

The Bridger



The Vermont Covered Bridge Society Newsletter—Summer 2009

PREZ SEZ

We had an excellent spring meeting – one of our best turnouts – on a fine April day in Waterville. Hope to see you all there in Windsor at the fall meeting.

Six covered bridge rehabilitation projects are going on right now: two in Montgomery, one in Fairfield, Kingsbury in Randolph, Willard in North Hartland, and soon, the Worrall in Rockingham. Let's get out and observe the progress.

Please plan on voting in the upcoming Bridger election of officers for 2010 -- we received less than a handful of responses to the 2009 ballot request.

Beginning with this issue, we have a new nomination and voting process giving potential candidates an opportunity to make themselves known to the membership. Beginning now, and each election year, the summer issue will ask for candidates for president, vice president, secretary, and treasurer to serve two-year terms. The candidates are asked to submit bios to be published in the fall issue with the ballot. Voters will return the ballots provided in the fall issue by the published deadline for the winter issue in which the winners will be announced. The incumbent officers will serve until midnight, December 31.

Every member in good standing is entitled to vote. This includes the adult members listed on a Family membership and the contact person on a Business or Organization/Municipality membership.

This is an open organization and all members are encouraged to participate, giving of their time and talent. If you don't want to run for one of the four offices, volunteer to join the board of directors by chairing a standing committee or a Bridge-watch area. The chairmanships for the Historical Committee and many Bridge-watch areas are open.

Candidates or volunteers will please contact Joe Nelson, Chairman of the Board of Directors; jcnelson@together.net or PO Box 267, Jericho, VT 05465.

John Weaver, President, VCBS

Notice! Notice! Notice! All Members!

This issue begins the new official voting process. Please see the above column!

Road trips

By Ray Hitchcock

My wife and I have resumed our tour of Vermont's covered bridges. We visited 60 of these bridges in southern and central Vermont over the past three years by motorcycle. Now we travel to northern Vermont and the pleasures to discover there.

Parent care and health issues slowed down the process so that only a handful of bridges were visited in 2008. Now a well broken leg has further slowed down the process. Motorcycles are definitely not the mode of travel this year, so we are shifting to automobiles.

While out an about we frequently bump into other people doing the same thing. One year we ran into a group visiting from England.

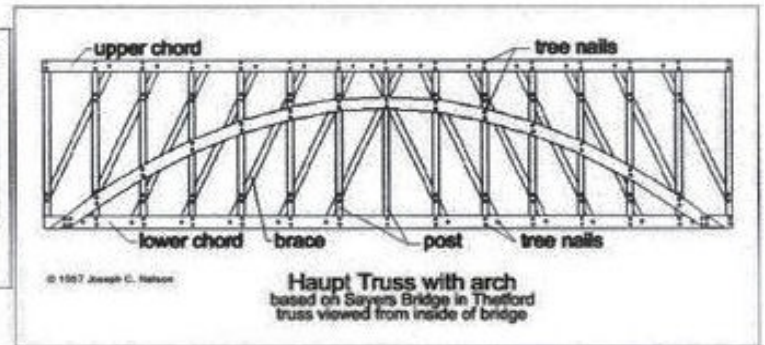
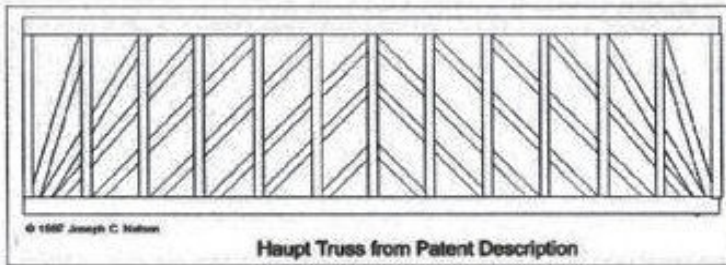
I would surmise that this activity would generate some good income to local communities throughout the state. We ran into the interesting fellow in the picture while doing the bridge tour for the Lamiolle River from Joe Nelson's book, "[Spanning Time – Vermont's Covered Bridges](#)". This "local" was busy helping out the economy of a Montgomery Center eating establishment.



Local Vermonter; photo by Ray H

We were excited to see the progress on the Martin bridge project just yesterday. The story is covered in this newsletter.

We are always surprised by how dynamic the covered bridge story is. Bridges just visited a year or two ago have changed. Mostly for the better! We hope to see you at one of these great memorials to our history.



Netcher Road Bridge Truss



Bunker Hill Bridge Truss

About that Haupt Truss

by Joe Nelson

The Sayres Bridge, (45-09-06) in Thetford Center, Vermont, is the only Haupt Truss covered bridge in New England, said Richard Sanders Allen in his *Covered Bridges of The Northeast*, and one of just two in the United States. At the time of that writing, the other was the Bunker Hill Bridge (33-18-01) in Catawba County, North Carolina.

Now, since 1999 there is a third claimant, the Netcher Covered Bridge, 35-04-63. It crosses Mill Creek in Jefferson Township, Ashtabula County, Ohio. It was designed by John Smolen of Smolen-Gulf Bridge fame (35-04-64), 110 feet long using an "inverted Haupt Truss" with arches.

These three covered bridges may have a common claim in that their builders were inspired by Herman Haupt's truss design described in his book, *General Theory of Bridge Construction* published in 1851, but each of the three truss systems differ in detail.

According to his patent letter, Haupt designed his truss as an improved lattice truss over that patented by Ithiel Town. Haupt, in his letter to the U. S. Patent Office ("Specification of Letters Patent No. 1,445, dated December 27, 1839") writes, "What I claim as my invention is—The construction of a lattice bridge without counterbraces, but consisting simply of braces inclined at any proposed angle and ties which are perpendicular to the lower chord, the chords being either straight or curved."

Haupt's truss resembles Town's in that both trusses use planks rather than squared timbers, and the truss members are fastened with treenails rather than mortise and tenon. (Netcher uses bolts.) Haupt's patent drawing shows a lattice design in which the braces (compression members) are sent directly to the lower chord ends, crossing several panels (see figure), the tension members here are solely the verticals (ties).

In the Sayres' the compression members interconnect adjacent panels and cross just one. (See figure.) In the Bunker Hill bridge truss, the compression members each cross two panels except the center pair and the end panels.

The truss used in the Netcher Road Bridge inverts Haupt's truss not only in form, but also in function. Upside down, Haupt's lattice of compression members and tension bearing "ties" becomes a lattice of tension members. The figure depicts the center five panels and a massive double laminated arch bolted to the ties. The arches, of course, are compression members.

I contacted Brian McKee in Ohio and asked him what he knew about the Netcher Road Bridge: "Is this a 'show bridge' topping on a stringer bridge, or a real working truss? I don't see how an inverted Haupt Truss could work." Brian's reply: "The bridge is mainly supported by a huge laminated arch, not the truss. To call it a Haupt Truss is not really accurate."

In that Haupt stated in his patent letter "... consisting of braces inclined at any angle ..." the Sayres and Bunker Hill trusses are true variants of the Haupt Truss. In the case of the Netcher Road truss, the lattice is all counterbraces, contrary to the Haupt design.

Herman Haupt graduated from West Point in 1835. He resigned his commission to become district superintendent and chief engineer for the Pennsylvania Railroad. When the Civil War began he was drafted to serve as superintendent of military railroads. He pushed his tracks through Virginia, building trestles out of found materials described by Abraham Lincoln as "bean poles and corn stalks."

[For a full description of the Bunker Hill Bridge and its truss, go to <http://www.catawbahistory.org/bunker_hill_covered_bridge.php> - JN]

About the Williamsville Covered Bridge

[WGN 45-13-05]

By Robert McCullough

The transportation agency will be developing an interpretive display for the Williamsville Covered Bridge as part of the reconstruction. Consequently, I've been digging into town records trying to gather as much information as possible. The date of construction and builder remain a mystery, but I've suggested a likely explanation. I'm attaching the material just to pass along the information, for what it's worth. I really need another trip to Newfane to dig into the handwritten records prior to 1850, but the town clerk's office is in transition and records are in disarray.

Williamsville is situated along the first branch of the West River, now the Rock River, but for many decades called simply "the Branch." Both the McClellan *Map of Windham County* (1856) and the Beer's *Atlas of Windham County*, (1869), identify three bridges in Williamsville. One crosses the Branch at the village's easterly end, where a covered bridge stood until destroyed by fire and replaced by a reinforced-concrete arch bridge in 1908. The second bridge crosses Baker Brook westerly of the village center on the road to Dover. The Williamsville Covered Bridge is the third crossing, also located on the road to Dover a short distance westerly of the bridge across Baker Brook. Although the builder and precise date of construction for the Williamsville Covered Bridge are not known, it was probably erected no later than 1860.

Newfane's handwritten records of town meetings and printed annual reports, the latter beginning in 1860, are inconclusive regarding the date of construction, but various clues point to the decade of the 1850s. By then, the improvement of roads leading to and from Williamsville had become a frequent topic at town meetings, possibly the result of periodic flooding. The 1856 McClellan map shows a mill pond at the site of the Williamsville Covered Bridge and also an adjacent pail factory. However, that pond and factory do not appear on the Beer's atlas in 1869. Instead, the Beer's map shows a mill pond crossed by the bridge at Baker Brook and, at the pond's outlet, a grist mill. A flood of 1856 did wash away several buildings and bridges along the Branch, but whether flooding caused the loss of the earlier pond, dam, and factory, or whether one of the maps is incorrect, is not known. Another freshet in July, 1859 destroyed nearly every bridge on Baker Brook,, as well as a saw mill owned by Dana D. Dickinson and E. P. Wheeler on that same stream.

Written accounts of town meetings up to 1859 do not mention the Williamsville Covered Bridge by that name. In addition, no printed copies of the First

Annual Report (1860) have been found. However, the Second Annual Report (1861) discloses that L. Halladay 60.

received \$5.93 for painting "the Williamsville Bridge." Five years later, sometime during 1865 or early 1866, E. P. Wheeler received \$5.00 for unspecified labor on a bridge by that same name. In 1877, the town spent \$113.03 to repair the "Williamsville Bridge" and to apply new shingles. Twenty years later, 1897 or early 1898, the town paid L. O. Morse \$106.00 to install metal roofing, again using the name "Williamsville Bridge." Unfortunately, whether these activities refer to the Williamsville Covered Bridge or to the covered bridge on the village's easterly end cannot be verified. Identification of the builder is also not possible, but timber framers erected a number of bridges in Williamsville and nearby Pondville (South Newfane) during these years of road-building, and the names Daniel O. Stratton, E. P. Wheeler, Dana D. Dickinson, B. E. Morse, and C. W. Morse appear frequently in town records.

Structural Deficiency

The Williamsville Covered Bridge is located on a busy Class II road used by heavy emergency vehicles and school buses, and no convenient alternative routes are located nearby. As originally designed, the bridge's 118-foot Town lattice truss proved to be inadequate for the weight of modern emergency vehicles. Many of its timber components were comparatively small when measured against other bridges of this design and span length. Moreover, many modifications had been introduced over the years to strengthen the structure, including numerous sister lattice planks. At one point, the original timber floor beams had been replaced with steel I-beams, which were eventually removed in 1979. That year, the lower five feet of all lattice planks were replaced, but with chords spliced by bolts. Unfortunately, the modified lattice components lacked sufficient rigidity, creating ere severed from each truss lattice and replaced with seven-foot segments spliced to the remaining lattice with bolts. Upper and lower bottom chords were also a systemic weakness in the trusses. By 1998, the truss lattice and top chords revealed wracking, bowing, and negative camber, indicating that the entire structure had begun to fail. As a temporary means for keeping the bridge open to traffic, engineers installed two very large glued-laminated girders inside the structure that year, one on each side of the single travel lane.

Reconstruction

In 2001, the Vermont Historic Covered Bridge Committee began discussions about the best method for preserving the Williamsville Covered Bridge, observing the guidelines specified by the Vermont Historic Covered Bridge Preservation Plan. That plan seeks two primary objectives: (1) to preserve the historic physical and structural integrity of covered bridges to the maximum extent possible; and (2) to retain covered bridges for use on the state's network of roads whenever possible, thus preserving the historic functional integrity of these bridges. The plan establishes priorities for ten preservation treatments, and the committee must establish that a preferred treatment is not possible before moving to the next recommended treatment.

The Williamsville Covered Bridge is a case study showing that achieving these worthy objectives can be very difficult. In its completed form, the bridge is an accurate reconstruction of the original 19th century design, with only nominal changes to the overall dimensions and to the size of some chord members. Those changes include glu-laminated lower bottom chords to increase the bridge's strength, one of several methods of strengthening considered by the committee.

The preservation plan recommends traditional methods of strengthening, and the committee initially approved a plan to restore the bridge to its original design, replacing deteriorated components in kind, and then adding a new, lattice truss to the outside of each existing truss. The committee recognized the experimental nature of this proposal but justified its potential compromise to the bridge's structural and visual integrity, reasoning that engineers would be able to test the way the structure functioned and thus evaluate its applicability at other sites. However, committee members eventually rejected this plan due principally to the resulting visual compromises to the bridge and because so many of the bridge's existing components would require replacement in any event.

The plan also permits the introduction of large glu-laminated girders as a co-functional, reversible supplemental structural system, reinforcing the existing structure. Two conditions must be satisfied to adopt this treatment: (a) other preferable treatments must be unworkable; and (b) the bridge must be restored to its original form. The committee investigated the possibility of installing two large glu-laminated girders beneath the existing structure, thereby satisfying loading re-

quirements. However, the substantial depth of those beams created poor clearance above the river.

Various other treatments permit the committee to modify, to a very limited extent, the size of the bridge's individual structural components in order to achieve the desired load capacity, specifying that changes to the bridge's overall dimensions should not occur. Recognizing that almost all of the bridge's structural components would require replacement, the committee elected to reconstruct the entire bridge and to modify the original design only to the extent required to carry emergency vehicles.

The reconstructed bridge standing today differs only slightly from what engineers and historians believe was the original truss design. The overall bridge width increased by a total of approximately eight inches and bridge height (from upper top chords to lower bottom chords) decreased by two-and-one-half inches. The paired sets of planks, four each for upper and lower top chords and for upper bottom chords, were increased in depth by one-half inch. The sets of four planks for the lower bottom chords were replaced by sets of two glu-laminated beams, six-and-three-quarters inches by twelve-and-three-eighths inches, one on each side of the truss web. The dimensions of the original floor beams are not known, but those installed in 1979, to replace steel I-beams, measured twelve-inches-by-eighteen inches set at four-foot intervals, center to center, and may have been larger than the original floor beams. However, many of the 1979 floor beams were replaced with glu-laminated beams in 1998 when the temporary glu-laminated girders were installed. The glu-laminated floor beams used in the reconstruction, ten-and-one-half-inches by fifteen-and-one-eighth-inches set at four-foot intervals, are slightly smaller than the floor beams used in 1979. The lattice planks of the trusses are identical in dimension to those used in the original design, fifteen-feet by ten-and-three-quarter-inches by three-inches.

[Robert McCullough, of the UVM Dept. of History and member of the Vtrans Historic Bridge Committee, is Author of *Crossings, A History of Vermont Bridges*, VAOT & VHS, 2005 - Ed.]



**Tenth Annual Spring Meeting
of the Vermont Covered Bridge Society**
Waterville, Vermont

April 25, 2009



Spring Meeting 2009, Photo by Bill McKone

Twenty-four people gathered in the Waterville Town Hall for the Tenth Annual Spring Meeting of the Vermont Covered Bridge Society.

President John Weaver called the meeting to order at 10:10 a.m. Because the minutes of the Annual Fall Meeting held in Bellows Falls have been published in the Winter edition of *The Bridger* precedence was followed, in the interest of saving meeting time, that they not be read. A vote to accept the minutes as printed in *The Bridger* was made by Neil Daniels and seconded by Joe Nelson.

Joe Nelson recommended that the Waterville Historic Preservation Board, our hosts for the meeting, receive a copy of each issue of *The Bridger*.

COMMITTEE REPORTS:

Election: Joe Nelson reports that ballots were to have been returned by April 1; but to date only three ballots have been returned. In future balloting will be via *The Bridger*. Bios of those running for office will be published in the Summer *Bridger*. The new procedures will be explained well in advance in a future issue of *The Bridger*.

Lending Library: Warren Tripp reports that any of the items are available for borrow from the library. He encourages those present to browse and anything can be borrowed as of this meeting. He asks that the borrower's name and address be provided upon borrowing and the return be made by US Mail.

Bridge Watch: John Weaver reports there are three rehabilitation projects currently underway: two in Montgomery and one in Fairfield and should be finished up this year. Three more are planned this yet year: the Kingsbury Bridge in Randolph, the Willard Bridge in Hartland which will get a new roof and new railings, plus the Worrall Bridge in Rockingham which will be significantly rehabilitated.

There are thumb-nail sketches of all of these projects along with photos on the VCBS web site: vermont-bridges.com

Miscellaneous: Joe Nelson reports that Ellen Everitz, Publicity Committee chair, has had a ten-inch column published in the *Vermont Magazine*.

Treasurer's Report: Neil Daniels reports the following for the period January 1, 2008 to December 31, 2008:

Total income	\$3,034.34
Total expense	<u>\$2,965.58</u>
	\$68.76
Checking Account at Union Bank	01/01/08 \$5,303.30
	12/31/08 <u>\$5,392.74</u>
	Change +\$89.44
Save a-A-Bridge Fund	01/01/08 \$4,372.50
	added in 2008 <u>\$392.50</u>
	Total \$4,765.00

(A more detailed cash flow report was submitted and is available if requested).

Membership: Sue Daniels reports that the Waterville area has the largest representation of members in Vermont of all of the VCBS membership.

Joe Nelson offers that the VCBS has approximately 200 members residing from New England to the west coast. Of the total number of members in the Vermont Covered Bridge Society; only one half are residents of Vermont the other half are spread across the entire USA and Canada and "even in Bermuda!"

Neil Daniels and Joe Nelson have been giving their second round of covered bridge presentations in the Dartmouth College-sponsored program entitled Institute for Life-long Learning at Dartmouth. They have had six sessions thus far.

Old Business: Bill McKone asked if there is an update on the status of the project regarding coverage bridge signage along state roads identifying a nearby covered bridge. Communications on the matter seem to have broken down with the state legislature.

Archivist Presentation: Bill Carroll, a professional archivist, is now the VCBS Archivist and reports on his efforts to organize, itemize, and catalogue all of the items that are currently in the VCBS collection--organized by bridge. So far Bill has 39 collections itemizing each by an abstract on each collection dating from the 1930s to present. Bill hopes to eventually register the collection with the Library of Congress. New donations are always welcome. The collection does not circulate as does the library but is available to view upon arrangements with Bill. A permanent home for the collection is being sought.

Joe Nelson interjects that there are slides from the 1940s to be added to the inventory.

Warren Tripp mentions that the Vermont Historical Society has large collection of 8 x 10 archival photographs which he is in process of photocopying to add to our collection. There are 17 books of photographs and the bridges are organized by World Guide numbers.

It was mentioned that a lot of the photos of a given bridge were taken over a period of time so that changes in a bridge can be noted, i.e. "windows come and go", he said.

Housekeeping: John Weaver mentions that there are handouts available mapping the covered bridges in the area for those planning to tour. A list of area restaurants is also available.

The sales table is set up, thanks to Ruth Nelson, and raffle tickets will go on sale upon adjournment of the business meeting. The price is \$1.00 each or 6 for \$5.00.

Added comment by Neil Daniels, that he mentions should have been in the Treasurer's report, of the National Society for the Preservation of Covered Bridges and the VCBS being mentioned in the will of an elderly lady. The two organizations were to have been given 5% of the estate. At first look it appeared to be about \$8,000; but the estate was used up because of a \$12,000 mortgage. Estate was eventually less than whole and the Covered Bridge Societies involved received nothing; but appreciated the thought.

Bill McKone reports that land at the Cambridge Junction Bridge is in need of a lease for a near-by park. The bridge was built at the behest of the Waterville residents for a shortcut to the rail depot to benefit the towns of Waterville and Cambridge. The freight depot was on a former rail line between Swanton and St. Johnsbury.

The land of that rail line is now dedicated to recreational use and is being used by VAST (Vermont Association of Snow Travelers) who have leased a 30 foot section of right-of-way. Bill also states that it is hoped for a picnic area near the bridge in the not-to-distant future. A park-and-ride area already exists.

The Annual Fall meeting of the VCBS will be held in Windsor, Vermont in the Toll House at the Cornish-Windsor Covered Bridge. Bill Caswell mentions that there are twenty covered bridges in Vermont and New Hampshire within a day's drive of that meeting site. The date for the fall meeting has been set for September 26, 2009. Bill offered to look into having the Fall Meeting as a kick-off of a two-day tour of those 20 bridges. Skepticism, however, was raised about proceeding with the idea because the cost of lodging during that fall-foliage season might discourage bridgers from participating. Suggestions for the logistics of this tour are welcomed. The tour would be Saturday, September 26, and Sunday, September 27.

The meeting adjourned at 11:00 by a motion by Sue Daniels and seconded by Ann Ovitt.

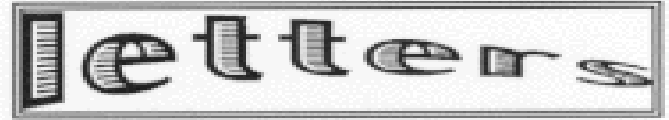
A Power Point presentation and commentary "The Bridges of Lamoille County" by Joe Nelson concluded the meeting after which members could tour the covered bridges in the Waterville/Cambridge area.

Proceeds from the raffle amounted to \$67.00

A big THANK YOU is extended to the folks in Waterville for hosting the VCBS meeting at their Town Hall and to the Waterville Historic Preservation Board for furnishing refreshments especially Sue Wisheart and Kathryn Crimby. Also a thank you to the Waterville Town Clerk, Nancy LaRose.

Respectfully Submitted, Irene R. Barna, Secretary

□□□



April 1, 2009 - Hello Mr. Nelson, My name is Joe Jewett. We recently read an article you had written about some construction repair to one of the covered bridges in Montgomery. I kept your e-mail address and have been waiting to drop you a line. When I typed in your name, a whole page of stories came up. In that list is an on-going repair to the bridge spanning the upper West Hill Branch. My Dad was born and raised at the top at the hill. His Grand Father was brother to Sheldon 1852/1889 and Savanard 1848/1925. His name was Bramen 1852/1911. All eight brothers helped in some capacity during that span in history that the Jewett brothers built bridges. Bramen had 3 children, Bruton, Martin (my fathers name) and Blossom, all of which have passed on.

We still like to visit the old home site and remaining bridges. We have caught many a brook trout in the swimming hole under that bridge. Sorry I am rattling on. The reason I contacted you was to inquire if there was any way to acquire a piece of the original bridge to have as keep sake. I would love to talk to you more about what you know about the Jewetts.

Thanks for your time. Look forward to hearing from you.

Regards, Joe Jewett, West Brattleboro, VT.

[I have put Joe in contact with Jim Ligon, Alpine Construction foreman in charge of the work on Montgomery's Creamery and Hutchins bridges. Jim is delighted to give Joe some keepsakes and to meet a Jewett descendent. Joe should be able get more information about his forbears through the Montgomery Historical Society – JN]

April 11, 2009 - Good Morning, Joe, by now, we hope you have had an opportunity to read the various articles we have written on the creation of the Theodore Covered Bridge Resource Center. Once completed, it promises to be a wonderful educational center for anyone interested in researching our Covered Bridges. Folks will be able to visit the center, relax and

enjoy spending time browsing through books, photographs, slides, newspaper clippings and newsletters regarding our bridges. We recently met with the Board of Directors of the Library and plans are coming along quite nicely. We are very excited to be a part of this ground breaking project.

With that being said, we write today to ask if the Vermont Covered Bridge Society would like to be a part of this endeavor by donating a complete set of your newsletters to the Center. They would be a wonderful source of information for anyone researching bridges in Vermont.

If you could let us know if the Society is interested in donating a set of your newsletters, it would assist us not only in planning for space in the Center, but the construction of bookshelves as well.

Thank you for considering our request. On behalf of the Theodore Burr Covered Bridge Resource Center, Bob and Trish Kane.

(A set of the Bridger newsletter back issues has been sent to Trish for presentation to the Theodore Burr Covered Bridge Resource Center, in behalf of the Vermont Covered Bridge Society – JN)

April 13, 2009 - Dear Mr Nelson, I came across your name while trying to locate photos and/or articles about a bridge I'm hoping you may be familiar with....the old wooden truss bridge that crossed over the RR tracks onto Vine St in Northfield, VT. I realize it is not a covered bridge, but it is one that has historical and sentimental value to me.

My grandmother once owned the house that sat at the end of the bridge (I believe her house was #6 Vine St) where it first connected to the roadway. I have not been to Vt in several years and I understand the bridge was torn down and replaced by a concrete one (yuck!) many years ago.

I realize your organization is devoted to covered bridges, but maybe some of your local members may have a photo of the bridge? Coincidentally, while researching this, I noticed that Northfield is in Washington Co, Vt. and I live in Washington Co, KY and we ALSO have a covered bridge in our county. The bridge has been closed for many years, but is still approachable and able to be photographed from several angles. I was born in Montpelier and have family ties to Northfield, though no living relatives are still in the area.

I would greatly appreciate any help or direction you could give me in this matter and I look forward to hearing from you. If it helps, my grandparents were Joseph and Helen (Marian) Ouellett (Vine St) and John and Winnie Durrell (Cemetery St)

Sincerely, Linda J Klostermann (nee Durrell) (If anyone has photos or information on this bridge, please contact me, at jcnelson@together.net, or PO Box 267, Jericho, VT 05465. I will arrange contact with Ms. Klostermann - JN)

Notice - Covered Bridge Festival - Notice

Hello Trish, Here in Union County Ohio, we are planning for our 2009 Covered Bridge Festival, which will take place on **September 12, 2009**. It will be held in conjunction with Festifair which will be in downtown Marysville.

This year's festival is featuring our Spain Creek Bridge [WGN 35-80-02]. We will have its historical marker presentation in late August.

Anyone who is interested in more info can contact me at sueipc@jencospeed.net. We would love to see you here
- Sue Spencer

Historical Committee Report

by William Carroll

Windsor, Vt. Toll Bridge

The covered toll bridge, east of the four-corner intersection on South Main St., built in 1866, is the longest covered bridge in, or partly in, Vermont, and the only one that retains the toll gate.

The first bridge on this site was built in 1796, replacing a ferry. It was at this point that [General] Lafayette entered Vermont, on June 28, 1825 for his brief tour of the state.

The records (1811-40) of the earlier toll bridge have been preserved, though in private

hands. On Nov. 12, 1837, for instance, there passed 'General' Lyman Mower with 1 wagon, 1 sulky, 1 horse and rider, 600 sheep, 127 cattle. The only possible conclusion is that there passed also, toll-free, some dogs. - **Vermont, American Guide Series (ca. 1930s)**

Passing of the covered bridge

One by one they are disappearing, the old covered bridges spanning with their clumsy wooden tunnels the wide and narrow, slow and fast rivers of pastoral New England.

When the old bridge begins to show signs of decay, when the roof leaks, broken planks make holes in the solid sides, and the thick boards below are almost worn away by the horses' hoofs and the heavy wheels of hundreds of automobiles, no helping hand is lent to the aging public servant. It is left to its own fate until it becomes a menace, and then it is replaced by an iron and concrete successor.

One by one they go, and with them goes much of the charm of the New England landscape. But memories of them will linger in the minds of many, memories of their high pointed roofs between the trees, of their long broad flanks reflected in the water, of the cool darkness inside, broken by shafts of sunlit dust, of the soft noise of feet and subdued clatter of

hoofs on the worn splintered floor and of the magic glimpses of the river, the trees and the hills through the opening between the crossing beams or the holes in the boarded sides.

There was a time when all the bridges crossing the Connecticut River between the Twin States - Vt. & N.H. - were wooden covered bridges. Now only a few remain. Resting squarely and solidly on heavy stone piers, their elongated tunnels decorated with a latticed stripe on each side showing the intercrossing of the side beams, they can boast of real architectural beauty.

The smaller bridges, crossing and re-crossing the rivulets and brooks of the Green and White

Mountain states are quainter, more varied in construction and appearance, if less beautiful.

Resting directly on the two banks, they often look like old barns placed in this curious position

by some strange mistake. -- **The Mentor, Aug. 1926**

[The above transcription is from a manuscript document, source unknown, in the VCBS Archives – W.C.]

Publicity Committee

by Ellen Everitz

To let people know about the VCBS and the work that it does I wrote this to various newspapers.

VCBS members might also consider posting the following on the public bulletin board in your community:

"The Vermont Covered Bridge Society (VCBS) is a 501c3 non-profit organization established to promote the preservation of our covered bridges. Anyone interested is invited to check out our very informative website: www.vermontbridges.com for many interesting facts about Vermont's Covered Bridges and the VCBS.

"All are invited to submit their experiences at any of our covered bridges, including those in their area, such as unusual occurrences or their impression of them for inclusion in the VCBS quarterly newsletter. We will also accept old photographs and postcards, as well as newspaper clippings. All items are to be submitted to: Miss Ellen Everitz, Publicity Chair, 7 Aspen Drive, Apt. 112, South Burlington, VT 05403-6247, E-mail: calamity99@peoplepc.com."

Here is a very interesting response to the above from a reader:

Dear Ellen,

The Stowe Reporter indicated you are interested in stories of covered bridges. In 1921 my parents bought our farm here and I have lived and farmed here since. My son, his wife and their daughter continue to operate it today. Our water supply comes from springs located off the property.

Originally the lead pipe from the spring to the farm was in a hand dug trench. When it reached "Gold Brook" it was placed in a wood box, covered with sawdust and the box was hung to the covered bridge.

One morning in the mid 1930's we woke up with no water running to the farm and house. We soon found the reason when we discovered the bridge had mysteriously burned in the night.

As far as I know no one to this day knows how the fire started! I hope this story is helpful.

Merton Pike, Stowe, Vermont

Membership

by Suzanne Daniels, chair, Membership Committee

Please join me in welcoming the following new members to our group: **Ken & Cathy Blum** of Springfield, Vermont, **Richard & Gloria Davis** of Lakewood, Colorado, **Mark Dawson** of Peabody, Massachusetts, **John French, Jr.** of West Hartford, Connecticut, and **Irene Mele** of Brewster, New York. A warm welcome to each of you!

Upcoming Birthdays and Anniversaries

June

04 Charlie Elflein
07 Carolyn Clapper
07 Robert & Barbara McPherson
09 Carleton Corby
10 Ron & Marie Bechard
14 Dick & June Roy
20 Joanne Billie
27 Glen Hall
27 Terry Shaw
28 Bob Kane
30 Lionel & Debra Whiston

July

04 Neil & Suzanne Daniels
05 Bill & Ada Jeffrey
11 Charles & Evelyn Lovastik
11 Marie Bechard
20 Bob & Trish Kane
22 June Roy
22 Lou Zabbia
28 Ray Gendron
28 DickRoy
28 Jan Lewandoski

August

03 Joanna Titcomb
 05 Joe Nelson
 08 Evelyn Lovastik
 08 Virginia Eckson
 10 Thomas Carpenter
 15 Ed Rhodes
 17 Euclid & Priscilla Farnham
 18 Ed & Irene Barna
 23 George Conn
 25 Jim & Linda Crouse
 25 Leo Fleury
 29 Ray & Dolores Gendron
 30 Ada Jeffrey
 30 Henry Messing
 30 Robert McPherson
 31 Kathleen Havranek
 31 N. David Charkes

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Martin Bridge Back Over River [WGN 45-12-06]



Martin Bridge is back, Photo by Joe Nelson, April

Marshfield, Vt., April 29, 2009 - The Martin Bridge, after standing in a field off U.S. Route 2 adjacent to the Winooski River for nearly five years, was returned to its place over the river this bright spring morning to the cheers of the watching Marshfield residents.

And cheer they should after a five year effort of raising funds to see this final moment. The bridge will serve as an entrance for pedestrians to the Marshfield town park. Happiest of all would be town resident Richard Phillips, watching his plans come together.

The Martin Bridge was built for William Martin in 1890 by Herman Townsend and his sons. The bridge utilizes a queen post truss and was built to provide access to Martin's agricultural lands on the far side of the Winooski River.

The Martin Bridge is the only covered bridge remaining in Marshfield and is the only original covered "farm" bridge left in Vermont. A farm bridge was built solely for agricultural use. The Martin Bridge and surrounding land was acquired by the Town of Marshfield in November, 2003.

Before the renovation, because of extensive rotting at the ends of the bottom chords and the shifting of the abutments, the bridge tilted significantly and was in danger of complete collapse.

To save the bridge, on May 18, 2004, it was lifted off its abutments and placed on temporary concrete supports in an adjacent field. With the bridge out of trouble, local volunteers directed their attention to designing the repairs and to fundraising.

Charles Thorndike, of New Hampton, N.H., gave the town of Marshfield the 120 acre property, valued at \$87,200, in exchange for the \$1,300 he owed in school taxes. The Selectboard agreed to the deal.

The Martin Bridge, also known as the Orton Bridge, was in very poor condition and probably would not have survived many more years without intervention. John Weaver, PE, Bridge-watch Coordinator for the Vermont Covered Bridge Society, after reading about the gift of the Martin Bridge to the town: "Marshfield Makes a Deal", in the Barre-Montpelier Times Argus, contacted the Marshfield Selectboard and volunteered to evaluate the bridge at no cost.

Montgomery's Creamery Bridge Rehab Paused [WGN 45-06-09]



Creamery Bridge, West Portal View, May 15, 2009 Photo by Joe Nelson]

Work on the bridge roofing, siding, and superstructure is complete, abutment and approach work remains to be done. Work has been suspended waiting for road conditions to allow heavy equipment access to the site.

Alpine Construction, of Schuylerville, New York, began work on Montgomery's Creamery Bridge on West Hill in mid September. The Contract completion date is July 31, 2009. The winning bid was \$598,632.30.

Built in 1883 by Savanna and Sheldon Jewett, the 59-foot Town truss bridge spans the West Hill Brook above a waterfall.

Structural problems forced closure of the bridge in the summer of 1994. An inspection team recommended interim rehabilitation to avoid collapse of the structure under its own weight and snow loading. The bridge was closed with concrete barriers. Over time water washing down into the bridge from the east end contributed to the rotting of the floor and floor timbers.

There are two roads leaving the south side of Route 118 west of Montgomery Village, one at each end of a cement bridge. One is named West Hill Road and the other is Hill West Road—perhaps some Yankee humor is at work here. Creamery Bridge Road joins both roads. However, the east approach (Hill West Road end) had been impassable due to wash-out.

Williamsville bridge Construction On Hold?

WGN VT-13-05

Newfane, VT, May 14, 2009 – The Vermont Agency of Transportation informed the Newfane Select board that the aggressive completion date of November 2009 may not be met because the contractor may not be able to obtain the necessary materials in time.

The request for contractors' bids is to be issued this week. Because of the potential delay, while the contract will require the completion date to be November, a clause will be added requiring winning contractor to maintain the bridge through the winter until the work is completed.

An adjacent land owner will allow construction to on his property, so the old bridge can remain in use until the new bridge is ready.

Pomeroy-Academia CB Renovation Completed

[WGN 38-34-01]

Academia, PA, May 25, 2009 - The Pomeroy-Academia Covered Bridge Renovation was completed in April; the Ribbon Cutting ceremony will be held 10 a.m., June 5 at the bridge between Beale and Spruce Hill townships. For more information: Visit the Juniata County Historical Society's Web site at: <http://www.rootsweb.ancestry.com/~pajchs/index.html>

The Pomeroy-Academia Bridge was closed in 2001 when an inspection discovered rotted beams and termite and powder post beetle damage. The dismantling of the bridge began in April 2008. Now, after eight years of

planning, fund raising, and reconstruction, the bridge will be opened to pedestrian traffic.

The pre-construction money came from fundraisers and a Keystone Preservation grant of \$70,000 from the Pennsylvania Historical and Museum Commission, a Pennsylvania Department of Economic and Community Development grant of \$34,000 and a loan of \$47,000 through the Infrastructure Bank.

Construction costs were funded by TEA 21, or the Transportation Enhancement Act and from SEDA-Council of Governments enhancement money, and through the Pennsylvania Department of Transportation.

The 278-foot Burr Truss bridge was completed in 1903 to cross Tuscarora Creek in 2 spans. It was part of the Pennsylvania Highway system until 1962 when the state replaced it with a new span. Slated for demolition, the Juniata County Historical Society took over the bridge.

[Thanks to Tom Walczak for bring this story to our attention]

Hutchins Bridge Reconstruction Progress

WGN 45-06-07



Hutchins Bridge, April 9, 2009, photo by Joe Nelson

The project began November 2008 and has a completion date of October 30, 2009. The winning bid was \$1,085,869.93 made by Alpine Construction of Schuylerville, New York. The bid includes a temporary Bailey bridge.

The abutments for the temporary bridge are ready. The current activity is preparing the site for work on the covered bridge superstructure. The bridge will be lifted above its abutments and suspended by its upper chords on steel scaffolding.

The 54-foot Hutchins Bridge was built in 1883 by the Jewett brothers to cross the South Branch of the Trout River using their usual Town truss.

The Hutchins stands in a quiet valley out of view of Vermont Route 118. A narrow unpaved road leads to the portal of the barn-red bridge. It is easy to imagine, in this isolated spot, that one has returned to the nineteenth century.

The Agency of Transportation Covered Bridge Study team inspected the bridge in 1994. The team found it to be in such poor condition that they recommended prompt attention to restore its capacity to safely support traffic. The Agency asked the town to close the bridge

until repairs are performed. Instead, I-beams were installed and the bridge continued in use by the dwelling beyond.

The Hermitage Road Covered Bridge*



Hermitage Bridge, photo by Anita Rafael

West Dover, Vermont. March, 2009 - Historic covered bridges have long been Vermont's most beloved landmarks, so when a traditionally-built covered bridge suddenly pops up on the landscape, people far and wide take notice. The Hermitage Road Covered Bridge at 25 Handle Road in West Dover, Vermont, is brand new; however, its vintage style keeps it within the proper historical context of Windham County's many National Register covered bridges.

The new bridge, which crosses Cold Brook, was built in 24 days in February, 2009. It is the result of cooperation between the Town of Dover, Vermont and the new owners of the Hermitage Inn. In 1986, the Town completed a wide concrete span leading from Handle Road onto Hermitage Road, and with sets of massive bolts to be used to secure a wooden bridge cover.

It was not until this year, however, that the covered bridge was realized, thanks to the generosity of Jim and Donna Barnes, owners of the Hermitage Inn. Their real estate holding corporation funded the entire cost of the wooden bridge for the Town, including the fees for permitting, design planning and engineering as well as the expense of the materials and contractors.

In one sense, the new bridge is already old. It is built in what is called the "Town Lattice Truss" style, a construction method dating back to 1820. Ithiel Town (b.1784-d.1844) of Connecticut popularized the use of closely spaced diagonal timbers for bridges, even improving on his own engineering and filing new patents again in 1835. Town became wealthy by collecting royalties for the use of his light, easy-to-build truss system.

In Windham County alone, there are numerous Town Lattice Truss covered bridges, including five that are a short drive from the Hermitage Inn: Scott Bridge in Townshend, Williamsville Bridge in Newfane, Green

River Bridge in Guilford, Creamery Bridge in Brattleboro, and West Dummerston's covered bridge. The Hermitage Road Covered Bridge is about to be recognized with a listing on the 2009 edition of Vermont's popular covered bridge map and guide.

The timbers in the frame of the Hermitage Road Covered Bridge are Hemlock, logged in Maine. They are pegged with custom 1½" Oak "trunnels." The bridge is sided with Atlantic White Cedar, which will weather naturally to a silvery gray. The roofing is painted standing-seam steel, a material that is commonly used nowadays even on historic bridges.

One unusual feature of the Hermitage Road Covered Bridge is that it can be removed in one piece should major repairs of the bridge's road bed be necessary. By unbolting the connections holding the wooden cover to the concrete, it can be lifted off by crane.

During the construction of the wooden cover this past winter, the road below it remained open to traffic. It was the one aspect of the project that was particularly challenging to builder Rob Wadsworth and his 5-man crew from Vermont Barns in Stratton, the contractors who built the bridge. After spending one week pre-assembling two 60 foot-long lattice sides on the snow-covered, they were able to set the bridge members in place in only one day using the "barn-raising" method and a large crane. Once the framework was joined, the contractors added the roofing and finished the siding and trim over the next two weeks.

The new covered bridge forms a gateway onto the 100-acre private estate of the Hermitage Inn. Steven O'Hern, the general manager, expects that since the bridge is in such a scenic setting, the Inn's guests and passersby will realize that it is one of the region's most photogenic landmarks. In autumn, the scenery behind the covered bridge and along the banks of Cold Brook will be ablaze in fall foliage; all spring and summer the bridge will be cocooned by the lush green of the surrounding fields and forest; and in winter, the snowy white ski slopes of nearby Haystack Resort will be visible above the roof peak.

[*This article is edited from a press release by Anita Rafael – Ed.]

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Covered Bridge Fiction or Fact?

Dear Readers:

Let us hear from you. What topic do you want our panel of experts to discuss?

Please send your suggestions to "Trivia", Bob and Trish Kane, 167 Williams Road, Sherburne, NY 13460, or bobtrish68@frontier.net - Ed.



Events

By Suzanne Daniels, Chair, Events Committee

VCBS Meetings in 2009

The Spring Meeting was held in the town hall in Waterville, Vermont—a community with three covered bridges! (And two more in neighboring Belvidere!) The meeting was well attended by approximately thirty people—several from Waterville and the Neighboring towns. This area is well represented in the VCBS by nine members.

The Historical Society of Waterville provided the table of refreshments. Joe Nelson gave an illustrated Power Point lecture on “The Bridges of Lamoille County.”

The Fall Meeting on Saturday, September 26, 2009 is to be held in Windsor, Vermont at the Toll House for the Windsor-Cornish covered bridge, the longest two-span covered bridge in the United States.

The meeting will be the first time that the Toll House, located on Bridge Street, on the Connecticut River and adjacent to the bridge, will be opened to the public. The circa 1790 cape was the original structure for the toll collection for the ferry from Cornish, New Hampshire, across to Windsor in Vermont. Historical structure buffs will enjoy touring this house.

Dear readers: If the code on your mailing label is in red, your membership needs to be renewed. Membership dues and donations are used for promoting the preservation and appreciation of covered bridges – **Membership Committee**



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