

# THE BRIDGER

The Vermont Covered Bridge Society Newsletter – March 2024

Mark Maddox, Editor



## From the Editor



- Mark and Winston

I'm excited to introduce myself as the new Editor of *The Bridger*. At the same time, I would like to thank Melanie Schropp, our prior editor, for her dedication and hard work in the production of *The Bridger* as well as being the past Secretary of the Vermont Covered Bridge Society.

We moved from Seattle, Washington to Rockingham (just outside of Saxtons River) in the summer of 2019. The people, the history and architecture as well as friends

located here were the driving force for the move. We haven't regretted the decision.

My first introduction to covered bridges was about 15 years ago in Indiana at the Parke County Covered Bridge Festival. I became captivated by their design and the history behind them. At the Chester Fall Festival last year, I discovered the VCBS and subsequently joined as a member in the September Fall meeting. Shortly after, I was recruited and elected as Secretary and Editor during the Board of Directors Meeting on December 21, 2023. I'm looking forward to exploring all of Vermont's covered bridges and doing what I can to help secure their future.

If there are items you'd like to see in *The Bridger* or interesting tidbits you hear about regarding any of our bridges I'd be glad to hear from you.

Cheers! *Mark Maddox* ([marmad40@gmail.com](mailto:marmad40@gmail.com))

## Introducing two New Board Members

### Jeanne Beaudry, Education Chair



My husband Marcel and I have been members of VCBS since October 2022. Our goal, as of retirement in 2019,

was to visit the National Parks, then Covid hit. We still wanted to explore so we joined the 251 Club of Vermont and began seeing covered bridges in many towns we visited. We are proud to say that we have now seen all 100 of Vermont's Covered Bridges. We began attending VCBS meetings, and as a retired teacher, I saw the need for interest in the preservation of our state covered bridges to begin with the youth of Vermont. I have begun working with schools in my area but plan to expand that work to other counties. Our committee is fairly new, but look for some wonderful things happening soon.

**President:** Joe Nelson, P.O. Box 267, Jericho, VT 05465, email: [jcarlnelson@yahoo.com](mailto:jcarlnelson@yahoo.com)

**Vice President:** Steve Miyamoto, 8 Ridge Rd., Essex Junction, VT 05452, email: [spmiamamoto@comcast.net](mailto:spmiamamoto@comcast.net)

**Secretary:** Mark Maddox, PO Box 296, Saxtons River, VT 05154, email: [marmad40@gmail.com](mailto:marmad40@gmail.com)

**Treasurer:** Dan Monger, 26 Lake St., Tunkhannock, PA 18657-7128, email: [teelmonger@ptd.net](mailto:teelmonger@ptd.net)

## Scott Scribner, Membership Chair

Scott's introduction comes to us by way of an interview by Steven Jupiter published in *The Reporter* January 17, 2024. Reprinted here by permission.



Barbara and Scott Scribner

# Vermont's covered bridges have a local fan club

BRANDON—Few existing structures trigger nostalgia for days of yore like covered bridges. They evoke horse-drawn buggies and farmers carting their wares to market. They're romantic and picturesque remnants of an earlier time.

These structures have a fan club here in Vermont: the Vermont Covered Bridge Society (VCBS), a nonprofit "dedicated to the promotion and preservation of Vermont's remaining covered bridges." The VCBS has about 200 members.

Scott and Barbara Scribner moved to Brandon from Florida in 2022, taking over the proprietorship of the Inn on Park Street. They're also now enthusiastic members of VCBS, with Scott now the organization's membership chairperson.

"We love history and architecture," said Scott in the parlor of their B & B. "When we drove up here from Florida to find a B & B to buy, we went on a covered bridge tour in Vermont and New Hampshire."

"We saw a sign for a covered bridge and followed it," added Barbara. "We just kept googling 'covered bridge' and used GPS to find our way."

When they hosted an event for the Brandon Museum at their B & B last fall, the Scribners met Beth Brown, a volunteer for the Museum who is also Chair of the Rutland County chapter of the VCBS. They immediately connected over their shared love of covered bridges and the Scribners

Our immediate area is fortunate to have 5 of these bridges still standing, 1 in Brandon and 4 in Pittsford. All but 1 (in Pittsford) are still open to vehicular traffic. And all require care and maintenance to remain intact, sometimes even to the point of major reconstruction.

The Sanderson bridge on Pearl Street in Brandon, for example, had become so unstable by the 1990s that a temporary bridge was constructed to bypass it. In 2003, the present structure was erected to replace the dilapidated original.

Sometimes it's not even a bridge's age that's the issue: in the era of GPS—where the shortest route is always the "best" route—trucks often cause damage when attempting to cross covered bridges. Trucks sometimes get stuck and require assistance as well. In Pittsford, residents have approached the Selectboard there about providing more space for trucks to turn around once they realize they won't be able to cross the Cooley Bridge that crosses Furnace Brook and the Gorham Bridge (rehabbed in 2003) that crosses Otter Creek and connects Pittsford and Proctor (each town owns its respective half of the bridge). Both of these bridges date to the 1840s. The other covered bridges in Pittsford are the Depot Hill bridge on Depot Hill Road and the Hammond bridge just next to Kendall Hill Road. Both of these bridges straddle Otter Creek. The Hammond bridge is not open to traffic.

"We need people and money," said Scott Scribner. "The towns that own the bridges are responsible for them, but if there isn't enough money, our group chips in. That's where the money from the organization goes."

VCBS also decorates the bridges for the holidays. Beth Brown has overseen the decoration of all the covered bridges in Rutland County since 2022.

Anyone interested in helping to support and maintain Vermont's covered bridges can join the VCBS. Individual memberships are currently \$10/year for individuals and \$15/year for families. You can find out more at [vermontbridges.org](http://vermontbridges.org), the VCBS's website.

For those interested in reading about Vermont's covered bridges, Beth Brown recommends the book *Spanning Time: Vermont's Covered Bridges* by Joe Nelson. The

Scribners' favorites in the state include the covered bridges in Quechee and Arlington.

If you're looking for an excuse to get out of the house this winter, consider a driving tour of Vermont's covered bridges!

<https://www.brandonreporter.com/2024/01/17/vermonts-covered-bridges-have-a-local-fan-club/>

Editor's note: Dues have been increased since this article was printed. See proposal 2 under the December 21, 2023 Board of Directors Meeting

## In Memory of Thomas A. Tumielewicz

- By Beth Brown Limmer



Thomas Anthony Tumielewicz, 76, of Rutland Town died unexpectedly Friday evening December 29, 2023 at his residence.

Tom joined VCBS at Rutland Fair in August 2023. He and his father built a model (big one!) of Hammond CB. Tom talked to me about this at 2022 Fair and had plans to put the finishing touches on it over the Winter.

"I'll work on it between cruises!", he said, with a hearty laugh. (Tom and his wife loved to travel and cruise. He had such a affable personality that they should have paid him to be onboard!)

Tom did finish the model bridge and brought it to the VCBS booth in August 2023. He joined VCBS that day and donated his beloved model. I took his photo with it which appeared in the Fall 2023 issue of *The Bridger*, VCBS' quarterly newsletter. The model drew great interest and folks enjoyed seeing it. Tom came for blocks of time on two separate days to answer questions about the model and to talk to Fair goers.

Tom was the epitome of a people person! He could talk to a post (and probably get it to laugh!)

I will miss my friend, Tom. He had a heart of gold. Rest easy, Tom, and know the model bridge is in good care with VCBS. It will go to the 2024 Rutland Fair and the story will be told of a father and son with a project and how it all ended.

Beth

The full obituary from Tom can be found in the *Rutland Herald*

<https://search.app/4qmZvEjBRH4TkZUP9>

# Special Board of Directors Meeting December 21, 2023

Minutes prepared by Mark Maddox

A Board of Directors meeting was convened in accordance with VCBS Constitution and Bylaws Article 3, Part 2. The meeting was conducted via Zoom, email, fax, telephone, and surface mail.

On the agenda were eight proposals for discussion. Nine members of the twelve-member board participated, giving us a quorum. Participating were Jeanne Beaudry, Education Committee Chair; Melody Beth Brown, Events Committee Chair and Fundraising Committee Acting Chair; William Caswell, Jr., Advisory Director; William McKone, Publicity Committee Chair; Steve Miyamoto, Vice President; Daniel Monger, Treasurer; Scott Scribner, Membership Committee Chair; Joseph Nelson, President and Communications Committee Chair; and Mark Maddox, Secretary. President Joe Nelson called the meeting to order at 7:04 p.m.

## Proposals for Discussion

**Proposal 1:** Adopt Proposed 2024 Budget. Each committee chair will examine the treasurer's proposed amount for your activities for the year 2024 and, if found to be necessary, adjust the amount. Minor fundraising was discussed and the budget approved unanimously.

**Proposal 2:** Raise the amount of dues paid by Annual Members receiving the society newsletter, *The Bridger*, by the United States Postal Service (USPS) to provide funds to pay for the rising cost of postage. After discussion, board unanimously approved the following increase in dues:

- Student from \$8 to \$10/year
- Individuals from \$10 to \$15/year (includes organizations – e.g. historical societies, libraries)
- Couples (instead of families) from \$15 to \$20/year

- Life Membership from \$150 to \$200
- Life Couple Membership from \$200 to \$300

An additional cost of \$1 will be added for dues submitted by PayPal to offset the PayPal service charge.

**Proposal 3:** Accept Melanie Schropp's resignation as Board Secretary and as editor of the *Bridger* newsletter. Proposal unanimously approved by Board of Directors.

**Proposal 4:** Nominate and vote for member Scott Scribner to chair the Membership Committee. Proposal unanimously approved by Board of Directors.

**Proposal 5:** Nominate and vote for member Mark Maddox to serve as Secretary and as editor of *The Bridger* newsletter. Proposal unanimously approved by Board of Directors.

**Proposal 6:** Shall VCBS offer the Town of Lyndonville a grant for repair of their School House Covered Bridge (45-03-03) to make the bridge safe for viewers. After discussion, the grant of \$3,000 was unanimously approved by the Board of Directors. President Joe Nelson to send letter to the town outlining the grant.

**Proposal 7:** Rent a post office box in Brandon for use of membership correspondence. Proposal unanimously approved by Board of Directors.

**Proposal 8:** Create a Speakers Bank and place it under the Publicity Committee for budgetary and administrative supervision. The Speakers Bank (or Speakers Bureau) would be used to engage the public, informing them of the work of the VCBS via Zoom or in person discussions. A minimum budget of \$500 for mileage reimbursement was provided under the 2024 budget discussed in Proposal 1. Proposal approved by the Board of Directors.

The meeting was adjourned at 8:56 p.m. by President Joe Nelson.

# Treasurers Report

– by Dan Monger, Treasurer

## VCBS TREASURER REPORT: 01/01/2023 – 12/31/2023

### INCOME:

Donations	\$3,455.00
Dues	\$861.00
Sales (Books, Caps, Decals, Misc.)	\$1,763.00
Sales (Gross, 2024 Calendars)	\$8,303.22
Meetings Income (Silent Auctions)	\$600.00
<b>TOTAL INCOME</b>	<b>\$14,982.22</b>

### EXPENSES:

Board of Directors	<b>\$90.00</b>
<u>Office Administration</u>	
P.O. Box Rental	\$84.00
Postage	\$80.50
Printing	\$120.00
Website (Software/Domain)	\$1,193.00
Insurance	\$1,190.00
<u>Total Office Administration</u>	<b>\$2,667.50</b>
Bridge Watch Committee	\$0.00
Legislation Watch Committee	\$0.00
Historical Committee (Storage)	\$1,235.00
Communications Committee	
Postage	\$391.00
Printing	\$700.28
<u>Total Communications Committee</u>	<b>\$1,091.28</b>
Publicity Committee	\$450.00
Membership Committee	
Postage	\$79.00
Printing	\$115.00
Purchases	\$797.50
<u>Total Membership Committee</u>	<b>\$991.50</b>
Events Committee	
Venues	\$611.00
Purchases (Miscellaneous)	\$160.00
Meetings Expenses	\$333.00
Mileage (All Committees)	\$689.00
<u>Total Events Committee</u>	<b>\$1,793.00</b>
Fund Raising Committee	
Purchases (Printing 2024 Calendars)	\$2,500.00
Commissioned Items Agreement	\$1,472.00
<u>Total Fund Raising Committee</u>	<b>\$3,972.00</b>
Education Committee	\$219.00

**TOTAL EXPENSES** **\$12,509.28**

**NET GAIN** **\$2,472.94**

Union Bank Checking Account Balance 01/01/2023 = **\$21,127.47**

Union Bank Checking Account Balance 12/31/2023 = **\$23,600.41**

Cash banking account, no fees charged. VCBS is a 501(C)(3) non-profit organization.

## Publicity Committee

- by Liam McKone, Chair

### SPEAKERS BUREAU

The Publicity Committee, acting on an initiative by Beth Brown, Chair of the Events Committee, has established a Speakers Bureau for the VCBS. The program will provide both virtual meetings on Zoom and in-person presentations to promote our organization, recruit new members, and explain our mission. We are seeking volunteers to support this effort and the other duties of the Publicity Committee. Materials are being developed for a standard program and they will be made available to anyone who steps up to organize a virtual or live

presentation. A training session can be arranged for those folks who might want help in their initial talks, either with technical support or factual information. We hope eventually to provide this program around the entire state by working in conjunction with organizations such as libraries, historical societies, civic groups, schools, and tourist centers. For further information or to sign up for participation, please contact Liam McKone at [VCBSPublicity@gmail.com](mailto:VCBSPublicity@gmail.com). The program support package should be ready by spring this year.

## Education Committee

- by Jeanne Beaudry, Chair



On Thursday February 22nd, North Country Supervisory Union (NCSU) held their middle school science fair. As a member of VCBS, I was invited to join with a booth. Students and teachers from 7 schools took part in the morning activities. My booth consisted of an 18:1 scale replica of the

Lord's Creek Bridge in Irasburg that was built by my husband Marcel. I also had tri-fold posters about the following topics: VCBS, covered bridges in Orleans County, covered bridges in Vermont by county, and specifics about the Lord's Creek Covered Bridge. All teachers in attendance received a proposal for a covered bridge building competition and a request to let me know if they are interested in participating. If replies come in with interest, we will have a NCSU middle school covered bridge building competition in May. More details to follow.

The Education committee consists of Maureen Mitchell, Kevin Mitchell, Joe Mitchell, Sally Cleveland and Jeanne Beaudry, chair.

## Events Committee

- by Beth Brown Limmer, Chair

First and foremost, mark your calendars now for Saturday, June 8, 2024 for the Spring Meeting! It will be held from 10 – 3 at the Charlotte Senior Center, 212 Ferry Road, Charlotte, Vermont. If you haven't been to the last three post-pandemic meetings, you are missing out on one of the best benefits of being a VCBS member! This is our time to

schmooze with each other, conduct a bit of business, exchange bridging tales, have lunch together, listen to an interesting presentation, and go to see the local covered bridges. Oh, and a bit of fun and frivolity, an opportunity to bid on Silent Auction items, and buy VCBS merchandise can also be expected!

No need to make reservations unless you want a gold star from me. Lunch money / donations will be solicited, unless I can round up a local Scout troop or 4-H group to make lunch as a fundraiser for their group. Then lunch will be by donation by that group. Regardless, there will be food and drink.

There will also be a caravan, led by Mark Maddox, to the three Charlotte Covered Bridges: Holmes Creek / Lakeshore, Quinlan, and Seguin, at 2:30 ish. These have some interesting features and locations, but I will divulge no spoilers here.

The Fall 2024 meeting will be on Saturday, September 28. The location has been narrowed to Warren, Waitsfield or Fayston, but I can't get it closer than that at this time. Plan on taking a foliage ride to that area, and watch for further details in the next issue of *The Bridger*.

As far as sale events are concerned, we plan to go to: Middletown Springs on Sunday, June 16 (1-4 p.m.); Jeffersonville on Thursday, July 4 (9-3); State Fair at Rutland, August 13 – 17; Chester Festival, September 21 & 22; Other possibilities are Midd Summer Market in Middlebury, Brandon Carnival in late July, and a time or two at Farmer's Market in Dorset (Sunday) and other Bennington County towns. I'll nail down the details by the Summer issue of *The Bridger*.

My thanks to the Events Committee members, and to everyone who has already volunteered to help at a 2024 sales event. We need more volunteers for schlepping and selling so please reach out to me if you are interested.

Thanks to our committee members Karen Tryon, Nancy Hodgson, Rhonda Vannest, Miles Jenness, Paul Limmer and Beth Brown Limmer, Chair.

## Fundraising Committee

- by Beth Brown Limmer, Acting Chair

Two meetings have been held thus far in 2024 (January 23 and February 27) We have explored some new items to sell at VCBS events and at the online store at [vermontbridges.org](http://vermontbridges.org) website. We have discussed the sales events we will attend. More volunteers means more events, so if you want to help, please let me know! Does your town have a festival, fair, or farmer's market we should go to?

Great progress has been made on the 2025 VCBS Calendar, thanks to Steve Brown who is doing the photo selections and format work this year. This is the third year of calendars made and sold by VCBS. The 2025 calendar will be a show-stopper! Hope is that they will be available first to members in June, in bookstores and gift shops by late June, and be at all 2024 sales events, starting with Father's Day in Middletown Springs!

In 2024 VCBS will be selling a custom-designed Christmas ornament by an artist and VCBS member, Elaine Kerr-Cole of Greensboro! It features the Cooley Covered Bridge in Pittsford. Heads up all

you ornament collectors and seekers of a "very Vermont" gift! This is it!

Another addition to VCBS sales items in 2024 will be a lapel pin featuring the Chiselsville Covered Bridge in Sutherland. We are looking for venues to sell these in Bennington County. They are also custom-designed and the start of a series if they sell well. These pins are wildly popular in other states such as Indiana, Ohio, and Pennsylvania. It's time for Vermont to highlight our covered bridges too.

Notecards and envelopes featuring John Knox's photos of Vermont covered bridges will be added to the usual lineup of ballcaps, DVDs, decals, bumper stickers, postcards, sew-on patches with VCBS logo, and book by Joseph Nelson. Some of these items are now for sale at VCBS online store.

It will be an exciting year to support VCBS by purchasing merchandise! Thank you, one and all. Our mission of preserving Vermont's covered bridges is advanced by your purchases.

Thanks to our committee members Steve Miyamoto, Barbara Scribner, Steve Brown and Beth Brown Limmer, Acting Chair.

## Bridge Watch/Bridges in the news

CAMBRIDGE – Liam McKone

The usual threats to covered bridges are fire, flood, and fools (who ignore the warning signs about height and weight of vehicles), but in this report we must include wind damage.

### Cambridge Junction Covered Bridge –

Liam McKone

The July 2023 record flooding on the Lamoille River stripped the downstream siding off the bridge. Bill Caswell last fall stated that Blow and Cote, experienced at maintaining covered bridges, would repair the siding and some damage to the abutments from the flood, though there has not been anything visible done as yet.

### Gates Farm Covered Bridge – Liam McKone

High winds on 10 January 2024 blew down many trees in the area and took much of the tin roofing off the bridge, but it has since been replaced as of February. Maintenance of the bridge is the responsibility of the state, although it is not open to vehicular traffic by anyone except the farm on which it sits. Trees have now also been cut back to prevent damage to the new roof.

### Mount Orne Covered Bridge – Steve

Miyamoto / Bill Caswell

Lunenburg: The bridge has been closed since November 2023 and reopened to traffic on February 21, 2024. Headache bars, or “crash bars” as they call them, are in place with the reopening of the bridge. The work is done by the Arnold M. Graton Associates but I believe this will be the first bridge in Vermont to use them. [https://www.vermontbridges.org/news\\_items\\_2024/vermont/mt-orne\\_bridge\\_nears\\_reopening\\_02-11-24.shtml](https://www.vermontbridges.org/news_items_2024/vermont/mt-orne_bridge_nears_reopening_02-11-24.shtml)

### Millers Run Covered Bridge – Steve

Miyamoto / Jeanne Beaudry

Lyndon: Per the article in the Caledonian Record, the Millers Run CB was hit again on February 8, 2024. There is an important update on the status of the “headache

bars” which were to be installed on this bridge: [https://www.vermontbridges.org/news\\_items\\_2024/vermont/millers-run\\_bridge\\_two\\_incidents\\_02-08-24.shtml](https://www.vermontbridges.org/news_items_2024/vermont/millers-run_bridge_two_incidents_02-08-24.shtml)



Millers Run Bridge 5 days prior to accident – by Mark Maddox

As of 2/23/24, the headache bar has not been installed. Instead, they removed all of the vertical portal boards from both ends. They put up a 2X4 with 2 rows of 2 inch red and white reflector tape attached to its face at the height of the former portal boards. The height is approximately 11 ft 9 in as is stated on the sign on the Route 122 end of the bridge. However, there is no height sign on the opposite end of the bridge. The reflector tape is quite noticeable in the daytime and should show up well in the headlights at night.



Millers Run Bridge with reflector tape – by Jeanne Beaudry

## Westford or Browns River Covered Bridge

– Steve Miyamoto / Mark Maddox

Westford: Miles Jenness of Vermont Heavy Timber made a presentation to the Westford Selectboard on the condition of the bridge on December 28, 2023. The Selectboard reviewed his proposal and wanted to get another opinion on the scope and cost of the repairs. This appears to be a project that they have interest in pending funding and approval of the scope of work. It is up to the Westford Selectboard to get another estimate and explore funding. VCBS was asked about options for VCBS to help and Steve Miyamoto reviewed our mission and the Save-A-Bridge program. Steve also provided the town of Westford with additional contractor recommendations.

## Sanderson Covered Bridge – Brandon

Police Report

Brandon – On December 6, 2023, Brandon Police Department received a report that a vehicle had crashed into the Sanderson Covered Bridge on Pearl Street, and that the vehicle was on its side in the roadway. Officers responded to the scene, along with Brandon Fire. The driver was discovered to have two active warrants for his arrest and was taken into custody. The driver was also found to have a civilly suspended license. The driver was transported to the Addison County Courthouse for arraignment. The cause of the crash was determined to be failure to yield to oncoming traffic and excessive speed. No injuries were reported and the bridge sustained only minimal damage.

## Sanborn Covered Bridge – Steve Miyamoto

Lyndonville: The Vermont Agency of Transportation Historic Covered Bridge Committee met in January to review the progress of the renovation plans for the Sanborn Covered Bridge. Numerous individuals from the various state departments concerned reviewed the current plans presented by Robert Durfee of the engineering firm of Dubois and King.



Sanborn Covered Bridge – by Mark Maddox

## Halls Covered Bridge – Mark Maddox

Rockingham – In December, a large vehicle crossed the Halls Covered Bridge causing damage to the interior trusses. Glen Schreiter, the Rockingham Highway Superintendent responded that work would be scheduled to repair the damage in the spring along with additional repair needed on the Williams Covered Bridge in Rockingham.

# A Visit to the Schoolhouse Covered Bridge

- by Mark Maddox

During the Board of Directors Meeting on December 21, 2023, a grant of \$3,000 was approved to offer the town of Lyndon to help make the School House Bridge (45-03-03) which is owned by the town safe for viewers. Steve Miyamoto notified the town of Lyndon of safety concerns specifically regarding weakness in the walkway railing on the bridge and the VCBS offer of assistance. Justin Smith, town

administrator of Lyndon, replied that they would look into the matter.

I decided to take a day trip to visit the bridge to see for myself. Inside the bridge, the Chamber of Commerce has provided the following information regarding the Schoolhouse Covered Bridge:

Location: Lyndon Corners S Wheelock Branch of the Passumpsic

Owner: Town of Lyndon

Built: 1897

Builders: J C Jones, Plans; Lee Goodall Framing; John Clement, Abutments

Type: Queen Post

Dimensions; 42 ft 8 in. length

"The School House Bridge was designed to be light and graceful, suggesting a bird poised to take wing. The builder wanted to protect the structure from the effect of weather and so spread the eaves much wider than usual and also carried the gable out on tall sloping brackets.

It is perhaps the only bridge remaining in the state to have the trusses boarded on both sides (possible to keep the school children from climbing the rafters).

The first bridge at this crossing was built to service the new brick Lyndon Academy and graded school in 1871-1872 and was uncovered. In 1927 the bridge survived the flood and settled right back on its original foundation.

The doctors and staff of the medical clinic at the old school house now faithfully maintain the bridge as a community service."

I believe the last paragraph no longer applies since the town has taken over maintenance of the bridge. As you can see by these photos taken in January,

the Schoolhouse Covered Bridge could use some additional TLC.



Schoolhouse Covered Bridge – by Mark Maddox



Winston inspecting the Schoolhouse Covered Bridge – by Mark Maddox

## Our Covered Bridges and Why They Are The Way They Are - by Joe Nelson

(Editors note: This is part of a multi-part article started in edition 95 of *The Bridger*. The full article is available under the VCBS members portal.)

### Repair and Strengthening of Wood Truss Bridges - by Jan Lewandoski

Wooden bridges were frequently repaired or strengthened during the 19th and early 20th century. This was necessitated by rot or damage from floods and ice, heavier vehicles using the bridge, or the fact that the bridge as built as simply

not as stiff or strong as it was intended to be. The most common methods used were adding more timber to a truss, adding wooden arches to a truss and shortening the span by means of additional piers.

Adding more timber to a truss generally increased its thickness, since it is very difficult to add

height to a wooden truss. The Henry Bridge, a Town Lattice in Bennington, Vermont (c. 1840) had its lattice doubled within a decade of its construction to accommodate the wagons of iron ore that began crossing it. The Cornish-Windsor Bridge (1866) between Vermont and New Hampshire had 40 ft. spruce timbers bolted to its top chords over the central pier and at mid-span on the bottom chords, both high tension areas, in an attempt to arrest the alarming sag caused by its ambitious 234' spans. This work was carried out sometime before 1912.

With lattice trusses it is possible to “sister” lattice, i.e. slip another lattice between the chords immediately alongside an existing lattice that is either damaged or located in a high stress area in need of strengthening. This was done at both the Paper Mill Bridge (1889) in Bennington and the West Dummerston Bridge (1872), both in Vermont.

The retrofitting of laminated arches to wooden trusses was a common method of strengthening bridges. The Pulp Mill Bridge (c. 1853) in Middlebury, Vermont was constructed as a double-barreled Burr arch spanning 195 feet. Due to a misinterpretation by the Pulp Mill’s builder of Burr’s post to chord connection, the bridge began to distort and sag soon after construction. Around 1860 10 layers of 2” x 6” plank were laminated into an arch that sat on top of the original arch (composed of naturally curved 4” x 12” timbers in series) and attached to the truss.

The addition of piers to shorten a span is a relatively simple upgrading solution for lattice trusses, in which all diagonals can function in either

tension or compression. For most other truss types, however, the division into several spans requires that half of the main bracing be reversed. The aforementioned Pulp Mill Bridge in Middlebury, Vermont, after being retrofitted with arches, was divided into three spans by two new piers. This involved reversing the direction of half the braces and bolting wooden shoulders to the rear of the posts to accept the new brace orientation. The 144 ft. Howe Truss at Jay, New York was subdivided early in this century by 3 piers. This subdivision produced such short spans that it was not thought necessary to reverse any of the bracing, leaving the single former counter braces to do the work previously carried out by pairs of main braces in half the panels.

Long trusses are equipped with large hardwood wedges where the vertical posts meet the top and bottom chords, designed, according to the inventor, for “trussing” or re-cambering the bridge. Howe trusses have vertical steel rods in place of posts and are described in Wm. Bell’s *Art and Science of Carpentry* (1859) as permitting of re-cambering at a later date. However, this author has come upon no account of these operations actually being carried out on a sagged bridge.

A final historic method of strengthening a failing bridge is to decrease its dead load by removing roof and siding, as was done on the Winooski River railroad bridge in Montpelier, Vermont in the late 19th century. To do so however, is a last desperate act, since the uncovered span is unlikely to last more than 20 years, while covered wooden bridges can persist almost indefinitely.

## Corrections

- by Mark Maddox

Unfortunately, as hard as we try there are the occasional errors we have to correct. On the VCBS website, Market Place – Online Store, under the 2024 Vermont Covered Bridge Society Calendar, we’ve made the following corrections:

1. Correct the spelling of the photographer to Alan B Hartmann.
2. Correct Mr. Hartmann’s website address to [www.SkylandsPhotography.com](http://www.SkylandsPhotography.com)

We apologize for the error and any inconvenience this caused.



PO Box 267  
Jericho, VT  
05465-0267



## Vermont Covered Bridge Society Membership Application

Dues and donations are used to promote the preservation of Vermont's covered bridges

Name: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: (     ) \_\_\_\_\_  
(Street) (City) (State) (Zip)

**Membership:**  New  Renewal  
 Student (\$10)  Individual (\$15)  Couples (\$20)  Life (\$200)  
 Life-Couple (\$300)  Business/Organization/Municipality (\$15)  
(Memberships are valid to the end of the current calendar year)  
(New memberships purchased in the fourth quarter are valid through the next calendar year)

**Newsletter Delivery:**  
 Postal Mail  Email  
 Opt-out

**Receive VCBS Email:**  
 Yes  No

**Donations:**  
 Palladio (\$2)  Palmer (\$5)  Hale (\$10)  Burr (\$25)  
 Powers (\$50)  Town (\$75)  Tasker (\$100)  Long (\$150)  
 Paddleford (\$200)  Whipple (\$250)  
 Other Amount (\$ \_\_\_\_\_)  
(The Vermont Covered Bridge Society is a 501c3 organization)

Return completed application with payment to:

Vermont Covered Bridge Society  
PO Box 83  
Brandon, VT 05733

(Checks payable to Vermont Covered Bridge Society)

OR Visit our website to join:



[www.vermonthbridges.org/membership](http://www.vermonthbridges.org/membership)