

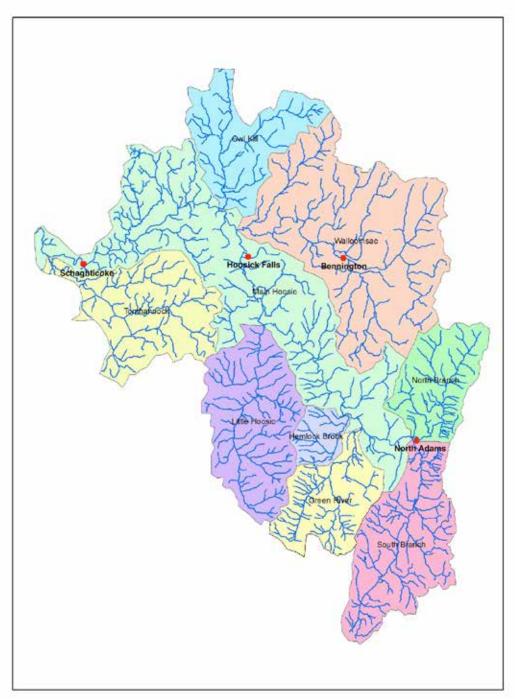
Dispatches from the Beyond Place:

Tales of the Hoosic River



Buskirk Bridge, S.McMahon

By Lauren R. Stevens with John Case & Wendy Hopkins



Hoosic Subwatersheds

Credit: R.Schlesinger

INTRODUCTION: Three states, one river

The granite marker where New York, Massachusetts, and Vermont abut stands beside an unmarked former logging road in a remote section of 2,600-forested acres. The nucleus was once a patchwork of small farms, then Amos Lawrence Hopkins' 19th century private preserve, then an experimental forest administered by the U.S. Forest Service, and now by Williams College. Williams' students and faculty continue the forest research, studying the natural systems like water flow in the brooks, weather, leaf fall, and forest regeneration. A canopy walk provides access to the upper parts of the trees. The movement from private to government or non-profit ownership and the emphasis on the environment is typical of the tri-state area that comprises the Hoosac Valley.

The establishment of state boundaries is an important part of the history of the area. Political boundaries, however, are of modest importance from the natural system's point of view. The 720-square-mile Hoosic watershed that surrounds that marker includes eastern New York north of Albany, the Bennington area of southwestern Vermont, and the Mt. Greylock area of northwestern Massachusetts, all linked by the Hoosic

River. Located about 150 miles equally from New York City and Boston, the valley is neither urban nor suburban but country—and likely to stay that way. Although it is not an area in which a lot of people have made a lot of money—in fact most residents work hard in low-paying jobs—it is an area to which some wealthy people, like railroad tycoon Hopkins, have escaped. And, partly as a result, much of the land is protected.

Land use in the watershed is consistently wooded on the ridges, dotted by small towns and villages along the river and its tributaries, with the area between largely agricultural. This is a pattern visitors seek out, residents feel comfortable with, and those who emigrate desire to return to. And yet peoples' vision of the area is distracted by the imaginary lines that demark towns, counties, and states to the extent that we have lost our understanding of the congruence of the Hoosac Valley, so that nowadays Williamstown residents, for example, rarely venture to Schaghticoke, and Bennington folk have little to do with North Adams. Perhaps even an idiosyncratic history of the valley will help overcome the myopia-and reveal the increasingly scarce qualities of the watershed.

Hoosic, Hoosac, Hoosick, Hoosuck... The word is Algonquian and any consistent spelling, elusive. In general usage, Hoosuck is an older form, as in a former name for Mt. Greylock: Grand Hoosuck Mountain. Nowadays the town in New York, Hoosick Falls, deploys a terminal k. The valley and eastern ridges that form the valley are spelled Hoosac. The river itself is Hoosic. The root word may have meant "beyond place." That is, living as the Mahicans did along the Hudson, they crossed beyond the Taconics to the Hoosacs for hunting and the like.

HISTORY, LEGENDS, & NILES

An idiosyncratic history of the Hoosac Valley has already been chronicled. Grace Greylock Niles' *The Hoosac Valley: Its Legends and History* (Putnam's, 1912) is an example of regional history that doesn't clearly differentiate between the "legends," mostly about Indians, and the "history," matters that can be documented. It also buries its story under detail, as do many regional histories, and it bestows somewhat odd place names. Given that some contemporary historians consider it unreliable and given that over 100 years have passed, it is time to take another look at Hoosuck, -sick -sac, -sic history.

Still, Niles' book is a remarkable effort. Pairing it with her biography adds to its allure. After all, according to her Bennington Banner obituary, June 15,

1943, "Miss Niles, a woman in her late seventies, was doubtless, from a literary standpoint, the most talented person native to this small Vermont town" of Pownal, non trivial praise considering that two U.S. Presidents, James A. Garfield and Chester A. Arthur, while not native, nevertheless taught in their youths in the same one-room Pownal school.



Grace Greylock Niles, self-portrait (?). Credit: Pownal Historical Society

Born in Pownal in 1864 as Grace Stoddard Niles, she attended Pownal schools (post presidential teaching stints), later a private school—probably in Herkimer, New York—and still later, nursing school. She returned to teach in Pownal and then began her writing career. She never married. Largely self-taught as

a naturalist, she published "The Origin of Plant Names" in 1902. Her close feeling of association with her natural setting may have caused her to adopt the name of the highest peak in southern New England, Greylock, located in Massachusetts just south of Pownal. The commonwealth had recently acquired the core of the Greylock Reservation (1898) as its first state-owned wild land. In 1904 she displayed that feeling for nature and her considerable talent for botany in her book, Bog Trotting for Orchids, the result of wandering through the Hoosic River watershed, especially the wetlands between the North Branch of the Hoosic and feeder streams to the Walloomsac. She drew many of the illustrations "from nature," as she wrote. This book is still regarded as an accurate and inspiring text.

In the same year she published her first history, "The Mission of the White Oaks Chapel," which was founded by Williams College Professor Albert Hopkins, in the section of Williamstown, Massachusetts, closest to Pownal. The article, published in the *Christian Register*, provides an intimate recounting of the runaway slave community that lived in that part of town, and which Hopkins' chapel served.

She continued to publish articles on flowers. She moved to New York City around 1910, to serve as a private nurse, but stuck to her geographical - and name-base, writing "The Greylock Park Reservation" in 1911, more history, to celebrate the state's protection of the massif. The following year she published The Hoosac Valley, followed by "The North American Cypripediums" (orchids). While she had been returning to Pownal summers, she moved back full time in 1918, at the age of 54. She settled on family land, which now belongs to The Trustees of Reservations and is called Mountain Meadow Preserve. Where on the property her house stood is not known, although the remains of a foundation by Benedict Road may have been hers.

Soon she began harassing her few neighbors, especially those who were setting out apple trees for what became the Kalarama Orchards. A distant, younger relative who saw to her, the late Henry Montgomery, recollected: "She worked so hard she went to dope," a phrase of which the general meaning at least is clear. He added: "I was the only one she let in... She carried a rifle all the time. The house was full of paintings and books. She was in terrible condition [:] no clothes or food or heat."

Perhaps she agreed. She burned down her house, while she "sat under her grapevine eating grapes," Montgomery reported. (The Benedict Road foundation shows signs of fire.) Two days after neighbors took her in she ran away. Montgomery found her in the rain "in a swamp" near the Sand Springs Hotel, down White Oaks Road in Williamstown. He called the sheriff, who drove her to the Brattleboro Retreat Center, a mental institution in Vermont. There she died in 1943, to be buried back in Pownal, at Oak Hill Cemetery.

If historians consider suspect her Indian history, her geology in The Hoosac Valley is based on the best available information of her day. Williams College, having broken free from a strict Classical curriculum, had become a center of science. Amos Eaton began the study of geology at Williams, before joining Stephen Van Rensselaer to Rensselaer Polytechnic Institute. Eaton's student, Ebenezer Emmons, established the Taconic System as explanation for mountain building and inspired T. Nelson Dale, Niles' contemporary and immediate source. Oddly, Niles the botanist includes scarce information about the plants of the region in The Hoosac Valley. Her accounts of 18th century settlement in her valley appear to be accurate. She certainly was a writer, artist, historian, and above all botanist of note. In fact, the more one reads her, the more she fascinates. For the most part, the material

she researched was not available in any digested, convenient form, except for college and Williamstown historian Arthur Latham Perry's and a few other's books. Her hours of digging through musty documents and old deeds in registries, libraries, and historical societies for *The Hoosac Valley* are awe-inspiring, might even drive someone to dope, even if she doesn't provide us with a bibliography and only occasionally a footnote. Don't expect footnotes to this informal paper, although a bibliography is attached.

Regarding the legends, she was in part set up. Her publisher, G.P. Putnam's Sons, was into them. In the back of her volume are advertisements for The Mohawk Valley: Its Legends and History, Old Paths and Legends of New England, and other similar titles. So, to some degree the inclusion of unverifiable or even fanciful material may have been part of her assignment. Among her legends are those relating to Indians pre-Revolutionary War. She found her Indian heroes, to whom she dedicated her book, in 17th century Albany deeds. The Dutch were scrupulous about negotiating with the Indians for their land, although their payments can seem trivial (cf. Manhatten). She refers to Soquon and Maguon as the "last of the great seers" of the Bears and the Wolves. By her time, the new Americans, in the East anyway, had

romanticized the Indians. (In the West we were still stealing their land.) She turned for sources to poet William Cullen Bryant and novelist James Fenimore Cooper. To be sure, both Bryant and Cooper researched Indian lore extensively, but their purpose wasn't history. Anyway, who can be absolutely certain of history lived before it was written down, she implied.

Another legend, one that attracted barn expert Richard Babcock like a pollinator to one of her orchids, had to do with French settlement of the Hoosac Valley prior to the Dutch and English. Again, historians find that highly unlikely, but if legend, it's good one. Babcock, as we'll see, added to it the story of Norumbega (also spelled Norembega or just Bega)—Norumbega on the Hoosic. In any case, Niles begins her first chapter with a quotation from Henry David Thoreau: "We should read history as little critically as we consider the landscape... It is the morning now turned evening and seen in the west,—the same sun but a new light and atmosphere" (A Week on the Concord and Merrimack Rivers). Verification isn't necessarily the goal.

SOMETHING FISHY

We need to define the Hoosic River watershed and describe its natural history, as Niles began her book. In a watershed all precipitation drains to one point. In the words of explorer and geographer John Wesley Powell, it is "that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community." Heights of land, however modest, send water one way or the other. Humans are part of resulting ecological areas; therefore everyone has a watershed address.

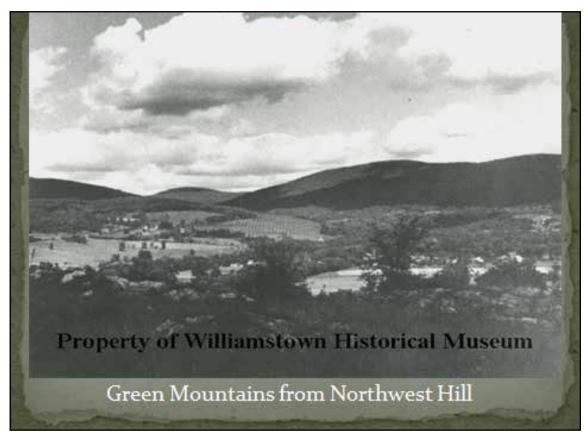
The Hoosic is a sub-watershed of the Hudson. The main stem of the Hoosic rises in Lanesborough, flowing through while Adams, the north branch descends from Heartwellville, Vermont, to join in North Adams, thence through Williamstown; Pownal, Vermont; and through the New York State towns of Hoosick Falls, Pittstown, Schaghticoke before mingling with the Hudson at Lock Four of the Champlain Canal, some 70 main-stem miles. ("Schaghticoke" is Algonquian for "mingling waters.") Its tributaries are sub-watersheds to the Hoosic, including the Green, Little Hoosic, Walloomsac, Owl Kill, and Tomhannock Creek. Mount Greylock, the Hoosacs, the Taconics, the Rensselaer Plateau, and the Green nestle the watershed. Mountains

demarking the area that drains into the Hoosic.

The history of this Hoosac Valley over the last 500 years: Forested, deforested, and now mostly forested again. Along with the trees, the larger forest animals are returning. The related history of the Hoosic River and its tributaries: Pristine to badly polluted, to being able, once again, to perform most of their ecological functions. Yet just at the point when the

river is recovering, warming—its greatest threat since the glaciers—is upon it.

The heights that bound the watershed are part of the Appalachians, a mountain chain once of Alpine proportions that formed millions of years ago when continental plates collided—an activity unknown to the geologists Niles consulted. In the Taconic Orogeny (mountain building) offshore islands pushed west onto what is now New England, which



The Green Mountains from Northwest Hill, Williamstown Credit: Williamstown Historical Museum

is why local mountains contain layers of rock formed under the ocean, such as quartzite, schist, and limestone. Wind and water erosion through time have reduced and continue to reduce their height.

The Taconics, along the New York-New England border, are predominantly phyllite schist. The Hoosic passes through an opening in that ridge. The Hoosac Range, with a complex of phyllite, quartzite, and granitic bedrock, defines the eastern flank of the valley. Its summits form the Berkshire Plateau, at around 2,400 feet in the north, decreasing to about 2,000 feet in the south. The plateau merges to the north with the granitic Green Mountains of Vermont. The Valley of Vermont, extending from Pownal to Proctor, is based on erodible dolomite bedrock.

Some geologists hold that the Taconics were originally the peaks of the Greens and the Hoosacs, shoved across that valley. Mt. Greylock stands as a massif in the northern Massachusetts portion of the region, its summit at 3,491 feet. Its bedrock geology is closely related to the Taconics. The Little Hoosic River bounds the western edge of the Taconics. The Rensselaer Plateau, primarily greywacke—durable sandstone with slate layers—rises 1,400 to 2,000 feet in the west.

During the Pleistocene, some 18,000

years ago, a nearly one-mile-thick ice sheet covered the entire region, scouring out the U-shaped valley as it crept southward toward Long Island. As the ice sheet receded through the region 4,000 years later, Lake Bascom filled the Hoosic River valley below the 1,100-foot elevation. Glacial debris dammed the melt water in various places, ultimately Potter Hill, New York, preventing its draining to the northwest, while a smaller dam in Cheshire blocked the flow to the south. Lake Bascom persisted for about 800 years until it emptied toward the Hudson in a series of dramatic floods. The Hoosic regained its pre-glacial southeast to northwest flow, unlike most rivers in New England that the glaciers gouged north to south. Traces of the lake are still visible as gravel and sand beaches, hundreds of feet above the river in northwestern Massachusetts and southern Vermont. A tributary, the Green, is colored because finely powdered rock left over from glacial grinding continues to wash down from the hills.

The valley floor contains a variety of wetland types, from flowing and flooding rivers to ponds and backwaters dammed by 19th century industrialists. Vegetative wetlands include wet meadows, marshes, fens, swamps, and bogs. The Pownal Bog, where Niles trotted, north of Barber

Pond, is actually a 2.5-acre peatland fen, formed in a kettle hole depression. The marshes in Cheshire just downstream of the Reservoir are the most extensive in northern Berkshire. Additional significant wetlands are found in Stamford, Vermont.

Uplands support boreal coniferous forest of balsam fir on Mt. Greylock, above 3,000 feet, and also on the Dome in Pownal, and red spruce from 2,400-3,000 feet above sea level on other peaks of Greylock. Sugar maple, yellow birch, eastern hemlock, and beech dominate north- and east-facing slopes at lower elevations, while oaks, hickories, and beech dominate south- and west-facing slopes. Eastern white pine, as well as hemlock and red spruce, populate the Rensselaer Plateau. Alkaline-preferring

plants, some rare, enjoy the calcareous soils in the valleys and hillsides, such as the old quarry in the Quarry Hill Natural Area, owned by The Nature Conservancy in Pownal. The lime also buffers vegetation, such as Niles' orchids, and

waterways (some but not all) against the acid deposition from power plants to the

west. Riparian areas grow black willow, sycamore, cottonwood, and giant ostrich ferns—as well as numerous invasive shrubs. Flood plain forests border the river near Cole Field in Williamstown, the bend of the river below North Pownal, and the Thompson Mill site in Valley Falls, among other stretches.

During the 19th and early 20th centuries, much of the forest cover was converted to agricultural uses, with residual forests cut for woodlots, for timber, charcoal, fuel, and other forest products. Early days of railroading finished the job of largely denuding the slopes for crossties and telephone poles, leading to increased runoff and landslides that fouled the river. Loss of riparian vegetation removed a natural barrier that held banks



The Walloomsac forms in the wetlands south of Bennington Center. Credit: T.Hyde

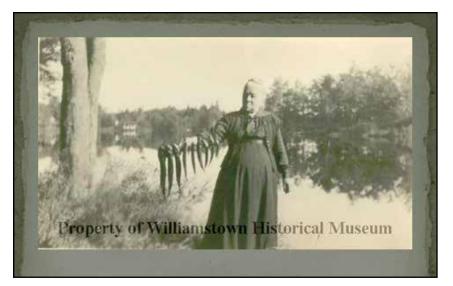
and strained out pollution. With the regional decline in agriculture and the pivot from wood to fossil fuels in the 20th century, forests began to reclaim much of the land. Residential and commercial developments, including roads and parking lots, are also important features of the post-agricultural landscape.

Tributaries include the Tomhannock. which flows from the City of Troy's reservoir, and the Little Hoosic, two of the three remaining sparsely developed, free-flowing rivers in eastern New York State. Hopper and Money brooks, flowing from Mt. Greylock to the Green, are Massachusetts-certified Wild and Scenic Rivers. The Green, currently on the impaired list, may be removed. Thus it should be fishable and swimmable. The Walloomsac is listed, probably inaccurately, as unimpaired. The six Massachusetts communities which the Hoosic runs for 29 miles have adopted it as a Local Scenic River. A fishing advisory on the main stem downstream of North Adams, due to polychlorinated biphenyls (PCBs) left over from the Sprague Electric Company, and bacterial contamination, encourage fishermen to release their catch, which increases the productivity of the river. In its lower reaches, primarily in New York, the river is home to warm water species,

such as pickerel, perch, and bass. Otter and bank beaver patrol the shores. Great blue and green herons fish the river, which is also home to ducks. Bald eagles stake out fishing territory beside at least two nests in the valley.

The upper Hoosic, roughly the Massachusetts portion, is biologically a cold-water fishery (although apparently to accommodate a waste water treatment plant, the official boundary is Adams); the lower portion, a working river with significant hydroelectric generation. The fish indicate the health of the entire, riverrelated ecosystem. The Hoosic and its tributaries produce quantities of fish, the creatures fish feast upon, and those that live upon the fish. In the gravel reaches of the upper river brown, rainbow, and brook trout spawn; the Hoosic is one of the few rivers in Massachusetts in which trout reproduce. These wild trout are more of a challenge to anglers than those raised in hatcheries. Brook trout are stocked in the tributaries.

On a given autumn day in the watershed, the sun, peering from underneath dark clouds, sends a bolt of fire through the orange and gold leaves of the sugar maples. On the bottom of a clear, moving tributary to the Hoosic, a dark-olive fish with wavy markings on her back and red spots on her side



Lucy Bridges Prindle caught these trout over 100 years ago. Credit: Williamstown Historical Museum

thrashes about, creating a nest in the gravel. Her even more colorful mate, he with the jutting jaw, fiercely drives off other males. When her redd is ready, she deposits 1,000 or so eggs and he, after one last tour of the perimeter, slides in to fertilize them. They cover the eggs with gravel; then both adults leave their progeny to be.

Although peripheral males feed on some of the eggs, as the water warms in the following spring, most hatch. The alevins stay under the gravel for a week before emerging to eat. They grow and swim away. Their lives will take them upand downstream, perhaps into the Hoosic itself, looking for food, logs under which to hide from predators, cool temperature refugia or pools, and boulders to provide protection from storms. This will be the place to which they will return, however,

provided no barriers are placed in their way, when their turn comes to spawn.

Historically, brook trout (also known as speckled and squaretail) in the eastern United States have found homes in New England, New York, Pennsylvania, and on south in higher elevations of the Appalachians. Destruction of suitable habitat by dams, flood chutes, the removal of riparian vegetation, and pollution, have already reduced that range by some 20 to 25 percent, especially in the central and southern Appalachians, and including western New York. The Manomet Center for Conservation Services, of Plymouth, Massachusetts, and the National Wildlife 2012 reviewed the Federation. in considerable research on the effect of a warming climate on trout, the indicator of the health of cold-water ecosystems and prize game fish of our area. By

mid-21st century higher temperatures may severely limit the viability of trout. Brown, brought from Europe in the 1880s, and rainbow, introduced from the western U.S. in the 1870s, as well as native brookies, are largely limited to unpolluted, cold, well-oxygenated streams. Water above 70 degrees F. kills eggs, fry, and adults. Therefore trout "might be among the more sensitive fish in the U.S. to climate change," according to Manomet. Although more study needs to be done, as a species trout do not seem to be particularly adaptable. Brown and rainbow are more tolerant of warmer temperatures than brook trout.

Many variables are in play, beginning with the issue of just how much the climate will warm, which in turn depends on the steps that we take to reduce the carbon we emit. In the Hoosac Valley to date, frost-free days have expanded significantly into the spring and fall. Some possibilities exist that may limit the negative effects. Recent studies Manomet reviews have emphasized that conditions for trout need to be assessed on a siteby-site rather than regional basis. The relationship between air temperature and water temperature is not automatic. Other factors may buffer stream temperatures, such as tributaries flowing from the hillsides, the addition of groundwater,

stream shading, angle to the sun, and adjacent land use. Blacktopped parking lots and roads by rivers; dams; concrete or stonewalls, all increase heat.

Certainly the erosion of trout fishing areas in the northeast will continue, working from south to north and from lower elevations to higher. Nevertheless the future for the Hoosic may not be as grim as earlier studies predicted and there are ways that we, the culprits in climate change, can modify its outcomes and even manipulate stream environments to prolong the life of what we correctly perceive as a prime indicator of our river's vitality. Our river would be significantly poorer without the trout.

BARN MAN

Dick Babcock, nationally known expert on what he called "roots barns"—those created according to the distinct styles of the European origins of their builders—was mystified. This bear of a man had discovered and dismantled to move to his barn museum in Hancock, Massachusetts, a barn built like none other he was familiar with. He had studied, saved, dismantled, and reassembled German, Dutch, Scots-Irish, and English barns, but this one had him stumped. So we can imagine how he reacted when he read in Niles'



Richard W. Babcock. Credit: R.Babcock

Hoosac Valley about French settlement along the Hoosic prior to any other Europeans, in fact 80 years before the Pilgrims' arrival at Plymouth Rock.

Babcock, born in 1934, came to live with his grandparents on their Cold Spring Road farm in Williamstown when he was young. His grandfather, Clayton, knew the skills, nearly lost to history, of disassembling and reassembling timber-framed barns. Clayton had learned them from Square Allen of Petersburgh, a talented timber-framer who had learned from his father, and so on. When Richard, returning from serving as a Marine in Korea, purchased a farm in Hancock, he knew he needed a barn.

His grandfather asked, "Why don't you move one?" So they did, from a farm once owned by Clayton's father and then by Clayton's brother. And that was how Richard learned, hands-on, the skills that became his profession, and how he was introduced to the wealth of ancient barns, most about to disappear, in the Hoosac Valley. That any of them were still around is a miracle, partly explained by their being over built. Given the size of the trees at the time, it may actually have been easier to build with huge timbers than to hew them down to size. But if barn roofs weren't kept up they moldered; and they were bulldozed as farms gave way to subdivisions.

The method involved a gin pole and bull wheel—something like the cargo hoist on a freighter—, portable devices that enable a crew to lift or lower heavy beams. The method involved knowledge of the intricate joints timber framers used to connect horizontal beams to vertical posts. It involved the skill and sweated labor of hewing beams. Babcock learned from his grandfather, and later research, that the earliest barns were built to be taken apart so that they could be moved as the farmer's plans changed. He learned and became a master at the different kinds of joinery used by settlers from

different European backgrounds in the Hoosac Valley and nearby, and he passed those skills on to his sons and others who went into timber framing.

other ancient carpenter's With techniques, Babcock took down and moved barns, most dating to the 18th century or before, to become homes. His activities turned out to be photogenic and newsworthy, such as a piece in (February Yankee Magazine 1976), which led to numerous other jobs. He moved two barns—one 17th century English, one later—from Shrewesbury to Macomber Farm, the Massachusetts Society for the Prevention of Cruelty to Animals in Framingham. Then Catherine Filene Shouse invited him to move an early 18th century German barn, from Blenheim, New York, together with a 1790 Scots barn from Jackson, New York, to Vienna, Virginia, to be combined as a performance shed at Wolf Trap. Babcock deconstructed and reconstructed a 1750 Dutch barn, from Guilderland, New York, which he dubbed the Great Plantation Barn of Saratoga, to be the focus of a barn museum he planned. He took a 17th century Dutch barn from Guilderland to Tarrytown to be part of the Philipsburg Manor estate, operated by Historic Hudson, Inc. He and his crew erected this one in public and in costume. All of the

major barn raisings were well covered by the press and brought Babcock fame and jobs. He simply could not manage money, however, and for all the attention, he remained as he described himself, "barn poor."

In 1984 he disassembled a barn on Breese Hollow Road in Hoosick that he found different from any before. This one had a king post that had originally risen from the great swing beam that spanned the width of the building. Some of the beams had been removed, no doubt to install a hayfork, but still he could see how it had been. He noticed unusual carpenter's compass marks on most beams. He noticed braces that ran all the way from sill to the top of corner posts. The nails were cruder than those he had found before. He stored the pieces in the Saratoga barn.

Then he turned to Niles for clues to who could have built it. There he read legends of St. Croix, a spirit cross, formed by the T-shaped junction of the Hoosic and Walloomsac—or perhaps Little White Creek and the Walloomsac—rivers, near the barn site. Niles wrote that when the Dutch, the supposed first Europeans, arrived in that area, they found the ruins of a fort. She wrote that Jean Alfonse's (Allefonsce) crew from St. Onge, France, visited the Hoosac

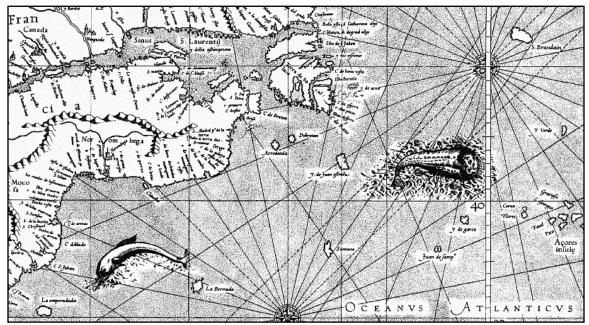
Indian hunting grounds between 1540 and 1542, established a community, and named it St. Croix. That name, sometimes corrupted to Sancoick, lingers. The community included a forest chapel in memory of the missionary, St. Antoine of Padua. Nearby Mt. Anthony, in Benningon, Vermont, bears the saint's name. Ships, churches, and barns had similar construction. For Babcock, the barn was very early, French, and originally a chapel.

Giovanni da Verrazzano, an Italian explorer in the service of France, described hearing on his voyage in 1524 about a magnificent city named Norumbega on a great river south of Cape Breton. Alfonse wrote that he found Norumbega; but where was he when he found it? Historians don't believe there were any 16th century European settlements in the Albany area, and John Cabot and Verrazzano didn't get that far up the Hudson, anyway. There were no French settlements in the area until after 1609, they say, when Champlain arrived on the lake that bears his name and Hudson, on his river. Richard knew the negatives; nevertheless, the barn expert who left school in eighth grade for a job erecting utility poles did a scholarly turn. He determined to check Niles' sources. He traveled across the state to the Harvard

University Libraries, where he sat down in front of Alfonse's *Cosmographie* (1545). He asked a librarian to copy every page where he found the word Norumbega. He found someone to translate them.

Jacques Cartier, searching for the Northwest Passage in 1535, sailed up the St. Lawrence to Quebec and Montreal. In 1541, he built a fort above Quebec, but his lieutenant, Sieur de Roberval, with three ships and 200 settlers, was delayed crossing the Atlantic, so what might have been the first European (as opposed to Viking) settlement of North America, failed. One of Roberval's pilots, Alfonse, wrote that after sailing southward to a great bay at latitude 42 degrees (roughly New England), he proceeded to Norumbega. The idea of Norumbega caught hold. Andre Theyet contributed in his account of his 1556 voyage—which Babcock also read about at Harvard. Generally adventurers, like Champlain, and the poet John Greenleaf Whittier, believed Norumbega, if not a misplaced myth about Mexican gold, was up the Penobscott River, in Maine.

Babcock found support for his view on Mercator's 1569 map, which shows a left branch from what might be the Hudson that could be the Mohawk, and a right branch that could be the Hoosic,



Mercator's 1569 map, sheet 9. Credit: Wiki Commons

with the word "Bega." And he found the account of David Ingram's extraordinary (and unlikely) 1569 hike from the Gulf of Mexico to find a Christian captain to take him home. Ingram said he found Bega—Babcock thought near the Hudson—on his way to Montreal, where a French captain offered him a lift. Ingram describes a great diamond rock near the head of navigable waters. Richard located at least a facsimile on the east bank of the Hudson below Albany—not a diamond, but shiny enough—now camouflaged by residential development.

All this is secondary to what Babcock did, that is, learn the facts of barns through

his hands, track down their history as best he could, save many old barns, and add considerably to the knowledge of timber framing. Unfortunately he stored the timbers from the "French" barn in the Saratoga barn, which burned down the evening of July 5, 1994. As he ran for help, Babcock felt pain shooting through his body. The firemen called an ambulance and he was taken to the coronary care unit at Berkshire Medical Center. It is probable that the fire was an accident, the slow result of fireworks set off the night before. He struggled with the realization that he was no longer young and that for all his epic barn adventures, what little he had in financial resources had gone up in smoke. His mind slipped and he died

in a Williamstown nursing home in 2014. In fire, poverty, and loss of bearings, Babcock followed the path of his trusted source, Grace Greylock Niles.

DRUMS ALONG THE HOOSIC

spelled The Mahicans. often Mohicans, have been confused with the Mohegans, an eastern Connecticut tribe (as in Mohegan Suns Casino in Uncasville). James Fenimore Cooper named Uncas, "the last of the Mohicans," after the Mohegan prince. For clarity, then, let's spell it with an "a." And let's call them Indians, even though it is Columbus' misnomer. Mahicans spoke the Algonquian language, with other Algonquin or Algonkin tribes, such as a group Niles separates out, the Hoosacs. (She wrote that their totem was the owl—hoo, hoo.) The Mohawks, perhaps originally a derogatory term ("flesheater"), were Iroquois speakers. Their homeland was the Mohawk River Valley, heading west from the Hudson, south of where the Hoosic enters. The Hoosac Valley was Mahican territory.

The Mahican formed a confederacy of five tribes with as many as 40 villages, governed by hereditary sachems through matrilineal descent, advised by a council of clan leaders. They had three clans: bear, wolf, and turtle. A general

council of sachems met regularly at their capital of Shodac (Schodack) on the Hudson to decide matters affecting the entire confederacy. For warfare they tightened the organization, passing authority to a war chief who exercised almost dictatorial power.

Their villages consisted of 20 to mid-sized, fortified longhouses, located on hills. Unlike other Algonquin, the Mahicans didn't always move to scattered hunting camps during the winter, finding it safer to stay in their "castles." Large cornfields were located nearby. Most of the Mahican diet was corn and other agricultural produce, supplemented by game, fish, and other wild foods. They used copper, acquired from the Great Lakes through trade, extensively for ornaments and some of their arrowheads. Once they began trade with the Dutch, they abandoned many of their traditional weapons, becoming experts with their new firearms.

Many archeological sites in the Hoosic watershed have been uncovered, dating to Colonial times and earlier. The segment between North Pownal and Hoosick Falls contains 10 known prehistoric sites. Forty-three others have been found before the Hoosic mingles with the Hudson. The site at Schaghticoke is over 8,000 years old. River Bend Farm in Williamstown is said to

have been an Indian camping place where hunters and travelers enjoyed nearby 73-degree F. spring waters. Archeology is indebted to 19th century Pownal resident Alonzo Whipple and his 20th century successor Gordon Sweeney who, during his lifetime, uncovered some 400-500 points, pieces of pottery, and stone tools, mostly above the river in Pownal. He hunted best on freshly plowed fields just after rain, when the object stood out above the beaten ground.

The Bennington area contains prehistory archeological important information revealed by two digs prior to the creation of the Bennington Bypass, Vermont 279, which opened in 2004. The Silk Road site, the setting for a 19th century textile mill, was located on two river terraces adjacent to the Walloomsac. The many artifacts documented how the Walloomsac was used by prehistoric Indians for annual seasonal encampments sporadically for 7,000 years between 5,000 B.C. and 1,500 A.D. The nearby Cloverleaf Site, a large archeological location, preserved the remains of a prehistoric village dating almost exclusively to a brief span during the Late Archaic Period, called the River Phase (ca. 1,000-1,800 B.C.).

As with much of human history, what we know best is often defined by battles.

Although culturally similar to other woodland Algonquin, the Mahican were shaped—or at least our knowledge is—by their constant warfare with neighboring Iroquois. The source of the enmity is unknown. The story of the Mahicans through the 17th and 18th centuries is of their 200-year fall from dominance to subservience to dispersal. This fall was due to a combination of circumstances including Mohawk rivalry and manipulation—sometimes unwittingby European powers and settlers. This story is more archeological and less mythological than Niles'—and covers the Colonial history of the area.

The Iroquois had organized into the Iroquois League, an alliance of five tribes (Mohawk, Oneida, Onondaga, Cayuga, Seneca; later the Tuscarora became the sixth) thought to prefigure the confederacy of colonies, and were regarded as formidable. After 50 years of warfare they had driven an unknown Algonquian-speaking enemy whom they called the Adirondack (bark-eaters) from the mountains in northern New York and were in the process of reclaiming the St. Lawrence Valley from the Algonkin. Thus the St. Lawrence River west of Quebec was a war zone blocking the expansion of the French fur trade. Mohawk war parties made the Algonkin and their Huron allies reluctant to bring their furs to Quebec so, to win their loyalty, the French decided to help them. In July of 1609, Samuel de Champlain and six other French accompanied a combined Algonkin, Montagnais, and Huron war party south. At the north end of the lake given his name they encountered a large force of Mohawk warriors massing for battle. French firearms broke the Mohawk formation, killing several of their chiefs. The Mohawks broke and ran.

The Iroquois were saved from technological annihilation by the beginning of trade with the Dutch on the Hudson. Trade goods soon included arms for pelts. In order for the Mohawk to trade with the Dutch, however, they first had to cross Mahican territory—which the latter were reluctant to allow. So the stakes were set.

Henry Hudson, Englishman an employed by the Dutch East India Company to search for that elusive Northwest Passage, sailed through Verrazzano Strait and entered the Hudson River in September, two months after Champlain's visit. The Wappinger Indians on the lower river were hostile, due to earlier encounters with European fishermen and slave traders, but Hudson continued upstream until stopped by shallow water near the Mahican villages below what was to become Albany. The Mahicans were friendly and eager to trade. Hudson exhausted his trade goods and returned to Holland with a cargo of valuable furs, which attracted Dutch fur traders in the following years. So European fashion for fur hats drove Europeans into the wilderness, to encounters detrimental to the Indians—and to the settlement of the New World.

As the Dutch established a trading post near Albany, they attempted to broker a peace between the Mahicans and Mohawks. The first agreement involved access to Fort Orange in return for tolls to the Mahicans. The Dutch tended to favor the Mahicans because they had closer contact with them, including marriage. As local supplies of fur were being exhausted, the Dutch asked the Mahicans to arrange trade with the Algonkin and Montagnais of the St. Lawrence. To the Mohawks, already unhappy about the tolls, trading with their enemies was too much, and led to another outbreak of Indian war in 1624. A Dutch commander and six of his soldiers joined a doomed Mahican war party. The Mohawks celebrated their victory by eating one of the dead. Gov. Pieter Minuit ordered the Dutch to remain neutral and evacuated the families near Fort Orange to Manhattan Island, inadvertently freeing the Mohawks

to conquer their enemies. By 1628 the Mahican had abandoned their villages on the west side of the Hudson.

The flexible Dutch accepted the Mohawks as their new primary trading partner, brokering a peace that required the Mahicans to pay an annual tribute of wampum to the Iroquois. The Mohawk used the wampum to purchase what they needed at Fort Orange. After 1629, when a British fleet captured Quebec, French goods and weapons were no longer available to the Algonkin and Montagnais. The Iroquois seized that opportunity to attack, so that when the French retook Canada in 1632, the Mohawk had nearly cut the trade corridor that included the Ottawa River valley and the Great Lakes. The French began to arm their allies and the Dutch did the same, resulting in 70 years of intertribal warfare known as the Beaver Wars (1629-1701).

The Dutch system of settlement involved wealthy investors (patroons) willing to transport 50 adult settlers to New Amsterdam. The patroon owned the land, while the settlers were tenants or sharecroppers; as opposed to settlement in New England, where farmers owned their own land. Of the five patroonships established, however, only Kiliaen Van Rensselaer's was successful. He sent Sebastian Jansen Krol to Fort Orange

in 1630 to negotiate with the Mahicans. They were willing to part with the land they had already abandoned. Rensselaerwyck made additional purchases over the years, including the east side of the Hudson, until it controlled nearly one million acres.

While Indians battled along the St. Lawrence, the Mahican and Mohawks, although heavily armed, entered a period of peace. In 1624 smallpox started in New England and swept through the Hudson Valley, devastating native populations that had no immunity. Measles, influenza, typhus, and a host of other diseases took a similar toll. The two ancient enemies, needing additional hunting territory but with reduced manpower, found themselves cooperating. The Mohawk pressured the Munsee Delaware west of the Hudson, while the Mahicans went after the Wappinger on the east. By the summer of 1645, more than 2,600 had been killed. The treaty signed at Fort Orange that August made the Wappinger subject to the Mahican and required a tribe on the western end of Long Island to pay an annual tribute in wampum (shells), which the Mahicans duly passed on to the Mohawks, as required. Local peace ended as the French tried to organize Algonkin forces opposed to Iroquois. In 1650 the Mahicans joined in for several years until the Dutch once



Remains of the Witenagemot Oak Credit: L.Stevens

again forced them into a separate peace with the Mohawk. Which did not hold. The fighting continued until 1762, but after 1664 the Mahican were forced to abandon most of their holdings in the Hudson valley. They moved their ancient capital from Shodac to Wnahkutook (Stockbridge) on the Housatonic River in western Massachusetts.

In September 1664, the British fleet captured New Netherlands. Fort Orange surrendered on the 10th. Now it was the British turn to urge peace on the Indians, with whom they signed treaties of trade and friendship on September 24. Although the Dutch returned briefly in 1673, their

governmental control was over. Their citizens remained, however, Dutch traders continuing to deal with the Indians and Dutch burgers maintaining residences in the along the area Hoosic River known as Dutch Hoosac. The English looked the other way, just

as the Dutch had, when four members of the Iroquois Confederacy drove Algonquian allies of the Mahicans out of western New England. The Mohawks followed the old Indian trail along the Hoosic to decimate the Pocumtucs in what is now Deerfield, opening the way for Anglo settlement in the area. (And inspiring what is really a misnomer, calling the automobile road that parallels the path, Route 2 in Massachusetts, the "Mohawk" Trail.) New York Gov. Francis Lovelace traveled to Albany on another peace mission, but the peace the Mahicans made with the Iroquois in 1672 was a total surrender. The Iroquois came to handle all Mahican negotiations with Europeans. The Mahicans, in fact,

became the first members of the Iroquois "Covenant Chain," meaning that Mahican warriors were recruited for Iroquois raids.

Philip was the anglicized name for Metacomet, who led the Wampanoag tribe in fighting back against the invasion of Europeans in New England. After King Philip's War (1675-76), Gov. Edmund Andros of New York invited Indians to a sanctuary, the Mahican village at Schaghticoke. Perhaps he reasoned that they would stave off attacks from Canada on Albany. To the displeasure of New Englanders, 250 refugees from Philip's War came and, after speeches and gifts on all sides, planted the Witenagemot Oak, the English word referring to a council of the wise. By 1700 the number of refugees at Schaghticoke had grown to more than 1,000—enough so that they agitated for a second tree to shelter them all. The peace did not last; the tree (or its immediate successor) did. After being propped up with cement and rebar, a 1948 hurricane finally felled it. Its remains rest in peace behind the Knickerbocker Mansion.

Having sold most of their lands in what was to be New York, the Mahicans found themselves under pressure in what was to be New England for, with the close of King Philip's War, settlers streamed up the Housatonic Valley. Small pox reduced Mahicans to fewer than 800. During King

William's War (1689-96) between Britain and France, French attacks dispersed the Mohawks. Faced with a possible invasion from Canada, New York recruited Mahican, Wappinger, and Munsee warriors to join Mohawk fighters—all lost many casualties. With the approach of



St. Croix Church, White Creek Credit: L.Stevens

Queen Anne's War in 1703, Gov. Edward Cornbury authorized construction of Fort Schaghticoke, which became the headquarters for Mahican and Mohawk scouts who were crucial to the defense system that protected the outermost regions of his colony. In 1709, Johannes Knickerbocker became commander of the Fort, obtained the first farmland along the Hoosic, and initiated Schaghticoke's European settlement.

Dutch or perhaps Walloons founded the Fort St. Croix colony in 1724, at the junction of Little White Creek and the Walloomsac River. Walloons were French-speaking Belgians often lumped together with the Dutch. They probably gave their name to the Hoosic tributary. Perhaps they built the unusual barn Babcock dismantled. Other settlers pushed up from the Hoosic onto the Rensselaer Plateau. Philip Van Ness founded the Tiashoke Colony on the north bank of the Hoosic, below its junction with the Owl Kill.

Mahicans, as their numbers continued to dwindle, began to scatter. Konkapot, their chief sachem, sold a large section along the Housatonic in 1724 for 460 pounds, three barrels of cider, and three quarts of rum, leaving only one holding south of Stockbridge. Game became increasingly scarce and alcohol a serious problem. Keepedo (later known as the "Mohican Abraham") abandoned his lands and left with his people in 1730 to settle among in the Wyoming Valley in northern Pennsylvania. The departure left only 400 at Wnahkutook, most converted to Christianity by missionary work, notably by John Sergeant, who built his mission in Stockbridge in 1735. Mahicans, Munsee, Wappinger, and several New England tribes soon joined his congregation. predominantly Although Mahican, as tribal lines blurred the community became known as the Stockbridge

Indians. Most of them came to live in frame houses, attend church, send their children to British schools, and resemble their white neighbors in other ways. This was, however, insufficient to protect them from the colonists, who continued to encroach on their lands. So the New York-New England Indians sorted into two groups, to the north the Schaghticokes and, south, the Stockbridge.

Mahicans from Stockbridge garrisoned Fort Dummer (New Hampshire Grants) to protect western New England during Greylock's War (1724-27) and later served as British scouts during King George's War (1744-48). Turning the other cheek, as required by their new faith, the Stockbridge chose not to retaliate to an unprovoked murder of a Mahican by two white men, even when the court's punishment was exceptionally lenient. At the outbreak of the French and Indian War in 1755, a war party from St. Francis retrieved some of its people from Schaghticoke—and some of them returned to kill five colonists. near Stockbridge, increasing distrust by Anglos. Yet 45 Stockbridge warriors joined Major Robert Rogers's Rangers against the French in 1756. Because of them. Abenaki and Schaghticoke raiders avoided English settlements along the Housatonic. A constant, despite their service, was that the Stockbridge found themselves

increasingly unwelcome in New England.

The Hoosic River provided a significant Indian trail, both for canoes and as a footpath, as the Mohawks had found. It generally followed the north and east sides of the river, although a trail said to have been used by scouting parties followed on the west side through Pownal to North Petersburgh. Together with a similar route along the Deerfield River it joined the Connecticut and Hudson valleys; and

invading and as a warning to Yorkers not to encroach from the west. At the same time, entrepreneurs widened the trail to Schaghticoke for carting supplies to the fort. In 1746, 900 French and Canadian Indians captured the fort, flew the French flag above it briefly, and then burned it, taking its defenders, women, and children over the trail. On the way, Captivity Smead was born in Pownal. Neither she nor her mother survived captivity

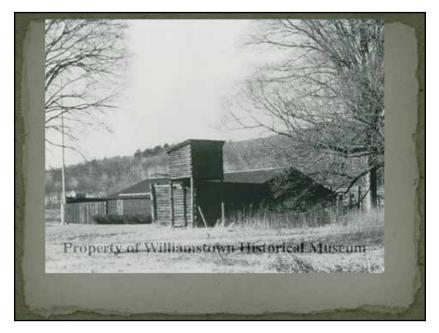


Photo of the 1930s reproduction of Fort Massachusetts. Credit: Williamstown Historical Museum

in Quebec. The fort was rebuilt and successfully defended in August 1748. With the Peace of Aix-La-Chappele in October, the garrison dwindled.

In 1753, the year of the first settlement of

West Hoosac (Willamstown), Elisha Hawley followed the trail to create a rough route over the Hoosacs to Charlemont. Two years later Indians descended on Dutch Hoosac, burning and scalping, including the Brimmer family on what is still called

the route up the Hoosic tributary Owl Kill was a major pathway to and from Canada, known as the Great Northern Warpath. The English built Fort Massachusetts on the trail, in what's now North Adams, in 1745, to prevent the French from

Indian Massacre Road, and the next day hit a settlement on the Walloomsac. The French and Indian War had begunor begun again, as both communities had been destroyed in the raid on Fort Massachusetts. In June of 1756, 13 soldiers from the fort were ambushed and in July a subsidiary, Fort West Hoosac, was attacked. Ephraim Williams, Jr., for whom the town was named and commander of a string of forts along what Massachusetts considered its northern border, volunteered to fight the French at Lake George in 1755, and was killed that September, although the British for whom he was fighting won the engagement. Of more lasting importance concerning the Anglos' feelings for the Indians was the Marquis de Montcalm's siege of the undermanned British Fort William Henry, on Lake George. The day after signing an honorable peace, on August 10, 1757, Indians from 33 different tribes, mostly from Canada, attached to Montcalm's troops, attacked the retreating British column, massacring soldiers, women, and children—and providing a setting for Cooper's Last of the Mohicans. The Peace of Paris, signed in 1763, largely ended France's claims to North America, except perhaps in the city of Quebec.

Although Konkapot at first refused to leave Stockbridge, many others sold their

lands in 1756 and, accepting the invitation from the Oneida, moved to upstate New York. After the fall of Quebec in September 1759, emboldened British settlers poured into western Massachusetts. Even Konkapot was forced to sell land to pay off debts to white traders. By the start of the American Revolution in 1775, the Stockbridge holdings had been reduced to fewer than 1,200 acres. Other than land provided by the Oneida, that was all the Mahican had after years of service to the Dutch and British.

As the Revolutionary War approached, Mahican and Wappinger sent wampum belts to the other tribes advising neutrality. After a meeting with the patriots in Boston in April 1774, however, Stockbridge Captain Hendrick Aupamut changed his mind and decided to throw in with the rebels. The Wappingers joined, too. The Stockbridge were one of the few tribes to support the American cause. They participated in the siege of Boston and fought at Bunker Hill that June, saw service at White Plains in 1776, fought as a company-sized unit at the Battle of Bennington in 1777, served as scouts for the army of Horatio Gates at Saratoga, and were at Barren Hill in 1778. Whatever the gratitude of their white neighbors, it did not last after the war and did not include citizenship. With most of their

lands gone, the Stockbridge left western Massachusetts for New York, the last group in 1786. Occasionally Mahicans visit this area, as did Stockbridge-Munsee from Wisconsin in 1975. In 1990 The Trustees of Reservations, which owns the Mission House in Stockbridge, returned a Bible given to the Indians in 1745. A few Mahican descendents live in the Hoosic Valley.

WHOSE LAND?

One family takes us through the era of European settlement in the Hoosac Valley to the Revolution, and beyond. Knickerbocker might mean "brick baker" or "marble baker," depending on the source. Harmon Jansen Knickerbocker migrated from Holland to New York about 1674 and made his way up the Hudson to Albany. His father was Johannes Van Knickerbocker of Friesland. Bergen Holland, and his mother was related to the Van Rensselaers' Norwegian factotum, Roelof Jansen. Harmon married Elizabeth Van de Bogart in 1678. They moved to Albany by 1680 and then back down river.

The Albany Corporation, standing in for a patroon, had purchased land from the Mahicans in Schaghticoke in the early 17th century, leasing it to settlers. Harmon leased a tract of land west of the Tomhannock Creek and south of the Hoosic, which Queen Ann confirmed in 1707. He was one of the eight original lessees of Albany city land at Schaghticoke and he also owned milling rights for lumber. He added considerably to his land. In Albany's 1720 census, he was listed as a freeholder, having property worth at least 40 pounds.

Their son Johannes was born in 1679. He married Anna Quackenbush in 1701, putting up a cabin on the family property. He and Anna had three sons, of whom Johannes (no surprise there), born in 1723, followed his father in acquiring land and serving his community.

In 1750 Johannes married Rebecca Fonda at the Dutch Reformed Church in Albany. He served with the British expedition against Fort Carillon (the French name for what the British christened Fort Ticonderoga) in the French and Indian War. He was a Justice of the Peace in Albany County and, although many of the Dutch were Tories, in the run up to the Revolution he headed the local Committee of Safety. He was the first Colonel of the 14th Albany militia. He was wounded at Saratoga. He served the state legislature from the newly formed Rensselaer County from 1792-96. He died in 1802.

The Colonel and Rebecca's son, Johannes, referred to as John Jr. (1751-



Knickerbocker Mansion, open to the public. Credit: L.Stevens

1827), continued the family traditions. In 1769, at 18 years, he petitioned the Albany Corporation, asking that he be granted all the remaining un-leased corporation land between his father's and the Hudson River. That was allowed in exchange for an annual feast at his home for the Albany Mayor and Common Council. He married Elizabeth Winne in the same year.

By the 1780s, when he owned far more land than his father, he built the existing Knickerbocker Mansion on the site of his grandfather's cabin. The mansion, just off Route 67, is now open to the public. The 1790 census shows Johns Junior and Senior each owning nine slaves. In the days before mechanized farm equipment, the Dutch could not have maintained their large farms without slaves. (Babcock believed they could not have erected their huge barns without slaves, either.) In 1799 John Jr. invested in a bridge

over the Hoosic to facilitate agriculture and the developing industry based on waterpower in the Schaghticoke gorge.

After serving as a private in the 14th Albany during the Revolution, in 1791 he became a major in Henry Van Rensselaer's Brigade, rising to colonel by the War of 1812. He was Poor Master and Commissioner of Highways for Schaghticoke. He was Assistant Justice of the Peace and served after his father in the State Assembly, from 1796-1802. John Jr. and Elizabeth's son, Harmon, frequently invited young Washington Irving to the mansion by the Hoosic. The stories the boys heard about the family in the days of wars and Indians, and the games they played, led to Irving's short stories such as "Rip Van Winkle" and "The Legend of Sleepy Hollow." Niles believed that some of the ideas came from tales told the boys by a Knickerbocker slave. Irving's pseudonymous Dietrich

Knickerbocker's Knickerbocher's History of New York (1809) is about New York City in "golden" Dutch days, downriver, but mentions Peter Stuyvesant's run-ins with Kiliaen Van Rensselaer and, of course, the Knickerbockers of Schaghticoke. Irving made his beloved home, Sunnyside, now open to the public, in Tarrytown—scene of Richard Babcock's most colorful barn raising.

When France and England squared off against each other in what the colonists called the French and Indian Wars, from 1740 to 1763, Britain controlled what the colonists could manufacture, how they shipped their goods, and what they could buy from abroad. While New Yorkers, including the Dutch, and New Englanders didn't like the duties and obligations, good Protestants all they nevertheless sided with England in its attempt to claim the continent from Catholic France. In 1756 France and England declared war. England captured Fort Duquesne and the French fortress of Louisbourg, Nova Scotia, in 1758, and, under Gen. James Wolfe, captured Quebec in 1759. Thus in four quick years Britain wrested control of North America from France; the question became, could Britain retain control over its colonies?

South of what was to become Canada, inter-colony bickering at first

overshadowed international issues, especially over the New Hampshire Grants: Land west of the Connecticut River now known as Vermont. Although there had been some talk of a 20-mile boundary that would split the distance between the Hudson and the Connecticut rivers, the New York side, mostly populated by Dutch descendents like the Knickerbockers. wanted to push east, while western New England did not wish encroachment, just as in the days when Fort Massachusetts was built. In 1769, the grants sparsely occupied mostly by land speculators from Connecticut with deeds (or "grants") from Gov. Benning Wentworth of New Hampshire, Gov. Cadwallader Colden of New York sent surveyors into Bennington in order to deed some of the same parcels; or make the grants' owners pay twice for the same parcel. New Englanders attempted to stop the survey and several times, unsuccessfully, to get King George III and his counselors to take their side. The Wentworth grantees were hauled into court in Albany-where, not too surprisingly, they lost their cases.

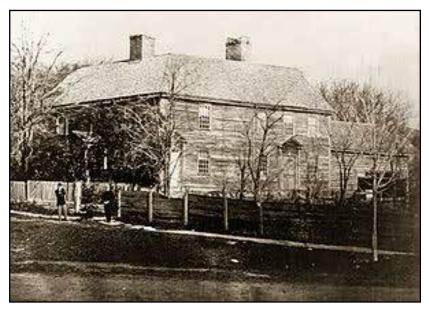
So they asked fellow landowner, Connecticut resident Ethan Allen, to stand up for them. His feisty response to them: "The gods of the valleys are not the gods of the hills." Loosely translated, he meant that those who exercised power in the Hudson Valley would be rudely treated in the Green Mountains. Tensions grew when Sherriff Ten Eyck, a Dutch descendent from Albany, was prevented from arresting Bennington residents, almost resulting in a militia battle in July 1770. Towns in the grants formed committees of safety and young men formed quasi-military

groups under Allen, who appointed himself colonel. As some found Allen a bit over the top, however, they formed under Seth Warner's leadership instead.

Both groups began harassing New York agents. They carried out a series of mischief raids on Yorker farms along the "border." Newly installed Gov. William Tryon of New

York professed disgust with these activities and thought the way to solve the problem was to take the land from the ruffians and to divide it among "men of weight and consideration," that is, Dutch Yorkers—many of whom continued to suffer the most indignities, however.

In response to a perceived New York threat of force, the Hampshire Grants militia organized under the heading of the Green Mountain Boys, in honor of their uneven landscape. They portrayed the conflict as between the hard-working yeoman farmers of the Grants and the rich landowners of the Hudson Valley—forgetting for the moment that Allen and his friends were themselves non-residents. While calmer citizens sought a peaceful solution, Allen honed



Former Catamount Tavern Credit: Wiki Commons

his rhetoric—and his land investments in the Onion (Winooski) River Company. In March of 1774, Gov. Tryon issued a warrant for the arrest of Allen, Warner, and other leaders, including a 100-pound bounty for Allen and Remember Baker. In response, Allen conducted mock trials and sentenced Yorkers who came within his reach to undignified punishment. One was bound and hoisted high in a chair to sit for hours before the Catamount Tavern, the favorite Green Mountain Boys' meeting place in Bennington.

The only way to avoid an eventual shooting war, it appeared, was to have a common enemy arise. The British obliged. So, early in 1775, 25 Vermont towns, meeting in Manchester, formed a compact to protect the land grants and to maintain good relations with New York in the face of joint concerns over the actions of the British government toward the colonies. Therefore the first shots were fired not across Lake Champlain, but on April 19 on the fields of Lexington and Concord. Even the Minute Men, until then, had assumed accommodations could be worked out. And the more conservative found it harder to maintain that all evil arose from George III being misinformed.

In the Grants, Allen and his ilk still hoped the King would favor their grants, so were reluctant to force their complaints against him and, of course, loathe to cooperate with New York. Nevertheless Allen and the other leaders agreed, after April 19, to join with the Albany Committee of Correspondence. Conveniently the militias were already organized and the Green Mountain Boys

found the rhetoric they had employed against Yorkers applicable to the British: Yeoman farmers against wealthy absentee powers. The Green Mountain Boys, like the Minute Men, caught the spark of Revolution.

As independence became a theme, Fort Ticonderoga became a likely early target. Held by the British, it was a steppingstone for an attack from Canada. Colonists who dropped by the fort noted that the British held it rather casually. Benedict Arnold received a commission from the Bay Colony to take the fort and hustled westward along the old Indian trail via the Deerfield, Hoosic, and Owl Kill rivers.

Coincidentally, volunteers from Connecticut and Massachusetts met up with Ethan Allen's Green Mountain Boys at Hand's Cove on the east side of Lake Champlain on the early morning of May 10, 1775. They hoped to cross to the fort before sunrise. At the last minute two scows were found to ferry 80 men—and two leaders, Allen and Arnold, who had reluctantly agreed to share command. They approached the fort three abreast and conquered the sleeping garrison with only one, ineffective, shot fired.

But two years later the rebels had to retreat from Ticonderoga, fight a delaying action at Hubberton, Vermont, and disperse to gather again in the Bennington area. The American cause was at its lowest point with the news, on July 17, 1777, that 500 or more Indians from north of the Great Lakes had arrived to join the British side at Skenesborough (now Whitehall), New York. As well as members of the Iroquois League of Six Nations, which had previously maintained neutrality, came Ottawa, Fox, and Ojibwa, recruited by St. Luc de la Corne, a Frenchman who had previously led the same Indians against the British. In fact, some were the same who had massacred British soldiers and colonists after their surrender at Fort William Henry. St. Luc had lured them with promises of scalps, prisoners, and loot. Many were young men, looking to establish their reputations. When British Gen. John Burgoyne publicized his threat to "give stretch to the Indians," the inhabitants of the Champlain Valley and surrounding area fled. Burgoyne tried to set limits in ceremonial meetings with the tribes, such as scalping only those killed in battle, but not prisoners, old men, women, and children.

Jane McCrea, the daughter of a Presbyterian minster, in her early twenties, was engaged to David Jones, a loyalist who went to Canada to join the American Volunteer Corps, i.e., Tories. The blooming Jane, with reddish hair said to have been so long it nearly reached the ground, was staying near Fort Edward with a Mrs. McNeil, a cousin of British officer Simon Fraser. Hearing the Indians were in the area, the two women were in the act of descending through a trap door to seek safety in the cellar of a cabin when a war party burst in. The women were separated. Indians with Jane began to quarrel over whose captive she was. One shot and scalped her, stripped off her clothes, and mutilated her body. When he paraded through Burgoyne's camp with her scalp, David Jones recognized the long locks of his beloved. Widow McNeil was later brought in alive. Burgoyne at first demanded Indians execute McCrea's murderer; however, British officers and St. Luc dissuaded him, arguing that the Indians would leave, possibly going on a rampage in Canada on their way.

The news spread that the British could not control the Indians, even from attacking the British side. The western Indians continued to pick off colonists, including one who had the soles of his feet sliced off, perhaps before he died, and another who was drawn and quartered. Scores of men were scalped. Burgoyne realized the Indians were a mistake, trying once again in a formal meeting to set

boundaries. The Indians appeared to agree, but the next day began leaving, loaded with loot.

Meanwhile American Gen. Philip Schuyler continued to retreat, first from Fort George and now to Saratoga. The Indians' departure was a break for the Americans and their presence turned out to have been, also. Enlistments were up. Either fight united or be picked off. Jane McCrea's locks turned out to be a potent recruiting tool. So the Germans fighting for the British ran into more on their way to Bennington than they anticipated.

About August 1, 1777, Burgoyne's army, heading south from Ticonderoga, reached the Hudson and took possession of Fort Edward. Progress was slow because retreating Americans had felled trees and destroyed bridges. While assuming his troubles were nearly over, Burgoyne had one vexing problem, securing provisions. With 15 days of hard labor he was only able to bring 10 bateaux and four days' worth of supplies from Lake George. In fact his supply line stretched to Quebec, even to England. Burgoyne learned that the colonists had collected a large quantity of military stores, cattle, and horses at Bennington, where the Bennington Battle Monument now stands. He let himself be persuaded by Tory Major Philip Skene, against the advice of senior officers, to send Col. Friedrich Baum, 500 Brunswickers, Canadians, and Tories to "try the affections of the country, to mount Riedesel's dragoons, to complete Peter's corps [of Loyalists,] and to obtain a large supply of cattle, horses, and carriages."

The detachment left Fort Edward on the Great Northern Warpath on August 13; and that evening surprised and captured five Americans in Cambridge. The next day they continued down the Owl Kill to a mill in Hoosick, 12 miles from Bennington. Gen. John Stark, learning of their approach, sent an order to Col. Warner, at Manchester, to march with his regiment of Green Mountain Boys and he rallied the neighboring militia, many of whom arrived along the old Indian trail along the Hoosic. He sent out an advance quard of 200 men, under Lieutenant-Colonel William Gregg on the 13th to encounter the enemy and then marched his whole force along the Walloomsac on the 14th, to meet the latter in retreat, about five miles from Bennington. The enemy was about a mile back, chasing Gregg. Both armies chose strong positions and threw up temporary entrenchments. Baum, alarmed at the number of Americans, sent for reinforcements.

Weapons of the day didn't work well when wet so, the next day being



Bennington Battlefield. Credit: L.Stevens

rainy, was spent preparing, with some sniping. Col. Warner's regiment arrived in Bennington in the evening, stopping to dry their powder and rest after their long march. Warner himself continued to the Walloomsac. Stark, concerned about the enemy receiving reinforcements, determined to attack the next day. Previous to the signal to attack, he told the troops: "See there, men! There are the redcoats. Before night they are ours, or Molly Stark will be a widow."

At the battlefield today it is easy to envisage Stark's approach to the hill from

three directions and, if we cross Route 67 to Caretaker Road, see where the Tory contingent was wiped out. After two-and-one-half hours of hard fighting, the Brunswickers on the hill gave way in a disorderly retreat.

That morning, August 16, 500 British reinforcements under Col. Heinrich Breymann left Cambridge early after a miserable night in the rain. They moved slowly, halting regularly to dress ranks. After all, Baum's last message to Burgoyne had sounded confident. The horses pulling the guns were weak and slow. At 4:30 p.m. the advance guard

arrived at St. Croix Mill, where they meet Philip Skene. Not a rebel in sight. They didn't hear firing. A captain and some Indians showed up to report that all was well. Skene and Breymann rode forward to a group of men they mistook for loyalists, lounging at the end of a rail fence. The men suddenly fired a volley, killing Breymann's horse from under him.

By this time Stark's men were tired, drunk (they brought their own in their canteens), or busy collecting German loot. So, as had happened at Hubberton, a British relief party could have swung the battle. Still, Stark was able to round up enough militia to form a skirmish line, which fired back at Breymann, all the while retreating.

The Green Mountain Boys, under Major Samuel Stafford, left Bennington about noon. They arrived in Stark's camp just in time to see, in the distance, Baum's troops running for it. When they came to the bridge over the Walloomsac, where Baum had taken his stand, the fighting seemed to be over—except that Warner rode up to inform them they were needed immediately to help the militia. Stark rallied his broken forces behind fresh troops, and soon the battle again became general. At sunset the rest of the enemy side fled toward the Hoosic, pursued by the Americans until dark.

About 30 Americans were killed and 40 wounded. The British loss in killed, wounded, and prisoners, was 934. While a small battle, it deprived the British force of the supplies they needed, as well as the troops, and provided the colonials with their first victory in the Northern Campaign, thereby contributing more than any other previous event to Burgoyne's surrender at Saratoga—where Col. Knickerbocker was wounded.

The rest of the Revolutionary War was fought to the south, but a prerevolutionary piece of business remained. Where was the New York-New England border? This dispute had percolated up through Connecticut and Massachusetts and now focused on the New Hampshire Grants. In December 1781, allies turned against each other. Grants militia from the Schaghticoke area mutinied, taking their Yorker officers captive. New York troops rushed to "quell the insurrection." The rescue party met the dissidents at Fort St. Croix. Outnumbered, they backed down and the would-be Vermonters decided to go to the new Congress for a legal settlement. In 1790 Congress chose the 20-mile line, approximately half way between the Hudson and Connecticut rivers, along the Taconics, for the boundary. Most of what is still referred to as Dutch Hoosac—Petersburgh and

Hoosick—fell in New York State, land claims were adjusted and, incidentally, one of the provisions of Ephraim Williams' will, that the township west of Fort Massachusetts be in the Bay Colony, was fulfilled, enabling the founding of a free elementary school in what became Williamstown. What no one noticed was that in 1741, when Richard Hazen surveyed the north boundary of the Bay Colony at the order of the Privy Council in London, he mimicked the course of the



West College. Credit: L.Stevens

Merrimack River three miles to its north, as directed. He then set out "due west" from what is now Lowell. The problem was, his compass was slightly off, so that about one-third of what was to become Williamstown, including Williams College, should have been in what was to become Vermont. No matter.

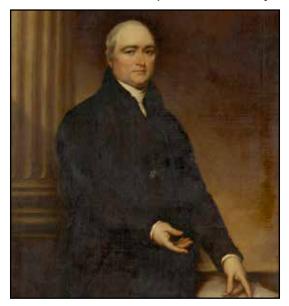
WHEATIES

Williams opened in 1792, according to the terms of Ephraim Williams' will as a free secondary school, with 15 students. The trustees immediately petitioned Massachusetts to convert the school into a tuition-based college. It became the second college in the commonwealth after Harvard when it opened the next year, in the same building, which came to be called West College. Most of its early students were area farmers' sons who

wanted to become ministers—although, unlike most New England colleges, Williams was never church-related.

Timothy Dwight, IV, president of Yale College, used his vacations to travel in New York and New England, writing of his observations under the guise of letters to an imaginary Englishman. The letters, intended to correct misinformation about this country, were published

posthumously. President Dwight followed the Hoosic River from Hoosick (Falls) to Williamstown on horseback in October 1799. He described autumn-tinged mountain ridges through which flowed "one of the handsomest streams in the world, over a fine bed of pebbles and gravel." He attested to its flashiness: "Its course is between high mountains and



John Trumbull's portrait of Timothy Dwight, IV. Credit: Wiki Media

its current rapid. Hence it rises and falls greatly within very short periods." He depicted landmarks still recognizable, including a mill and dam in North Pownal. The successor mill went from textiles to tannery, became a Superfund site and now produces hydropower.

Once in Williamstown, Dwight looked up fellow Yale graduate, Williams' first president, Ebenezer Fitch. The two of them then rode up Notch Road in the north part of Adams to inquire of the owner of land on Mt. Greylock if they could continue to the summit of the mountain—100 years before Grace Niles added it as her middle name. Jeremiah Wilbur "willingly

accompanied us. Our ascent was a spiral circuit of three miles, and employed us diligently two hours," wrote Dwight.

Wilbur, born in Rhode Island in 1753, arrived on the side of Greylock at age 14, with his older brother. Their father had died and their mother remarried. Some Rhode Island Quakers sailed through Long Island Sound and up the Hudson, eventually settling in Adams. It is possible that the Wilburs were among them. A 1767 Adams property map shows John and Jeremiah Wilbur owning the first parcels of the 1,600 acres Jeremiah eventually held. John apparently moved on. There doesn't appear to be any record of Jeremiah's service during the Revolutionary War. If he were a Quaker pacifist, he may have declined to fight the British.

Dwight detailed something of the "active and industrious" Jeremiah, who "has here cleared in the midst of the forest, and reduced to a good state of cultivation, a farm from which, besides other produce, he cuts annually one hundred tons of hay." Wilbur cut the road the presidents rode on, in a year boiled 1,800 pounds of sugar from the sap of his maple bush (the descendents of which still line the Bellows Pipe Trail), and of course cut the wood to build his house, heat it, and cook. He constructed three mills on Notch Brook,

saw, cider, and grist. He had help. His first wife, the perhaps aptly named Patience Harrandine, bore him 10 children and died in 1801. The second, the widow Hannah Russell, bore him two more. Fitch wrote admiringly about his sheep. Wilbur's children helped maintain his herd of cattle, protecting them from bear and wolves. One Wilbur son died in infancy; another died at age 18, taken ill after searching the mountain for stray cattle.

The two college presidents and the farmer dismounted about 20 feet from the summit, which was tree covered. As there was as yet no tower, each of them shinnied up a frost-stunted evergreen. view was "The immense and of amazing grandeur," Dwight wrote. They recognized the Adirondacks, the Greens, Mt. Monadnock, Mt. Tom, and the Catskills. They believed they looked down on the "houses, church, and colleges" of the "village of Williamstown" which, however, is not possible, as other peaks of the Greylock massif, mounts Prospect and Williams, obscure the town. What the presidents saw remains a mystery. History can labor under misapprehensions, even when quoting sources, as Henry David Thoreau may have demonstrated some 45 years later.

We are fortunate, through Dwight's visit, to know as much about Wilbur as

we do. We can consider the immense task early farmers undertook, even those not half way up a mountain. He died in 1813 and is buried in a family cemetery in forested land near his likely Bellows Pipe home site, his name spelled "Wilber" on the stone. His family lingered in the area. One of his grandsons gave Nathaniel Hawthorne a tour of the homestead.

Oddly, Dwight doesn't mention Wilbur's house or, even more oddly, his barn. At the time a visitor usually judged the worth of a farm by the size and condition of the barn. Perhaps, coming from an academic background, Dwight saw things differently, i.e., number of tons, number of pounds. We may suspect, however, that both home and barn were nondescript.

Certainly the barn was the first thing Richard Babcock would have commented on. His early career as a farmer and later as a barn expert gave him unique insights into the early days of agriculture in the Hoosac Valley. Indians grew native corn in the rich alluvial soil beside the Hoosic and its tributaries, especially along the lower river. They used fish perhaps as much to fertilize the crop as to eat. White men came to grow wheat, which they brought with them from the old country. Settlers built most of the first-generation barns close to the rivers, often in fields that had already been cleared by the Indians, a break Wilbur didn't get.



The Historic Barns at Nipmoose restored by Babcock's sons Credit: C.Kheel

There the farmer grew a crop to make bread, on which, with meat and some vegetables, his family subsided. Wheat was cut early in the field, before it became so dry it would fall off the stalk as it was being cut. After being gathered into small bundles, it was loaded by hand into a wheat cart and brought to the barn. There it was stored on top of a layer of loose hay spread over poles that lay across the beams. Babcock uncovered notches for those poles in his barn work. When the wheat dried, it was dropped to the threshing floor below, the large, opposing barn doors allowing the prevailing wind to blow away the lighter chaff, while the raised thresh hold, which Babcock also documented, contained the wheat. The farmer thrashed the wheat with flails, two sticks fastened together with rawhide

Farmers were eventually crowded out of the bottomlands necessary to sustain crops wheat and moved to the higher land on the valley walls. There, although disassembled they their barns and moved them, they were forced to change their focus grazing animals, could which thrive when the soil was not as

rich. Even those who managed to remain beside the rivers eventually exhausted the soil for wheat. Most farmers in the Hoosac Valley switched over from wheat to dairy or sheep after the Revolutionary War. Then they grew corn or hay to feed their animals. So now, Babcock pointed out, farmers had barns originally designed for wheat storage they were using to house animals—and, as time wore on the barns became less and less relevant to the farmer's occupation, with 20th century regulations for sanitary milk production the last clang of the milk can. Barns that weren't a necessity weren't kept up. Although with their huge beams and joinery they lasted, wooden barns, the emblem of European agriculture, started their long decline some 250 years

ago in the watershed. More recent barns, generally the ones still visible on the Hoosac landscape, often in some form of decay, are what Babcock dismissively referred to as "pole barns," made out of dimensional lumber from the sawmill, nailed together rather than joined.

MILLS & MILLERS

Some early farmers, like Philip Van Ness of the Tiashoke colony, near St. Croix, established water-powered mills on their land to grind flour, saw wood for construction, and create cloththe tradition Wilbur later followed. Neighbors came by with raw materials for manufacture, paying with a portion of their produce. Gradually the mills took on a life of their own, their owners becoming more millers than farmers. By the mid-1800s there were mills and factories throughout the valley, using the Hoosic and its tributaries as a source of waterpower and as a convenient way to get rid of waste. Because the flow in the Hoosic was irregular, mill owners often dammed up reservoirs, either upstream or on tributaries, to impound water and let it out during periods of low flow. Cheshire Reservoir, otherwise known as Hoosac Lake, provided an upstream head for downstream mills. Water from manmade Windsor Lake, in North Adams, was piped to the Windsor Mill. Now both impoundments are used for recreation. Often a system of canals, as in Adams, connected reservoirs or tributaries to the mills. As industry took hold along the Hoosic throughout the 1800s and much of the 1900s, New York and New England became world leaders in manufacturing, especially textiles.

Hard-working Quakers, like Wilbur perhaps, established a forge and trip hammer, four cotton mills, a paper mill, and five factories along the Hoosic in Adams before 1850. By then, more of the town's residents were manufacturers. than farmers. At first farm girls came into town to work at the mills, staying in dormitories built for them. There weren't enough of them, so soon came immigrants, sometimes the result of recruiting trips, at first Irish-Catholic, then Scots, French-Canadians, and Germans; and, in the 20th century, and Lebanese. Poles, Jews, The immigrants tended to set up their own communities, including churches and stores. Generally they were received gracefully, with one exception. By the 1860s Adams south and north were bustling commercial centers. The employees of the Calvin Sampson Shoe factory, members of a union, the Knights of St. Crispin, struck for higher



Tannery Dam. Addie worked at a textile mill there. Credit: L.Stevens

pay and a 10-hour workday. Sampson imported 75 young Chinese men from San Francisco as strikebreakers. They arrived June 13, 1870, to face a hostile crowd. No blood was shed, however. Eventually they migrated either back to the West Coast or to Boston, establishing that city's China Town.

The War of 1812 boosted production, because Americans were unable to buy textiles from England. The need for uniforms during the Civil War set off a textile boom in the entire valley. U.S. President William McKinley, a fishing friend of the major mill owners in Adams, the Plunketts, established a high tariff policy that benefitted U.S. textiles—hence the provocatively named Protection Avenue in North Adams. McKinley visited

in 1897 to dedicate Berkshire Mill No. 1 and again, in 1899, to lay the cornerstone for Mill No. 4. In 1901, after he was assassinated, the town erected a statue to him.

If women and immigrants were scarce, mill owners turned to children, who were small enough to scoot between the machines and whose hands were sized

for several jobs. Lewis Hines' 1910 photograph of 12-year-old Addie Card, "Anemic Little Spinner in the North Pownal Cotton Mill," graced a 1998 U.S. postage stamp commemorating passage of child labor laws. The mill was in the same location as the one Dwight saw. Bennington also used waterpower in its early days, for gristmills, sawmills, and forges. Moses Sage set up a blast furnace in 1800. The mills evolved through the 19th century to textile, gunpowder, shoes, paper, charcoal, brick, pottery, and underwear manufacturing. By the 20th century electronics, lubricating devices, MACE, steering wheel columns, health, and of course culture, including Bennington College, were staples of employment. One form of culture, still celebrated, was the presence of poet Robert L. Frost in South Shaftesbury,

from 1920 to 1929. There he wrote many poems, including, on a warm June day in 1922, "Stopping by Woods on a Snowy Evening." His home has been preserved, while he and his family reside in the graveyard of the Congregational Church in Old Bennington.

From earliest days, Hoosick Falls' settlers built dams above the cascade (which Niles refers to as "Falls of Quequick") for which the town was named, in order to increase the flow and head of waterpower. In 1774, Isaac Turner and Joel Abbott rigged a trip hammer in their blacksmith shop. A decade later, Joseph Dorr found power for carding, fulling, and cloth dressing; two years later Benjamin Colvin built a gristmill. In 1852, at 37, Walter A. Wood organized a company for the manufacture of reaping machines, improving on the patented creation of John H. Manny, after a previous experience of manufacturing moldboard plows-and having grown up in his father's forge and foundry. The younger Wood's approach, improving on others' inventions, grew his business rapidly in a variety of horsedrawn farming equipment. His products won prizes at international exhibitions. In 1867 Napoleon III awarded him the Cross of the Legion of Honor and in 1878 the emperor of Austria bestowed the Imperial Order of Franz Joseph. The

Walter A. Wood Mowing and Reaping Machine Company, which replaced a former wooden dam at the falls with a concrete one, sprawled over a large part of Hoosick Falls and became the largest farm equipment manufacturer in the world by the 1890s. Other businesses and factories were drawn to the town and the population swelled to 7,000.

Wood went on to be a member of the U.S. House of Representatives from New York's 17th district, from 1879-83. He built a large mansion on 1,000 acres, which he farmed. He served as mayor of the Village of Hoosick Falls and president of its board of education. He died in 1892. Competition, the panic of 1895, business errors by his successors, including the failure to take the plunge into self-propelled farming equipment, and World War I, which destroyed the European market, put the company out of business by 1924. An English spin-off continued through World War II, when its equipment helped England convert parkland to agriculture in order to be more self-sustaining as German submarines harassed shipping. In the 1970s, the vast, vacant Hoosick Falls plant was torched.

By the 1920s the textile operations began to head south, nearer their cotton suppliers and cheap labor, beginning a long industrial decline in the Hoosac Valley that lasted through the 20th century. The dam Dwight noted and near which Addie labored, later provided electricity for a tannery. A hydropower site was developed below the falls in Hoosick Falls in the 1880s. That site remains a small-scale electric generator. Dams to provide direct power to manufacture cotton cloth on the lower Hoosic became dams to create electricity, a move dictated as the value of electricity surpassed the value of manufacture.

In Schaghticoke, Chase's bridge over the Hoosic, built in 1788, led to a second bridge, built by John Knickerbocker, Jr., and others, led to Charles and Benjamin Joy's carding machine, gristmill, and sawmill. In 1850, Lewis Pickett built a paper mill at the sawmill site. All these and many other mills, including the Rensselaer Woolen and Cotton Manufacturing Company of 1810, turned the 100-foot falls into power to run machinery. Other mills were installed nearby on Tomhannock Creek, including the Masters family's black powder mill, which may have provided percussive force in the War of 1812. The mill moved to Valley Falls to become Hercules Powder in service of the military, the taming of the West, fire works, lifesaving, harpoon guns, and signaling through the Civil War and World War I, William Johnson came to the

nearby hamlet he later named for himself, building a brick gristmill and sawmill. From 1859 to 1907, the Johnsonville Axe Manufacturing Company, purveyor of axes to the entire nation, occupied much of the gristmill. The company later moved to Jamestown, New York. The town, since the mills have gone, has become a suburban community relating to the Capital District of New York, while still retaining an agricultural base.

Appropriately, the Hoosic forms a giant S in Schaghticoke, while dropping 150-feet over cascades in a distance of about two miles. The grounds of the Schaghticoke Fair, held each year over Labor Day weekend, overlook the gorge. The Schenectady Power Company took advantage of the geomorphology, building diversions. dams. and holding ponds between and 1910 at Johnsonville, Valley Falls, and Schaghticoke for hydropower generation that ended up totalling18.5 megawatts. At Schaghticoke the water is drawn from behind a 680-foot-long concrete dam, which replaced five older dams, on the upstream curve into a reservoir and then by siphon across the mid-portion of the river's S into a surge tank to level the flow, and thence to five penstocks, pipes that lead the water into the four generators. The fifth penstock supplies the exciter



Putting in below the Powerhouse, Schaghticoke. Credit: T. Hyde.

turbine, used to maintain voltage. The water exits at the lower curve. The Johnsonville dam includes additional turbines; the Valley Falls dam creates a reservoir. General Electric manufactured the machinery. Niagara Mohawk took over the Schaghticoke Power Co., operating it until selling to Brascan, which became Brookfield Power.

Charles Proteus Steinmetz, born in Prussia, sought refuge in the United States in 1888 from possible political persecution due to his socialist leanings. (Upon immigration he did Niles one better, choosing both his first and middle names.) Four-feet tall, with a hump in his back and an off-center gait, he settled in Schenectady where he was frequently seen riding his bicycle. Direct Current, which the Edison Company, forerunner of GE, had favored, could not travel long distances. Alternating current could. William Stanley—whose transformer

business General Electric purchased in 1903—used it to light Great Barrington in 1886. Steinmetz provided General Electric and the world with the theory and mathematics of alternating current, which led to Edison's adapting that current. Steinmetz built a three-phase, AC plant in Mechanicville in 1897, the oldest still in operation. In 1908 he experimented with a new kind of transmission line, monocyclic, which traveled eiaht miles from Schaghticoke to Mechanicville, where it joined the line to Schenectady, GE's home. While the two customary wires carried electricity, a third, "teaser" wire enabled starting an electric motor without using a clutch, thus allowing for smaller motors with fewer failures. Lightening bedeviled his new transmission line and, although his three-phase approach prevailed, rival Westinghouse's transmission line became the industry standard.

GETTING THERE

One May day in 1830 Williams' President Edward Dorr Griffin excused the entire college from classes, leading them instead to clear a trail up the west, grain-hopper-shaped side of Mt. Greylock. At the summit they built a tower. That burned, but college Professor Albert Hopkins and his students built another in 1841, which was to host Thoreau's overnight

visit. Hopkins was the brother of Williams College's fourth president, Mark Hopkins, and uncle of Amos Lawrence Hopkins, the gentleman farmer of Hopkins Forest. A true polymath, Albert placed weatherrecording equipment at the college spring, on Spring Street in Williamstown, and in the tower, so that he could compare the readings. He and his students used stone they quarried on Pine Cobble to build the first college observatory, still standing, now used as a planetarium. In 1863 he founded the Alpine Club, the first mountain-climbing organization in the United States, preceding both the White Mountain Club (1873) and the Mountain Club (1876). Appalachian Although its first members were mostly local young women, it was the forerunner of the Williams Outing Club, which has been maintaining trails ever since. A related Hopkins' endeavor was Camp Fern, which borrowed Methodist camp meeting tents and set them on Stony Ledge on Greylock for several summers beginning in 1869. Families hired Bridget, a young Irish woman, to cook. Her name and other camp participants' appears on a fungus that is in the Williams College Archives. They organized games, explorations, and parties, publishing the "Camp Fern Leaflet" to record the events.

Grace Niles wrote of another side of

Hopkins. Born in 1807 in Stockbridge, upon arriving as a student at Williams in 1823 he became interested in the community of runaway slaves who inhabited the banks of Broad Brook, from the northern portion of Williamstown into Vermont, since before the Revolution. Many were supposed to have come from Virginia. The men used the oaks to make baskets; the women generally worked as servants. Massachusetts effectively abolished slavery through a court case in 1783. Vermont was admitted to the Union in 1791, its constitution banning slavery. New York did not abolish slavery until 1827, revealing perhaps the importance of the Dutch tradition of large-scale agriculture. In these states, however, runaways could still be hunted down.

The White Oaks, as the area was called, harbored petty white criminals, as well, who could hop across the border to escape capture. Thus it was considered, in Niles' words, "a place of poverty and moral degradation." Hopkins graduated from Williams and became a professor there, preaching in his spare time. He sought to reform the area, including purchasing a farm in the White Oaks, in Niles' words from her article in *The Christian Register*, "in order to better understand [White Oaks residents] and gain their confidence." In February 1865

he aroused interest in building a chapel. After the cornerstone was laid in May, "labor, lumber, and luncheons were generously donated." The building, still standing, was dedicated in October. He and others preached and reached out. Niles reported that the state of the community improved markedly. When he died, in May of 1872, "the people of White Oaks bore him reverently, as a father, to his grave in the college cemetery of Williams, and the children gathered arbutus, violets and ferns from the glens he loved most, to be strewn over last resting place."

Henry David Thoreau, set out from Concord in July 1844. He climbed Mt. Monadnock in southern New Hampshire, then hiked west several days, crossing the Connecticut River and following the old Indian trail along the Deerfield River to Charlemont, where he spent the night at a Rice house. In A Week on the Concord and Merrimack Rivers he presented an amusing image of his crusty host. Arising very early the next morning, Thoreau continued on the trail over the Hoosacs, arriving at the Western Summit, from which he looked down at the threedimensional wonder of the north portion of Adams nestled in the Hoosac Valley.

After picking up rice and a tin cup in the village, he climbed what's now Notch Road, past the homestead of the late Jeremiah Wilbur, and up the Bellows Pipe—named, he suggested, for the way the wind rushes down it in a storm. He stopped at a house for a flirtatious conversation with its mistress and then. rather than taking Wilbur's bridle path, went cross lots, stopping in a field where the owner of the next house assured him he would not make the summit before dark. He barely did or perhaps didn't, for he described seeing "Williamstown College" in the valley, using that as the occasion to comment on the value to the students of placing a college at the foot of a mountain. "Some will remember, no doubt, not only that they went to the college, but that they went to the mountain. Every visit to its summit would, as it were, generalize the particular information gained below, and subject it to more catholic tests." Starting before sunrise in Charlemont, he made it to the summit of Greylock, some 30 miles, on foot, in one day.

But mounts Prospect and Williams hadn't moved since Timothy Dwight's visit, suggesting that either Thoreau didn't see anything because dark had already settled or that by the next year, when he wrote the book while staying at Walden Pond, he had forgotten what he saw. In either case, he was acquainted with Dwight's *Travels*, having cited it in a

description of his trip to Cape Cod, and likely borrowed the line about seeing the college. After a night in Hopkins' tower, he was treated to a gorgeous view of the sunrise above the clouds; then he departed in the rain down the mountain to Pittsfield. He wrote that the experience on Greylock offered him a view of heaven.

Niles quoted Thoreau several times in *Bog-trotting*, as well she should, for whether by accident or design he was a pattern for her writing and her life. Like him, she was an excellent botanist and a graceful writer. Both attempted to feel at home in the natural world, even to the extent of getting muddy—or frightened. He wrote history, as in essays on Colonial wars; she, on the Hoosac Valley. Neither married. Both taught school. He and she

both worked briefly in New York City. He changed his name from David Henry to Henry David; she substituted Greylock, where Thoreau found heaven. He retreated to Walden Pond, she to Mountain Meadow.

Nor everyone walked like Thoreau, Hopkins, or Niles, not even then. Some wanted to ride. As a result

of increased manufacturing, coupled with the uncertain condition of carting roads, by the early 19th century the young nation went on a spree of canal digging, including the Erie, west along the Mohawk River. As a companion, following a proposal initially put forward by Revolutionary War Gen. Schuyler, the Champlain Canal, a way of moving past the shoals and falls of the Hudson above Albany, opened in part to Lake Champlain in 1819 and entirely four years later. As rebuilt for wider vessels, it became known as the Champlain Barge Canal, remaining open to commercial traffic into the 1980s and still available for recreational use. Lock builders rerouted the lowest stretch of the Hoosic to provide additional flow for raising boats at Lock Four, Schaghticoke, in the largest park (91 acres) in New York State's canal system. Construction also included removing



Lock Four, Champlain Canal. The Hoosic enters right. Credit: Marinas.com

high, shale bluffs and reconfiguring two islands to be come part of the shore, along with two dams, a bridge, and the canal cut. Not to be outdone, in 1825 Massachusetts appointed Daniel Noble of Williamstown and William Brayton of North Adams, among others, to scout out a canal route across their state. They put on a brave face, but the prospect cannot have looked good and soon faded.

Canals preceded railroads, which were needed to bring cotton from the south to textile mills—and to market the cloth. The route Noble and Brayton came up with would have gone over the same Hoosac Mountain the railroad later tunneled beneath. The first railroad to serve Hoosick Falls was the Troy & Boston, chartered in 1852, connecting Troy with North Bennington—and with the north part of Adams by 1869. A line north from Pittsfield also served northern Adams. Railroad fever drove out canal thoughts and, after much delay involving financing and the failure of two steam-driven digging machines, the pioneering use of nitroglycerin created a breakthrough literally, as the tunnels that progressed from each side were only one-eighth of an inch off when they met in the middle in 1875. The Hoosac Tunnel, at the cost of 195 workers' lives, connected the Deerfield watershed to the Hoosic watershed. At 4.74 miles, it was the longest tunnel in the world. The old Indian trail had become a rough carting road over the mountain, below which the tunnel bored. Initially it brought the Boston, Hoosac Tunnel & Western line, formed in 1878, from Mechanicville to Boston. The Fitchburg Railroad soon acquired both that line and the optimistically named Troy & Boston. Later the Fitchburg became the Boston & Maine, now PanAm Southern, with a couple stops along the way. Passenger service ended in the 1950s, although freight service continues. Testifying to the economic effect of the tunnel, its opening helped the northern part of Adams outgrow the southern, causing it to split off from the mother town in 1878.

Settlers needed wood to build their homes and outbuildings; some burned 20 cords or more annually to cook their food and warm their hearths. They cleared for crops, for sunlight, and to provide separation from whatever or whoever might be lurking in the forest. They began the job of denuding the landscape. As the farms moved upslope, away from the alluvial land, they cut farther toward the ridgelines. Then their livestock, notably the sheep, cropped the vegetation to the summits, which encouraged erosion. Manufacturing needed wood, too, especially as converted to charcoal for



Hoosac Tunnel. Credit: Williamstown Historical Museum

smelting iron. Charcoal burners combed the hillsides, hauling their product to the furnaces. Lime burning similarly ate trees. The demands of the railroads—early on—for fuel and—all along—for poles, crossties, and buildings, finished the deforestation. The hillsides leaked into the rivers, covering the gravel and sand with silt, thus reducing fish propagation. Concern for the erosion prompted individuals in North Adams to purchase 400 acres around the peak as Greylock Park. Essentially they were reassembling part of Wilbur's holdings. Although they charged for access, they were unable to sustain the park financially, so they turned it over to the state in 1898, the first Massachusetts wilderness reservation.

trains The ran along the rivers. jostling the roads for position. And so did the trolleys. Early on, horses pulled the cars, often with help from the passengers, but in 1884, Frank Julian Sprague came with the first practical method for

combining electric power with a springloaded trolley pole, a wire-and-wheel suspension system, and an electric motor he designed to create trolley service in Richmond, Virginia. (The word trolley refers to the wheel that runs along an overhead wire.) By the late 19th century, 170 miles of light rail linked Hoosick Falls, Bennington, Pownal, Williamstown, North Adams, Adams, Cheshire, Pittsfield, and on south to Canaan, Connecticut; and from Lee east nearly to Springfield. Frederick Billings, who founded the Northern Pacific Railroad, was also a partner in founding the trolley line from Bennington to New Lebanon. Generally

the tracks ran in the roads but occasionally they took off through the woods. Workers were able to commute. The Hoosac Valley and Pittsfield lines both built and served dance pavilions and amusement parks. Dance bands came to Meadowbrook, near Hodges Cross Road in Adams. The lines had open cars for recreationalists, parlor cars for the well to do, and freight cars. The Berkshire Street Railway was formed in 1901 from lines previously owned and operated by the Hoosac Valley Street Railway, Pittsfield Street Railway, Pittsfield Electric Street Railway, Hoosick Railway, Bennington Electric Railway, Bennington & Hoosick Valley Railway, Bennington & North Adams Street Railway, Hoosick Falls Railroad, and the Vermont Company. Yet in spite of it all, the BSR didn't make money. The automobile horn came to sound louder than the clang of the trolley. By the 1920s trolleys were being replaced by buses, a less elegant and less joyful way to get there.

In what might have been the last trolley hurrah, in 1910 the state legislature authorized a trolley line up the eastern side of Mt. Greylock to the summit, to be operated by the Hartford and New Haven Railway, which at the time owned the line from Pittsfield to North Adams. Although the state's Public Service Board had second thoughts and turned down

the project three years later, the idea of whisking people up the mountain, as at nearby Mt. Tom, smoldered. It was fanned by the economic distress of the area as mills moved south. The trollev became a tramway, as proposed by the Mt. Greylock Tramway Authority in 1960. In fact, it was to be "world's largest tramway," measured not by the distance it traveled nor the height it attained, but by the size of the vehicles, each of two cars to carry 104 passengers: A centerpiece for a major downhill ski resort. The battle, which went to the courts, engaged the Mt. Greylock Protective Association. On Labor Day, 1966, both houses of the legislature abolished the Tramway Authority. However, they left open the possibility of developing one of Greylock's sister peaks, Saddleball. That was the bait that led Elco developers to assemble property on the Adams side that came to be known as Greylock Glen. In 1973, ground was broken for the new resort proposal—only to succumb to environmental opposition and shaky financing.

In 1925, Robert C. Sprague, son of the trolley developer, invented a tone-control device for the radio, which he and his wife marketed from their home in Quincy, Massachusetts. The next year he and friends anted up \$25,000; such devices came to be called capacitors and led to the

Sprague Electric Company that, by 1929, outgrew available space in its hometown.

Three weeks before the stock market crash Sprague, with the aid of individual North Adams shareholders and banks, purchased a good portion of the one million square feet of former Arnold Print Works mills it eventually acquired. Arnold, which printed textiles, had gone south. By 1931, due to competition and the Crash, Sprague nearly foundered, to be saved by diversifying its line of products—and by World War II. Sprague Electric capacitors helped develop the proximity fuse and radar, and triggered the atomic bomb at Nagasaki. With the continuing cold and hot wars of succeeding decades, plus the advent of television, Sprague Electric grew to be the nation's largest manufacturer of capacitors. Silver-haired Sprague in 1958 detailed the company's history and hair's-breath escape in an address to the Newcomen Society, a non-profit educational foundation for "the study and recognition of achievement in American business and the society it serves."

Sprague Electric became a major research and development center, with state-of-the-art equipment, conducting studies on the nature of electricity and semi-conducting materials. Post-war, its products were used in the launch systems for Gemini moon missions. By 1966,

Sprague employed 4,137 in a community of 18,000, the largest employer in the area and the mainstay of several generations. Although the company produced electrical components for the booming consumer electronics market, competition from abroad led to declining sales. RC, as he was called, was a founder of the Williamstown Theatre Festival. helped combine the Sprague Orchestra with a Williams' student group to form the Berkshire Symphony, and bent his efforts towards an unsuccessful if noble effort to save the elms along Williamstown's Main Street from Dutch elm disease. He took personally a strike in 1970 and lost a son in an airplane accident in 1991. In 1985, his other son, John, in charge of Sprague, part of the company moved, closing operations on Marshall Street—and later Brown Street—, leaving the ominous quiet of a community's heart—stopped. Not much different than what happened in Hoosick Falls when the Wood Company went out, except that Sprague left behind cleaning solvents that leached into the groundwater and PCBs, which the company used for lubrication before they were suspected of being carcinogens. They washed into the Hoosic River.

The loss of Sprague also led to yet another in the series of proposals to develop the Adams' side of the mountain,

Heritage Greylock, this time limited to the Glen, but with cross country skiing extending onto the Reservation: 1,275 condominium units, 380 inn rooms, conference center, retail, fitness center, ski lodge, golf course, downhill skiing, tennis, on the order of Vail. The issue once again engaged vigorous debate across the commonwealth, leading to a whittling away of features. The iteration died with a new governor in 1991. But lo and behold Gov. William Weld came up with yet another proposal in 1996. Many of the same arguments about scale, cronyism, and private use of public land led yet another new (acting) governor, Jane Swift, to cancel the deal in 2001. In September of 2004, the state having acquired the property, the Town of Adams submitted a proposal to be the Glen developer and it has been moving cautiously ever since toward conference center, outdoor recreation, and environmental education.

The label on "Green Mountain Park," which runs for nearly a mile along the Hoosic and U.S. Route 7, sometimes confuses those who consult maps. It is not a state park, although it is located in the Pownal portion of the Hoosac Valley—considered the beautiful southern entryway to Vermont—and within the Green Mountain National Forest acquisition area. It is, in fact, a

racetrack that opened in the early 1960s. The five sons of Art Rooney, then owner of the Pittsburgh Steelers football team, purchased it a decade later, in spite of their father's discouraging comment about "more cows than people." Horse racing, employing in its short season some 700, attracted mobile home parks and motels, before switching over to greyhounds in 1976, due to-too few people. Animal rights activists, reportedly, did in greyhound racing in 1992. Then a period ensued when only occasional events, such as car shows, model airplane flying, and concerts took place there. Efforts to hold a major outdoor concert in 2015 went awry when it was discovered that the railroad wouldn't permit access over its tracks at one of the two entrances. In 2009 the owners made arrangements for what was called the largest solar field, some 10 acres, in New England, changing the name to Green Mountain Energy Park. Other forms of energy are yet to materialize, however, and the cavernous vacant grandstand sits like a gigantic, squat frog among the green fields and glens.

THE SOLUTION TO POLLUTION

During the industrial period, the people and the river were both destructive. Since industries and households used the river as an open sewer, the Hoosic became offensive and a source of disease. The Hoosac Valley News, in August, 1894, warned that "the river bed [in Willow Dell, North Adams] receives 99 percent of all the sewage, refuse and discarded material of the houses along its bank... It is no wonder that illness is prevalent in the tenements." In the winter, newspapers

cautioned people on their habit of dumping their garbage on the frozen river, where it stayed until the spring thaw swept it downstream. Mills dumped directly into the river, so that it ran different colors depending on what dye was being used. Even after water-powered mills were history, riverside remained the industry site for convenience in disposal, and because railroads and roads followed water level

routes along the river. Occasionally the Hoosic turned the tables, visiting towns with devastating floods. After heavy rain or snow, especially after vegetation was removed, the narrow, steep sides of the upper valleys acted as funnels. Floodwaters rushed from the hills into the valley bottom to destroy homes and businesses. Floods in 1927, 1936, 1938, 1945, 1948, and 1950 were particularly destructive. North Adams "Feebly Raises

Head After Disastrous Blow," headlined *The North Adams Transcript*, following the September 1927, storm.

As a result, the Army Corps of Engineers built flood control structures in Adams, North Adams, and Hoosick Falls in the 1950s. Transforming the cascades at Hoosick Falls involved widening the channel, creating an earthen berm and



Tropical Storm Irene tests the North Adams chutes. Credit: L.Stevens

concrete wall, removing the Wood Company dam, and related projects, similar to the Corps' approach in Adams and North Adams. The chutes survived their first real test in August 2011, with Tropical Storm Irene. They put an end to the most destructive flooding at their locations, although with the possibility that by speeding the water

through the towns they created more problems downstream. The same storm flooded The Spruces Mobile Home Park in Williamstown out of existence. The chutes also created a sterile environment in which fish and other aquatic life struggled to survive. At the time the chutes were installed, people didn't mind so much because the river was foul with pollution. As the river was out of sight behind concrete and fencing, people forgot that it was a living organism.

Thomas C. Jorling, who has a Hoosic watershed address, took his Notre Dame law degree to the U.S. Senate as a staffer. In D.C., with teammate Leon G. Billings, coached by Maine Senator Edmund Muskie, they drafted the Clean Air and Clean Water acts, which marked profound change in Americans' relationship to their natural resources. Individuals and businesses no longer had the right to dump pollutants; rather, they were regulated and had to apply for a permit. Furthermore, from then on not only the government but individuals and organizations like watershed associations had standing in environmental issues. They could sue. The model was that the federal government set the standards for cleanliness, which the states implemented. And the public was involved.

Jorling has pointed out that the

environment, soon after the first Earth Day, was a non-partisan issue. In fact, for most in Congress it was a relief to talk about, as opposed to a contentious Vietnam War. Furthermore, Congress was a friendlier place then. He doubts that such legislation could pass today, given the partisan divide on environmental issues that has become the norm. Jorling went on to be U.S. EPA Assistant Administrator for Water and Hazardous Material under the Carter Administration. He directed and taught in the Williams College Center for Environmental Studies and served as New York State's Environmental Commissioner, before retiring as Vice President for Environmental Affairs at International Paper Company. There he was responsible for moving thousands of acres of paper company land to the public domain, as part of the Adirondack Park. While with NYDEC, as an ardent bicyclist he often rode up to Petersburgh Pass in the Taconics. When he noticed the former ski area there was for sale, he worked with Massachusetts to create a two-state park at the site—along the 20-mile line.

While the states and the federal government had taken some action previously, Congressional passage of Public Law 92-500, the Clean Water Act, in 1972, offering funding for sewage treatment and penalties for dumping,

began substantial improvement in water quality. In the Hoosac Valley, it was not a case that residents rose up demanding a cleaner river; they had come to accept the false notion that having jobs required mistreating natural resources. Rather government action led to a gradual change in residents' attitudes toward their rivers from utilitarian to more recreational, aesthetic, and health conscious. Family memories were tainted by foul smells and flooding, but gradually many came to realize that a cleaner river could improve living conditions and could expand the economy.

These federal standards have had a major impact on the Hoosic Watershed. The City of Troy had closed three smaller drinking water reservoirs and placed an earth dam across Tomhannock Creek to create one reservoir, five and one-half miles long, containing 12.3 billion gallons, under construction from 1900 to 1905, and incidentally realigning the lower portion of the creek. Fishing from the bank and ice fishing are the only recreational activities permitted on the largest water body in the watershed. As a result of the federal Safe Water Drinking Act of 1974, and amendments, the city also treats the water. North Adams, faced with the same regulations, installed a treatment plant at its Mt. Williams Reservoir: Williamstown

took the other prescribed route, switching from reservoirs to rely on wells. Since wells can fail if the power goes down, their use required installation of a water tank. The town and The Clark Art Institute, which didn't want to look at a tank, cooperated in burying it near the ridge of Stone Hill, in The Clark's backyard.

The Water Pollution Control Act. 1972. raised the goal, not yet achieved, of eliminating the discharge of all pollutants into the rivers by 1983. Both Williamstown and North Adams had primary wastewater treatment plants that needed updating in the 1970s. In addition, the Widen Tannery in the Blackinton section of North Adams. was contributing toxic materials the plant couldn't handle. The Berkshire Regional Planning Commission suggested secondary treatment at a joint plant, also including the town of Clarksburg, to be located downstream in Williamstown. The state supported the plan, as did the federal government. An interceptor sewer line connecting North Adams and Williamstown was completed on 1973. The new plant opened three years later and the North Adams plant phased out. Widen Tannery installed pre-treatment facilities but soon went out of business. Several decades passed before part of Clarksburg was sewered and connected. The Hoosac Water Quality District plant

has been updated several times since.

The plant serving Pownal was likewise the result of seizing the moment. Prior to it, waste either went directly into the river or into tanks or, often, failing septic fields. The former North Pownal mill, once producing cotton cloth and more recently a tannery, due to extensive contamination became a federal Superfund site. The Environmental Protection Agency worked with the Hoosic River Watershed Association, the town, and Vermont in 2006 to construct a treatment plant on top of one of the former tannery waste lagoons, terminating a major source of river pollution.

A memorable outdoor performance was held in the late 1970s, on Cole Field in Williamstown. Legendary balladeer Pete Seeger, founder of the Hudson River sloop Clearwater, sang and urged the crowd to sing along, to benefit the locally organized Hoosic River Basin Citizens Environmental Protective Association (HRBCEPA). That group hired a lawyer to apply the tools created by the Clean Water Act in order to force polluters to desist. In one case, for example, the group tracked a truckload of toxic material from a Vermont companyto a manhole in North Adams. They had tipped off the press so when the driver began the illegal discharge, a flashbulb went off. He made

Page One of The North Adams Transcript. Although HRBCEPA had faded by the 1980s, its litigious work and the departure of certain industries from the area meant that the water quality of the river was becoming an asset rather than a liability to watershed communities.

It also meant that from the Hoosic River Watershed Association's (HooRWA) founding, it was free to look at a broad range of issues rather than concentrate solely on tracking down polluters. The first recommendation of the Berkshire Regional Planning Commission's "Hoosic River Action Plan" was the creation of a watershed association that would look out for the river. The board was established in 1986, including several members who were active in HRBCEPA. The next year a canoe cruise on the Hoosic, in which officials from the three states participated, coincided with а major aluminum anodizing company spill in North Adams. Paddlers were amazed at the number of dead suckers and trout—testimony to the toxicity of the spill but also to the fecundity of the river. Restocked from upstream and the tributaries, the river rebounded. A settlement from the company financed river monitoring.

The watershed association early on took an interest in recreation. In 1990 HooRWA intervened when the then-

Boston & Maine Railroad proposed to sell off the rail line that runs along the river between Pittsfield and Adams, the one that might have linked to a trolley up Greylock, giving first state Senator and then Acting Governor Jane Swift time it to purchase the abandoned line and create the Ashuwillticook Rail Trail. (The



The Mahican Mohawk hiking trail, here utilizing old railroad abutments, follows an Indian route. Credit: L.Stevens

name came, slightly altered, from Niles' for the south branch.) The watershed association continues to work with the regional planning commission and the towns to extend the bike path to North Adams and Williamstown. In 1992 Williams students proposed a hiking trail to link the Connecticut and the Hudson rivers by following the Hoosic and the Deerfield, the route of the old Indian trail, as mapped by David Costello—one of

the engineers who brought the Mohawk Trail highway into being. Thanks to the Deerfield River Watershed Association, HooRWA, the state's Division of Greenways and Trails, regional planning commissions, and others, most of the Massachusetts segment of the Mahican Mohawk Trail is complete. HooRWA has

been facilitating the creation of parks, greenways, and river access, including the conversion of an abandoned rail line in Hoosick Falls to a bike path and of the Thompson Mill site in Valley Falls into a village park.

HooRWA

longs

Fundamentally

for fishable and swimmable rivers. It monitors the entire Hoosic, which shows significant improvement. In the 1990s, then HooRWA board member Jerry Schoen determined that flood control chutes heated the river and established that heat was a form of pollution that should be governed by the state's anti-degradation regulations. While development in flood plains was already off limits, the passage of the Massachusetts River Protection Act in 1996 has aided efforts by further limiting development next to rivers. Williams' students continue to track the decreasing amount of PCBs in the river, while Massachusetts College of Liberal Arts' students have pinpointed

remaining sources of biological pollution. Although much of the pollution from pipes has been reduced, the treatment plants were not designed to treat the pharmaceuticals and other alien matter that gets into them today—and they are approaching the limits of their expected life. As well, the difficult task remains of reducing runoff from agricultural fields, lawns, and impermeable surfaces such as roofs, roads, and parking lots. Controlling non-point pollution, as it is called, is to a large degree a matter of public education, requiring at once more patience and imagination.

And unanticipated threats emerge. In the early 1950s John R. Cook and Cleveland Dodge, a philanthropic scion of the Phelps Dodge mining company, developed a Teflon-coated wire that could withstand high temperatures, and which soon became a commercial success. They controlled the Warren Wire Company, named after Cook's oldest son, in Pownal. Later Dodge left Warren Wire to found Dodge Fibers Corporation in Hoosick Falls, Cook sold Warren Wire and went on to start a third company, ChemFab, in Bennington. Hoosick Falls became the center for the manufacture of yarn, fabric, pots, and aluminum foil, while the Bennington factory specialized in Teflon roofs. Dodge and ChemFab

were both eventually acquired by the French multinational Saint-Gobain Performance Plastics.

Perfluorooctanic acid (PFOA) and associated chemicals—that have since been linked to thyroid disease, high cholesterol, liver damage, testicular and kidney cancer, and pregnancy problems were used to stick Teflon to products. In 2014 a Hoosick Falls citizen, Michael Hickey, tested his well water and that of a local McDonald's, discovering PFOA over limits regarded as "safe." Later it was found in groundwater in Bennington and Pownal, Vermont; and Petersburgh, White Creek, and Cambridge, New York. These communities either the manufacturing facilities hosted or are located nearby. Saint-Gobain, International—owner Honeywell another company that once operated in Hoosick Falls—, and Taconic Industries, which used a product related to PFOA in Petersburgh, assumed responsibility, providing bottled water, filters for private and public wells, and cash to the communities. Those actions do not erase the feelings of the residents who discovered they and their children have elevated levels of PFOA in their blood.

Although only trace amounts have been found in the Hoosic River, groundwater tends to follow a river's course. All the

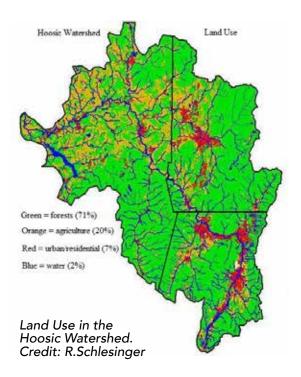
communities involved are in the Hoosic watershed. Testing and remediation are under way state by state, including the standards for "safe" levels, whereas PFOA is really a watershed issue, in its origins as well as in its effects, a point Caroline White-Nockleby, Williams College '17, wrote in her riveting paper on the subject.

The river, although faced by climate change—a threat to the Hoosic more potentially lethal than PFOA or any other pollution—is ready to play its part in a post-industrial watershed world. The other players would also seem to be some of the old ones, re-invigorated.

NORUMBEGA

In much of the valley, as milk prices became too low to sustain small farms and, as farmers' sons and daughters became painfully aware that most people don't work 12-hour days year around, remnant farm families no longer bred future farmers to carry on the dairying tradition. Their properties are divided for residential development, often for retired city dwellers, and often with large lots. Thus the former fields, no longer hayed or producing corn, fill with trees. Land trusts and state programs attempt to preserve the rural quality of communities by buying development rights or outright

purchase, furthering the longevity of some farms and ensuring more wooded land. With the numerous federal and state properties, such as Green Mountain National Forest, Tibbitts State Forest which long-time owners the Tibbits family donated to New York, and Mt. Greylock State Reservation, land in the watershed is 71 percent forested and a declining 20



percent in agriculture, the ratio opposite that of 150 years ago. With the trees and unplowed fields come wild animals: Most obviously a large deer herd and an active beaver population; a modest influx of moose, bear, bobcat, coyote, feral pigs, and occasionally even a cougar just passing through.

Industries were a threat to the Hoosic, particularly their dams, which interrupted fish passage, and their discharge of pollution-both of which warmed the river. Cattle manure on fields washes into the river, cattle sometimes deposit directly into the adjacent waterway; farmers have been known to plow to the water's edge, resulting in bank erosion; farmers have employed pesticides that are toxic to aquatic life. Unlike major industry, however, there is a future for enlightened agriculture in the watershed. A few farms hang on by offering agroentertainment, where the farm becomes a tourist attraction, with hayrides, corn mazes, and baby animals. Specialty farms include branded ones like the (Grandma) Moses Farm in Eagle Bridge, named for the folk painter whose works are on view at the Bennington Museum, or pickyour-own berry patches or orchards, or organically grown vegetables, often catering to farmers' markets, schools, and restaurants. Annual investors receive vegetable dividends at communitysupported farms. St. Croix Farms, 688 acres in Valley Falls, raise beef, forage, and feed crops. Dairy continues, such as at Breese Hollow Farm, licensed to sell raw milk, founded originally by the Breese family on a land grant from the Van Rensselaers, in Hoosick, and McMahon's Hooskip Farm, named for the adjacent Hoosic River and Skiparee Mountain, 714 acres on Indian Massacre Road in Petersburgh and Pownal. In Buskirk small farms have consolidated, yielding a large dairy operation, apparently viable, of 580 milkers and 500 young stock at the Tiashoke Farms, employing immigrant labor, milking around the clock. Great sweeps of cultivated and haved land surround serried rows of milk sheds. The name harks back to the first European settlers of the area and even further, to the Indians. Niles reported that Tiashoke land was fenced, at Albany's expense, to provide Indians 12 acres to grow corn without incursions of their new, European neighbors' domestic animals. The Ziehm family is into its third generation there, Frank's dad having turned the farm over to him when he was 27, and Frank turning it over to his sons. According to Cabot Creamery, whose Agri-Mark trucks pick up the milk, the Ziehms "are passionate about dairy farming and feel a profound responsibility for their stewardship of the land, dedicating 550 acres to 'open space,' which means the land is restricted and cannot be used for development of any kind." The family's commitment to the broader community



Tiashoke Farms, Buskirk. Credit: L.Stevens

extends beyond farming and land stewardship. Frank has been a member of Agri-Mark's hauling committee for many years, and he has served on the Village Board for three decades.

The Hoosac Valley is rich in culture as well as agri-culture, witness the Williamstown Theatre Festival, Old Castle Theatre in Bennington, Hubbard Hall in Cambridge and even a drive-in movie in North Hoosick. It is in fact a cultural watershed, containing along with many public and private secondary schools, four colleges. Williams, at over 2,000 students, became coeducational in the 1980s. It is consistently rated among the top in the country. Massachusetts College of Liberal Arts was founded in 1894 as North Adams Normal School, In 1932 it became a state teachers college, adding a baccalaureate degree. In 1960 it progressed to North Adams State College, assuming its present title in 1997, under the guidance of alumna and President Mary Grant. It plays a significant role in the community. Southern Vermont College, a private, four-year liberal arts college, was founded in Bennington, in 1926, as the St. Joseph Business School. In 1962 it became an accredited junior college. Twelve years later, it moved to the estate of jar magnate Edward H. Everett in the east side of Mt. Anthony, becoming the four-year Southern Vermont College. Bennington College, with a mission to educate woman and to include in its academic year a non-resident winter term, was founded in 1932. It became coeducational in 1969, keeping the winter term. Traditionally known for its drama, dance, arts, and literature, it is engaging the full liberal arts curriculum.

Robert Sterling Clark, scion of the Singer sewing machine company, an entrepreneur, explorer, and art collector, acquired his first Renoir in 1916. In Paris he met up with Francine, an actress with La Comedie Français who had excellent taste for, and awareness of, Impressionist painters. After their 1919 marriage they joined in collecting art. It was assumed they would donate their considerable collection to the Metropolitan Museum of Art, but they became concerned about



MASS MoCA, at the junction of the North Branch and the Hoosic. Credit: L.Stevens

the possibility of a nuclear attack on New York City. Clark's father and grandfather had been trustees of Williams College, and the Clarks established relationships with the Williams art faculty so, in 1950, they began building a home that was also an art museum in Williamstown. The 1973 addition underlined that the Clark is an institute, as well as a museum, housing an art library and Williams College's art curators' graduate program. Under Director Michael Conforti, the center on Stone Hill opened, with more exhibit space and the Williamstown Art Conservation Laboratory. Finally, in 2014, the Clark Center opened, providing

space for traveling exhibits, and enhanced landscaping that includes reflecting pools. So The Clark had been transformed from a gorgeous but static display to a world-class purveyor of timeless art—all with real cows on real fields with no water tank for a backdrop.

The Sprague closure devastated the local economy immediately—and through time, right up to the demise of North Adams Regional Hospital in 2014. Unemployment rates shot up and population declined. In 1986, the business and political leaders of North Adams sought creative ways to re-use the vast Arnold/Sprague complex. Williams College Museum of

Art (WCMA) Director Thomas Krens, who would later become director of the Solomon R. Guggenheim Museum, was looking for space to exhibit large works of contemporary art that would not fit in conventional galleries. When Mayor John Barrett III (serving 1983-2009) suggested the vast Marshall Street complex, the idea of creating a contemporary arts center in the hardscrabble city began to take shape.

Joseph C. Thompson, after graduating from Williams College in 1981, worked with Krens at WCMA for several years. Then the lanky Oklahoman was named an Annenberg fellow in art history at the University of Pennsylvania. During his stay, he also received a business degree from the Wharton School. Then he became founding director of an idea. While a campaign began to build community and political support for an entity that would serve as a platform for the creation and presentation of contemporary art-and develop links with the region's other cultural institutions, such as Jacob's Pillow, Clark Art Institute, Williamstown Theatre Festival, Williams College, and the Massachusetts College of Liberal Arts-Thompson held on at low or no salary. His wife Jennifer Trainer Thompson published cookbooks. Between them they marketed hot sauces, which sustained them until the project found its legs.

The state legislature announced its support for the project in 1988. Subsequent economic upheaval in Massachusetts threatened funding, but broad-based support from the community and private donors, who pledged more than \$8 million, kept what was to be called the Massachusetts Museum of Contemporary Art (MASS MoCA) under way. The museum maintains its structures' industrial past unapologetically, while serving as what was (and again is, as new space opens) the country's largest center for visual and performing arts. As home to several firms, restaurants, and shops, and as a concert and museum venue, MoCA has made economic sense, without as yet noticeably reviving the downtown portions of the city. Still it is clear that cultural activities are part of the watershed's future and MoCA is their harbinger. Krens now has proposed a high-tech model railroad and architecture museum in North Adams, in company with the recently operational scenic railroad, and another art museum as part of a resurgent Harriman & West Airport. Destination resorts and hotels on the outskirts are in the works. The Hoosac Valley is home to numerous art venues, artists, and academic institutions. Culture, which includes the area's rich natural history and human history, is the valley's way to provide for its creatures, human and otherwise.

Williams College, a mainstay of area culture, recognizes the Hoosic in its anthem, "The Mountains":

O, proudly rise the monarchs of our mountain land,
With their kingly forest robes, to the sky,
Where Alma Mater dwelleth
with her chosen band,
And the peaceful river floweth gently by.
—Washington Gladden

And usually it does. The river joins the communities, a link that overcomes arbitrary political boundaries. We need no longer be concerned about the Dutch encroaching from the west or the French and Indians sweeping down from the north, anyway. In the 21st century valley folk are looking to agriculture, culture, and recreation for inspiration in plotting the future. Those activities along the river have proven to be compatible.

Judy Grinnell had a dream of using the river to revivify North Adams, no stranger dream perhaps than using art for the same purpose. Blessed with fund raising skills and a wealth of contacts, she has moved her project near the forefront of a small city planning big things for its future. As her Hoosic River Revival's efforts to naturalize the aging flood chutes, which interrupt fish passage and heat the water, will prove, a clear, cool river benefits all and is necessary

to the post-industrial economic strategy. After generations when the river was a disincentive, due to pollution and flooding, businesses and homeowners are now attracted to riverside property—although not in the flood plain. Numerous long distance and shorter hiking trails cross or follow the river. Along with the Ashuwillticook Trail, paved but lightly traveled roads offer excellent biking, with arresting mountain and river views. Boating and fishing river access is available along the entire length. We canoe, kayak, and raft on the upper river and sail or motor in the dead water above the Johnsonville dam, even if we have to fight through the water chestnut. On a good day, the keeper will lock our canoes through Lock 4 of the Champlain Canal.

"We had a sportful day... over 200 fish in one afternoon," reported President William McKinley about fishing the Hoosic in 1890. "When I saw it was a brook trout, I could hardly believe my eyes: 22 inches, a wild brook trout," enthused Williamstown rod-maker Reggie Galvin 100 years later. For those observing today's legal limits and with a license, fishing the Hoosic remains "sportful" and trophy fish, while cagey, are available. Most of the Hoosic is categorized as fishable and swimmable, although also listed as impaired—meaning that as yet we are reluctant to eat the teaming fish.

While it has not yet returned to Dwight's "limpid" state, changing public perception of the river drives further improvement. Improvement means ever more closely approximating the way it was—including the upper river's character as a cold-water fishery. HooRWA is trying to determine and protect stream segments most likely to retain coldwater qualities. As John Wesley Powell implied, fish, what fish eat, what eat fish, and humans—we're all in this together.

The future of the Hoosac Valley looks good. David Ingram, an English sailor who supposedly trekked all the way from the Gulf of Mexico through New England in the 16th century, described opulence in Norumbega: "Kings decorated with rubies six inches long; and they were borne on chairs of silver and crystal, adorned with precious stones. [Ingram] saw pearls as common as pebbles, and the natives were laden down by their ornaments of gold and silver." The city of Bega was three-quarters of a mile long and had many streets wider than those of London, he reported. Some houses had massive pillars of crystal and silver.

Could Norumbega be on the Hoosic? We're short on silver pillars; in fact the area is still struggling economically, although the plants and animals are doing well. John Greenleaf Whittier was a Quaker poet and hymn-writer. In his poem, the knight searches

in vain for the fabled city. His squire reflects:

'These woods, perchance, no secret hide
Of lordly tower and hall;
Yon river in its wanderings wide
Has washed no city wall;
'Yet mirrored in the sullen stream
The holy stars are given;
Is Norembega, then, a dream
Whose waking is in Heaven?'
—From "Norembega"

The Hoosic Valley has a fabled past perhaps but it can wake into a real future. It is fair to say that at this time, although the river guides wildlife, humans don't follow the river as much as in the days the Indians crossed the old Indian trail, Fort Massachusetts looked to Schaghticoke for provisions, Berkshire farmers flocked to fight at Walloomsac, Dwight rode up the valley and the mountain, Thoreau found heaven on Greylock, or trolleys connected all of us. Perhaps consulting our history will awaken us to the natural congruity of North Adams, Bennington, Hoosick Falls, Schaghticoke, and the towns and villages in between, as strung together organically by the Hoosic. For all of us, the Hoosic is our watershed address. So we should identify ourselves. And if we can mitigate and adapt to climate change so that the upper river system retains coldwater characteristics—then perhaps we will find Norumbega on the Hoosic.

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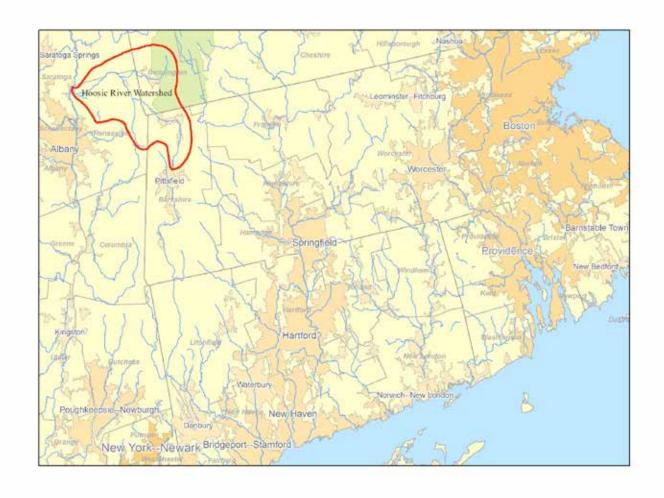
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Locus map of the Hoosic Watershed on back cover. Credit: R.Schlesinger



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