Reproducing the tone, pitch, and timbre of harps from the 7th century B.C. to the 17th century A.D. is a challenge that Catherine and Bill Campbell have devoted themselves to meeting for the last 15 years. In their workshops in Port Townsend, Washington, this couple is constantly refining the art and science of making historical harps.

A commitment to preserving the sounds of those early harps has driven the Campbells to make over 16 different historical styles since the first harp came out of Bill’s boat-building shop in 1993. “The early instrument makers knew better than anyone else how to make these instruments work for the music they were intended for,” says Bill, “so we’ve learned to do what they did, to make the instruments as they did.”

Different path
Making half a dozen or so harps each year was not the career Catherine and Bill imagined for themselves when they met while students at Wayne State University in Detroit. Catherine majored in biology, and Bill was an art major with a focus on painting and printmaking. In 1970, the couple took a trip to Mexico to study river flukes and then went to Seattle to work in a friend’s restaurant. Soon, twin boys expanded their family, and a few years later, they all headed to Alaska to go fishing. Their plans changed along the way, though, when they stopped in Port Townsend for tires. “I loved it here,” Catherine says, “and thought it would be a great place to raise children. I told Bill and the boys I never wanted to leave.” So they didn’t, and instead of fishing, they lived and worked on a farm. “We milked goats for our rent money,” Catherine remembers.

During their forays into fishing and farming, Catherine, who started playing the violin at age eight, performed in community orchestras and did minor violin repair and set-up. Since 1982, she’s been part of an ongoing string quartet. “Music and building things have always been a part of my life,” she explains. Catherine likes to tell of a series of events in 1990 that marked her introduction to the instrument that is now the focus of her work. “After a performance of my quartet, a harp player came up to talk. Having a whole range of chords, as well as the melody, on one player’s hands.”

Catherine soon learned about the South American Harp and attended a conference put on by the International Society of Folk Harpers and Craftsmen. “That was fortuitous,” she says. “I met Judy Kadar from Germany and her brayed harp, Mara Galassi from Italy on her Baroque harp, and Egberto Bermúdez from Colombia. Egberto lectured on how closely linked the current South American harp is to the historical harp. I was lost – or found – but I needed to get a historical harp. So I came home and told Bill I wanted one.”

The two weren’t deterred when they couldn’t find the perfect historical harp; instead, they did some research and found that the curator of the Boston Museum of Fine Arts had disassembled...
a single-row European style harp and taken photos and made drawings. The Campbells did further research on historical instrument restoration, wood, acoustics, varnishes, and strings. Bill was building boats at the time, so he went to work on the harp in his boat shop, cutting the maple for it on a ship saw. “Having seen the inside as well as the outside of the original,” Catherine remembers, “we attempted to re-create the historical sound by duplicating the type of wood and its grain orientation and the thickness of all its parts.”

One year later, the Campbells took their “Boston” to the Historical Harp Society Conference and Workshop. “Instrument makers believe that unless we have people who play them, we’re just making furniture,” Bill says, so the conference was their first harp’s test. “People saw our harp, played it, and were amazed at the volume and tone from such a small harp,” Catherine remembers. “It seemed you could hear angels singing, and that’s what began everything.”

The building process

The angels likely were smiling over the harps under construction in the Campbells’ workshop as they prepared for this June’s Historical Harp Society Conference and the Boston Early Music Festival. In the small cabin Bill built as a drying room, he’s rigged up a line to suspend instrument pieces from the rafters. Golden maple sound boards and necks of an 86-string Baroque triple-row and a 53-string Gothic double-row glisten in morning light streaming in through a small window; they’re drying before Catherine applies another of a dozen or more coats of varnish. Four other harps are in various stages of construction in the workshop – two Boston single-row harps with 32 strings, one made of maple, the other walnut; a maple and cherry Ghent Renaissance harp with 27 strings and inlaid designs; and a maple and cherry Medieval harp with 13 strings.

It took weeks for these instruments to get to this stage, and more hours lie ahead before they’re ready to be delivered. “People always ask how long it takes to build a harp,” Catherine says, “and I tell them I start in the fall and end in the spring.” After receiving orders for harps, Catherine and Bill divide the labor based on their different skills and interests. Before the first piece of wood is cut, Catherine talks with the musicians about how and what they play and what they’re looking for in a harp. Both she and Bill do extensive research about extant harps as well as harp iconography, music, and history.

Once they’re ready to start construction, Bill treks a few miles out of town to a larger workshop where he mills the wood to the thickness needed and also cuts large pieces with a band saw. “To get the best sound, you want the wood as thin as possible,” Bill says. “But that’s when it’s the most fragile. We’ve had a couple failures when the sound board cracked – it sounded like a gun going off.” It takes courage to push the wood to its limit. “Musicians say a harp sounds best just before it blows up and strings sound best just before they break,” Bill says. “So we live on the edge.”

After milling, Bill transports the wood to the workspace in the ground floor shop at home, and Catherine sifts through a plastic bin full of rolled-up drawings she has made from her harp research. Following those sketches and templates, she draws shapes on the wood and then cuts them out by hand using gougers, chisels, and scrapers.

Cutting and carving the wood is just
part of the months-long process of crafting a harp. For the Campbells, another step in creating harps that are as authentic as possible is hand-making staples from bronze. The staples act as frets and prevent the strings from cutting into the wood.

Today, Catherine is building brays for the single-row harps. The small, wooden L-shaped pieces attach the strings to the soundboard. Although not always found on harps in museum collections, the Campbells’ research has convinced them the brays probably were typical on Medieval harps. “The tip of the bray barely touches the string and makes it vibrate,” Catherine explains. “That vibration affects the volume and tone color of the sound, gives it a buzz and creates overtones that really stand out from other instruments, even bagpipes.” Later, Catherine will string the harp. “Perhaps the most important ‘voice’ for harps comes from the strings,” she says. “They are the prime generators of the sound from the instrument.”

Catherine takes a break from the bray-making to demonstrate how they work on an Italian single-row harp with 32 notes in gut strings. Also known among historical harpists as the Vermillion Harp, this one in dark brown, highly-figured maple is based on an original in the Shrine to Music Museum in Vermillion, SD. Catherine tucks her shoulder-length blonde hair behind her ears, rests the 141-cm harp against her right shoulder, and improvises a sweet melody.

“Playability of the harp is so important to me,” she says. “The Baroque harp is very complicated to build and play, and I love every aspect of it.” She plays regularly and has studied with Maxine Eilander, an accomplished harpist and teacher at the Seattle Academy of Baroque Opera. “My goal is to make the instruments not only look beautiful but to have the most fabulous tone and volume possible.”

Her attention to making this complicated instrument easier to play is one of Catherine’s hallmarks, and it’s a trait that dates back to the first Boston Harp she and Bill built. “It had a wonderful sound, yet very narrow spacing of the strings, which is difficult for many musicians,” she says. “I found formulas to help calculate a stringing schedule, and then I worked on feel and spacing as a player, trying for the best tone and a comfortable playing tension that won’t blow up the harp. The spacing has evolved into the harp I make today, with the same tone of our earliest copy, yet easier to play. We’ve created this harp for over 15 years now and still are amazed at its consistently beautiful tone, playability, and volume."

**Collaboration with musicians**

Another of the Campbells’ Vermillion Harp reproductions and one of their Medieval harps belong to Ron Cook, past president of the Historical Harp Society and current president of Early Music America. Ron performs
both as a soloist and as the director of The Early Interval, a seven-member early music group based in Columbus, OH. “Both harps are very satisfying to play,” Ron says. “I use the Italian instrument to perform solo harp music from the 16th and early 17th centuries.” He plays it even more often together with other continuo instruments (including theorbo, guitar, other harps, and bass viola da gamba) to accompany one or more singers.

Ron purchased his Vermillion in 2003. “I had heard and played earlier instruments made by the Campbells,” Ron remembers, “and they were excellent, both in the beauty of their sound and of their appearance. I asked Bill and Catherine to build one for me at a time when I was becoming more and more interested in the use of the harp as a continuo instrument in Italy early in the 17th century. This harp has a very clear sound that is even throughout its notes. With its robust bass range, mellow middle range, and bright upper range, it’s perfect for both solo music and continuo accompaniment.”

The second harp the Campbells made for Ron is small and early Medieval. Catherine designed it in 2006 following Ron’s research and their mutual review of iconography from the 11th through the 13th centuries. “I commissioned this harp when I became aware that most early Medieval harps made by modern harp makers have two fundamental problems,” Ron says. “They almost always have more strings than was actually the case in the early Middle Ages, and they are not usually equipped with bray pins, which were probably common on harps in this period. Catherine agreed to work with me to make a harp that matched the results of my research.” The outcome was, in Ron’s words, “the most robust sound I have ever heard in a harp of this size.”

Challenges and joys
Finding the right wood for the harps is getting more difficult these days. “We’re fussy about the wood we use,” Bill says. He searches for cherry that will provide a warm, sweet tone and that darkens with age to a beautiful amber tone.
color, and maple that produces a bright tone. Spruce is one of the most important woods for the soundboards of historical harps because it provides strength and stability as well as clear tone. “Fortunately,” Bill says, “those woods are available in the Northwest, and we get most of ours from Washington, Alaska, and Canada.”

Getting the finished harps to customers is another of the challenges the Campbells face. “Trying to ship them is disconcerting,” Bill says. “People from all over the world want them, and packing them so they get places in one piece is a job in itself.”

The frustrations and problems are outweighed for both Bill and Catherine, though, by the many aspects of constructing harps that bring them joy. “Harp making provides me my space, my time, my world,” says Catherine. “So much of what I do is about the music. I want to put these instruments in the hands of people who want to play these lost sounds.”

For Bill, a man of many interests and talents who believes sleeping is a waste of time, the range of tasks required to build historical harps is a good fit. “I enjoy the research and the studying,” he says. “And I like the coopering to create the barrel shape for the sound box – I like waking the wood up to have a voice.”

To Boston and beyond

As they put the finishing touches on the harps under construction, Catherine and Bill are thinking about getting themselves and their harps to Boston. “We drive across country in a rented van because we’ll take six to eight instruments with us” Catherine explains. Professional musicians from around the world attend the festival, and they count on the Campbells to bring harps for them to play in concerts. Although the harps aren’t heavy (the Boston weighs seven pounds, the big triple weighs 20), they’re too big as carry-ons, and airlines won’t insure them as checked baggage.

“It makes us very proud to have professionals want to use our harps for their performances,” Catherine says.

Undoubtedly Catherine and Bill will return home with more ideas about how to make their instruments even better for the musicians who play them and with validation about the contribution their efforts make to the early music world. They’ll continue to research and refine as they strive to construct instruments best suited to the music of an earlier time. “Re-creating the sound of the past is what excites me so much about making these instruments,” Catherine says. “We’re reviving a lost art.”

Writer Iris Graville and photographer Summer Moon Scriver are from Lopez Island, Washington. Graville’s profile of oboe maker Sand Dalton appeared in the Summer 2006 issue of Early Music America. Scriver’s photographs have been exhibited in galleries across the Northwest. The two collaborated on Hands at Work: Portraits & Profiles of People Who Work with Their Hands. For more information, visit www.handswerking.com.