

MASHAMOQUET BROOK

Its Past - Into Its Future



Prepared 1973-1975 by the Pomfret Conservation Commission

financed by

The Ford Foundation

MASHAMOQUET BROOK
ITS PAST — INTO ITS FUTURE

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Cover Photo—Braytons' Mill, with other mills below it in the Mashamoquet State Park. Postcard by G. P. Sumner of Abington about 1900.

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FORWORD

The Pomfret Conservation Commission is pleased to submit to the people of the Town of Pomfret "Mashamoquet Brook—Its Past Into Its Future."

The Commission, composed of five appointed members, has attempted to examine many aspects of the Mashamoquet Brook as it affects our common heritage and our present lifestyle. The quality of life of the people of Pomfret is closely connected with the brook and the land it drains. Since it is our town's largest and most active natural resource, Commission members attempted to compile various information. One area of investigation flowed into another, since the Mashamoquet turned out to be the single unifying factor for much of our natural environment, our historic development and our future challenges.

Many residents shared the experiences of Commission members in "walking the brook." For those who have not enjoyed the rugged beauty and varied topography along the ten miles of waterway, it is hoped this report will serve as a stimulus. Others may well have much to add in terms of data and personal observation. The Commission members sincerely hope that this report will be viewed as an incentive for further study regarding the brook; its history, peoples and future.

Respectfully submitted, April 10, 1975

Peter F. McFarlin
Chairman
Pomfret Conservation
Commission

THE PHYSICAL FACTS



Cascade made by a bed-rock ridge about one thousand feet above Pomfret Landing.

December, 1972

GEOLOGY—The Mashamoquet area has not always been the quiet and secure place it is now. Many events have happened here during millions of years of geologic history. Once, mountains of alpine height existed which have now almost washed into the sea. In more recent times, ice, thousands of feet thick, covered this area, not just once, but probably four times.

The bedrock of Pomfret and the Mashamoquet Brook is very old, and has undergone many changes since first laid down as sediments deep under water. The rocks of Connecticut's Eastern Highlands are, for the most part, of two classes; metamorphic and igneous, both known as crystalline rocks. No volcanic rocks are known. The crystalline rocks sometimes look stratified, although their layers were tilted, folded and crumpled by pressure and heat while at great depth. Gneisses and schists are the most familiar metarocks in the Mashamoquet area.

The most familiar igneous rocks are the granite outcrops. There are no "fire-created" or volcanic igneous rocks found in the Mashamoquet watershed. That type of activity was restricted to the west of here. The basaltic igneous rocks that are found here, squeezed their way into the metamorphic rocks while they were still buried. These intrusions are mainly called sills and dikes.

Pomfret's rock formations are older as one walks downstream from west to east. The bedrock to the west of Nightingale Brook and Pond and down to the 4-H Camp is named the Eastford Gneiss, and is of the lower Devonian period (350 million years old). From the camp area downstream to Bosworth Road are found the Scotland Schist, the Canterbury Gneiss covering the State Park's area, and then the Hebron Schist formation. These are pre-Pennsylvanian in age. Exact dating of these

rocks is very difficult. There are no fossils, and the original formations are extremely changed. From Bosworth Road to the Quinebaug River are found other meta-sedimentary (more resistant to weathering) and meta-volcanic (less resistant to weathering) rocks.

Eastern Connecticut has been subject to very long periods of erosion. The rocks that now form the surface were formerly buried under two or three miles of mountain mass. These have gradually been carried away by the activities of rain, frost and rivers.

A north-south series of old fault lines drain river and swampy areas. These faults were left when the earth shifted to relieve great internal stresses, and natural erosion followed their lines.

Economic Geology—There is no evidence of local concentrations of metallic minerals worth developing. The Eastford Gneiss was once quarried for dimension, or sized, stone, and several of the small quarries are still recognizable between Angell Brook and Quarry Road in north Pomfret.

There are enough sand and gravel supplies for present rural use, but these would be inadequate for future housing development or highway construction. Most gravel deposits are "bony" and rusty and require washing and sieving for use as concrete aggregate. Clay deposits underlying some swamp deposits might be used as a source of brick clay. Potash from somewhere near the Potash works (#7 on the map) was used for nitre to make the local gunpowder during the Revolutionary War, but was not continued long.

Glacial Geology—The last continental glacier which blanketed all of Connecticut, even out past its present shoreline, originated in Labrador. The Wisconsin period, latest of four ice ages, was also the longest (90,000 years) and ended just 12,000 years ago here in Pomfret¹.

When the temperatures were colder, the snow continued to pile up and compacted itself into ice. The ice moved slowly across Connecticut, southward towards the ocean and became perhaps 2,000 feet thick in this

region. Ocean levels were about 200 feet lower than at present, since all that water was in the form of ice covering the land. The glacier's speed of movement then is estimated at up to 100 feet per year. This slow-moving, powerful sheet of ice picked up and carried much soil and rock, while at the same time grinding and smoothing down the land and its hills. The Mashamoquet area has fifteen or more smoothed, rounded hills left in a north-south direction. These drumlins later were used by the first settlers for fields, crops and house-sites.

As the climate became warmer, the glacier's advance stopped and the ice melted. Most of the ground-up mixture of rock fragments and clay dropped slowly in place, to form our present clayey-based soil called till. Known as Pomfret clay, it serves little other purpose than to hold up a layer of water, or to stymie patient attempts to dig through it.

This melting, rotting ice created its own streams and ponds on the ice and against the hilltops as they emerged. Much of the Mashamoquet Brook itself was once dammed up by the ice, and a series of small glacial lakes was created. The sand and gravel mixture from these lakes and glacial streams are higher than the present flood plains, and are laid up and against the lower valley sides.

Nightingale Pond area was once about 60 feet higher than its present level. The 4-H Pond was 30 feet higher, and Taft Pond was 60 feet higher. A third lake was along Covell Road, down to the large railroad culvert. The last and largest pair of lakes filled the State Park ravine, Wolf Den Brook swamp, Pomfret Community School area, Day Brook up to its ravine, plus all of the Bosworth farmland on down to the Pomfret Landing area. Eventually, much of the glacial lake clay was washed out to sea by the intense stream action of those times. The washed sand and gravel deposits left behind are presently useful as building aggregate and aquifers for water supply.

Weathering—Most of the rocks of the area are resistant to chemical decomposition, so the Mashamoquet Brook has a low chemical load compared to the rivers in the central and southern United States. The dominant weathering activity here results from frost action: a splitting of the rocks from ice in the cracks.

¹ Clifford A. Kaye; Personal communication, 1975.

Various radiocarbon dating of carbonates or organic sediment shows when certain vegetation first grew after the ice melted:

10,000 to 11,000 years before present in Worcester, Mass.

11,000 to 12,000 years before present in Boston, Mass.

14,000 years before present in the New Haven, Conn. area.

CLIMATE—Technically, we live in a humid continental climatic zone. This zone has a large annual change in temperature and has sufficient precipitation to permit agriculture. We average 46 inches of water each year, of which $\frac{1}{10}$ makes a yearly average of 40 to 50 inches of snow. The wind in the fall and winter is from the northwest, and in the spring and summer it varies from the southwest for half the time and the northwest the other half. It averages 7 mph in summer and 9 mph in the winter. We are between the coastal and northern New England winter storm tracks.

The amount of sunshine depends on the latitude, clouds and time of year. We have sunshine 55% of the daylight time. Boston, New York, and other urban areas had (from 1950 to 1960) about 10% less solar radiation (ultra-violet rays) which is so essential to plants, animals and human health. Reduction of sunshine in the cities is due to air pollution and is one proof, easily seen and measured, why our country air is a better quality.

Farming, the Mashamoquet's most active industry, is closely dependent upon a favorable climate. For instance, a summer mean temperature of about 70° F in this uplands area, favors the growth of hay crops, so important because livestock must be barn-fed for about 6 months of the year. Ample precipitation, dependable runoff and good ground water supply have made this area a desirable location for a variety of industries: mills for the most part (especially in the past) and manufacturers to a lesser degree. Forest stands, now with somewhat better management and maintenance, are resulting in foresting and forest products. The comfortable summer temperatures, and invigorating, but not severe winter temperatures, appeal to most who live and work here.

The climate is generally agreeable for most recreation. Pleasant temperatures and frequent sunny days prevail during the summer and early fall months. This is excellent for swimming and fishing. Hunting, ice skating and snow activities result from the moderately cold weather months.

There are occasional climatic hazards, such as heavy snow, rain, wind, or bad drought. The severe ice storm in the winter of 1973-74, floods in 1955 and 1936, and the 1938 hurricane have recently reminded us of the more

dangerous extremes, while the less noticeable dry spells occasionally wither our grass and crops and shrink water supplies. Generally, though, we have a rich natural asset in this pleasant, changing climate of ours. It has been predicted to be now changing slowly from the slightly warmer years since 1940 back towards the cold years of the 1880's. This would only require a total change of a few degrees.

SOILS—The importance of the various soil types in the Brook area have been long known by the farmer. He had to learn the soils to use them to their best advantage. How much drainage, how rocky, how much clay, and the amount and quality of the organic content? The farmer or gardener learned all he could of the soil and hopefully then made use of it.

Soils have long been classified by the Soils Conservation Service of the U. S. Department of Agriculture. They are grouped primarily on the basis of natural physical properties. These groups of soils are each easily characterized for man's use. Soil qualities determine adequacy for sewage absorption fields, homesites, lawns and landscaping, wildlife habitat, picnicking, camping, and, of course, agricultural crop potential. The seven groups and their approximate amounts in the Mashamoquet watershed are:

- 10% A. Terrace Soils -
over sands and gravels
- 5% B. Upland Soils -
over friable to firm glacial till
- 60% C. Upland Soils -
over compact glacial till (hardpan)
- 15% D. Upland Soils -
rocky and shallow to bedrock
- 5% E. Flood Plain Soils
- 5% F. Marsh and Swamp Soils
- 0% G. Lake Terrace Soils -
over strata high in silt and clay

The soils scientist maps an area by walking it and digging many holes. He will look at the different layers, each with its color, texture and hardness. The holes are usually from 30 inches to 5 feet deep and the scientist can map 200-400 acres per day. Areas showing different soil types (there are over 60 in all!) are transferred to aerial photos for permanent reference.

Recent passage of Inland Wetlands Legislation (Public Act 155) makes use of this Soils Conservation Service study. Soil type determines the designation of wetlands, although water bodies

and water courses also come under this Act. The Wetlands Act is aimed at the proper use and care of those areas felt to be very important to our present and future way of life. Soils designated as poorly drained, very poorly drained, alluvial, and flood plain are considered wetlands. Within the Mashamoquet Brook drainage basin, the wetlands account for 25% of the area.

GROUND WATER—Rainfall produces all the underground water in the Mashamoquet watershed. It is best stored in the glacial sand and gravel which is thickest around the riverbeds. Near the headwaters of the brook, the deposits generally run 10 - 30 feet thick. Downstream, at the junction of White Brook and Mashamoquet Brook, the sand and gravel is over 80 feet thick. The local bedrock of schists and gneisses also store some ground water in the joints, cracks, or pores of the solid rock. About half of the rain falling on the ground sinks into the soil and passes vertically downward through the vadose (unsaturated) zone until it reaches a level at which all the pores are filled with water. This level is called the ground

water table. The ground water can then move to the side; slowly when the pores are small, faster with greater porosity. Beneath the water-filled porous zone, the cracks become smaller due to the weight of the soil and rock. Between 200 and 2,000 feet, the water-filled cracks close up. Generally, it appears that the quality of ground water in the watershed is fair to good. Most all the water contains somewhat high percents of dissolved metals, such as iron. Sulfur dioxide, with the familiar rotten egg smell, has been found in some deep well water.

The ground water seeps or runs out through the many springs of the area. Springs are always underlain by compact materials, such as bedrock or clay, through which the water cannot seep. There are few, if any, true artesian wells in all of Eastern Connecticut. That is, a well that actually has an upward flow of water out on the ground after the well has been dug or drilled. The clay layers interbedded in the glacial sands of Pomfret are not continuous and do not, in most cases, retain the water within the sands under artesian pressure.

THE BROOK—The Mashamoquet Brook is the most dynamic force in Pomfret. As seen on page 25, the brook drains 67.7% (27.5 square miles) of Pomfret, plus 6.3 miles total in Brooklyn, Eastford, and Woodstock. About 37 million gallons of water per day, on a yearly average, flow from the brook into the Quinebaug River. Just one of Mashamoquet's many tributaries, the Wappaquoia Brook (which drains 4.28 square miles measured at Day Road) had a discharge of 1500 gallons per second, or 130 million gallons per day! This was a normal spring storm with runoff measured April 2, 1970. For more facts on water, see the data on page 25.

As the rocks and soil continually break up from frost action and weathering, gravity pulls this loosened material down the slopes and into the streams. We often see how the brooks run muddy-brown after a storm, as they carry the silt and clay from the fields and embankments. Mankind cannot and should not try to stop the natural forces at work here. There will always

be storms with their floods and heavy erosion. This does bring heavy siltation and new soil deposits in flood plains and river bottoms, but the majority of the sediment load is brought out to sea in an ever-expanding and thickening blanket of mud and ooze. Over a few short million years, this can become miles thick, trapping natural gas and oil, and finally humping up into new young mountains. This total process is inexorable and can't possibly be altered by man, even though he might try.

Much can be accomplished by man's careful thought and work. Keeping his own projects as clean as possible from silty, polluting run-offs should be obvious. Also, he might occasionally build stone rip-raps to retard the undercutting of embankments, or he can help keep the cover growth intact to protect the natural sponge effect that the bogs, swamps and other wetlands have. The speed of water runoff vastly increases and the potential for good water storage generally decreases as these marshy basins become filled or are dug out.



*River bank being actively undercut by the meanderings of the Mashamoquet Brook.
Located below The Pomfret Community School and Rte. 169.*

November, 1972

WATER QUALITY—Quality of water in the Mashamoquet and its tributaries varies at present. The main brook itself is a class B stream and remains mostly up to that standard¹. There is always a certain amount of nitrogen, phosphates or other chemical additions to the water. This comes from vegetation, animals, and man himself in the form of wastes or fertilizer. Much of this is tolerable and acceptable, and the streams can clean themselves of a limited amount of this kind of "pollution". At certain times of the year, the pollutant levels increase for two reasons: first; during drought periods and the very low water levels, the percent of material compared with the amount of water increases. This too can be acceptable, if it's not a burden on the public health. We've occasionally seen swimming places closed during a dry summer period to avoid illnesses. The second, and greater, problem is created when a storm increases the runoff water and its carrying capacity from the fields. The largest potential (and occasionally real) pollution

hazard to the Mashamoquet Brook occurs when large amounts of manure and waste run off in storms. At these times, the brook can carry enormous quantities of highly polluted water down through the various watersheds, and is only somewhat cleaned when it reaches the sea. The local effects of this in Pomfret can be great; poor drinking water, fish kills, ceasing of recreational activity, production of odor and large growths of algae. However, most of this second type of increase in pollution is only occasional and with some guidance of septage and farming techniques, this hazard would be mostly eliminated.

Some of the tributary streams are of lower quality than desirable. Parts of the Wappaquoia and Abington Brooks have recently been classified as D² streams. Hopefully, efforts of individual home and land owners, as well as some local schools will produce cleaner streams in the near future. Overall, the fairly high quality of water of the brook remains, and there is promise of future improvement.

¹ B Class streams are suitable for bathing, other recreational purposes, agricultural uses, certain industrial processes and cooling. They have excellent fish and wild life habitat, have a good aesthetic value, and are acceptable for public water supply with minor treatment.

² D Class streams are appropriate only for navigation, power, certain industrial processes and cooling and migration of fish. Aesthetic value remain good.



*Swamp made by old beaver dam,
Lower end of Angell Brook.
September, 1972*

WILDLIFE AND WOODS

THE BROOKS BIOLOGY—When the Ice Age opened over a million years ago, North America was one of the world's richest animal habitats. All the animals of today existed then, plus mastodon, mammoths, tapirs, bison, sloths, tigers, lions, and huge bears. Several of these species vanished before the epoch closed; others survived only in regions more favorable to them, such as the alligator in Florida. Many of the animals which survived man's arrival in North America 12,000 years ago, like camels, sloths and horses, died out within a few thousand years of the end of the Ice Age. This left the continent with much fewer animals, and what the changing climate didn't accomplish, man soon did. Indian and white hunters alike, along with the settlers, destroyed the elk, caribou and bison herds; continuing the process that had been going on for almost a half-million years.

Just 15,000 years ago, Pomfret was still under the last melting remnants of glacial ice. With the final end of permanent ice 12,000 years ago, due to the slightly warming climate, only barren hills and flood plains covered with rock and bare soil were evident. Mud, water and harsh, cold winds were the only forces at work. No trees, bushes or grasses existed here until the birds and wind added new seeds to those few which remained in the soil. Then came an abrupt warming trend for the next 700 years, coinciding with a rapid vegetative growth, appearance of animals, and the eastward migration of the hunter, man. He had traveled across the land bridge from Asia into Alaska, and down the west coast. He left fluted Clovis projectile points as he came, and these have been dated at Bull Brook, Massachusetts, 9,000 years before the present. Others have been found in at least nine places in Connecticut and two in Rhode Island.

The early vegetation cover had spruce and fir dominating in the forest, which may have been separated from the ice front by a narrow belt of park-tundra. This tundra zone apparently consisted of isolated clumps of spruce and fir, with scattered patches of grasses, sedges, and willows between them. The animals from the west and south followed this new forage northward. If man had been present here 11,000 years ago, he would have had available as game animals, the mastodon, mammoth,

barren-ground caribou (American reindeer), beaver, elk, deer, and many smaller mammals. Horses, camels and bison preferred prairies and dry barrens rather than our eastern cold, swampy woodlands, but beaver came early to New England, and one giant breed, eight feet long was often found. This certainly makes him one of the largest continual inhabitants in the Mashamoquet watershed. Porcupine was another early comer.

About 9,000 years ago, when the paleo-Indians were certainly roaming up the Connecticut River valleys in small nomadic hunting bands, the climatic conditions in the northeast were moderating and becoming less wet. Consequently, the forest dominance shifted from fir, spruce and birch to white and red pine, with an increasing number of broad-leaved hardwoods, chiefly oak and beech. This is somewhat similar to what the settlers found, and what we now have in Pomfret.

Pomfret is in an area where the present climate is fairly healthy for two major types of vegetative growth, and so a large variety of trees flourish here. Broadleaf hardwoods like oak, hickory and ash mix easily with the conifers like white pine and hemlock. The final, climax vegetation here is an extensive forest or woodland with soils and topography as the main factors controlling which type of vegetation predominates. On the north-facing and steeper slopes we find mostly hemlocks and birch.

The animal life we know here today seems considerable and varied to us, and with proper management and hunting methods, this natural balance will improve. Some animals used to be more abundant 200 years ago, but deer and a few others have actually increased since then. Along the lower end of the Mashamoquet Brook where there are more houses, muskrats are about the only unusual animal to be commonly seen. Moving upstream, we find more abundant beaver, mink, otter and raccoon. At least thirty, and possibly one hundred and fifty beaver still live in the Mashamoquet watershed. There are several deer crossings, and further up in heavier timber, porcupine roam. Gray and red foxes are still to be found, but often sickly and not as many as twenty to forty years ago, when they were actively hunted for sport. The occasional

screech of bobcat is heard, although this secretive animal is almost never seen. Red and gray squirrels are still common, and once in awhile towards evening, flying squirrels are seen around the bridge at Taft Pond Road. It seems the recently warming climate has brought opossum to Pomfret from the south. As early as 1948, a 'possum was shot here, and now they are often killed by cars on our roads.

The white-tailed deer in Pomfret is presently estimated at two hundred, with the largest population in the northwestern part of town. The mature deer measures 34-40 inches at the shoulder, may be 60-75 inches long, and weighs about 145 lbs. Most deer die naturally before age 10, with a few living 15-18 years. The antlers are grown each year from May to August, and are dropped one at a time after the breeding season in January-February. Mice, squirrels, rabbits, and porcupines feed on these highly mineralized bones. If the buck's food is plentiful, with high vitamins and minerals, his first set of full antlers at age 2½ may equal those of a 6 to 8 year old adult.

Our Pomfret deer exist well here, with the forest and open fields so mixed. It seems that any change or "interface" between one type of growth and another is the most productive food areas for various animals. The edge between a forest and a field brings deer to forage in the weeds, goldenrod, white pine, birch and cherry that grow there. Beaver, on the other hand, thrive where forest meets brook, and poplar and alders grow. Pomfret has enjoyed a stable deer population with what seemed to be proper and useful controls. A recent new system of population counts from air flights pushed estimates up from 12,000 to 20,000 animals for the State. Illegal poaching is still continuing, and now the new higher counts will bring legal hunting back and our non-restockable deer herds may well be seriously depleted.

After the heavy clear-cutting of trees in the late 1800's, there was much brush and sprout, which was fine cover for our upland birds. This has now grown back to woods, with a resultant decline in good undergrowth area for pheasant and other birds.

Upland sport birds are still actively hunted here, and presently up to 200 ring-necked pheasant are stocked yearly by the Wildlife Unit

of the Connecticut Department of Environmental Protection. The woodcock is not abundant, but seems in a stable population position as it grubs for worms in the wet woods. Native ruffed grouse are making a comeback, due to improved woods habitat, and its own 7 to 10 year cycle. Native quail are still few.

The smaller, more "decorative" bird populations also fluctuate. Cardinals, mockingbirds, titmice and bluebirds have increased in some areas, while purple martins, pileated woodpeckers and osprey have decreased. It seems a shame that hawks and owls are still destroyed by occasional misdirected shooters. These fine birds pose little real threat to farmers, and their reductions will, hopefully, soon cease.

The inland freshwater fishing Pomfret offers is still excellent. There used to be a large native population of brook trout up to 15" and 1-1½ lbs. In the late 1950's, the gas pipe line was thrust through Pomfret, and its construction killed many fish. Apparently, the water level had to be lowered in Drown swamp, and so some beaver dams were blasted out. A large charge of silty water began rushing down Lyon Brook, breaking other dams, and adding more silt. This devastated the spawning grounds, and physically killed many fish. A stocking program of Rainbow, Brown and Brook trout is now maintained by DEP's Fisheries Unit. About 1,000 to 1,200 five to seven-inch fish, with a few larger ones, are put into the Mashamoquet during the year, along with 300 Brook Trout in the Wappaquoia Brook. There was recently (1973) a "one-shot" program to put in over 30,000 fry in the upper reaches of Cemetery Brook, Baker Hollow and Wappaquoia Brooks. Perhaps this will bring back some of the natural spawning habitats which made Pomfret fishing even better some years ago.

Pomfret ponds also afford pleasant fishing. Many native bass, hornpout, yellow perch, bluegills and chain pickerel are pulled out each year. Fishing in Nightingale Pond, especially through the ice, used to produce 26-28" pickerel up to 4 or 5 lbs., but bass have taken over.

All in all, the walking, fishing and hunting that Pomfret affords are some of the best in southern New England, and are the end result of many years of natural evolution, with some minor hindrance and guidance by man.

THE PEOPLE OF POMFRET

INDIANS—The Algonkian (French named them Algonquin) Indians migrated to Connecticut five to ten thousand years ago from the Iroquois area to the west. Hunting, fishing and cultivation of corn and tobacco were primary occupations. Pomfret was typical of the eastern Connecticut uplands. There was sufficient game, springs, river and pond waters, grassy fields for tilling and material for construction of the domed wigwam. These natives were not a nomadic people, and lived in small villages.

The early peoples of the area were not completely peaceful, but considered war a kind of game without thinking too much of the consequences. They did not fare very well against the well-trained and disciplined Iroquois, to the west. Before 1620, perhaps 50,000 indians were in the Massachusetts, Rhode Island and eastern Connecticut area - about 25,000 of those in Connecticut and Rhode Island. Another estimate puts the number in eastern Connecticut at about 6,000 when Pomfret settlers arrived.

Originally, the rough, hilly Pomfret area was used by the Nipmuck, Wabbaquassett and Quinebaug tribes. While the Nipmucks hunted and raised corn, the Wabbaquassetts concentrated on mat and basket weaving. At that time, the swamps and marshes along the waterways had fine rushes and grasses. Most all the tribes fished and some even pastured deer on the land they had burned over. All wore the usual deer-skin clothing. At least three large indian campsites are known within the Mashamoquet watershed. There are also three other large sites in Pomfret along the Quinebaug. Note their locations on the map.

During the time just prior to white settlement, an epidemic disease decimated the indian populations. Also, local tribes fought occasionally with the Narragansetts to the east, and later King Phillips War involved many of the Nipmucks. They were scattered or destroyed by 1677. Most indian tribes took heavy casualties, and their leaders were executed or shipped off to

the West Indies as slaves¹. Essentially, no indians were left in their original Pomfret homes. The Wabbaquassetts, however, went with Uncas, the Mohegan-Pequot nation's grand sachem. About this time, the Connecticut General Court allowed that the indians Uncas and his son, Oweneco, might still have some land rights near the Quinebaug River. A Major James Fitch acted as Oweneco's guardian, and by 1684, all of Wabbaquassett country (now Northern Windham County) was legally transferred to him.

The Mashamoquet purchase on May 1, 1686, was from Major Fitch by twelve men of Roxbury, Massachusetts. For 15,100 acres, the price was 30 English pounds. Mr. Butcher of Woodstock surveyed the land in 1694, but continuing indian problems delayed any settlement from the Boston area. After King Phillips War, the Wabbaquassetts returned and settled again in the Quinebaug and Mashamoquet area. The original Mohegan name for Pomfret's largest brook was the Tomanquas (or Tonaquas) River, and the Wabbaquassetts called it Mashamoquet, meaning "at the great fishing place."

Real settlement by white man began shortly after this time, and by 1726 there were just a few hundred indians in the area, mostly Wabbaquassetts and Quinebaugs. The first Connecticut census for Pomfret, in 1756, showed 1,677 whites and 50 blacks; of these, a few were probably indian. The census of 1774 showed only 123 indians in all of Windham County. Even noting the indians who probably weren't counted, we can see that in just 150 years, the population fell from more than 5,000 down to about 200. War and disease, both indian and white, had reduced them by 95%. The gradual destruction of their whole way of life obliterated the native indian.

¹ Finally in 1788, a state law brought forth by the Quakers, provided a fine of £100 against anyone forcibly removing an indian or negro from the state.



Carrying the Pomfret mail about 1900.

SETTLERS PAST TO PRESENT—The six purchasers and the six other grantees whom they named were all residents of Roxbury, Massachusetts when they bought, in 1686, the “wilderness land” now known as Pomfret. Their Roxbury friends and neighbors who had moved and settled in Woodstock (then Massachusetts) told them of “a fair land stretching southward into Connecticut.” The hills in this Wabbaquasset country seemed ideal for farming, and the first owners would have come sooner to settle, except for the indian problems and Connecticut’s unsettled colonial government.

When the owners finally did arrive from 1700 on, they farmed easily and quickly on some of the open, treeless lands. They did have to clear many fields of the loose stones, and eventually these piles of rocks were used for fences and legal bounds. The self-sufficient yankee farmer raised hops for the yeast in his beer and bread; made sauces out of cranberries and grew all his fruit, vegetables and spices. His fields produced rye, corn and, after 1800, wheat. Flax was spun into linen cloth, while his sheep yielded the warm woolen goods, and tanning of his animals’ hides made tough leather goods. The farmer had

more use for oxen for power than horses for riding, and, in the 1700’s, carts were still the basic transport. Goods, (especially cheese and lumber) and services were used instead of money, and even through the 1780’s to 1800’s, many still preferred not to use the unfamiliar dollars or the English pound¹ with their ever-changing values.

Probably the settlers’ earliest use of the Mashamoquet Brook was as the southern dividing bound in 1693, setting off the Mashamoquet Purchase to the north from Mortlake Manor to the south. There were no roads in Pomfret until the first cartroad was built about 1721. Before then, rude bridal paths connected the various farms with no bridges over the streams. The only way to cross the brook was to wade or “ford” through it. The population grew, mostly by the settlers expanding families and the immigration of a few from outside of Pomfret. New farms, schools, meeting-houses and roads were slowly built. Bridges for the carts were constructed over the brook.

¹ Nathaniel Ayers’ Fulling Mill “day books” give a good account of typical transactions in Pomfret from the 1780’s to 1840’s. See *The Old Fulling Mill of Pomfret, Connecticut* by Olive Pike Weatherbee.

Above all else, the brook was a friend - it had great power, which could be harnessed to man's needs. Mills were started in order to accomplish many tasks. A sawmill in the Mashamoquet area was started in 1707 by Abiel Lyon. The first grist, or grinding mill was begun by James Sawyer in 1709 on Bark Meadow Brook. Water powered mills of every sort; for making cider, cutting wood, grinding corn or grain; for running any kind of simple or complicated machine. The stream water was used in the tanning or curing of leather, and for fulling or dyeing of cloth. See the more complete list of Mashamoquet area mills on pages 22-24.

Strong stone dams were put across the water beds with races, flumes and sluice gates for the driven wheels and bypasses whenever needed. The pond levels behind the gates were carefully controlled by the mill owner with agreement by his neighbors whose land he would flood. By this water depth control, the miller could maintain the energy needed to run the wheels for much of the year. Probably some of the smaller mills closed in the dry months and the millers labors would be spent in farming for the family.

On the Mashamoquet Brook itself, there were at least twenty various mills and factories at different times. The map shows many of their locations. Often stonework foundations are still seen, and even occasional millstones or old iron work can be found. One mill on the Mashamoquet still stands. The barn-red Brayton Grist Mill, now on Connecticut State Park property, is in excellent condition, and still has much of its internal machinery intact. (see cover photo) It was built around 1800, and was used until 1928, when the late Mr. Harry Chase, Pomfret's unofficial historian for many years, ground the last grain for Tom Hanley, boss-farmer for the Perkins' place. This mill could be easily converted for historical purposes, and, as the last of its kind in Pomfret, should be preserved.

The list of Mashamoquet mill sites shown on the data pages is incomplete, and needs more study in order to record this important part of Pomfret's history, especially so, since the sites and records are still available. There were 25 or more various mills and factories in operation in the watershed, many at the same time. The early goods and supplies made here were mostly for the townspeople. Materials and services usually



*"Lost Village" Dam in 1934 at the site of the old Higginbotham Mills. (# 11)
Dam probably went out in the '36 flood or '38 hurricane.*



*Brooks General Store and P.O. at Abington 4-corners.
Later replaced by Rucki's General Store.
Taken in 1880's?*

were for the most needed things; food, clothing, and buildings. Pomfret's mill power climaxed in the 1820's - 1830's, after which steampower, railroad transportation and roads often made local small production too expensive to maintain. There was much work in keeping a mill running properly, and the rebuilding of dams or foundations after floods or ice damage grew too expensive to bear.

The building of the railroad through Pomfret in the 1860's with its steep cuts and large fills, changed much of the landscape. Its construction took a number of years, and service between Putnam and Willimantic was opened about 1872.

By this time, the cities were becoming more dirty and cramped, and many people who could afford it decided that now with the railroad they should live in the country a part of each year. Coming to Pomfret from Boston, New York, Cranston, Newport, and elsewhere, they purchased old farms, remodeled the houses, or built new ones. By 1896, Pomfret had little in-

dustry other than local stores and depended mostly on Putnam for its supplies, yet at the same time, it was one of the wealthiest towns in Connecticut.

There are now a few new industries in Pomfret; one is cable manufacture by Loos & Co. and its Cable Tech Division. This is housed by an enormous 2 acre building on a bank of the Mashamoquet, across from the Pomfret Community School. A new, busy sawmill operated by Hull Forest Products is off Route 97 in the center of town and Idlewild Farm, off Searles Road, processes thousands of frozen chicken dinners for the airline industry.

Through all the changes that Pomfret has seen, farming has remained steady. The mills, the railroad, the migration of some people out to new western lands, the society people from Newport; all passed. It is still today a rural farming community. The land has not changed much - the soil remains, and when all else faded, the land supported those who wanted to work it.

AGRICULTURE—Settling the Mashamoquet Purchase was only accomplished by building farms and using the land. All other trades were only to assist the farmer. In fact, all the first farmer-settlers did their own limited metalwork, weaving, curing of meat and hides, and above all, food production. The only outside help he had was occasionally from the sawmill or grist mill, a housewright to help build his homes, and a minister who would bring him to God.

Meadows, which were available for pasture and haying, had been the first attraction, and, after the initial clearing of rocks and some minor hardships (at least compared to the Pilgrims' first winters!), the Pomfret farms began to have small surpluses. The first extras; wood products and pelts, were marketed overland by way of crude roads through the forest. These were exchanged in the cities for iron, salt, and manufactured goods. Later, due to their annual increase, cattle were driven to Boston to be fattened, or were salted down for later export. Connecticut farmers in the 1700's had enough surplus milk to market butter and cheese in New England cities, and even to the West Indies. During the American Revolution farm families constituted 90% of the States' population. Their farm surplus enabled them to feed their own militia, supply the colony's vessels and feed most of the continental army. Overall, the interior agricultural trade was small, compared to the business trade of the towns and cities along the coast.

The climate and soil of this area was more suited for grazing and orchards than tilling and the raising of food crops. By 1800, Pomfret was known as one of the best grazing and dairying towns in the state.

Agriculture at present in Connecticut is bigger than one might think. The following 1970 information is from the University of Connecticut at Storrs and the Pomfret tax lists:

Farmers' 1970 total receipts for Conn. - \$167,000,000.

a) from milk and cattle sales, \$42,500,000.

Since 1935, the number of dairy farms decreased by 85%, but now they produce 9 times as much milk per farm. We have now fewer, but larger and much more productive farms. In 1971, Connecticut was 6th in the United States in dairy cattle density, with 22.4 head per square mile.

Pomfret had about 3400 head of dairy cattle in 1974, which makes over 80 head per square mile!

- b) Considering horses, Connecticut is the most densely populated state in the United States. Pomfret had 34 of the State's 40,000.
- c) Beef cattle is a small industry here, numbering about 30, but the quality of the white-faced Herefords breeding stock is high.
- d) Sheep number 20 and hogs 25, both considered minor.

As to crops, corn acreage has recently been increasing, and there are more acres in corn than any other crop. Fruit production has declined from what it was 40 years ago, but the Seeley-Brown peach and apple orchards are still well known.

Yet, what does all this mean to the Mashamoquet Brook - what are the effects agriculture and the Brook have upon each other? On one hand, the Mashamoquet helps drain excess water away from the land, allowing the soil to dry out and be used for crops, and it can be a source of water for irrigation and fire protection.

The Brook can also flood its banks when overloaded, inundating pastures and crop land, and even occasionally endangering animals. The moving streambed is constantly eroding and undermining its banks. This can reduce certain cultivated land. Flood control dams might help, if really needed, but the expense could be too great for the results. River banks can be protected by good vegetation cover and some rocks to protect bad points. Open fields adjacent to the brooks provide scenic vistas and buffer zones which reduce home or industrial pollutions from harming the water quality. On the other hand, various kinds of poor management or unconcern can seriously harm the brook. One major problem here would be animal wastes getting into the brook. Livestock pastured too close, drainage from barnyards or stored manure piles, plus improperly spread manure, all contribute to this.

Current fertilizer and manure handling practices can be improved. Manure is not simply a waste to be disposed of. More attention should be given to methods of handling and storage, so that it may be applied to the crop during the growing season.

In the watershed, dairy cattle alone produce about 92 tons of manure a day¹. Some farms have the proper facilities for handling this, and others are now working towards this end, with the assistance of the Extension Dairy Agent of the Windham County Cooperative Extension Service and the Soils Conservation Service in Brooklyn.

Some simple procedures could be easily used: Prevent direct drainage from the barnyards; do not store manure piles near swamps or brooks; when spreading manure, leave a strip of grass near the stream unspread; if spreading on bare soil, plow under as soon as possible.

Commercial sprays for killing plants and insects could be another contributing factor towards poor quality of water due to agriculture. New technology is resulting in sprays which decompose quickly. Moderation in application of sprays is also desirable.

¹ 3400 animals
x 2 cubic ft./day average
x 40 lbs./cubic ft.
135 tons/day x 68% in Mashamoquet Watershed

Excessive sediment runoff must be prevented by winter cover crops, grassy strips along stream edges, and contour strip crops along hillsides to prevent erosion.

RECREATION—The opportunity for recreation along the Mashamoquet Brook is available to anyone. Young and old alike can find something to do. Possibilities range from more strenuous activities, such as swimming, hiking and skating, to such leisurely activities as picnicking and quiet contemplation.

For the sportsman, there is hunting, trapping and fishing. At various places along the brook, trout are stocked each Spring. The rocky bottom with many riffles and small pools make it an interesting and enjoyable brook to fish. At various times, the hunter can find an abundance of cottontail rabbits and squirrels. Many sections have ideal cover and food for ruffed grouse. Quail are present, but small in number. Migratory birds are ducks, geese and woodcocks. One can definitely find beaver and muskrats, and occasionally mink and otter are found.



*Enjoying a walk along the Brook.
November, 1972*

Near the headwaters, there is the Windham-Tolland 4-H Camp, which provides organized recreation for many of the area youth. Just below the 4-H camp, the Dennis Preserve; about 400 acres, was recently given to the Nature Conservancy for protection. This area will be used for outdoor educational purposes, especially involving schools.

Private lands totaling about 1400 acres along the brook are used by Pomfret Boy Scout Troop 26 for hiking, camping, nature study, and other efforts. Their conservation projects include building and putting out wood duck boxes, planting seedlings, cutting brush, and keeping trails open. The owners have given permission, and a good spirit of cooperation exists.

Further downstream is the Mashamoquet Brook State Park. The park covers 838 acres, including the Wolf Den Section, the site where Israel Putnam killed a wolf in 1743. An interesting trail system crisscrosses the park, providing access to the facilities and points of interest. Fishing is allowed in the brook. Swimming and skating are provided for by a man-made pool. Water is piped to the pool from the dam on the brook, and runs back to the brook from the overflow pipe at the lower end of the pool. The park has a 35 site campground, and is in the process of building a new campground in the Wolf Den area. Picnicking is the major recreation activity at the Park. During the summer, thousands of people come during the days to picnic and to enjoy the natural environment. Some hike, some fish, some swim, some play ball, and some just sit and relax.

PRESENT LAND USE AND OWNERSHIP

The Mashamoquet watershed is scenic, uncrowded and quiet. It has remained remarkably unchanged for two hundred years. In 1756, there were 1722 people in Pomfret; in 1940 there were 1710; 12 people less! In the past thirty years, there has been more growth, to the present 2500 but projections to the year 2020¹ show this town will have the least total increase of northeastern Connecticut, perhaps an increase of another 2500.

Pomfret's present land use² measured from aerial photos shows:

- 62.3% Forest
(dense, mature timber growth)
- 22.2% Agriculture
(land in production)
- 8.0% Vacant
(formerly agriculture, now scrub)
- * { 3.7% Wetlands
(swamps and bogs)
- .7% Water bodies
- 2.3% Residential
(houses and the yards around them)
- .7% Institutions
(schools and the yards around them)
- .1% Commercial
(buildings, parking lots, etc.)

(Remember, this is not a measure of ownership, but of the use of the land.)

Inland wetlands* as described by Public Act 155 differ from the analyses above. The amounts here are measured from only the water that could be seen. The type of soils determine the legal wetlands and about ¼ of the forest and agriculture land uses above would also be inland wetland type soils. The total wetlands by PA 155 in Pomfret would be 25% of all the town.

Our forests have always fluctuated due to economic pressures. More open land was needed by the first settlers for their growing farms. Wood was needed for heat and to build with. All the virgin, climax woodlands that had been in Pomfret were felled during the first one hundred years. Since about 1800, only unplanned reforestation has occurred. During the last 40 years, once-cleared land has grown up to scrub forests.

Recent management activities have been largely confined to the clearing of brush and cutting of trash trees. Some hemlock stands were encouraged, and a stand of red pine is seen on the Dennis Preserve. In spite of increased management activities in the last ten years, the emphasis is still on clearing brush and cutting weed trees. There are few, if any, planned, new forest growths.

¹ NECRPA Series #26, A statistical view of NE Conn. 1972.

² NECRPA file report, 1972

Presently, Windham County's major woods are as follows - Pomfret's are likely to be much the same.²

Hardwoods	
42%	Oak - Hickory
21%	Elm - Ash - Red Maple
16%	Maple - Beech - Birch
1%	Aspen - Birch
Mixed hardwood - softwood	
6%	Oak - Pine
11%	White Pine - Red Pine
Softwoods	
2%	Yellow Pine
1%	Spruce - Fir
<hr/>	
100%	

Most people in the watershed use the woods for recreation and hunting. Little commercial cutting or sale of woods is found, although a recent hardwood sawmill is enjoying fair success here. Further new woodworking industries in the northeast area would probably be welcomed.

Steep hills, rocks and swamps predominate in the uplands of the Mashamoquet. The amount of agriculture increases downstream, as the soils become thicker and better. As noted before, most farming here is aimed toward dairying. There is some additional raising of swine, sheep, horses and beef cattle. The principal feed crop is silage corn with added legumes and hay grasses.

Present attitudes around the Mashamoquet indicate many farmers plan in the future, or are now in the process of selling out and leaving farming. Right now there are many hundreds of acres of farmland for sale to the highest bidder, regardless of future use.

Apparently, the need to continue farming in the present open lands is now of more national, regional and state importance. Governor Thomas Meskill last year stated by his executive order No. 26 that:

"The future of agriculture is of paramount importance to the citizens of this state and nation in view of possible future food shortages...farmland still occupies nearly 18 per cent of the land area of the state...Connecticut ranks first in New England in income from agricultural products on the basis of geographic size...agricultural land represents an integral part of Connecticut culture and aesthetic quality and is important to the preservation of our state's distinctive employment."

As a result of his order, a committee investigated the decline of farming. The major reasons were: increasing cash value of land, increasing property taxes and heavy gift or inheritance taxes on the transfer of land from father to son. There have also been additional new state rules as to health, production methods and land protection. All these make a farmer's independent life and work more difficult.

The main recommendation of the Governor's Task Force Committee on the Preservation of Agricultural Land was that Connecticut should reserve at least 325,000 of its remaining 500,000 acres of farmland. In 1949, there were 1,250,000 acres in agriculture; 1975 will show less than 500,000. The recommended reserve would produce about $\frac{1}{3}$ of Connecticut's food.

They suggest a \$500,000,000 state fund to purchase the development rights of this land at a fair market value; estimated at \$1,500 an acre. The owner would retain all other rights and uses, and would be helped in his farming by decreases in his property and inheritance taxes.

The cost of this program would not be borne by the farmers. Rather, a 1% tax on all the state's real estate sales would be enough to pay for each year's state purchase of development rights, about \$30 million/year. The farm owner would not be forced to accept all this money for not selling his land. The choice would be up to him, and he could take the money over a period of years. The result would be a payment of \$1,500 per acre for farmers to continue owning and running their farms with less taxes.

² Connecticut Forest and Park Association, May, 1974

The ownership of land in Pomfret is difficult to measure or even look at, since the town has no tax maps. The Pomfret 1974 tax

listings and general information show that the following data might be close.

	Totals	
Resident-owned parcels of land:		
211 Small (1-9 acre) parcels	1,248	(average - 6 acres)
170 Medium (10-99 acre) parcels	5,300	(average - 31 acres)
46 Large (100 plus acre) parcels	<u>8,550</u>	(average - 186 acres)
	15,098	or... .. 58.1%
Non-resident owned parcels of land:		
53 Small (1-9 acre) parcels	318	(average - 6 acres)
77 Medium (10-99 acre) parcels	2,714	(average - 35 acres)
15 Large (100 plus acre) parcels	<u>3,152</u>	(average - 210 acres)
	6,184	or... .. 23.8%
State-owned land:		
State highway right of way ¹	260	
Mashamoquet State Park ²	838	
Natchaug State Forest and railroad right of way ³	<u>1,337</u>	
	2,435	or... .. 9.4%
Town-owned land:		
Town buildings and their land	26	acres
Town highway right of way (65 miles x 75' average width)	703	acres
Cemeteries - (13 in Pomfret - some private)	<u>30</u>	acres
	759	or... .. 2.9%
Other unaccounted for land; either not taxed, not listed, or not measured		<u>5.7%</u>
		100.0%

Of the non-resident, large, landowners, it should be noted that most are in the adjacent towns, or at least eastern Connecticut, while only about 10 or 20% of the 6,184 acres is owned by out-of-staters. So, other than State property, Pomfret is mostly owned by local, or at least Connecticut, residents.

A large number of people own tracts over 100 acres, especially when compared to other southern New England areas. Most of the large farm tracts reflect a consolidation of farming out of the necessity to make it pay.

Also, much land held by non-farmers is, in fact, land leased for the farmer's use.

If the protective farm measures are passed by the legislature in Hartford, a large acreage in Pomfret might be eligible for inclusion in the program if the owners wanted to gain those benefits: considerable cash income, lower income taxes and lower gift or inheritance taxes. Quite possibly, Pomfret could continue in its rural atmosphere while those in farming would be greatly encouraged to stay.

¹ 26.8 miles x 80' average right of way. From State Dept. of Transportation Boundary and Geodetic Survey Division.

² From State Department of Environmental Protection, Land Acquisition Branch, as of 24 February 1975.

³ From the Pomfret Tax Records.

THE BROOK'S FUTURE

MEASURING TODAY—The Brook area continues from the past a sense of quiet unhurriedness. There is a solitude around the Brook accompanied mostly by nature's sounds of water, woods and fields. There is a special bustle in the springtime, as brush is cut out, fields are readied and the farming community moves into another cycle of planting and growing. Fields and woods are pleasant with sounds of birds and fresh smells of the new year.

Summer gradually arrives and Pomfret's pace slows to meet the season. Fishing, camping and hiking; kids playing ball and swimming in the brooks and ponds; these all make the area a place to visit rather than leave for elsewhere. Children, calves, foals and yearlings now have their time for growing and learning the outdoors.

We feel that what we have here around the Mashamoquet Brook is a beautiful pleasant country in which to live and work. Nearby Quinebaug Valley offers certain job and school opportunities, and the local shopping in nearby centers is adequate. For larger shopping and work opportunities, we are only about one hour from Hartford, Providence or Worcester, and still just ninety minutes from Boston.

The Valley is the last green corridor in all southern New England and the Mashamoquet may just be the prettiest part.

POSSIBLE TRENDS—What might some of the major changes be that face the Brook and its seventy percent of Pomfret? And what of the gradual things that happen while we don't notice? No one ever knows the future exactly. Ideas and predictions have to be based on what experience we, ourselves, have and our knowledge of things happening around us now, as well as in the past.

An industrial-jetport complex in the Sterling-Voluntown area just to the south of us has been proposed and studied during the past few years. This would serve all of New England as the major center for autos from Detroit and other manufacturing goods from the entire world. It would be a major export center for New England and have a series of connecting interstate highways encircling it for hundreds of miles. The jet flyover and holding areas would be from Worcester to out past New

London. These jets would be over the whole area, dumping excess fuel and barraging us constantly with noise, twenty-four hours day. The cities and population growth accompanying this complex, in just ten years, would be comparable to only one other place in the world. Dallas-Fort Worth, Texas has the same credentials as outlined here, including the highways, noise and pollution. The Quinebaug would be green no longer, and the Mashamoquet would have little or none of what it offers today.

Yet, certain changes will, and probably should come. The highway system as begun should be finished in our area. Interstate 52 will, hopefully, be connected to the Mass. Turnpike within a year or two. Interstate 84 from Hartford to Providence is perhaps seventy-five percent complete in Connecticut, and with proper care of the environment should be completed to the state line within a few years. Just what Rhode Island will do with their end is still unsure, but government funding pressures from Washington will insure its being built to Providence within about five years. We feel these connecting highways are necessary for the economic well-being of Mashamoquet's people in the future.

September of 1974 saw the beginning of a working State Plan of Conservation and Development with all regions participating. It is noted there that Pomfret is not suited for any urban-type development since there are no municipal water or sewerage systems existing or proposed. That being the case, our area is seen for the future to be able to handle limited growth only, which is governed by effective and continuous on-lot septic systems and water supplies. There are also proposed some additional open space and recreational areas, although these are small in size and number since Pomfret already has a few thousand acres of this type. Urban build-up, according to the Plan, would be held to the Quinebaug Valley from Thompson through most of Putnam, then most of eastern Killingly and western Brooklyn.

It is seen here that the general framework of the state policy will somewhat control the Mashamoquet's future. Above all, though, we must continue our own self-determination as much as possible.

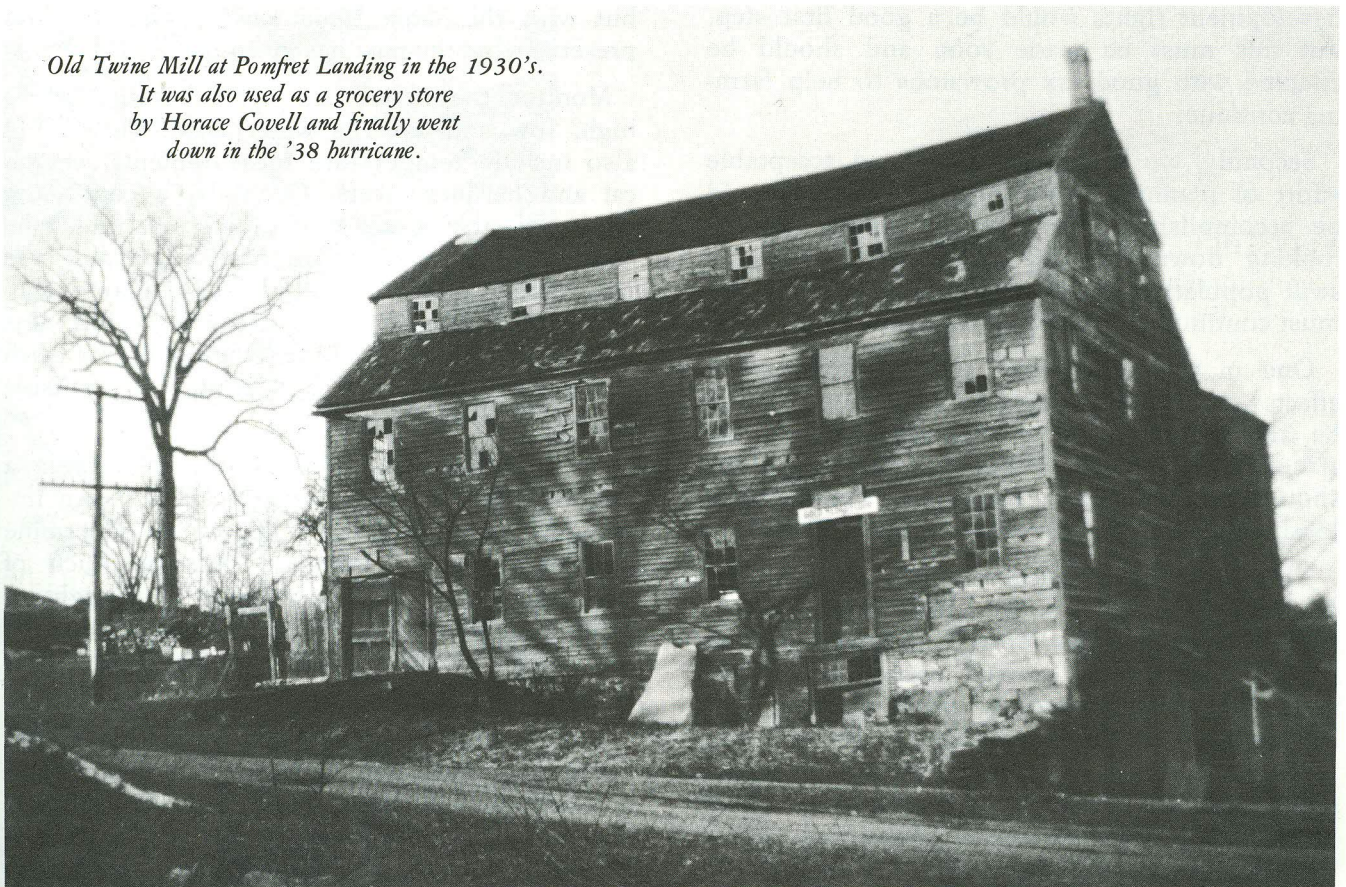
WHAT'S NEXT?—Just as others see different things for the future of the region, so do the Conservation Commission members each differ somewhat in what is seen for the Mashamoquet in the next fifty or so years. However, certain assumptions were made and carried throughout our predictions and recommendations. The jetport should not and, hopefully, will not come to this area. We can do economically well with selective planning and location of businesses, fully using the proposed urban growth plan for the Quinebaug Valley area. The two major highways as proposed, if completed within two to five years, will give adequate transportation facilities coupled, hopefully, with continuing freight rail service.

Population trends closely follow such major items as a jetport, wartime or immense climate changes, but assuming none of the above happens, what will happen here? There are some recent indications of a shift in population from central U.S. to the east coast. However, Connecticut has recently become stable in its population, holding as the fourth most populous state: over 3 million people living in 5,000

square miles. Southern New England Telephone, our regional planning agency, and local schools see mostly only a slow upward trend in our area. We might possibly add another two or three thousand people in the next fifty years. Continuing the trends as they presently are, much of this growth will probably occur at the lower half of the Brook during the next twenty-five years. But if agricultural protective measures become available, then this concentration might change. Then, with good planning, the woodlands and other non-agricultural areas having adequate soils would be the growth areas, rather than our using the last of the good farmland.

Weather, floods and the outdoor elements continue to change and cover our settlers' heritage from the past. Timbers rot away, metal rusts and stone foundations are shifted by frost and water. Old sites become covered with vegetation and now, sometimes, removed or covered by man. Time seems to move slowly, but changes like this aren't noticed and things are soon gone and forgotten.

*Old Twine Mill at Pomfret Landing in the 1930's.
It was also used as a grocery store
by Horace Covell and finally went
down in the '38 hurricane.*



People's entire ways of life change, sometimes gradually, often quickly and drastically. We question here whether the people in the Mashamoquet area wish to see their whole way of life change in a similar fashion to what has happened downstate. Once-pleasant rural atmospheres enjoyed by most townspeople suddenly and unpleasantly changed with large increases in population, coupled with inadequate facilities. Many people moved out, to find again what they had perhaps once taken for granted.

MAYBE SOME ANSWERS—We think the Mashamoquet's future would best be an agricultural-rural status which would provide well for the limited growth seen for this area. There could be some local business expansion, but keep larger industry in the areas which can best service them with adequate facilities. The nearby Quinebaug urban area would be within easy reach of those workers who wished to live in our country area and, hopefully, agriculture would remain the number one business here.

Therefore, it is recommended that any provision for bettering the local farmer's position should be made. The recent proposal to protect farmland by a reasonable purchase of development rights would be a good first step, but this must be made soon and should be coupled with good tax provisions to help farming continue.

Secondly, we feel that a good and acceptable effort of planning, by the whole town, should be accomplished. We are at a crossroads. By looking downstate, the unpleasant results of swift population growths can easily be seen. We must continue our own self-determination.

One of the most basic and immediate bad effects on the Mashamoquet watershed would be any continuing or new major wetland destruction. Provisions of the wetlands regulations should be followed. These are handled by local townspeople, rather than from Hartford.

There is a large resource going to economic waste in the Mashamoquet - the woods. Proper, well thought out, yet inexpensive reforestation methods should be started immediately. This might be accomplished by good thinning and cutting practices. Not clearcutting, which is no more than just mining timber, and not selection cutting, which tends to take only the good, strong trees, leaving weaker, degenerate types. Rather, another method somewhere in between

and much less expensive could be "sequential shelterwood cutting." A 125-year sequence which uses a series of 15-year cuttings and would leave some partly mature trees each time to shelter the new growth. This would work best in our area with a mixture of hemlock, hardwoods and white pine.

Walking along the Mashamoquet, it is pleasant to envision a trail open to the people of Pomfret. Numerous suitable sites have been noted by the Commission during walks over the past few years. With cooperation between the town and a number of landowners, this trail could be made possible. Considering just five landowners and the state property, there are over five thousand acres already adjacent to the Brook. This could provide a vast amount of outdoor education and enjoyment for the people of Pomfret. Corridors using the old railroad right-of-way or gas and power lines could also be worked out.

OTHER PROJECTS SEEN—The work on this report over the last two years has brought forth what we feel are interesting studies that should be looked into soon. These could be worked on by various groups of various ages, but with the same basic tenet; to record and preserve what the past has given us.

Monitor the Brook and its tributaries as to high, low and average water flow. This could also include temperature measurements, chemical and hardness tests. Certainly, a continuing study of the water's cleanliness should be started. When man settled here, the water was very clean and fish abounded. Pollutants continue today to cause our streams to have less than ideal ratings. All the equipment for such monitoring, measuring and testing is available right here in town.

As shown on pages 22-24, the mills were a major part of the Mashamoquet Brook. An immediate study should be started to determine the sites, types, dates and owners. Much of our history can be learned by what is right in front of us! The Brayton Grist Mill should be historically preserved and possibly opened for showing.

The Indians were first here and their record should be preserved and recorded. The campgrounds, artifacts and sites need much study and cataloging to learn of their cultures and periods here in the Mashamoquet Brook.



1 inch: 3,900 ft.
1 cm: 510 meters.

THE MASHAMOQUET WATERSHED (MOSTLY IN POMFRET)

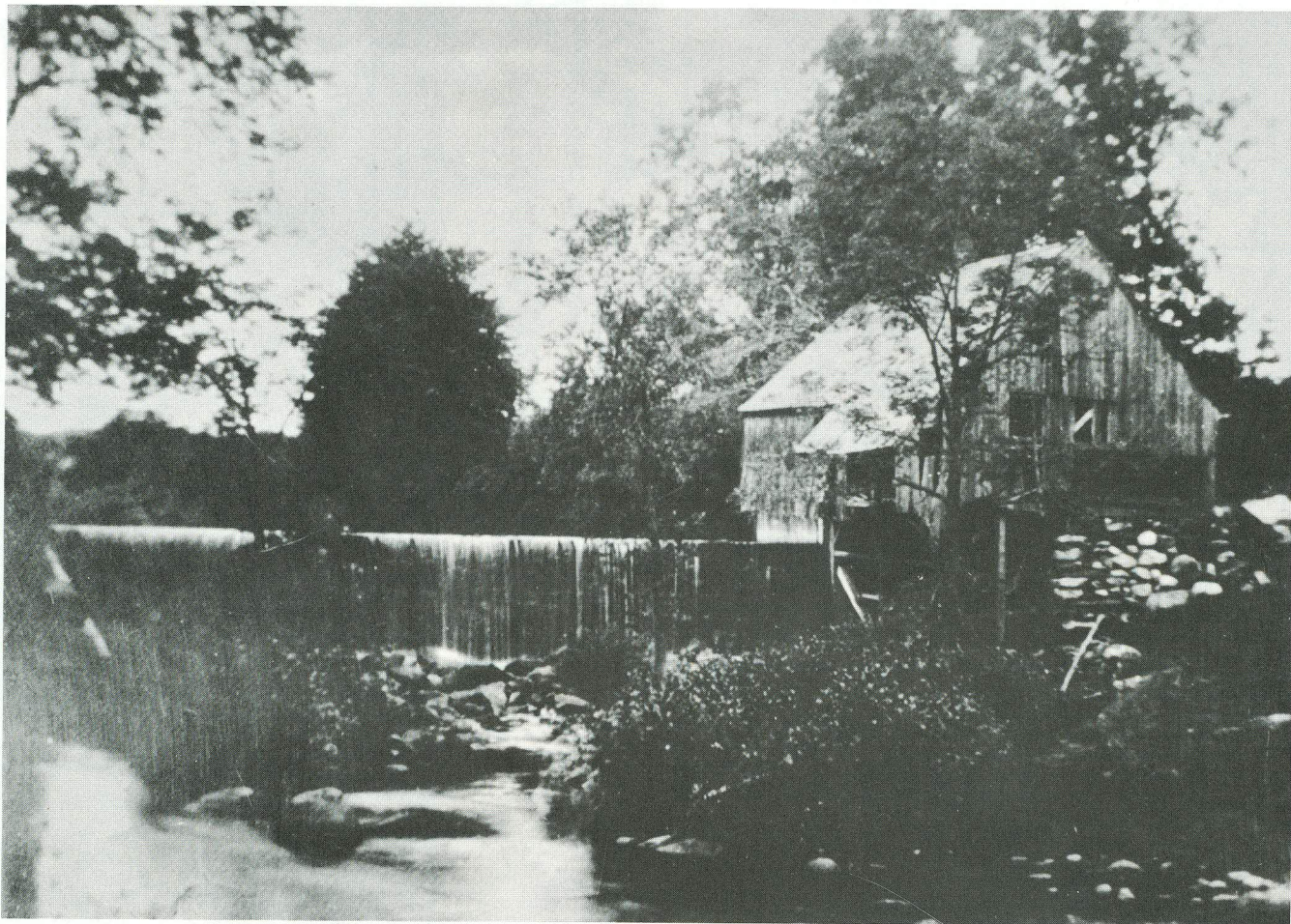
100 ACRES

NORTH

- TOWN BOUNDARY
- REGIONAL BOUNDARY
- GRID REGISTRATION

MILLS AND BUSINESSES—The Mashamoquet Brook and its tributaries attracted many mills and businesses over the years. A partial compilation of types, dates and owners follows with their approximate locations on the map. Names and dates are not guaranteed, and deeds or other references should be further checked. Wappaquoia Brook, Lyon Brook, as well as other tributaries, probably have numerous sites. Our thanks and appreciation go to Olive Pike Weatherbee for her most helpful knowledge and listing of many of these sites.

1. Sawmill-Grist Mill — Owned and operated by Abiel Lyon, 1707 to ?. South of Route 97 where it crosses Mashamoquet Brook.
2. Grist Mill-Sawmill (on opposite sides of Mashamoquet Brook) — Owned and operated by Ebenezer Holbrook, 1720 to ? See also numbers 15 and 25. (See below)
3. Sawmill — Owned and operated by a Parkhurst? (in operation before 1739). North of Valentine Road on Sawmill Brook.
4. Grist Mill-Sawmill — Tannery, Forge, wood-work shop; Brayman Hollow Road. An early mill, possibly build by a Grosvenor. Medium-large mill, specializing in shingles, clapboards, mouldings, casings. Operated until 1836-38.
5. Linseed Oil Mill — Either just North or South of Route 44 by the State Park. Built by Ebenezer Holbrook 1725 to 1735. Later became a grist mill.
6. Sword Shop — Owned and operated by Lemuel Ingalls, 1776 to 1780. South of Route 97, directly opposite the house belonging to Dr. and Mrs. Valentine; the farm where William McCarthy is caretaker (1975).



*One of the Holbrook - Sessions - Covell Mills on the Mashamoquet Brook just west of Covell Rd.
About 1890?*

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Since this present work attempts to spur the readers into further research, a fairly complete listing of all available references is presented here. Major sources used for this work are noted by an asterisk*.

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