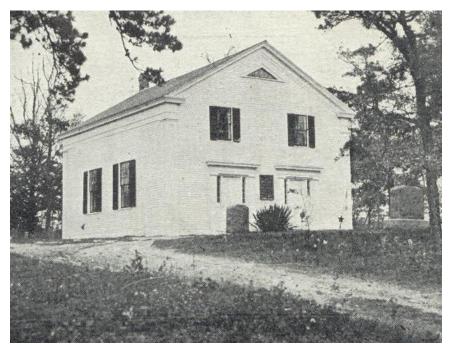
### Old Indian Meeting House



The view of the Meeting House while fishing the river by glancing up Meeting House Path was noted in John Farley's fishing diary.

The picture at left shows the Meeting House today after a refurbishment that changed the entrance from two doorways to a single entrance.

The original Meeting House building was constructed at Bryant's Neck on the shore of Santuit Pond in 1684 and subsequently moved in 1717. The Meeting House is listed on the National Register of Historic Places, which states that the current building was constructed at the present location about 1758.



The picture to the left shows a view of the Meeting House at a time when it had two entrance doors.
Courtesy of the Mashpee Archives.

#### One Room School



Currently located beside the Meeting House, the one room school was originally located at the corner of Red Brook and Great Oak Roads. The proper name for the structure is the "South Mashpee School"

Built in 1831 and utilized for schooling Mashpee children until 1900.

Purchased by the Young People's Baptist Society in 1900, the renamed school was called Ockway Chapel and was used for religious services.

The Chapel building was acquired by developers in 1953 and donated to the Town in 1975 when it was moved to its present location.

The citizens of Mashpee are deeply indebted to the Mashpee Historical Commission with financial support from the Mashpee Women's Club for the restoration of an historic building showing the ravages of time to a well-maintained structure that maintains its original architecture.

The South Mashpee School is listed on the National Register of Historic Places.

Great Bridge





Route 28 crosses the river near the Mashpee Rotary. The rectangular culvert facilitating the river's passage under the roadway has a twin less than a stone's throw downstream. One vehicle wide, if you don't cringe at the brush scratching the vehicle's side, this section of the old Route 28 still has remnants of it asphalt remaining as it travels from 28 near the rotary to a dead end on the far side of the river.

#### Farley's Camp



The only solid evidence of John Farley's Fishing Camp is the granite base for the fireplace. Mr. Farley made purchases from 1914 to1931 to establish a fishing club complete with a river keeper and a trout-rearing pond, which surprisingly enough is named Trout Pond.

John Farley maintained a detailed fishing diary covering the period from 1915 to 1956 where his love for the river environs and fishing are obvious. The following excerpt is taken from his diary. "as we wade down, not only does the stream become larger, but also colder from the numerous little trickles and springs, and it seems to dig more deeply under the banks, and make larger pools, until a little way above "Asher's Path" it becomes what one may fairly call an ideal Trout Stream."

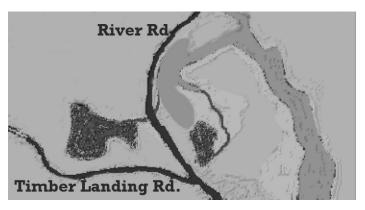


This undated Mashpee Archives photo of Farley's camp depicts a more open area with less overgrowth than exists today.

The visits to the fishing camp by "Boston Sports" and other notable individuals may not only have been induced by the excellent fishing, but perhaps with the added features of guides and meals. One such meal is described as cocktails, caviar, broiled trout, asparagus and ale.

The regionally rare large nodding bur marigold (Bidens laevis) occurs streamside in this area.

#### Canaway's Cove



A river survey commissioned by John Farley in 1931 indicated the river's transition point from freshwater to saltwater at that time to be much closer to Popponesset Bay than Canaway's Cove.

Measurements made over the recent past show saline conditions at the point where the cove joins the river.

The availability of fresh water in the cove enabled the freshwater demands of cranberry farming to be fulfilled in that area. Water was pumped under River Rd. from the cove to the bog located between River Rd. and Timber Landing Rd. That bog is now an area forested with white pine trees. Other than bog channel remains and a small outlet pond, little exists to identify the prior use.

#### The Viaduct



The picture to the left includes a significant volume of underbrush and trees that grow around and through these remnants of the viaduct. The viaduct, constructed of lumber, posts and mineral paper lined to reduce leakage carried water pumped vertically up about 12 feet. It flowed through this elevated channel and under River Rd. to a ditch leading to the upper Canaway's Bogs.

Time and the elements have

taken their toll on the structure and the remaining life of the viaduct is impossible to predict accurately. It is interesting to note the significant flow of water that goes into Canaway's Cove via the old bog outlet even though the supply pumped from the cove ended years ago.

## The Wigwam



This Mashpee Archives photo of the Wigwam Motel shows a structure that differs greatly from a current view of the property.

Situated on Great Neck Road North, across from Washburn Pond, the Wigwam had undergone a transition to a more active entertainment and rental housing facility with the newer name of Riverbend.

Today, most locals refer to the property as Zachary's Strip Bar.

#### Attaquin Hotel

The Attaquin built in 1840 was a popular location until the mid-20<sup>th</sup> century. Even today a few residents remain that have fond memories of the inn. President Grover Cleveland and Joseph Jefferson are among the historical figures reported as visitors to the area while fishing the Mashpee River as well as other area streams and ponds. The hotel at that time was located adjacent to the river across the street from Mill Pond on a rural dirt road. Cleveland was an avid sportsman and loved hunting and fishing on the Cape with his good friend, renowned 19th-century actor Joseph Jefferson.

The hotel was lost to fire in 1955.

Cleveland and Jefferson Islands on the Wakeby end of Mashpee-Wakeby Pond are named in honor of these gentlemen.

Cleveland

Jefferson

### Attaquin Hotel (cont.)

#### Webster



When speaking of sportsmen, famous in American History that visited the river, no account would be complete without the inclusion of Daniel Webster.

Mssr. Webster, 1782-1852, referred to the Mashpee as the "Chief of all Brooks".



This Mashpee Archives pictorial of the Hotel Attaquin provides a hint of the period's American sporting lifestyle for the financially secure strata of the population.

#### American Brook Lamprey

The American Brook Lamprey (Lampetra Appendix) is classified as "State Threatened" by the Commonwealth's Natural Heritage and Endangered Species Program.



This 5-7 inch, when mature, member of the Lamprey Family is not parasitic. It uses a disk like mouth as a holding device.

Found in the freshwater sections of the river. It is susceptible to siltation, streambed changes, pollution and temperature changes.

#### The Estuarine Problem

The estuarine section of the Mashpee River from Canaway's Cove to the Mouth at Popponesset/Shoestring Bay is severely degraded due to bacterial and nutrient pollution.

The nutrient pollution impacts are the result of the extensive development within the river's watershed. The harmful effects are apparent to individuals familiar with the river.

One impact is large floating algae mats that suffocate and detach marsh edges introducing a decay activity similar to composting that creates the black mayonnaise that lines the bottom of the river bed, reducing depth and slowing the river's flow. The mats are the result of massive nutrient fed algal growth that typically forms attached to the bottom like giant green clouds. At times, the growing algae are evenly distributed in the water column coloring the entire river.

Other impacts include foul odors, reductions in normal animal populations including shellfish suffocation and pathogenic closures for shellfish harvesting resulting from the improved conditions for bacteria.





The photos above are of Melosira algae globs starting to form along the shoreline and a typical floating mat of a Melosira and Enteromorpha seaweed mix.

### Corrective measures

Large reductions in the sources of nutrients are needed to solve the problem. There is general agreement that the solution is the combination of many different activities.

The overriding time-proven missing element is the political will to publicize and prioritize the problem. Implementation of solutions will only come by educating the public and explaining the benefits available by taking early actions.

## Historical Perspective

- 1980 Riparian residents end swimming in the Mashpee River
- 1986 K-V Associates starts study of Mashpee and Santuit Rivers
- 1987 Residents start requests to Waterways Commission for dredging
- 1988 Mashpee River Corridor designated "Special Place" by state EOEA
- 1991 K-V issues report defines nitrogen problem
- 1992 First of 4 resident's petitions to Board of Selectmen requesting dredging
- 1995 Cape Cod Commission cites river as 33 times over nutrient limit
- 1995 Conservation Commission denies residents request for a District of Critical Planning Concern (DCPC) nomination (We are Appointed, Conscom states)
- 1995 Residents petition number 4 to selectmen for dredging
- 1996 Citizen's DCPC Petition article fails as Selectmen suggest DCPC Study
- 1996 DCPC Study Committee becomes Mashpee River Committee
- 1996 Selectmen commit to dredging river
- 1996 Town Meeting authorizes \$85,000 for dredge permitting
- 1997 Town Meeting authorizes \$35,000 additional dredge permitting funds
- 1997 Town funded UMASS Report is scientific confirmation of problem.

  CMAST study; "I have never seen (nitrogen) levels as high as the

  Mashpee River, except one pond in the Danube you could practically
  walk on."
- 1997 Interim report for Town funded \$150,000 study confirms 1997 study
- 1998 Town awards \$59,300 contract to Woods Hole Group for dredge permit Engineering services. Fall Town Meeting adds \$35,000 to the 1996 \$85,000
- 1999 State Exec. Office of Environmental Affairs issues Approval Certificate for dredge project
- 2000 State initiates Estuaries Project for 89 embayments
- 2000 Town Meeting authorizes \$275,000 for dredging while waiting for permits
- 2001 Town contracts with Sterns & Wheler for a \$450,000 Nitrogen

  Management Study using State Revolving Fund Loan that has expired
  without use
- ???? Town Funded \$150,000 study is rolled into state estuaries project, how is unknown
- 2003 Town Meeting petition article requesting Town Board's action on river dredging passes
- 2004 Draft SMAST Popponesset Estuaries report is delivered to DEP in March
- 2004 Town Meeting petition article requesting Selectmen action on river dredging passes





Circa 1980 2003

The photographs above show the same location approximately two decades apart.

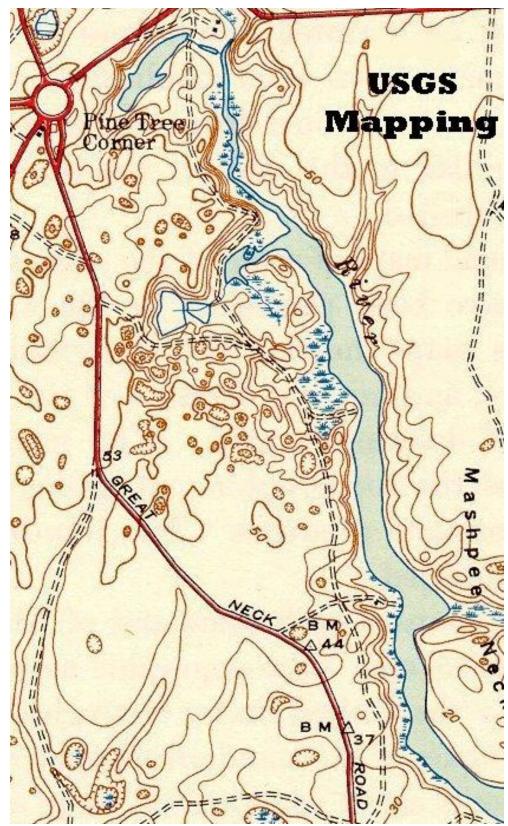
## <u>Acknowledgements</u>

"1870 MASHPEE 1995", A Pictorial History by Rosemary H. Burns, edited by Ann M. Whitlow was a major and informative source for this pamphlet. The expert advice and assistance provided by Ms. Burns and Ms. Whitlow was a valued and major contribution.

Geological information was summarized from "A Geologist's View of Cape Cod", Arthur N. Strahler and "Cape Cod and the Islands, The Geologic Story", Robert N. Oldale.

The excellent, well-cataloged resources of the Mashpee Archives were a source of data available only in a Town with a proud history. The Historical Commission and the Volunteer Staff made research efforts a pleasurable experience. They have my sincere gratitude. Many of the graphics are renditions or copies of the Archives resources.

Our thanks to Ace Wildlife Removal Services, Jeremiah Breen, the Mashpee Branch of Citizens Bank, Martin and Pamela Coleman and Mashpee's local Stop and Shop Supermarket for underwriting the printing and distribution of this guide.



This circa 1943 USGS Map Cut-out shows the river from near Rte. 28 to Pirates Cove. Only two structures are shown on the entire cutout in the area of Farley's Camp.

### Erattum

In 2008 the One Room Schoolhouse was moved to a new location adjacent to the Veteran's Garden at the junction of Route 130 and Great Neck Road, North.

The Schoolhouse was rededicated on Memorial Day, May 25, 2009.

Printing and distribution of this Guide was made possible by donations from Ace Wildlife Removal Services, Jeremiah Breen, the Mashpee Branch of Citizens Bank, Martin and Pamela Coleman and Mashpee's local Stop and Shop Supermarket.