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The Mad River

Heartway of The Valley

by Earline Marsh

From its beginnings in Granville Gulf as a mountain rill, to the broad sweep of its confluence with the Winooski River in Moretown, the Mad River flows north for twenty-six miles through the changing scenery of the Valley that carries its name. The River courses through farmland and forest, through placid shallow waters, cool deep pools and rock-hewn gorges which at times roar with flood waters. It meanders through the village centers of Warren and Waitsfield, under much-photographed covered bridges, and runs onward through a picturesque gorge and swimming hole in Moretown village.

The River lends itself to recreational activities in pastoral settings: boating, fishing, swimming and river walks. Within the mountains that form the Mad River Watershed are spectacular hiking trails and internationally acclaimed alpine and cross-country skiing.

Listening to the Mad River one can almost hear echoes of Smetana's Moldau — the music of a forest rivulet in Bohemia as it tumbles, swells and joins the majestic Elbe River on its predestined journey to the sea. The Mad River, one tenth the size of the Moldau, gathers strength from several tributaries that flow down from the mountains. Its path to the Atlantic Ocean is through the Winooski River to Lake Champlain — which also flows north — to the Richelieu and St. Lawrence Rivers, debauching into the Gulf of St. Lawrence, in the spectacular scenery of Gaspe Peninsula, Prince Edward Island, and Cape Breton Island.



Warren Falls, in the upper reaches of the Mad River.

What's In a Name?

“One wonders where Mad River got its name. William Strong, the surveyor of the town, called it by its present name in his field notes of 1788, and one guesses that his party gave the name because of some unhappy experience with its uncertain habits.”

Matt Bushnell Jones, 1909, *History of Waitsfield, 1782-1908*

“Mad River received its name doubtless from the fact that — the mountains being so near and steep — the surplus water is almost immediately thrown off into the brooks, and by them poured out into the river, which of course rises like sudden anger overflowing its banks and devouring them at will.”

Vermont History Gazetteer, Abby Maria Hemenway, 1882

“The Vermont brook is a varying personality and has its mad as well as its lucid intervals. Indeed, one of the beautiful streams of Vermont is called Mad River.”

Wallace Nutting, *Vermont Beautiful*, 1922

“The Mad River, running through here [Waitsfield], is named for its disposition in springtime.”

Gazetteer of Vermont Heritage, 1966

“Waitsfield has repeatedly been devastated by floods due to the rapid rise and angry overflow of the aptly-named Mad River, although no serious damage has occurred in recent years.

Snapshots, Waitsfield, Vermont Bicentennial, 1989

“Perhaps the name ‘Mad’ originated with the observation that this river actually flows north — not south as many rivers in the area do.”

The Best River Ever, 1995

“... so called for its wild rush down the hills.”

Esther Munroe Swift, *Vermont Place Names*, 1996



Kristen Gallagher studied the river as a student at Moretown Elementary School and Harwood Middle School.

Tributaries of the Mad River



The Mad River Watershed includes many small tributary streams. Names commonly used today are:

- Clay Brook (with Rice Brook), Bradley Brook, Freeman Brook, Lincoln Brook, Stetson Brook, Mills Brook, and Austin Brook entering the Mad River in Warren, with some tributaries rising in Lincoln and Granville;
- Pine Brook, High Bridge and Folsom Brooks in Waitsfield;
- Shepard Brook (with French and Deer Brooks) and Mill Brook (with Slide, Lockwood, and Chase Brooks), rising in Fayston and entering the Mad River in Waitsfield;
- Welder Brook (with Cunningham Brook) and Dowsville Brook, rising in Duxbury and entering the Mad River in Moretown;
- Doctor Brook in Moretown Village, probably named for an early town physician, Dr. Haylett, whose property abutted this small stream.

From *Vermont Place Names: Footprints of History*, by Esther Munroe Swift

With few exceptions the smaller streams that flow into the Mad River within Warren are named for families involved with lumber or wood products during the period from 1850 to about 1890. Austin Brook had a clapboard mill run by the Austin family, and Bradley Brook was named for the Bradley brothers, Mason and Nelson, who had large timber holdings and owned a mill that turned out shingles, bobbins and clapboards. Freeman Brook took its name from a family whose interests were in farming and maple syrup production. Stetson Brook is named for the Stetson family, who had sawmills, a clothespin factory and cider mills. Even the name Mills Brook came from a family who lived along its banks.

Several lesser streams merge with Mad River within Waitsfield. Mill and Shepard flow from Fayston in the west; Pine, High Bridge and Charles Folsom Brooks rise in the eastern part of the town. Pine Brook's name is self-explanatory. High Bridge Brook once passed under a high bridge, and Mr. Folsom was a resident of Waitsfield. Mill Brook in Fayston was so-called because it provided power for early mills. Shepard Brook takes its name from a hunter who trapped many beavers in the meadows there.

Note: Some 19th century references spell the latter brook Shepherd's, and the family for whom it is named is also spelled Shepherd. It was called North Brook in 1788. High Bridge Brook was also called Clay Brook.

"Mill Brook rises in the southern part of the town, in a locality known for miles around as 'Pigeon Hollow', so named from the myriads of pigeons which nested there in 1849."

Fayston Centennial, 1898

Friends of the Mad River

Working to preserve and enhance the ecological, scenic and recreational values of the Mad River and its tributaries

Founded in 1990, the Friends of the Mad River work to achieve this goal through research, education and cooperative partnerships with Valley residents, businesses, schools and governments. The precious natural resource that is the focus of their endeavors includes the entire Mad River watershed — the area of land which collects all surface water to its river channels, following natural topographic boundaries.

"The Mad River Slide Show" has been making the rounds of the Valley, introducing many people to the Mad River and its watershed. This unique presentation is often adapted to keep current on the multi-faceted dynamics of a river like ours. It's well-worth viewing again whenever the opportunity is there.

The Friends of the Mad River board of directors has representation from all five towns included in the Mad River watershed. Board members are Kinny Connell, president, Mary Gow and John Norton from Warren; Brian Shupe, treasurer, and Katie Sullivan from Waitsfield; Joanna Whitcomb from Fayston; Jack Byrne, vice-president, and Kathy Beyer from Moretown; and Elizabeth Walker, secretary, from Duxbury.

Membership in the Friends of the Mad River brings a wide range of activities, as well as a periodic newsletter, *Mad River Matters*, to keep river devotees informed of what's happening. Membership now stands at 250 and growing. The annual cost of membership is ten dollars. For more information write to Friends of the Mad River, P.O. Box 255, Waitsfield, VT 05673, or call 802-496-3437.



The Mad River in Waitsfield Village south of the covered bridge.

"Any river is really the summation of the whole valley. To think of any river as nothing but water is to ignore the greater part of it."

H. Borland

“The Best River Ever”

a Plan for Protecting the Mad River

One of the most ambitious undertakings of the Friends is the *The Best River Ever*, a 188 page comprehensive plan published in 1995 and “developed to protect and restore Vermont’s beautiful Mad River watershed.” The project was made possible by funds granted by the United States Environmental Protection Agency through the Lake Champlain Basin Program, with matching funds from Friends of the Mad River, and the Mad River Valley Planning District. An impressive list of contributors fills a page of acknowledgements.

Along with black and white photos capturing the Mad River and its watershed in various moods and poses, the publication contains a wealth of information about monitoring the health of the river, developing education programs in the communities and schools, controlling erosion and sedimentation, revegetating stream banks, protecting water quality, improving recreational opportunities, protecting aquatic habitats, and long term planning for the future.

Included in *The Best River Ever* are comments from community members who participated in “river forums” held throughout the Valley. The general outcome of these forums was a “vision of a river that is ecologically healthy, beautiful, and widely enjoyed for its diverse benefits.”

The Best River Ever establishes a vision for a healthy Mad River and a plan to achieve that vision. In September, 1996, the Vermont Planners Association named *The Best River Ever* as Vermont’s Outstanding Planning project of the past year. A week later similar recognition came from the Northern New England Chapter of the American Planners Association.

The Best River Ever is in local libraries and can be purchased at the Chamber of Commerce, the planning District Office in Waitsfield, or from board president Kinny Connell at 496-3437.

Warren Elementary School students are equipped with clip boards to record their study of Freeman Brook, also known as Kids’ Brook.

Photo by Katie Sullivan

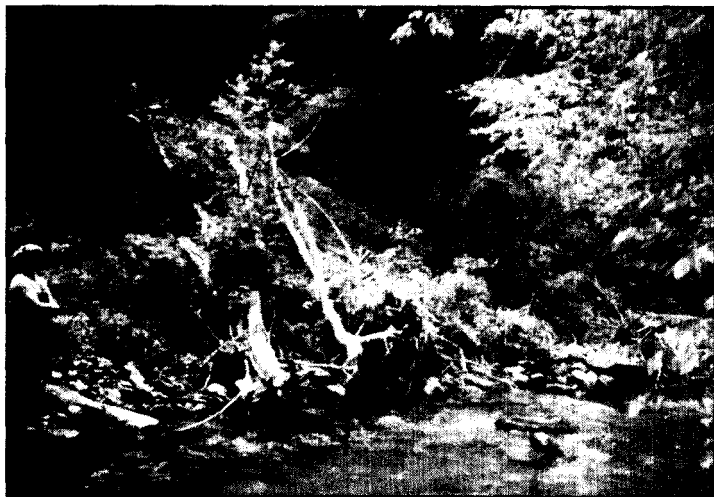


Join a Stream Team

Imagine adopting a stretch of the Mad River or one of its tributaries, with your family or a group of friends. You could quietly walk your stream bank, becoming familiar with its own unique characteristics, observing the natural changes of the seasons, enjoying the life cycles of plants and animals living there. You'd also be alert to any conditions that impact on the health of your charge, keeping watch for problems and becoming a vital part of the solutions.

The Stream Team program, started in the summer of 1996, quickly had twelve groups set up. "This will be the backbone of what we're doing, encouraging people to see what's there, to pay attention to the river and its watershed — to enjoy it as well as to look for problems that need to be addressed," says president Kinny Connell.

A comprehensive training program is now in place to teach volunteers about river conservation practises and methods of assessing various river conditions. Included in the training are river walks and the Mad River Slide Show. As well as learning about the diverse Mad River watershed, the program encourages volunteers to enjoy it, to appreciate its bounty and its beauty.



**Kelly Coleman
assesses a tributary
as part of
Stream Team
training.**

**Photo by Richard
Czaplinski**

Writing in *Mad River Matters* then board member Keefer Irwin quoted Stephen Trimble, 20th century American writer and photographer.

"Floating the rivers takes you through the land, not merely over its surface ... this particular form of intimacy ... can only be had on rivers. It flows through your memory and leaves behind a ripple of emotion: Reverence."

Mad River Watch

Founded in 1985, the Mad River Watch Program is one of the oldest and most successful volunteer water quality monitoring programs in the nation. In 1991 the Friends of the Mad River became the primary sponsor of Mad River Watch, and it has been at the core of the Friends' conservation and education program ever since.



Richard Czaplinski, environmental protection consultant to the Friends, explains the diverse ecology of the Greenway in Waitsfield. The Greenway is a river path that in some places borders the stream bank, in others, follows a buffer strip between the path and the river.

Photo by Ann Day

The Mad River Watch is diligent in monitoring the water quality of swimming holes in the Valley. The River Forums held in 1994 showed that a great public concern was to keep the river and its tributaries clean and swimmable. The *Best River Ever* lists nineteen swimming holes in the Valley, only four of them publicly owned. One of the publicly owned areas -- the Ward Access in Moretown -- is rated as "significant for very heavy use." While swimming in the Mad River is generally considered to be good, a basic question is: Will the swimming holes still be there for our children and grandchildren to enjoy as we do today?

The Mad River Watch program is supported by committed volunteers who help in collecting samples, making field observations, assisting in the lab, doing slide shows about the river and other essential tasks. An annual fundraising appeal supports this vital work of monitoring the health of the river and its tributaries.

An Innovative Streambank Stabilization Project

The 1824 House Inn Streambank Stabilization project takes its name from this historic landmark on Route 100 north of Waitsfield village. Across the road, through the field and down to the river, Friends of the Mad River gathered in the fall of 1996 to work on this remarkable reclamation site and aquatic habitat restoration. (So when you read a streambank stabilization report referring to "1824 volunteers" it means the site, not the numbers.)

Designed by Richard Czaplinski, environmental protection consultant to the Friends, the project utilizes several techniques of an almost lost art called soil bioengineering. Writing in *Mad River Matters*, board member Mary Gow noted: "In the early part of this century, through Vermont's recovery from the 1927 flood, rootmass and organic structures were the prevalent tools for bank stabilization. As equipment capable of moving large amounts of rock became available and the

popularity of rock rip-rap to armor collapsing banks increased, many of these techniques were forgotten."



The stabilization project utilizes bioengineering techniques designed to slow the flow of the water at the bank's edge.

Photo by Richard Czaplinski

The severely slumping river bank across from the 1824 House Inn, at a bend in the Mad River, was an ideal candidate for this closely-watched restoration. During the fall of 1996, using rediscovered and new vegetative practises, the volunteers worked on a 300 foot revetment designed to slow the flow of the water and allow sediment to accumulate among the branches and needles of securely cabled hemlock trees. Live black willow posts were planted in holes punched by a steel ram attached to a backhoe, followed by fascines of willow twigs covered with soil. Hopefully the willows will grow and provide not only a stable root structure but also shade to cool the water for aquatic habitat. Besides being less natural in appearance, the past practise of rip-rapping has the disadvantage of heating up, making the water warmer and less healthy for fish.

The streambank project has been monitored throughout the winter, and when the ice went off the river on February 22, "everything held up beautifully." Of the 122 willow posts put in last fall only three succumbed to the ravages of the ice. "So far so good," Kinny Connell said in late February, "but we'll know more when things start sprouting." The spring task was the planting of a 25 to 50 foot buffer strip around the revetment area. Throughout this exciting project at the 1824 site, all activities and monitoring of work has been video-taped. This video will be completed in June.

Mary Gow also wrote: "Beyond its local significance, this project is of considerable interest to other watershed organizations and water resource professionals because it will test the limits of soil bioengineering."

Prior to the reclamation project, Warren board member John Norton wrote "... perhaps [damage from the hard winter of 1995-96] was calculated to restore our respect for the forces of nature, remind us of our place in the natural order and renew our commitment to protecting the best river ever."



**Volunteers install an erosion control mat at the
1824 House Inn streambank
stabilization site.
Photo by Kinny Connell**

The Mad River:

A Real World Laboratory for Learning

Many excellent river studies involving schools and communities have been carried out in recent years. These two pages represent only some of the fine river ecology being taught throughout the Valley.

Harwood Middle School science teacher Nancy Spencer sums up the philosophy behind her river unit, which included studying the nearby streambank stabilization project on the Mad River.

"The river study helps students to develop a sense of place. Through scientific inquiry, students develop an appreciation of the biological, aesthetic and cultural significance of the Mad River. Middle school age is an ideal time to develop environmental ethics and to critically examine land and water use issues."

A Typical Student Project

As a sixth grade student at Fayston Elementary School, Aja Zoecklein won the 1995 Clean Water Week Poster contest, for which the Friends of the Mad River serves as one of the sponsors. Aja focused on her theme: "Three-fourths of our earth is water; without that we only have one-fourth of a life to live."

Now an eighth grade student at Harwood Middle School, Aja produced an A+ research project, a photo documentation of healthy and unhealthy aspects of local rivers. Aja was inspired by her science teacher, Wendy Moore, who designed and taught a hands-on River Ecology unit. Aja was also inspired by Kinny Connell, of the Friends of the Mad River, who visited the class and presented the Mad River Slide Show, as well as a discussion that brought students into close involvement with their projects.



In the introduction to her unit, Wendy wrote: "Adolescents are receptive to learning, especially if the learning takes place in an outdoor setting." She ended: "With so many pressures on adolescents living in the 1990s, it may be helpful for them to realize that there are peaceful places for them to feel connected."

Referring to all of her eighth graders' projects, Wendy said, "They were amazing."

Left: Aja Zoecklein reviews maps she used for her river ecology project.

Photo by Earline. Marsh

The Moody River

It has connections with the Mad River, but it's not on a map. Students in Katie Sullivan's third and fourth grade class at Warren Elementary School could readily explain this riddle. The Moody River is their own classroom indoor ecosystem loosely patterned on nearby Freeman Brook — also known as Kids' Brook — which runs through Warren Village.

In *Mad River Matters*, Katie Sullivan, who is a Friends of the Mad River board member, wrote: "Working as a team of scientists, we explored the Freeman Brook in depth. The biologists collected samples of macroinvertebrates and recorded other living things they saw in the area. The physicists noted the physical properties of the brook: water and air temperature, stream velocity and depth at various points along the brook. The chemists tested the pH and dissolved oxygen in the water. We brought some of our living samples back to the classroom and studied them closely using microscopes and identified them using the River Watch macroinvertebrate chart."

The indoor river model used as a guide included a marsh at one end, a riverbed and a pond at the bottom with a pump sending water back up to the marsh. "We decided that our river would have three waterfalls and two bends. After scoping out an area in the classroom and collecting materials, we were ready to begin construction," Katie said.

With the assistance of skilled and dedicated parent volunteers, the river was ready for water. "Armed with buckets and excitement," Katie wrote, "our class walked down to Kinny Connell's house on the Freeman Brook. After playing along the stream and enjoying the sunshine, we filled our buckets with water and lugged them back up to our classroom. We filled the pond (aquarium) and started the pump."

Katie explained the name, Moody River. "For reasons still unknown to us, we are unable to keep our pump working continuously, thus earning our river the name The Moody River."

Katie concludes: "The amount of math, science, history and art that is involved is amazing, as is the interest and fun generated by this kind of project.

Back in the classroom Cassidy DeMos and B.R. King examine their discoveries.

Photo by Katie Sullivan



Debris Avalanches

In the 19th century four significant naturally occurring landslides were recorded in what we now call the Slide Brook Basin, in the western part of the Mad River watershed: 1812, 1827, 1840 and 1897. As Fayston historian Anna Bixby Bragg wrote in 1898: "... they may have started in Warren, but they surely landed in Fayston."

Technically these were debris avalanches: long, narrow, sudden slope failures made up of masses of bedrock, soil and trees that flow downslope, rapidly gaining momentum and adding mass during descent. Historically, debris avalanches in Vermont have been triggered by heavy, wind-driven rains, on steep mountain slopes with highly absorbant, saturated soils and sediments, in a region where peaks exceed 3,000 feet.

Brian Stone, chief of Forest Management for the State of Vermont, Agency of Natural Resources, provided a wealth of material for this research on "such a unique subject, one which has had a significant impact on Vermont mountain-sides, streams and valleys." Brian wrote the following summary paragraph:

"Slides similar to the ones occurring in Slide Brook are very common in Vermont. Because of glacial topography and weather these catastrophic events have occurred from time to time. USGS Geological Survey Bulletin 2043 identifies thirty occurrences from 1811 to 1984. Heavy glacial rocks planted atop long steep slopes acted on by frost and heavy rains are the most common cause of these small but sometimes devastating events. It is nature following gravity's call to find a common level."

Green Mountain Slide

Laura Brigham Boyce of Fayston wrote the following account, which appears in Abby Maria Hemenway's *Vermont History Gazetteer*, 1882.

The famous "Green Mountain Slide," which began within a few feet of the summit, where the town is divided from Buel's Gore, in sight of the homestead where I was born, occurred in the summer of 1827. It had rained quite hard for some days, and the soil, becoming loosened, gave way, carrying with it trees, rocks, and the debris of ages, on its downward course. Gathering impetus as it advanced, for the mountain is very steep here, it went thundering down the mountainside a distance of a mile or more, with a crash and rumble that shook the earth for miles around, like an earthquake. One branch of Mill Brook comes down from here, and, being dammed up by the debris of this grand avalanche, its waters accumulated till it became a miniature lake, then overleaping its barriers it rushed down to its work of destruction below.



"Birch, spruce and hemlock trees two feet and more in diameter were twisted off and stripped of bark and limbs as clean as if done with an axe. On Sunday the land within a radius of half a mile around Mr. Bettis' home looked like a vast camp-meeting."

Quote from the VERMONT WATCHMAN & STATE JOURNAL
While not authenticated, this photo is thought to be the 1897 landslide.
Courtesy of Waitsfield Historical Society

100 Years Ago:

The Fayston Landslide of July 14, 1897

Condensed From VERMONT WATCHMAN & STATE JOURNAL,
Wednesday July 21, 1897

Damage Done by High Water in That Fertile Spot - The Loss Will Reach Thousands of Dollars - Great Land Slide on Fayston Mountain - One Hundred and Twenty Acres of Dense Timber Land Hurled into the Valley Below - Narrow Escape of People Living at the Base of the Mountain - The Story in Detail

A representative of THE WATCHMAN drove through the Mad River valley last week to look over the destruction wrought in that fertile section by recent floods, and to see the havoc and ruin left by the landslide from Fayston mountain.

Bad as was the flood of the last week in the Mad River valley this was not the first time that section has been visited by high water. The worst flood in the history of the valley was in July, 1830, when the high water carried out the dam at Waitsfield, and a large portion of the land between Waitsfield and Moretown was under several feet of water. Again in July, 1850, and in October, 1869, disastrous floods swept through the valley, ruining crops, carrying away bridges and badly damaging highways.

THE FAYSTON LANDSLIDE

An occasional old resident remembers the great landslide of June 3, 1827, when about one hundred acres of heavily timbered land slid off Fayston mountain. But it will be many a long year before the "oldest inhabitant" of that section of Washington county will cease to talk of the occurrences of last Wednesday morning, when one of the most extensive avalanches ever known in Vermont, and possibly New England, without warning came rushing down the side of Warren and Fayston mountain and landed in the valley below.

THE WATCHMAN reporter visited the scene and climbed the three miles between the immense heaps of debris in the valley to the starting point far up the mountain. Mr. Hollis Mehuron's farm buildings were directly in the track of the avalanche, and it seems a pure providence that about 100 rods from his buildings the avalanche took a sharp turn, following the brook and came between the buildings of Mr. Mehuron and Julius Hickory.

The top of the slide was in the town of Warren. An immense rock estimated to weigh nearly two hundred tons fell that morning a distance of ten rods from a nearby perpendicular height, and where it struck was the beginning of the slide. It started near the top of the mountain at two separate points, and after about 100 rods the two came together and the combined avalanche went thundering and crashing to the foot of the mountain, nearly three miles, and its momentum carried it nearly a mile further upon comparatively level ground. A small brook trickles down the mountainside in this valley swept by the landslide, and this stream was swollen to a raging torrent. About 120 acres of heavily wooded spruce timber land went down in the slide. The average width of the avalanche was 20 rods and at several points near the top of the slide it was at least 60 feet deep. The noise was deafening and was heard for five miles and more. The avalanche made two sharp turns, one about a half a mile from the top of the slide, and again as it left the forest just back of the residence of Hollis Mehuron.

The last house under the mountain is occupied by Charles Bettis. His buildings narrowly escaped destruction. The slide passed so close to his house that huge trees tumbling down came within a few feet of his barn.

During the fifteen minutes that the seething mass was passing the Bettis home they supposed the whole mountain was coming down upon them and expected every moment that their little home would be crushed and they themselves hurled into eternity.

Mr. Bettis knew that the buildings of Mr. Mehuron below him were in the track of the avalanche. It was more than an hour before he learned that the landslide had taken a sharp turn and that Mr. Mehuron and Mr. Hickory were safe.

Halfway from the starting point to the valley below, the force of the avalanche was so tremendous that it tore out the logs, rocks and debris deposited by the old landslide of seventy years ago. The logs were in a remarkable state of preservation, appearing to have lain only a few years.

By actual measurement the slide started 3,894 feet above sea level and landed 1,478 feet above sea level, making an actual fall of 2,416 feet.

Mr. Mehuron said: "I was working in my potato patch when I heard an awful noise, which I first thought was thunder. My women folk came running and told me that the mountain was all sliding down upon us. By that time the thing was in sight. It was headed straight for my buildings, and I expected we would all be killed. But the slide followed the course of the brook and we were safe. My potatoes, my grain, and my mowing are all ruined, but I am happy we are all alive."

Just beyond Mr. Mehuron's, across the valley which the avalanche followed is the home of Julius Hickory. He and his family suffered a terrible fright, but aside from the damage to his land by the flood-wood, they were uninjured.

In the highway between the residence of Mr. Mehuron and Mr. Hickory the logs, limbs, roots, boulders, gravel and mud were all in such a compact mass that it was impossible to tear them apart with horses and oxen, and to clear the highway it was necessary to cut a passage through the pile. Mr. Mehuron thinks he will be obliged to use dynamite to loosen the piles left in every direction scattered over his fields.

A trip up through the canyon left by the slide gave an added idea of its tremendous force. Birch, spruce and hemlock trees two feet and more in diameter were twisted off and stripped of bark and limbs as clean as if done with an axe.

When the reporter first reached the lower end of the slide he innocently inquired how so much peeled timber happened to be so far up on the mountain and was informed that the process of peeling was carried on during the wild ride down the mountain.

The avalanche and the ruin it left is a rare sight. On Sunday the land within a radius of half a mile around Mr. Bettis' home looked like a vast camp-meeting. People came on foot, on bicycles and by every known conveyance, and it was anything but a quiet Sunday in that neighborhood.

The Fayston landslide of 1897 will pass into history as one of the most important events in the history of Vermont during the closing years of the nineteenth century.

Note: One rod, an old-fashioned unit of measure, equals 16.5 feet.



Alden Bettis of Waitsfield, grandson of Charles Bettis, Sr., remembers his grandparents and his aunt Lena Bettis Chase talking about the landslide and the great thundering noise it made as it rumbled down the mountain. Lena Bettis was twelve years old at the time, living with her family on the farm off German Flats Road, the "last house under the mountain" in the preceding account. Alden was a toddler when his mother died, and his Aunt Lena, his father's sister, without children of her own, brought him up.

Jessamine Bettis Larrow remembers Aunt Lena telling of the great landslide in 1897. (Jessamine's father Henry was Charles and Lena's brother.) Lena was outside getting water from a water trough when she heard the dreadful noise of the slide coming down the mountain. It was great good fortune that the family and their dwelling were spared. Lena Chase lived for many years to come and led a productive life well into her 90s. Jessamine recalls, "Aunt Lena told us the story a good many times."

The following is a condensed version of an account written by Theron Baldwin, quoted in U.S. Geological Survey Bulletin 2043.

On the 30th of June, I went with sixteen of my neighbors to visit the spot so singularly marked by Providence, which I am now about to describe. I found the slide to commence near the top of the mountain, between two large rocks which were stripped of earth, opening a passage of four rods wide; it proceeded in a south easterly direction, gradually widening for a distance of 200 rods, to the south branch of Mill Brook in Fayston. It swept every thing in its way; overturning trees by their roots, divesting them of roots, branches and bark, and often breaking them in short pieces. Rocks, judged to weigh from 15 to 20 tons were moved some distance. From where it entered Mill Brook, its course was in a north easterly direction, 280 rods, the natural course of the brook being very small; but the channel cut by this torrent is now from two to ten rods in width; on either side are high piles of flood wood. Some trees are standing on their tops, stripped of roots, branches and bark. Much of the timber is apparently buried several feet in sand and mud. One black ash was literally pounded into a broom whose brush is seven feet long. The whole distance of these ravages is a mile and a half, and the quantity of land thus suddenly metamorphosed into a barren waste is 25 acres. The force of water must have been very great; in some places, from appearances, it must have been 30 or 40 feet high. Heavy rains for several days preceded this debris avalanche, which produced a roar that could be heard for miles, thought to be an earthquake or a clap of thunder.

Note: The date of the 1827 slide has been given as June 3rd, 27th or 28th in various accounts.



The following account was contained in the “Historical Sketch” written by Anna Bixby Bragg for the Fayston Centennial Celebration in 1898.

There have been several land slides on the eastern slope of the Green Mountains; though they may have started in Warren or Lincoln, they surely landed in Fayston.

The first one was in 1812. The longest slide occurred June 28, 1827. There had been a heavy rain for some days. The noise and roar of the slide was heard for miles. A party of a dozen men visited the place on the next fourth of July and reported the length of the slide from the top to the turn 200 rods, and from the turn to the lower end 280 rods; greatest width, 24 rods. There was a jam of naked timber piled up at the lower end, 15 or 20 feet deep, for a long distance. There was another one [slide] in 1840.

The most remarkable slide was on July 14, 1897. After a copious shower which lasted the whole night and most of the early morning a heavy, roaring sound was heard a long distance and for a long time. Those living near “slide off brook” soon saw a tremendous mass of floating trees, rocks and mud coming down the stream. It cleared a wide channel in its course as it went on its way of destruction. Bridges, flumes and meadow land were swept away by its resistless current. Before the summer was over thousands of people from all about the country had visited its wonderful course.

U.S. Geological Survey Bulletin 2043, from Monthly Weather Review, July 1897, U.S. Department of Agriculture, Weather Bureau:

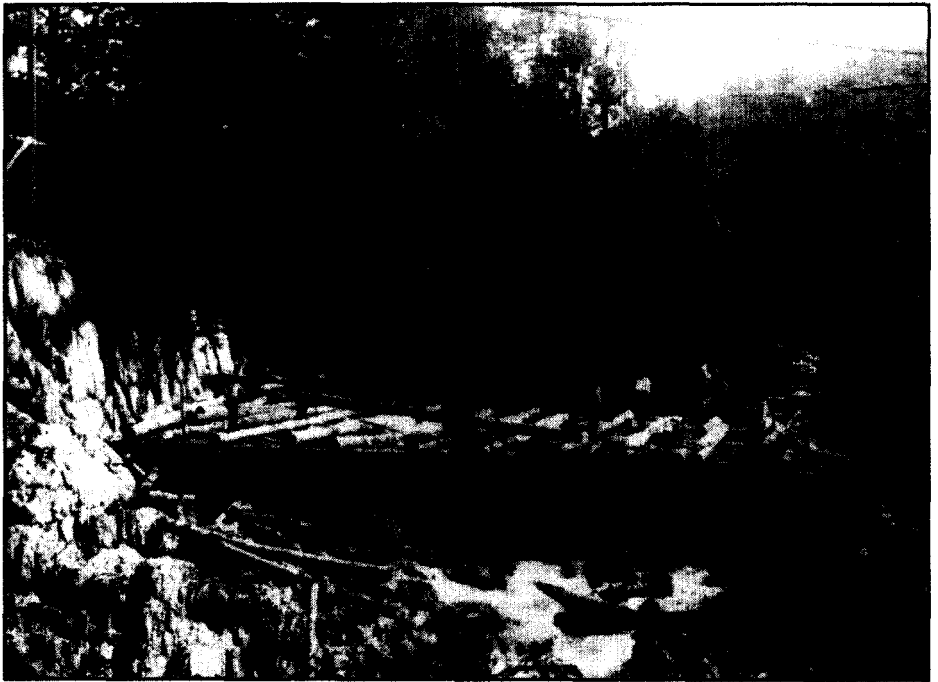
The landslide of the present month [July 14, 1897] had been preceded by heavy rains, but it seems to have been started by the fall of an immense boulder near the top of the mountain [Mt. Ellen] in the northwest of Warren township at an altitude of about 3890 feet. Simultaneously, another slide began at a point a little south of this boulder; the two slides joined together after a path of about 100 rods, and the combined avalanche continued not only three miles eastward to the foot of the mountain, but a mile farther over comparatively level ground The foot of the slide now covers an area of nearly a quarter of a mile square . . . about 1300 to 1478 feet above sea level, making an actual fall for the whole mass of about 2400 feet. The slide apparently ran down the ravine occupied by Clay Brook and landed at its mouth in the valley of the Mad River.

Historian Ralph Nading Hill adds a footnote: “In 1897, 120 acres of forested land slid 2,416 feet off the mountain at Fayston with a roar that convinced inhabitants it was the millennium. A similar landslide of 100 acres had occurred near the same spot in 1827. Settlers once farmed some of the high land above Mad River but abandoned it with the opening of the West.”

Hydro-Electric Power on the Mad River

Only the rush of the Mad River through this scenic gorge breaks the stillness of an early spring day. Within a few hundred feet the Mad River ends its 26 mile journey as it enters the Winooski River. Leaves are not yet out on trees which are thick along the steep river banks, and it would be easy to walk by on this pleasant dirt lane and miss the silent remains of the Lovers Lane hydro-electric station, also known as the #7. These unobtrusive remnants, survivors of the great flood of 1927, are a significant part of the cultural history of the Mad River.

Construction on the Lovers Lane hydro-electric plant was begun in 1903, during a time of rapid improvements in the technology of generation, transmission and interconnection in hydro-electric power. On October 28, 1904, the plant generated its first power. It served only twenty-three years, until the flood of November 4, 1927, took out the "timber crib" dam and brick power house, in its path of destruction. The #7 was among eleven hydro-electric facilities in Vermont so extensively damaged by the flood that they were abandoned.



This remarkable photo shows the Lovers Lane timber crib dam under construction in 1903. On October 28, 1904 this plant, also known as the #7, generated its first power.

Photo courtesy of Vermont Historical Society

The remnants today stand as a fine example of early 20th century stone construction. On the north side of the rusting Lovers Lane bridge, built in 1928, the line of penstock cradles forms a path along the river's edge to the rock-solid substructure of the once-brick powerhouse. (A penstock is a large pipe that carries water from the dam to the power station.) South of the bridge one dam abutment stands almost 35 feet above the river, a testimony to the great labor it took to build this by hand, without cranes, one stone upon the other.



Photo courtesy of Vermont Historical Society

Above: The penstock leading to the #7 powerhouse, prior to the 1927 flood.

Right: Remains of the penstock cradles today, the author dwarfed near the last one.



Photo by Gary Parkinson

In the early 20th century there were three hydro-electric power plants on or near the Mad River: The Middlesex station, still in operation, owned by Green Mountain Power Corporation is known as the #2, the Lovers Lane as the # 7 and the current Moretown Hydro as the #8. Initial construction dates vary slightly from one account to another. The numbers, assigned by GMP to identify the stations, are in the order in which they were built.

Remembering a Tragedy

Ethel (Progen) Ryan grew up in Middlesex and now lives on Route 2 on the other side of Montpelier. She has a vivid memory of a tragic accident that occurred more than seventy years ago when she was a young child. Her uncle Ralph Johnson lived in the big white house across from the Middlesex country store, and she lived nearby. It was the summer of 1925. Ethel had just cleaned her precious black patent leather shoes with Vaseline and was carefully wrapping them in tissue paper when she saw Uncle Ralph. He was whistling as he waved to her and walked by on his way to work at the Lovers Lane hydro-electric plant. That was the last time she ever saw him.

Later that morning Ralph Johnson was on a ladder when the phone rang. As he got down to answer it he slipped, fell, hit a high tension wire and was electrocuted. "It was such a tragic thing," Mrs. Ryan said. "If he had fallen three or four inches away he would have landed on a rubber mat and would probably have survived."

Mrs. Ryan remembers hearing that Uncle Ralph had cautioned his wife, her Aunt Bernice, to drive carefully on her way to Waterbury that morning, because the road was newly paved. His family had worried about Ralph while he served in France during World War I. But he survived the war, as well as driving around the Middlesex area on a fast motorcycle, a daring feat for the times.

The accident was discovered, Mrs. Ryan related, when the main office repeatedly called the Lovers Lane hydro plant — and there was no answer.



The author by the remains of #7 sub-station, on Lovers Lane.
Photo by Gary Parkinson



Clifford Bruce with the Mad River in the background. He said, "I never saw the ice go out so quickly."

The photo was taken on February 24, 1997 and the ice had gone out two days earlier.

Route 100 B and the pond in front of the Bruce residence, about 1910.

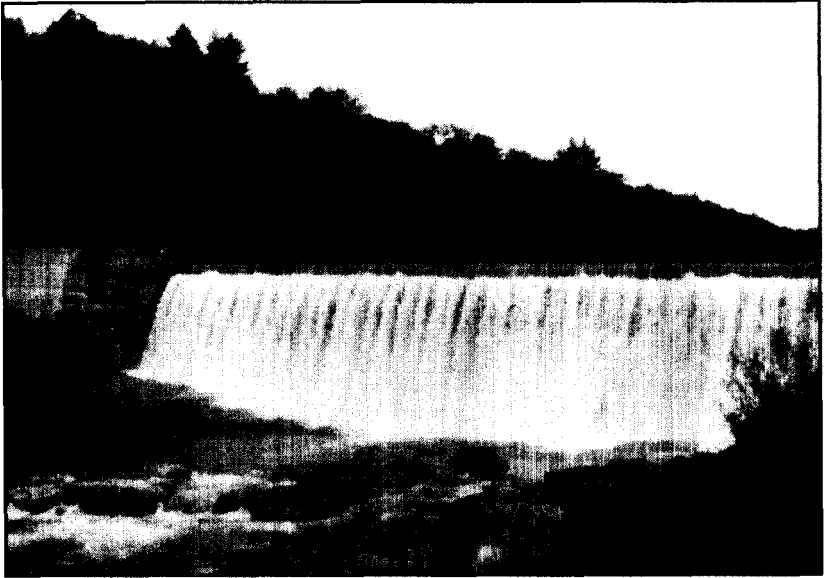
Photo courtesy of Clifford and Cora Bruce



Clifford Bruce, who has always lived in the large white house on Route 100B, has fond memories of the lovely pond across the road, created by the #7 dam. He remembers long summer evenings when he and his friends would build a bon-fire and fish until midnight.

Regular travelers on Route 100B will know the Bruce home by its American flag flying proudly from a tall pole and a sign on the front lawn, Pygmy Goats For Sale. They will remember the lone "fisherman" a few years ago, sitting in a comfortable chair on the rocks by the river's edge, or more recently a boat on the rocks, washed away in high water. Clifford smiled and said, "We're looking for something new."

Clifford Bruce recalls that Washington Electric brought power to their farm in 1946. Power had come into the Valley earlier, but it went through the woods on the other side of the river. From the 1920s to 1946, like other farmers in the area, the Bruces relied on their own small power plant, a generator with 16 storage batteries. When commercial power became available, the Bruces had to change all their electric fixtures from 32 to 110 volts.



Miss A.V. Beckley was the photographer of this early though undated photo of the #8 dam.

Photo courtesy of Vermont Historical Society

Less than a mile upstream, on Route 100B, is the #8 hydro-electric station built in 1910. Unlike its stone-crafted neighbor, this was a “modern” station with the dam, powerhouse foundation and penstock supports all poured-in-place concrete. This concrete construction proved to be stronger than the old timber crib design of the #7. The #8 dam and power station survived the 1927 flood with relatively minor damage. Many others, including the Middlesex (#2) station, initially built in 1895, were washed away in the flood but rebuilt to the more modern standards of the late 1920s. The #8 station operated from 1910 through 1956 when Green Mountain Power, who owned it at the time, felt it was no longer economically viable.



Downstream of the #8 dam today, showing remains of the old powerhouse.

The oil embargo of 1973 changed the economics of the electric power industry, and hydro-electric power started to make a comeback. Initial costs of building a hydro-station are high, but once a plant is established, maintenance is lower and there are no fuel costs.

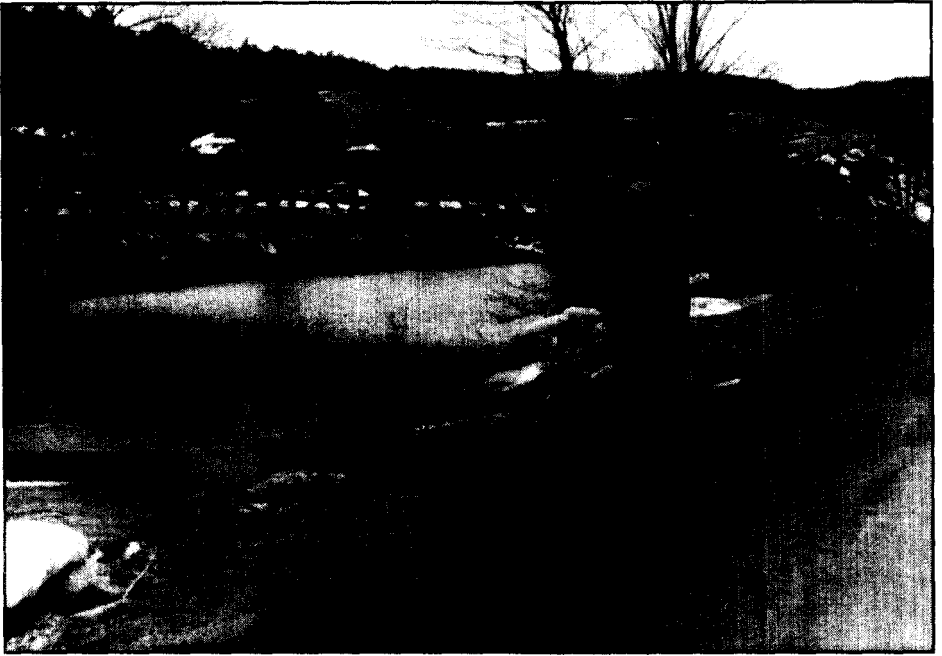
During the early 1980s private developers looked into the feasibility of rebuilding the #8 station. The original power house was located almost 2000 feet downstream from the dam. The concern with rebuilding the old power house was that the water would go through the penstock and dry out the river bed. The new developers agreed to build the power station at the base of the existing dam. Reconstruction on station #8 started on 8-8-88. The dam was rebuilt to its original height. To assure against wash-out, 50 foot long anchors were drilled through the dam and embedded 20 feet into the rock below. The existing hole through the dam for the penstock had to be enlarged. While doing this the construction crew found 4" by 4" wooden stakes driven into the rock, to help anchor the concrete to the rock river bed. The wooden stakes, embedded in concrete, were so well preserved they looked new rather than nearly 78 years old.

The rebuilt #8 hydro station now supplies electrical energy to the local power grid.



Gary Parkinson, who contributed significantly to this section on hydro-electric power, explains details to his son Cooper. Gary was project engineer for the 1988 reconstruction of this plant.

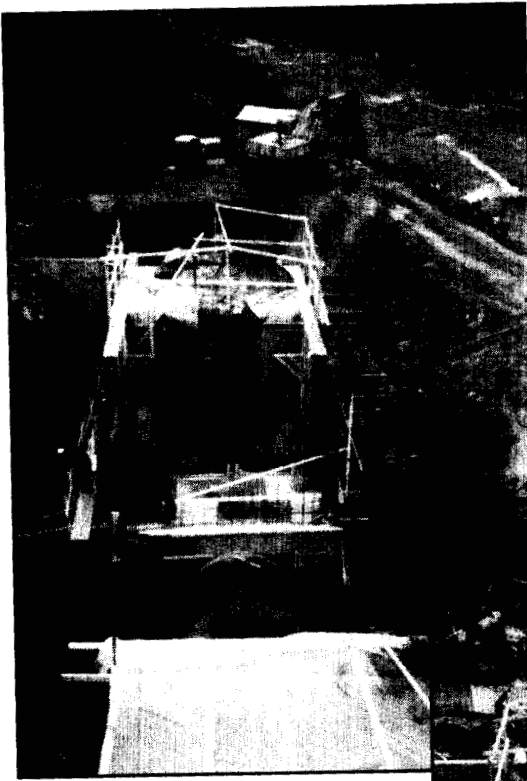
Both the #7 and #8 stations were originally developed by the Moody and Almon Partnership, which was incorporated in 1911 under the name of Mad River Electric Light & Power. Four months later the name was changed to Waterbury Light & Power Co., Inc. In 1916 the two stations were purchased by Montpelier & Barre Light and Power Co., Inc., which in turn was purchased by Peoples Hydro Electric Vermont. In 1928 the company name was changed to Green Mountain Power Corporation.



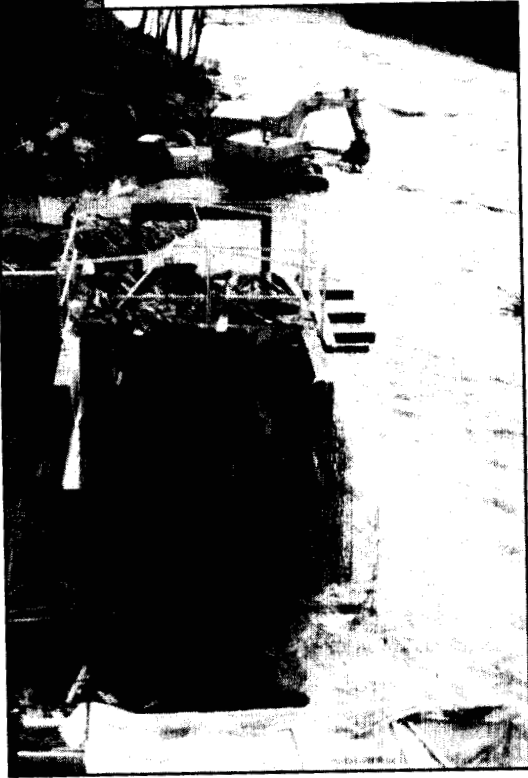
Kenneth Austin across the road from his house, with part of the weir in the lower left corner and the stream gauging station in the upper right.

Upstream of the #8 station is a weir, a low dam built in the river for measuring the depth of the water, which is then converted to a water flow. Along the shore just upstream is a gauging station that looks like a 3 foot square concrete telephone booth. This houses the monitoring equipment that has measured the water flow in the Mad River since 1928. For years Kenneth Austin worked for Green Mountain Power, and he would walk across the road in front of his house to record the water level every day at 8 am and 4 pm. He would send weekly records to GMP. In the 1940s a strip recorder replaced Kenneth's twice daily recordings. Today river flow monitoring is done by an electronic signal sent to Pembroke, New Hampshire, where the data is collected and analyzed by the U.S. Geological Survey. River flows are typically measured in cubic feet per second (cfs. One cfs equals 450 gallons per minute.) By analyzing flood marks geologists determined that in November, 1927, the river peaked at a depth of 19.4 feet at the point where the weir is now located. This correlates to 23,000 cfs. Kenneth, who has always lived in this location, was twelve years old at the time of the great flood. He recalls watching the river rise. His family had to leave their house and move up to their camp on higher ground. It took a lot of cleaning up, Kenneth said, but the house withstood the ravages of the flood.

Only twice has the Mad River exceeded even half the 23,000 cfs of 1927. Records show a 1938 flow of 18,400 cfs and 1976, 13,400 cfs. By contrast the lowest recording was October 1, 1930, when the river measured a scant 1.4 cfs.



**Left: On November 5, 1988,
the cubic flow per second (cfs)
was 250.**



**Right: The next day, November 6,
1988, the cfs was 3500.**

**Photos by Gary Parkinson, taken during the 1988 reconstruction,
done by Pizzagalli Construction Co.**

Henry Parker, a long-time official at Green Mountain Power Co., predicts:
“Unless something catastrophic happens, like the '27 flood, the hydro stations in
Vermont will continue to function.”

Mad River Glen

Over the years the Mad River has lent its name to many endeavors in the Valley — but none is more enduring than the legendary Mad River Glen, the first of three local ski areas. (Mad River Glen officially opened on December 11, 1948; Sugarbush on Christmas Day, 1958; and Glen Ellen on December 12, 1964.)

In the December, 1947 issue of *Ski Illustrated*, Mad River Glen founder Roland Palmedo wrote:

The news that there is to be a truly major new ski resort in the East is news indeed, for despite the atomic boom in skiing during the past decade, localities in this half of the country that can fairly lay claim to being in the major category are still to be counted on one hand, — and with fingers to spare. Located in the “Snow Corner of New England,” which also harbors the renowned Mt. Mansfield, Mad River Glen promises to rival even the best of the Western resorts for full-fledged descents, uphill transportation, and snow cover.”

“The shelter, to be called ‘The Basebox,’ is well on the way to completion and promises to be a unique installation. Oriented and designed on solar principles, it faces both the sun and the skiing activities. A window composed of four huge panes of Thermopane glass features the warming room, which also has a large stone fireplace.”



The Basebox, 1947

“Three feet of snow in November, 1947, prevented the completion of the chairlift and the grand opening of Mad River Glen. The opening ceremony was held December 11, 1948, but lack of snow postponed the first day of skiing on the mountain until January, 1949. An all-day lift ticket was \$3.50.”

Mad River Valley Winter Carnival, *Ski Nostalgia* newsletter, February, 1993

“When Mad River Glen opened in 1948 Route 17 was still a dead-end dirt road. Some people haven’t been back since.”

Ken Quackenbush, long-time general manager
Ski Nostalgia newsletter, 1993

One of the charms of this venerable ski area is that through the years not a great deal has changed.

More information about the early years of Mad River Glen appears in the Waitsfield-Fayston Telephone Co. 1992 directory.

My First Guest

A True Story: The Christening of Ulla Lodge, Mad River, Vt.

by H. Sewall Williams



The following is a condensed version of a story appearing in SKI, December 1, 1953. The former Ulla Lodge is now the Hyde Away on Route 17.

It all began, that is my lodge business did, a few years ago when I was most optimistic about the approaching ski season. I could visualize thousands of eager skiers phoning day and night for reservations, car loads of young and old alike knocking on the door, and an overflow of guests that left some snoring on mattresses on the kitchen, living room and dining room floors. But I suppose I've always been an optimistic non-business man or I probably never would have remodeled the two old farm houses and barn and waited for snow and skiers.

All was in readiness. The place was immaculate; the beds made; the bar well-stocked; the reservation sheet empty — and not enough snow to ski on up on the mountain.

I was sitting comfortably in our cozy living room when I heard a loud knock on the office door. After extracting myself out of a deep powder dream somewhere in the West, I opened the door. There stood a man with a suitcase. "Great heavens," I thought, "my first guest — and not enough snow for skiing." Nevertheless, I introduced myself and before the poor man could say more than a few words I had him sign the register and took him on a tour of the buildings.

When we finally returned to the living room I offered him a drink on the house. He politely turned it down and patiently waited for an opening when he might speak. I broke the bad skiing news to him, but it didn't faze him in the least, which I thought a bit odd. Then he spoke, and to this day I can still feel the blush creep up my neck as he said, "Sir, I'm your Fuller brush man. Can I show you my wares? They are in my suitcase in your men's dormitory."

A 1948 painting of Ulla Lodge done by Stowe artist Walter Blodgett.

Courtesy of
Sewall Williams



Hairry GaGoinky

This Hairry GaGoinky lives at Mad River Glen,
 Now I clearly remember quite long ago when
 I was a kid, not much bigger than you,
 Skiing the Catamount under clear skies of blue.
 Back in the sixties, I was one of the aces,
 Though my pants were baggy and my boots had laces,
 Zipping along as cool as you please
 On my beautiful shiny new Northland skis,
 When suddenly I felt a peculiar push,
 Up went my feet and down went my tush.
 There I sat - all red in the face
 In the cold wet snow - oh such a disgrace!
 From the corner of my eye I saw a quick flicker,
 And I heard in the woods a mischievous snicker.
 As I picked myself up and brushed off the snow,
 I continued my descent - I'll admit a bit slow.

Twenty years later, at Mad River Glen,
 I was out skiing - when it happened again!
 Back in the Basebox I talked with my friends.
 They all knew about Hairry, and his vexing trends.
 Just when our performance is feeling so graceful,
 Hairry causes our tumbles - and a wet white faceful.
 No one has seen him, although we've all tried.
 He always manages slyly to hide
 Just before we've come to our senses,
 Before we can think of strategic defenses.



He's just my size -
 only bigger.

By ski historian Glenn
 Parkinson, in collabo-
 ration with Earline
 Marsh.

The only known likeness of Hairry GaGoinky, by a six year old artist.

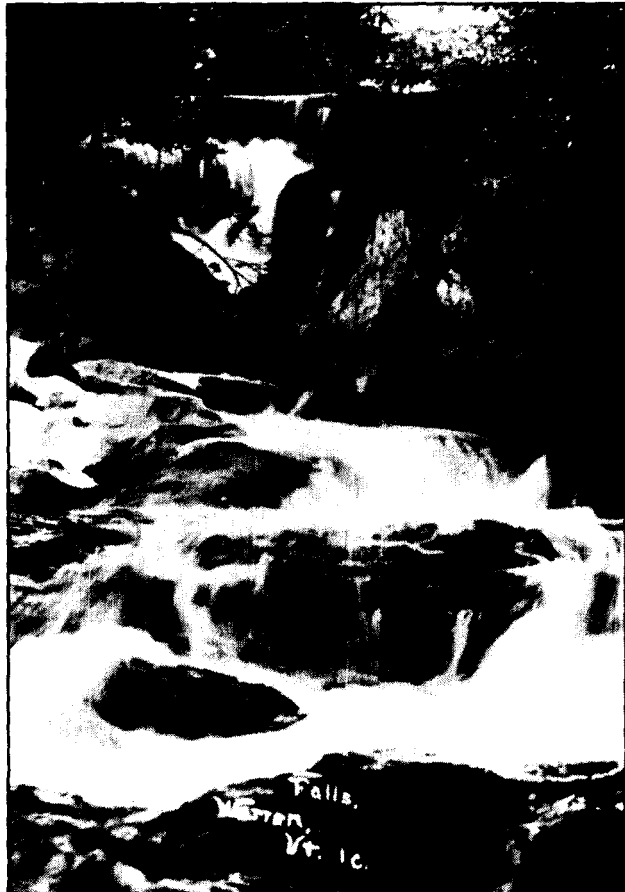
19th Century Mills on the Mad River & Tributaries

Journey back in time to the late 1800s and walk in fantasy through the village centers of the Mad River towns on a pleasant mid-summer day. In Warren Village listen to the rhythmic clanging from George Banister's blacksmith shop and smell the ever-present mingling odors of horses which clutter the hot and dusty street. In Waitsfield Village check out a new rig in James S. Newcomb's carriage shop and stop to chat with a neighbor about the big news of the great landslide in Fayston, and the residents' miraculous escape from potential death. In Moretown Village, stand in I.D. Robinson & Son's grist-mill surrounded by pungent aromas, while close at hand flies drone lazily and in the background the river rushes steadily over the nearby wooden dam.

The following is a composite profile of these late 19th century mills, taken largely from the *Washington County Gazetteer* of 1889 by Hamilton Child, with additional information from the Fayston Centennial publication and Matt Jones' *History of Waitsfield*.

The dam at Warren
Falls in the early
1900s.

Photo courtesy of the
Friends of the Mad
River, original photo
from Rupert Blair.



WARREN is an agricultural town; grass is "king," dairy and stock growing are leading branches of industry; but the manufacture of various kinds of wood products — tubs, shingles, bobbins — is flourishing.

Plyna Parker's saw and shingle mill on the lower end of Warren Village on Mad River, opposite the grist-mill. It came into Mr. Parker's possession in 1877. Mr. Parker also owns a clapboard mill near the tub factory which was built by William Cardell for a starch factory. He stocks the two mills himself and draws his lumber over the mountain to Roxbury.

Bradley Brothers' shingle, bobbin and clapboard mill on Mad River, at the extreme south end of the village, on the site of the scythe and edge tools manufactory built about 1845 by Carlos Sargent, which was burned.

F.A. Allen's saw and clapboard mill on Clay Brook about 2.5 miles from Warren Village, built in 1874. Mr. Allen also leases E. Cardell's saw-mill in Warren Village.

H.W. Lyford's tub factory is located in Warren Village on Mad River, which affords the power with steam as an auxiliary. It was a sash and door factory when Mr. Lyford bought it. He manufactured clothes pins and pail handles before the tubs.

D.C. Geer's carriage, casket and furniture shop in the village was built in 1862. It is supplied with power from E. Cardell's mill.

George Banister's blacksmith shop on the west side of Mad River in the village, built by William Cardell for a tannery. In 1884 Mr. Banister put in a trip hammer and machinery to manufacture steel ox-shoes, slide ox-yokes, mill picks, lumbermen's cant-dogs, stone cutters' tools, bush hammers, axes, and joiners' tools.

Sylvester Banister's grist-mill on Mad River in the village, built by Kimball and Parker. Mr. Banister runs a custom mill with three runs of stones. He sells flour, feed, meal and grain.

Walter A. Bagley's cooper shop is located on Bradley Brook at the lower end of Warren Village. He built it in 1885. He does a small business, making only about 500 or 600 tubs per year.

A.A. Pearson's clapboard mill on Lincoln Brook was built by Erastus Butterfield for a clothespin factory (1878 to 1886).

B.F. Shaw's carriage shop at the lower end of Warren Village, built by George Hanks about 1872. Mr. Shaw manufactures heavy wagons and sleds and does sawing and planing for builders.

Stetson & Son's custom saw and cider mills on Mad River about 2.5 miles from Warren Village.

19th Century Warren: One winter morning Dennison Sargent from Woodstock in the employ of William Cardell went into the mill and down below to cut ice from the water-wheel. Someone raised the gate while he was there, and he was carried under the wheel, down the raceway and under the ice below the mill. Mr. Cardell wondered where Sargent was during the day. Someone looked below the mill and discovered the body in the ice.

Abby Maria Hemenway

WAITSFIELD VILLAGE is situated on the Mad River and so located that it is the commercial center for both Waitsfield and the adjoining town of Fayston. Its nearest railroad station is at Middlesex and it has the benefit of a daily stage. When the legislature granted a petition to tax all land in Waitsfield to build mills, roads and bridges, John Heaton soon built a saw mill and grist mill, where the little village of Irasville now stands.

Palmer Bros. grist and saw mills were purchased in 1886. The grist mill, with three runs of stones, does a large and flourishing business.

M.L. Richardson's saw mill located on Mill Brook was built by Ira Richardson.

Fred Parker's shingle mill at Irasville was originally built for a wool-carding mill. Mr. Parker purchased the property in 1882.

Elmer O. Trask's saw and shingle mill in the northern part of the town. Mr. Trask has owned the property since 1882.

James S. Newcomb's carriage shop is located in the village, where he and his son conduct the business of carriage-making and general repairing.

George W. Olmstead's butter tub shop, established in 1884 located in the village. He turns out about 400 butter tubs per year and does general repairing business.

"The grist and sawmills just beyond [east of the Village covered bridge, on the south side of the road] were built by Roderick Richardson, John Stafford Campbell, and Daniel Thayer in 1829 and 1830, and with their canal and bridge were considered no small undertaking in those days." He also writes, "The mills erected in the village in 1830 by Roderick Richardson, John Stafford Campbell, and Daniel Thayer, were for many years operated by Edwin A. Dumas, later by Oscar G. Eaton, and now by Walter Henry Moriarty."
Matt Bushnell Jones, 1909

FAYSTON is a somewhat irregularly shaped town, abundantly watered by numerous springs and brooks of pure soft water. Without a town center of its own, it relies on adjoining Waitsfield as a center of commerce.

S. J. Dana's shingle mill on Mill Brook, built by the Honorable Ira Richardson, was first used for sawing clapboards, and later for grinding tan bark.

C.D. Billings & Son's [G.N. Billings] clapboard mill on Mill Brook was built by C.D. Billings about 1884.

John A. Grandfield's saw mills are located on Shepard's Brook. Mr. Grandfield has owned the mill since 1886 and contemplates adding machinery for manufacturing chair stock.

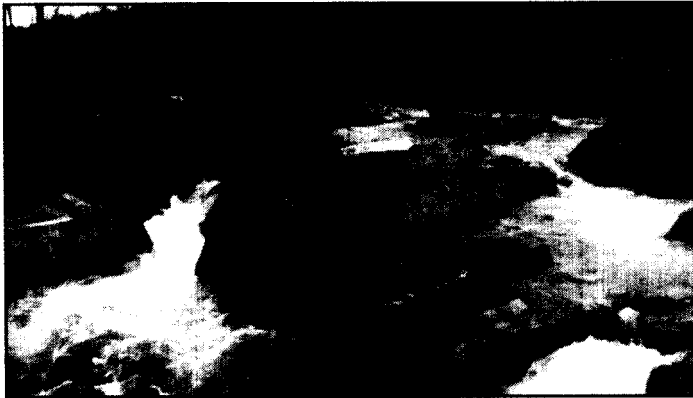
C.M. & M. L. Richardson's clapboard mill on Mill Brook, built by the Honorable Ira Richardson and W.S. Rich.

Edgar A. Davis' clapboard mill in the northern part of Fayston was built in 1874 on the site of one destroyed by fire. Mr. Davis' son Merton works in the same mill.

Hugh Baird owns a clapboard mill near the mountain on Mill Brook.

Calvin Mehuron has the honor of building the first steam mill in town. He saws about 250,000 feet of clapboard a year.

John Chase owns and works a shingle mill on Chase Brook.



Mill Brook today, near Andy Baird's saw mill on Route 17.

MORETOWN VILLAGE is located in the south-western part of town on the Mad River. The nearest railroad station is at Middlesex.

I.D. Robinson & Son's grist-mill in the village was built by Charles Howe in 1831. It has four runs of stones and does custom work. In connection with the grist-mill the proprietors run a saw-mill, built in 1874.

Messrs. Parker & Gillett's saw mills in the village were built by Charles Howe. Mr. Parker purchased the property in 1873 and in 1875 Mr. Gillett became his partner.

Lovejoy & Towle own the carriage and undertaking shops in the village built by Calvin Foster in 1850. This firm also manufactures wagons and sleighs and does general repairing.

H.O. Ward's box factory and grist mill in the village on Mad River. An old mill was burned here May 15, 1887, and J.B. Farrell and his wife, who lived in one part of it, perished in the flames. Mr. Ward's mill was built in the ensuing fall. Charles H. Dale operates the grist-mill. Mr. Ward resides in Duxbury.

Joseph M. Brown & Son's saw-mill and planing mill on road 33 are run by water-power and a forty-horse power steam engine.

G.S. & P.A. Chapman's saw-mill is located on road 33, in the eastern part of town.

Exploring stream banks in the Mad River watershed can yield traces of the historic legacy left by once flourishing mills whose ghosts linger today in scattered, unmarked remains. Many of the mills which survived into the 20th century fell victim to the ravages of the 1927 flood, the most destructive one in recent history.



**A Sunday afternoon by Ward Lumber Co. Upper Mill in Moretown Village
on the Mad River, no date.**

Photo courtesy of Moretown Historical Society.



The same area as it looks today.

Ralph Nading Hill, renowned Vermont historian, said before his death in 1987: “The location of nearly every town and city of consequence in the state bears witness to the waterfall and dam that provided the original settlers their only source of power other than oxen, horses and their own arms and backs. ... The energy our rivers provided literally created the white wooden towns that still symbolize Vermont.”

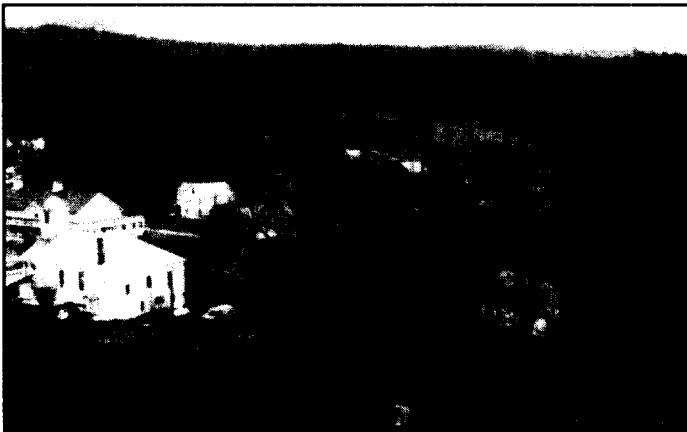
Ward Lumber Co.

Hiram O. Ward's sawmill on the Mad River in Moretown is the lone survivor in a lengthy list of mills which derived power from the river during the 19th century. Hiram made shipping crates from the million feet of lumber cut annually from his extensive holdings. Ward Lumber Company, which in Hiram's day relied on its 22,000 acres of land, prided itself on a practise of planting a new tree for every one harvested. Long-since converted to electric power, Ward's Clapboard Mill continues under the direction of Hiram's great grandson Holly Ward.

Listen to historian Ralph Nading Hill's 1949 description of the Ward operation under Hiram's son.

"Burton Ward's headquarters is his general store and post office, the nerve center of Moretown. His son Merlin is postmaster and manager, and Merlin's wife [Aline], whom the people recently sent to the legislature helps dispense the mail and wait on trade. Villagers frequently telephone Mrs. Ward to ask if they got a post card, and if so, would she read it over the phone. Those who want goods from the Sears, Roebuck catalogue are also accustomed to calling in. Mrs. Ward writes the money orders, adds the sum to their bills at the store, and phones them when the Sears, Roebuck merchandise arrives. There are not many items that cannot be bought right in Moretown. Ward's store offers underwear, roller skates, nail polish, toasters, Wampole's Cod Liver Oil, birthday cards, suspenders, ice cream, dresses, flashlights, detective mysteries, shoes, horse collars, hair nets, glue, rubber balls, flit guns, yarn, beef, grass seed, wallpaper, mousetraps and root beer."

Note: A more extensive history of the Ward family and their lumber operation appears in the Waitsfield-Fayston Telephone Co. 1992 directory, pages 45-50. Information about the Bobbin Mill in Warren is also in the 1992 directory, pages 32-35.

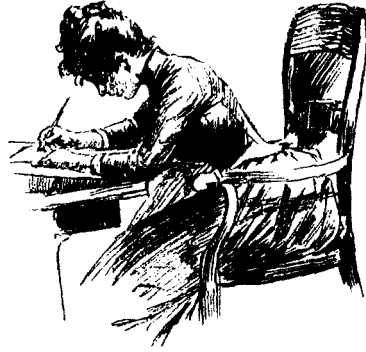


Looking down
into present day
Moretown
Village, Ward
Lumber Co. in
the lower left
corner.

Photo by
Kristen Gallagher

Freshets & Floods

Laura Brigham Boyce wrote the following account of Freshets in Fayston, for Abby Maria Hemenway's *Vermont History Gazetteer*, 1882.



Fayston, along with other towns, has suffered from freshets from time to time. In the year 1830 occurred what was known as the "great freshet." Buildings were swept away, one person was drowned and others barely escaped.

In July, 1858, a destructive freshet visited Fayston and the towns adjacent. It had been exceedingly dry and water was very low. In the afternoon of Saturday, July 3, the workmen in the mill of Campbell & Grandy were desiring rain, that they might run the mill. They got what they desired, only got too much; for instead of running the mill they ran for their lives, and let the mill run itself, as it did very rapidly down stream in less than two hours after the rain commenced. The old saying "It never rains but it pours" was verified; it came in sheets. We retired to rest and slept undisturbed, not being in the vicinity of the large streams. We learned in the morning every bridge between Fayston and Middlesex, but one, was swept away. Campbell & Grandy's mill went off before 10 o'clock, and the house pertaining to the mill was so much undermined by the water the inmates left, taking what valuables they could with them. Mr. Green's family also deserted their house. The water was several feet deep in the road, but the storm soon subsiding, the houses did not go off.

A clapboard mill owned by Brigham brothers, on Shepherd's Brook, was ruined. Not a mill in town escaped a good deal of injury. Many people left their houses, expecting them to be carried down the seething flood. Only one bridge of any account was left in town, and the roads were completely demoralized!

This storm seemed a local one, not doing much damage except in the towns in the Mad River Basin and on tributary streams. I have heard it speculated that two rain clouds met on the mountain ridges. Be that as it may, I think two hours' rain seldom did such damage in any locality.

In the freshet of 1869 Fayston suffered less than many towns but several bridges were carried off, roads cut up badly, and mill dams swept away.

The mill rebuilt on the site of the one swept away in 1858, this time owned by Richardson & Rich, was again carried off, but as considerable of the machinery was afterward found, Mr. Richardson determined to rebuild, putting it a few rods lower down the stream. He has built a fine, large mill there, and feels secure this mill shall stand.

Rev. P.B. Fisk wrote the following account of Floods in Waitsfield, for Abby Maria Hemenway's *Vermont History Gazetteer*, 1882.

In July, 1830, the rivers overflowed the whole valley, sweeping away every bridge in town and doing incalculable damage to the crops, and not a little to the mills. The grist-mill was left on an island, by the gulling of the flood. The dwelling of a Mr. Kimball was swept away, but the family escaped. Mr. K. had lately buried his brother, with whom he was in company. In the night he awoke and listened to the roar of the water, but he had so little apprehension that he did not arise. He saw his brother standing by the side of the bed, bidding him get up and flee. He declared that he was wide awake and saw the form vanish away. Finding there was danger, he removed his family, and as he stepped out on the doorstone, last of all, the house began to settle away, and in a moment or two, went over into the flood.

In July, 1850, another flood swept through the valley, doing not so much damage as before, yet enough to make it remembered well. In July, 1858, there was another of a singular character, as all the damage was done by the brooks on the west side, or by the river swollen by their torrents. It would seem as if a huge cloud must have emptied itself all at once upon the hills of Fayston. The thundershower (for such it was) lasted only a few hours. It was the 21st birthday of the writer, and he remembers well how, for over half an hour, a sheet of water poured from the roof, breaking into drops about one foot below the ends of the shingles. Shepard's Brook swept out various new passages; it uprooted nearly half an acre of heavy timber and pushed it over a mile into the river and upon the meadow. A Mr. Learned, living near the mouth of the brook was reading his paper in the evening when he "heard something bumping against the floor" and on going to the cellar found it to be his meat-barrel floating about. The water was running across his lower doorstep, and the roaring of the brook showed its fury, while examination showed that there was no way of escape from the house. Though several buildings were swept away, this house, the most beleaguered of all was spared.

In October, 1869, another flood swept through this valley, within a foot of the high water mark of 1830. The crops of corn not already housed were swept away, and the breaking out of the river at the west end of the dam above the grist-mill seriously endangered the village, and carried away a shop belonging to J.W. Richardson, Esq. Pine Brook made a clean sweep of her seven bridges, and many other bridges in town followed suit.

Mad River without this turbulence would be like the play Hamlet with Hamlet left out.

Rev. P.B. Fisk, 1882

An account in Vermont Historical Magazine relates this sad incident in Moretown during the 1830 freshet.

In the darkness Henry Carpenter started off with his wife and boy, the boy walking between them with hands in theirs, to go to a neighbor's. They intended to keep to the road, wading through the water, but coming to deeper water Mrs. Carpenter let go the boy's hand and probably became entangled. Mr. C. called into the dark but no voice replied. The next day, in great sadness, he rallied some neighbors. His wife was found on the meadow below, cold in death.

From an account written by S. Minerva Boyce, who was "sweet sixteen" at the time of this event.



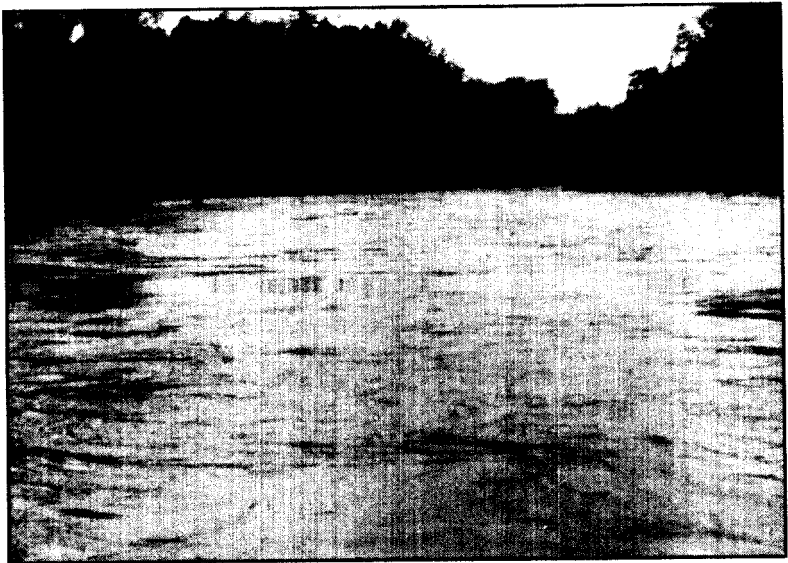
The Waitsfield 4th of July Celebration in 1858 was to be a "noisy and glorious one: parades, music, speeches and fire-works." With great anticipation Minerva went to the front door every morning to float a feather on the breeze: If from the east, a storm was brewing, if from the west, fair weather. "The west wind prevailed and promised fair weather, but alas! about sunset on July third the sky looked threatening."

At seven o'clock the rain was falling in torrents. "I have never known a wilder night," Minerva wrote. "The thunder rolled, the lightning blazed, and between flashes the darkness sparkled like millions of fireflies. By midnight all the bridges and dams from the mountain to the river road had been carried away, including the big dam near our home, my father's board mill and Dr. Brigham's clapboard mill, with all the lumber in the mill yards. Big boulders and debris pounded and ground all night as they swept by, until the very earth trembled."

Minerva's father, Ziba Wentworth Boyce, had recently completed a hotly contested bit of road construction, "the brook road through North Fayston, whereby much hard travel over the old hill route was removed." The staunch opponents sent word to Ziba: "Tell Boyce he'll have to travel over the hill a while longer; the Lord has taken away his new road."



The Mad River is like the lovely young child of nursery rhyme fame:
"When she is good she is very very good,
but when **she is bad she is horrid.**"



Photos by Caroline Strauss

Above, Lizzie Strauss plays in the Moretown Village swimming hole on a placid summer day in 1976. Below, later in the summer, slightly down river in the same area, the third highest river level on record measured 13,400 cfs (cubic feet per second). On a typical summer day the river flow is between 30 and 50 cfs.

The Beauty of The Mad River in Winter

Right: Snow and the river
create their own impres-
sionistic art in Moretown.



The curves of
the Greenway
and the river
flow in
harmony on a
frigid winter
morning.



Frozen mists at
20 below zero
shroud the river
in delicate
whiteness.

Mad River Canoe

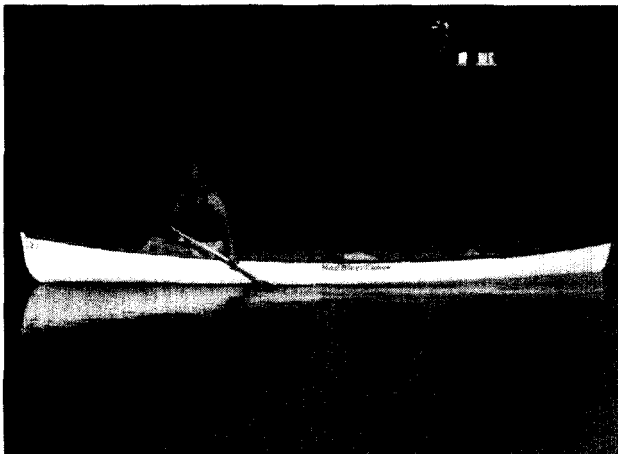
The rivers of America — and far beyond into Japan and Europe — have a special connection with our “best river ever” as Mad River Canoe carries the name far and wide. The company’s meteoric rise in the international canoe industry is perhaps better known than the following home-town tales behind the Mad River Canoe success story .

One evening before Christmas in 1970, as Kay and Jim Henry drove in their Volkswagen bus through the darkness and thick snow on the German Flats Road, a freak accident happened. Sewall Williams’ horse broke loose, probably spooked by the snow and wind blowing a branch against the barn. The horse, trained to be a hunter and a jumper, reared up and ran down the road, into the oncoming headlights of the approaching vehicle. Panicked and blinded, the horse tried in vain to jump over the VW bus. Its knees went into the windshield, and the passenger, Kay, was violently pushed into the back seat. She suffered a badly broken jaw and nose; Jim wasn’t hurt at all. Kay had to stay in the Valley while she endured a painstaking convalescence, and Jim started to make canoes.

“The horse’s name was Merry Legs,” Kay said. “I’ll never forget it.”

Today Jim is restoring the first canoe he ever sold. Here, too, lies a tale. On a trip out west, before the horse episode, their truck engine blew up. It took a helpful tow into Edmonton to get the damage repaired. This is how Jim made a new friend, who happened to be in the market for a really good canoe. He became Jim’s first customer.

The Mad River Canoe logo also comes with a tale, one that begins with a Native American legend. The rabbit, pipe in hand, sits confidently within the ferns, as his mortal enemy the lynx prowls nearby. He knows that he has the strength, agility and intelligence to deal with whatever challenges await him. So, too, are Mad River Canoes ready for challenges.



**Testing a new boat design
are Mad River Canoe
employees Ardis Murphy
and Ken Beauchemin, VP
of manufacturing.**

**Photo courtesy of
Mad River Canoe**

Fishing the Mad River

Story and Photo by Peter F. Cammann

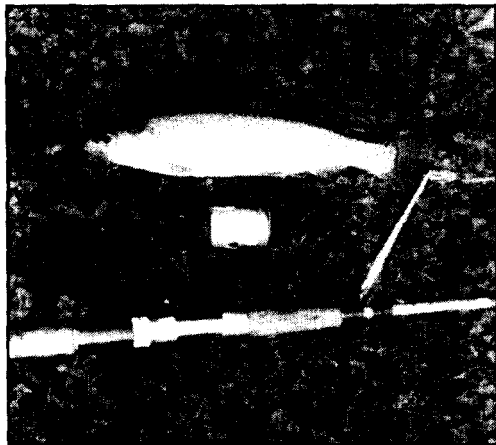
What constitutes a great trout river? Well, a healthy population of trout would seem to be a prerequisite. But what most people don't know is: the Mad River contains a three and a half mile stretch of pristine, wild trout water, one of the more prolific in the entire state of Vermont. In fact, a study prepared by the state Department of Fish & Wildlife in 1992 recommended that the stocking of hatchery raised rainbow, brown, and brook trout be discontinued for the entire area upstream of Warren Village, so well established was the trout population there.

But before everyone starts to head into the upper reaches of the Mad River with visions of catching their limit before noon: be forewarned! Wild trout are tough to catch. Technically, a wild trout is one that was born in the river itself. The rainbow trout (*Oncorhynchus mykiss*) was originally imported to New England from the Rocky Mountain region after the Civil War and the brown trout (*Salmo trutta*) was first stocked here at around the same time from a European strain. Of the three major species found in the Mad River, only the brook trout (*Salvelinus fontinalis*) is native to our waters. Interestingly enough, the brookie itself is not a trout, but a species of char, related to the Dolly Varden (*Salvelinus malma*) and the Arctic char (*Salvelinus alpinus*). These biological distinctions aside, wild trout abound in the Mad River, fish that hatched from eggs laid in the sandy river bed, that have survived several winters under the ice to maturity, to spawn themselves.

Wild trout require patience, tact, and stealth if you hope to catch them. Since trout spend most of their days maintaining their position in moving water, they will normally be faced upstream, against the current. If you approach a likely looking piece of trout water from downstream and cast your line above where you think the fish might be holding, you are far more apt to be successful. While the Department of Fish & Wildlife may favor one particular stretch of the Mad River, all three species can be found along almost its entire length. Anglers

who wish to promote the Mad as a premiere trout stream would do well to release any fish they do catch, so as to preserve the river's wild trout population.

Peter Cammann is the author of two books, *Fishing Vermont's Streams and Lakes* and *UltraLight Spin-Fishing*. He has also written numerous magazine articles on both fly and spin fishing.



A typical wild rainbow trout, taken on a small ultra light spinning lure.

The Mad River Greenway

The Mad River Greenway is a pleasant river walk that follows the wandering stream, in some places safely close to the water's edge and in others with a vegetated buffer strip between the path and the river to protect a fragile bank. Now in its fourth year, the Mad River Greenway stretches for almost three miles between its southern end at Tremblay Road in Waitsfield to about one mile north of Meadow Road.

Activities on the Greenway range from quiet walks to jogging, cross-country skiing and biking. The Friends of the Mad River and others interested in the river environment use the path for nature walks and to learn about the river and its abundant wildlife.

The Mad River Greenway is one of several recreation paths in the Valley, totaling seven miles, under the jurisdiction of the Mad River Path Association. "It is because of the real generosity of landowners that the public can enjoy these paths," says board member Harrison Snapp. "As more landowners see what a low impact the paths have on the land, we can work toward extending them." He says that among future plans is the continuation of the Greenway to Harwood Union High School and Moretown. Also in the future are interpretive signs to help people become better acquainted with the rich natural environment along the river bank. Low signs, in earth colors, will be kept to a minimum.

Every fall the association sponsors a Path Awareness Day when people assemble by S.G. Phillips to enjoy fresh-pressed cider and a nature walk.

All the paths in the network are well-cared for by the people who enjoy them. Generally the "pack it in pack it out" system works well, says Harrison, and landowners are not subjected to litter problems.



The Greenway was white on this sparkling winter day, ideal for cross-country skiing.

Board members are Steve Robbins, chair; Chuck Derrick, vice-chair; Marge Skroski, secretary; Nammu Reddy, treasurer; Blaise Car-rig; Kevin Russell; Megen McKinnon; Fred Gilbert; Carl Lobel; Doug Wilson; Biffie Gallant, and Harrison Snapp. Membership in the Mad River Path Association is ten dollars. The address is PO Box 683, Waitsfield, VT 05673.

Gold in the Mad River?

For generations tales have been told in the Valley of gold to be found in the Mad River. Indeed, on occasion a figure can be seen hunkered over the streambank, miner's pan in hand.

One long-time gold seeker is Will Rodgers of Warren. Has he been successful? His wife Bobbie says, "Yes. He panned the gold for my wedding band." Will and Bobbie Rodgers celebrate their tenth anniversary on August 1, 1997.

These two unscientific references appeared in research.

"... traces of gold in alluvium exist along the Mad River."

Hamilton Child, 1889

(Alluvium: soil material deposited by running water.)

Matt Bushnell Jones, writing in 1909 about Clay Brook (High Bridge Brook) which "rises up yonder on the slope of Old Scrag" . . .

"If you have skill to use a miner's pan you may extract from its sands a few grains of gold, but the reward will hardly compensate you for the pains."



Another surprise might be the location of this photo. It was taken in Warren Village just downstream from the covered bridge, with a bit of the Mad River visible in the lower left corner.

Classic Bridges



Probably one of the most photographed and painted scenes on the Mad River is this view of the dam and covered bridge in Warren Village.



The Lovers Lane bridge, northernmost one on the Mad River, was built by Palmer Steel Co., Springfield, MA, in 1928. From the bridge looking south is a view of the one remaining abutment of the #7 hydro-electric dam, washed out in the flood of 1927. This majestic sentinel, built without cranes, stone by stone, has withstood everything the river has had to offer since that infamous day 70 years ago. North of the bridge are the penstock cradles and powerhouse foundation. These remarkable remains are easily seen from the bridge, but binoculars would enhance the details.

History Is Alive In the Mad River Valley!

It was recent front page news in the *Times Argus* when the Waitsfield Historical Society presented a history program featuring Jack Smith's slides taken from old photos. The Warren Town Hall, with its nostalgic pictures lining the walls, was packed for an oral history presentation. (Warren's historian, Katharine Hartshorn, has amassed and identified a remarkable collection of historic photos.) An active and dedicated group in the Moretown Historical Society continues to add to its well-documented collections and to sponsor history-related activities. And Reba Hall in Fayston cares for this small town's history with a knowledge and devotion that is legendary.



Photo by Richard Czaplinski

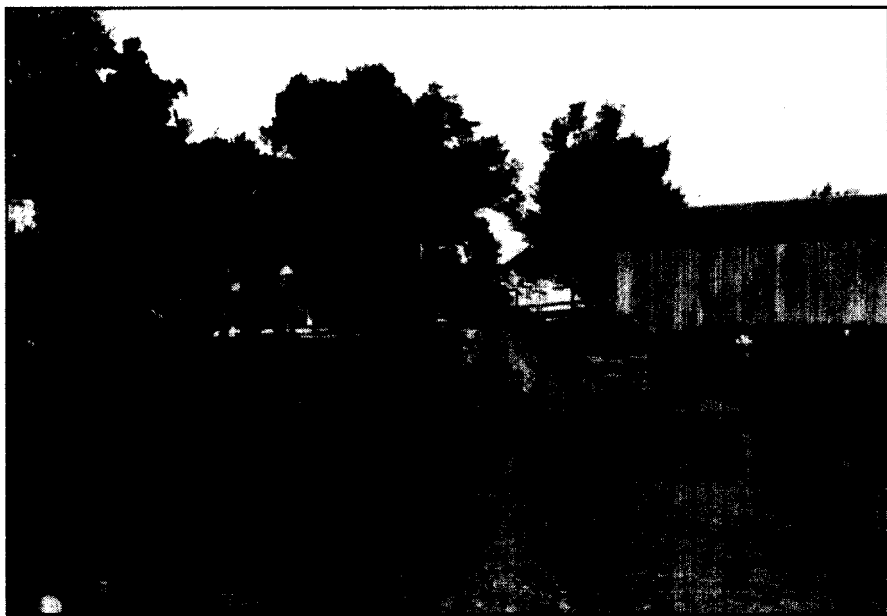
Grown-up "kids" in the Valley remember boasting that there's a dam on the Mad River
they'd dare to go over in a barrel.
(This is the weir by the stream gauging station in Moretown.)

A Closing Word from Waitsfield Telecom

Each year when we produce this section of the telephone directory we try to choose subjects of interest to our community. The intent is to help preserve information relating to our history and the on-going uniqueness which comprises the fabric of our valley home.

We always appreciate your input. Many times we have been able to capture important historical details when readers respond to what had been written. Often our best ideas for future issues come from your generous suggestions. We have learned over the years that there are unlimited themes and stories yet to be explored. If you have any suggestions or comments to offer, we encourage you to contact Dody Moriarty at Waitsfield Telecom (496-3391 ext. 303).

We hope that you have enjoyed this year's topic and gained a greater knowledge of our beautiful, albeit often "mad", river.



The Big Eddy or Village Bridge in Waitsfield circa 1900-1910.

Photo courtesy of Vermont Historical Society.

Thanks . . .

go to so many people who cheerfully helped me with this rewarding project. Kinny Connell, president of the Friends of the Mad River, was an enduring enthusiast. Katie Sullivan, Wendy Moore, Nancy Spencer, and Aja Zoecklein provided information on school projects. Sewall Williams gave permission to use the charming story about the opening of Ulla Lodge. Ski historian Glenn Parkinson agreed to the first publication of *Hairy GaGoinky*.

Gary Parkinson contributed significantly to the section on early hydro-electric power on the Mad River, including research at the University of Vermont and the Vermont Historical Society. Clifford and Cora Bruce, Ethel Ryan, and Kenneth Austin provided further information.

Brian Stone, chief of Forest Management for the State of Vermont, provided a wealth of resources for the section on landslides, augmented by contributions from Reba Hall, Jack Smith, Alden Bettis, and Jessamine Larrow.

Special thanks go to Peter Camman, who wrote the section on fishing. Harrison Snapp told about the Greenway, and Kay Henry about Mad River Canoe from a home town point of view. Ed and Mimi Clark, on behalf of the Moretown Historical Society, lent the great photo of the old mill and pointed out the location behind their house where it once stood.

Paul Carnahan at the Vermont Historical Society came to know me so well I ended up as a judge for a VHS sponsored essay contest.

Photos without credits are by John Gallagher, who supplied me with an incredible array from which to choose, a difficult task. (John is a direct descendent of Laura Brigham Boyce, who wrote the piece about the Green Mountain Slide on page 12.)

I am grateful to Lauren Gallagher for diligently reading several drafts and helping me to refine them into the final product.

**Ice floes and rocks,
temporary companions,
blend into the reflection
at the Ward swimming
hole in Moretown on an
early April day.**



From the Author

During the fifteen years I have lived near the confluence of the Mad and Winooski Rivers, exploring this northern reach of the Valley has been a personal joy. Walking through the stubble of the Scribner family's cornfield, I delight in early spring red-winged blackbirds announcing their return. Skirting the engulfing green sea of summer corn, on occasion I see bobolinks or meadow larks. Near the river are majestic blue herons or their elusive green cousins, or a flock of startled American mergansers who flash their white underbellies as they skim the river surface to seek uninvaded waters. (We affectionately call them mergan-dancers.) One winter I watched a lone unidentified duck in an ever-narrowing space of water and wondered about its fate.

Some winters, when the river freezes over, my husband Wavell Cowan and I ski over snow-cushioned rocks and under the aging Lovers Lane bridge, as far as the looming iciness of the Moretown hydro dam. Always there are sinister black pools where rushing water threatens briefly; always we keep at a comfortable distance. Skiing northward onto the Winooski offers a different experience, more restful gliding on a smoother surface.

My connection with a small piece of this remarkable river is a source of peace and serenity in a sometimes chaotic world. I am reminded of an early lesson from my father, an amateur naturalist who was an ardent believer in Rachel Carson when others scoffed at her: Our natural bounty is finite and must be treasured and protected.

Earline Marsh



Confluence of the Mad & Winooski Rivers, January, 1987
Photo by Earline Marsh