Covered Bridges

From My Side To Yours

By Emily Rehmeyer
Understanding Old Photos

Old postcards can tell us a lot about how Vermont used to look.

From this picture, we can gather a lot of information like how the river used to look, the type of bridge, etc.

And remember, just because a photo is old, doesn’t make it any less interesting than a new one!
Why bother covering a bridge?

Covered bridges are made mostly out of wood. When wood gets wet and then dries, and gets wet again, etc., it speeds up the process of deterioration.

A timber bridge exposed to these conditions will be lucky to function for 10 years. Thus, the only purpose for covering a bridge is to protect the wood structure underneath.
Covered bridges were used mainly for river crossings. They were used by both the railroad and in the road system.
Who used them?

People would walk across, ride horses across, drive horse-drawn wagons and carts…

and once cars were invented, they used covered bridges too!
Length

There are two types of length - **single-span** and **multiple-span**.

**Single-span** means that the bridge stretches from one side to the other without any supports in the river bed.

**Multiple-span** uses one or more supports in the river bed. This particular photo shows a “double-span.”
The width of covered bridges ranges from **one lane**, **one lane with walkway**, and **two lane**.

**Two Lane**

**One Lane with Walkway**

**One Lane**
Trusses

A “truss” is the framework that supports a bridge.

In this photo, the truss is all the crisscrossing and upright pieces of wood on the sides of the bridge. This particular truss is called a Plank-lattice truss.
Truss Identification

Before looking at the different types, it’s important to note that you can’t always tell what truss type a bridge has just from looking at images.

We know that the bridge in this image is a covered bridge, but it’s impossible to tell what kind of truss was used here.

There is a reason they are called “covered” bridges after all!
Therefore, we can divide trusses into two categories—short span trusses and long span trusses. Note, however, that long span trusses can also be used for short spans, though not vice versa.

The type of truss that gets used depends on how long the bridge must be.
Short Span Trusses

The short span trusses include the Kingpost and Queenpost varieties.

The **Kingpost** truss is identified by having one main upright post.

The **Queenpost** truss is the next step up. It has two main upright posts!
The **Burr-arch** truss has a pieced arch on the inner walls of the bridge (like part of a hexagon).

The **Haupt** truss is very similar to the Burr-arch except it’s arch looks more like a part of a circle than a hexagon.
One More Arched Truss

This truss is the **Pratt** arch. This arch is smooth like a circle as well, but it is made from layers of planks, rather than just one big log.
Long Span Trusses - Crosses

This is a **Howe** truss.

This is a **Long** truss.

This is a **Paddleford** truss.

All these trusses form X’s or crosses along their sides. They are very similar to each other, though they have slight variances.
Long Span Trusses - Crisscross

The is the last truss. It is called the Plank-lattice truss and is one of the most popular trusses in Vermont. The sides of this bridge form a distinctive crisscross pattern.
Now that we know the basics about covered bridges, let’s take a look at the **history** of them!

Bay Bridge, St. Albans
The oldest covered bridge that is still standing is the Pulp Mill Bridge in Middlebury. It was built around 1820. This is when the earliest covered bridges started to appear.
Another old bridge...

The Cooley Bridge in Pittsford was built in 1849 and is still standing today! It has a Plank-lattice truss.
Most bridges aren’t as lucky to last as long and get replaced with newer, more modern bridges.

This bridge is in Lyndon.

This bridge is in Hardwick.
They can become outdated, and something bigger is needed.

This covered bridge is being replaced by a concrete bridge in Northfield.

Or nature can destroy them...
Fire can destroy covered bridges, especially since most covered bridges are made almost entirely from wood.

Ice jams are another natural occurrence that can destroy a covered bridge.
By and large though, **floods** are the deadliest threat to covered bridges.
Take this bridge for example...

The flood waters have almost claimed this bridge and it’s barely holding on!
and some loose logs floating down river pushed it off its foundation.
Until it ran into another bridge!

It started to float downriver!

Until it ran into another bridge!
After the flood went away...

The bridge was grounded and full of debris. This bridge won’t be good for any crossings now!
The effect of floods can be drastic!

There were over **600** covered bridges in Vermont before the 1927 flood. Today, there are just over **100**.
Despite the dangers...

Vermont has the highest concentration of covered bridges in the US, as well as being ranked 3rd for having the most!

Overall, though...
Covered bridges can be a lot of fun!

- Fishing
- Filming movies
- Swimming and diving

LS08061 1984-06-06 Exactly
LS08947 1987-05-08 Exactly
LS08068 1986-07-24 Exactly
Let’s finish up with some…

Fun Facts!

Lowest - Lake Shore Bridge, Charlotte

Highest - Halpin Bridge, Middlebury 41’

Oldest - Pulp Mill Bridge, Middlebury 1820
Longest Two-span - Dummerston Bridge, West Dummerston 267’

Longest - Scotts Bridge, Townshend 276’

Longest Single-span - Bartonsville Bridge, Rockingham 151’
Widest - Maple Street Bridge, Fairfax 17’

Narrowest - Hall Bridge, Rockingham 12’
Wishing Bridges

It is said that covered bridges are good for wishing, and if you follow these steps, your wish is more likely to come true!

Make your wish before entering the bridge; lift your feet off the floor of your vehicle, take a deep breath, and say, “Bunny, bunny, bunny, bunny...” all the way through the bridge while thinking of your wish; then, upon coming out the other side, say "Rabbit!"

If you wish to know more, check out these books and websites...
More Info and Sources


URL 2 - http://www.virtualvermont.com/coveredbridge/

Landscape Change Program - http://www.uvm.edu/perkins/landscape/

*Spanning Time, Vermont’s Covered Bridges* Joseph C. Nelson

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