

Wooden Canoe Heritage Association

# THREE RIVERS CHAPTER

Issue 158

January 2025

Pittsburgh, Pennsylvania

## Happy 2025, People of the Rivers!

As I'm writing this, I'm watching what the weather guys are calling a "generational" lake effect storm dump feet of snow outside my Chautauqua window. Even so, canoeing and its pleasures are never far from mind. With that, please enjoy the two features in this first newsletter of the year: Mark Zalonis's excellent review of a new book on Bill Mason, and Craig Johnson's story on his rocking canoe build...a more harrowing adventure than any actual trip I've been on, for sure.

### Upcoming Meeting: Aquatic Invaders (Pre-Viewing Required)

**Saturday, January 17, 9:45 a.m.**  
**Zoom link (no on-site meeting):**  
<https://psu.zoom.us/j/93017413874?pwd=J20xwIQjdDF9pcaAyQzFHNiDJ0Vra.1>  
**Password: 205441**

Millie Sass has arranged for a fascinating presentation on invasive aquatic plants by Amber Rose Stilwell of Pennsylvania Sea Grant  
(<https://seagrants.psu.edu/>).

Amber will give us the latest on recognizing invasive species that are crowding out the locals in the waterways we paddle, with tips on managing and not spreading them.

**NOTE: Millie says you MUST watch this 40-minute documentary ahead of time:**

*Seeing the Unseen: Aquatic Invaders and What's at Stake.*  
(See link in caption below.) It's well done, visually beautiful, and highly informative.

### Download Our 2025 Event Schedule on the Forum

As you know, we met last November in Wheeling and

planned our events for 2025. To add this information to your calendars, go to the Three Rivers Chapter section of the WCHA Forum and download the schedule. Here's a direct link:

<https://forums.wcha.org/threads/planning-meeting-recap-and-2025-schedule.19870/>

Here's a link to details on our February and March meetings—lots of good stuff coming up.

<https://forums.wcha.org/threads/happy-holidays-heres-what-were-doing-over-the-next-couple-of-months.19904/>

Happy paddling!

—Brad



Before the January 17 meeting, watch this video here:

<https://waterlandlife.org/seeingtheunseen/>



## Book Review

*Bill Mason:*

### *Wilderness Artist*, by Ken Buck

by Mark Zalonis

*Dedicated to Andy Hutyera,  
Canoeist, Photographer,  
and Friend*

Bill Mason was a canoeist, artist, photographer, animator, cartoonist, painter, filmmaker, author, and environmentalist. Most people in the canoeing community have enjoyed his films and books for many years. Many have studied his *Path of the Paddle* films and books to learn and improve their paddling skills. Many have also enjoyed his other films. James Raffin wrote an excellent biography, *Fire in the Bones: Bill Mason and the Canadian Canoeing Tradition*. It is appropriate that this new book about his life and art should be authored by Ken Buck, a friend and collaborator in his filmmaking.

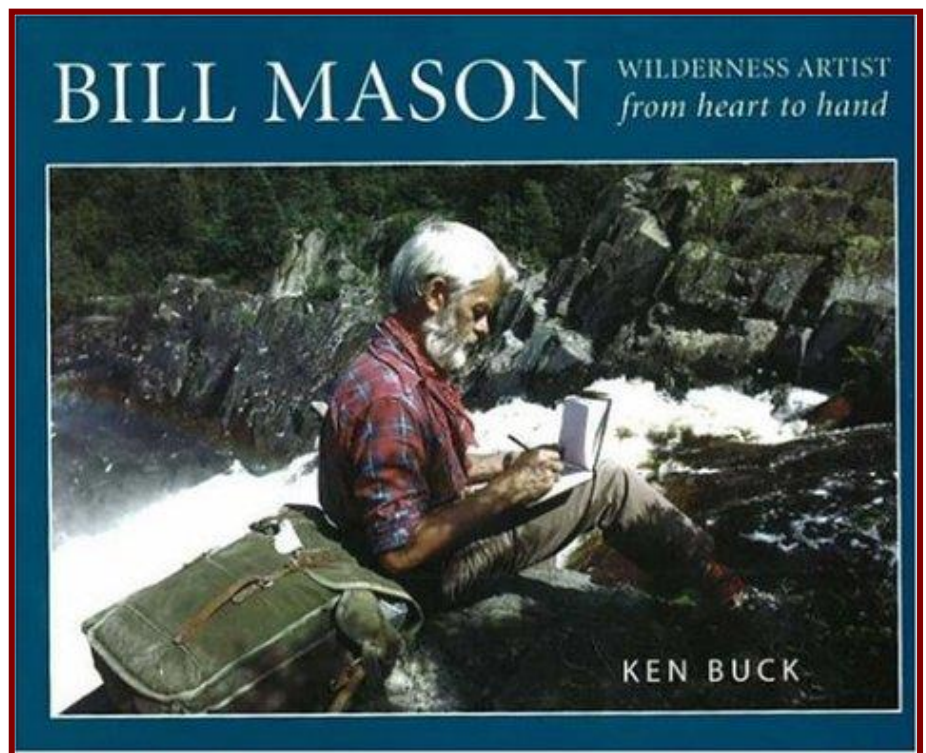
Ken Buck starts this book as most biographies do, with Bill's birth, his parents, and his childhood. Art and canoes were the focus of his life from his early years. His parents even allowed him to paddle a short distance from home and camp overnight. It was one of the formative acts in his life.

Bill always had health problems growing up. He was small, much shorter than his peers. Doctors gave him growth hormone drugs to help him reach his 5-ft, 5-in. 135-pound body.

These may have had side effects that afflicted him later in life. But they did not reduce his high energy. He loved hockey and played it intensely all of his life.

He grew up during the Depression. His father had a job during the depression with an insurance company when many others were out of work. He stuck with it, in spite of being unhappy, and sometime drank too much.

instructor, and guide. He learned that good teaching is an organized enthusiastic sharing of knowledge with other people. Upon graduating from art school, he became a commercial artist working for Philips, Gutkin and Associates. When he asked for the summers off, his employers said no. So, he quit and went canoeing for weeks or months, like his hero Calvin Rutstrum (*The Way of the*



Although Bill's Christianity was central to his life, he opposed religious excess, hypocrisy, and self-serving interpretations of the Bible. It taught him to resist being a slave to opinions of others.

Manitoba Pioneer Camp was created to give youth a summer camp in a Christian environment. It was here that Bill got his first formal training in canoeing skills. He became a counselor,

*Wilderness* and *Paradise Below Zero*) had done. When he returned, PGA would rehire him. Canoeing trips became art and filmmaking trips. This was a learning period for Bill as he studied Tom Thomson and the art in Sigurd Olsen's book *The Singing Wilderness*.

In 1958 Bill moved to Meech Lake in Quebec's Gatineau Hills, where he camped and commuted by canoe and car to Crawley

Film Studios in Winnipeg. He rented a cabin and in 1959 married Joyce Ferguson. Joyce became his chief of staff, critic, and connection to reality. She tempered his manic work ethic and guarded Bill from outside interruptions when he was working. They lived at Meech Lake for the rest of Bill's life when he was not traveling and canoeing for his art and filmmaking.

Later chapters in the book describe Bill Mason's journey through his artistic world. He worked as a commercial artist creating advertising. Being true to himself, he tried to insert an environmental message in the background of his art using references to Canada's history as a vehicle for his message. Advertising about trucks might include a drawing of the voyageurs, or a picture of a truck might be in the background of a wilderness camping scene with Bill paddling a red canoe.

Bill's wilderness canoe trips combined his artistic eye with photography. Skill in composition and lighting made his photographs tell a story about living in harmony with the wilderness. Animation and cartoons were another arrow in his quiver to push an environmental message with humor. Like any great artist, sketching as well as painting were important. Filming was another extension of his art.

Bill was working for the National Film Board of Canada when he pitched the idea of making a film of the classic children's book, *Paddle-to-the-*

*Sea* by Holling Clancy Holling. A young boy carves a small canoe with a native paddler and launches it into the headwaters of the Great Lakes, where it eventually reaches the ocean. The film follows Paddle on his long trip showing the changes in the environment along the way. The film was nominated for an Academy Award Oscar for Best Short Film in 1968. Teachers used the film in classrooms, and it was extremely popular.

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*"Upon graduating from art school, he became a commercial artist working for Philips, Gutkin and Associates. When he asked for the summers off, his employers said no."*

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Ken Buck's book details the making of Bill's other films: *Rise and Fall of the Great Lakes* (1966), *Blake* (1967), *Death of a Legend* (1968), *Wolf Pack* (1971), *Cry of the Wild* (1973), *In Search of the Bowhead Whale* (1974), *Face of the Earth* (1975), and culminating in his well-known canoe films.

Bill Mason's canoe films *Path of the Paddle* (1976), *Song of the Paddle* (1976), and *Waterwalker* (1984) would secure his place among the paddling community. *Path of the Paddle* is one of the most successful films made at the National Film Board. It is a series of instructional films showing how to paddle basic strokes in flatwater and whitewater, solo and in tandem. It was not filmed in a swimming pool but in natural wilderness settings. The beauty of

the backgrounds and the clarity of the instructions contributed to the popularity of canoeing. The films never claimed that Bill was the best paddler in the world but rather that anyone could learn to paddle well and safely in a canoe. Bill's calm and pleasant voice carried the assurance that the viewer could do it too. *Song of the Paddle* was Bill's assurance that paddling in the wilderness was a beautiful and pleasant thing to do, not a tooth-and-nail struggle for survival.

Bill made three more films for the National Film Board:

*Pukaskwa National Park* (1981), *Coming Back Alive* (1981), and *Where the Buoys Are* (1981). But his heart wasn't in it. He decided to retire from the Film Board to paint full time. He wanted to write another book based on the film *Song of the Paddle*. He put together outtakes from previous films to make his canoe feature *Waterwalker*. *Waterwalker* was Bill's plea for environmental responsibility using a canoe odyssey as the vehicle for the theme. He wrote a book about his paintings called *Canoescapes*.

In chapter 11, "Cameras and the Art of Seeing," Ken Buck delves into the technology used in making the films, including the cameras they used and how important perspective and light were in creating dramatic scenes.

In closing, *Bill Mason: Wilderness Artist* is an interesting view into the life and work of an amazing artist and filmmaker and is highly recommended. It is available from Amazon and other online sites, as well as from interlibrary loan. ☘

# The Rocking Canoe: A Long, Challenging, and Fascinating Journey

by Craig Johnson

Four years ago when my daughter got married, I started thinking about things I would make for my grandchildren if I were so lucky have some. As should be expected from someone with our organization's peculiar obsession, my mind soon turned to canoes. I came up with the none-too-original concept of a rocking canoe (instead of a rocking horse).

I'm sure I'm not the first with this idea, but I might be the first canoe builder who wanted to build this toy the same way I'd build a full-sized canoe. That is, I wanted full-dimension ribs and planking in a design with sheer and tumblehome but—ironically—no rocker. It would have #10 canvas, traditional silicon filler, and outside stems, and it would be tricked out with all the shiny brass hardware found on a fine vintage canoe. Stuff I already knew how to do.

Simple, right? Not so much.

## Best Laid Plans

My first step was to come up with a design. Envisioning a canoe 4 ft. long and about 20 in. wide, I was able to draw some full-scale plans. I used flexible battens to work out the stem profile and the curve and sheer of the gunwales, as well as the cross-sections at the locations of the ribs. I had read an article in



The finished canoe.

*Wooden Canoe* magazine about building a canoe without using a traditional canoe form, and I thought that would be a good method for this project.

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*"I wanted full-dimension ribs and planking in a design with sheer and tumblehome but—ironically—no rocker. It would have #10 canvas, traditional silicon filler, and outside stems, and it would be tricked out with all the shiny brass hardware found on a fine vintage canoe."*

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I decided that, in such a short canoe, the stems would practically meet in the center, so I would make them in one piece instead of two. They would essentially also be a keelson. I built a form to steam bend this on and milled a piece of ash that was an inch square in the stem area and widened to about 2 in. in the middle of the canoe or keelson area. I also built a form

to steam-bend the compound curves of the inwales. Both the inwales and the stems took several attempts at bending before I was successful due to the extreme bends and the time it took to bend essentially two different stems before they cooled down.

Once I had the stems bent, I shaped the stem sections and cut the notches in the keelson section to accept the ribs. To bend the ribs, I built plywood forms for each of them. I assembled the decks, inwales, and stem/keelson into a frame on which to attach the ribs. The pre-bent ribs were first fastened to the keelson and then to the inwales. I then fastened a seat support to the inside that spanned four ribs and stiffened up the whole structure even more. At this point I had quite a bit of work into the project. I was happy with how it had turned out so far, and well on my way to, as they say, rocking it.

Or so I thought.



**First failed attempt. Pretty, but no go.**

## Just Not Fair

Planking was the next step, but as I started fairing the ribs preliminary to planking, the error of my ways became apparent. At the sheer and on the flat bottom of the canoe, the ribs lay nicely in plane, but at the bilge a piece of planking would hit the high edge of each rib while being 1/4 to 1/2 in. away from the other edge. There was no fairing that would fix this. After all that work, I was devastated to realize that my plan was, in a word, flawed!

I tried to solve the problem by cutting a bevel on each of the rib forms, but my first attempt proved that, on this short, fat, extremely curved boat design, a straight rib could not follow the plane.

This problem occurs when building a full-sized canoe too, but when stretched over 16 ft. and divided by 50 or so ribs it is negligible and easily compensated for with a couple of simple tricks. But not on a rocking canoe.

## Geometry Lesson

The center rib of a canoe is essentially bending around a cylinder and so stays perfectly straight. Every rib after that is basically being bent around a cone. To lay flat on the form, each rib has to lean a tiny bit towards the center of the canoe. This becomes more pronounced and noticeable at the ends of the canoe where the bend occurs closer to the keel line. To compensate for this geometry problem, some manufacturers

that use tapered ribs would, instead of tapering both edges of each rib, put all the taper on one edge and then always put the tapered edge toward the center of the canoe, thus visually eliminating the lean until the ends of the canoe.

But this trick won't work on a 4-ft. 20-in. hull. On such a condensed curve, each straight rib would lean so far toward the center that it would completely overlap the previous rib at the gunwale line.

The only solution that I could think of was to build on a miniature traditional canoe form and use curved ribs. I could foresee some problems with this also, and so, discouraged, I put the project on the back burner.

Thank goodness there were no grandchildren imminent.

A year passed, during which I stewed over the problem. Then my daughter started talking seriously about having a baby. Time to get back on the horse.

I used the lines from my original design to build a regular canoe form, only smaller. It was



**This is not a still for making moonshine. It's the new form. And it worked.**

complete with metal strips for clinching the tacks as they were pounded through the planks and ribs. I used strips of Formica, which were thin enough to bend and lay flat on the form, to determine the shape of each rib. I needed to know this before I could cut a metal strip for the ribs. With the strips attached

I was worried about those ribs. Since they needed to be curved to fit the taper of the boat, there would be more and more grain runout as the ribs became more curved towards the ends of the boat. At these extreme points, the grain runout could make the rib subject to breaking during steam bending.



**Curved ribs. Note the grain runout on the curviest ones. Not good.**

to the form, I was ready to begin again.

When I built the form, I decided to take the wider keelson area out, and made the two stems and keelson from one piece of 7/8-in. x 7/8-in. ash. I wasn't having any luck bending this piece, so I tried making it by laminating thin strips of ash onto a form. I wasn't entirely satisfied with the results because there were some gaps between some of the layers, so I decided to shelve the problem for the time being and move on to the ribs.

I was right to be worried. I was totally frustrated in my attempts to bend any but the two straightest, most central ribs.

Again the project was shelved, and another year passed.

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*"Watching how quickly Kai was developing motivated me to get back to the rocking canoe. . . . I decided to devote myself to the rocking canoe full time. I'd either finish it or throw in the towel."*

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## Full Steam Ahead

In the meantime, I had been working on restoring other full-sized canoes, and I'd made an interesting discovery in steam bending that would ease my construction problems somewhat. I had started using flexible poly tubes for steam bending instead of the traditional rigid steam box. It was great for long, one-piece gunwales. It also allowed me to work at a slower pace that made it easier to manage the bending process, especially when working solo. If I didn't have the right jig or clamp, no worry, I could take my time to get or make what I needed while the wood stayed hot. As I used this method more and more, it began to occur to me that this might be the solution to my problem with bending curved ribs.

Then the grandson showed up. And he started growing. Soon he'd be ready to rock.

Watching how quickly Kai was developing motivated me to get back to the rocking canoe. After our third cross-county visit with him, and after finishing up a remodeling project that a happy marriage required, I decided to devote myself to the rocking canoe full time. I'd either finish it or throw in the towel.

Steaming the pieces in poly tubing turned out to be my saving grace. The first piece I bent was the keelson/stems. I have to state here that acquiring some really straight-grained ash from a chapter member probably had as much to do with my success as the new method. I had to come up with a way to use a



**Bending the stem/keelson using the poly tube method.**

compression strap inside the poly tubing without restricting the flow of steam. I had some 10-ft. x 1-in. galvanized duct hanging strap left over from a job. It turned out to be the perfect solution. After soaking an 8-ft. piece of ash for a couple of days, I simply folded the strap over each end and secured it with a small bolt. I cut the bolt off flush with the nut and filed it smooth. I didn't leave any extra length in the compression strap as I normally would because it would be heated with the wood and so expand giving me that little bit of extra length so as to not have too much compression.

### More Clamps!

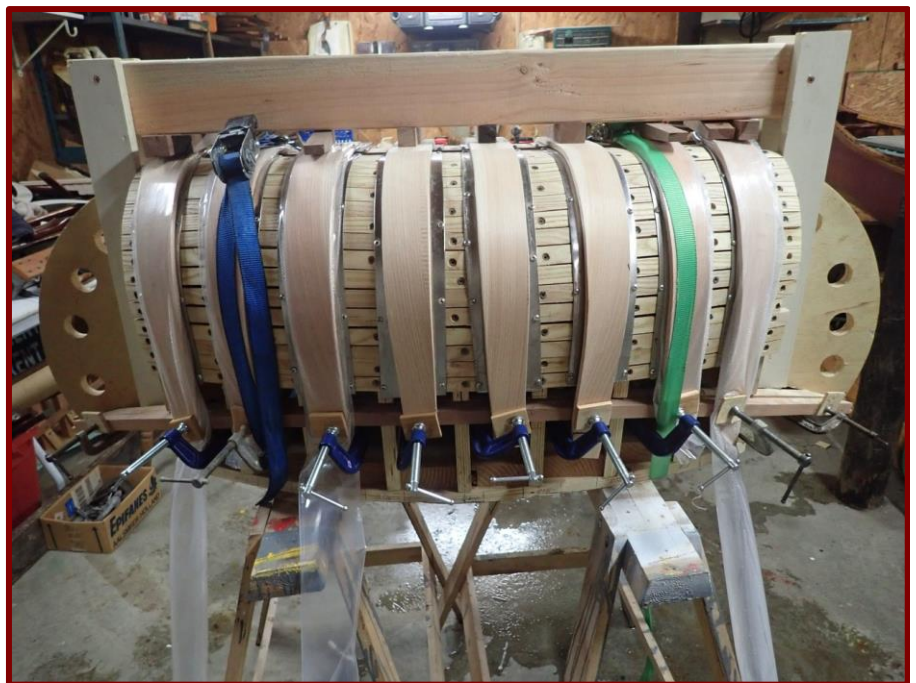
It seemed to work perfectly. I steamed the whole contraption in the poly tube for about an hour and then started bending. It was securely clamped at the middle of the keelson section, and I

started bending the stem away from the steam source. Right away I could see that the stem was not tight to the form between my wedge stations. No problem: I drilled some more holes for extra clamps and continued on.

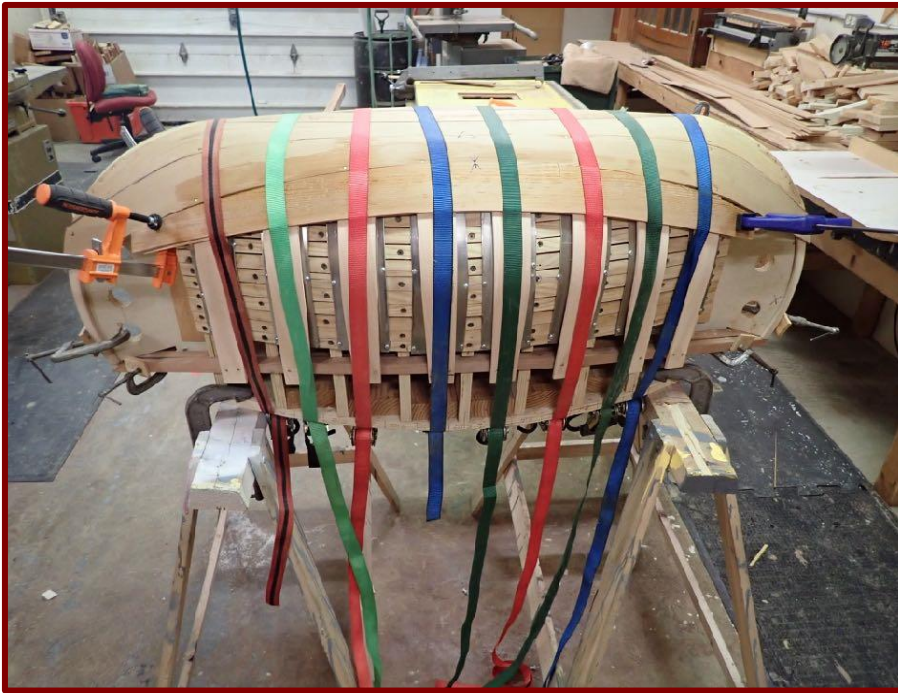
When I got to the end, the tip wanted to pull away from the form. There was no place to clamp, so I rigged a ratchet strap to make it comply. I then proceeded with the other stem end with the same method. The whole process probably took 45 minutes to an hour, but that was no problem because the wood was kept in steam the whole time. I continue to use this method for bending single stems by myself just because it is so much more relaxed and manageable.

### Lots and Lots of Kindling

Encouraged by that success, I moved on to the ribs. After soaking the ribs I would insert them into the poly tube, which could accommodate the curved ribs. I centered the ribs on the form and wedged them tight under the strong back. I steamed them for about 20 minutes and



**Using poly tubes and ratchet straps to bend the curved ribs.**



**Using straps to get the planking to conform.**

then started bending them very slowly. Some cracked exactly where I expected at the grain runout, but I had made extras, and some were successful. Even when a rib didn't crack, the area where the grain ran out tended to

lift away from the form on one edge. Because they were still being heated, I was able to rig a ratchet strap to pull them tight.

I now had the four central ribs done but the next two sets with more curve were not working. I

solved this problem by using half ribs and joining them under the keelson. Cutting the amount of curve in half allowed me to orient the grain in such a manner as to get the grain runout in the least crucial area of the bend. With a growing pile of cracked ribs for kindling, I had all but the cant ribs made.

I also used this method to bend the cherry inwales. With all the components bent, dried, and sanded, I reassembled them on the form and temporarily joined the stem and inwale tips. I attached the ribs at the keelson and gunwales and then faired them. I was ready for planking.

## Plank Problems

For planking, I chose to use 7/32-in. red cedar: red cedar because I like the contrast with the white cedar ribs, and 7/32 in. instead of the more typical 5/32 because I assumed there would be lots of fairing required, and I wanted to be able to get a smooth hull without making the planking too thin at the edges.

This was a decision I came to regret. While the amount of curve in the short length of the canoe was troublesome enough, the tight curve in the bilge was maddening. I ended up soaking the planking for a day or two and then holding each one in place with eight ratchet straps while heating it with an iron. I would then have to scribe them to the previous plank, remove and shape them, re-strap them, and finally tack them in place. Of course, as I had anticipated, since they had been soaked, they



**Ready for canvas.**

shrank when dry, opening up an ugly gap that would have been unacceptable on a full-sized canoe. At this point, though, I was willing to live with it.

I won't even go into how I came up with a goring pattern. I didn't plank past the gore planks because I could tell that the hull was becoming so rigid that it would be difficult to remove from the form. I was right, but, compared to the other problems I had to overcome, this was not so bad. Once off the form I finished planking and then had to make two sets of cant ribs. I wish I had done this on the form, but I guess I had acquired some skill because I accomplished the task without creating any more kindling. I trimmed the sheer plank and faired the hull and finally saw the light at the end of the tunnel. I knew I'd be able to complete the project. Now for the fun part.

## A Little Bling

I made the decks, thwarts, seat slats, and floorboards out of tiger maple. Lots of sanding and six coats of Epifanes Wood Finish Gloss, and she was ready for canvas. Unable to wait until after canvas, paint, outwales, and stems, I decided to brass it up a little first. I put the brass painter ring on the bow deck and flagpole socket on the stern deck along with copper and brass floorboard clips and bronze thwart bolts for a little bling.

While I was enjoying the finished work on the interior of the canoe, there was another niggling worry chewing away at my confidence. I wondered if



**The filled canoe awaiting my return from visiting its future owner.**



**Attaching the outside stems.**



**Attaching the cherry outwales and shaping the rocker cradle.**

canvas could be stretched enough to conform to the shape of this compact canoe. I also wondered if Roland (Thurlow, of

Northwoods Canoe) thought I was nuts for ordering just 6 ft. of canvas. Maybe he was right. Maybe I was nuts.

It started out pretty well. I got a nice stretch along the length of the canoe, so I cut the stems and started working my way up to the tip. By the time I got there I had a big fold that I couldn't get out. I then pulled the rib tacks back to the middle to see if I could redistribute the extra canvas but ended up with the big fold up at the gunwale. I pulled all the tacks again and restretched the length again, but this time worked down from the tip of the stem to the keel. Lo and behold, the big fold was now down there.

After much tack removal and restretching, I decided it could not be done. The best solution that I could come up with was to have the folds at the keel line and then cut in darts at that location to get rid of them. I tried to place them so that they would be covered by the cradle that supported the canoe between the rockers. Since this canoe will never see water, it really didn't matter. But it still felt like a failure, since cutting and gluing the canvas would not work on a real canoe.

But hey, who knows but me? Oops. Now you know, too.

The next day I filled the canvas, and it was just in time to leave for another cross-country trip to visit our grandson (and his parents) for six weeks, which is conveniently just how long it takes the filler to cure.

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*"The rocking canoe turned out to be the most complicated and challenging woodworking project I've ever done—and I'm a professional woodworker."*

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Upon our return I was ready to hop right into painting the canoe. In between the six coats of paint, I worked on making the cherry outwales and ash outside stems.

Once that was all done and assembled, I attached the canoe to the rockers. I designed the rockers and cross pieces to look like water. It was a little tricky to get the cross pieces to line up in just the right spot with a rib—necessary for putting in fasteners when the time came.



**Our two intrepid explorers.**

The cross pieces also had to be hand shaped with a changing bevel to cradle the curve of the canoe. The ends were mortised into the rockers, and I built a jig to hold everything square, plumb, and in line for assembly. I painted the rocker assembly blue and put the brass stem bands on the canoe. Then one final coat of paint and my grandson's name painted on the side, and I was ready for the final assembly. I put two carriage bolts through the keelson, keel, and carriage, and then four number ten screws through the ribs into the carriage, and it was all done.

While we had been in San Francisco on our last visit, Covid struck. That and some other factors convinced my daughter's family to move back to our hometown in Ohio, which solved the problem of having to transport the canoe across the country. It stays in the play area at our farmhouse, and the children play in it when they visit.

## **Toddler Tested, Built to Last**

The rocking canoe turned out to be the most complicated and challenging woodworking project I've ever done—and I'm a professional woodworker. Consequently, it's the one I am proudest of. It was *much* more difficult to build than a full-sized canoe. The fact that it was for my first grandchild kept me motivated to persevere

through the surprises and gotchas that were part of the journey. Now I have a second grandson who is also enjoying it. It has survived everything these two toddlers could throw at it. My hope is that it will be passed down for many years, teaching the beauty and joy of wood/canvas construction to generations of toddlers to come. ☕

## Miscellany

### 2025 Schedule of Events

Last November a planning meeting was held at Waterfront Hall in Wheeling, W. Va. and by Zoom for those who were unable to attend in person. Here is the tentative schedule of events. Other potential events include outings to Tidioute, Crooked Creek, and Blennerhasset Island.

Details will follow as each date draws nearer. Also, see the WCHA Three Rivers chapter website at <https://forums.wcha.org/threads/happy-holidays-heres-what-were-doing-over-the-next-couple-of-months.19904/>

- ☕ **Saturday, January 17, 9:45 a.m.: Zoom meeting**—Invasive aquatic plant presentation by Amber Rose Stilwell. See p. 1 for details.
- ☕ **Saturday, February 8: Slide show**—Meet at the Presbyterian Church in Cadiz, Ohio (or by Zoom). Brad Fisher will cover our activities over the years. Please share your photos with him well ahead of time to help make

this a well-rounded presentation.

- ☕ **March (date TBD): T-shirt printing**—Come to Tony Stanton's and Ann Mertz's house to silk-screen shirts etc. using the Johnson brothers' new design. You supply the garment(s).
- ☕ **Saturday, April 30: Paddle and potluck picnic**—Gather at Moraine State Park, hosted by Fred Capenos and Lee Grubish.
- ☕ **May 17–18: Camping and paddling**—Spend some time at Big Run State Park, hosted by Mark and Ruth Zalonis.
- ☕ **June 6–8: Annual Western Pennsylvania Solo Rendezvous** at Coopers Lake.
- ☕ **June 27: Fill Andy's canoe**—Come to Cadiz to fill the canvas of one of the canoes of our dear departed paddling friend, Andy.
- ☕ **July 15–20: WCHA Annual Assembly**—Learn about motorized canoes at Paul Smiths College.
- ☕ **August 16: Paddle**—Salt Fork Lake, hosted by Craig Johnson.
- ☕ **September 6–8: Weekend exploration**—We will again gather at Chautauqua, N.Y., hosted by Brad Fisher.
- ☕ **September (date TBD): Annual meeting**—Plan to attend.
- ☕ **October (date TBD): Mini-Assembly** at Gifford Pinchot State Park near Harrisburg, Pa.
- ☕ **November (date TBD): Planning Meeting**—Come to Waterfront Hall in Wheeling, W. Va. to help us plan next year's events.

## Three Rivers Chapter Dues Reminder

Dues for 2025 are now payable and are still a great bargain at only \$20 per year.

Please make your check payable to Three Rivers Chapter, WCHA, and send payment to:

Fred Capenos

P.O. Box 227

Chalk Hill, PA 15421

Be sure to include your name, address, and phone number.

### Chapter Information

**Head:** Brad Fisher

**Treasurer:** Fred Capenos

**At large:** Bob Ball, Craig Johnson, Scott Johnson, Jackie Hutylara

**Newsletter:** Ann Mertz

**Librarian:** Mark Zalonis

### National WCHA

<http://www.wcha.org/>