



# SCANTLINGS

NEWSLETTER OF THE TIMBER FRAMERS GUILD

NUMBER 194

MAY-JUNE 2015

## Help plan Guild's 30th birthday party

JEFF ARVIN

It's a party! A birthday party. To celebrate 30 years, the Guild will convene its annual conference in beautiful Coeur d'Alene, Idaho, October 29–November 1. Our theme is “The TFG at 30: Growing Up, Getting Better.”

We'll be exploring the relevance of timber framing in today's building and craft environment from the angles of environmental sensitivity, work and skillsets, best business practices, and historical context.

Right now we're working hard on content and the speaker lineup. Thanks to those who have already reached out to us. We recently sent a Call for Presentations in Weekly Guild Notes, and these are going to everyone we can think of, so consider yourself served!

We always want to know what you find interesting or what you want to know about. We'd also like to know if there are other groups or organizations that you think might be good affiliations for the Guild and that might offer engaging content for our conference. Please send me your ideas.

Turning 30 this year is the perfect mark for a newly healthy and super-charged Guild. We're older, maybe wiser, and we've weathered storms. It's time to celebrate and get ready for the next 30 years.

Please come join fellow members of the timber framing world, outside experts, and more. Bring your family!



Coeur d'Alene resort.

## Bylaws changes pass in merger vote

GABEL HOLDER

The results of the recent vote on bylaws changes that allow the merger of the Timber Frame Business Council (TFBC) with the Guild have been tallied and the measure was approved by a 94% majority of the voters. With 444 votes cast in this important ballot, we had an excellent turnout. The board is grateful for your participation.

We are extremely excited to have the TFBC join us as a part of the Guild and we are looking forward to all the great things that are to come.

The board will appoint directors to fill three newly created seats until June. At that time, those seats will be filled by election by TFG members. If you'd like to nominate someone for a board seat for the June

election, please [send me their name](#) by May 8.

The TFBC (now a committee of the TFG) will continue its work to “expand the demand for timber framing.” A large part of that work involves educating and informing the public about timber framing, which is completely in line with the TFG's mission.

Soon the Guild will begin accepting company members who will make up the TFBC, so stay tuned for details about that. There is a tremendous amount of energy and vision in the leadership of the TFBC and now is a great time to jump in and become a part of the good things that are happening.

I want to commend Pam Hinton, executive director of the TFBC, for all she has done to make the merger

*See Bylaws, page 9*

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Newsletter of the Timber Framers Guild  
Number 194 May–June 2015

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PO Box 60, Becket, MA 01223, [www.tfguild.org](http://www.tfguild.org).  
[Jeff Arvin](#), executive director, 413/443-1803.  
[Sue Warden](#), business manager, 855/598-1803.

John Miller, president • Gabel Holder, vice president • Mack Magee, treasurer • Christine Benson, clerk • Paul Freeman, Ellen Gibson, Stephen Morrison, Jonathan Orpin, 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: June 10.**

News contributions and correspondence: [Accacia Mullen](#), editor, 3525 Maury River Rd, Rockbridge Baths, VA 24473. 540/817-9398.

## Passing the baton

SUSAN WITTER

As *Scantlings* associate editor Accacia Mullen has increased her knowledge of editing and production, I have been taking a back seat in getting *Scantlings* out. Now, with this issue, Accacia is becoming *Scantlings* editor and I am shifting to consulting editor. Please send all *Scantlings*-related communications to [Accacia](#), 540/817-9398. This includes articles, article ideas, letters, photos, reports, announcements, questions, and ad inquiries.

Since I am now the TFG web content editor, for the time being, please send all member notices and event listings to [me](#), 360/647-0310. When this changes, we will let you know. Currently I am working with Al Wallace to “remodel” the TFG website.

In my view, the best thing about *Scantlings* has been the articles and letters you members have sent in on your own initiative, sharing with others new items of interest you’ve discovered, important issues, or descriptions of unusual projects you’ve taken on. The reports you’ve contributed on various Guild events have added new voices and new perspectives. The Guild is a unique, diverse group of people. I know you’ll continue to enliven the pages of *Scantlings*, via Accacia, with your stories.

I wish you all the best.

## Using teamwork, students raise barns

TOM MUSCO

Deb D’Amico and I are getting ready for our third year of presenting the traveling New England program of Teamwork & Timbers, an educational program of the [National Barn Alliance](#). We work with elementary school students to raise a quarter-scale timber frame model of an English barn—the first European barns built in New England. The model has the same joinery as a full sized barn, requiring the students to fasten the joints with oak pegs. Deb is a retired elementary school principal and I have been building timber frames for 38 years.

We have done raisings at the 2013 TFG Conference in Burlington, Vt., and at schools throughout Massachusetts including Douglas Elementary School, in Acton. This year we’ll go back to the Douglas School and raise the barn at the Village School, Royalston, Mass., and the Job Lane House and Barn, Bedford, Mass.

The program is designed as a teamwork exercise as the children “raise” the barn models. Working in groups, they are exposed to math and science while

See [Teamwork](#), page 5

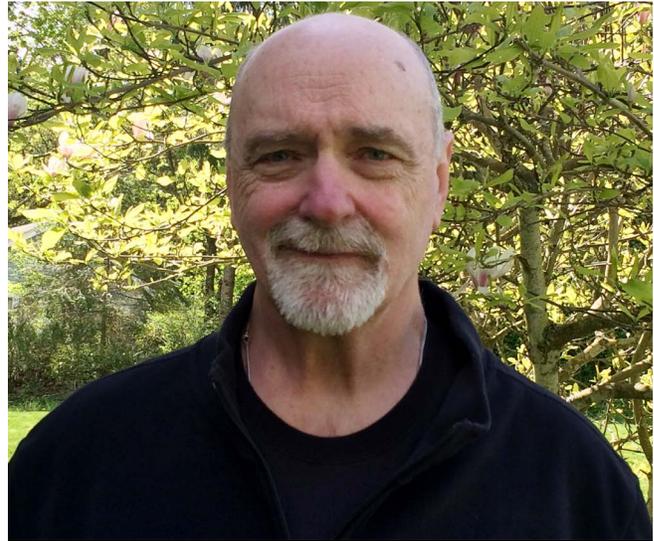
# Hello from our new ED

JEFF ARVIN

Wow! What a great gig this is. And wow! What a lot of stuff you have going on. One week on the job and my head is full.

By way of introduction, my name is Jeff Arvin, and I am thrilled to be the executive director of the Timber Framers Guild. I've been around a while, so I know a lot of you. But for those I have yet to meet, let me say this: I have been a hands-on timber framer and a timber frame business owner. I first joined the Guild in 1985. I was elected to the board of directors in 1987 and became president in 1989. I got a really close look at the growing Guild. Believe me, we lacked the sophistication that the organization has today. The interwebs were yet to be invented. Mobile phones, if anybody had one, were bigger than bricks and almost as heavy. Fax machines were rare; overnight FedEx was the best tool for “instant” communication. The Guild operation was a cut and paste affair—and I mean scissors and glue.

Now, 30 years later, the Guild has entered a new era. We have grown and changed, weathering tough years, accumulating knowledge and skill along the way. Through all the growth and change, however, the essence of the Guild is unchanged. I believe the Guild stands for commitment to good work that improves lives and communities. It's humbling and inspiring to see how Guild members put that into action. As ED, I look forward to the journey ahead of us. We



Carol Arvin

Jeff Arvin, our new ED.

have the tools, skills, and experience to create works of even greater relevance for our families and communities, and our very exciting task is to find ways to implement our ideals. Can it get much better than that?

Hey—I'm always interested in hearing what you're thinking about.

[Drop me a line.](#) Keep in touch!

## Progress on Santa Cruz barn

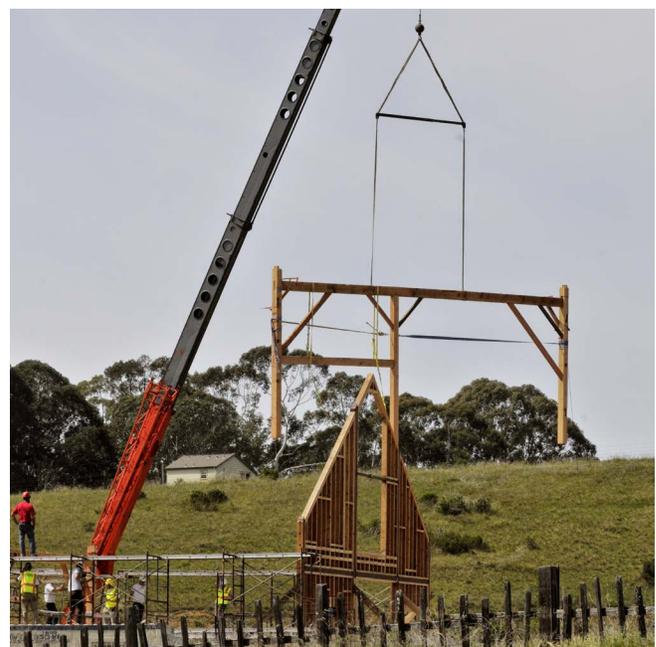
BILL HURLEY

Cowell Limeworks Historic District's reconstructed 1868 timber framed hay barn is well on its way to a June completion date. The barn will become the centerpiece of the Center for Agroecology and Sustainable Food Systems at the University of California At Santa Cruz (UCSC). The 2012 western Guild conference at Asilomar included a pre-conference tour at Cowell Lime Works.

Fernau & Hartman Architects, Berkley Calif., are responsible for the overall project. With my company, Dos Osos Timberworks, Los Osos, Calif., I was the timber frame consultant for the architectural firm and responsible for the HABS documents and the final frame documents.

Karl Bareis and his crew at Santa Cruz Timberframes deserve all the credit for a superbly cut frame and the safe, smooth execution of the resurrected historic barn. We (primarily Karl) put the word out, and the response from the timber framing community, including many Guild members in California, was great.

*See Santa Cruz, page 10*



First bent being set.

# Leadership transition in PH expansion project

ACCACIA MULLEN

The timber frame for Project Horizon's (PH) expansion in Lexington, Va., was completed on March 31. This is the 31st project of the Virginia Military Institute (VMI) cadet, or student, timber frame group, advised by Grigg Mullen Jr., since the trébuchet in 1997. The three-story addition (first floor is concrete and stick framed) will provide considerably more living space to the area's domestic violence support program. Project Horizon's original building, Lisa's House, was a TFG project in 1999, and their weaving shed, an occupational therapy center, was a TFG project in 2010.

About 100 people worked on this project, including local leaders and instructors, who return for many of the twice-yearly projects; eleven people who signed up to receive instruction as workshop students, three of whom returned after taking the fall 2014 workshop in Lexington; many volunteers from around the country; and college students from VMI, Fanshawe College, Alfred State University, the American College of the Building Arts, and Washington & Lee. Several of the long-time volunteers did their first timber frame work of Lisa's House in 1999.

Of Lisa's House, Grigg said, "The Guild community showed us how to do this 16 years ago." Since then, these projects have maintained local community support and generated the local leadership to continue. Laurie Macrae, a restaurant owner at the time, helped feed people at the 1999 project. That project planted the timber framing seed for her, and also her son Mez Welch, then age 12. Laurie volunteered on this project, doing some carving and helping everywhere she could; Mez was involved too, having been a core instructor on VMI projects for several years.

When I asked Grigg, a professor of civil engineering, why he keeps doing this, he told me that it provides good real world experience for the cadets. Many of them are engineering students, and a timber frame project



Paul Magann

Josh McMichael, general contractor, Al Anderson, and Grigg Mullen watch the raising.

provides [nearly] instant rewards, whereas a steel or concrete project can't be completed in a long weekend's time. It's also important, he said, for cadets to learn in a less formal manner than their classes, and from people who may be less "degreed" than they are. Many of the cadets keep coming back for more projects and get to learn who the real players are.

This project saw some change in those players. As we watched the wetting bush be placed, Grigg told me this is the first time he stepped back, and he let the younger people run this project. In addition to instructor Will Barry-Rec, a local carpenter and timber framer, the younger leaders include Mullen's son Grigg III and Mez Welch. The hard work and guidance of these three, along with Trevor Mitchell, a 2007 VMI graduate, and Rob Geoghegan-Morphet, timber framer and instructor at Fanshawe College in London, Ontario, allowed the older Grigg Mullen and long time instructor Bob Smith to focus on the big picture.

The big picture in this case is a 3600-sq.-ft. addition of 12,500-bd.-ft., primarily oak and poplar, plus some cherry that was harvested and sawn during the project. Architect Andrea Warchaizer designed the building with a 72-degree angled wall along the property line, to maximize the interior space. The building includes tension straps and 4-ft. long bolts on the 20-ft span main roof truss that were created by the revolving crew of blacksmiths. PH's staff coordinated about 2500 meals, most donated by community groups. Both PH and the larger community were present at every meal. Cindy Mullen, Grigg's wife, maintained the registration table and helped with logistics, and also made sure everyone who came for the project had a place to stay. Most camped on site or stayed with a local host family.



Rob Geoghegan-Morphet

View of layout and cutting work from above.

Evening activities included joinery instruction, screenings of timber frame related movies (synagogue, belltower, obelisk, and turtle), and two auctions. In the style of the Guild conference bag auctions, we raised about \$1500 for PH, selling tickets by the armspan.

The project drew the attention of observers, too. The frame was cut at Washington & Lee's pavilion, an enclosed space near the school's tennis center, athletic fields, and physical plant, so there were plenty of people passing by. In addition to local observers, past instructor Ira Friedrichs brought his partner Becca Hall and their son Cuilean from Asheville, N.C. Ira commented, "The finished frame seems like icing on the cake compared to the thousand steps and collaborations that brought the frame to life. It's a wonderful example of how change can happen in a community if you create the proper container for people to contribute."

Grigg and the Lexington crew will be doing a project this fall during VMI's fall field training exercises. They'll also be doing their 20th spring project next year. We don't know what the building will be, but we expect that anyone participating will experience the same excitement of creating something as well as community involvement



Paul Magann

Jordan Finch and Rob Geoghegan-Morphet fit the walnut truss.

that was felt and seen at this project. You can read more about the project and see more pictures on the project blog and reach [Grigg Mullen](#) at 540/464-6578.

**Teamwork** *from page 2*

building a scale model timber frame. Along the way they learn about different types of wood, the history of rural structures, the parts of a barn and, most important, why teamwork is so important: one person can't raise a barn.

Educators have found value in the program because it touches upon both history and science. They also appreciate the teamwork and leadership skills developed during the program. For the students, there is the chance to employ skills and concepts they have learned in the classroom. Most important, however, it is just plain fun!

The National Barn Alliance is looking for timber framers to design and build barn models indigenous to their region and present the Teamwork & Timbers program to students in their area. If you're interested in starting a Teamwork and Timbers program in your area, reach the National Barn Alliance.



Students at Douglas Elementary School in Acton, Mass., raise barn model.



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# Bucks County barns, history, culture at TTRAG symposium

ACCACIA MULLEN

Organizers Alex Greenwood and Michael Cuba, both of the N.J. Barn Company, opened the symposium by introducing speaker Jeff Marshall, president of the [Heritage Conservancy](#). Jeff works on preserving barns and open space, so he knows nearly every barn in Bucks County and many of the people. He spoke about German, Quaker, Scots-Irish, and English settlement patterns and features of their buildings. Window arches, originally segmented, progressed to keystone. While the German and English began building with their own barn designs, the barn styles merged eventually. Jeff's presentation concluded with a preview of the sites on Saturday's tour.

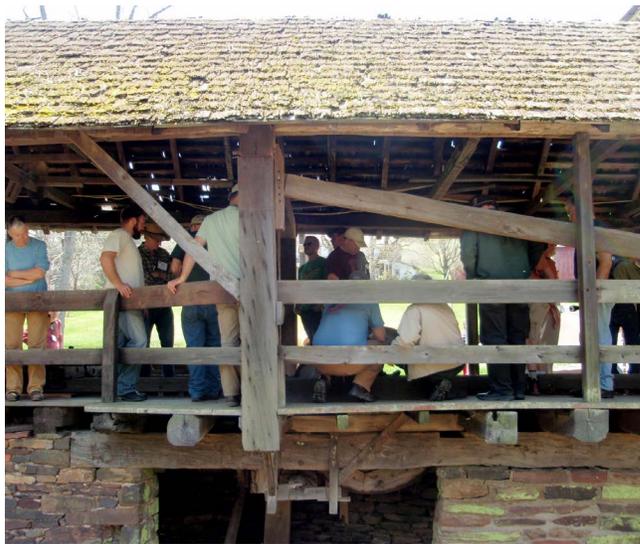
## Material culture

Lisa Minardi spoke next, focusing on how the Quaker and Germanic settlers to the Philadelphia area furnished their homes. Lisa explained that English Quakers were the first to settle, acquiring the best land, followed by Irish Quakers, and then Scots-Irish Presbyterians who settled further away from Philadelphia between the Quakers and the Native Americans. As assistant curator at Winterthur Museum, she shared many images from the museum's collections, including evidence that Quaker items were not always plain. We saw crewel embroidery decorated with vibrant parrots and cherries, exotic symbols of the new world, and furniture showing Quakers' propensity for putting their initials on everything. Lisa showed us a clock built by a Germanic baker with an inlaid pretzel, and a Mennonite sampler embroidered OEHBDE, initials for "O Edel Herz BeDenk Dein End" or "Oh noble heart think on thine end." Lisa's ended by describing another project, the restoration of Frederick Muhlenberg's Speaker's House.



Accacia Mullen

Notice the near book-matched stones on ventilation slots at the Paxson barn.



Examining the sawmill at Stover-Myers Mill.

She invited everyone to visit the site, where Marcus Brandt would also be working on Sunday following the symposium.

## Saturday barn tour

Buckingham Friends Meeting House was the first stop on the tour. Caretaker Peter Ray told the group that the current building, dating to 1720, is the third or fourth meeting house on the site. He invited people to fiddle with things, and encouraged people to share with him any information about the building that may be helpful. A rare 18th-century building without a fireplace, the men's and women's sides are of nearly equal size. Room dividers and doors operate with counterweights and have interesting metal hardware.

Two buses departed from the meeting house, and through the day, they stopped at five barns, a mill, and a wooden aqueduct. Some of the barns, like the one at Tinicum Park, are owned by the county. Others, like the Paxson, have private ownership. Some people took the opportunity to walk the steel footbridge across the Delaware River or enjoy refreshments at the Black Bass Hotel, originally the Lumberville Hotel. At one time Lumberville was site of many sawmills. The buses passed several miles along the Delaware River, and Jeff Marshall pointed out interesting and important sites, such as additional Stover family property and other barns that didn't make the cut for this tour, to passengers on his bus. The Tohickon Aqueduct was an extra stop. This wooden aqueduct of the Delaware Canal was designed by Dave Fischetti, known to many TFG members. The last barn of the tour was on a farm that's for sale, along with a Dutch frame house that Alex Greenwood moved to the

See TTRAG, page 10



# APPRENTICE LOG

## ATP wants you

CURTIS MILTON

Looking ahead ten months and planning the next training session may seem a bit obsessive but in reality, it may leave us too little time to get it 100% correct. Not that we won't try, exert plenty of effort, and actually deliver. We will.

We (the Apprentice Training Committee) are volunteers and that means we have other responsibilities: family, hobbies, community service, and jobs to support it all. I am not complaining; I was raised in a family that valued the volunteer spirit, and I still believe that any volunteer effort is a lever to be applied as needed for good purpose.

Volunteers are the engine that powers the entire TFG.

Right here is where I ask if you have contributed your skills and knowledge to the curriculum building initiative of the Apprentice Training Program (ATP). You don't have to work for free but you will have to work. We have some money; we have goals, specifications, and examples. We have editors who can help polish. The finished product of every element and the whole curriculum is not intended to be sequestered away for the use of an exclusive few. The entire collection of training materials can be used by others outside ATP for a fee.

Among the many third-party timber frame educational opportunities, is there one that addresses the specific needs of the timber framing industry? Not exactly, but we hope to focus some energy in that direction. Imagine being able to hire a person who has made an investment in specialized education and credentials. The goal is to take the curse of initial training expenses and shift those to the new hire. Does a person who has a first aid card, forklift credentials, work placement credentials, OSHA 30 card, tool use and maintenance experience (including edge tools, basic vocabulary and understanding of layout systems), construction geometry, construction math, assessed communication skills, Signaller's credentials and the like, plus a basic but specified tool kit become more employable? I can only imagine—how about you?

The scheduled program for the 2016 annual training and assessment will revolve around rigging, lifting, lift planning, work placement, and more. This is something that we do for every building we erect, and it can be both dangerous and expensive. Stay tuned as the actual program for the event is developed and scheduled. Maybe your skill set and experience allow you to develop some materials on this topic for the program and for the benefit of all future timber frame carpenters.

Think about it. [Email us](#), or better yet pick up the phone and call me at 603/387-6770. We can always find something for you to do.



Pat Bell and Eric Cody at 2015 ATP training and assessment.

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## Tight building construction: opportunity or liability?

AL WALLACE

Now more than ever consumers are demanding energy efficient homes. Typical upgrades to older homes include installing high efficiency appliances and tightening the building envelope—doors, windows, walls, and roof assemblies. The benefits appear obvious and include increased comfort, indoor air quality, and energy efficiency. Yet installing these options without understanding building science can create serious hazards to the consumer and expose contractors to substantial liability. Improvements may have negative consequences that are more often than not insidious, so public awareness is lacking.

Reducing air leakage, improving insulation, and upgrading to high efficiency heating, cooling, and hot water systems is good. However, because tight buildings lack the natural ventilation of older buildings, occupants and the structure may be exposed to hazardous conditions.

Every building has indoor pollutants that can affect the occupants' health and, in the case of mold or mildew, also impact the durability of the structure. Cleaning chemicals, carpet and construction adhesives, wall-to-wall carpeting pads, humidifiers, and fossil fuel combustion appliances create the highest health risks. A recent National Jewish Health study reported a 300% increase in asthma and respiratory allergies since 1970 that is directly attributable to poor indoor air quality in buildings. "Allergens getting into the house are staying in the house . . . that includes things like smoke, mold, bacteria, and pet dander." With the same indoor environment, a tight building will inherently have a greater concentration of harmful contaminants than a leaky house. The purpose of this article is to provide insight into the building science and potential harmful impact of heating systems performance in tight houses.

### Carbon monoxide stays in tight homes

Carbon monoxide is a toxic gas but, being colorless, odorless, tasteless, and initially non-irritating, it is difficult to detect. It is created by combustion with insufficient oxygen, and within a home, the most common cause is secondary combustion of carbon dioxide. The byproducts of carbon-based fuel combustion include water and carbon dioxide, and when carbon dioxide backdrafts into a combustion appliance, carbon dioxide is converted to carbon monoxide. Any process that causes the house to depressurize may cause this backdrafting. When hot air rising into an open flue is the primary means of exhaust, you have an atmospheric vented appliance. These appliances include older boilers, furnaces, hot water heaters, kitchen stovetops, and unvented fireplaces. Leaky houses self-ventilate; however,

a tight home requires mechanical or combustion makeup air ventilation to prevent backdrafting of atmospherically vented appliances.

In Denver, carbon monoxide alarm activation is the leading reason that consumers contact the fire department for assistance. It is ironic that OSHA allows 50 parts per million (ppm) per hour average over an eight-hour period, yet Denver firemen go on 100% oxygen at a concentration of 35 ppm. Concentrations above 100 ppm are dangerous to human health, and occupants experience severe headaches, confusion, and lethargy. Longer or larger exposures can lead to significant toxicity of the central nervous system and heart.

### Energy efficiency upgrade scenario

In a typical energy efficiency upgrade, the owner of an older home with an atmospheric vented furnace and water heater upgrades the insulation and seals exterior air leaks. The formerly leaky house is now tight and the natural source of fresh combustion air is removed. The insulation contractor didn't check the heating system. Now imagine that the return ducts to the furnace leak or there is an open fireplace with no makeup air. The fan blower sucks air from the leaky duct which depressurizes the basement where the furnace and water heater are located, or the open fireplace uses the home's interior air for combustion which produces the same "suction" effect.

All non-vented fireplaces depressurize the house and expose occupants to combustion fumes and carbon monoxide. Any fireplace (open or sealed combustion) should have makeup air venting, so that air is drawn from the outside for combustion then vented back to the outside after combustion. If lacking makeup air, the fireplace creates a pressure differential that overrides the natural ventilation that would occur with warm exhaust air rising through the vent to the roof. Carbon monoxide is generated in the mechanical room and then distributed through the heating system's supply ductwork.

Backdrafting can also occur when a furnace is replaced with a high efficiency model without checking for leaky ducts. Although the new furnace has power venting that assures both makeup combustion and exhaust air is removed from the home, leaking return ducts on the furnace will cause the water heater to backdraft. When installed by a licensed contractor who obtains a permit for the heating upgrade, a building inspector should catch this oversight and will insist on either 1) installing makeup air ducts, or 2) replacing the old water heater with one that has sealed combustion (a fan to bring combustion air in and blow exhaust air out). Since many homeowners often perform these upgrades with

contractors who are unaware of this issue or do not obtain a permit that requires an inspection, the problem is more prevalent than not.

Mechanical building codes require combustion makeup air with high and low vents in the same room as the fossil fuel appliance. Unless the mechanical room is air-sealed from the rest of the house, these ventilation ducts defeat the purpose of increasing the tightness of the home, as cold outside air is drawn into the room any time the appliance operates. Combustion ducts have an additional downside: their performance assumes no differential pressure induced by wind loads acting on the structure. There are scenarios where a combustion air duct on the leeward side of a home could cause depressurization. Since air leakage has a higher impact on the energy efficiency of the building envelope, these makeup air ducts offset most gains obtained in upgraded air sealing or improving building insulation.

### **Mechanical ventilation in tight homes**

As a general rule, if a homeowner upgrades to a high efficiency power-vented or sealed-combustion appliance, they should upgrade any atmospheric vented appliances and non-vented fireplaces. The homeowner should install carbon monoxide detectors in halls outside mechanical rooms and in halls adjacent to bedrooms. The homeowner should also hire a certified energy rater who will inspect the installed equipment and verify the home's performance with a blower door test. The same test would disclose differential pressure issues in the home and the propensity for backdrafting. The audit report will also include recommendations for safely improving the energy efficiency of the home.

The 2012 International Energy Conservation Code (IECC) requires mechanical ventilation for tight homes, a process that mitigates the negative consequences of indoor pollutants while minimizing energy efficiency losses. Ideally, homeowners eliminate the source of indoor contaminants; however, when this is not possible, "the solution to pollution is dilution." Mechanical ventilation brings in fresh air and removes stale air containing allergens, pollutants, carbon dioxide, and moisture. The devices which achieve this air exchange are heat recovery ventilators (HRV) or energy recovery ventilators (ERV). When the home is in heating mode, cold outside air enters the HRV or ERV and is warmed by

heated exhaust air. In cooling mode, the process is reversed. The difference between the two is that an ERV also has moisture control (latent heat), so that humidity is retained in heating mode and rejected in cooling mode. Tightening a building inherently increases indoor humidity, and maintaining indoor humidity between 40% and 50% is considered the ideal range for comfort and indoor air quality. HRV and ERV technology has not only reduced energy costs and heating and cooling loads, but has improved indoor air quality.

Efficiency can be increased by using the HRV/ERV to ventilate the bathrooms as well. For new home construction, the ERV/HRV can exhaust air from bathrooms, replacing individual bath fans. Typical installations exhaust stale air from bathrooms and provide fresh air to bedrooms or common areas. The incoming and exhaust streams never mix, transferring only temperature and moisture through a heat exchanger. This option saves on the cost of procuring and operating separate bath fans, removes fan noise from the bathrooms, and reduces energy use since the ERV/HRV is already operating continuously or on an hourly schedule.

Like most appliances, the efficiency of heat and energy recovery ventilators varies and correlates to cost. The unit should be equipped with a two speed or variable speed electronically commutated motor, ranging from 35 to 150 watts from low speed to high speed. All units have filters, and a unit equipped with two pre-filters and a core filter warrantied for ten years is recommended. A core filter should have a Minimum Efficiency Reporting Value of 8 which removes 95% of particles 3 microns and larger. The minimum heat exchange efficiency should be 90%. A unit meeting these requirements retails between \$1500 and \$2000.

Many uninformed builders discount the benefits of tight construction by pointing out the potential liabilities addressed in the article. However, best practices dictate that buildings are "sealed tight and ventilated right." To achieve high comfort, good indoor air quality, and superior energy efficiency, understanding the science of how buildings and systems interact is crucial. Builders who understand and implement these technologies have a competitive advantage in delivering true value to their clients.

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### **Bylaws, from page 1**

a success. She has been an incredible help to both the TFBC and the Guild, and her support and wisdom have been invaluable to the process and to the people involved. Thanks so much, Pam. We think the world of you!

These are exciting times in the Guild with lots of

stuff in the works. It's a great time to get more involved and support our growth by attending a conference or community building project, making a donation, or joining a committee—especially the Guild's newest, the TFBC!

TTRAG, from page 6

property. It boasts some lovely stone work.

### Evening discussion and slides

After dinner, Alex Greenwood spoke, followed by a slide show. Alex discussed Pennsylvania barn history and differences between Quaker and German barns. He concluded with a quiz in which he showed an image from a barn and people guessed whether it was of Quaker or German origin. He noted that conical stone columns are a trademark of Pennsylvania barns, and that sometimes it's very hard to say why we believe a barn is Quaker, but like Supreme Court judges and pornography, he knows a Quaker Barn when he sees it.

The night concluded with a slide show emceed by Randy Nash, the “Jay Leno” of TFG slideshows, with Dale Emde at the computer helping move things along. Ten people shared images from their work in timber framing, including:

- Grigg Mullen: recently completed Project Horizon project.
- Greg Huber: with his slides somehow missing, he talked about a recent tour of 1150 German barns.
- Michael Cuba: Stowe, Vt., cabin and other oddities.
- Terry Necciai: farm in Washington County, Penn., and Brownsville, Penn. “Pittsburgh might amount to something if not for Brownsville.”
- Dan Boyle: barn damage from winter storm.
- Arron Sturgis: Denmark, Maine, leadership training center.
- Carl Stearns: moved small Erie Canal building to his property 27 miles away.
- Daniel Seeling: barn restorations.
- Eliot Lothrop: blimp hangers in San Francisco.
- Jane Radocchia: geometry.
- Jan Lewandoski: obscure projects including a rhinoceros veterinarian's barn.

### Sunday program

Sunday morning began with a lively discussion of the timber framing lexicon. It was facilitated by Michael Cuba, who learned the importance of effective communication while studying science in college, and TIMBER FRAMING editor Ken Rower, who wants to update the TFG's glossary. Ken stood behind the elephant in the room—the lectern, often incorrectly called a podium. Making the distinction that the podium is the thing on which the lectern stands highlighted the importance of using the proper term. The terms discussed included swing beam, masonry studded tie, queen post, and collar beam.

Patrick Donmoyer presented last with a cultural narrative of barn history. Head of the [Pennsylvania German Cultural Heritage Center](#) and author of a book on hex signs or decorative barn stars, Patrick described three major barn types: *Grundscheier* or ground barn, a single level barn with loft storage above, also found in the Rhein River area in Germany; *Schweizer-Scheier* or *Schweitzer* (Swiss) barn, with asymmetrical roofline and front forebay, and standard barn, with symmetrical roofline. He noted the difficulties in defining a barn as inherently English or Germanic. Should it be defined by its type, customer, or builder? Patrick showed a barn complex of an English style barn, owned by Germanic farmer, with a standard barn next to it, noting that we don't need to force a barn into a paradigm that was not important at the time it was built.

One of Patrick's last images was a red barn decorated with a sundial and the Latin phrase *Transit umbra manet opera*, “The shadow moves but the work remains.” Ken Rower commented that someone important in timber framing (Tedd Benson) said our work is to enhance people's lives, and it is valuable to be reminded that *manet opera*. Outgoing executive director Brenda Baker had the last word requesting that TTRAG members start soon planning next year's symposium.

### Santa Cruz, from page 3

This may be the southernmost example of an original timber frame on the West Coast. From its listing as a historic building to its repurposing as the center of the program at UCSC, it is a fine affirmation that our collective agricultural heritage can be saved for generations to come.

documents.  
Karl Bareis and his crew at Santa Cruz Timberframes deserve all the credit for a superbly cut frame and the safe, smooth execution of the resurrected historic barn. We (primarily Karl) put the word out, and the response from the timber framing community, including many Guild members in California, was great.



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Jack Hursh

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# NOTICES



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 \$60 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.

## help wanted

### Timber framer.

Maine Mountain Timber Frames seeks experienced timber framer to join our crew. We are looking for someone with proficiency in all aspects of shop work including layout and checking. The ideal candidate will have worked in a production oriented environment. This is a year round, W-2 position. Please send note of interest, resume, and pay requirements to [Jence](#).

### Woodcrafters–timber framers.

Daizen Joinery, in British Columbia, is looking for a couple of experienced wood crafters and timber framers who can work on high quality joinery work. Please submit resume to [Dai Ona](#).

## employment wanted

### Seeking summer work.

Itinerant timber framer based in southern Vermont seeks hand-cut work in laid-back Northeast setting this summer. Can provide resume and references. Have hand tools.  
[Ariel Schecter](#), 914/559-8148.

## for sale

### Bubble scribbers.

Heartwood is partnering with TimberHomes LLC in producing a limited run (25) of unique and innovative bubble scribers. These tools are specifically designed to layout round to round and round to square joinery, and have a much longer and agile reach than conventional log scribers. Half of this run is already spoken for, and we are looking for homes for the rest. \$450 plus S&H. For more info, see <http://www.heartwoodschool.com/scribers.html> or call Will Beemer at 413/623-6677.

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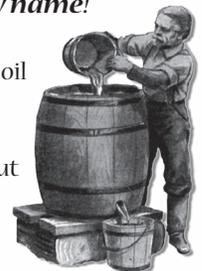
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# EVENTS



These listings are for Guild workshops and meetings, were submitted by Guild members, or announce other relevant events. For more info on Guild events or to register for any TFG project, reach **Sue Warden**, 855/598-1803.

## Guild events

**Timber Framing Tour of Switzerland** May 4–14. **Sue Warden**.

**Northwest Regional Meeting** May 23, Squamish, B.C. **Mack Magee**.

**North-Central Regional Meeting** Jul 10–12, Grand Marais, Minn. **Peter Henrikson**.

2015 TFG Conference Oct 29–Nov 1, Coeur d'Alene, Idaho. **Sue Warden**, 855/598-1803.

Regional meetings  
In Squamish, B.C. May 23  
In Grand Marais, Mich. July 10–12  
More information [here](#).

## other events

### EcoNest Natural Building

In Willow Creek, California—

**Natural building apprenticeship boot camp** May 4–Jun 12

**EcoNest Intensive** May 11–29

**Timber framing** May 11–15

**Straw-clay walls** May 18–22

In Ashland, Oregon—

**Japanese Tools and Joinery with Dale Brotherton** Jun 15–21

**Natural building apprenticeship Boot Camp** Jun 29–Aug 7

**EcoNest Intensive** Jul 6–24

**Timber framing** Jul 6–10

**Straw-clay walls** Jul 13–16

[www.econesthomes.com](http://www.econesthomes.com), 541/488-9508.

### Heartwood School

**Country Woodcraft** May 4–8

**Sketchup for timber framers** May 7–9

**Stairbuilding** May 11–15

**Hip and valley roof framing** Jun 8–10

**Build an outdoor earthen oven** Jun 11–13

**Concrete countertops** Jun 12–13

**Timber framing** Jun 15–19, Aug 10–14

**Scribed timber framing** Jun 22–26

**Comprehensive homebuilding** Jul 6–17

**Finish carpentry** Jul 20–24

**Carpentry for women** Jul 27–31

**Converting trees to timber** Aug 3–7

**Timber frame design and joinery decisions** Sep 8–10

**Compound joinery for timber framers** Sep 14–18

**Advanced SketchUp Pro: Layout** Sep 11–12

**Fundamentals of woodworking** Sep 28–Oct 2

**Cabinetmaking** Oct 5–9

**Art du Trait** Oct 12–16, Oct 19–23

**Tangent handrailing** Nov 5–7

Washington, Mass. Michele Beemer, [www.heartwoodschool.com](http://www.heartwoodschool.com), 413/623-6677.

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## other events

### *Hudson Valley Vernacular Architecture*

**Tour of historic buildings** May 16, Troy, N.Y.

**Tour of historic buildings** Garrison, N.Y.

**Hurley Stone House day**, HVVA picnic Jul 11, Hurley, N.Y.

**Tour of historic farms** Sep 19, Shawangunk, N.Y.

[www.hvva.org](http://www.hvva.org).

### *John C. Campbell Folk School*

**Timber framing** / Charles Judd May 10–16, Brasstown, N.C.

[folkschool.org](http://folkschool.org), 800/FOL-KSCH.

### *North House Folk School*

**Basic timber framing** May 6–10

**Norwegian Grindbygg timber framing** Jun 3–7

**German-style timber framing** Jul 6–10

**Timber carving tutorial** Jul 7–10

**Timber frame engineering: an introduction** Jul 9

**Timber frame roof and truss engineering** Jul 10

**SketchingUp your timber frame** Jul 10

**Build your own timber frame—smaller frames** Jul 14–22

**Build your own timber frame—large frame** Aug 15–24

Grand Marais, Minn. [www.northhouse.org](http://www.northhouse.org), 888/387-9762.

### *Rocky Mountain Workshops*

**Designing with SketchUp** / Eli West May 29–Jun 1, and  
Sep 25–28

**Square rule timber framing: straight and curved timbers**

Skip Dewhurst, Josh Jackson Aug 16–22

Colo. State U. Mountain Campus, Pingree Park, Colo.

Peter Haney, [www.rockymountainworkshops.com](http://www.rockymountainworkshops.com), 970/482-1366.

### *Sobon/Carlton*

**Traditional timber framing** / Jack Sobon, Dave Carlton

Sep 23–27, Hancock Shaker Village, Pittsfield, Mass.

**Dave Carlton**, 318 Bates Rd, Windsor, MA 01270, 413/684-3612, or

**Jack Sobon**, 613 Shaw Rd, Windsor, MA 01270, 413/684-3223.

### *Whippletree Timberframing*

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