Home Built Harps

This feature of the Folk Harp Journal is intended to celebrate and encourage the craft of harp-making by home hobbyists around the world. The goal is to publicize the excellent, and sometimes surprising, results of one these adventurous woodworkers in each issue of the Journal. We will focus on amateur builders, those build harps as a hobby rather than as a business. We will share some of their experiences, woodworking tips, customizing ideas, etc. for the benefit and encouragement of other amateur builders. The following is an interview conducted for the Folk Harp Journal by Jerry Brown of Musicmaker's Kits.

Our featured home harp builder for this issue is Royce Kessler, from Colorado Springs, Colorado. He sent me a snapshot of his first harp, built from blueprints, and I was immediately impressed by both his workmanship and by his interesting selection of woods. I hope you enjoy his story.

Royce Kessler
(photo by Gordon Sadeik of Phogo)

Jerry Brown: Royce, your Gothic style harp is stunning, and I am curious about several unusual things you've done with this plan.

Royce Kessler: Thanks for asking. I am honored that you have taken an interest in the harp.

JB: Where did you learn woodworking?

RK: I first learned woodwork and design from my father, Glen, who gave me a coping saw and a design stamp for background decoration when I was five years old. I still learn from him whenever I have a chance to visit. The rest has been from time spent in the library, on-line, sometimes from my students, or trial and error.

JB: When you say students, what do you teach?

RK: I instruct adults on hand plane tune up and usage that covers a variety of planes and scrapers. I also teach hand cut dove-tails using only a pencil, marking gage, chisels, back saw and mallet. The other classes cover a range of shop safety, band saw class, table building, chair construction, wood bending, vacuum laminating, and general machine tune and setup. Some of the classes qualify for continuing education credits.

JB: I see by your website, www.spearfishcreek.com, that you are a canoe builder, bowl turner, and furniture maker, along with other woodworking artistry. How did you become interested in making a harp?

RK: I have had an interest in musical instruments primarily from a soundboard standpoint. I've built mountain dulcimers, hammered dulcimers, and bells, and I've experimented with acoustics off and on for years. The harp decision was actually driven by the board I used for the soundboard. I had planned to build another hammered dulcimer for an art show and started looking for the soundboard material. I came across a beautiful piece of Ambrosia Maple, which is one of the soft maples. I didn't buy the timber at the time, and when I went back for

it, it was gone. I was really unhappy with myself for not buying the piece on the spot, and I happened to mention it to a woodworking friend. He knew the board I was talking about, and said he had bought it himself! He didn't need all of it, so he offered to sell half of it to me. Sometimes things just work out. At this time I still planned to make a hammered dulcimer, but after getting the timber home and working out the best way to cut it for yield, I decided it would look better used on a harp, and that is how it started.

JB: So you bought a blueprint and our harp design book, and just jumped right in! That's terrific. How many harps have you made?

Royce Kessler's Gothic style harp with Ambrosia Maple soundboard and back

RK: This is the first of what I hope will be many harps.

JB: I've never seen Ambrosia Maple before, but that interesting grain is what struck me first when I saw the photo of your harp. How does this wood work as a soundboard?

RK: The Ambrosia Maple works out very nicely as a soundboard and yields a beautiful tone.

JB: I generally recommend a laminated soundboard for this Gothic harp design because of the curved front and the open hole at the bottom for the pillar to pass through. Did you have any trouble with the curve? Did you reinforce the edges of the hole to prevent cracking?

RK: The sound board is laminated to a piece of 1/8" Baltic birch that was thinned prior to laminating to the maple.

JB: How else did you prepare the soundboard before installing it?

RK: The maple was re-sawn, book-matched, laminated to the birch in my vacuum press over a curved form, and thinned by hand plane and scrapers until it yielded a pleasing sound when knuckle bumped. Overall, it is about 1/4" thick at the center bottom and a fraction over 1/8" thick at the edges and top. I made the back board out of Ambrosia Maple too, but it is not laminated. I planed that panel to about 3/16" thickness. Then I built the frame of the harp with Lyptus wood.

JB: Lyptus is another variety of wood I've never heard of. It looks somewhat like mahogany. Where did you get such an interesting species of hardwood?

RK: The Lyptus is a plantation grown tree from Brazil, a hybrid of two different Eucalyptus trees. It is very hard and heavy. I also used some cherry wood and Peruvian walnut on the harp, but none of the cherry shows on the outside.

Harp neck made from 6 layers of Lyptus wood

JB: The deeply curved neck on this harp design poses a big challenge to the harp-maker. I can see some layers of wood showing at the front end of the neck. What types of wood did you use for the inner layers, and how did you lay them up to reinforce the neck so it withstands the 1,200 pounds of string tension?

RK: The neck is six each 1/4" layers of Lyptus. The grain is oriented to maximize the strength and runs a different direction in each of the six layers.

JB: You have also added some very striking design elements to this instrument. Is there a story behind the thick overlays and pointed overhang where the neck meets the pillar?

Peruvian Walnut overlays cover the neck-pillar joint

RK: Just a different cosmetic method of handling the design and structure in that area. I have already decided to change the next one to mortise and tenon in that area.

JB: What did you use for your finish?

RK: Tung oil is what I use to finish any piece that I care about. I have found it to be durable and easy to repair when needed. I also like the way it highlights wood grain, and I enjoy the tactile feel of waxed tung oil.

JB: What did you find to be the most challenging aspect of this project?

RK: I rarely work from plans but felt that, as this was my first harp, I should take advantage of your expertise. As I have over 35 years experience working with my own designs, it was a real challenge to incorporate my preferences into your excellent plans. I have to admit it was a series of one challenge after another. Just solve one and move on to the next one [he smiles].

JB: You obviously put a great deal of thought into this project, planning how to make use of different woods, and working on creative design elements. What would you change if you were to build another harp?

RK: I really like the curved soundboard and will keep that for sure. I also like the dowel used at the junction of neck and soundboard. I will use a mortise and tenon joint at the neck-pillar junction, and I will also thin the Baltic Birch panel even more before laminating the sound board to it.

JB: Thanks very much for sharing your harp-making story. Would you mind giving out your email address so readers could contact you?

RK: I enjoy corresponding with fellow builders and players. They can reach me by email at this address <rkkessler@earthlink.net>.

Jerry Brown is owner and founder of Musicmaker's Kits, Inc., in Minnesota, and author of *Folk Harp Design and Construction*, a 150-page manual on harp making. An admitted kit-monger, plywood soundboard pusher, and incurable do-it-yourselfer, he corresponds regularly with hobbyists who build their own musical instruments.

If you know of an amateur harp maker who should be featured in this series, please contact Jerry Brown, of Musicmaker's Kits, Inc. (800) 432-5487, jerryb@musikit.com. Yes, he says he is even willing to feature people who build from "other people's" kits and plans!