

5 Bonner History Roundtable: Plywood Plant and Bonner Company Town

Feb. 21, 2010: St. Ann Catholic Church in Bonner

https://youtu.be/ebJZrs1jgmU?si=uZo7Q5k4_qFYtdC1

Otis Seal, Retired Plywood Plant Maintenance Supervisor

Dan Hall, President, Western Cultural, Inc.

(This program has been edited for clarity.)

(Intro music and credits)

[00:00:58] **Judy Matson:** Welcome everybody to the second of our series of "Working at the Mill" programs and we will get started right away because we've got a lot of great things to talk about in our program. First of all, I do want to call your attention, if you have a program, to the special thanks at the bottom. There's the Bonner Milltown History Center, Friends of Two Rivers, the Historical Museum at Fort Missoula, MCAT [Missoula Community Access Television], and the St. Ann Catholic Church who have all come forth and helped us put this program on and we really appreciate it. I also want to call your attention to the back of the program which is the calendar that's coming up. If you have suggestions for programs, things you'd like to see done or have questions, there's a list of contact people on the back, and I'd like to invite you all to come to the Bonner Milltown History Center and become a part of saving the history of our local area and our timber heritage because it's a lot of fun actually, and it makes it more fun if more people can participate.

Our first item on our program today is about the plywood plant. I don't need to introduce Otis to you, but I will. This is Otis Seal and he's going to talk about the plywood plant.

Otis Seal: Okay, thanks, Judy. I'm going to start out just a little bit, if you can hear me. First time with one of these guys. (gesturing to microphone)

Unknown speaker: You are good.

Otis Seal: My name is Otis Seal. I'm going to spend 10 minutes talking about Otis, about 15 minutes talking about terms of what I'm going to talk about, and then here's some of the terms down here on the bottom (pointing to list on easel) that I'll talk about and we'll get into a little bit.

And then we passed out tickets. We'll have a drawing in there of a little item. I'm going to start out with me so you know a little bit of what happened to me or how things came about with me. I was born in 1948, September, 1948. My dad was in the woods industry. He was a truck boss for Rosboro Forest Products in Eugene, Oregon.

Anyway, I started out there when I was six years old. My brother, which was 16 years older than I am, was killed in the woods by a log rolling off a logging truck and got him. So then I went on, I used to sell donuts door to door when I was 12 years old, the same as my son and for a buck and a half a day. And I sold donuts, and I never took a paycheck because I had donuts and milk for lunch. (laughter) Well, always the broken ones. I went through that. I also worked for a buck and a quarter an hour through the school. I was the guy that raised the flag, cleaned the gym, that kind of stuff, because in 1965 my dad died of cancer. I was 16 years old. In 1967, my mother died. I was 18.

To make a long story short here, I started out young, 18 years old. You had to keep going, you had to make money. I did go to college for two years in Bend, Oregon, and got in there. Then my mother passed away that same year and I had to go to work; I didn't have any choice. We had to make the money.

I started out setting chokers in the woods, after that running Cat, running skidder, things like that. I run high lead, set chokers on high lead and slack line in Oregon. They have towers that string cables down across from the draws and pick logs up, take them up to the landing and you're running up and down the hills, setting chokers. I did that.

[00:5:06] Then on February 10th of 1970, I started for U.S. Plywood. Mapleton, Oregon, right on the coast, 14 miles from the coast in Mapleton, Oregon. I worked there for four years at U.S. Plywood. This place over here was coming to life then, and I moved over here in March 15th of '74, and I got a job as a millwright here.

I worked as a millwright over here for 14 years, and then in 1988, I had an opportunity to go salary, and I went salary for a maintenance superintendent at the plywood plant here, and I worked it all the way through up until the end.

Now to start out in the middle here. In 1971, I got married. Twenty-five years later, well, we had a child, my daughter Angie. But 25 years later, I bought two dozen roses for my wife for our 25th wedding anniversary. Now that seems a little weird. My name is Otis Seal. A lot of people, a lot of close friends refer to me as Giant.

Now I don't know why, (audience laughter) but my nickname is Giant. You're welcome to call me Giant if you can't remember Otis, because I am hard at names and I have to hear your name a couple times so I can get it through up here. So when I bought those roses and we had bought the roses from Garden City Floral in town, told them to send to my wife, they sent them out.

"Happy Anniversary," 25th wedding anniversary, "Happy Anniversary, Grant."

I asked her, "Who is Grant?" "I don't know." (audience laughter) They said, "nobody's name is Giant," they thought it was Grant, so they wrote Grant on the card. So a little humor there.

[00:07:22] As we go through my history over here at the mill, I lasted until the mill shut down here on 7/7 of '07. That was the last day and I tried to go back and work, that was in July. In September I had a heart attack at the mill, and it's the best place to have one. I had supervisors there that was there at the time, all the employees had left, who gave me CPR and got me started again, and it was a good place because a month before that I was in Superior digging muck on a gold dredge. I do some part-time panning and gold and stuff, and we were up there on a deal and why it didn't happen there ... If it happened there, I wouldn't be here.

I had the heart attack. It was Chris Rice. I don't know if you guys remember him. Steve Lau, Mike Eichenlaub just happened to be there at the right time. I went over backwards, hit the deck, split my skull all the way around to the side, and I was dead. They gave me the paddles. Got me started. No. Hit me with the paddles again. Didn't work. Hit the paddles again. Didn't work. I got to all the way to the ambulance. They hit me again, and when I got to the hospital the fifth time, they paddled me and it started. You know, so I'm very fortunate to be here. They gave me CPR while I was there and I just think it's really great.

Now you're going to think I'm a little weird here, but I started thinking about the hereafter after that and I started believing in the hereafter and I know some of you believe in the hereafter also, and you're looking at me like, "Where in the world is this guy going?" Well, the hereafter... I'm at home, I'm down in the family room in the basement, I go up to the kitchen and I stand there and I look around and I wonder, "What the heck am I here after?" [audience laughter] You guys have probably had the same problem. "I don't know what I'm here after." You just stand there, look silly.

[00:09:45] Enough about me, or a little bit more about me - with the concussion I had; I lost three weeks of memory during that time. And I still have, if you ask me a question, I may answer you, I may ignore you. If I ignore you, I apologize. Please ask again, because sometimes it don't go through like it used to. It's like, "I didn't hear you or it doesn't calculate the way it was." I don't mean to be rude at all, so just ask me again. Say, "Hey, come on."

All right: Terms. [gestures to list] I'll stand on this side because the microphone's this way, but we talk about super sap on the trees and I'll explain more. Sap, heart, core. The center, the center of the log is the core, fishtail, 54s, 27, random. Up here we talk about chucks and it's not Chuck Crothers, it's chucks on a lathe, and spindles and core again. When we get down further into the slides, I'll talk about core as far as the core of the plywood, and then I'm going to talk about grain and growth rings and knots. Does anyone know what a knot is? Where's the knot come from? In a board?

[00:11:13] **Jim Habeck:** That's a thing like on your head, isn't it?

Otis Seal: [audience laughter] Yeah, I think you're right. I think you're right, Jim. I think you're right. The knots in wood, you think, "Well, it's just a knot." A knot was a limb on the tree. That's where the knot comes from because it was a limb. So I have some samples here that I'll pass around that are just plywood.

[Holds up first sample] This is 5-ply. We're going to talk a little bit about faces and backs when I get into the spreader part. Faces are the front side of the wood like you'd put up on the wall. That's pretty. The back could have knots in it, could have holes in it, could have putty in it depending on what the application is. These patterns on here are growth rings, and I'll get into some growth rings. I have a deal on the back here, I'll explain to you.

[Second sample block] This here is cut. Same one of these (5ply) Gives you the area, this is a glue line all these that are made into it that hold it together, but what's real important about plywood is the grain. What makes its strength? Where does the strong part come from? The grain here is going this way, this would be a core on the inside, it'll be going that way. This would be a center, it's going this way, the grain that way, and then this way for the back. That gives it strong strength. So those you are not familiar with plywood, we'll send these around. (hands plywood samples to audience) You can get an idea of them. And then I'll go on.

You getting your tomatoes ready, Leroy? Is that what you're doing? Oh, okay.

[Otis takes drink of water bottle]

[00:13:09] **Leroy Donovan:** (jokes) I see you're still hitting the gin.

Otis Seal: What's that?

Leroy Donovan: I see you're still hitting the gin.

Otis Seal: Oh, yeah. I gotta keep that gin going. Anyway, I'll flip this over just for a second and I know it looks bad. Looks like a target. (Drawing on easel) It's my deal of a tree. When you cut it in half and cut the log in half on the outside, you have bark. Now when I'm talking super sap, the next layer in here is where the sap moves up and down the tree, and the part that's right close to the bark is super sap because it's really wet.

These are growth rings and if you ever notice a tree when you cut it, each one's a year, that's a season, a whole season that it's grown and that'll mark them, and some of them may be 60 years old, some of them may be 700 years old.

It's really amazing to just see, but every year, some of them might be real close together, some of them farther apart, but the ones that are further apart are the ones that had a great season; they had a good wet season and it grew well, and maybe they're close together because the season was short. It had a long winter and short summer and so on. The bark on the outside protects the tree. If you guys know, you've heard of people ringing trees. Cut a ring around the tree, cut the bark. Once you cut the bark, that's its lifeline. The tree dies. It's done.

Now this will go on into the core of the tree. All these little deals are just rings. You'll see some pictures that I have that I took some trees in Oregon that are in here and I'll explain those as I go.

[00:14:58] (starts raffle drawing) I think what I should do is, Sharon, did you have the bucket or basket or whatever? Could you have somebody draw a name? I think we'll do one of those draw name things there and see if you have that number. If you have your ticket there. I had some items here that I brought in I just kinda want to talk to you about. Oh, you're going to give it to me.

Sharon Smith: You've got the mic.

[00:15:25] **Otis Seal:** I think all I have to do is read the last three numbers. (for raffle) How about a 672? Aha. That young lady right there. (holds up wooden carved figurines) A buck and a doe. Okay. Now the reason I brought these is if you look at them endo, you see all the growth rings that I was just talking about, they're all in here. If you look at the wood, when you buy 2x4s or whatever, the growth rings are all here. Congratulations.

Unknown speaker: How old are they?

unknown speaker 2: Thank you very much.

Otis Seal: I don't know. I didn't figure out how old they were, but when you do this and a lady wins that, don't you hate that? You just win that. Sharon, we had one drawing. Why don't we have another one? Okay, one second. We'll have one more drawing maybe Jim Roach will ... We've seen your name in the paper the other day that you've retrained and now you're into solar work, right?

Jim Roach: Yeah.

Otis Seal: That's good. That's good. That's probably a job that'll make it for a while. As long as the sun don't go out, you know. 669. Hal Padden. I have an elk for you.

Unknown speaker: Where'd you get those?

Otis Seal: There's an old guy that makes those, he gives 'em to me. (kidding) I make them in my garage. So really, if somebody wants some of those, I live in Clinton, talk to me after the meeting. I have maybe only six elk, but I have quite a few deer. The deer are made from a 2x4. I'll give them to you no charge. I bought the last ones I made out of the 2x4. I bought redwood from Redwood, California. Decking boards. They've got beautiful color to them, the elk is made out of a 4x4 that's treated and it has funny patterns to it, but it's a treated 4x4. It takes a knack to make them, because one slip and you've got a mess on your hands, you just throw it in the trash.

Anyway, that gets the growth rings there for that. So Ben, you want to go ahead and start us off here? Oh, we need to kill a few lights here. There we go. Can everybody see that?

(Starts a slide show. Grandson Ben is running the projector) Is it focused in then? This is just in Oregon, but this is how the original, I'm standing right in Glenn 's way here. This is how the trees start out.

(new slide) That's me standing by one of the old growth trees in Oregon. This has been a few years ago, some of you will watch this. Yeah, I'm skinny then. (chuckles) Yeah, I had hair. But look at the size of me and the tree. That tree in Oregon, it does grow faster. That tree's probably 400 or 500 years old or more. I mean, it's really

amazing. You're talking about moving logs to the mill or something you buy, these are old growth, been there since Columbus landed. A three-log load or maybe a one-log load. In Oregon when we run high lead, I worked with a slack line and with the high lead choker off high lead, and the cable was an inch and a half on the high lead. And that's why.

(new slide)

Unknown speaker: What type of tree was that?

Otis Seal: Oh, those are fir. You know I owe you people something, when I moved here in 1974, I couldn't figure out why all the trees were dying. The larch were losing their needles. (laughter) I didn't know anything about larch. I thought, "What's happening? Is this bug kill or what?"

[00:20:10] (new slide) This is the same deal. This is, the guy with the beard is my brother-in-law, he passed away about 30 years ago. If you look at these, and you'll be able to tell, I don't know how old these are, maybe 35 years, these pictures. There's some cars in here and I'm sure some of you could tell me the dates of it, then we'll all know.

(new slide) This tree, I hiked through the woods and I found, if you look at the top one, this one was about five foot through, and you think how old that is, it's growing out of a dead one that's laying across the bottom. How old is he? That's what amazed me about this picture. I'm clear out in the boonies, but I couldn't believe that this log was running around here, rotting, and that thing has grown out of it and it's older than whatever, and you got one underneath.

Unknown speaker: Is it hollow inside there? A bear could winter there or something?

Otis Seal: Oh, no, it was just the outside where the bark had come off there. No, there were bears in that country though.

(new slide) **Jim Habeck:** That's your hemlock and that's usually how they get started on rotting trees.

Otis Seal: Oh, is that right?

Jim Habeck: That's not unusual, really. You often get a row of 8 or nine of them.

Otis Seal: Yeah. I enjoy you adding in, because I need the knowledge there.

Unknown speaker: The last one was a redwood, they grow from palm trees.

Otis Seal: Oh, they do? Well, I've seen the redwoods. I was in Ukiah, California, here a few years back. My daughter was working there and they had cedar and maybe it was redwood in the mill deal and there was limbs growing out of the trees as they watered the logs. It was growing. I couldn't believe that.

(new slide) Anyway, Champion International. You see some of the cars here?

We had Wagners over there. We had 90s and we had 120s. A 90 is 90 ton. That's what it picks up. A 120, like this would pick up 120 ton. They would just walk up to a train car. The 120s would walk up to a train car, clamp it, pick all the logs off one shot and sometimes the trailer, the car too. Take it right off the tracks, and then you have to shake it and put it back on the tracks and call Rail Link to put it back on.

(new slide) It shows I'm here going in to a truck. Picking them off in one lump sum and they'll take them out and grade them, scale them, and put them to species so we can run them for species, whether it's larch, we even ran dogwood one time, dogwood, or fir, or pine, or bull pine. Whatever we had, we used it all. Whatever came in we used, because we could use that kind of stuff as far as the APA standard was, APA is the American Plywood Association that kind of keeps a rank on you to make sure that you're living up to specs and putting the stuff in it so the customer's happy so his house don't lean or something.

(new slide) Coming up off the truck. (speaking to audience) I'm still in your way, just throw rock at me! But that's coming off the truck.

(speaking to audience) (new slide) I'll get over here, maybe that'd be better for you. You see the steam in the background coming out of the boiler? The logs were stacked by species. This guy here, that's exactly what he did. They would dump them with the Wagner, come in and just scatter them out, and he would sit there and pick them out -- larch, whichever, put them into species in the log yard.

(new slide) This is the Forest Service here. We had a government run on some of the logs. We had to go in and do all the scalings, because it was coming off government land and keep track of that.

(new slide) The Champion hat (worn by man in picture), but he was still Forest Service. I couldn't believe that these guys were perched on the ground when they do scaling or scalers do scaling, I don't know how they do it.

I've tried it. I can't do it. They stand there with those sticks, tells you the diameter, and they're doing this all day long, going along and writing down, tallying them up. Boy, it gets old in a hurry. But these were already, these are blocks, what we call a block. They're cut 101 and a half inches and they go into the vats, which is coming up.

[00:25:13] (new slide) Here's the Wagner going over, putting him on the processor. The guy with the shovel is getting ready to feed him in. Sometimes somebody made a mistake and there's a bad species in there. He sets them off to the side and they go put them in a different pile. He keeps them going the right way to run these through, speaking from me as a maintenance person was the little end first, because as it goes through the barker, it has fingers on it, they spring open and just starts peeling the bark off as it goes through. That's the best way. Little end first to the big end. Managers? They want to go the other way, because what they're having is they have the big end go through. They want to cut the waste off the small end, the little end at the end, instead of cutting it off the big end at the end. Boy, it raises Cain when you stick a big one in there and it has to open and slam real quick. Charlie knows, he did a lot of welding and stuff on the barkers.

(new slide) Same thing going in.

(new slide) These are barkers. They come through, they have rings in here. There's another one over on the other side toward the river, below the tower, and people would sit up here and watch the logs go through and they would come out like this. It would peel all the bark off. In the wintertime they'd be frozen, it was hard to get the bark off. What we didn't want, we wanted to get the bark off here. The bark that left here would go to the boiler for fuel. Our boiler was a 600-pound boiler. It ran 600 pounds of steam through the plywood plant, and the dryers took a hit of 600 pounds in the first zone. Then it would reduce with Fisher control valves to 300 pound and then kind of like a big oven, and I'll explain that as we go. Excuse me. Gotta have some more gin, Leroy. (drinks water, audience laughs)

(new slide) This is just going into the vats area. These logs would go down or be fed back in, depending on what they were running. In the vats, we'd keep different species, so you'd have species all the way across. You may have fir on, so at night they could just start peeling the lathe, run a different species, just pull a different vat, and they keep right on going. They would stockpile them out here too, so the night shift could put them back in and have them hot for us in the morning if you work day shift.

(new slide) When I'm saying vats, these were bunkers that got kicked into hot water in the vats. We had heat exchangers on the outside that shot steam through them and heated the water in the vats to 160 degrees. It had caustic soda in there, which is an acid. Without the caustic soda in the water the sap out of the logs would literally eat the steel. It had to keep the pH level in the vats at 6-zero or close to it. It wouldn't have no acidity or no basic, either way.

(new slide) Same picture of these stacks ... fell one winter (chuckles), but anyway we have a crane that goes across here and sorts these out. You can see him here. Little man out here running this, reaching down the pockets, getting the bent one or the crooked ones back into the vats and going on across. These vents were to let the hot air go out through the top, the steam, so at least in the wintertime, he could look down here and see it without having a cloud of white. I mean, that's what he'd have. Couldn't see in the hole.

Jim Roach: That was the idea.

Otis Seal: That's the idea. You worked out there for a lot of years. It didn't always work, did it, Jim?

(new slide) Same thing. Heat exchangers were over here at that time we had a chain that we processed and went over to the sawmill, shipped logs all the way to the sawmill on a chain that's by the river.

[00:29:53] (new slide) This is coming out of the vats. These logs would soak in there for six to eight hours or longer. If we didn't do this in the wintertime, when we got to the lathe and went to peel them with a knife, which is real hard to peel the wood, if we didn't do that, it would break chunks out of the knife. The wood had to be soft and it had to be able to peel it. In the wintertime, these things are like rocks.

(new slide) Jack ladders is going back up. Different species, going to different lathes. I need to probably tell you also, when we started out in Champion days -- four lathes. It was the biggest plywood plant west of the Mississippi in 1974, or 1975, or 1976 in there. It was the biggest. Then Corrigan, Texas, took off and they started after the poplar down there, and so they built on and it became more. And it started out, like I said, U.S. Plywood. Then it went to Champion, then it went to Stimson, and now I believe Champion went to International Paper. At least that's where our pensions come from. (chuckles)

(new slide) This is going into the jack ladder on the lathe. We had different setups as we got done. More terminology. Hydraulics as the knife.

Unknown speaker: How long are they here?

Otis Seal: They're 103 inches here, but on the lathe as this block is turning, there's a score knife that sits right here, and it's at 101 1/2 (inches) and it makes a straight edge, because you know the guy that cut one end of that power saw (imitates saw buzzing noise) , and you got one of these coming in there. Well, that just trimmed it off right here at 101 1/2 inches, a little square knife there. Just peel down whatever thickness we were using. The thickness that we would peel is 1/10th, 1/8th and 1/6th. 1/10th, 1/8, 1/6. There's one more somewhere.

Unknown speaker: Three sixteenths.

Otis Seal: Three sixteenths for core. Yes. Before we left down there, there was a scanner on here that had lasers coming down. It would pick that block up, make it one revolution, and then the spindles on the end of the charger would go like this, whichever way it had to go, so we could get the most cut out of the wood that we could get. It would adjust it to wherever we could get it, and then it would swing in and go into the spindles and go from there.

(new slide) Here's a block spinning in the lathe, and I was going to draw a quick one here. (turns to drawing board, draws diagram depicting spinning block) Let's look at this. As this block spins around, it hits the knife point right here. It's 22 degrees and the carriage feeds in this way and the operator will decide whether he wants to peel 1/10th, 1/8th, whatever he wants to peel. This is a backup, or a roller bar, and it'll help turn that log where that knife is and it just peels her off in a ribbon and away it goes. Now, I was there for a long time, I don't know how, and it was an awful thing for me to say, but as fast as those things would go through there just zzzzip and it's gone. Zip, another one, zzzzip. They would just rattle them through there. I wondered how many trees in this country there really were, because it was eating them and there were four lathes doing that. We had one 10-foot that didn't run that much, but three of them did.

(new slide on projector) This is the block spinning the same as before. It's kind of dark, but it is chewing up. This part here, I talked a little bit about fishtail and you wanted to know what fishtail was, or you maybe didn't want to know but ... The ribbon that comes off was 101. (returns to drawing board, draws another visual to demonstrate fishtail) So as you come across here, it may come up here and go in here like this and then as it peels, it starts getting full all the way across. Now we called this fishtail, because when it got to the clipper it would clip out into random, clip these defects out so we could use all we could use. Or even these, if it didn't clip them out, we'd cut them off here and still use that 54-inch piece for core down the road, one of the inner layers of the plywood for the core. So we used everything. The stuff we didn't use here went into a chipper, which is coming up.

[00:35:36] (returns to projector, new slide) The block is spinning on the other side. This one here's got a new block in it. The hydraulics are here. This carriage would move into that log and pull it back. At this time it had feed screws that would screw it in, keep track of it. Over time, we changed it all over to hydraulics, run servo valves, hydraulics, and we could move this side and that side simultaneously to a thousandths of an inch. It would just move in. If you had to move it there's a server on the computer that would keep track of where it was and when it made a mess, it really made a mess. Once you went hay haywire, it wasn't good. But anyway the ribbon is coming off here.

(new slide) It goes into the tray system. We had trays here, like four trays. It would fill this tray all the way to the clipper. It would drop down on a tipple, feed it all the way through, and this way the lathe didn't have to stop. It could continue to run all the time. The clipper would take off this one and then try to get this one, and once in a while the lathe would catch up. You'd have them all full. You'd run them down and it would just keep going. Keep the flow going constantly.

(new slide) This is going into a clipper. This had a scanner across the top that looked down with a light bar underneath, and it would see these holes and that clipper would just clip them. It had a rotating knife, and it would just cut them. Tap, tap, tap, tap, tap, tap. If you push the override, it'd actually just about make toothpicks. It would clip all the defects out as it came out.

(new slide) This shows it coming out with the defects and the random pieces that I talked about, just long, just whatever they are. They weren't 27s, they weren't 54s, they were just random pieces.

(new slide) Green chain. Jim, you probably never pulled on a green chain, did you?

Jim Roach: I feel that I did.

Otis Seal: Oh, you got sore shoulders. But anyway it's a little different than the sawmill green chain because it's lighter. It's 1/8th, 1/6th, whichever that they pulled into the carts, but when they were doing it here, they're pulling super sap. They're pulling sap, as we talked about with the rings, the growth rings. Sap, super sap, and heart. Now the reason they're doing that, super sap will take longer to dry. Sap will take a little bit less time.

Heart didn't take hardly any, that was the center. That's how they pulled those off into it. Like this one here may be a fishtail.

(new slide) Let's see, that's 1/8. Go ahead, Ben. (points to stamps on stacks of plywood)

Jim Roach: I think that's bull pine, I think that's what that BP is.

Otis Seal: Yeah, bull pine is 1/8 and the shift was swing, is that right?

Jim Roach: Yeah, probably.

Otis Seal: So if the load was messed up, had the wrong stuff in it, they knew who to go get. Yeah, swing shift did it. (laughs) Of course, on day shift they always did.

(new slide) This is the fishtail saw. It's a large 84-inch saw that we would put a load in and it would go through and cut all the fishtail off one side that wasn't any good. Just the random lengths we would use and we'll see them a little bit later on down on the spreaders, but this here would go through. Now the odd part about this, the Champion did, and even Stimson -- I talked to Hal Padden here one day. They started moving people around. Hal had been there for 20 years. "Hey, we want you to go pull on green chain." He didn't know where it was. He had never been there. Worked out on a certain machine on the other end, never been anywhere. I'm picking on you, but I think that's true. I think you had a problem. They asked you to go somewhere and you'd never been shown that end of the mill, you know, it was that big. It was 12 and a half acres, that's what it was. Okay.

[00:40:05] **Unknown speaker:** He still don't know where it's at.

Otis Seal: What's that?

Unknown speaker: He still don't know where it's at.

Otis Seal: Oh, he still doesn't know where it's at. (audience laughter)

(new slide) Six knife chippers. There was three of those when we started out. And then some block chippers on the other end. This would take all of the junk wood or the fishtails or whatever.

(new slide) It would go out to the shaker screens and Jim, (addressing Jim in audience, former employee of 30 years) No. 2 shakers' plugged up! (laughs) All this long stuff ends up in here and you can see there's little square screens in here and this chips will fall down through that. Those chips went to Stone Container, which is the thing of the past now also, but the chips would go there. Then there was a 3/8th screen underneath that, that they called the fines. The fines would fall through that and that would go to the boiler for fuel. But we sold the chips. They would go up here into the chip bins. So we used all of it, the bark, all that stuff, went to the boiler to make fuel. The chips that we couldn't use all went to Stone Container. In time some of them went to Roseburg Forest Products for particle board.

(new slide) The chip bins, the sign says Crothers.

Charles Crothers. Oh, no. (laughs) No relation though Charlie, huh?

Charlie Carruthers(?): I have one of them Chrome pieces.

Otis Seal: Oh, you do? All right. All right.

(new slide) Chip trucks would come through, open these doors, fill the whole chip truck. It'd hold I think nine units, and they just opened them up. Up in the top of this as this chain went up, there was a big screw auger up on top that went all the full length. So when it dumped in and this bin was full, like this bin would be full, it'd just auger to the next bin, and they'd come out with the chip trucks and haul it off.

(new slide) This might be you, Roach. I don't know. (referring to man in picture) Anyway, this is up on top. These are what the blocks look like, or the core looks like that came out of the lathe. What happened to these is they spun, they were too soft in the ends. The chucks on the lathe couldn't hold it. Couldn't hold enough pressure without just shoving it clear through it, and they couldn't spin this block anymore to get anything out of it. Now the big ones, sometimes they would ship them outside, split them with a front-end loader and run them back through and just do half of it or something and get it going. Or maybe run in with they had oversized chucks, they could stick on the end and run them through that way. Stud mill, this is a chipper that went up here, stud mill over here.

The cores were cut sometimes two inches. They just go to chips. 4 5/8ths would go to the stud mill or bigger, and they just had fly cutter knives. They cut them, trim the sides off and the top and bottom. Cut it in half and out of a 4 5/8 block or core, they could get two 2x4s. They had a little bit of round edges on them, but it was

okay because we were going to send them to Glenn over there. He'll run them through the planer and straighten them out for us, but we did that.

(new slide) We did, this is going into the stud mill here. These are chippers, but the stud mill went that way. We also cut them down to three inch, trimmed two sides, and made landscape timbers. You've seen those things in your garden or whatever that you stack up for flower beds. So the "Duck! Duck!" (referring to sign in picture) the catwalk as you see goes up here. A low bridge, you're going to hit your head, so somebody wrote, probably Roach wrote that. (laughs)

(new slide) The dryers. Do you recognize any of these people? Penny's been around the dryers for years.

Several speakers: Jeff. What's Jeff's last name? It looks like Jeff. Jeff Mello. (Others agree) Mello.

[00:44:28] **Otis Seal:** Anyway, these guys are feeding what is 27s. This guy's feeding random in here. This is loads of 27 in the middle and this is also random. Feed that through the dryer and there's four decks of just rolls, steel rolls all way on a chain that runs all the way through the dryer and it just goes in there and dries the wood. One dryer has 105 fans. Circulates the air, the hot air around through the wood and it would dry it as it goes through. The dryer tenders would set the 600-pound steam would come into the first zone, it would run four a quarter (425), somewhere in there. Temperature, go to the next zone, run 375, 350. Then before it came out there was a cooling zone. It'd run through the cooling zone. Cool it back down because if we didn't cool it down, it would stay hot and stay hard and believe it or not, it would case harden. It would turn really hard. I know the spreader people have done that. They go to slam a piece of core against the backboard and it just blows up because it's just brittle. I have honestly seen wood go through the dryers, maybe it was cottonwood at the time, but a 27' this wide (spreads arms apart) and it had a crack in the front end of it. When it came out the other end, this piece was over here and this piece was over here and it was still attached on the back end as one. I mean it really gets warpy. They had bad dryer plug ups, things like that.

(new slide) Same thing here. These just feed them in, the random loads.

(new slide) This is coming out. Is that out of focus a little bit or is it just me? This is coming out of the dryers when it's all dry. This is random lengths.

(new slide) Comes out under a moisture meter. I don't know what this guy's up here for, but they come out underneath that orange part. They come out and hit the line. Now it doesn't show any on here. The blue line ... I forgot what the blue line was. The red line had a red line. You could only have, I believe 10 to 12% of wetness in there and you could get, it would dry as you go through the mill, but you couldn't get any wetter than that. When you take it to the press and put glue on it, put it in the press, which we'll see here in a moment, you put it in the press and then start to cook it if it had water in it, it turned to steam. When it turned to steam, as soon as the pressure let off the press, it would go pow! And it just split that plywood wide open. Then you have a blow or what we call the blow.

(new slide) This is the grade line. Just the same way people grading on it. One of them, and they agreed to grade here by A, B, C, D, X. X is big knots, holes. The random went in here, all the random went for core. In time we got some composers that put all this back together and put strings on it and glue on it and made sheets out of it. In '74 when I got there, I believe the sew machine was there. We actually had a sew machine that would sew green veneer, just stitch it all the way through and then it cut it off and we could use that. I've seen some of that stitched plywood still around.

(new slide) Okay. C 1/6th. C I believe for the APA specs knots couldn't be over a dime. Is that right? You pulled over, is that right?

Unknown speaker: ABCD. X, random.

Otis Seal: Yeah. Yeah. D had big knots or whatever.

Unknown speaker: Blue camp (?). Blue camp is what we used to call it. *inaudible*

Otis Seal: Oh yeah. So we'll go on and see what the next one is here, Benny.

(new slide) Okay. This big pipe that everybody's seen that goes across the top of the dryers, and it also went to the boiler, but it would take the gases off the dryers, all the smoke, that type of stuff that was run through the dryers would go through this fan. It would suck it off like a big vacuum and send it to the boiler. That's a four-foot pipe and the boiler would re-burn it and get all smoke out of it so we wouldn't be letting a lot out. When you seen smoke over there, it may have been smoke from the mill or steam. There was times that bearings went out and things happened.

(new slide) Penny, you were around this. I don't know who the lady is, but these are plugger machines. We had six, seven. Well, six in Champion time in here and these ladies would patch these patches and patch the knots. [00:50:01] And I don't have any, but people call (inaudible). Patches, you've seen the football shape patches, you've seen the dog bone ones that kind of go like this, they were called dog bones. But they cut out and upgrade that so we could have good stock. Now some of it was for underlayment, things like that, that you put under tile floors, vinyl floors. You couldn't have any dents or nothing in it, because if you put your vinyl on it, then you'd have that problem with the dent.

(new slide) The spreaders. Those pieces I passed around, this'll explain some of that. We're back to the grain of the wood or those circles that I drew. These are core, that's 54s cut in half or whatever. There's a line that comes down here, so the guy watches to see if it's too short or what it was, and so he wouldn't make it too short and make defects. What would happen and these things would go, these guys are sheet turners. One here, one here. There's a core layer, that guy's a core feeder. Now this is a different kind of core than I talked about earlier when we were turning the blocks, those were a little round, going to the stud mill, making studs. Those were cores also, but this down here on this end is core. It's core because it's the center of the plywood. These two guys would grab a face and a back. This sheet would be a face. The other sheet on the other side would be a back. When they got that core line laid here, this guy bends over, those two guys lay those two sheets right on top of this load. That gentleman there would feed the core through to the next line. These people here usually had a cart over here on the side. They'd pull a center across, put that center in, put another line of core across here, and then this guy would put two sheets on again, a face and a back. Only this time this sheet would be the face and the other sheet would be the back. When I'm saying back, that's the bottom of the plywood. The face is the part that you see when you're looking at, so it may be a different grade. The bottom one, the back may be a be a C, the front one may be an A grade that's perfectly clear. There's no problems with it.

(new slide) These show the pictures of the guys flipping them over doing this.

Unknown speaker: Has it already got the glue on it?

Otis Seal: Pardon?

Unknown speaker: Has it already got the glue on it?

Otis Seal: No, these don't have glue on it. It's just here. The glue goes through two rolls in the spreader. There's a roll on the bottom, roll on the top, and as he feeds it through it coats the bottom and the top at the same time. And those pieces that went through, you're around here before you can see that core layer in there.

(new slide) This looks like Roger Hinkle to me. (gestures to man in photograph) They just go ahead and put them down here. When they got 40 panels made up, they just roll that out. It would go to a pre-press and then into a press and that's coming up also.

Unknown speaker: You might mention the fact too that when the veneer comes out, they're coming out of there like bullets. I mean, they're really flying out.

Otis Seal: Oh yeah. (chuckles)

(new slide) This is again, the spreaders. This up here was a layup line and it basically took on a lot of, got rid of some of the spreaders then went to specialty, the foam line, put the glue on in like a little noodle of foam. I didn't get any pictures of that at the time, but it put it all in. It would make a double panel continuous all the time. Saw on this end would saw it up. They'd make sheeting, like for roofs and things like that.

(new slide) Globe pre-press. These loads would go in. Now you gotta remember these are like five ply going different directions. This load would go in, 40 panels go into the pre-press. The pre-press would come down and it's not heated or anything. It's got these big rams. This is a lifting jack ram and there's four of these big rams right on the thing. Come down hydraulically, push that load. I'm not familiar, I'll say eight minutes for cure time and all that was doing is just sticking the glue a little bit so when you slide it in the press, it stayed as one panel. You just slide it in.

[00:55:10] (new slide) This is the press charger. The guy would come in here, go up in an elevator and put one panel in each hole all the way up. End up with 40 panels. No. 1 press was 24 panels, but it was a 5x10. We actually made, off No. 1 lathe we actually made 5x10 wood for a while. It was supposed to have been the big thing, but we didn't sell much of it.

The thickest we ever made was inch and a quarter. The inch and a quarter we made was for a government order. We made quite a bit of that back in Champion days. It was for the decks of the PT boats that we sold it for. They would kick ammo out of the guns and stuff like that. The shells would go down, hit the deck, it would tear up

the plywood, but the shell wouldn't be going bing, bing, bing, bing across the deck hurting somebody else. They used that to just set in there to, so the magazines would just kick out, tear up. That was a government order.

(new slide) This is coming out of the back of the press. As these things went into the press, the press would run. All 380. You've got to bear with me, I was a maintenance guy, I honestly didn't keep track of the production stuff much because I had enough problems. (chuckles) It would come out of the back and then it would index into the loaf. These are panels, plywood panels now, they went through the press, they cooked for 13 minutes or so in the press. There were stages. They go in, the rams would come up from the bottom and start pushing on the hydraulics, start closing the press. Each one would have a hot plate in between top and bottom steam, energized with lots of little spiderwebs inside so it had even heat all the way across it. It would cook it, depending on what it was, what species, for eight minutes, 13 minutes. As it cooked it, it was putting out 2,400 pounds per square inch, pressing it all together. But it had different stages. You could see it, it'd come under and go, and then in the second stage it'd come in (imitates machine noise), third stage get more hydraulic (imitates machine noise). You just shove it up there. I saw a guy put a sandwich on one, one day he was going to warm it up, somebody running through a pan. It was this big around about that thick, you know?

[00:58:09] (new slide) These are the hot stacks. The hot stacks coming out of the back of the presses? They pick them up with a forklift, set them out here. I can't tell you, but they didn't run these through the saws right away. They usually let them set a day or two because they're still hot and as the heat is generated inside, it would still cook and things are hot. I mean, you couldn't really touch them.

(new slide) This is the end feed to a saw line. At that time we had this stack would fall down, these panels would come out and go down a saw line and this is where you got the ends trimmed and the sides trimmed to make it into an exact panel. We have Steve Postma here, he run the saw line for years and ended up getting an exact 4x8 sheet cut right to the precise deal. Every one. And sometimes they were 4 and 5/8s depending on what the customer wanted.

(new slide) This little end trim would get trimmed off. This would be four feet across this way and they just go through here. One right after another in and out, just zip, zip, zip, zip.

(new slide) It would come down, fly across this way. The ends are trimmed. Now it will go sideways and trim off the ends. The other way was cutting the sides. It was cutting the sides off as skinner deck and this one will cut the ends off and then you have a panel. Steve sat here in the shack and as they went through the turner, you have to look at all the edges and see if there's a gap, an opening. Maybe the core didn't set right, maybe the face folded over. Now it's x-rayed or whatever. He would grade them all and get them ready to go out to the customer.

[01:00:06] (New slide) After grading through here, it would go into each bin for what it was. It'd be marked as it goes out. In time we had, as it goes to the sander ...

(New slide) End trim coming off the bottom or off the sides of the wood would go through a hog. Also boiler fuel towards Stimson's end of the days, all this fuel didn't go to the boiler fuel. We started cutting back on boiler fuel and it was starting to hurt us, but we could sell this product to Roseburg Forest Products, even though it had glue in it, they wanted it and they took it for particle board. In fact, they paid us at one cyclone on the chip bin they bought the whole thing, put in cyclones and all that stuff at their cost to get our product. They wanted it that bad.

(new slide) This is the in-feed to the sander. There's a six drum sander in here. Had five foot wide belts and great big belt sander. There's six drums in here, three on top, three on the bottom. You could sand the bottom and the top at the same time. It had rubber feed rolls that were steel shafts, but rubber rolls so it wouldn't mar anything. Feed it through and sand top and bottom or just the top, or just the first head. As it run through here, we, by Stimson time we put on a barcode. It would stamp a barcode, put a barcode on it like you have today. We actually had a sprayer on the other end that would put in marks for flooring panel, it would actually spread all these marks across the board, so they knew where to put the nails in when they put flooring down for subflooring, and we did a lot of that kind of stuff so we could get things ...

(new slide) This is the same way coming out the out-feed of the sander.

(new slide) (Pointing out markings on side of stacks.) Champion half inch plywood, champion CDX, C face, D back, and X for paneling. 66 pieces. Mill number, sheeting, Western Sheeting.

(new slide) Electricians and millwrights, if you had a problem, millwrights would be somewhere. The operator would come over here and write, this guy wrote No. 1 press, he has a problem, he needed an electrician. Whistle: two. He'd stand there and a little button over here on the side. He'd push it twice. Electrician would go that way to fix his problem. Or millwright would go for one whistle, it would go that way. Over time we ended

up with two-way radios and all that stuff. Supervisors I think were three and two [whistles], but anyway that's how it worked.

(new slide) Millwright shop. A little bit of our stuff that we had in our shop.

(new slide) Now if you can clear that up. I can't see very well, but Charlie may be able to pick out some people. (points out various employees in photograph) Phil Solle, passed away here a couple months ago (Nov. 17, 2009) worked out there. He also worked for Evans Products, right Charlie? He worked out there with you guys at Evans Products. Frenchy, what's his name? Ray Doucette. He's still around the country. That was Ron Haury (?) here on the bicycle, and that's funny. Back in Champion days, the millwrights, electricians rode bicycles. Some of them three wheelers, some of them two wheelers. That's how we got around. It was 12 acres.

Charlie Caruthers (?): Looks like Gary England (?) with the white shirt.

Otis Seal: Oh, maybe it is.

Charlie: He's got the radio.

Otis Seal: Yeah, but we had Cushman carts with welders on them, oxygen acetylene tanks. They'd just go out to the job, fix everything right where you were and they had these little Cushman carts they drove around.

(new slide) I know this is Haury, this is Clay Zander. Who's that guy, Charlie?

Charlie: I don't know who that is. [It's Charlie]

Otis Seal: I don't know who this is. Kind of looks like Bob Brown. Is that you, Bob? Huh? I don't know. I couldn't tell. That's Jim Sturgill there, but I couldn't tell.

[01:05:15] (new slide) This is a putty system. Putty guns, synthetic patch is what it was called. I didn't get a picture of the route line, but these panels would go by in a route line, endo, and they'd take a little saw, grind out all the defects, mark it with a piece of chalk, and then this gentleman here would spray synthetic patch in the hole. It'd just fill it in, fill all the voids in and before this got 50 feet to the back wall, it was hard and went into a stack. It set up that fast going through there.

Unknown speaker: They did have to sand it afterwards.

Otis Seal: Yes, they did. They'd have to sand it afterwards and maybe you guys have seen some of that. Charlie knows if the A and the B aren't mixing properly and it doesn't set up, you've got a big lump of something. It's not good. Anyway, go ahead. We're just about done here. (new slide) This guy's doing the same. I don't remember the gentleman.

Unknown speaker: I did it on days.

Otis Seal: You did it one day?

Unknown speaker: I did it on days.

Otis Seal: (new slide) Oh, you did it on days. Yeah. Greg did it. But it looked like this, that was a little puddle. And I know Hal Padden, he did it a lot. I think Hal was using it for tooth fill or something. (audience laughter) Anyway, the millwrights would always go down there with a toilet roll and fill up their deal so they get a screwdriver handle that broke off or something. They would mark it like that so you could see the defects in the wood. But as you see this wood, all these little things here that make, to me, make the plywood pretty are all those grains that we talked about on that tree. That's all the grains that as you peel it, go through, these are the rings that you see on that plywood.

(new slide) Now here they are, they're doing hand putty instead of squirting it on, filling these long cracks, things like that. I think this is dirt on my deal.

(new slide) Same thing here, but here also, you can see some of the football patches if you want them. Some people called them boat patches, but they would patch out.

(new slide) Specialty saw, feed them through here. This put a tongue and groove in them on the ends. Shiplap, whichever way you wanted to go. It made early American, made a rough grain across it. It also made T1-11, the siding, in there.

(new slide) This guy's on the out feed. It would put a stamp on it, what it was, and then they'd put it in a stack. We changed that all around later.

(new slide) T1-11 cut these grooves in there, the knots are the limbs, remember? All this grain that you see, were the growing grains. Yes, sir.

Unknown speaker: Well, my living room, my folks finished it with surf wood. You ever hear of that?

Otis Seal: No, sir.

Unknown speaker: We ran through a sandblaster.

several speakers: So you raised the grain?

Unknown speaker: Yeah, it took off all the springwood, left the summer wood.

Otis Seal: Oh, really?

Unknown speaker: And then my dad painted it with green paint and then immediately wiped it off so that the color, the light wood would be a light green. But the darker color remained. And I think we bought that about 1953. I wonder if anyone knew where, what mill that came from? I know two houses that were finished with that thing.

Otis Seal: Yeah. I don't know.

Unknown speaker 2: We made similar stuff at Evans, we used brushes, wire brushes, and they run the panel like that through. I have a house with paneling on it just like that, like T1-11. But all the soft wood brush takes the soft wood down.

Unknown speaker: Well, maybe it was brush rather than sandblasting.

Unknown speaker 2: No, they had a sander they converted to a... It was a deck sander they converted. They put brushes in they run too.

Otis Seal: I know that Glenn over there, he worked in the planer and sawmill area. They'd run blue pine. And it's I believe actually a rotting wood, it changes the color.

I think it's the most beautiful stuff there is. But once in a while you get a run of that. You could get some of that, but it wasn't a sale item was it?

[01:10:04] **Glenn Smith:** No, in fact they frowned on that. We had to dip a chemical in that to stop it.

Otis Seal: Oh, did you?

Glenn Smith: Yeah. Especially in a hot summer, that mold would form and then when you surfaced it, then you had this blue stain. It was beautiful. I loved it.

Otis Seal: Be like what he's talking about, but I've never heard of it.

Unknown speaker: It was only available for a few months from Hightower Lubrecht lumber yard there just up 2nd.

Unknown speaker 2: You can make it if you've just taken wire brush to the wood because the white is soft and the other is not, and you can brush the panel and remove the soft and create that yourself with a brushing effect with a steel brush.

Otis Seal: (new slide) This here has lines. Is it out focus, Ben, or is it just me? There we go. There was a rough top chain, looked like a power saw chain that went through as this was going through and it would make these marks on here. And the customer actually wanted that that way, it looks funny, but I think they called that the Early America paneling that we made.

(New slide) This is what it looked like, shiplap or tongue and groove, however way they wanted to do it. They had heads all the way across that cut the grooves in, then you just put them on the wall and there you go.

(new slide) (Stacks of wrapped packages with Champion label) Champion, all the stuff. I used to do this same showing I'd do for the school over here. When Judy called me she said, "Otis, you're on for doing a talk down here for the plywood." Oh, I was going through slides like no tomorrow I couldn't find them. I'd finally, I thought, what were they at? I went to Bonner School. They had them in the teacher's lounge (audience laughter) But I used to go to the school, back in Champion days, third graders and things like this, and I'd show them the same thing and explain to them how it worked, what went on. And the one mistake you gotta realize is a third grader as you go through there, you'd say, "Okay, these are guys pulling on the green chain", and then the questions would come up. "Well, we've never seen the green chain." In their minds, they were looking for a chain that was green. In my mind we're looking for wood that hasn't been dried. (audience laughter) But, you know, it's kind of ironic the way kids think.

(new slide) Truck coming outta the end of the plywood in the shipping area. We ship by trucks, we also ship by rail. When John Peters, he's sitting there in the back, when he was there we actually got some wood from

Uruguay, I believe. It was called Guatambu. It was cut real thin. It was a hardwood, and we brought it in, did an overlay on the wood, and it was really beautiful stuff. But that was before (chuckles) all the

Unknown speaker: On those stacks of plywood that were wrapped with the white wrap in the last picture? How many of those would be produced in a day or those big bundle?

Otis Seal: You got any judge, Steve? Maybe John would know. I don't know. How many the wraps units would be produced in a day? I don't know.

Unknown speaker: Well, one day there, the plywood plant in three shifts made enough plywood, they made over a million and a half feet of 3/8ths, which is one ton of plywood. You put it end to end and it would go almost to the Idaho border. You lay the panels in.

Otis Seal: For a one 24-hour shift?

Unknown speaker: In a 24-hour period.

Otis Seal: So yeah, that's a lot. That's a lot of wood.

(new slide) See we're going out. Same thing. Sheeting. This is PUL Premium underlayment. This would be flooring. Okay.

(new slide) Railroad cars. We'd load those and ship them out also.

(new slide) Now see the cars. You guys can tell me how old this film is. These are new cars, but I don't know how old they are. Boyce Lumber was one of our people that we sold to here in town, in the Champion days we sold to this.

(new slide) Same here with Boyce Lumber.

(new slide) Now this picture shows some building of houses here in Missoula. These houses I took as they were building the houses on, if you go to Russell, go to 39th and go up toward the hill as it cuts across, they were building these houses at that time. That's where I took the pictures from.

[01:15:00] (new slide) Siding had the lines in it. T1-11. And this is ... building plywood it was strong and it was good product.

(new slide) Sheeting for the roofs the same way.

(new slide) Same here. You can see the square panels going across the roof as they put it up for strength in roofing.

(new slide) Same here.

(new slide) (tall Ponderosa pine) And it all came from this. Do you remember these? All this stuff comes from this stuff. It's just amazing what that really gives us.

(new slide) This came about, this is our enemy. This is a particle board. There is also an OSB and oriented strand board that orients all of these little things in rows, more or less. They kind of stay together and they do that. Now this is just stuff, there's no grain to it, it's just chips put together with a resin or whatever, and pressed. This one here was 7/16ths. This one here, their stamp's backwards, or this way. It's one or the other.

(new slide) Houses in Missoula started using this. It was cheaper and contractors don't care. They just went ahead and did it because they knew they could cut costs and make money as a profit. They started going to this, and that was our competitor. Now, when I was in the business and when I retired Jeff Weber at the time as the vice president for Stimson, he asked me some questions when I was retired. So you can tell the truth now. And I said that's true. I always helped out Plum Creek. I always helped out Roseburg Forest Products, guy by the name Pat McGowan out there. He would call and say, "Otis, I lost a gearbox. You got one? Can you give me something to get me going?" "Sure, Pat, I'll help you." And they were always nice. We'd help each other if we needed problems, even though we were competitors and in the business, we're all in the business to make money. We're all in the business to help each other out, and that's the way I operated. Zale (Bender, purchasing agent) will probably shoot me now because some of that stuff went out.

Unknown speaker: Well, we did the same thing ...

Otis Seal: And came back just to help somebody get off the line. because you call the vendor and he says, "Oh yeah, I have one of those. It'll be here 14 weeks." We can't be down for 14 weeks! So anyway, I gotta get going, hogging everybody's time here.

(new slide) Go ahead, Ben. So same thing here. Just kinda give you an idea of everybody who did it.

I believe that's the end of it. All right. (applause) I wish to thank the operator for the camera and thank you very much. I got a little damp up here. (wipes forehead; notices audience member) Oh, hi, Ray! It's good to see you. Ray was maintenance superintendent back in the Champion days.

Judy Matson: If you would like to invite them up and share any stories.

Otis Seal: Anybody want to come up and just, you don't have to wear this (gesturing to microphone). You can talk, if you want to share any stories and tell.

I have a quick story that I thought of. Quick story that ... you remember Lee Lincoln, he passed away here year or so ago. Lee always had one of those, I call it excuse me, but poop-eating grin. He kind of had this grin on his face, you know, and stand there. Well, I'm in the maintenance shop. I'm sitting down at the table sitting there like this, and the moon comes out. Okay? So my pants are down just a little bit. Well, all of a sudden I feel, "Oh, what is that now? Here comes Lee, around the end of the table with this grin. Around the table and he's holding up a big pouch of mustard that he just put somewhere. I reach back here. (audience laughter)

Unknown speaker: You think you would've learned after that.

Otis Seal: No, I'm just a sucker, you know. Anybody want to add any stories? Ray, you got anything or anybody? It's good to see you. I haven't seen you in years.

Ray: Good to see you.

[01:20:07] **Unknown speaker:** I got one on Otis. You know when Subaru came out with a little Brat pickup 4-Door, had the two seats in the back, my wife had it. Otis wanted the two seats out of the back, so she asked Otis, "You take the truck down to your place." Otis lived about four houses down from us. So here comes Otis, and he gets in that little Subaru Brat, door wide open, one foot on the gas and one leg outside going like this. I never got a picture and I wish I could've. It was a sight.

Otis Seal: I can't get in. I can't get my knee between the steering wheel and the door to push on the clutch. So what happens? You open the door, push up the clutch, find the door. Zale, I'm going to bring up the one purchase order that I wrote. But I don't think I should bring it here now (audience laughter), but in the glue loft, we had a glue loft, and in order to make the glue, it had to take resin, caustic soda, soda ash. It took blood, cow blood or whatever. It all made this stuff up together. But the flour that came in, it had flour in bulk. We also had 10 pounds of back in Champion days, I know this happened, I don't know if John knows that. But anyway, 10 pounds of flour, Gold Medal cooking flour, and it was a piece of, "oh, wow". (mimics picking up flour, whistles casually) I know some supervisors that did that, but why was it there? That was an industrial deal because it had rats in it, or it had something, it was industrial for a reason. (laughter) But anyway, as we had the augers in there, the augers would take them up and dump the flour in, and as the augers were there we had models that would grow, little larvae would grow in the flour and make nests and all this stuff. So I wrote out a purchase order to Zale Bender, who's purchasing agent. I wrote that to him and said, "Hey, I have an incest problem. (laughter) Well, I spelled insect wrong (laughter continues) He wanted to know what the incest problem! So now it is humorous that way, you know...

Unknown speaker: Incest in the plywood plant.

Otis Seal: Yeah, incest in the plywood plant. I have the other one and it's not dirty. But anyway, the other one was, I took care of sewer treatment plants over here. I was in charge of those. They had one on one side, one on the other, and sewer treatment plants had little bugs inside that we had to keep alive to keep it generating, and it had to clean up all the stuff that was going in the sewer plant. Well, on the weekends I needed dog food to pour into the sewer plants, because there wasn't enough usage of solids going into the sewer plant to keep the bugs alive to keep things working. So I told Zale we need some, and he says, "What is it?" I said, "Well, it's the little orgasms we have." (audience laughter) And he says, "What?" I said, "No, no, no. It's the organisms." Oh, I was embarrassed. That came up at my retirement party.

Unknown speaker: We had fun at your retirement party.

Otis Seal: That's right. Yeah. But all that stuff was humorous. For us. There may not be some good spelling.

Unknown speaker: Otis, I want to thank you for giving us the presentation.

Otis Seal: You're welcome. (audience applause)

Judy Matson: That was really great. Thanks, Ben, too for being the projectionist. We're going to have a switch over of our equipment now while we get ready for Dan Hall's presentation. So if you want to grab some coffee, take a little break, and then we'll reconvene for our Bonner Company Town program.

(new program, introducing Daniel S. Hall from Western Cultural)

Judy Matson: Susan Knudsen came to one of our programs, as you may recall, and from Western Cultural, and she gave us a talk on some research that was going on to making the effort to make our Bonner Company Town a national historically recognized district.

It's been a year and since that time, and that was a year into the research, and we have as you remember from our last program, Dan Hall, just home from Helena, they made the announcement that that application was successful, and Dan is going to give us some information now. We'll need the lights out. He's going to give us information on what makes the Bonner Company Town a national historic district. Dan Hall, Western Cultural, who is the lead researcher.

[01:25:27] **Dan Hall:** Thanks Judy.

Otis Seal: (referring to PowerPoint slide) I didn't ask but that house on the side. Yeah, I lived here for 30 years.

Dan Hall: Then I probably had the information wrong.

Otis Seal: That's our house. That's house number 30, right?

Dan Hall: Yeah. As Judy said, this has been two years in the works now, and by way of introduction, I've been working in historic preservation in Montana for 30 years now. When Scott Cooney first approached me about the possibility of creating a historic district in Bonner, I immediately jumped at the opportunity. I've long been fascinated with Bonner history. I think that there's a story to tell here that is fascinating. So it was, I believe in March of 2008 and we sat in Scott's backyard and talked about the Bonner Historic District.

What I'm going to do today is talk to you a little bit about the National Register of Historic Places, talk to you a little bit about the National Park Service. They administer the National Register of Historic Places and then jump right into the history of Bonner. Our argument is that Bonner is nationally significant. Properties are eligible for the National Register of Historic Places at the local level, at the state level, and at the national level of significance. The story that's here in Bonner is national in its scope, and by that I mean there are historic themes that affected our nation as a whole, and they play out here in Bonner. Bonner is shaped by these events, and Bonner helps to shape these events, and so that's the basis for this argument, if you will, that Bonner is nationally significant.

Now we begin the process by going through each individual house, and we fill out these forms, and the Park Service loves forms. They are the masters. You check this box, you fill in the blank with this word, and we go through the entire town of Bonner. We're looking not only at the houses, but the buildings that are out back. We're looking at everything in the town, and we're compiling these forms, these historic site forms that document each individual house, each individual outbuilding and we need to know when they were constructed. We need to know who the residents were, what did it cost to build, what's the architectural style?

Then once we've got all of our baseline historical information, the next thing that we do is to draw a boundary. In other words, what is then the Park Service is very particular about this. How do you define what is the historic district? And we've got a really unusual historic district boundary here. What we've done is we've included not only the town, the houses themselves, but also the mill site. There is no way to separate the mill from the houses. It's all one entity and that's the meat, if you will, of the district.

But we've also got, as part of our district, what we refer to as a historic landscape, and basically to try and boil that down into a sentence, it's a recognition that the historical events that have happened have shaped the land and the land has shaped the history. That's a gross oversimplification of what a landscape is, but as I talk about this more you'll begin to understand that there is a historic landscape that's here in Bonner, and that's why we end up with this really large historic district boundary.

(new slide) To make that argument that Bonner is nationally significant, there are these historic themes that we need to be able to identify. And so we begin by telling our story with the Montana Improvement Company, and yes, there's history of Bonner that predates the Montana Improvement Company, but it is the Montana Improvement Company that puts Bonner on the national stage. The Montana Improvement Company is tied to the Northern Pacific Railroad, and it is tied to the Anaconda Company. These two industries, if you will, the railroad and hard rock mining, they required a tremendous amount of timber. They certainly drove the economic and the social development of the United States. When you look at the Northern Pacific and its effect on Montana, when you look at the Anaconda and its effect on the state of Montana being the world's largest copper monopoly, this is where we start our story.

[01:30:28] (new slide) Make no mistake about it, railroads require a tremendous amount of wood products. Whether we're talking about the ties for the lines, or whether we're talking about the bridges and the trestles and the associated buildings that go with that the amount of wood that the transcontinental railroad requires is a staggering amount of trees, and the same thing is true for the Anaconda Company. The Montana Improvement

Company is formed by E.L. Bonner. I can never remember [Michael] Connell's first name. Help me out, Susan. What was Connell's first name?

(inaudible response)

Dan Hall: (laughs) But anyway, one of the other investor in the Montana Improvement Company is Marcus Daly, and the Montana Improvement Company goes out in the business of cutting these trees that are on the Northern Pacific Railroad land grant. Except the problem is they're not really concerned about where the trees are coming from.

They're just cutting trees as fast as they can, and they're cutting trees to get them to the mill to get their product out the door. This isn't just a case where the sawyer is going down the boundary line, and he's like, "Oh, my bad. That tree was on this side of the section line." No, they're miles from where they're supposed to be. They're 3, 5, 6, even 15 miles from the public domain, and you have to remember that this is before the National Forest. This is before the forest reserves. This is just the public domain, if you will, and the Montana Improvement Company is out there just cutting as fast as they can.

(new slide) The Montana Improvement Company catches the attention of the Cleveland administration, and this is the next historic theme, if you will, that runs through Bonner, that puts Bonner on the national stage. Cleveland was elected to the White House on a platform of reform. And Gifford Pinchot, who's widely recognized as the father of the Forest Service, says that the illegal cutting activity that was occurring on the public domain was Public Enemy No. 1. K. Ross Toole, who is an eminent Montana historian, tells us that the Montana Improvement Company is at the top of the list. The Cleveland administration drew up a list of the worst of the worst, and there's the Montana Improvement Company. So as a result of this illegal cutting activity, the Cleveland Administration filed a lawsuit against the Montana Improvement Company.

And if you read through Bonner History, you'll see this alphabet soup of corporations. This company becomes this company, becomes this company, and this is intentional. What the investors are doing is they're trying to hide their assets from the federal government. Toole tells us that if the lawsuit had been successful, it would've been the ruin of the Anaconda Company. The lawsuit itself was settled 33 years later, and it actually went out with kind of a whimper. Andrew Hammond was one of the investors in the Montana Improvement Company. He owned the Missoula Mercantile, and I think that the final judgment against Hammond was something like \$7,000 and pennies. Historians look at that and they say, "Well, the lumberman carried the day. They won the lawsuit." Yet the reality is you need to look at the result of the lawsuit. It's not so much the conclusion, but what is the result of them actually filing the lawsuit?

Now, the Cleveland administration cannot get the relief that they want from the courts. They're not able to get the courts to recognize that this is the federal domain. This is the federal Forest Service. The Cleveland administration cannot get Congress to act to do something about this question, and so Cleveland does the only thing that he can do, and that's administratively create these 13 units that would become the U.S. Forest Service.

[01:35:04] Probably more important than that is that the lawsuit opens up the door to the Anaconda Company. Marcus Daly buys out the other investors, the Montana Improvement, the holdings of the Montana Improvement Company, the mill, the houses, the timberlands -- all of this becomes the property of the Anaconda Company.

(new slide) What Marcus Daly knew from the very beginning when he arrived in Butte -- Butte was a dying silver camp, but Daly understood that he had the secret or the keys, if you will, to the world's copper supply, and what he needed was to control the Anaconda mine. He needed a smelter and he needed a sawmill. Once he had those three things in place, then he could control the world's supply of copper, and if you spend a lot of time reading about wood products history one of the first things that will jump out to you is at some point in time, every mill is going to make the claim that they were the largest sawmill in the nation. It is, and it's probably true for a short period of time, this mill probably was granted, when we look at Bonner and we look at that 1900, 1910, 1920 period when the heyday if you will, when we're cutting for the Northern Pacific and the Chicago, Milwaukee, and St. Paul and the Anaconda Company.

Frederick Weyerhaeuser built probably the largest timber conglomerate in the nation. He did that on five mills. These five mills were cutting between 50 and 70 million board feet a year. At that time Bonner is pushing 128 million, so it's clear that this is one of the largest, if not the largest, sawmill that's operating in the United States.

Again, there is that symbiotic relationship that occurs between hard rock mining and the railroads, and I can't overstate that enough. These are the historic themes as I go through here that tie Bonner to the national stage.

(next slide) The next historic theme, if you will, that's going to put Bonner on the national stage are the two world wars. We, in essence, during both wars, nationalized the industry. Wood products are to go for certain uses for the war effort. Whether it's the PT boats, whether it's decking for ships, propellers for airplanes, the

struts for airplanes, the platoons for the Corps of Engineers to build bridges. The piers, one of the largest uses during the two wars are crates and pallets. Everything that's sent to the European Theater is put into a wooden box, and put onto a pallet. So the Anaconda Company is producing a tremendous amount of product that's going to the war effort, and of course being the Anaconda Company, and where the dollar is concerned there are instances where we're able to see where they're not really following government regulations, but the dollar's involved. So that's the Anaconda for you.

Some of the other things that we found when we're looking at the war effort, interestingly enough here in Bonner we do not see the counterpart to Rosie the Riveter. Now, there are no women that are working in the mill during either of the wars. Susan (Knudsen) had done the research on this. She went back and looked at the payroll records, everything that we could, find and came back and said there were no women at the mill. I said, "Well, you've got to be wrong. Go back and do it again." Which earned me the evil eye, but she's right. There are no women that are working in the mill, and I don't have an answer to that. You would think given the labor shortages that we had here in Bonner at the mill that it would be a natural fit, but it really wasn't until the 1950s and 1960s where women actually began to enter the workforce at the mill.

[01:40:05] The shortages of labor did cause production problems. The mill actually went out to Fort Missoula. The Italians were detained out there, and they would bring them out to the mill to work. The people who were working at the mill were deferred from draft.

(new slide) Again, back to this whole relationship between the national events that occurred and what's happening here in Bonner, and the war effort really is evident here in Bonner. It's playing out in spades, and it's a great story. The production from the mill jumps dramatically when you chart it by year, and then the war comes along and there's a spike, and then after the war there's a corresponding decrease.

(new slide) Then when we talk about how pervasive the war effort was throughout not only the mill itself, but the community, it becomes readily apparent, and this is true for much of the United States where we see the emergence of Victory Gardens. In the Hotel Margaret, the Red Cross had set up operations where they're making bandages. This is an all-out effort, not only by industry, but by the people of the United States. Now, one of the interesting things that we see in Bonner is the continuation of the Victory Gardens, if you will, between the wars, and there's a whole host of reasons for that. By the way, I'm going to skip a lot of things. We're kind of constrained by time today. So feel free to ask questions when I get done.

(new slide) One of the other historic themes, if you will, that we've made this argument, that Bonner is nationally significant, is the company town. The company town is a unique creation in the United States. It is a result of that dance that occurs between the capital and labor. This is capital trying to control all aspects of labor. In Bonner, it is incredibly pervasive, more so than most other company towns around the United States. There are, if you look at the literature, when you look at the historians, they don't really agree on a definition of what constitutes a company town, but when you look at all the different definitions, the one thing that becomes readily apparent is the corporate control, the corporate ownership. Unlike other company towns around the United States, the corporate ownership in Bonner is complete. It is total, and it is completely pervasive, and the company store is one of those elements that makes up a company town.

I think it was 1946 Travis Merle (Merle Travis) wrote "16 Tons of Coal." It was later covered by Tennessee Ford. And the lyrics were something along the lines of, "I owe my soul to the company store." The company store was ripe for abuse. The employees had no other option but to shop at the company store, then to have that bill deducted from their paycheck.

One of the odd things, at least odd from my perspective, is the company store in Bonner was not-for-profit, and they're quite proud of this. The company is making speeches to conventions around the country, and they're talking about the fact that they're running the store for the benefit of the employees and they're not trying to make money. There's this paternalistic attitude between the company and the employees, and this is part of that paternalism, if you will. My personal opinion is that probably the reason that we see Anaconda treating Bonner so differently than other company towns that they own or even other company towns around the United States probably is Kenneth Ross. Ross is one of the interesting characters that wades through Bonner's history. He's the one who's going around touting the benefits of what they're doing on behalf of the employees.

[01:45:05] **Mac Palmer:** Library Car would be another good example of that.

Dan Hall: Exactly. You've seen this?

Mac Palmer: I was the one that helped to move it.

Dan Hall: (next slide) The post office is not an unusual creation in a company town. What's unusual about the Bonner Post Office is that the company is adamantly admitting they did not set this up, and they're not running

this for the benefit of the employees. There's a post office in Milltown. Instead, what the company is admitting in public is they don't want their employees going over to Milltown where the bars are. This is an effort to control the demon liquor. When I talk about corporate control and ownership, it's not only what you build, it's what you do not allow to be built.

There are no bars in Bonner, although there was one inside the Hotel Margaret, but that was for a very short period of time. That was for management, and of course management's different. The post office is a common theme in company towns around the United States, and there is one here in Bonner. Again, when we look at other company towns around the nation, it's not too surprising, but what's surprising is why it's here.

The library is another example. This is an odd critter in the literature of company towns. The Missoula County librarian had approached Kenneth Ross with this idea about starting a library. He freely admits that this idea was forced on him, and he was not receptive to the idea and he didn't think it would work. At the end, he became the biggest believer in the library. There was a library in the lobby of the Hotel Margaret. The picture that you see here is the railroad car that he was speaking of, and they would wheel this out to the logging camps. (Kenneth) Ross talked about the idea that if two people had read the same book, they had a starting point for cooperation, a conversation that could have occur, and he was always big on this idea that cooperation would lead to better results than the alternative.

(new slide) Schools are another element that you find in company towns, and Bonner is no different, I guess. The first school in Bonner, the main floor was actually the social hall and the school was on the second floor. The only person who was not an employee of the company was a school teacher.

(new slide) Religion and baseball. Linda Carlson is a historian of some renown who's written extensively about company towns, and she tells us that it's unusual to see a church in a company town. And here in Bonner we have two, and they've been here since the turn of the, I can't say the turn of the century anymore, the turn of the previous century. When I initially saw this picture, my first reaction was that Kenneth Ross had to have been either a Catholic or a Lutheran, and as it turns out, he was neither. He was Presbyterian. This is an example of the great lengths that the company is going through to control labor, and make no mistake about it, that's exactly what this is. The whole idea of the company town is you want to attract a stable workforce. You want the married man who has children, and if the married man with children is living in your house and he's shopping at your store and he's going to your church and his kids are going to your school, he's going to think twice before he goes out on strike.

Of course there are spectacular examples where this idea failed in the United States. Pullman, Illinois, is the classic example. Gary, Indiana, is another example where the company town failed and failed on a major scale. Here in Bonner, it succeeded. Again, this is just my opinion, I think it's probably due more to Kenneth Ross than any other reason.

[01:49:46] Ross is one of those interesting characters. He had arrived in Montana as part of the timber industry. Daly and Hammond and the other investors in the Montana Improvement Company invite him to Bonner to set the mill up and get it operating and running, and then he leaves. Daly pulls him back in, and calls him to New York, actually to the headquarters of the Anaconda Company at 25 Broadway in New York City, and offers him a tremendous amount of money along with the stock option if he will manage Bonner. To Ross's credit, he said, "I will do so only if I can do this without interference from you." And that, I think, is the difference that we see between Bonner and Butte. The Anaconda Company was particularly ruthless when it came to negotiating with unions and the way they treated their people, and here in Bonner there's this, and for lack of a better word, there's that paternalism that runs through Bonner.

My take is that this is Kenneth Ross.

Now, the presence of baseball is pervasive in company towns throughout not only the West, but across the United States. Baseball was the American game. In Bonner, it didn't matter if you were a millwright or a scaler, but if you could play third base and you could hit .300, you had a job. This is true for company towns around the United States, it's not your ability to work for the company, it's your ability on the baseball field that got you the job. There was an account of, the National League All Stars used to barnstorm at the turn of the other century. They were in Potlatch, Idaho, and played a game, and they wanted to stay and play a second game because they lost. They couldn't stay because of their schedule, and the newspaper accounts talk about how they got on the train, went up to Coeur d'Alene and they were turning and coming into Montana. It seemed to me that they've gotta be coming to Bonner, the National League All Stars have got to be coming to Bonner, but I never could find any reference to those guys having been here. But nonetheless, there's a reason why the baseball field is here, and where it is and why it's so prominent in the town. That's tied to this whole concept of how important baseball is. When we were talking with Glenn (Smith), I think he provided one of the better quotes when he talked about how divisive it was between Bonner and Milltown and West Riverside and Piltzville, and he talked

about there were only two things that could unite the community, and the first one was the whistle at the mill and the second one was baseball.

(new slide) Of course, it's a shame we lost the Margaret. This is where visiting dignitaries would stay, meaning the Anaconda management. This is an unusual creation in the company town. In our efforts, we reached out to State Historic Preservation Offices around the nation to look at other company towns in addition to reading the literature of company towns, and this really is an odd thing to have. It is not related to the operation of the mill. It's not related to this paternalistic relationship with the employees. I think it's probably a reflection of this sense of nobility that the Anaconda Company management had, and as I said, for a short period of time there, there was a bar in the lobby of the Margaret. This is also where, as I said earlier, during World War II, the Red Cross was set up to make bandages to send to the theater. The library is here in the Margaret, and so there's, while it looks ostentatious and it certainly was built for an ostentatious purpose, there's an egalitarian use to the building itself.

Unknown speaker: It sounds like it's contradictory.

(new slide) **Dan Hall:** It is. It is. It is very contradictory. This is where the Red Cross is making the bandages. This is where the common working man comes to the library to check out books. There's a well there on one side of the building where people are drawing drinking water for their homes before each house has drinking water. There's a community-wide gathering place and at the same time, when you look at the picture, it's rather ostentatious.

[01:55:12] Now, there's a historic landscape in Bonner, and when I say the historic landscape, there's this built environment that's a reaction to the historical events that have occurred. It's here in Bonner and it's here in spades. In the early 1900s, the United States witnessed what we refer to as the City Beautiful Movement. There's this idea that if we humanize the built environment, we take the rough edge off and we introduce landscaping, it will somehow instill a sense of ethics and morals. It's a pride in place, and we certainly, I think, see this here in Bonner. When you look at those elements that comprise the City Beautiful Movement, the manicured lawns, the broad streets, the decorative lampposts, the sidewalks, the ornamental bushes, the trees. Some of the trees, there are a couple here anyway, are sugar maples from New England, and at one point in time there was a homesick mill manager who imported sugar maples.

(new slide) I think this gives you a good example of when I talk about, trying to humanize the environment. When we look at Bonner before the landscaping and then we see the end result today, the landscape is here and it's in spades. Arthur Stone was an editor for the Missoulian and he made extensive trips around Montana and wrote about them in a weekly column for the Missoulian, and the second trip he made to Bonner actually made it into a reprint book of his. Actually this is the only time I've read someone actually laying out the City Beautiful Movement in terms of what they see. You can go down Stone's column, and you can pick out all of these things that relate to this City Beautiful Movement that went across the United States, and it's here in Bonner. It's here in spades, and usually it's a lot more difficult to make that argument that you see a historic landscape and it's related to the City Beautiful Movement, but Stone lays it out for us perfectly.

(new slide) I think this is probably one of the better images that I've ever seen, where we're talking about the relationship of landscape, the geography, to the history that occurred. There's a reason why the mill was put here. This twist in the river acts as a containment to slow down the logs that are coming down. You can build a small dam here, and then you've got your holding pond on the river. You're at the mouth of the canyon. You've got the railroad right here: the transcontinental railroad, if you will. You're in the middle of this seemingly endless ocean of trees. The mill was put here in Bonner for a reason, and that reason is tied to the geography of place.

(new slide) Now, one of the other arguments that we make for the national significance of Bonner is reflected in the architecture. As you know, there's a socioeconomic stratification. You've got the mill managers over here on Silk Stocking Row, and you've got the workers over here, and this is true of company towns around the United States. This is not unique to Bonner. In Potlatch, Idaho, they took the mill managers and they put them on Knob Hill, which of course became known as Snob Hill. The reason for putting them on Knob Hill is because it would put them away from the noise and the pollution of the mill, and yet here in Bonner they're right next to the mill, and the employees are the ones that get the break. When and I talk about this socioeconomic stratification, it's pervasive. The Hotel Margaret is put here for a reason, which then becomes White House Park, and that's to create this break between management and the employees. This is a common tool that's used in the landscape of the architecture.

[02:00:03] This was a difficult question to ask and answer in Bonner. Tax records are probably one of the better sources for trying to determine the age of a building. In Bonner the Anaconda Company just fills out one bill for their tax and sends it, so there's no individual listing of the tax records for individual structures, and that makes

it difficult. This was a particularly difficult problem we had with the State Historic Preservation Office when I presented. And they kept saying, "Well, why are you saying circa 1900 or pre-1921?" Well, we used the records from when the houses were rented, they kept a list of who rented what, and what the rental amount was. We used the Sanborn Insurance maps, we used historic photographs, anything else that we could find, and that's how we were able to date these structures. In some cases, yes, the house was built in 1921 and in other cases, the best we can say is 1921-ish. And let me tell you, that doesn't go very well with the folks in Helena. I shouldn't pick on 'em, but it's too easy. Besides, they're not here. (chuckles)

When we began looking at that, the architecture of the buildings, and I remember those first couple of days when we were out there filling out these forms. My initial reaction was that what they'd done was they'd just gone across the street and grabbed whatever they could off of the shelves at the mill and came over and built these houses. The architectural style is something I'd never encountered before, and as we began to do research into this it became readily apparent that there is a style here. These are houses that are built in what's referred to as the Folk style and more accurate the National Folk style. The Folk style, the National Folk style of architecture, is related to the arrival of the railroad, to the lumber mills of the West, and Virginia McCallister has written what we refer to as the bible of architecture. She has a great series of maps that show the rapid arrival of this architectural style all across the nation. So when you think about it, what other styles of architecture would there be in Bonner, but the folk style? Really, if you had to boil the folk style down to a very brief discussion of what it is, the one word would be functionality. It's not as ornate or decorative, say for example, as its contemporary, the Craftsman style, is. It doesn't have a lot of the attention to detail that the Victorian mansions that you see on Silk Stocking Row have. It is a functional house. It's not intended to be decorative. It's not intended to make a statement. It is intended that the lumber yards can put mass quantities of lumber onto a railroad car and ship them across the country, and these houses can be easily constructed. That's the purpose, that's the architectural style.

[02:03:34] (new slide) As you see, as we scroll through here, you'll see the C or the NC. This is what we refer to as whether it's contributing to the historic district or whether it's non-contributing, and there's a whole bunch of mojo that we go through to determine if something is contributing or non-contributing. Basically it has to appear as if it did during the period of significance, and when we talk about historic districts that appearance is a little bit more lenient than if we were just talking about one property. So when you have this community of Bonner, it is the collective whole that conveys that appearance if you will. We did go through everybody's backyards and look at the outbuildings. There are four types of outbuildings that are here in Bonner. You have the wood sheds. You have the small accessory dwelling units. You have the small one-car garages, and then you have the modern or recent type of a building, and this was another point of issue that we had with the State Historic Preservation Office. This really is more of a judgment call than anything else when we talk about the National Register. Some of these are pretty shot. I mean, there's no doubt that this guy here has lost its materials.

[02:05:08] It's been stripped down to the studs. It's a goner. And then some people would take a look at this and they would say, "Well, why is this considered to be contributing?" Its presence adds to that collective whole. These are single men who are working at the mill, and they're not in the bunkhouse that's on the mill. No. Instead they've got a little shack like this in somebody's backyard. When I talk about the socioeconomic stratification, we see people moving around town all the time. As you gain tenure in the mill, and as you work your way up, you're allowed to move to other houses. It's not only the size of the house that's attractive, but it's what's in your backyard that's attractive, and if you've got somebody living in your backyard, that's not quite as interesting as if you have a woodshed, which of course isn't as cool as if you've got a one-car garage. So there's this socioeconomic stratification that's not only management and the workers, but within the workers themselves and the houses that they're occupying in Bonner at the time.

(new slide) We went through the houses that are on the mill side, and we evaluated them for the National Register. It's hard to believe it's been two years. For the longest time there was this confidentiality agreement between Scott Cooney and Stimson, and neither side could talk about what was going to happen, and I've intentionally avoided that conversation. I come from a long line of lawyers, and I know you don't poke that rattlesnake unless you want to get bitten. So I've stayed away from this. I did call Scott before I went to Helena last month, and I said, first time I'd ever asked him point blank, "What's going to happen?" The loan package is in place, and the idea is now that the property underneath these houses will be purchased and these houses will be set back down, and then they will be returned to their historic appearance. This is what we've been operating on from day one with the inventory and it's been one of the biggest concerns of mine.

(new slide) It's so nice to be able to talk about it and say, "Yes, this is going to happen." And it's so cool. Scott retained the services of Steve Adler, who's an architect in Missoula. One of the things that Scott and Steve talked about was that they're probably going to have to move these houses, and then what do we do with these and where do we move them so that we can still create this company town feel? The answer from the Park Service was, "if you move them, they're not going to be eligible." That's one of the things I think pushed this

direction forward of buying the property underneath the houses. But the other thing that Steve did was prepare this preservation plan, and these houses have now been returned to their historic appearance when they were owned by and operated by the Anaconda Company.

(new slide) I should say that the plan itself, the work that we did, everything that has gone into this historic district, I think is it's an incredible commitment on Scott Cooney's part. It's incredibly ironic that the newest historic district in Montana was created by a developer working on a private project. When I presented this defense in Helena at the State Historic Preservation Office last month, I finished my slideshow and the very first comment that came out was from Jon Axline, who's the historian with the Montana Department of Transportation. He's on the review board. Jon said, "There's no question, but we're talking about a nationally significant property." And the relief just, ah, this has been one of our biggest, if not fears, biggest concerns from Day One was this nationally significant argument. The review board agreed unanimously that this is nationally significant and that Bonner occupies a place on the stage. The review board had questions, they had comments,

(camera pans back to speaker) they actually wrote down that made a request for clarifications. Most of the comments that came back from the review board were minor in nature. As an example, they asked for a paragraph or two talking about the pre-history of Bonner prior to the settlement.

I had intentionally skated around the origin of the Bonner name and got called on the carpet for that. That's what happens when you dance, I guess. And, I have this huge problem with, I used to write "at the turn of the century", and I used to say, "at the turn of the century". Well, in 2000, you can't say that anymore, and so I've got this problem with 17th, 18th, and 19th century. And what difference does it make, really? So I got called on that.

[02:10:21] The comments are minor and most of the corrections and additions have been made to the document, and it's ready to go to Washington DC to the keeper's office. Most properties that are determined to be eligible for the National Register of Historic Places do not go to the keeper for a signature. We are taking this to D.C. for a signature. The National Register is governed by the National Historic Preservation Act, and there's language in that legislation that says that if the SHPO and the SHPO review board say that it's eligible, then it is to be treated as if it were eligible even without the keeper's signature.

What the Park Service is going to do is they're going to look to make sure we filled in the blank with the proper word, we checked the right box, and that our map is correct. It's more of a perfunctory review than anything substantive. The major milestone in the process was getting SHPO and the review board to unanimously agree that this is eligible for the register and that it is eligible at the national level. So that's where we are. This thing, this document is going to go on its way to Washington, DC, Monday or Tuesday. The keeper has 45 days to sign the document which they usually do.

It certainly has been a great project to work on. My team is here, and I would like to take a moment to recognize them. Margaret Clark couldn't be here today. She wrote the section on the company town and Bonner, and then when she finished, she immediately left the country. She went to India to volunteer in an orphanage. I'm sure that's not a reflection on Bonner, it's probably more reflection of working for me. John Fielding wrote the part of the nomination that deals with the labor history and the Wobblies and wrote the biography of Kenneth Ross. I think I've always been struck by why Ross has been so ignored by historians, but I think John did a wonderful job with Ross. Ryan Windell wrote the section of the nomination that talks about World War I and World War II and what the lumber industry meant to both war efforts and how that played out here on the ground in Bonner. I think John did a bang-up job on that.

And Susan (Knudsen), my right hand ... I would imagine that Glenn's probably very tired of phone calls from Susan. Susan's dogged determination, I think helped us immeasurably. Susan wrote the part of the landscape that deals with the nomination. As always, when I present in Helena for a nomination and we have a landscape in it, they're always 'ooh'ing and 'ahhh'ing. And so to you guys, stand up and take a bow. That was a great job.

Then I would be remiss if I didn't say thanks to Glenn (Smith). If he didn't know the answer to the question, he told us where to go what we needed to know. Kim Briggeman is another one that I think I'm surprised he returns my phone calls. He's been a big help. Judy (Matson) and the Bonner History Group, what you guys have going here is amazing. When I was in Helena presenting this, I had the chance to talk to Richard Sims, the director of the Historical Society. He was there, and I told Richard to keep an eye on you guys. You get things done. If we could take that essence of you and put it in the bottle and sprinkle it around to other historic communities in Montana, it would be a better place. Richard was glad to hear that.

He does what he calls a "history beer". He travels Montana, goes into bars and talks to people about their local history. And so if you're ever in a bar here and you see this guy that's asking an awful lot of questions about

Bonner history, and he looks like Mark Twain, grab that guy by the arm. That's Richard Sims, the director of the Montana Historical Society.

I guess finally I'd be remiss if I didn't say thanks to Scott Cooney. This has been an amazing project to work on. As I said earlier, I jumped at the opportunity to work on this, no questions asked. It's a great story. And as I said earlier, here, we have a private developer who's taking private property and creating Montana's newest historic district. I think that speaks well for the future of Bonner. I think it speaks well for your organization. I see nothing but good days ahead for you. A big kudos goes to Scott and for his vision of what Bonner is going to become. Are there any questions?

[02:15:33] **Unknown speaker:** I have a minor one. How did Anaconda come in possession of the Northern Pacific land grant timber. Did they just buy it from them?

Dan Hall: They did, and that's a result of the lawsuit that was filed by the Cleveland administration against them, and Marcus Daly ponied up 1.7 million, I believe, for the mill, for the houses and for the timberlands. The timberlands was what he needed.

Unknown speaker: The timberlands was worth a lot of money.

Dan Hall: Yeah, yeah. But at that point in time, K. Ross Toole is a personal favorite of mine when it comes to Montana history, and that lawsuit would've been ruin to the Anaconda Company if it had succeeded, and Marcus Daly knew that. So the purchase at that time was outlandish. Now the amount of money that the Anaconda turned over to the Montana Improvement Company was an incredible amount of money, but Daly knew that he had to have that Timberlands and he had to have the mill. Without the mill and without the Timberlands, then he would not control the world's supply of copper, and so no price was too great to pay and he paid it. Kim?

Kim Briggeman: I think one of the little ironies of this whole discussion is you're referring to Kenneth Ross and you're referring to K. Ross Toole, who is the historian, of course. K. Ross Toole is Kenneth Ross Toole, who is the grandson of Kenneth Ross.

Dan Hall: And the Tooles are all over Montana.

Kim Briggeman: The Ross is there too.

Dan Hall: You've got John Toole, who's former mayor of Missoula. You've got a John Toole, a former governor of Montana, and Governor Toole actually was ... the Anaconda Company called a strike. They had this the Battle of the Copper Kings, and you've probably heard this story, but as a result of not being able to get anywhere in the court systems in Butte, the Anaconda Company shut down. Shut down the entire state. 80% of Montana is unemployed within days. This is what, [1903], and it's Governor Toole that has to call the legislature into special session to do the Anaconda's bidding so that Montana can go back to work. So there were Tooles, I mean, you can't go anywhere without bumping into those guys.

Otis Seal: Just a question, like I said earlier I used to live in House 30 when I first came here. I bought a house, a trailer house, and lived in here for a while, but I started out in House Number 72 by the post office. The rent was \$75 a month, you know? That was well worth it. I lived in House 30 for quite a few years until my daughters grew up there, went through Bonner School and all that. I don't remember what the rent was there, but our kids grew up there. But in the garage on the wall in 1926, and it may still be there, "change starter in the car" and then a month later "change starter in the car". (laughter) "Change starter in the car", the guy must have had a good excuse for it. (laughter) At the same time, we had a flower bed in the backyard and my wife found a token in the backyard, and it was for the Bonner House, which was stationed at the Kelly Field where it's at now. I took it to Jack Demmons and it's in his collection, and he told me that it was, it says a token for 5 cents on it, and he said it was from the Bonner House for a schooner of beer or 5 cents to cash their pay envelope. Either way you wanted to go. So he has it now, or I think he does. That was given to him.

Dan Hall: Yeah, and that was one of the few bars that existed in Bonner. The liquor thing is an amazing part of Bonner's story.

Otis Seal: Yeah, Bonner was a great place to live, I thought. I always loved Bonner.

Dan Hall: It's a great story. Question back here.

Jim Habeck: The electric trolley for bringing people out from Missoula for more than just sight seeing, they must have been bringing a significant portion of the workers after 1905.

[02:19:56] **Dan Hall:** Yes. And there are some interesting stories that are associated with the trolley. What the trolley does is it bridges that gap. We've got the interstate now and it takes me all of 15 minutes to get from my

home in the center of Missoula to here, but back then it's a big deal to go from Bonner to Missoula. What the trolley does, it not only introduces the worker, but it also allows the people who are here to go into town and they can now go into town and shop. They can go catch something at the theater. There's so much more that the trolley does socially for the history of Bonner than just about anything else. Unfortunately we've lost the roundhouse, but boy, you're right. It is part of the story.

Jim Habeck: 1911, when that went into service.

Jim Habeck: I was connecting the trolley with the availability of surplus electricity from the dam production. I guess the production of the electricity in itself was a significant milestone too.

Dan Hall: It was. That's the reason why the dam is the first thing that's built in Bonner. That electricity is the key thing that has to happen first, and so the electricity and the dam is first. Then we subsequently see, and I'm talking about the dam that's here on the on the Blackfoot River. I'm not talking about the dam here on the Clark Fork that was taken out. The hydroelectric power is incredible, and there's a big need for that.

Jim Habeck: (Looking at some) The market would challenge some other aspects, so he suggested the idea of rejecting permanencies, stability to those that were part of the community. It's certainly not something like Garnet or something like that where people couldn't have believed that there was anything but a spike in activity and then you get out.

Dan Hall: That's true and as I said earlier, I think part of the opulence of the Margaret is when you talk about the Anaconda Company, you're talking about John Ryan, you're talking about the Rockefellers, you're talking about Marcus Daly. These are the leading industrialists of the world. They're not going to stay in the Kelly Hotel up in Garnet. No, there's going to be some ostentatious thing plumbed right down here in Bonner. That is its purpose, is that sense of nobility that pervades the upper management of the Anaconda Company. Yet at the same time on the other side of that coin it's where the Red Cross is operating out of from both World Wars, and it's where the library is, and the community drinking well is there. The single mill workers are dining in the dining room at the Margaret, and so there is this incredible dichotomy of 'here's this ostentatious thing', and yet it's being used by everybody in town.

Unknown speaker: Is it still here?

Dan Hall: No. Well, it just got pushed into its foundation. It's still over there, (laughter) but it's buried. Question here.

Doug Grimm: It's not a question, it's just that after 1900 if you read the Missoulian, people are always astounded at the progress that the human race is experiencing. And you mentioned Al Stone as being editor of the Missoulian back around 1911. At about that time some lady from Bonner went from to Chicago to visit relatives, and when she left her relative's house with her suitcase, she walked down off the porch and down the walkway to the sidewalk. From the sidewalk she stepped into some sort of conveyance, I suppose it was an automobile, which delivered her to the train depot and downtown Chicago, where she stepped out onto the sidewalk and went in and got her ticket and walked down the platform and stepped into probably a Northern Pacific coach. From Chicago, after three or four days, she stepped out of the coach car and onto the platform in Missoula, Montana, and picked up her luggage and went through the depot in Missoula and out onto the concrete sidewalk. Missoula in 1911 had on Higgins Avenue, red paving brick. She stepped onto that and got into the trolley, and the trolley went down Higgins and turned and went out Broadway a ways, and then eventually made it out here to Bonner, where it came to a stop and she stepped up onto a sidewalk, and she walked down that sidewalk to her house and up her walkway and stepped onto her porch and thought, "Well, I should take and clean the dirt off my shoes", and she thought, "No, I don't have to! For the first time in my life, probably the first time in mankind, I have gone hundreds and hundreds of miles and have not had to step onto dirt." (chuckles from audience)

[02:25:20] **Dan Hall:** That's an amazing story. Back here in the back.

Unknown speaker: When was the Margaret torn down?

Dan Hall: It was torn down in, I think in 1957. 1957.

Unknown speaker: From what I understand that there have been pieces of parts of that hotel incorporated in some of the houses. We were in House 20 and our back porch, the railing from what I was told, came from the Hotel Margaret.

Dan Hall: Yeah, no longer there. There was a free-for-all where parts were stripped out of the Margaret before it was bulldozed into its foundation.

Unknown speaker: But I thought it was kind of interesting that, yeah, apparently it's all over town.

Dan Hall: Question over here.

Lee Legreid: I was just going to say this Hotel Margaret, it's really too bad that they didn't recognize the historical significance of that in 1957 and restore that and not tear it down. But apparently there wasn't enough interest in it at that time to save it.

Dan Hall: What I've heard from the residents of Bonner is there was an interest in trying to save it, but this is a company decision. This isn't something the people of Bonner had any control or any part in the decision on that.

Bob Starr: I have a comment. I have an antique fire engine I built up and one of the fire extinguishers on that fire engine I have right now came out of a Bonner home when they removed the Pyrene fire extinguishers and replaced them with some other brand because Pyrene was dangerous. And that's on the 1915 Model 2 Ford Fire truck right now. I have that at my house. The old Pyrene pumped up fire. It came out of a (recording abruptly ends)

Dan Hall: Thanks, Judy.

(Outro music and credits)



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