



WOOD FORUM

Newsletter of the Sonoma County Woodworkers Association

www.sonomawoodworkers.com

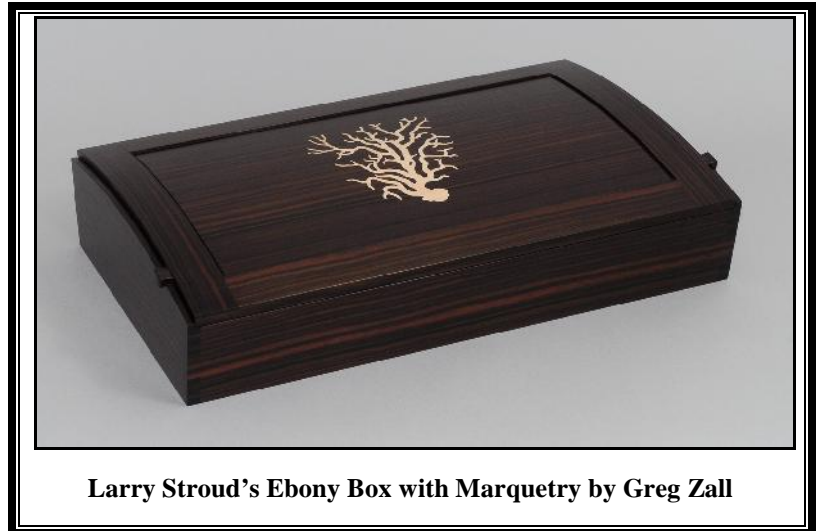
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Address Letters to the Editor
or article submissions to:

mike@pamg.com



Larry Stroud's Ebony Box with Marquetrie by Greg Zall

March Meeting Notice

- Where:** Rancho Cotate High School
Woodshop
- When:** Tuesday, March 5th, 7:00 PM
- Who:** Roger Heitzman, Art Deco
Furniture Maker and Sculptor

March Meeting

By Art Hoffman

Our featured speaker will be Roger Heitzman. You may know him, since he has twice been a judge at our *Artistry in Wood* show, including the 2012 Show.

Heitzman Studios is located in Scotts Valley, north of Santa Cruz. Roger has been producing award-winning, noteworthy furniture and sculpture since the early 1980's. Almost all of his pieces feature the sweeping lines, flair and curves associated with the Art Nouveau and Art Deco movements. Straight lines do not seem to be part of his repertoire. His work is a delight to the eye - playful, light and intriguing. If you think that this prose might be a touch exaggerated, take a look at the several scores of pieces on his website gallery at <http://heitzmanstudios.com/gallery/>. At the meeting, Roger will focus on the development of his work over the years and on his processes from the design through the finishing stages.



Heitzman Art Deco Bar Cabinet

The meeting will take place at 7 pm on Tuesday March 5th 2013 in the woodshop at Rancho Cotate High School in Rohnert Park. The address is 5450 Snyder Lane, Rohnert Park. Rancho's campus is close to Sonoma State University. Take Rohnert Park Expressway to Snyder Lane, and turn south, or, if coming from the south, take East Cotati Avenue and turn north on Snyder Lane. The parking lot is on the north end of the campus. Once parked, look to the east, towards S.S.U. for a flag pole, which may be somewhat obscured because of the tall trees. Once you sight the flag pole, walk in that direction until you see the plainly designated Woodshop in the northeast corner of the campus. It is recognized by the huge dust collection cyclone and dumpster in front of it.

Calendar

By Art Hoffman

March 5: Roger Heitzman, Art Deco Furniture Maker and Sculptor; Rancho Cotate High School Wood Shop, 7:00 PM

April 2: Elizabeth Lundburg, Turner of Sculptured Vessels; Cotati Cottages Clubhouse, 7:00 PM

May 7: Greg Hay, Local Furniture Builder; Greg's Sebastopol Shop, 7:00 PM

Officers Meeting

By Steve Thomas

A Sonoma County Woodworkers Association officers' meeting was held January 28, 2013 at the club house of Cotati Cottages at 5:50 pm. Officers Larry Stroud, Jim Heimbach, Bill Taft, Art Hoffman, and Steve Thomas were in attendance. There were no guests in attendance. Jim Heimbach facilitated the meeting in the absence of a Chairperson.

The proposed meeting agenda prepared by Art Hoffman was reviewed and approved as modified.

Jim Heimbach presented the 2013 budget for review. After discussion and consideration of Bill Taft's budget for the show at the museum, the 2013 budget was approved as modified. Art Hoffman moved that the SCWA continue to purchase advertisement cards from the Museum for distribution to appropriate businesses in Sonoma County. The motion was approved unanimously with one officer abstaining.

Art Hoffman moved the SCWA send color copies of the Forum to the following organizations: Bay Area Woodworkers, Diablo Valley Woodworkers, San Diego Woodworkers, other select woodworking associations as recommended by Bill Taft, and the College of the Redwoods Fine Woodworking Program. The motion was approved by consent.

Larry and Art led a discussion on potential changes to the bylaws. Both will submit draft changes to all officers prior to the next meeting of the board.

The meeting adjourned at 8:00 pm.

Call for Forum Articles

By Mike Burwen

I'm happy to report that the SCWA Members I've spoken to like the Wood Forum's new look. Although I love to write and have often been accused of having diarrhea of the pen, I need more contributions from the Membership. I especially want to feature Member's work, but any and all contributions will be gratefully accepted.

To repeat: If you would like to have one of your pieces featured in the Forum, please send me a couple of pictures (preferably jpg format, at least 500KB) and a few paragraphs describing the piece. I am particularly interested in pieces that posed interesting or difficult challenges. Include in your description how you overcame those challenges. Send the info to mike@pamg.com. If you send me stuff, I promise not to nag you any longer!

New Web Site Planned

By Larry Stroud

As I mentioned at the start of our February meeting at Steve Wigfield's shop, a few of us are looking into creating a new website for the SCWA. We are forming a committee to move ahead with this and I will be sending out a questionnaire to all of our members to get their input.

For a good look at current Woodworking Guilds, Clubs and Associations' web sites check out the list at www.wwgoa.com/resources/guilds/.

February Meeting: John Philips, Harpsichord Maker

By Mike Burwen

The Meeting was held at Wigfield Woodworking in Petaluma. Bill Taft and Larry Stroud began the meeting with several announcements:

- The ByLaws are being rewritten in order to eliminate "political problems." They should be ready for the next meeting.
- The Association is functioning well without a Chairman or Vice-chairman.
- Dues are due. If anyone has not sent them in, they should do so ASAP.
- The website will be updated.
- There are lots of things in a state of flux. Members need to be patient.
- David Marks has lots of olive wood in the log for sale.

Art Hoffman then introduced the guest speaker for the evening, harpsichord maker John Philips.



John Philips, Master Harpsichord Maker

John was a trained pianist. When he began graduate school at UC Santa Cruz, he ran across a \$150 harpsichord kit, which he bought and built. He soon discovered that playing a piano was not a good background for playing a

harpichord, but the exercise piqued his interest, and he made a more elaborate harpichord from another, more expensive kit. Ultimately, he became intrigued with idea of building fine instruments, quit graduate school and opened his harpichord shop.

Today, John makes 3-5 harpichords a year in his Berkeley shop, which he opened in 1974. His harpichords are essentially copies of European instruments made centuries ago. Given some limitations in materials, he strives for authenticity. He pointed out that he is serving a very small niche market. "Classical music is 5% of the music business. Move the decimal point two places to the left, and that is the size of the 'ancient music' business." Nonetheless, people from all over the world do buy his harpichords for prices ranging from \$20,000 - \$40,000, and the waiting list for one of his instruments is 5 years!

Each area of Europe had its own styles and methods for making harpichords. The major schools were in Paris, Belgium (Flemish), Germany and Italy. John has mastered the techniques needed to reproduce instruments from all of these schools. The instruments from these places both look and sound different. In any case, the last historic harpichords were manufactured in the early 1800s. The reader is referred to John's website to see pictures of instruments from the different schools.



French-style Harpichord

There are two ways to make a harpichord. The first is to make the bottom (the soundboard) and build the upper structure on top of it. The second method starts with the case sides and then adds the bottom.

The sides of a harpichord are curved. Depending on the maker, bent wood was achieved by steaming, heating

(without moisture) or kerfing. Regardless of the method, the sides are "sprung" in place, because the wood is more resonant if it is under tension.

Fastening was traditionally done by gluing using hide glues, nailing with Tremont cut nails and trunneling, either with or without glue. Hide glue is difficult to work because it sets up so fast, but it is amazingly strong. In addition to making harpichords, John also restores old ones. He described how difficult it is to separate hide-glued joints that have been there for a couple of centuries.



Flemish Muselar Harpichord

Fancy joinery was not used very much, although the Germans (being Germans) liked to use dovetails. Everyone else simply butt-jointed corners and nailed them together with or without glue. Rarely, corner joints were mitered.

Much of the wood used in old instruments was native to Europe and is not easily available today, even from specialists who serve the instrument trade. The legal ivory trade is defunct as well. Thus, John uses a variety of woods which he feels best duplicate the structural integrity and sonic properties of the originals.

He uses basswood (lime or linden), poplar and ponderosa pine for casework. Keys are made from ebony, boxwood, pear, and cherry. The latter is blackened by heating in a toaster oven! Ivory keys are simulated using beef bone. Sound boards are made of Sitka spruce and Port Orford cedar. Claro walnut veneer is used for appearance. Hard maple is used for pegs and other mechanical components, as well as for decorative veneer.

The early harpichords were painted, except in a few places where veneer was used. The early makers usually used gouache paint covered with a glue-size finish. French and Flemish instruments always featured elaborate painting which was eschewed by the Germans and Italians who liked their harpichords devoid of decoration. Gilding was also popular with the French.

John uses modern coating materials. First he applies a coat of glue size and sands it. Next, shellac is applied as a seal coat. Several coats of paint follow using paint he mixes himself. The paint can be either a water-based gouache or oil-based mixture. Painting is followed by three coats of Pratt & Lambert alkyd varnish. If gilding is required, it is applied between the varnish coats. John said that finishing is typically about 25% of a project.

The decorative painting and gilding is done by John's lone assistant, an accomplished artist. He claims that she can do all the intricate decorative painting of an instrument in a couple of days!

The strings of a harpsichord may be made from either brass or steel. John says the sound of the two materials is quite different. Harpsichord strings are plucked, not hammered like piano strings. The pluckers are called "plectra" (singular "plectrum"), and they were traditionally made from the quills of crows or ravens. John uses quills from Canada geese, which he collects from around Oakland's Lake Merritt! He said that they last a long time if lubricated with sewing machine oil every few months. Olive oil was used traditionally, but John says it turns rancid and the quills have to be replaced more often.

John concluded his presentation by mentioning that harpsichords are tuned by their owners, in contrast to pianos, which require the services of a professional. Harpsichords are tuned using the ear rather than a tuning fork. While the process sounds imprecise to those familiar with pianos, it works and can be mastered relatively easily.

Those of you who may have an interest in how John's various harpsichords sound are referred to the discography provided in John's website. Listed are recordings of artists playing his instruments.

Editors Note: If the reader will go to John's website, www.jph.us, and look at the pictures and accompanying descriptions of the instruments from the various schools, this article will be much easier to follow.

Piece of the Month: Larry Stroud's and Greg Zall's Ebony Box

By Larry Stroud

This Macassar ebony box was a belated wedding present for my brother-in-law and his wife, and the top of the box featured a design based on a coral motif from their wedding. The marquetry on this commemorative box was deftly executed in holly by Greg Zall. The box is about 12" x 17" x 3 1/2" and is finished with shellac and wax.

Execution of the box was fairly straightforward but there were a few challenges along the way. I like small rabbets on the edges of the slightly recessed panels on the top and bottom of the box because they add more visual interest with an additional line of light and shadow. Creating a rabbet with a depth of near 3/64" on a veneered and curved panel complicates things since the top veneer is only 1/16" thick. If you make the rabbet after the curved panel is glued up (total thickness of 3/16") it can be tricky work keeping consistent pressure and a smooth path on the router table. And if you rout a bit too deep you can hit a glue line. For this box I chose to rabbet the top veneer prior to sandwiching all three layers in the vacuum bag. After rabbeting, the little wing on the edge of the top veneer was only a little over 1/64" thick and about 1/4" long; I handled it very gently and was relieved when it entered the vacuum bag unscathed.



Another challenge was attaching the small Brusso stop hinges along the edge of the 3/8" thick frame. Their mortises had to be nearly 1/8" deep, leaving only 1/4" in which to bury the threads. It is actually less than 1/4" because the screw can create a little dimple on the top surface if you bottom out the screw. I like to use the brass coated steel screws that come with piano hinges for this application. They match the brass hinges, and the steel threads are much stronger than brass, and run all the way up to the head of the screw. I cut them off at a little less than 3/16" of thread and make a flat-bottomed hole 3/16" deep. It is just enough to hold the top firmly but lessens the chance of raising a dimple.

Maple

By Mike Burwen

I'm sure everyone is at least somewhat familiar with the woodworking properties of maple. The first piece of furniture I built, circa 1970, a small end table, has a curly

maple top. There is a lot to know about maple, and I'll bet you pick up something you don't know in this article.

There are 124 species of maple, 13 of which are native to North America. Most are native to Asia. A few are European, notably the European Sycamore Maple, *Acer Pseudoplatanus*, known as a Plane Tree in the UK. Most of the urban-planted sycamores in California are of the European variety even though a closely related species of sycamore is native to Eastern North America. An interesting side note is that sugar maple trees planted in Europe will not flower, and nobody knows why.

In addition to the named species, there are hundreds of varieties, many of them developed by the Japanese over more than a thousand years. I visited a botanic garden outside of Tokyo that contains over 600 varieties of Japanese maple, *Acer Palmatum*. Mature trees range in height from 2 feet to nearly 100 feet, all of them developed from a single species!



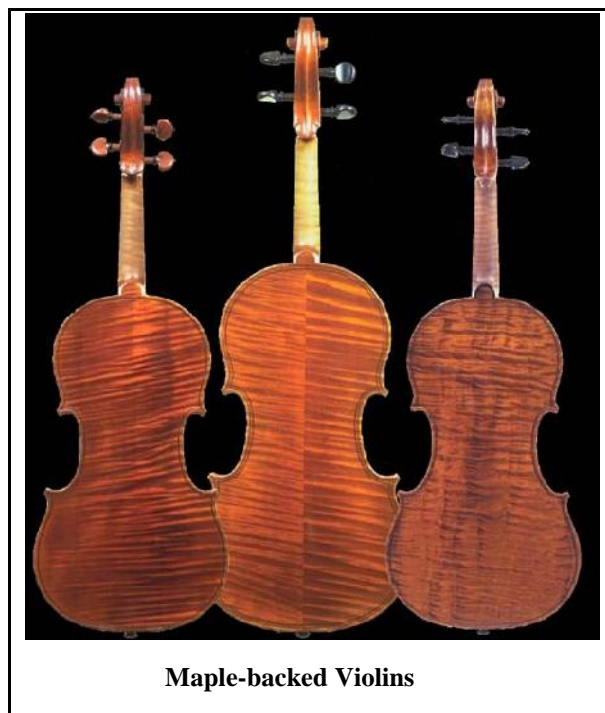
Birds-eye Maple

That said, the North American woodworker is undoubtedly most interested in the so-called hard maples, notably the Sugar Maple, *Acer Saccharum* and the Black Maple, *Acer Nigrum*. Other maples are softer and of lesser interest, except the native West Coast BigLeaf Maple, *Acer Macrophyllum*, which often has interesting figure.

The range of uses of hard maple is astonishing. It is commonly used to make baseball bats, floors, bowling alleys and pins, basketball courts, fine furniture, gun stocks, string instruments, shoe lasts, bobbins, crates, archery bows, novelties, railroad ties, piano frames, pallets and even pulpwood. When I was a kid, I'd go into the woods, bore a 1/2" hole a couple of inches deep in a sugar maple tree with a bit-brace, stick a 6" piece of pipe in the hole, hang a 5-gallon bucket on the pipe and come back days later to find the bucket full of sap which I would boil down to make maple syrup. (It takes 40 gallons of sap to make 1 quart of syrup. Needless to say, I didn't make a lot

of it.) Maple syrup can also be produced from Bigleaf Maple trees, but it is said to have a "different" taste.

One of the properties of maple that holds great appeal for the fine woodworker is figure. The variety of figures, especially prevalent in sugar and bigleaf maples, is astonishing. Curly, tiger, quilted, birds-eye, ribbon, and fiddleback are a few of the adjectives used to describe the kinds of figure that can be found in maples. How does a lumberjack identify a tree that has figure before the tree is cut down? In general, he can't. However, some people



Maple-backed Violins

claim (not scientifically substantiated) that if the lower bole of the trunk is shaped like an old coke bottle, the birds-eye figure will be prevalent! By the way, although there are several theories around, nobody knows for certain what causes birds-eye figure to occur.

Many of the articles written about maple state that it is difficult to machine. Maybe those authors were using dull tools, because I've found that maple machines beautifully. However, hand planing figured maple can be a challenge because the grain goes every which way and tends to tear out. Taking very shallow bites with very sharp tools can help, but scrapers and sandpaper are the norm for most of us. Either way, maple takes a beautiful finish using virtually any kind of coating material. Personally, I like clear oil-varnish finishes over maple, because they enhance the figure. Surface stains often come out blotchy on maple, but some dyes work well if you are into fooling with Mother Nature.

Like most temperate hardwoods, maple glues up very well. In addition, it has great resistance to splitting. Baseball fans know all about this. While ash bats split when broken, maple bats shatter.

Today, almost all fine violins have maple backs and sides. The wood is cut tangentially ("on the slab") producing a "flame" or "curl" figure. This is the result of the wood fibers having grown in an undulating pattern. When split, the wood looks something like corrugated metal. When cut, as in a finished instrument, it produces an interesting optical effect of alternating light and dark flames. Move the light source and the dark flames will turn light and the light flames dark. Figured maple is also used for the tops of electric guitars where it is prized for its appearance rather than its acoustical qualities. If you are interested in this subject, visit www.lespaulforum.com.

Kiln drying is said to ruin the acoustical properties of the wood. Therefore, violin makers use wood from old growth trees cut during the cold dormant months. Immediately after the tree is felled, the trunk is bucked into rounds slightly longer than that needed for the finished pieces. Like slicing a pie, these rounds are split or sawn radially into wedge-shaped billets which are end-sealed, stickered and stored under controlled conditions for 10 years or more. The wood used in the finest violins is at least 50 years old from cutting!

The familiar Pacific Bigleaf Maple grows from Alaska south along the coast to Southern California, but is harvested commercially only in Oregon. The biggest known specimen has a trunk diameter of 8' and is nearly 90' tall. Most of the timber goes into veneer, but it is also used by luthiers and furniture makers. In California, Bigleaf Maple trees are often cut down when stands of conifers are being timbered, and, unfortunately, the trees are usually left to rot!

Sugar maple sometimes produces burlwood that is both beautiful and expensive. \$50 for a single small piece is typical at retail. Such pieces are much easier to find in the Michigan-Wisconsin area than on the west coast, so try shopping online if that is something that interests you. Typical retail prices for unfigured relatively straight-grained sugar maple are around \$5/bf. Figured boards can be much more expensive, up to \$35/bf depending on quality.

Locally, unfigured Bigleaf Maple boards can be had for around \$2.50/bf for 4/4 common and \$3.50 for 4/4 select. As with hard maple, figured stock is much more expensive. Bigleaf Maple burl is generally sold by weight for about \$5/lb. Small pieces of figured stock may also be sold by weight.

Consider buying unfinished hard maple flooring if you want to save a few dollars. Solid unfinished maple flooring is available in widths up to 6" and 3/8" to 3/4" thicknesses. It is die-straight with few blemishes, comes in a wide variety of color-tones, and, while not exotically figured, some choices have interesting grain patterns. Prices can be as low as \$2.50/sf. Check it out at Lumber Liquidators or an equivalent retailer.

Fun Furniture Facts: The Chair

By Mike Burwen

A "chair" has a back. A "stool" does not. The earliest known chair dates to the Egyptian pharaohs. For thousands of years, they were used only by important people for important occasions, and did not get into general use in Europe until the renaissance. Chairs were unknown in China until around 600 AD. Unlike Japan, Korea and some other Asian cultures, everybody sits on chairs in China today.



Egyptian Pharaoh's Chair

An armchair found in a Valley of the Kings tomb is virtually identical to the "Empire" style chair favored by Napoleon. The Egyptians thought that by using chairs that followed natural forms, chaos in the universe could be avoided. (Apparently that didn't quite work out for Napoleon.)

The Latin word for chair is *thronus*, hence the modern word "throne".

Chair cushions did not appear until medieval times. They were used by both the poor and the rich. Up until then, chair sitters often developed uncomfortable butt-sores.

Charles Darwin invented the modern office chair by adding wheels to his chair so that he could move around his study quickly. German Chancellor Otto von Bismarck popularized the office chair by giving one to each member of his parliament.

“The Chair” is the name of at least 2 films, a song, a game show, a book and the fence at a UK racetrack. It is the symbol of authority in the British and Canadian parliaments. “Chairmen” or “Chairwomen” run organizations and companies.

In the early 1800s, Harvard students used to have food fights that often resulted in broken chairs. One of the students, Ralph Waldo Emerson (who became the famed transcendentalist), designed a chair he thought could withstand the hijinks. Thus was born the *Harvard Chair*. If inclined, you can buy a modernized version from Harvard for \$395 plus shipping. If you would like to make a Harvard chair yourself, see www.everythingharvard.com/chairmaking.htm.

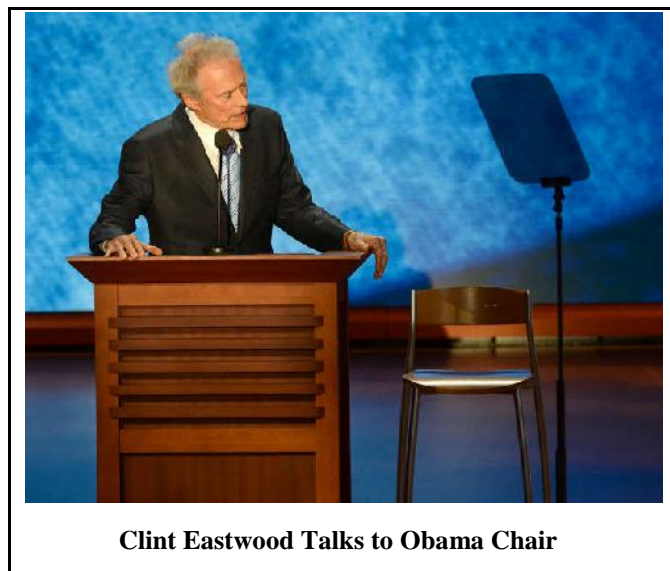


Emerson's Harvard Chair

The *Chair of Saint Peter* in the Vatican dates to the 6th century. Originally of oak, rotted parts have been replaced by acacia. It is shown to the public once each century.

A chair created by the Italian designer Sergio Mian, was used by Clint Eastwood in his address at the 2012 Republican convention. The empty chair represented Barack Obama with whom Eastwood conversed about the state of the nation. (Disgusting or hilarious depending on one's political sensibilities.)

Who knows more about chairs than dentists? The electric chair was invented in 1881 by New York dentist Alfred P. Southwick!



Clint Eastwood Talks to Obama Chair

Mobile Tool Store for North Bay Woodworkers Debuts

By Mike Burwen

Don Ketman has launched *Woodshop Mercantile*, selling supplies and tools to woodworkers via a mobile van that makes rounds throughout the North Bay (Napa, Sonoma, Marin and Mendocino counties). You can also order through the company's website, but if you need to see and touch it or are in a hurry, the mobile store will visit you. You can track the location of the van through GPS which is reported on the company's web site along with the van's itinerary for the following week.

Since the Santa Rosa Woodcraft store's demise, the North Bay has been without a woodworker's specialty store. Hopefully, Don's mobile business model will compensate.

You can read all about it, place an order or hail the van from the website, www.woodshopmercantile.com.

Don told me that he is interested in teaming with local businesses. If you would like to explore that possibility, contact Don at don@woodshopmercantile.com.

The 2013 Wooden Boat Challenge

The Wooden Boat Challenge at Bodega Bay is on again for 2013. It is scheduled for April 27-28. For more information, go to www.bbfishfest.org/boat.

About the SCWA

Founded 33 years ago, the **Sonoma County Woodworkers Association**, is dedicated to the art and craft of fine woodworking. Its more than 100 professional and amateur Members share ideas, experiences and techniques. At monthly meetings, well-known woodworkers discuss their craft and demonstrate their methodologies. Each year, the SCWA sponsors the *Artistry in Wood* exhibition at the Sonoma County Museum featuring members' work. Annual dues are \$35.

Wood Forum is the monthly newsletter of the SCWA. Members are invited to submit notices, articles and comments for inclusion. Submit entries to:

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