

**COVER SHEET**

TRANSCRIPTION NUMBER: 16 OF 17

Transcriber: Amanda Fickey, PhD, Independent Contractor  
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Interviewees: Warren May  
Interviewer: Bob Gates  
Cinematographer: Sean Anderson  
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Transcription Notes:

**BG:** Bob Gates

**WM:** Warren May

**SA:** Sean Anderson

In some cases, words such as “um”, “uh”, “and”, “so” and “yeah” have been excluded.

Time notations have been included at approximately 2-minute intervals.

... Indicates pause, delay in conversation, or, weak transition/no transition in themes.

The names of musical styles are capitalized throughout the transcript (in transcript number 16 of 17, this includes “Mountain” and “Church” which are recognized as distinct styles by the interviewee).

Attempts were made to verify the names of all musicians and geographical locations referenced throughout this interview.

**0:00**

**BG:** My name is Bob Gates and I'm doing an interview with Warren May at his business here in Berea, and we are doing it for the Kentucky Craft History and Education Association. This is part of the project to document luthiers across Kentucky. Now I'm safely out of the way.

**WM:** Good.

**BG:** How are you doing?

**WM:** Fine.

**BG:** Good. So I wanted to ask you a little bit about how you got started. Actually, how you came here. Where are you from?

**WM:** I'm from rural Carroll County, Kentucky. I've been carving or whittling ever since I was born.

**BG:** In Carrollton? Down in Carrollton?

**WM:** Yes, which is a little different than rural Carroll County, but George's Creek to be specific. We always lived up on top of a hill and I was born in a real log house, pre-Civil War. We actually got rural electrification in the first grade, but I would be puttering around in my dad's workshop trying to emulate him. He would do some; oh he could split shingles and do just about any kind of farm work or small kitchen utensils. But yeah, I was puttering around in the workshop carving on things ever since I could remember.

**BG:** What kind of workshop did he have?

**WM:** Oh very, very primitive. I still have the old stake in the ground vice from that. I've kept that for all these years. Really just a one-car garage, a basic workbench and a vice. Like I said, dark and damp, and outside, but with the vice I could clamp things down and hew on things with a draw knife or split things with a hammer and a butcher knife so I started out that simply.

**BG:** What kind of things did you make?

**2:01**

**WM:** I made rolling pens, lots of bows and arrows, the best I could; the green wood was all I could work. I don't think I actually tried to make cars or wheel toys or anything like that, so more, just very simple. I know by the time I was in grade school and high school I was actually carving out some very simple figures, some arrows and some initials and things like that.

**BG:** Did your dad like what you were doing?

**WM:** Oh yeah, my dad was always supportive, even when I tried to play the electric guitar by the time I was in college, but he'd sit there and not say a word for hours because the music was just horrible.

**BG:** Were you in a band or something?

**WM:** Oh no, my brother invited a really good guitarist to our home one time. I think we probably had electricity by then. I think he had an amplifier, but this young man could sit around and play just about any popular song and I think I was hooked on music. I struggled with guitar for years and years. In fact, I was already out teaching woodworking/industrial arts in the county high schools here in Kentucky and I was finally able to make my first dulcimer back in 1972.

**BG:** Oh yeah?

**WM:** Yep.

**BG:** Ok. How did you get started making dulcimers?

**WM:** Well I couldn't afford to buy a kit per se and really didn't have anybody for instruction or anybody to show me the details, but once I saw the parts and pieces of a dulcimer I actually came back to my school workshop and started cutting out the parts to a dulcimer and in a very short time, now this is way down in Lawrence County, Lousia, Kentucky, in a very short time I actually found a very early Homer Ledford dulcimer and it had a little more dimension and fret scale to work with and actually my number two dulcimer was a little more of the Kentucky shape, the hour glass shape, more like the traditional Homer Ledford models.

**BG:** When you were in Carroll County you said you started teaching at a high school there?

**WM:** No, I actually didn't have any woodworking or shop classes at Carrollton High School. I enrolled at Eastern Kentucky University in 1965. I graduated in '69 with my teaching degree. Taught for two years in Washington County, two years in Lawrence County, Louisa, and then four years in Henry County at Eminence High School.

**BG:** Oh ok, so you were kind of coming closer to home?

**WM:** Yes.

**BG:** Did your dad make any instruments or anything like that?

**WM:** No. He played the Jew's harp [also referred to as the juice harp], or mouth harp, that's about the only thing he would strum on a little bit. Of course he did love to sing and hum. Mostly church music was the kind of music he would be interested in.

**BG:** Ok. So I know Carroll County a little bit. I worked with Raymond Hicks who is a boat builder down there.

**WM:** Well how about that?

**BG:** Yeah, he lived right along the Kentucky River. What kind of music was being played down in that area when you were a kid?

**WM:** I was raised just on Church music. Really just acoustic music in the churches we attended, and then, of course, early Country music. I kind of still remember Hank Williams and Johnny Cash and some of the very, very earliest of what you'd consider your radio personalities. I didn't know much about real Mountain music, so it really was mostly Gospel and Country, popular Country radio music.

But my roommate, when I was a sophomore in college, that would have been 1967, was from Owsley County, Booneville, and he actually taught me a little bit more of the flavor of real Mountain music and ballads. Much easier tempo. Much more of a story. A little bit more of a calming type music I guess, so that added a little bit to my different types of music I enjoyed.

**BG:** And you wanted to be a rock start at one time?

**WM:** Oh no. I struggled with guitar for years, but I made my first dulcimer, I was so proud of my first dulcimer I actually finished it up in the fall of '72, but several teachers in the school in Lawrence County played music. Some of them played fiddle and of course, in eastern Kentucky everyone plays music, either Church music or Bluegrass music because of all the other celebrities in that area. So I was so proud that I just took my dulcimer down the hall of the school because we knew all the teachers and we'd just go right in the classrooms and demonstrate the dulcimer. You had that much encouragement to play music in that area, but much better on dulcimer so I sort of gave up the guitar.

**BG:** So, that was in Louisa?

**WM:** Yes.

**BG:** And you were teaching at the high school there.

**WM:** Uh huh.

**BG:** Ok. That's where Rickey Skaggs is from, isn't it?

**WM:** Oh yes. He actually didn't graduate from Louisa high school the year before I got there, but I've seen him, I've not meet him, going up and down the road and everything. But certainly a real great person from that area. **[Verification – Skaggs was a high school dropout, see article “High-school dropout Ricky Skaggs Country Music Association Winner,” published in *The Montreal Gazette*, Nashville, Oct. 15, 1985, available via Google.]**

**BG:** There was a lot of music in that area, and so you built your first dulcimer from a kit or you made pieces like that kit?

**WM:** Just pieces from memory of seeing a kit in Gatlinburg and then, of course, I'd had a little bit of influence from Homer Ledford. I had seen his dulcimers at different craft fairs. By then we were introduced in woodworking and craft fairs and specifically Homer's dulcimers would be the most obvious ones to see. So we started coming to Berea to enjoy the craft fairs and the quality crafts. I was also studying furniture, classical furniture at that time too. So when my wife and I decided to actually start a business, that was 1977, we ultimately chose Berea and we've been here ever since.

**BG:** Oh ok. How did you get into shop? You were a shop teacher?

**WM:** Yes, industrial arts. I actually taught eight years. Thoroughly enjoyed the kids, all the way from junior high to high school. Had a lot of boys and girls in shop and we actually studied how to make things. We went over all the safety rules. Once you got all those kids into the shop atmosphere all they wanted to do was just make things. Of course being very careful, the kids would just respond wonderfully to being able to use the machines and learn the details.

**BG:** What kinds of things did you teach them to make?

**WM:** We would start out with, obviously in the younger grades, a very simple project, but one of the things I learned in my teaching; we'd start out with a very simple project. Some of the kids could just take that and complete it very, very quickly. So I would add a little more complexity, a little more complexity to the project. Some of the kids might struggle just to make the very simplest; we had a certain amount of requirements that we had to do each year. They had to do a woodcarving, they had to do different projects, metal and wood and a lot of different things. But we were actually building just enormous grandfather clocks and enormous pieces of furniture and everything by the time I had the students for two or three years. They were very accomplished woodworkers.

**BG:** That's what you worked mainly on, wood?

**WM:** Yes.

**BG:** Yeah.

**10:15**

**WM:** We did also metal working and general crafts and just a few other things like that. Then about that time there was less emphasis on the shop programs here in Kentucky, that was about the time computers were coming along, so they didn't care as much about that and that's when we really considered going into business. I was already making dulcimers by then and was making furniture just working with the students but not offering furniture for sale so, like I said, we packed up everything and moved our family here, my wife and I, here in 1977, and it's been almost thirty five years later and about a dulcimer a day for forty years now.

**BG:** Really?

**WM:** So, talk about enthusiasm for carving!

**BG:** Dang. What do you like about carving?

**WM:** Oh just being able to make the wood work. I enjoy all the local woods. Walnut is probably my first choice because of the nice rich brown color. Cherry obviously the second choice because it gets prettier as it goes along.

**BG:** Is that Cherry there?

**WM:** Cherry turns a beautiful burgundy color [shows Cherry dulcimer] just in a few years, just in a few months, it will darken quite significantly, but Walnut is very pretty right from the very beginning, but

Cherry matures and has a little more of a clear tone **[strums dulcimer]** and then also I do the traditional dulcimers out of Kentucky Poplar or Tulip Poplar.

**BG:** That's what that is?

**WM:** Uh huh **[shows Poplar dulcimer]**.

**BG:** What's that one right there?

**WM:** This is also raw Walnut and here you can see where I've actually used the natural knot whole and enhanced that because that will be a really pretty dark area in the wood there. So that will darken up to just a beautiful chocolate color as it ages there.

**BG:** Did you learn about wood from your dad or is that something you picked up from shop?

**WM:** I did the basic carving and learned a little more about the texture. I actually had to hew on some fence posts. Of course, it was my job to also to cut all of the kindling and the firewood. You learn a lot from cutting kindling let me tell you.

**BG:** For whom? For your house?

**WM:** Oh that was my only required chore. Dad, we always had wood heat, the whole time I was at home.

**BG:** So you were a kid? Ok.

**WM:** So we absolutely had to have dry kindling and dry wood in the house and that was my have to requirement. So I'd go out in the snow or whatever. My dad was very good about having a supply of firewood on hand, but it was my chore to get that kindling chopped up and get that wood into the house. That was my have to job.

**BG:** What's the trick to getting good kindling?

**WM:** Well, actually, just cutting the wood up fairly finely so you can get the fire started quickly.

**BG:** Yeah.

**WM:** Yep. A few pieces of wood hit me in the nose and the face out in the cold snow, and you learn what you can do with an axe and what splits and what doesn't.

**BG:** Oh yeah?

**WM:** That's right.

**BG:** So you like wood, huh?

**WM:** Certainly. I'm in the process of doing some logging on my acreage, just outside of Berea here now. That will be wood that won't even be useable for probably six to eight years. Got some beautiful Cherry, Hedge Apple, with the Willow tree I might make some dough bowls or woodturnings out of.

**BG:** Where are you going to store all of that?

**WM:** Uh, after I get it sawed I'll have to store part of it outside. I do have a pretty good storage shop. I have a workshop on my farm. About fifty feet of heated work space and then probably another forty feet of dry wood storage. I'll start the wood outside. Let that dry for a few years. Move it inside into a metal building and then gradually move it into my workspace. So I'm actually working with quite a bit of wood that I've either found as old wood, I absolutely love to buy old wood. I'm in the process now of buying wood that's probably forty or fifty years old from another wood worker down in Breckenridge County. So I've found quite a few caches of wood in eastern Kentucky too. Also, using the wood that I've actually harvested some of it from my farm and some of it is local here, but mostly Walnut and Cherry. Going back to the Poplar, because most log houses and barns and cabins are made out of Poplar so...

**[Interruption – noise, fan]**

**15:35**

**BG:** I was thinking about the different kinds of wood. You were talking about Poplar, weren't you?

**WM:** Yes. Poplar would have been the most traditional dulcimer wood, just because it would have been the most common planks or wood left over from houses or barns or log cabins. Probably is one of the more resonate or louder woods. The dulcimers were made very, very primitively. I have dulcimers up to one hundred and eighty years old that are made out of Poplar. All hand put together with wooden pins. So, if somebody asked what the most authentic traditional Kentucky dulcimer wood would be I would say Poplar, Tulip Poplar. Then, after that, the Walnut and Cherry as they were able to harvest and collect those woods because we have an abundance of all the wonderful woods here in eastern Kentucky.

**BG:** What drew you to making a dulcimer? Why the dulcimer?

**[Interruption – outside noise]**

**16:49**

**WM:** I had experimented with just a little bit with a balalaika [**Russian stringed instrument**] when I was in college at Eastern Kentucky University. I didn't have any technical details to make it play, but like I said I was playing guitar and was sort of interested in acoustic fretted instruments like that, but basically it's the ease of playing, the fact that you really could play almost any song on a dulcimer and you could pick out the notes and the melody. And then about five years into it I discovered that you could play guitar chords and since then we've expanded. Of course, almost all music is just the basic three chords like D, G, and A, but once I realized you could play almost any popular song, whether we are talking about Country and Gospel, and Classical and Folk, you really can play the song with expression, with feeling, you can play the notes to the song, you can play along with other instruments like guitars and fiddles and mandolins and penny whistles, so basically I saw that ease of playing, the fact that people could learn to play and you could really enjoy the music so much more quickly and efficiently than you could on other instruments like a guitar.

**BG:** Did you have anybody that kind of took you under their wings and showed you anything or was it all self-taught?

**WM:** Believe it or not, most of it is self-taught because we just didn't have time to mentor with anybody else I guess. I knew Homer Ledford; we'd see him at craft shows. I actually had a lot of respect for him and I didn't want to bother him by going to his workshop and asking questions. So early on I wanted to make, once I decided I was going to make dulcimers especially for my living, I decided I was going to make the Kentucky style and now, the Kentucky style of a dulcimer is a little bit different than other state's style, or what is often considered a modern dulcimer. The hourglass shape really is the Kentucky shape **[shows example]** even in the study of the early instruments and predecessors like the sheitholt, which is an early German instrument...

**BG:** How'd you learn, how you'd know that?

**WM:** ... other things. Oh...

**BG:** How did you know about the shapes and things? Did you read it?

**WM:** Yes, you know, we'd go back and, just going to the different dulcimer conventions and you learn a little bit more about the earlier Kentucky makers. Ed Presnell, who was from Banner Elk, North Carolina, had some influence up in this area. Raymond Layne **[verified spelling via: [www.everythingdulcimer.com](http://www.everythingdulcimer.com)]** was an earlier dulcimer maker living here in Berea when we came in the mid-70s. Jethro Amburgey, of course, was probably one the most prolific makers. I have several of his instruments here hanging on the wall. His were probably the, going back, who was the earliest one in the closet **[speaks to someone off camera]**. Yeah. Ed Thomas probably was the first one and I have one of his dulcimers from 1917 that I'm very proud to own. Probably one of the first ones to build what we call the hourglass shapes. Some of them were very narrow, but this is the most efficient way and strongest way to build a wooden box is the continuous curve and the more we have studied the earliest instruments, dulcimers going a back a thousand years, we found out that that probably really is the Kentucky shape or Kentucky style is the hourglass. Along with that you would have a bead on the edge.

**BG:** A bead?

**WM:** This little bead **[demonstrates with dulcimer]** requires a lot more work to this edge. Part of it is functional where you can actually pick up the instrument and wouldn't have to drop it as often. Part of it is a little bit of a shock absorber to absorb a little bumping on the edges there. Some type of carved scroll, generally, because this is a very simple nut scroll, once I've figured out that was sort of my design is actually the hand carved scroll. Typically some folk art. I put some little Tulip flowers, wood burned, which are not just decorative, they are functional places where songs might start or chords would play. 3, 5, 7, 10 **[demonstrates]** so a lot of things will be functional. I've come up with a few functional designs like my hummingbird and vines designs. One of my specialties, because we'd be working with the natural wood holes, this would be the hour drop. I do a teardrop, which is another pretty common shape, but I didn't like this as well, so eventually we discovered that by putting the two shapes together we would get a much richer, a little more of an acoustic, actually a guitar sound. But a little richer, minor, minor voice. A little more weight. So that became my flagship model was called the hourglass teardrop or hourodrop for short. Of course, I still make the traditional smaller Kentucky dulcimer.

Still use wooden pegs on a lot. Over the past ten years probably we've gone to the very best geared mechanical tuners and while I hated to give up the carved Rosewood pegs, I didn't want to put any limitations on people learning to play the dulcimer as easily as possible. So I think the metal tuners make it easier for people to keep in tune and to actually enjoy the instrument.

**BG:** You've developed the teardrop, what did you call it?

**WM:** Hourdrop.

**BG:** Hourdrop. Nobody else does that?

**WM:** Not really, of actually physically putting these together on purpose like this...

**BG:** So the one half is the old traditional style?

**WM:** Yes.

**BG:** And the other half is?

**WM:** The teardrop. Now the teardrop was a very thin, low slow sound because it just didn't have enough body over here, but by adding the round side we picked up a wider voice range. Very, very good treble, and then a much stronger bass [**demonstrates on dulcimer**]. So a little acoustic guitar quality, especially as you get into a little fancier music like minors for Bluegrass or Folk music or Gospel, whereas in the traditional shape like this one, it's just a bigger version of the smaller, many of the early Kentucky dulcimers were very narrow and they actually still played very well. I think part of that was just the wood availability and just less problems with working the wood under very primitive circumstances, but as we made them a little bit wider, much better tone value overall making the instrument just a little bit broader here.

**BG:** So that's very symmetrical.

**WM:** Yes.

**BG:** The Walnut one is symmetrical and the other one is asymmetrical. Does that affect the sound on either one of them?

**WM:** Yes. On this one you are going to get a little more of the traditional "hummy" sound. A little more clear noting quality. Here we have a little more chord acoustic value. An excellent rhythm instrument. Here the Cherry would be very good for picking the individual notes. So while I do use the prettiest pieces of wood because I do many, many dulcimers, I work on dulcimers about every day. Anything that would make it a little more artistic like the knothole or choosing just the prettiest pieces of wood... I spent probably the greater amount of time on making the instrument play as well as possible. Now that would involve part of the assembly like the gluing up, getting the fret board just to my specifications, quite a few, quite a while and quite a few different operations to true up the fret board and the fret scale, with several adjustments on the nut and the bridge, to make each instrument play just as well as possible.

**BG:** What about the wood? We were just at Donna Lamb's shop and they were talking about how the top wood should be thin for what they make. Is that true for you?

**WM:** It is. I will vary the thickness a little bit as your harder woods, Cherry, I'll make it just a little thinner, Poplar you can make quite a bit thicker. The Poplar would have a little bit more of a rusty **[rustic]** true Mountain sound, more of an overt or rougher sound per chance, but good volume. Cherry is very precise in the quality of the wood and then Walnut would probably be the mellowest for just the ease of listening and that's actually why I chose a Walnut one to play here to demonstrate with. Walnut is going to give you the easiest listening and just the mellowest sound. Because you are getting a lot of the tone going into the fret board I do handpick and process the fret board to be very light, very straight. I think that's one of the most important tone elements. There are other tone woods like your Rosewood and different things like that but generally I stay with Walnut or Cherry. If I wanted a louder instrument I could use Butternut, which is white Walnut, on either of these models. I typically would only use a different top wood and not mix more than just one or two woods for each instruments otherwise the tone is good, but a little more unpredictable.

**BG:** With guitars they use Spruce a lot, don't they?

**WM:** Yes.

**BG:** You don't do that?

**WM:** Spruce is a little bit sharper, higher sound. If I just want to enhance the tone I'll probably go with Butternut on top or Poplar. Poplar on Walnut is a wonderful sound. Typically I would use Butternut on Walnut or Cherry.

**BG:** Ok. So you talked about a lot of different factors that contribute to the sound being certain ways. How did you learn that?

**WM:** Just all these years, nearly forty years of doing that. I've had to be a little more patient working with thin wood as compared to working with furniture wood. The thin wood, we actually saw that from a thicker piece of wood, typically a one inch board or plank because I hand pick each piece and I have patterns to do that, and just from experience from the weights of the wood, textures of the wood, and being a little more patient working with thin wood. I have wood stored that's maybe already sawn from the boards that I've actually had stored and been waiting on for several years. Some of it I just haven't gotten to it yet, but you have to let the wood relax when it is in a very thin board like that, you have to let it relax as you are working the process.

**BG:** How do you get it to relax?

**WM:** Mostly just let it sit around after the wood is actually sawn into the thin boards.

**BG:** What kind of saw will you use to saw those?

**WM:** I have a bandsaw.

**BG:** A big bandsaw machine?

**WM:** Yes.

**BG:** And that keeps it straight as you cut?

**WM:** Uh huh, and it's a dedicated bandsaw. In other words, it's a saw that I have special rollers for to keep the blank piece against the fence so I can saw very accurately.

**BG:** Vertically or horizontally?

**WM:** Vertically. It is a traditional woodcutting bandsaw, but I have a special fence and a special roller with a pressure handle that I've made up to keep the boards very straight and it is quite a sophisticated process to slice many pieces of wood. In other words, I'll actually cut out several dozen pieces from the one-inch blanks typically.

**BG:** Will the blanks be the shape of this? Are the blanks a square?

**WM:** We'll actually cut the top piece to shape, so I'll blank that out just a little oversized of this half of the instrument because this will be book matched. So we'll actually take this blank, saw several slices and that will make several top pieces. The back pieces, the larger piece, now here we are up to about four and nine-sixteenths wide so that's a real big rectangular piece of wood.

**BG:** Is that two pieces of wood there?

**WM:** Uh oh.

**31:23**

**BG:** Ok.

**WM:** See here where we have the little knots there where the cathedral grain is going up, that's perfectly matched. That's two slices book matched from the same board.

**BG:** What do you mean, book matched? You mean it would open like a book?

**WM:** Yeah, and again, looking at the grain patterns. So really, I was working with one blank of wood that would be big enough to make exactly half of the back of the dulcimer. Of course, when we get two slices from that we can process that together as if you would open a book where each piece mirrors each other. That's the most efficient way for me to get a nice wide back, much better balance by having two pieces here. So we have two pieces matched on the front. The sidepieces are also matched because they are pretty easy to slice or saw out.

**BG:** Is that a different type or part of the wood, the sidepieces?

**WM:** No. Typically because we do wet and bend them; the sides are very thin so we wet and bend those around forms before we actually glue them on to the instrument.

**BG:** I guess what I mean is, the grain looks different on the side than it does on the top. Is that true?

**WM:** Maybe just a little straighter grain. This would be just a good regular model. This is called a wide-body Walnut. Now some, if I had a little more figured or fancy grain pattern I would probably use that on a little more, one of my special instruments. By that, I've picked out the absolute finest and highly figured pieces of wood that we could find. One example might be, here we're doing odd pieces. This actually, I started the hourdrop using up some odd pieces of wood. See, many times when you slice a piece of wood you'll get three or five slices and you will accumulate a lot of wood that wouldn't be usable, but I did learn how to do that and use up almost all of the thin slices of wood.

**BG:** Is that why you built the hourglass to use wood like that?

**WM:** Originally, yes.

**BG:** Oh really. Ok.

**WM:** But what was good fortunate is that we learned that this shape actually has real strong and very desirable and a little better voice range. In other words, it's a little stronger and a little more interesting tone than the traditional smaller dulcimers because we made the wider one. Here would be an example of an extremely rare piece of Cherry compared to a simply grained piece here. Now this will be pretty, it will turn red. This would be feathered Cherry from a very large tree that actually forks, and when we saw through the fork of the tree we end up with this absolutely rare feather patten. Of course, we've book matched that or mirrored that, but it takes an enormous tree like thirty inches or more around to produce a feather like this. I've added a little contrasting stripe in the middle. That would be one of my specialty details, you can see a little more figuring here on the sides, this particular instrument has, we've worked up some, actually some free form wood burning here on the fret board. Another little detail that may be a little harder to see, there is a scribe line here, just a little indentation on the instrument that is sort of a Kentucky detail. I've found, even looking at old instruments and older items, there is usually some kind of decorative aspect that people have added, not because it was necessary, just because they wanted to make it a little bit fancier. One of my favorite sayings... I have since learned that the scribe mark may have functioned as a way of thinning the top and improving the tone. So again, almost everything in the Kentucky dulcimer is to make it as efficient, as far as the playing and the construction, just as efficient as possible, and there are a few decorative elements, the hard carving and the scribe.

**BG:** How do you figure out which decorative elements you are going to use with each one?

**WM:** Over the years I've come up with just different characteristics of each different model, like on the most basic model, I will still probably do my wood burning, the little Tulip flowers. Again, my dad liked Tulip flowers so that's why I've got Tulip designs, but very functional. 3, 5, 7, 10. But a little more of the basic sound holes. A little less ornamentation.

**BG:** What is that there?

**WM:** A good old traditional Tulip Poplar. Very simple piece. That sometimes will have a little darker color.

**BG:** That's scribed too isn't it? Was it scribed on the sides?

**WM:** Yes. So I actually make the Poplar dulcimer and add the scribe detail as a most traditional model. Wonderful sound. A little more of the overt, rusky **[rustic]** sound. We we'll play on that a little bit as we go. I do that model in Cherry and Walnut. This would be, one step up would be my hourdrop or the wide-body, just a little bit wider size here, about an inch wider, but far better. I'll add a little more decorative sound holes like the carved humming birds and then one step up would be my special models and we'll start out, I'll hand pick the fret board for what I think will be the very best sounding fret board and then I'll go ahead and decorate that up and then I'll add on the prettiest pieces of wood. This is Cocobolo Rosewood, which is a good tone wood. Of course, it's a little bit more expensive wood, and then I've chosen the more curly sidepieces and the very finest pieces of wood on the back.

**BG:** That's two different kinds of wood there?

**WM:** No, it's all Cherry with the Cocobolo top.

**BG:** The top's not Cherry. It's a different wood.

**WM:** That's right. Yeah, this is from South America, southern Mexico. It's one of the worlds finest tone woods, but sometimes I do make specials with all Walnut and all Cherry using the very rare pieces of wood.

**BG:** Over the years you've kind of developed different models.

**WM:** Just three.

**BG:** Three, ok, there are three models then. The skinnier one?

**WM:** Yeah. The most traditional model. A little more narrow here. Then the hourdrop was my next model that we did here. And then the wide-body; you get a little clearer acoustics and the same clear tone here. **[Demonstrates tones]** Now if you were playing you would actually hear quite a bit of difference in the body styles and again, the Poplar has a little more of the authentic Mountain sound, the Walnut is the most pleasant, mellow, sort of hollow, echo-y sound, and the Cherry would be clear and bright, but the hourdrop makes it very strong and acoustic.

**BG:** Could you do that again? Go through the three. What's the difference between them?

**39:38**

**[Tunes dulcimers]**

**WM:** Let me get them tuned just right. Yes, very, very simple, a little louder sound, but more of what I call a rustic or rusky sound. **[Demonstrates on dulcimer]** And the Walnut is much more mellow. Same song here. We get a little stronger chord pattern, a little better minor values as you get into a little more than just your three basic chords. So really, you can play them together and they sound just great. Started playing two dulcimers at the craft fairs just to get a little more volume. You can tell I still like to play after all these years.

**BG:** Well let me, just to clarify this for me, if you selling these to professional artists, and you do don't you?

**WM:** Yes.

**BG:** Not just tourists that come in, but artists.

**WM:** No, we have several professional folk singers.

**BG:** Ok so if you did, are there certain benefits they would buy different dulcimers for?

**WM:** Yes, if you were doing like the earlier say Civil War or early Mountain music you would definitely lean more towards the Poplar because it's going to have the most authentic, a little more of that rough Mountain style. By that I mean just a little more of that rustic sound, not the playing, I make all my instruments play just as nicely as I can. If somebody was very timid about having been musically abused or told they would never be able to play music, I would start them on a Walnut. A Walnut is by far the most forgiving. It is the easiest to listen to. If you make a mistake it's not going to show up. If you are just strumming it's definitely, if I only made one dulcimer I'd use Walnut. So some people it gives them a little more confidence to go ahead and want to start playing music. We get a lot of feedback, people call back and they say, "I didn't think I was going to be able to do it, but I am playing. I am playing my dulcimer every day. I've learned to play at church, I've learned to play with other people, and that is very rewarding." Somebody comes in who is perhaps a much more trained musician, more of a pianist, we had some violinists in yesterday, a little more noting people, perhaps a little more vocal people, I would recommend a Cherry. A little better volume. It's going to work a little better with other instruments. If you play specific note qualities [**demonstrates**] so we're playing really specific notes in the melody. On the other hand, this shape, you have a little more weight of sound. A little more clarity, and a little more sophisticated music. So a little broader voice range, a little better treble, bass sound here too.

**BG:** And it's not the strings it's the wood making the difference?

**WM:** No, no. Just the wood and the shapes because that's what I do every day long, all day long is demonstrate all the different qualities.

**BG:** You also have the combination of Cherry and that, mixing them up. How does...?

**WM:** Yeah, if I want more volume, more individual noting and acoustic value, I might add a Butternut top to the Cherry here. I can do that to Walnut. The Poplar I wouldn't mix up any other woods with the Poplar. I would leave it because it's more of the overall sound on a Poplar. The Walnut you are hearing more of a Walnut sound, the Cherry you are hearing definitely more of the crispiness and extreme accuracy of the Cherry wood.

**BG:** How does the wood make that much difference?

**WM:** Every piece of wood is different. That's what the challenge is, looking at the piece of wood, feeling the piece of wood, knowing it is going to be just a little bit different from any other piece of wood, any other board, even from the same board or the same tree, each piece of wood is going to be totally different. It's the textures and the way the tree grows, the combinations of pieces of wood that we've put together in the one box that would definitely affect the tone a little bit. Not as critical say as a violin where you are actually sculpting and changing the tone of the parts and pieces as you would on a violin. On a dulcimer it's more of the thickness of the wood, the actual kind of wood. A lot of it on a fretted

instrument is the actual playability or how it handles or if the instrument is friendly or not. Some, that's a musician's term, is whether your instrument is friendly, that means it places as easily as possible, it notes as accurately as possible, and you can play as confidently as possible on that instrument. That all shortens down the terms of what's a friendly instrument. It's easy on your hands. It sounds good.

**BG:** What makes it friendly? The fret [inaudible]?

**WM:** Yes, I actually file and adjust the entire fret board. In other words, every fret note I blend together. The Kentucky dulcimer has a tempered scale anyway which gives it a little softer, a little harmonious sound than some instruments, which are made using mathematical scales. This is actually an old scale that is passed down so I'm probably the main Kentucky maker that is still using a really truly authentic Kentucky scale spacing. Along with it playing very smoothly, and very warmly with a good voice, over the years we've had to make the instrument as versatile as possible. Some people are playing very sophisticated music. There are different tunings. The dulcimer is a modal instrument because it is so simple in scale. You can actually tune it to sound like different songs. You can tune it to sound like different styles of music. So over all the Kentucky dulcimer has proven to be very, very versatile. In other words, I feel like my instruments are the most versatile as far as styles of music, playing techniques, and different uses for the instrument.

**BG:** So you're glad you picked the dulcimer to work on?

**WM:** Oh yes. Hardly tempted to do anything else. People ask, "Do you make guitars or violins?" No. Way, way, too much time. Time spent doing too much periphery work. Like, if I had to spend too much time, even though I do a lot of carving on each one, if I had to spend too much time sculpturing the wood, or even assembling the wood, I think it would take away a lot of the enjoyment. We have a very simple instrument, traditional Kentucky fabrication, or construction, yet on the other hand we are able to use these wonderful local woods. The instrument should last indefinitely. Modern homes, modern situations. The instrument should just last indefinitely. So we try to just make each one as best as possible.

**BG:** Are those bigger ones on the wall behind you or do they just look that way?

**WM:** They look a little bigger, but if you were to actually compare my standard length, some of them are just a little bit bulky.

**BG:** There are four right there. Those are yours aren't they?

**WM:** Yes. Oh these are. These are just my special collection. I have a pretty sophisticated Cherry selection of wood there. It has the stripe on the back and all the little extra wood burning. That's a vine pattern. The second one has one of my knotholes with the flowers carved in the knotholes. So I've chosen a little fancier top there and it will have a real pretty back on it. This is actually Indian Rosewood. Again, one of your world's finest tone woods, it's Indian Rosewood on the top only. I found out the top is all you need to make the Rosewood. If you made more of the instrument, maybe tops and sides, then it would be too heavy and you wouldn't get a very good dulcimer sound. Then this one is actually all Poplar with a little bit of Walnut on it, I think a Walnut fret board. So, that one with the vine pattern, you've got the mellowness of the Walnut with a little amplified voice from the Poplar.

**[Interruption – lights/external noises]**

**51:45-52:16**

**WM:** This would be a back blank. Notice I picked out a very, very strong grain pattern. This is actually Black Walnut with the light and dark wood near the end of the tree. When I actually saw this, sometimes I call it slicing, sawing the thin pieces, this blank of really pretty Walnut will yield at least four back slices. Here I've actually glued on a little contrasting stripe. So we will actually saw the pieces out, let those rest anywhere from a few days to a few months, then I'll go back and lay these out in sequence. You can see how the grain pattern changes from light to darker, to darker, this one is out of sequence, so that would probably be the way they came out. Then I go back and actually put those together to make the prettiest book matched or mirror images, of course you can tell those are almost identical right down to the knothole because this will cut away, that's been planned out size wise. Very strong. This will be a fancy back and it will be on one of my nicest signature models, any of them with a stripe. Here would be the next match. See, that one doesn't match as closely and so we will go back and do the closest match that would work. That would be the closest match there. That will make two backs. Here is a top blank. Here we've cut it out as precisely as possible for efficiency. Again, this will make four to five slices; here would be five slices, or thin cuts of wood that have been made from that. Again, we'd lay those out. Very, very high quality Curly Cherry and one they're processed out and seasoned out they will be fancy tops also. It darkens to a really pretty color.

**WM continues:** So here we show the two pieces where we've actually added the two pieces on to the hollowed out fret board choosing a very, very light fret board piece of wood, light weight piece of wood, and then of course we add...

**BG:** I didn't know that was hollowed out, the fret board?

**WM:** It's a very important aspect.

**BG:** Why is it hollowed out?

**WM:** Because a lot of the tone goes in to the frets as you press the strings on the frets a lot of the tone goes into the fret board. Less mass here, less heaviness, even this has been something I've done over the years is to hollow out this area here so it wouldn't be so heavy. In this case, it's a very light piece of wood. I either chose light straight pieces of wood that are closer to the outside of the tree, they would be called the new growth or the sap wood, that would make a lighter weight fret board. As you can see we've sliced the five slices out of there which brings up the point of how I did my hourdrop because I have one extra piece left over, and then I have to go back and match it to another piece, but you can see how very carefully we would match the pieces. Here would be a very high quality piece of Cherry for a back and it's been glued together, a stripe here, but extremely strong matching grain pattern here. On the inside, in the process of gluing this together, I've added a little reinforcement strip here. Again, that's a way to use up almost all of the thin stuff from all the different processes.

**BG:** What kind of glue do you use on that?

**WM:** Typically, this is yellow glue like Titebond II and part of this assembly we do with a white polyvinyl glue which is just a little easier to work with, but definitely many lifetimes of lasting. We haven't had any problem with the gluing over the years.

**BG:** How thick is that?

**WM:** Normally, an eighth of an inch, maybe just a little heavier, this piece has not been shaved down to the final dimension yet. Of course, you can see where we've marked it here to get the best match. So this will actually be sanded down with a drum sander, it's probably the only piece of fancy machinery, but I do have a drum-sanding machine, which takes the wood down to thickness. You can see these are pretty thick here. They have not been sanded. This is Curly Ash. Again, something that I don't use all the time, but sometimes the wood is just absolutely the most rare exquisite grain patterns and you just can't resist, especially when one piece of wood makes two fancy dulcimer backs, but I choose this one just to show you how fancy just some normal wood would be.

**BG:** Couldn't you use either side of that?

**WM:** Yes. I haven't matched it yet, so I will go back and arrive. Here I can see, of course the wood is extremely fancy, see these may not be the best match here. You can tell that this might be a little better of a match, but I'll actually, when I get ready to assemble them I like to go back and choose the very best pieces. Sometimes I can lay the wood back together as it started and see if the grain matches up and so, there are several ways to match them and several best choices, many different choices of putting wood together the best way.

**BG:** How do you determine the best wood?

**WM:** The best color matches for the two backs. The fanciest grain pattern is first consideration. Next is making the wood as nice as a piece selection as we can. Now this might take several weeks to months to process of some of these fancier grain pieces, but the overall assembly of the dulcimer takes about three weeks. People always ask that. Through my workshop I do have two employees, typically, but I'll hand pick and hand select and actually hand process the parts and pieces. I do a lot of the detailing like cutting the sound holes, carving around the sound holes, carving and inspecting, like, this instrument is assembled but there is at least a half hour of trimming, and carving, and inletting, and in that process is where I do the quality control. Every joint is gone over. Every little detail like this dulcimer's almost flawless here, but if it has any tiny places that need to be secured or looked at then we will do that in the carving and sanding process. So about three weeks through the shop, that's not including the processing of the wood. I do let the wood age weeks to months to years.

**BG:** How do you know when it's ready?

**WM:** You can tell. Basically I use very dry wood, and sometimes very old wood. The wood has to be several years old, and then it has to stay in the sun, but not sanded or not processed like this wood is, just straight from the bandsaw. So I would actually set this up and sometimes have a little roller mechanism against the fence here. I would slice off one slice, then slice off another slice, and by that I mean bandsawing, and eventually get pretty even slices. So this wood has been sitting around several weeks now. So now it is probably ready to use anytime we wanted to use it. So I'll use that this spring.

**1:00:38 – End Track 1**

**0:00 – Begin Track 2**

**WM:** I think it actually is hollowed out perhaps. He was using table saws by then.

**BG:** How do you hollow it out?

**WM:** On a table saw. I do have basic woodworking machinery. We have bandsaws, jointers, and again, a sanding machine, so most of the pieces have been sanded to size. Why that is important is, once you get into the extremely high quality fancier wood like fancy Cherry or Curly Ash, that's the only way you can process the wood is by sanding. So most of the parts and pieces have been sanded. So here we would take a fret board, and this is a raw fret board. The frets haven't been added. I have not hollowed the back. Once the fret board is processed, I would glue it on to the two matched top pieces. In the meanwhile, I would be gluing the two matched back pieces together, of course you can tell that's plenty big enough to make the back because we've chosen a very strong grain pattern here for the larger so you can tell how it fits the overall shape of the instrument. Meanwhile, we have been processing the scroll. This is all made out of solid wood. It's about an inch and a half thick to match the fret board size. There's about twenty processing operations in just making my traditional scroll, by that I mean hollowing out, drilling for the keys, the joinery for the sides and the fitting. Plus it's the handwork. I've got another ten to twenty minutes of hand carving here. So now you are beginning to see the dulcimer as it shapes together.

There is a tailpiece down there, which you can see very easily. Pretty much the same detailing as the scroll, but now we are actually looking to assemble the dulcimer with the scroll tailpiece, adding the sides and then probably adding the back last. Still do some gluing with hand clamps, spring clamps, clothes pin clamps, but most of our gluing is done with a spring loaded clamp to where we actually squeeze the instrument together in two or three different clamping operations.

**2:41**

**BG:** How do you put the side on?

**WM:** The sides, you can see they actually go down into the curve here. Now this is a traditional Kentucky construction, so after several tries of clamping assembly, many years I just put the side in by hand, I just used spring clamps to clamp it down, but that got old after several years. So we finally figured out a way to assemble the scroll tailpiece, then we can glue the sides down sliding the top down on the sides and then at the very last actually gluing the back on to the entire process. Then that would make the final assembly here. This dulcimer only weights a few ounces. I stress that because it doesn't weight nearly a pound. It is probably no more than ten or twelve ounces. It's in Poplar, unfinished, and some of the instruments will be heavier. But what we've done is make the strongest, lightest, most acoustic wooden box. Zither is like a generic name for any box instrument like this, this would be considered a fretted zither, but it just means a box with strings. The dulcimer of course, is probably from the Biblical instrument that's in the Book of Daniel; the dulcimer is mentioned three times in the Book of Daniel. Now whether that's the hammered dulcimer, which is a totally different theory, it's the forerunner of the piano, or whether they named these Mountain music boxes or hog fiddles or dulcimores, John Boy Walton called them "Ever lovings" when they featured the dulcimer on the Walton's show. Daniel Boone played the dulcimer on some of the Daniel Boone series, but what we've done, and the reason I still do the Poplar is it's the most authentic, most efficient way to build my real Kentucky dulcimers.

**BG:** I'm still kind of hung up on the side. Is that cut out piece, and then do you have to end it or anything?

**WM:** Yeah. The side, unfortunately I don't have a sidepiece here, just some little cut off pieces.

**BG:** You don't have to steam it or anything do you?

**WM:** No, I just wet it, anywhere from five to ten minutes. But amazingly, the sides are extremely thin, like these are the thickest of the sidepieces. You wouldn't think that maybe, less than an eighth of an inch, 3/32nds maybe would be, but actually it's very strong, but when we wet this length of wood it will curve quite handily if you get it thin enough. Then again you gain a lot of strength by having this as a continuous curve.

**5:48**

**BG:** How do you glue it when it is wet?

**WM:** Oh we let it dry. The wetting is just to put it in a pre-form mold...

**BG:** Oh you have a mold. Ok.

**WM:** Just to get it to it's basic shape. It doesn't get it to the exact shape. It does get the continuous bend. Then, because we let the wood dry out in the mold, and then you have the basic shape, and then we have some squeeze molds where we clamp the instrument into the exact silhouette, so by clamping that in and holding it rigidly while we glue the top and put the back on, and then all this is trimmed off later. Sometimes you do have overhands and this has been trimmed off with some tools here. This is the part that has to be hand carved and inlet and everything. So I still do a lot of hand carving.

**[Interruption in tape]**

**6:42**

**WM:** Oh yeah, that's the old number one. I actually used Brazilian Rosewood on the sides. I spent about two weeks on that one, working on it most every day and night.

**BG:** And that was the kit?

**WM:** No. I never used any kits or anything. It was one I made visually...

**BG:** Based on a kit.

**WM:** ... from memory.

**BG:** I hear people saying they got kits, but I was wondering what that meant.

**WM:** That's a big deal, but we don't want to do the kits because there's really just no end to it if you want to make a fine instrument.

My second dulcimer looked quite a bit like Homer Ledford's instrument, even with the diamonds. Now I don't have mine here, this is a very early Homer Ledford, signed but not numbered, which means it was one of his first couple hundred instruments. Beautiful instrument. Still plays very well. Probably at least

fifty years old. It's Pine and Walnut, but definitely the pure classical. You can see that this one was sort of modeled after the Jethro Amburgey ones and then you can see I have an old Ed Thomas dulcimer, 1917, and you can easily where Jethro Amburgey sort of modeled off the Ed Thomas dulcimers. Eventually we are going to put those all in sequence, but there are certain characteristics like the scroll silhouette that you can see are just so similar.

**BG:** What's interesting in both designs are the frets only go part of the way across. They don't go to the drone string, right?

**WM:** Yes. Typically, you only played one string. Part of that, there just wasn't any reason to **[some interrupts off camera]**... They were made very primitively, but you only needed just the one string for the one melody line. In many cases, in the traditional playing of dulcimers, you didn't play a full instrumental version of the song, you only did a few voice notes and then to sing all your ballads it would just wear you out singing a ballad that was forty or fifty verses long if you tried to play every note. So in many cases, you would just do two or three notes, what's called a three-note trick, two or three notes just to go with your chords or your voice notes.

**BG:** Ok, the ones with the holes all over it, what's that all about?

**WM:** That one is Poplar, the old green and yellow Poplar. The holes have been added just to lighten the box. You can see where they have made saw marks, probably with a hand saw insides, but the sides are actually pretty thick, they are probably three eighths of an inch thick so they've drilled holes to lighten the instrument, but the reason it was thicker, it was put together with wooden pegs here. Here is a little bit of the decorative element, this little chevron probably burned with a hot poker set, is purely decorative. No real reason for that.

**BG:** Where did you get that one?

**WM:** Traded for it in about 1980. From the best we know from a little bit of the provenance we think it probably is about one hundred and eighty years old.

**BG:** Is this from eastern Kentucky?

**WM:** Or Virginia.

**BG:** The frets are crooked aren't they?

**WM:** Well, it's pretty rare, the frets do go all the way across, but they are adjustable.

**BG:** Adjustable?

**WM:** And what's amazing too, it just has a few frets just for the very simplest one octave scale there, but it does sound like a banjo **[demonstrates]**. That's from the tailpiece and the overall construction probably. It's actually made very well. Totally hand planed.

Here's one that we know pretty much the documentation from about 1860 here. The wood is extremely thin. It is Cherry, but extremely well made and it too has the wire frets, but extremely well made. It's been played a lot; there is a lot of wear here so the instrument has been played many...

**BG:** And that's a teardrop?

**WM:** That's the teardrop shape. Again this one is from Virginia, so this is not the typical hourglass of the Kentucky style.

**BG:** Any other ones you want to tell us about there?

**WM:** Well again, this is my first one, 1972. Still plays quite well. Very calm sounding because it is so thick, but it plays very well. Very primitive, but it's totally original, I've not tried to upgrade or anything. It's totally original the way I made it.

**BG:** And you were pretty proud, that's the one you took around to all the high schools?

**WM:** Oh yes, we really did, and it still plays very well even though it has the wire frets. I did about ten with the pure wire frets. That was just the only material. You could actually use wooden frets, but what's called broom wire, or just mild wire steel, that was probably the hardest item to get was any kind of metal early on.

Here's one of my earliest Berea dulcimers, and one of my earliest one's with a natural like a knothole. It's made out of an old woodworker's workbench. Very old Walnut, notice the red color, but this one was in the late '70s. I did do many teardrops. Here's a really pretty piece of Cherry that my wife Frankye's dad made in 1973. I started in '72. Her dad made this dulcimer a little bit longer. This was sort of modeled from an Arkansas kit. Of course, not the handwork and the real pretty Cherry color. It's a 1973. Little more of the modern style, even though with the wooden pegs its a little more contemporary styles.

**BG:** He's got some big birds in there doesn't he?

**WM:** Big birds. He was quite a good woodworker.

**BG:** Is that how you met your wife?

**WM:** Well, it was about that time, yeah. Yeah, her dad was a lifetime woodworker too. Ok, here we go. Let me see... So I will sit down here and do a little bit of serious carving.

**BG:** Why do you have that collection up there?

**WM:** Well, people like to see it. I do have the only Ed Thomas. **[WM speaks to someone off camera: Do you want to get it down? It should be easy to get it down... All right, fine.]**

**13:28**

**BG:** It's kind of your little history area in the shop?

**WM:** We are going to totally remodel and redo. Next week we are going to shut everything down for a week, but when we put them back up we are going to put them in chronological sequence. In other

words, you'll be starting with this one, which actually we've been keeping in the closet. It's a very valuable instrument that somebody gave me. **[Speaks to someone off camera: Can you get him? Ok.]**

So this instrument is totally assembled and again, I've worked the little flowers and leaves around the knothole here. Beautiful piece of dark Walnut. I've sawn out the humming bird and done some sculpturing, some interior bracing, but at this point I am carving the low edge chamfer for my humming bird wings. So this will be one of the other details.

So this is the prized instrument. It's a 1917 Ed Thomas and historically we know he was the first one, there was one other maker named Sagelton, but as far as we know Ed Thomas was the first one to put the continuous curve here which became the Kentucky tradition. Just from the details of the scroll shape, sometimes the scrolls are very small, some of the other features, a little bit of folk art around the holes, the tailpiece, the way the strings are attached, very easy to see that Jethro Amburgey was influenced by this instrument and that Homer was influenced by Jethro Amburgey perhaps, and gradually added a little more of his detailing, and then I was definitely influenced by the Homer Ledford instruments. Part of that was because I really wanted to maintain the Kentucky tradition. I've made my instruments are wee bit shorter scale to make them easier to play, but again, this was just a little more of the traditional scale here. I made a longer scroll pattern. I think because these were so hard to hand carve in the old days, they just made them as small as possible, but one of the first changes or hopefully improvements, was to make the peg area larger so you could physically do the wooden pegs and the metal pegs more efficiently. This is all one piece, backs and everything. Two pieces...

**BG:** And little feet on the back...?

**WM:** Yeah, typically this probably is one, it's maybe two pieces, but it may be one piece.

**BG:** And then on the back they have those...

**WM:** Little feet.

**BG:** ...little feet.

**WM:** Yeah, basically they wanted to keep it from rattling. If you laid it up on the table the three points would not rattle.

**BG:** Oh ok.

**WM:** So again, the scribe line here. A little more of a decorative element. Little more of a complicated tailpiece structuring. I simplified that and made it a little more in tune with the construction technique up here, and this little curve is actually my design. I wanted to actually make some kind of design element, so I've added a little curve there. A humming bird would be pretty typical. So here I'm just carving the little chamfer on the humming bird and as the instrument is finished this will show up very brightly and again will have a handwork detail.

**BG:** Aren't you afraid of ruining it?

**WM:** Oh at this point we have to be very careful. See very simple tools. Just the simplest carving.

**BG:** You're digging out a pretty good piece of wood there aren't you?

**WM:** Uh huh. Walnut is wonderful to carve. So really just this quickly, actually I've sort of enhanced...

**BG:** Will you hold it up so we can see what you've...?

**WM:** We will, and maybe just...

**BG:** So a beveled line, is that what you are saying?

**WM:** Yes. I call it a chamfer. We might take a little bit of the sharpness just so it will feel better. That will turn out very pretty once it's finished. It will add a lot of sparkle. In many cases I will use a really swirly piece of wood for the birds.

**BG:** Did you do that on this one too?

**WM:** Uh huh, yeah, so this one is all done. It's totally finished, so I'll chamfer this one too. There is a little more detail work. I've got to trim these little corners flush and again I'm adding the final shaping and looking at every aspect of the construction to this point. We are about two weeks into the construction at this point and then about another week to sand and get four coats of spray finish on it.

**BG:** How do you finish them?

**WM:** Typically we sand it down to a one fiftieth, which is pretty fine sanding. Two coats of sanding sealer and then we sand the sealer and then two coats of semi-gloss lacquer and then I seal it in wax, so even the finishing detail is a lot of handwork. A little bit of functional detail here on the scroll even though we've already processed it there is a certain amount of handwork in this area and so many times I'll tape up my hands so I carve more efficiently, but this scroll with actually be shaped all the way down. Again, that just sort of evolved into my design. This is to let the strings come from the tuners properly to get the most efficient tuning. So I'm actually carving with both hands here. All together it will take about an hour to sand the instrument from this point. We will do the quality control. Check every construction detail.

**BG:** What are these two tabs up here?

**WM:** Oh, they are just little extras. I've actually trimmed this off, made the bead with a little routing bead maker that I have. So I can do it all except that one little corner and again, I'll have to hand carve that and hand shape it and hand sand it. So it's amazing that I spend a lot of my free time hand carving these little details. So I've blended that all together, flushed the joints, and on this one we've got a little appendage here, a little extra again, carving, that's one of my favorite things is how to get the real pretty grains and curls coming up. I still enjoy that. Sometimes you'll get that pretty little flower there and then it all goes away.

**BG:** You like that, huh?

**WM:** So, yeah, you notice every time you get the really pretty curl like that.

**BG:** Does that mean you're carving it well?

**WM:** Yeah you notice it every time. It just sort of happens. So you try to get the little satisfaction from each little detail there. We've become very efficient just by making the same style and the same processing of instruments over and over.

**BG:** Is each one a little different though?

**WM:** Each one is different, but you still have to pay attention to the minutest detail. If you don't go ahead and make it right, it should have been better. You always think of how it could be better.

**BG:** I think of luthiers as being artists, being creative and expressing themselves through what they make. What part of this do you feel is most expressive, or most artistic, or is it the whole thing?

**WM:** Well, yes, here's a dulcimer that's almost finished. So what we have here is a really pretty wooden box. Of course, you can see a lot of the details, the carved scroll, the finish, the wood burning, the little extra wood burning enhancement on the vine patterns, the really pretty graceful vine pattern that fits the shape there, the little bit of scribe detail here, my signature, real pretty like fifty year old Cherry wood, a beautiful kind of drastic stripe down there, so what you have down there is a really pretty box because it's not an instrument yet. So now it amazes me, I think it amazes people when they see me just light into it with some of my tools here now, so here I'll actually check the playability to this point, so actually I can tell a whole lot about how well we've controlled the construction and we are talking about the acoustic friendliness and actual playability as an instrument as determined here right now. In this case I know that I need to file, this is a regular metal mill file, but I've actually crafted this instrument with a little bit of a curve in it, so I know that it has to be filed in this area. **[Starts filing on fret board]** That's so I can get a more clear and lower string action down here in these upper notes. I'll look at it again. I've built a very slight rise here, or a bow down, in other words it's bowed down just a little bit, and that's built into it, but I know I need to file this area up here a little better. **[Begins filing again].**

So I filed that area and now I need to blend this area together so I can make it all sort of flow together **[resumes filing]**. I'm going to file the entire fret board so that all the notes are blended together on the entire instrument.

**BG:** And you are doing that just by sight and feel?

**WM:** Yes, and of course, we've not put any strings or listened to it. Maybe some light softening and smoothing. These are fret files. A lot of dulcimer makers don't go ahead and finish their instruments. They'll make these wooden boxes and they'll call it a dulcimer, but they leave out a lot of the refinements that we've learned over the years. Now it took me years to figure all this out. You can ruin a dulcimer when you glue the fret board on if you don't glue the fret board on right, it's ruined from the word go.

**BG:** What do you mean ruined?

**WM:** It just won't be playable, or it won't be...

**BG:** Is the pressure to high?

**WM:** Yeah, if this is bowed too much, or if it is bowed up it won't ever be a playable instrument. It has to be bowed down just a little bit here, just slightly concave to allow for this adjustment. Here you take the fret files and you round up the frets, get them all level, and trim off the edges so it feels good here.

**BG:** Is there a groove in it?

**WM:** Yes.

**BG:** Ok.

**WM:** Yeah there really is. These are real guitar-style fret files, which I've actually modified. I've carved them off here; I've filed them off around the edges so they don't hurt the instrument. So after all that I'm ready to actually put the strings on. To do a little more fine tuning, little tiny bridges. The bridge is actually adjustable on all my instruments whereas on the old instruments the bridge probably was not adjustable so it was a little more limited to how you could find...

**BG:** So you've got all the frets where you wanted did you say?

**WM:** Yeah, I would do all the frets like that and put strings on and, let's see, here's one very similar, and again, what we are looking at, and sometimes I do have to go back and make minor adjustments, but now we are actually tuned up to basically, A, A, A, D, which is the same as guitar notes, so we are actually playing the whole idea, now it's actually an instrument whereas a few minutes ago it was just a wooden box, now it's an instrument. So that's what keeps me going. Now whether it would be Rosewood like this, Cocobolo Rosewood, or whether it be Walnut, Cherry, or Poplar, I've done the same processing for each instrument. I'll go from one of my very finest instruments here, to one of my most authentic traditional instruments. The playing function is totally the same. In other words, it's the very purist easiest playing. So you can play Country music, which is all the same **[demonstrates]**. You can play Bluegrass, which has a little chop to it **[demonstrates]**, or you can play real Mountain music, which there's no rush to Mountain music at all **[demonstrates]**. You don't have anywhere to go.

**[Continues to demonstrate on dulcimer]** Now the guitar player, he didn't have anywhere else to go either, so he would just take off around the house. That's an old Carter family song... **[Resumes demonstration]**. That's fun.

**BG:** Cool.

**WM:** Good.

**BG:** Do you, you know, usually when I'm talking to folk artists about their traditional stuff I ask them about other people in the field. Do you belong to any organizations that you share, dulcimer associations or anything like that?

**WM:** Not really. By doing the really traditional instruments like I do, I just really stay home and make them the very best that I can. Occasionally, we will go out to a little dulcimer festival. There are dulcimer festivals everywhere. Almost every town has dulcimer players now. What makes a dulcimer; it is getting more and more popular because it is our state instrument. People can play the dulcimer at any level. You can sit and strum, just sit and strum along, and you're playing perfect music. You can play along with a group that simply. You can play just one string or you can play very artistically. I think that appeal is far

less intimidating than say a guitar, which a lot of people never make it past the first week on a guitar. Banjo is interesting and exciting, but it is like a wild animal. You have to tame a banjo so that's going to take a while. Violin doesn't have notes on it so you must figure out how to make it have notes on it, how to make the notes on the violin. Mandolin is like a violin except it's twice as precise and twice as fast and it hurts your fingers. So the dulcimer seems to make sense for a lot of people.

**31:13**

**BG:** Do you feel like you're an artist?

**WM:** Well sure. Working with my wood medium and then being able to translate that into something that is a finished article, should last indefinitely, is not just for the quality of the wood or the beauty of the wood, it is an instrument and whether people play it now or whether people play it later, or their grandkids play it, it is made as an instrument and fortunately, once I got pretty much all my little details, what I consider my Kentucky instruments, the bead, the tail, the little curve on the tail here, my scroll pattern, fortunately, going all the way back almost to '72, probably since '75 I had gotten most of my details all figured out here. So if you see one of my instruments you can tell it's one of my instruments. I sign and date each one. We just passed 16,400 I think. That is quite a bit of whittling, but you could tell one of my instruments from anyone else's pretty easily. You can also tell a Kentucky dulcimer as opposed to what would be another state specialty instrument or contemporary dulcimer, which basically they left off a lot of the little characteristic details. Nobody likes to do that much carving.

**BG:** Is there anybody else that you admire that does this kind of work?

**WM:** There are very good makers out there. A lot of people do very primitive instruments. We could do that, but I determined early on to make the very best instruments. In other words, I wanted to increase the status as a musical instrument. I've never done cardboard dulcimers, which are available. I've never done plywood dulcimers, which are available. Not so rare, some of the really famous makers as they got older they actually used thin laminated sheets of plywood. I think probably for convenience and safety, not using the more complicated woodworking tools and things. So I've seen that in several of the recognized makers, that they didn't use solid wood sometimes.

**BG:** How does making furniture fit with this?

**WM:** Making furniture is much more of an overall plan. I generally make my original furniture; even with my classical pieces I start with just three basic dimensions. I may have an idea of a piece. If I want to make a Kentucky style piece or a classical piece I really well just start with the basic proportions and dimensions that fit the wood I have or fits the purpose of the piece, like a certain size cabinet or a certain sized table. You have to visualize the entire piece of furniture. On a dulcimer you can tell that this is a dulcimer. You can tell that this is going to be a dulcimer. There's a little scratch... If you pull out a drawer on a piece of furniture there's no visualizing what that piece of furniture is going to be. So it takes a lot of discipline to design and visualize an entire piece of furniture. It can be a simple piece, or it can be a very complicated piece with doors and drawers and sections and interior, tremendously complicated, but there is a tremendous amount of discipline in a piece of furniture. You are looking at a long construction period on a piece of furniture to make it totally complete without any weak spots, either structurally or design wise, if you think about that, if you make a nice piece of furniture and maybe just didn't do that one little proportion or that one little element properly it won't be the best

that it could be. So what you do is make each piece the best you can and get you another piece and go on.

**BG:** Where you have three specific models that you have developed over the years for your dulcimers, do you have the same with your furniture or do you just make whatever people ask for?

**35:39**

**WM:** I have a couple of really popular pieces. One of those is my Kentucky sideboard. Now that's a cabinet typically four feet long, two horizontal drawers. The Kentucky tapered leg, several Kentucky details on the apron. Kentucky furniture is very soft, it's very confident in the way it stands and it really is a recognizable style. So over twenty years ago I started doing Kentucky furniture, little variations on my purely classical Governor Winthrop, Queen Anne, Chippendale styles which I've done for hundreds of pieces, but I realized that nobody was actually executing and making new Kentucky style pieces and part of that would involve decorative inlays like a trailing vine or a little Kentucky Bell flower that drips down again as a decorative element. That was my last hurdle was to learn how to do the inlay. That was like the ultimate detail on Kentucky cabinets and Kentucky furniture. So the sideboard is a very popular piece in Walnut or Cherry. I do a little classical piece called a Serpentine and both ends and the front piece are totally sculptured into a Serpentine format to bring out the really pretty grain patterns. These are little console pieces about forty-five inches long with different legs. That's my next most popular piece. Other than that I just try to do real pretty cabinet or table pieces. Many times I'll use natural edges, which is definitely not Kentucky style, but it's much more artistic to do an entire piece with all the free edge of the natural board.

**BG:** Is there are different side of your personality that does furniture versus instruments?

**WM:** Yes. Many times I'll start cutting out furniture wood. Again, you really have to feel like you have the best wood available on the furniture, of course you do on the dulcimers too, but many times I'll start working on the furniture and I'll gradually switch over to sawing out pieces for dulcimers later on.

Furniture is much more disciplined too, because you are working on one unit piece. You are looking at the entire finished piece, but really after the piece is assembled, once it's assembled, you've even got the proportions designed and the different featured elements, then everything is critical because you are actually working on the body of that piece of furniture. The inlay is extremely critical because there is no room for error. You might be able to wiggle it just a little bit, but you are actually working on the finished, nearly finished piece of furniture and that detail, even the hardware, the fitting of the drawers, the finishing, it's all extremely risky. There were times when I did really large cabinets, I almost gave up on the furniture it was just too stressful, but you learn how to be a little more patient. I'm doing more simple pieces. In other words, not a life or death situation if you had a little blemish or something on it.

**BG:** I saw most of your stuff is smaller in here. Do people come in and commission you to do a certain piece a certain way or do they buy what you have?

**WM:** I do very little commission work. I did the first few years when we were in business. I found it too confining. It was a great opportunity to do wonderfully beautiful pieces of furniture. We are talking about the Bombay chest from the Williamsburg Governor's Palace, the very finest solid Cherry Chippendale acanthus leaf ball and claw high boys and low boys, and Governor Winthrop's Secretaries and French Vitrines with bubble glass that cost hundreds of dollars just for the glass and the hardware.

But it was a wonderful opportunity the first ten years or so, but I found it very confining to spend several months of each year on one really critical piece. I needed to expand and do more pieces.

**BG:** And with your dulcimers, you don't have people come in and order certain types do you? You don't pre-make them, they kind of order them...

**WM:** I do a lot of different choices, probably more than I should. I really limit the customizing. I do very little overt decoration like pearl inlays or ivory inlays or specifically personalized...

**BG:** People ask for that sometimes?

**WM:** Yes, but I really shy away from that. I'm building the instrument with all the details and the quality wood. I'm doing everything I want to do to it and other than just some very minor work like I could probably inscribe somebody's name or date on the outside of the instrument, but I don't like to personalize like carving somebody's initials or something like that.

**BG:** Because you see it as a finished piece as it is?

**WM:** Yes.

**BG:** That makes you feel better that way I guess?

**WM:** Very much so. If I wanted to add all the do-dads to it I would do that, but I'm much more interested in the playing part of it, the function part of it.

**BG:** I guess another question I had, a lot of instrument makers have people they work with. I mean, there are a lot of dulcimer groups in the state, do they come and work with you?

**WM:** Oh yes, I have dulcimers, believe it or not, in almost every town in Kentucky probably. Just about every town in the whole country too, probably. Oh yes. As there are trims, there are trims to make instruments larger; I've experimented with that a little bit. I didn't find it very rewarding to make like a deeper instrument.

**BG:** So you are staying with your own design. Your designs, I'm seeing on the wall, say twenty-five years, twenty-eight, thirty, how long have you been doing this?

**WM:** Forty-years this fall, which will be 2012 has been forty years.

**BG:** And it sounds like to me, correct me if I'm wrong, that over these forty-years you've experimented, learned, and this is kind of the culmination?

**WM:** Yes.

**BG:** Is that right?

**WM:** Yes. Dropping the specific teardrop instrument that was too narrow upon the upper part to be as good a tone as I wanted. Switching to the hourdrop, that superseded **[Interruption – off camera]** and I made some small dulcimers. I actually called them "Groundhog" dulcimers, which were short and fat,

thinking of them as children's dulcimers. Did those a couple of years. Far too precise and complicated for children to play, and far too specialized to be... you could do Bluegrass music with them very well, but not with the effort of making it larger or smaller.

**BG:** So you feel like you've done your experimentation and you are pretty much where you want to be with it, right?

**WM:** Yes. Sometimes I'll get a light, a brainstorm of what might be another improvement. Sometimes I actually will try that. Might have a few ideas, but in most cases it doesn't outweigh the traditional details that I've done.

**BG:** Is it about sales or not, or is it about whether you like it or not, or a combination of the two?

**WM:** It's both. I do make my instruments for people. They buy the instruments, but I make a really good price range actually from three to five hundred on my most regular models. We go a little higher than that on some of the super rare wood models, by rare I mean sometimes the tone woods or a piece of the local rare wood like the feather chair, people do want the finer models and that has helped us a little bit as a maturing craftsman and I guess being able to charge a little bit more for some of the models. But people buy my instruments and I make them for people. That's all there is to it. It would soon wear out if you weren't really getting people to play.

**44:55**

**BG:** And you like to have people play them?

**WM:** Oh yeah, everybody that comes in I let them play a little bit, or if they want too.

**BG:** But you said earlier when people call you back and say that they've actually learned to play it...

**WM:** Yeah that's pretty neat. We actually get a lot of follow-up letters and phone calls.

**BG:** Would you rather they play them than hang them up on the wall?

**WM:** Oh yes. Sometimes it takes them years to get started. Just didn't get around to it and they'll find someone to help them a little bit or something.

**BG:** Well you sold me one for my daughter. My daughter went away to college and it's now hanging on my wall and my wife wants to learn.

**WM:** Well that's good. We've got the books. There is quite a bit of software available. All kinds of DVDs that are available...

**BG:** She might need something like that.

**WM:** They give a little instruction on the wooden pegs, just a little refinement that way, but otherwise she should be ready to go.

**BG:** She's got the metal pegs.

**WM:** She's got the metal?

**BG:** Yeah, you changed that out for her.

**WM:** Well, we have little instruction sheets that sort of give little tips of how to make them work. We'll get you going.

**BG:** Ok. She needs a little... She feels like she needs to learn by reading music when she learns things, and I feel like sometimes it's easier to learn by ear.

**WM:** That's a good balance. The books, you can play notes, you can play numbers, and you can play chords. The main thing is to get like a favorite song and just get to where you can sort of like belting out that favorite song. In other words, you can play out the words or the melody of a song to where you can enjoy it and other people can enjoy it too. I want people to play real songs where people can enjoy it.

**BG:** I've got one last question I guess. You were honored for a couple of different awards right?

**WM:** Yes.

**BG:** You're considered a master. You were in the master's program. Have you ever thought about teaching someone to be as good as you someday?

**WM:** Not specifically. I have employees. I don't let the employees do all the detailing like fine-tuning the final set-up. I do let my employees work to their maximum skill level and maximum confidence level, like the wood burning and some of the other decorative touching. A lot of the sawing processing, assembling, yeah, my employees work up to that, but the actual setting up as a playing instrument I pretty much reserve that. It would take quite a bit of skill training to go ahead and adjust each instrument.

**BG:** We have a grant for the Arts Council [**Kentucky Arts Council**] for that. You've never applied for it. Some other people have. I was just wondering.

**WM:** I know it. Mostly we stay so busy with keeping the family going.

**[Comment made from unknown speaker off camera: You can teach craftsmanship, but you can't teach artistry. You really can't. You can study under a great artist or painter, or you might learn his techniques or his methods, but I don't think you would ever be that artist.]**

**BG:** Well no, but I guess you can, if somebody is at a high degree you can kind of help them get closer to you in a way I think.

**WM:** Yeah.

**BG:** Well I think we're finished.

**WM:** Good. Lot of detail. Good.

**BG:** Anything you want to say before we turn it off.

**WM:** Nah, we're fine... You said you wanted to spend some time and get some details and we have.

**BG:** Yeah.

**[Interview ends]**

**[Filming stops at 48:49]**

**48:53 – End Track 2**

**End of Interview**