



SCANTLINGS

NEWSLETTER OF THE TIMBER FRAMERS GUILD
NUMBER 199 FEBRUARY 2016

Recap of 30th annual conference

With 240 people attending, the Guild's 30th annual conference in Coeur d'Alene, Idaho, was a great success. The auction brought in \$42,220, a record for TFG conference auctions. Keynote speakers traveled from around the country and abroad to tell their experiences to rooms full of timber framers and those in associated businesses. The pre-conference workshops were well attended, and there was no shortage of interesting lectures and workshops. Business boot camp started along with pre-conferences and continued through to the conference end. Here are a few summaries.

Pre-conference workshops

TFEC grading course

JOE MILLER

The Timber Frame Engineering Council held its timber grading training course for the third time in lieu of a traditional pre-conference symposium. The training was well attended by people who ranged from engineers to sawyers and from carpenters to suppliers. An enthusiastic group, we filled the room to the brim—with people, as well as timbers—for a full two days.

The course was taught by wood scientist Ron Anthony of Anthony and Associates (Fort Collins, Colo.) and balanced out with professional grader and quality assurance field manager Charlie Phillips of the Western Wood Products Association. Ron's classroom focus included the science behind the grading rules, including use of ASTM D245, to help define the process



Accacia Mullen

Collin Beggs led a movement workshop at the conference.

of converting strength values taken from small clear straight grain specimens in the laboratory to design values for actual timbers with real defects. He also included a pragmatic but defensible perspective on the use of reclaimed timbers and grading timbers in situ. Charlie's hands-on portion of the program included a brief overview of the WWPA grading standards and their application. His focus on grading to the rules in an efficient manner is to find the controlling defect in the timber, using that to determine the grade, and moving on without focusing on other lesser defects that won't affect grade. This was logical, and once mastered, easy to follow, but there was a bit of a steep learning curve. We were able to spend a decent amount of time under Charlie and Ron's tutelage looking at actual timbers, donated by Paul Cochran of Reliance Specialty Building Products in Spokane, Wash., and assigning grades, normally by unanimous, but some time contested, consensus.

See Pre-conference, page 3

Directors election results

Thanks to everyone who voted in the recent election. Let's welcome newly elected and reelected board members, Brenda Baker, Leon Buckwalter, Michael Cuba and Mack Magee, who are all serving a three year term through December 31, 2018. Congratulations! They are joining Jonathan Orpin, Gabel Holder, Bill Keir, Stephen Morrison, Rick Collins, Ellen Gibson, Steve Lawrence, and Al Wallace.

Thanks to retiring board member Paul Freeman for his hard work.

SCANTLINGS

Newsletter of the Timber Framers Guild
Number 199 February 2016

IN THIS ISSUE

| | |
|--|----|
| Recap of 30th annual conference. | 1 |
| Directors election results. | 1 |
| Grigg, Cindy Mullen recognized by Project Horizon | 4 |
| Welcome new and returning members | 6 |
| 1812 church toured during TTRAG meeting in N.H. | 7 |
| Apprentice Log. | 8 |
| Colorado Timberframe part of Noah's Ark replica in Kentucky | 8 |
| Director's corner. | 9 |
| Earthquake conference inspires interest in global collaboration | 10 |
| Events | 13 |
| Notices. | 15 |



Founded 1985

© 2015 Timber Framers Guild. All rights reserved.
PO Box 60, Becket, MA 01223, www.tfguild.org.
Jeff Arvin, executive director, 413/443-1803.
Megan Starr, executive assistant, 360/746-6571.
Brenda Baker, program manager, 517/403-6760.
Sue Warden, business manager, 855/598-1803.

Mack Magee, president • Brenda Baker, vice president • Steve Lawrence, treasurer • Bill Keir, clerk • Leon Buckwalter, Rick Collins, Michael Cuba, Ellen Gibson, Gabel Holder, Stephen Morrison, Jonathan Orpin, and Al Wallace, directors at large

Accacia Mullen, *Scantlings* editor • Susan Witter, *Scantlings* consulting editor • Brittany Robertson, *Scantlings* layout

Scantlings, the member newsletter of the Timber Framers Guild, is published in January, February, April, May, July, August, October, and November. Next deadline: Feb. 10.

News contributions and correspondence: Accacia Mullen, *Scantlings* editor, 3525 Maury River Rd, Rockbridge Baths, VA 24473. 540/817-9398.

Grigg, Cindy Mullen recognized by Project Horizon

ACCACIA MULLEN

At a dedication open house for the the Project Horizon (PH) building expansion, in Lexington, Virginia, Grigg and Cindy Mullen were honored on October 21, 2015, with the Pam Simpson Peace Award. Named after the late Pam Simpson, a long-time PH board member and community activist, the award was created by the PH board to “recognize individuals or groups who have made outstanding contributions to the work of Project Horizon.” The Mullens have been the link between the Guild and Project Horizon since Lisa’s House, a Guild project in 1999. Other timber frame projects benefitting PH include the loom shed in 2010 and several small frames that have been auctioned off at the annual Deck the Halls benefit gala. PH executive director Judy Casteel said, “The Mullens are a true example of those who work to make our community a better, more peaceful place to be,” and we congratulate them.



Grigg and Cindy Mullen watching the raising at the Project Horizon expansion.



Accacia Mullen

Grigg and Cindy Mullen, second and third from right, at 2015 Project Horizon holiday benefit gala with friends.

Recap, from page 1

While a two-day course and a short exam isn't sufficient to make any of us professional timber graders, it certainly gave us more confidence on how to apply grading rules and speak a bit more intelligently on how to justify using reclaimed material. If you ever work with, or design, timber structures using ungraded (new or old) material, I'd strongly encourage to you consider taking this grading course.

SIP School with Al Cobb

SEAN BERMAN

Al Cobb is the director of SIPschool and the owner of Panelwrights, LLC, and has been installing and endorsing structural insulated panels for over 30 years. His pre-conference workshop was mainly focused on general SIP knowledge and installation guidelines, while naturally promoting advanced building science and indoor climate management.

There are many material combinations for SIPs, with options for skins, cores and adhesives, though a common combination for wrapping a timber frame might be OSB skins and an expanded polystyrene core. Each material has advantages and disadvantages, and it's best to consult your architect and dealer when deciding which to use. Understanding the R-value that comes with each panel core, and what R-values, aged R-values, and true R-values really mean can be crucial in making a decision. Additionally, determining the global impact, compressive strength, perm rating, bug-deterrent options, and available sizes of panels can play roles as well.

SIPs provide a great solution for any building, given proper attention to details. As with any pre-cut system, it's crucial to have the details worked out prior to delivery. In many cases, cutting panels on-site can ruin a schedule and budget, so it is often best to have them pre-cut for a quick and painless installation. It's important to have an exterior water management system which might involve vertical, diagonal, or cross-battens over the tar paper or housewrap (additionally these options can help with decreasing sound transmission). Running of mechanicals doesn't have to be difficult with proper planning: pre-cutting or using integrated conduits, or interior furring can resolve those critical systems. Incorporated columns and pre-cut openings will help decrease site time as well.

Al's main point, the one he really drove home, was the importance of airtightness. Airtightness is key in the effectiveness and longevity of any SIP system. The closer to air-tight any building can get, and with the proper ventilation systems of course, the more effective and longer-lasting your insulated panel will be. Prior to, during, and after installation, any air-pocket within the panel should be filled with a single component or two-part foam. If done properly, and with a successful blower-door test, interior seam taping can be eliminated. Many trades that are unfamiliar with these systems can easily

diminish any effort towards this goal, so it is critical that the GC be aware and educate those on-site to keep the system performing properly.

Business Boot Camp

ERIC MORLEY

Learning from Matt Fleming in his search engine optimization (SEO) presentation, and talking with him during a break, was worth the expense of traveling to the conference for me. His message is that Google dominates SEO, so focus on Google. Content (well written, original, quality content) is king. Align your site with similar high authority websites (like Timber Framers Guild, Timber Frame Engineering Council). To read more of Eric's experiences at Business Boot Camp, go to www.tfguild.org/news/why-i-go-to-tfg-conference-and-highlights-from-the-business-boot-camp-by-eric-morley.

Conference sessions

English vernacular timber framing

MICHAEL CUBA

Jim Blackburn and Will Latrobe Bateman gave an outstanding presentation of English vernacular timber framing. Will began with slides of conservation and restoration projects. He also showed new structures and additions using traditional techniques and a mix of contemporary and old design methods. Jim Blackburn did an amazing job at consolidating well over a thousand years of English building history into a coherent chronology. He used charts and timelines to demonstrate the evolution of both specific joinery techniques and architectural styles over time and geographic distribution. His well-organized talk explored pre-Norman styles and the impacts of the Norman invasion, religious influence, medieval life and the development of regional styles.

Community projects

ELLEN GIBSON

Grigg Mullen, Tim Chauvin, Will Denton and Mack Magee all spoke about their roles in community building projects. Although everyone presented the topic of Community Building projects from a different angle, all stressed similar points. A project starts with community commitment of time and finances. It follows Guild guidelines and involves many partners and individuals. Realistic planning and accounting are critical and communication on all levels is key. The mission is to educate the local (public) community in the craft of framing and thus build the TFG community. Local community members are drawn in through projects and involvement in them. Ask for help and don't forget to acknowledge and thank all involved. Projects have been a vital part of the Guild, introducing many to the TFG community, to framing in general, and to community partnerships.

A well-planned project, with a plan B in hand, will unite a crowd, foster collective enthusiasm, and make memories for years.

Read more about this in the next *Scantlings*.

Compound roofs with Will Beemer

DARREN WATSON

Having begun my timber framing career with Will Beemer and Dave Carlon's excellent Intro to Timber Framing course at Pingree Park in 2002, I was excited to learn from Will again. He did not disappoint. I've spent most of my career in close proximity to a computer and a 3D solid model, so I have never had to really learn how to generate this information from scratch. I have found the existing materials fairly opaque and as a result I haven't taken the time to really understand this process like I should have. Will's instruction was open and accessible and any time there was a question he took the time to work through it clearly and concisely.

The first day we covered the basics of a simple 8:12 hip roof kernal that introduced the concept of unfolding the planes of the roof and how that allows you to lay out the lengths and angles needed to cut the joinery. We followed that up with an exercise detailing a purlin in a hexagonal roof, which moved us away from the straightforward world of regular plan roof. This prepared us for working our way through an irregular plan, irregular pitch roof on the second day. Each of the exercises was accompanied by cutting each of the components we developed in the drawings to create a physical model that reinforced the lessons we learned on paper. This course really helped me understand and visualize the process of developed drawing in a way that actually improved my understanding of the structure and construction of compound roofs.

Rigging, raising best practices

KEVIN CONLEY

One of the highlights of the conference was Steve Lawrence's presentation: "Rigging and Raising—Best Practices." Steve spoke to a packed room of people eager to learn more about the topic. Some of his slides were quite extraordinary, depicting complex lifting operations that he has accomplished.

Steve's presentation covered the practical aspects of safety (the fun ends when somebody gets hurt), competitiveness (the best way to compete is to get good at what you do) and cost (control). His topics covered types of cranes and other lifting equipment, including the Canadian A-frame. Steve defined designated and competent persons and went over lift planning and selecting a crane as well as rigging gear selection and inspection. Other topics included center of gravity calculations, briefings, tailgate meetings, and helicopter lifting.

Steve presented a plethora of tips, based on his experience, on how to conduct safe, efficient raisings.



Darren Watson working on his model in the compound roof workshop.

Examples included carefully considering ground conditions, using Sketchup models to plan complex raisings, and countless other tips to ensure successful raisings and avoid problems. Members of the audience got involved, acting out animated portrayals of crane signaling dos and don'ts. The next time you get a chance to see one of Steve's presentations, don't miss it.

Featured speakers and evening events

ACCACIA MULLEN

Rick and Laura Brown "Raise the Roof"

I saw "Raise the Roof," the documentary film about the Polish synagogue project, in the spring at a timber frame project in Lexington, Va. I don't watch many movies more than once, but I was so glad to have another opportunity to see this one in Coeur d'Alene. Rick and Laura Brown, key figures in the project and the film, introduced the film at the conference, and Rick noted that he was grateful to be speaking to the Guild that day. He said it was great to share a moment together with the Guild and Laura remarked that the project would not have been so wonderful without the Timber Framers Guild. They also credited Ed Levin and Joel McCarty for their support of the project, sharing that it was hard that Ed wasn't there to see the project to fruition.

Throughout the film, we learn Rick's "secrets of the universe," which start out with "learn to love to work." At the announcement of this lesson, Alicia Spence says that "everyone wanted the project to be as good as they could get it." For the other secrets, you'll have to see the film yourself. The documentarians, who are neighbors and friends of the Browns, include some history of Poland and synagogues and feature both the timber framers and the painters who worked so hard to recreate the synagogue roof.

The question and answer period were informative and inspirational as well. Rick and Laura talked about the expense of the project (including over \$1 million in in-kind donations), and their next project, which could be a Trojan Horse. Ellen Gibson and Leon Buckwalter, who were on the project in Poland, talked about what

it was like to be there. The event ended with some thoughts from Al Wallace about the Guild having more of an outward reach, learning from this project, and including an international focus as well.

Opening speakers and slideshow

“The rest of the world is not full of people like we have in this community.” This is how Jeff Arvin opened the conference. He noted that a raft trip with some fellow TFG members a couple of years back convinced him to come back to the Guild, and he was appointed executive director soon after.

Following his brief opening remarks and some “housekeeping” notes from Jonathan Orpin, Guild board president and conference chair, Brad and Dolores Gardner, of Helping Hand Presentations, gave their motivational safety presentation.

Brad began with a peanut butter and jelly sandwich making contest, pitting a blindfolded contestant against one with his arm tied behind his back. There were no winners. In his talk, Brad described an incident at work at a potato processing plant in which nobody was to blame, and everyone was to blame. It was quite graphic, which conference goers seemed to either love or hate. The main point of the presentation was delivered well by Brad’s wife, who said, “what hurts most is that people not involved in the accident are the ones who pay the price.” Both encouraged everyone in the room to consider safety in their work.

The slideshow, expertly composed by Michael Cuba, included the work of 42 people. Some highlights:

- Ode to queen post trusses
- 54 tons of material moved in 2½ hours
- R “A lot” Glulam walls rescued from a Safeway store building
- Radiant floor cooled house
- 13-ft. truck, 10-ft. bridge
- 8x17 dovetail cabin and tiny outhouse
- Portland, Mich., community project
- Union carpenter work
- Treehouses

Featured speakers

Richard LaTrobe Bateman

In a quiet voice, Richard LaTrobe Bateman asked the question in his talk’s title, “What are we doing?” and then stated: “I hope it doesn’t sound too cheeky.” His humor showed through, as he promoted himself to timber framer for the conference. Richard took us through a slideshow of his career timeline, beginning with his college studies with furniture designer David Pye. He showed some beautiful chairs, the design of which became simpler as in time, the number of pieces in each chair became smaller. Richard particularly enjoys building bridges: “No one’s going to ask you to put a



Accacia Mullen

Brad Gardner, center, officiating at the peanut butter and jelly sandwich-making contest between a blindfolded Ben Brungraber and his temporarily one-handed opponent.

footbridge up in a nasty place,” he said. He noted that cranes, when used to install, detract from the simplicity of the bridges, and that more processes will become mechanized as we move to the future (like using a Hundegger to cut a bridge frame).

He concluded summarizing his career, explaining that “Presented with the problem of making furniture, I latched on to structure and have gotten to this.” Following questions, he addressed his audience: “Well done for having a guild, and one that works together nationally. It must be so satisfying to come together. Can’t underestimate that. Hold onto it.”

John Abrams

John Abrams’ talk was called “About the Biology of Business,” but he explained that his talk was about transitions, which he said are different from changes, and the importance of hiring the right people. In describing big transitions at his design-build company on Martha’s Vineyard, Massachusetts, South Mountain Company, he told of the influence William Bridges’ book *Managing Transitions* on his own experiences. John invited audience participation by asking us to think about transitions in our own work lives, and we heard of a company’s lawsuit, someone’s retirement, and the way having children can change one’s perspective on work. John also talked about the Building Energy Bottom Lines organization, which began as a collaboration between New England Sustainable Energy Association and Yestermorrow. This group’s focus is on people, planet and profit with a goal of regional networking. The group was scheduled to meet about a week after the conference, and we expect to have a report in the next *Scantlings*. Audience questions included one notable comment: “I wish this talk was at the beginning of the conference instead of the end.” Presumably this person wanted more opportunities to apply John’s ideas to what he would learn in conference sessions.

Welcome new and returning members

Since July, 126 people joined the Guild or returned as members. Their names are here and we're glad they decided to be part of the Guild.

Merle Adams, Montana
James Adams, North Carolina
Michael Adams, Ontario
Brad Arlen, New Jersey
Steve Arthur, Virginia
Mark Arthur, Virginia
Ken Austin, British Columbia
Phil Bachofner, Montana
Richard Backus, Virginia
Pete Bartowski, Montana
Lyndsey Bayles, Louisiana
Kevin Berry, New York
Jeff Block, Montana
Chris Bloom, Pennsylvania
Samuel Bradbury, Ontario
Beate Brady, Colorado
Harry Brakeley, Massachusetts
Garth Brears, British Columbia
Earl Burden, Oklahoma
David Carlton, Oregon
Steve Chabra, Virginia
Brooke Christie, Manitoba
Terry Clark, Ohio
Kevin Conley, Maine
Norbert Conrad, British Columbia
Brad Corkill, Idaho
Neal Curry, Idaho
Matthew Daw, Washington, D.C.
Moyer Decatur Fountain, South Carolina
Jeremy DeYoung, Montana
Jodie Dodson, Pennsylvania
Pierre Dorval, Quebec
Adam Dreihaar, British Columbia
Brian Easterbrook, Ontario
Lucas Easterbrook, Ontario
James Everard, New Hampshire
Shawn Fetterolf, Vermont
Jason Foltin, Oklahoma
James Fox, Montana
Elizabeth Freierman, New Hampshire
Doug Friant, Vermont
Carter Gjevre, Minnesota
Diane Glowacki, New Hampshire
Eric Gomez-Ibarra, Mexico
Amy Good, Pennsylvania
David Goretoy, Idaho
Michael Granger, Rhode Island
Christian Gudmand, Massachusetts
Ryan Haggard, Colorado
David Haig, Michigan
Keith Hamilton, British Columbia
Ivan Herbert, Ontario

Mike Herrema, Oregon
Jeffrey Hershberger, Maine
Todd Herzog, Ohio
Ehron Hicks, Virginia
Levi Hochstettler, Ohio
David Hutchinson, Alabama
Rob Irwin, Ontario
Robert Jackson, British Columbia
Paul Jensen, Wyoming
Lubo Jezik, British Columbia
Butch Johnson, Tennessee
Jason Joudrey, Rhode Island
Adam King, Vermont
Rick Kinsmen, Ontario
Kurt Klappenbach, Maine
Kenneth Kriner, Georgia
Gabriel LaPlante, Quebec
Jim Lapp, Pennsylvania
Bob Lee, Illinois
Matt Lovemark, Oregon
Michael Low, Washington
Pamela Lunceford, North Carolina
Jaret Lynch, Connecticut
Neil Maclean, Ontario
John Mason, Texas
Luke Mawhinney, Montana
Kyle McCabe, New Hampshire
Bob McCarthy, New Hampshire
Rory McDonnell, Ontario
Mike McGinnis, Missouri
Anneliese McNaughton, British Columbia
Brett Mendonca, British Columbia
Richard Miles, New York
Brandon Mimbs, Idaho
Adam Mitchell, Vermont
Ethan Monk, South Carolina
Dustin Muhn, California
Omri Nassau, Massachusetts

Kipton Nichols, Washington
Eric O'Keefe, Washington
Claude Paradis, Quebec
Lyndon Penner, Japan
Mikey Perkins, Massachusetts
Christoph Petersen, British Columbia
William Polhemus, Texas
Douglas Pollock, Oregon
Benjamin Pries, Manitoba
Ian Proctor, New South Wales
Jeff Reed, Iowa
Bruce Reese, Georgia
Roy Russell, Massachusetts
Linda Rust, New Hampshire
Evan Sachs, Oregon
S M Schilder, Texas
Yvonne Schirp, British Columbia
Tray Schon, Nebraska
Jessie Shocklee, Idaho
Robert Sleboda, Massachusetts
Benjamin Smith, British Columbia
Tucker Smyth, Washington
Helmut Stoll, Germany
Jackson Sweitzer, Vermont
Patty Tanalski, Rhode Island
Joelle Taylor, New Hampshire
Jesse Thomas, North Carolina
Rick Thorton, Washington
Michael Twohig, Massachusetts
John Van Bruggen, Kansas
Michele Van Den Huevel, Wisconsin
Robert Ward, New York
Adam Watters, Pennsylvania
Daniel Weddle, South Carolina
Don Whitaker, Georgia
Hans Winter, British Columbia
Brian Zabel, Wisconsin

- Sawmill-direct pricing, surfaced or rough sawn
- Pine and hardwood precision-milled to your exact dimensions
- NELMA graded timbers and FSC-certified timbers available
- Plank flooring, paneling, siding, and stair parts



800-353-3331 • www.hullforest.com

1812 church toured during TTRAG member meeting in N.H.

MICHAEL CUBA

TTRAG members and guests gathered at an inn in Lyme, N.H. in early November for their annual meeting. As usual, the meeting was packed with great presentations and included slideshows of several international tours and projects. This year's presentations included:

TTRAG members:

Kim Balfour—Six Swing Beam Barns in Eastern New York
Dan Boyle—Canadian Barns in Etna, N.H.
Michael Burrey—Nantucket saltbox and Plympton house
Michael Cuba—Joinery of the Berner Oberland
Jim Derby—Warren 2nd Congo Church Steeple
Alex Greenwood—Two Large Bank Barns Moved to Connecticut
Bob Hedges—Three North Dutchess County Barns, N.Y.
Janet Kane—Exploration of Common Rafter, Purlin, and Queenpost Systems
Rick Lazarus—Details of Octagon Barn, Varna, N.Y.
Andy LeBlanc—Wozniak Barn Repair ca 1750, Saratoga County, N.Y.
John McNamara—Einhaus Bergholtz-Wheatfield, N.Y.
Randy Nash—Steel Replacement of the White House Timber Frame
Doug Reed—Traditional European Construction Methods
Jack Sobon—A Timber Framer's Tour of Sweden and Norway
Aaron Sturgis—Three Steeples: Derry, N.H., Northwood, N.H., and Wenham, Mass.



Michael Cuba

Lyme Congregational Church (1812) was on the TTRAG tour in November.

Guest presenters:

Rudy Christian—Conservation of Shwe-Nandaw Kyaung in Mandalay
James Hess—1802 Alfred, Maine Barn
Eliot Lothrop—Restoration of a c. 1800 Vermont Barn
Daniel Miles—Restoration at the White Tower of London
Ian Stewart—Anglo-Dutch Houses of the Hudson River Valley, N.Y., 1790-1810

Ken Rower hosted the event at the Dowd's Country Inn, a rambling bed & breakfast with a core structure built in the 1780s, located on the green in Lyme. Several additions to the original house provided enough room for all of us to stay at the inn. Most of our meals were catered by the inn; Lunch during the Saturday tour was at a nearby cafe.

We had an outstanding tour beginning with the 1812 Lyme Congregational Church where we were able to

See 1812, page 16



TTRAG members and guests visited the 1811 Moses Kent House on the recent tour.



CURTIS MILTON

The Apprentice Training Program (ATP) survives on the support of the registered Journeyworkers and Apprentices, the voluntary contributions of the committee members, and the other contributions we collect along the way.

In 2015, Timberwolf Tools contributed a new Mafell LS-103 chain mortiser to the TFG for use by the ATP and community building projects. The ATP was asked to care for that tool and the other tools we need to train skilled timber frame carpenters (and enthusiasts) for the future. That means this kit is insured and secured at my house between projects.

A major contribution is made annually by the host of the February assessment and training event. February 2016 brings a new host into the mix: Cascade Joinery of Ferndale, Wash. Past hosts have been Trillium Dell Timberworks, Knoxville, Ill. (2012 and 2014) and Frameworks Timber, Ft. Collins, Colo. (2013 and 2015). Frameworks Timber also contributed materials and material preparation for the ATP. This includes walls built in conjunction with a two-day scribing workshop at the recent TFG Conference, and the octagonal frame, built at the ATP 2013 assessment and training, which the ATP donated to the 2015 conference auction in

Coeur d'Alene, Idaho, seen in *Scantlings 198*.

Kindness and generosity are proven hallmarks of the TFG community, but developing and sustaining a Department of Labor-registered apprenticeship program will require greater participation by the timber frame industry.

Over the last six years we have repeatedly asked what we can do to help you as employers train yourselves and your staff. We haven't gotten a lot of response. The folks who want to learn have reached out to us and they continue to respond to our offerings looking for training, opportunities, and employment.

I am also not good at quitting so I'm not going to, but we could use some real input and participation outside the remaining program participants. We (the financially, intellectually, and in-kind contributing members of the ATP) will continue to develop programming and training materials because that is our mission. We are always pleased to discuss new collaborations.

The 2016 Assessment and Training event is ramping up and we will report the details in a future *Scantlings*. We still have space available and the registration deadline is February 19. www.tfguild.org/events/2016-apprentice-training-program

Colorado Timberframe build part of Noah's Ark replica in Kentucky

ACCACIA MULLEN

Guild members Colorado Timberframe, a timber fabrication company in Lafayette, Colo., are working on the Ark Encounter, a life size replica of Noah's Ark. The structure measures 540 ft. long x 90 ft. wide x 120 ft. tall, and when completed will be the largest timber frame structure in the world. Located at the Creation Museum in Williamstown, Kentucky, the Ark Encounter will be open year round as a tourist attraction. The Ark Encounter will also be one of the largest "green" construction projects in the country, taking advantage of the latest environmental technologies. Feasibility studies revealed that the Ark may attract 1.6 million visitors in the first year—and potentially more in future years. To learn more about this massive project, including video updates, see www.coloradotimberframe.com/ark-encounter/ and www.arkencounter.com.



Director's corner

JEFF ARVIN

Traveling on behalf of the Guild is exhilarating, if a little exhausting. I just returned from a trip through New England where I called on company members and potential Visionary Partners in Rhode Island, Massachusetts, Vermont, New Hampshire and New York. I also met with the people who are commissioning our next community building project in Schuylerville, N.Y. Everywhere I went, the enthusiasm for the Guild and our mission resonated loud and clear. The members I met with reminded me, (as if I need a reminder!) that as a group, Guild members are among the hardest working, biggest-hearted, most genuine people I have ever known. My only regret is that I could not have met with more of you.

I am, however, also frustrated.

I'm frustrated by the common refrain I hear when I bring up the topic of company membership in the TFG. It goes something like this: "I didn't receive value from the Timber Frame Business Council, and so I don't see why I should join the Guild as a company member." While the previous frustrations with perceived lack of value in the TFBC may be understandable, objections based on the past miss the point—the merger with the TFBC brings the Guild opportunities we've never had before.

Let's review for a moment. While the Guild has historically been an organization of individuals, its activities have provided invaluable support to companies in many ways:

We offer hands-on education to timber framers and their employees.

We provide valuable technical data via the Timber Frame Engineering Council.

We sponsor an apprenticeship program (and those companies who are not participating in this program are missing a bet!).

Our community building program trains timber framers and promotes timber framing.

Our TTRAG group researches and advises the general membership in preservation and restoration techniques—a growing business opportunity for qualified companies.

We provide two informative publications keeping members attuned to Guild news and offering thought provoking, in-depth articles.

Our conferences create valuable learning opportunities and invaluable networking opportunities for business owners and employees of those businesses.

Now, with the integration of company members, the Guild can continue its support of companies and expand our focus from a solely craft-based vision to one that includes:

Outreach to architects, engineers, general contractors and building owners, the specifiers and end users who make buying decisions.

Creating an educated and informed general public.

A regular and ongoing publicity campaign about Guild events.

Additional promotion of timber framing through our Community Building Program.

Providing valuable SEO data to member companies.

Additional education in business basics.

A library of basic business documents.

Providing the validation a community offers its members in the eye of the public.

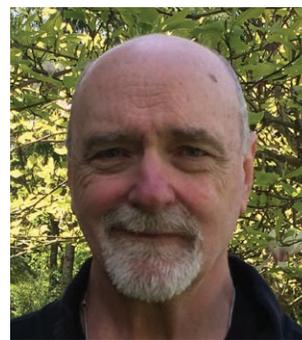
We don't need a traditional marketing campaign. The Guild's ongoing story is an extremely compelling one and in the context of telling that story, we can give buyers all the information they can possibly want or need to become informed users and customers. With company support, the Guild can build an even stronger, more vital community. It will be the tide that lifts all boats.

But we need more help! A financially sustainable model of the Guild calls for us to substantially increase both company membership and Visionary Partners.

In 2016, I look forward to traveling to speaking engagements and other events where I can share the incredible legacy and exciting potential of the Timber Framers Guild and its members. We have a big, exciting story to tell, and I love telling it, so I'm asking for your help. Thanks to all of you who have joined as company members and Visionary Partners, but we need more of you. Those of you who have joined, please talk to your colleagues. Those of you who are holding back, please have a heartfelt conversation with the person in the mirror. With your faith, will and vision we can push this extraordinary community into a greater future.

I hope you had wonderful holidays, and here's to a prosperous 2016!

Let's keep in touch!



PENLAND SCHOOL OF CRAFTS

Timber!

An eight-week timber-framing workshop with Raivo Vihman of Haystack Joinery

Participants will cut, join, and raise a timber-framed structure that will become a permanent part of the campus.

March 13 – May 6, 2016

Scholarship application deadline Nov. 28, 2015

Penland, NC • penland.org/wood

Earthquake conference inspires interest in global collaboration

RICK COLLINS

I recently attended the 2nd International Conference on Historic Earthquake-Resistant Timber Frames in the Mediterranean Area. It was hosted in Lisbon at the National Laboratory for Civil Engineering, and the 200 Euro fee included three days of presentations, two lunches, five breaks, and one dinner. There was also a technical site visit that explored 2500 years of building history in Lisbon, beginning before the Roman occupation. This conference featured 40 presentations on work in the entire Mediterranean region, all relating to timber frame buildings and timber frame building technology.

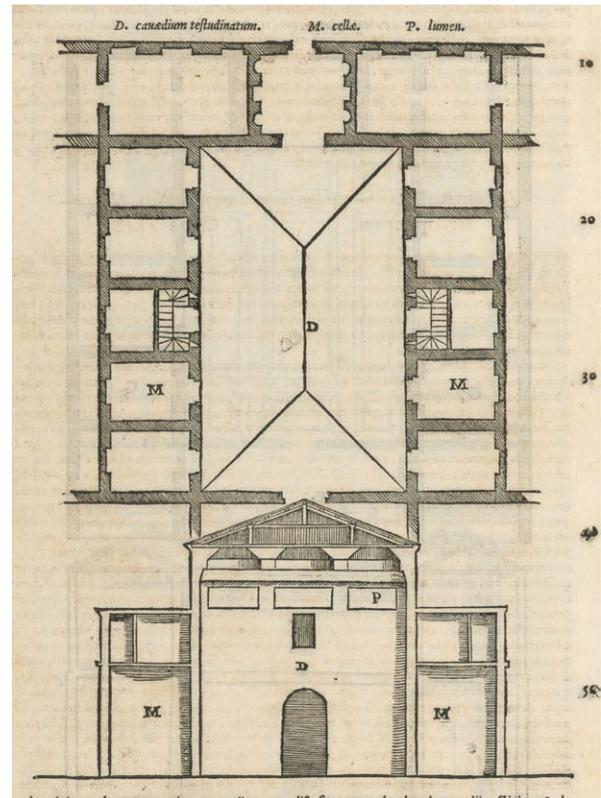
For the first 10 years of my career, I buried my head in North American heavy wood framing, both timber and log, and once satisfied I had a handle on my home turf, I moved on to trying to understand the roots of where our framing came from: Europe. I then spent the next 10 years learning as much as I could about western European framing and I really felt like I had been getting a grasp on it when I started to feel like I was missing a component—there was something tantalizingly out of reach. I realized my exploration and study of timber frames just kept getting deeper and deeper. There were elements that I wanted to know more about, pieces I was seeing that looked like they had connections to other places and times. Thus began the next step of my journey into Mediterranean timber framing. This journey began for me as a young carpenter, understanding and rebuilding a barn—where I once put hay—that burned down, and later moved down the Mississippi river to the old French homes of the 1720s. It took me across the Atlantic, and is now pushing me ever closer to the cradle of civilization.

In the beginning, I bought the books of the early 20th century, and later the books about Medieval framing, German and French roof math, and more. But long before the last few short centuries, we got our information about how to build well from different sources and in different ways (not books). One of the many fascinating presentations in Lisbon was by an engineer from Algeria. Her talk focused on wood and masonry structures in her home country. However, she began her talk with the following from the Bible: “In Ecclesiastes 22:16 is the following proverb: “Timber girt and bound into a building shall not be loosed with shaking” which has been translated as “Tie-beam braced into a building will not be torn asunder in an earthquake.” The Cambridge Bible explains it in footnotes this way: “Timber-built houses resist shocks of earthquakes best, and Palestine was a land of earthquakes.” It has been thought that Ecclesiastes was written sometime around 300-500 BCE, so would this be perhaps one of our first written building codes? Sometime later, Vitruvius goes on to tell us a lot about construction in his books *De Architectura*, around

15 BCE. Though *De Architectura* is largely about masonry, he does speak of half-timbered walls referring to them in Latin as *Opus Craticum*, and the technique of inserting stones as *Opus Insertum*.

In 1755 a massive earthquake struck Lisbon, killing 275,000 people. This led to new regulations and structures known as Pombalino buildings—timber frame structures with St. Andrew’s crosses, all in-filled with stones. After the 1783 earthquake, we find the Borbonne timber frame system of *casa barracata* written into the code books in Calabria, Italy. In both cases, timber framing had been employed previously—in Lisbon it was half-timbered houses that withstood the earthquake, and in Calabria, buildings such as the Palace of Nocera, built in 1683, survived the earthquake. In Greece, there is the Lefkada system, named after a particular system indigenous to the Ionian islands. In response to the earthquake of 1821, the British, who ruled at the time, established seismic codes for the buildings on Lefkas.

A big part of this conference centers on exploring how buildings were built in the past and how people



OLC.V834.567, Houghton Library, Harvard University

Illustration from *De architectura libri decem*, originally by Vitruvius Pollio. From an edition published in 1567 by Daniel Barbaro, using plate illustrations from the Marconi edition of 1556, and are the same as those in Franciscus' Italian edition, also issued in 1567.

adopted structures that survived the earthquakes of their region. When we talk about the past in this region, its not a few hundred years, or even millennia. The Minoans were building timber frames on Crete 5000 years ago. My personal interest is in the structures, but there were also presentations on repair and reinforcement, assessment and diagnosis, and safety codes.

I feel that some collaboration between North Americans and the people of the Mediterranean would be beneficial. It was my interest in and study of the French homes of the 1720s near New Madrid, Missouri, that helped me make the next step on my journey, to the Mediterranean. These Midwestern French timber frames (the largest and oldest collections of French timber frames in the U.S.) survived the four magnitude 8+ earthquakes of 1812.

I am not an engineer, but I feel like I understand what we are up against regarding our own environment and building in it, and I see what groups like our Timber Frame Engineering Council are working on. Part of my job is to speak with engineers about timber framing—almost every day in some cases—a lot of this related to repair. We have some knowledge that could be shared, and if we did, would we start saving some lives in these regions of concrete and steel?

The focus of this group is to bring back the building traditions of the past and help save the lives of hundreds of millions of people who live in these dangerous concrete structures. The knowledge to build well is there, in the words of the past and the buildings that were developed over 5000 years of experience.



Legacy Timber Frames

EVERGREEN SPECIALTIES LTD.

604-988-8574
brucelindsay@shaw.ca



Your Vision

» SUPPLIER—LUMBER, MILLWORK, & TIMBER
» DRY & GREEN, FIR, CEDAR, WESTERN CYPRESS

Our Timbers

TIMBER TOOLS

The first NEW traditional socket framing chisel in a hundred years:



Our BUFFALO TOOL FORGE chisel.

One-piece forged. Bevel edge.
Ergonomic handle. Balanced feel.
Edge life extraordinaire.

TIMBERTOOLS.COM
1-800-350-8176

When Execution Matters



FraserWood RF Drying Solutions



Contact us today.
(888) 898-1385
www.fraserwoodindustries.com

The wood screw for the professional: **HECO-TOPIX®**



- Revolutionary tip and shank design
- Easy to handle
- No predrilling required
- Much less risk of splitting the wood
- Lower driving torque
- European Technical Approval ETA-11/0284



The perfect wood connector for engineered timber construction: **HECO-TOPIX®-CC**



- Draws the connecting pieces together due to different thread pitches
- Narrow spacing without splitting is possible thanks to the HECO-TOPIX® tip and the cylinder head
- Structural verification provided HECO® calculation software HCS
- European Technical Approval ETA-12/0132



Authorized Distributor



613.673.1428

www.herrmannframes.com

PRECISION-MILLED,
OAK & DOUGLAS FIR
TIMBERS



- White Oak and Red Oak up to 40'
- Douglas Fir up to 50', dense and free of heart center
- All timbers grade-certified

Call or write for free timber price list: 1-419-368-0008
Fax timber list for free quote: 1-419-368-6080

Hochstetler Milling, Ltd.
552 Hwy. 95 Loudonville, OH 44842

The Timber Framers' Panel Company

Foard
PANEL

A Full Service Panel Company:
Design, Manufacturing, Precutting,
Technical Support, Installation

Ultimate Flexibility:

- EPS, NEO, XPS, & PIR cores
- 4' & 8' wide SIPs
- 4' to 24' long



www.foardpanel.com • info@foardpanel.com

1-800-644-8885

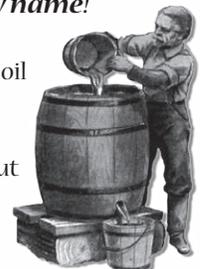
53 Stow Drive / PO Box 185
West Chesterfield, NH 03466

Heritage
Natural Finishes

Formerly called
Land Ark Natural Wood Finishes.
Same great finishes, new name!

High quality, all natural penetrating oil finishes for wood and earth.

Fast, reliable service! We get orders out in 1-2 business days.



Contact us for free samples.

Heritage Natural Finishes, llc

2214 Sanford Dr., Unit 8B
Grand Junction, CO 81505

(541) 844-8748 or 1-888-526-3275 toll free

www.heritagenaturalfinishes.com

EVENTS

These listings are for Guild workshops and meetings, were submitted by Guild members, or announce other relevant events. See www.tfguild.org/events. To submit info on a Guild event or project, reach Susan Witter, 360/647-0310.

Guild events

2016 Apprentice training and assessment Feb 26,
Cascade Joinery, Ferndale, Wash
Curtis Milton, atc@tfguild.org, 603/387-6770.

other events

Fox Maple (2016 workshops)

In Nosara, Costa Rica—

Timber framing Feb 22–Mar 5

Natural building Mar 7–11

Intensive apprenticeship Feb 15–Mar 19

At Fox Maple, in Brownfield, Maine—

Clay building May 27–29

Introductory timber framing May 30–Jun 4

Advanced timber framing Jun 6–11

Foxmaple, 207/935-3720.

EcoNest

In Mount Shasta, California—

Intensive May 9–27

Timber Framing May 9–13

Straw Clay Walls May 16–20

In Portland, Oregon—

Apprenticeship Jun 20–Jul 28

Intensive Jun 27–Jul 15

Timber Framing Jun 27–Jul 1

Straw Clay Walls Jul 5–9

www.econesthomes.com, 541/488-9508.

ENGINEERING DESIGN & REVIEW

Timber Frames

Over 28 years experience

Structural Insulated Panels

Licensed in 15 States

3D Modeling

Responsive

Full Structural Services

Reasonable Rates

SELLERS TREYBAL

Williston, VT

802.324.7780

John@STS-Engineers.com

www.STS-Engineers.com



John Treybal, P.E.
Greg Sellers, S.E., LEED AP



Reciprocal roof framing at the St. James Episcopal Church in Cannonball, ND by Empire Timberworks.

ELEVATING THE DESIGN & ENGINEERING OF TIMBER STRUCTURES

Bringing a Modern Perspective to an ancient craft. Fire Tower specializes in timber structures and related systems.

Ben Brungraber, Ph.D., P.E.

Joe Miller, Ph.D., P.E., P.Eng.

Mack Magee, M.S.

Dick Schmidt, Ph.D., P.E.

Duncan McElroy, P.E.

Talk to us about your next project, large or small.

Licensed in:
USA: AZ, CA, CO, CT, DE, FL, GA, IA, ID, IN, KS,
KY, LA, MD, MA, ME, MI, MN, MO, MT, NC, ND,
NH, NJ, NY, OH, OK, OR, PA, RI, SC, TX, UT, VT,
WA, WI, WY
Canada: AB, BC, ON, SK



FIRE TOWER
ENGINEERED TIMBER

27 SIMS AVENUE, UNIT 2R
PROVIDENCE, RI 02909
401.654.4600 • WWW.FTET.COM

"We trusted Pioneer to deliver 38,000bf of large dimension reclaimed Douglas fir on schedule... and they did it."

- Newell Pledger-Shinn, Hardwick Post and Beam



With 25 years of experience & inventory on each coast, your reclaimed timber project is easy to source.

Contact us for a quote :: 800.951.WOOD :: pionermillworks.com

Heartwood School

- Fundamentals of woodworking Apr 18–22, Oct 10–14
- Cabinetmaking Apr 25–29, Oct 17–21
- Country woodcraft May 23–27
- Intro to SketchUp for timber framers May 26–28
- Build an outdoor earthen bake oven Jun 9–11
- Concrete countertops Jun 10–11
- Timber framing Jun 13–17, Aug 22–26
- Scribed timber framing using natural forms Jun 20–24
- Converting trees to timber Jun 27–July 1
- Comprehensive housebuilding Jul 18–29
- Finish carpentry Aug 1–5
- Carpentry for women Aug 15–19
- Build your own country Windsor chair Aug 29–Sep 2
- Advanced SketchUpPro: layout Sep 2–3

Compound joinery Oct 3–7

Washington MA.
info@heartwoodschool.com, 413/623-6677.

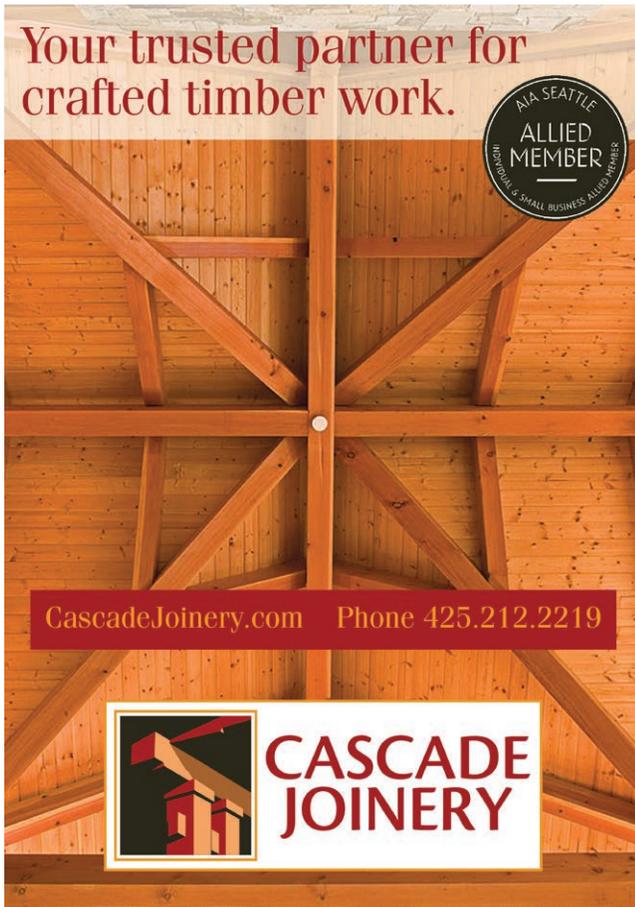
Rancho Mastatal Sustainable Living Center

Natural building project apprenticeship Aug 1–Nov 30, 2016
Mastatal, Costa Rica.
Ali Ostergard, <http://ranchomastatal.com/pages/links/page.php?Grouping=Apprenticeship&PageName=internship>.

Rocky Mountain Workshops

Mastering the Basics of Square Rule Timber Framing / Josh Jackson and Skip Dewhirst Aug 28–Sep 3, 2016
Colorado State University Mountain Campus
Peter Haney, www.rockymountainworkshops.com, 970/482-1366.

Your trusted partner for crafted timber work.

CascadeJoinery.com Phone 425.212.2219



CASCADE JOINERY



SMALL PLANET WORKSHOP

High performance building envelope products shipped in 48 hours to anywhere in the US, Canada, & Alaska.

Building The World of HIGH PERFORMANCE

The Small Planet Workshop is your worldwide link to knowledge and access of specialty products for the High Performance Building Envelope.

We Proudly Represent:
Zehnder, Siga®, Agepan, Roxul®, Heco, Prosoco, Hannoband®, Passivhaus Institut and more.

(360) 866-8779
Toll Free (855) 367-7442

www.smallplanetworkshop.com



"An elegant future is to be found in needing less energy."

Albert Rooks
President
Small Planet Workshop




Chain/Slot Mortiser



Chain Beam Saw

Portable Band Saw



Circular Saws and more...



TIMBERWOLF TOOLS

timberwolftools.com
800-869-4169

Your best source for the world's finest Timber Framing Tools



Notices are for one-time events and offers, and they run free to Guild members for two issues per year. The cost to non-Guild members is \$80 per notice per issue. A notice, whether free or paid, runs for a maximum of two issues. Notices are intended for onetime events and offers; appropriateness for inclusion is decided by the web content manager. For email links, see www.tfguild.org/events/notices.

for sale

Timber frame layout squares

The goal was simple: create a layout square that increases accuracy, decreases layout time, and makes the layout process more enjoyable. This square incorporates the features of a framing square, try square, and protractor all wrapped into one. The square has 1/16-in. scale with laser etched markings designed for easy reading. Pivot off one corner of the base to get the plumb cut angles, seat cut, and any angles for compound joinery. Flip it over and get the opposing angles. It also makes peg layout a snap. The offset base aids in reference edge layout with graduation slots every 1/2 inch with notches on edges to mark every 1/4 inch. Brice Cochran, timberframehq.com/layout.

-Workshop Frame For Sale

Workshop frame at a great price! 12'x16', three-bent frame. Includes floor system. See photo/drawing at www.rockymountainworkshops.com. Click on, "2016 Workshop Frame For Sale." References from previous workshop frame buyers available. For details, reach Peter Haney, workshop organizer, haneyrmw@frii.com, 970-482-1366

help wanted

HSB timber frame designer.

Rocky Mountain Joinery is looking for an experienced HSB designer to join our company on a full-time basis in Colorado. Applicant must have at least 5 years' experience with HSB, must be proficient in creating detailed shop drawings, and must be able to communicate with customers and architects. This is a great opportunity to join a fast-paced and dynamic work environment at a large company in a great location. Very competitive salary package and benefits (dependent on level of experience). Please email Hemi Mund, hemi@rmjoinery.com, or call 865/566-4587.

Dietrich's draftsman.

Nicola Logworks is looking to hire a Dietrich's draftsman with a carpentry background. Required are sound knowledge of Dietrich's timber modelling software and journeyman carpenter or similar experience. Not required but desirable are log building experience, timber framing experience, and German and/or French language skills.

We are a small log and timber company located in the Nicola Valley in Southern B.C., doing a challenging variety of mass timber buildings. Please email John Boys, john@logworks.ca.

EAST FORK LUMBER COMPANY

Working for over 30 years toward a sustainable rural economy and wise use of our natural resources. Manufacturing Douglas fir, Port Orford cedar, and western red cedar timbers and wood products in Myrtle Point, Oregon.

Below: Tumblebug fire salvage,
Willamette National Forest,
December 2012



www.eastforklumber.com
(541) 572-5732 • eflc@uci.net

RELIANCE

TIMBERS & MILLWORK
FROM THE PACIFIC NORTHWEST



800.697.4705-509.466.9300
WWW.RELIANCESBP.COM
SALES@RELIANCESBP.COM



Timber Framers Guild
PO Box 60
Becket, MA 01223

1812, from page 7

explore the impressive trusses and the steeple tower. From the church, we went to the Moses Kent Farm in Lyme-Orford, N.H. The Kent House, built in 1811, is amazingly well preserved and restored. The main house featured murals painted by Rufus Porter throughout. Because much of the trim work in the main hallway was rather narrow, the murals covered the walls almost to the door apertures themselves. Rufus Porter (1792–1884) was not only a painter but also an inventor and a founder of *Scientific American* magazine. The Kent Farm also had an early gable entry barn to explore.

We crossed the river from New Hampshire to Newbury, Vermont to explore a most unusual barn dating to the late 18th or early 19th century. The Whitney-Girardin barn has all of the hallmarks of a traditional New England English threshing barn, but with an unusual size. The original barn measured roughly 32 ft. wide x 80 ft. long. This is uncommon for barns of the region in that era. Subsequently, the barn was placed above a basement and split longitudinally in order to widen it by about eight feet or so, to create a large central aisle accessed from the gables. A 40 ft. x 40 ft. addition to the north end of the barn was added during

the mid-to-late-1800s. As it stands, the barn has about 14 bents and measures approximately 120 ft. long x 40 ft. wide.

On our way back to Lyme, we stopped to explore the Old Church Theater in Bradford, VT. The building had served as the town's church from 1795 until 1876 when it was replaced by the present Congregational Church that stands adjacent to it. After the construction of the new church, the Old Church was used as the village hall, opera house, and now theater. After exploring the trusses and steeple tower, we were serendipitously invited next door to explore the exceptionally narrow passages in the spire of the Congregational Church before returning to the B&B.

Early on Sunday morning, we carved out a bit of time before breakfast to discuss TTRAG business including upcoming events. We should have a great track set up for the 2016 TFG national conference in Schuylerville, N.Y., including some great local presenters. We discussed plans for a meeting in 2017, open to all, with a tentative location in western Massachusetts. More details for upcoming TTRAG events will be posted when they become available.