



Charlie Wade
Deep Roots Milling at Woodson's Mill

Date: July 10, 2020
Location: Remote interview
Interviewer: Sarah Adams
Transcription: Technitype Transcripts
Length: Forty five minutes
Project: Southern Baking

Sarah Adams: All right. Good morning. This is Sarah Adams recording Charlie Wade on July 10th, 2020. Because of the [COVID-19] pandemic, we are doing this interview remotely, so I am in Richmond, Virginia, and, Charlie, why don't you introduce yourself and tell us where you are.

[00:00:20]

Charlie Wade: Sure. I'm Charlie Wade with Woodson's Mill and Deep Roots Milling, but I'm here in Roanoke, Virginia.

[00:00:30]

Sarah Adams: Great. And just for the record, could we get your birth date, please?

[00:00:32]

Charlie Wade: June 18th, 1984.

[00:00:35]

Sarah Adams: Cool. All right. So where do we start? Why don't we hear a little bit about milling. What do you do?

[00:00:44]

Charlie Wade: So I guess kind of back up, our family history in the milling business, we operated Wade's Mill, or our family operated Wade's Mill from 1880 to 1990, so I'm the sixth generation in our family to, I guess, make a go at the milling business. So Dad sold

our family mill back when I was five or six, so I've always had this interest to get back into it. So about two years ago, I started a small milling operation here in Roanoke, Deep Roots Milling, mainly catering to farmers' markets and a few bakeries here locally. An opportunity came up to kind of consolidate with Woodson's Mill over in Nelson County, which is a historic water-powered mill, so it was built in the 1790s, the stones, and they date back to the 1840s, and it's one of the last commercially-run water mills in the area. So it was pretty exciting. So, basically, the kind of products we're focused on, of course everything is stoneground, meaning that they're whole-grain products, so there's basically, I guess, detail on the milling operation itself, so you have a bed stone that is stationary, then a runner stone that's on top. Grain is fed between the two, with the stones rotating. It grinds it up and creates a flour or meal or whatever kind of product you're after. So right now we're focused on bread flours, cornmeal, grits. We do a bit of rye and buckwheat. Everything that we source, we made a commitment to work with local growers, so everything that we're purchasing grain-wise is coming from Virginia or the surrounding states. So I guess we've kind of designated our grain basket as being kind of Chesapeake Bay area, including West Virginia and parts of North Carolina.

[00:02:35]

Sarah Adams: Oh, great. There's so much there and there's so much more I want to hear just about what you've just told us, like starting at the very beginning, I guess, in 1880. So do you know anything about your ancestral people who started the mill? Do you know names or anything or what led them into it?

[00:02:54]

Charlie Wade: So I guess great-great-great-grandfather, to go back that far, but he apprenticed under his father-in-law that actually started in Nelson County, so it's kind of neat that I'm going back to Nelson County, kind of closing that loop. But he mentored under a mill that no longer exists, and I think the last name of that miller or his father-in-law was Harmon, so I really need to go back in and kind of do some research and look at the old county registers and see if there was a mill located in Massies Mill in Nelson County under the name Harmon, and try to figure out where that mill is or was. But anyway, he apprenticed there, and then later on, he leased Kennedy. I think it was called Kennedy's Mill at that point in Raphine. He leased that, then purchased it a couple years later and became Kennedy-Wade's Mill. So he ran it, and it was run up until the 1960s, when my grandfather had to close it, because at that point, a lot of the country mills were going out of business. Users were going more towards larger grocery chains, larger commercial flour, and there just wasn't a market for it anymore. Then Dad started that mill back up in the [19]80s and tried to make a go at it. He ran—

[00:04:13]

Sarah Adams: What do you remember about that? So if you were a child then when your dad started again in the e[19]80s, do you have any milling memories from early childhood?

[00:04:19]

Charlie Wade: Well, I never was old enough to work in the mill. I remember playing around the mill. Looking back on it, it probably wasn't the safest thing, but we were riding our little bikes around the basement of the mill or around the equipment and stuff. It was a lot of fun. Then when we did move, we moved up the road a couple miles. We were always close to it. But for whatever reason, I never spent much time and tried to work in the mill when I was younger, so that's why it was kind of the driving force to get back into this.

[00:04:47]

Sarah Adams: Yeah. So your dad, you said, stopped milling in the early [19]90s. Were there still other mills in the area, in Roanoke, in Virginia, that were still going at that point, or had it really fallen off?

[00:05:01]

Charlie Wade: I mean, yeah, it had kind of fallen off. At that point, Woodson's Mill, the one that we're at right now, its history is it fell into disrepair about the same time that Granddad shut down Wade's Mill back in the [19]60s, and it basically was left vacant for a long time. Then the current family that owns it, they bought it in the [19]80s and they're restoring it at the same time Dad was starting up Wade's Mill again. So I think that's kind of the trajectory of a lot of different mills around that same time period in the [19]60s. A lot of them just kind of went out of business and kind of sat vacant for a long time and still sit vacant.

[00:05:41]

Sarah Adams: Wow. But then from 1880 till the 1960s, that was just one generation after the other in your family, and your dad picked it up twenty years later.

[00:05:49]

Charlie Wade: Yeah, and then starting probably around the early 1900s, the stones—well, the stones are still left in there, but at that point, they installed roller mills, and that was kind of the fad, I guess the most technological machines of the time, and they were producing more refined flour there. But when Dad started back in the [19]80s, I guess he kind of recognized that whole grains were kind of the path forward, so he put the stone mills back in.

[00:06:21]

Sarah Adams: So I would love to hear a little more about those distinctions between stoneground and roller mills, which I assume uses rollers, but what kind of rollers? And just to hear the difference of how they process grains differently, how like the efficacy might be different or the efficiency.

[00:06:40]

Charlie Wade: Sure, sure. I'm by no means an expert on this, but I know some general knowledge. So roller mills are basically steel cylinders or ceramic cylinders, and instead of rotating—they sit side by side. I guess it's audio, so you can't really see my hand gestures. So they sit kind of parallel to one another, and there's very little space in

between them, and they're spinning at different velocities. One's spinning slow and one's spinning fast, so as the grain gets dropped into it, instead of grinding it, it basically shears it. There's a series of rollers with different gaps in between the cylinders. The first roller mill would have a wider gap and do the initial break on the grain, and then it would get sifted and passed back to another roller mill, which is a little bit closer, and as you progress down the line, you get a finer and finer flour. It's more like a surgical tool when you're taking that grain apart. So what you end up—the output of that process is basically just the endosperm of the flour, the starch, and this creates—and I guess they're doing this because the starch doesn't have any oils, it's more shelf-stable, so that flour can keep a lot longer and is more, I guess, more apt to the commercial production. But stone grinding is different in that you can't—I kind of liken it to roller mills are like a scalpel and stone mills are like a hammer, I mean, you don't have that control over, so when you grind it, you get all the germ, the bran in there, and you can sift it off to some extent, but most of the nutrients that's in the germ remains in the flour at the end of the day. But kind of the down side of that—and that's kind of why they moved away from it—is that it's not very shelf-stable. If you don't have cold storage, it won't keep very long. And it's definitely not as white, so a lot of preferences, when the roller mills went into production, people were looking for that really white flour, and that's why sometimes you see chlorine used or bleached flour to get that white flour. You can't get that product with the stone milling.

[00:08:58]

Sarah Adams: So it's not as refined, but is it still white flour as opposed to whole wheat flour because it is still being processed, or is it whole wheat because it's not being processed enough to actually be considered like refined white flour?

[00:09:12]

Charlie Wade: Kind of the way I think about it is whole wheat is if you're—so you can certainly sift a stoneground flour to get a white flour. What you're sifting, you're sifting the bran off and the large pieces of the germ off. I wouldn't necessarily call that a whole wheat flour. But if you're just grinding and then not sifting at all or just taking the really large pieces off, that can still be considered whole wheat flour because it contains pieces of endosperm, germ, and bran in it.

[00:09:41]

Sarah Adams: So for the grinding with the stones, where does one source mill stones?

[00:09:47]

Charlie Wade: So the stones at Woodson's, we think they came from Blacksburg. There was a stone quarry up on Brushy Mountain in Blacksburg, and I think that's where they came from. We can't verify that, but based off the texture of the stones, the parent material, that's kind of where we believe it to come from.

[00:10:07]

Sarah Adams: That's fascinating.

[00:10:07]

Charlie Wade: But you can buy modern stone mills. There are a number of manufacturers. Kind of the best-known one in the U.S. right now more historically has been Meadows Mill. They're based in Wilkesboro, North Carolina, and they've been around since early 1900s. I actually started off on a Meadows Mill and still have one of those. They're a little bit different. They're vertically aligned stones instead of horizontal, but, yeah, they're good machines. There's also a new company starting up in the Northeast called New American Stone Mills. They're going back to the horizontal style. They make a really good product. There's a company over in, I think, Austria, that makes mills that are fairly popular. And there's a couple of different European manufacturers.

[00:11:01]

Sarah Adams: What do the stones look like? Like how big are they and how heavy would they be? Because I'm thinking if they're coming from Austria.

[00:11:07]

Charlie Wade: I mean, you can get different sizes. There's no set size. Like I said, the Meadows Mill's that I have, it's a 16-inch stone, though stones at Woodson's Mill, they're 48 inches. Some Austrian mills are—you can get those in different sizes, so there's no single size.

[00:11:27]

Sarah Adams: The stones at Woodson's Mill that you think are sourced to a quarry in the Brushy Mountains, how old do you think those are, then? When would those have been—

[00:11:35]

Charlie Wade: We believe they were installed in the 1840s.

[00:11:37]

Sarah Adams: Wow. Wow.

[00:11:42]

Charlie Wade: Just kind of think about those were hauled over the mountains by horse and cart, trying to do those big things, and they probably weigh, you know—I don't know if they weigh a ton apiece, but probably close to a ton per stone.

[00:11:54]

Sarah Adams: Wow!

[00:11:56]

Charlie Wade: And there's two stones per set for the mill.

[00:12:01]

Sarah Adams: And if they've been in since the 1840s, so that would be, I mean, almost 200 years at this point, is there—or I'll say what is the life span of a mill stone and the replacement process? They just keep going?

[00:12:17]

Charlie Wade: Yeah, unless you crack 'em.

[00:12:20]

Sarah Adams: Wow!

[00:12:20]

Charlie Wade: I mean, but you, of course, have to resharpen 'em periodically, and that involves—you can either do it with a hand chisel, they call them mill bills, but it's basically, yeah, a chisel that you use to put in furrows and lands. So, I guess, back up, so the mill stone basically has two different portions of it. The furrows, which we kind of consider like valleys through the mill, and those are used for the cutting action, and then there's also the lands, so it's the flat portion of the stone, and there's rough—and those are for the grinding. So, basically, in the furrows also are used to convey air into the mill and also the product out of the stones, so as it's rotating around, the furrows act as a conduit to get the flour out to the edge of the stone and into the chute. Yeah, so you periodically have to redress those or resharpen those.

[00:13:15]

Sarah Adams: Who does that?

[00:13:16]

Charlie Wade: I attempt at it. I try sometimes. I've done it a couple times. I'm certainly not the best. I'm still learning a lot. But you can take 'em down to—like the Meadows Mill that I have had to take that down to their facility in North Carolina, had them resharpen it. But the stones at Woodson's, of course, you can't move those, so we do it ourselves or if we need to hire someone, we could get someone with a little bit more experience to come in and do that.

[00:13:46]

Sarah Adams: You say you're learning a lot, but there's so much that you know already, it's a real education. I would love to hear about your education of this. Is this stuff you grew up knowing, growing up with it in the business as a child, and also, you know, generational lore? Or is this self-education?

[00:14:04]

Charlie Wade: The family was self-education. I mean, I was always aware of the milling business up until I started it or started working in it, but never had any practical experience. So, yeah, a lot of self-education. I've been able to connect with different people that are doing it and kind of get their input, get their thoughts and kind of mentorship. Working at Woodson's, Steve Roberts is the miller there, or has been the

millers there, and he still is there. They're kind of showing us the ropes. He's been a huge help. A lot of it's just, you know, learn as you go.

[00:14:40]

Sarah Adams: What were you doing before you restarted the mill?

[00:14:43]

Charlie Wade: So I'm a trained forester, and that's what I still do, so the milling is still part-time for us. But, yeah, I work for a forestry firm now.

[00:14:54]

Sarah Adams: And what led you to do the milling, to add the milling? You already had a job and were doing something. What was the call?

[00:15:05]

Charlie Wade: I don't know. I'm always looking for a side hustle, and that seemed like it was an appropriate one, just had a real interest in it.

[00:15:05]

Sarah Adams: Are your parents still living? Is your dad still—

[00:15:16]

Charlie Wade: Mm-hm.

[00:15:16]

Sarah Adams: So he's probably pretty helpful, I would guess. Does he—

[00:15:16]

Charlie Wade: He's a good base of knowledge, yeah.

[00:15:23]

Sarah Adams: And what was his knowledge source? Was again just tracing it backwards just because it's a family line?

[00:15:30]

Charlie Wade: Well, yes, but he, of course, grew up at the mill working with my granddad, so he had a lot of experience going into it.

[00:15:38]

Sarah Adams: Can I get your parents' names?

[00:15:40]

Charlie Wade: Charlie and Susan Wade.

[00:15:44]

Charlie Wade: Okay. And both spelled as they'd be spelled, S-u-s-a-n and Charlie like you?

[00:15:50]

Charlie Wade: Yep.

[00:15:53]

Sarah Adams: And so you said—what year did you restart things? That was 2017?

[00:15:59]

Charlie Wade: Yeah, 2016, 2017, yeah. Yeah, I started off with a small eight-inch stone mill just to kind of learn the ropes, play around with it for a while, did the farmers' market, and then I upgraded to a bigger 16-inch mill. That gave me a little bit more production capabilities. Put some sifting equipment in and started trying to service a number of bakeries.

[00:16:25]

Sarah Adams: And where were you sourcing your wheat at that point?

[00:16:25]

Charlie Wade: Basically same place we're sourcing it now. It's been the same set of growers.

[00:16:25]

Sarah Adams: And were those relationships you made at that point when you got started and were still experimenting?

[00:16:41]

Charlie Wade: Yeah. So the first grower I worked with and still one of the main growers I work with is Daniel Austin over in Rocky Mount, Virginia, and, yeah, I connected with Daniel early on through a baker friend. My friend Michael, who owns a bakery near Bedford, he had bought wheat from Daniel, but he—no, no, let me take it back. No. So another farmer had mentioned that Daniel was growing food-grade wheat, so that's how I reached out to Daniel, and that's how I connected with Michael. Yeah. But there are just not that many food-grade grain growers in the state.

[00:17:23]

Sarah Adams: What's the reason for that?

[00:17:24]

Charlie Wade: Well, I don't think there's much of a market for it, and so a group that we're part of is the Common Grain Alliance, which is a kind of advocacy group that's trying to promote more, I guess, interest and knowledge about grains, because everyone goes to the farmers' market and recognizes that, you know, they want to buy local produce, they want to buy local meat, but they never really give much thought to where the flour they use is coming from. So the Common Grain Alliance's main objective is to

kind of put that in front of people, make them more aware of it. But historically, there hasn't been much of a market for food-grade grain in the state. The state isn't the best suited for wheat production. We have really hot, humid summers, which makes fungus and diseases an issue with the wheat, so it's been a challenge. Yeah, just not a lot of people are interested in it.

[00:18:28]

Sarah Adams: What kind of wheat do you use?

[00:18:30]

Charlie Wade: Right now it's all hard wheat for bread flours. We use a variety called New East, which is actually more of a modern variety. I think it was bred out of NC State to do well in the East, on the East Coast.

[00:18:48]

Sarah Adams: That's North Carolina State?

[00:18:49]

Charlie Wade: Yes, North Carolina State. So it was bred to do well in the humid climate and it's more of a modern wheat, but we also like to incorporate heirloom wheats, so we're working with Red Fife and Turkey Red. Both of those have probably been around since the early 1800s. But, yeah, and also, of course, we work with corn as well, and

we're using heirloom varieties of corn, Bloody Butcher being the main one, Hickory King, and then also John **Hall**.

[00:19:25]

Sarah Adams: Do you know anything about the origins of those names? I gotta know where the name Bloody Butcher corn comes from.

[00:19:32]

Charlie Wade: Yeah, I mean, Bloody Butcher itself has a great flavor to it, but I think the main marketing asset is its name. Everyone asks that question. But basically it's a red corn, and when you mill it, it's got that speckled red in it and it looks like the apron of a butcher at the end of the day. So that's kind of where the name came from.

[00:19:54]

Sarah Adams: Are there differences between milling corn and milling wheat?

[00:19:58]

Charlie Wade: I mean, you're basically after different products. With wheat and, of course, the grain itself is different size, different hardness, but with corn, we're basically trying to get two products off of it, grits and cornmeal. Grits has been the bigger seller of the two for us, so we generally, when we grind corn, we try to grind for grit, so we're not grinding very close. We're leaving a decent gap in between the stones to get the coarser

material. Wheat flour, we're just trying to—right now we're doing a single pass over it, trying to grind pretty tight to get as a fine a flour as we can.

[00:20:37]

Sarah Adams: And for the wheat flour—so for the corn, you're doing grits and you're doing meal. For the wheat flour, the end product is the same; it's all like a flour. It's not different varieties of flour.

[00:20:53]

Charlie Wade: So we can do different extractions on the flour. Right now we're doing a whole wheat flour, which is completely unsifted. We do a flour that we call a brown flour, which is 90 percent extraction, so we're basically sifting 10 percent off, and that's mainly the bran. And we're doing a gold flour, which is 80 percent extraction, so, again, we're taking 20 percent off of that. I had been doing white flours, and that's generally between a 60 and 70 percent extraction, so, again, removing 40 percent of the flour, the bran and germ.

[00:21:29]

Sarah Adams: And what are the different uses for the different flours?

[00:21:33]

Charlie Wade: You know, that's a good question.

[00:21:37]

Sarah Adams: That's not your department. [Laughter]

[00:21:38]

Charlie Wade: Yeah. That's one thing, I'm not a baker. That's why I've surrounded myself with bakers, to help out. So that's part of the new milling operation at Woodson's, is myself and two other guys. One is a chef and baker out of Blacksburg, Aaron Grigsby, and he's been a huge help basically in product development and product testing, and make sure that we—you know, what we're producing is useable for bakers. And also the variety of wheat kind of has an effect on its end product, too, because, you know, the different wheats have different protein levels, and this can be different even within one variety. It can be different from year to year or different from farm to farm, just depending on what the climate is and what the growing conditions were any given year. So the lower-protein wheats, they tend to make more all-purpose flours, biscuit flours like croissants, and the higher-protein flours are more good for like hearth-type breads. So last year, our New East wheat was in a protein level between like 10, 11 percent, and that generally made it like a good like croissant-type flour, and kind of the Red Fife we're working with and Turkey Red, that was probably around 13 percent protein, and that generally made a better bread than the New East did.

[00:23:07]

Sarah Adams: What—I'm sorry. Actually, I wanted to go back for a minute just to when you got started in this a few years ago, for when you drew back in. What do you

remember from that, from, you know, when you were first getting started, and I know you said you were experimenting with different size mills, kind of moving up in size, finding sources, etc. Are there any specific experiences you remember? Anything like any amazing days going at it or any disappointments?

[00:23:36]

Charlie Wade: It's pretty fun. I guess I was a little naïve starting out and maybe a little, I don't know, tight with my cash too. I didn't want to buy any sifting equipment, so I thought I could build one.

[00:23:48]

Sarah Adams: How did that go? [Laughter]

[00:23:48]

Charlie Wade: It was a fun project. My father-in-law helped me build it, and we had a lot of fun putting it together.

[00:23:58]

Sarah Adams: What does something like that look like, for a sifter? Like how—what are the dimensions and what—

[00:24:02]

Charlie Wade: So this one is pretty small. I don't know. It's maybe three or four feet long. There's basically two different types of sifters. You can do a reel sifter, which is basically it has a cylindrical reel inside of it with a screen on that and it's just rotating around, and then as you progress—so at the input of the sifter, you have your fine mesh, and then you progressively get coarser at the end of it so you get your fines out at the top and your coarser stuff at the bottom, and you can separate that into different products. Then you have eccentric sifters, and this is what we use at Woodson's. This is the commercial one that we bought, but it's basically a stack of sieves and then the flour comes in the top. Again, you get fine at top, then as you progress down, you get coarser sieves, and it's just basically shifting back and forth. Again, I'm making motions here, but you can't really see it. And then you have different outlets on that so you can get different products off of it. We built a reel sifter, and, again, it's about four feet long and about five feet tall. But, yeah, it works to some degree. It doesn't work as well as we needed it to, but it was a fun project.

[00:25:20]

Sarah Adams: And to do it, is that just something, you know, you know what a sifter is and you know what they look like and you just go from there? Or can you buy sifter plans?

[00:25:28]

Charlie Wade: [Laughter] No, unfortunately not. I don't know if anyone out there wants to make milling equipment, but I think there's probably a need for the small-grade stuff or the small-scale stuff, because, you know, all the equipment you can buy is out there, really small kitchen size or it's really big. There's nothing in between. So I think for some engineering person out there, that could be a good niche. But basically we—and there's not much modern literature on mills, but, luckily, the technology hasn't changed. This technology's been around for thousands of years. And there's a really good book that was written in the probably 1920s, called *Practical Milling*, and it's got all the equipment schematics and diagrams and stuff in there, so we took one of those and kind of ran with it.

[00:26:21]

Sarah Adams: Was that a book that was published in the U.S.?

[00:26:23]

Charlie Wade: Yeah, yeah. I forget the guy's name. [B.W.] Dedrick is the author? Yeah, just *Practical Milling*. Anyone interested in the milling process, it's like the gold standard.

[00:26:37]

Sarah Adams: What kind of community is there for you, especially when you were getting started, but certainly now? I know you talked about Common Grain Alliance. So is that something when you picked up milling, did you pick up with them or are they newer than that?

[00:26:54]

Charlie Wade: Yeah. I started before they were formed, but, yeah, they've been a huge asset. I mean, it's really a close-knit community. Basically everyone that we're selling to is part of that community, and everyone we're buying from is part of that community or part of that network, so, you know, it's been a huge asset for us from a marketing standpoint and also from a knowledge standpoint too. So we're really excited about that group. But, yeah, so that was formed maybe a year after I had started, and I was actually one of the founding members of it.

[00:27:30]

Sarah Adams: Oh, great. And are you networked nationally or internationally with other millers? Is there any kind of online community?

[00:27:38]

Charlie Wade: I met a lot of people through Instagram, just send a message out. And there's a great mill in Edisto Island, South Carolina, Geechie Boy, and Greg Johnsman,

that runs that, he's been a huge help and he's always there to answer any questions and give some input.

[00:27:57]

Sarah Adams: Can I ask how that's spelled? Esto Island, you said?

[00:27:59]

Charlie Wade: Edisto Island.

[00:28:05]

Sarah Adams: And what's the name of the mill, if you don't mind spelling it?

[00:28:06]

Charlie Wade: Geechie Boy, G-e-e-c-h-i-e, then Boy.

[00:28:13]

Sarah Adams: Got it. And Edisto is E-d-i?

[00:28:16]

Charlie Wade: S-t-o, I think. It's right outside—pretty close to Savannah, that area down there.

[00:28:22]

Sarah Adams: So it's interesting, you've gotten—you know, been doing this for a few years and it seems like as you have the last two or three years under your belt, we reached a pretty unprecedented time certainly in recent history and in the longer history too. And one of the truly probably unpredictable fallouts from that [COVID-19] was flour became a hot commodity.

[00:28:47]

Charlie Wade: Yeah, yeah. You would have never thought that there'd be a run on flour and couldn't buy it in stores.

[00:28:51]

Sarah Adams: Absolutely. So I would love to hear all of your thoughts on that, even if we could do it as kind of a timeline of when that sort of came on your radar that sourcing flour was a problem for people.

[00:29:05]

Charlie Wade: Yeah, that was—we kind of missed that. At that point, early, at the beginning of the year, I made the decision to move my stuff, my operation over to Woodson's, and we were in that process of getting that moved over there and kind of get set up, and then COVID hit. Everything shut down. At that point, the owner, Will [Brockenbrough], he was running it part-time as well. He had some other family stuff to take care of, so basically the mill wasn't run for a while. We weren't able to get any product out. Then kind of once all the dust settled there, we tried to get that going again,

but Steve Roberts, the miller that's currently working there, he—we wanted to have social distancing in place, so he didn't want to be at the mill at that point, and we still needed his knowledge to run everything, so we actually tried to get my electric mill set up. We got that in place and were running that a bit, but it wasn't as much production as we had hoped. By the time we finally got up and running again, the demand for flour kind of stabilized and we kind of missed that peak. But, I mean, it's interesting that it kind of—I think the silver lining in this whole thing, or I hope the silver lining will be that, you know, people kind of recognize that the local food system is very important and not be as dependent on the commercial brands, you know, commercial distribution.

[00:30:35]

Sarah Adams: Yeah. Where do you see—how do you see that playing out, you know, in terms of since there are more and more artisan food production operations sort of across different ingredients and commodities? How do you see that just playing out in the future if people will continue to turn more towards more specialized sources?

[00:30:35]

Charlie Wade: Yeah, I hope they do. I can't say with any certainty that they will. It seems like we're going to be in this COVID environment for a while, so hopefully people will use this opportunity to find the smaller-scale producers and then once things start to normalize, we'll be able to still maintain these relationships and maintain them as customers.

[00:31:23]

Sarah Adams: What does production scale look like for an operation your size, and how does that compare with commercial-brand flours?

[00:31:34]

Charlie Wade: I mean, if we were running—I mean, on any given day, we probably have the capability to do a ton of wheat.

[00:31:43]

Sarah Adams: Literally one ton, 2,000 pounds?

[00:31:44]

Charlie Wade: Yeah, yeah, yeah. And we could scale it up pretty easily, because right now—well, yeah, there's two sets of stones both dating back to 1840s. One is only being used. We could put the other one back in operation. We could put another mill in there and run that, so we could easily scale it up quickly, but at that point, we'd be out-milling the demand, and there's just no reason to do that right now. Yeah, we could easily do a ton a day, but on our milling days we—so we're milling twice a month right now. That's kind of the level that we need to be at right now, and we do about 1,500 pounds any given day.

[00:32:32]

Sarah Adams: And do you do the packaging also?

[00:32:33]

Charlie Wade: Yeah, yeah, we do packaging. Right now we're doing everything by hand. We have packaging equipment that's just kind of sitting idle, so we're working on getting that picked up and put that back in operation.

[00:32:46]

Sarah Adams: And then how does that end of it work for packaging? So once the flour's milled, you have just a huge hopper full of flour?

[00:32:53]

Charlie Wade: Right now we're putting it into bins. Then we bag out of the bins. Once we get the bagging equipment in place—our sifting equipment's on the second floor—we'll put the baggers on the first floor so as it's coming off the sifter, it's going to go right to the bagging machine and into the bag, so it'll be a lot more efficient.

[00:33:14]

Sarah Adams: And then you do deliveries and—

[00:33:17]

Charlie Wade: I don't personally—that's been a hurdle, too, but I was able to connect with a distributor in Lexington, Virginia, that does all our deliveries for us.

[00:33:28]

Sarah Adams: And you said the outlets that vend your flour are mostly bakeries, you said, at this point, or they're retail flour?

[00:33:36]

Charlie Wade: Yeah, and we're doing some retail to different small chain, you know, kind of grocery stores like gourmet grocery stores, but mainly what we're kind of focused on right now is wholesale bakeries. Before COVID hit, one of the big sides of business for Woodson's was restaurant sales, and that's kind of dried up right now, but we hope to get that—you know, once that starts, those get back to operation, we hope to scale that up too.

[00:34:09]

Sarah Adams: That's great. What—sorry. Give me one sec. Where would you see for the future—what would your ideal be for production for scale but also delivery and everything else? I mean, where—would you like to stay more or less local? Would you rather go broader outside of Virginia?

[00:34:42]

Charlie Wade: Yeah, I think you need to broaden if you want to make this a full-time venture or make it more profitable. I think you have to look outside of the state. We would at some point hope to connect with a larger distributor, have more regular sales,

but, yeah, right now we're just kind of focusing on getting the operation up and going, kind of getting efficiencies in place, try to get our feet under us right now.

[00:35:10]

Sarah Adams: And do you use your own flour at home? I know you said you're not a baker, but—

[00:35:14]

Charlie Wade: Yeah, I do. My wife is gluten-free, so I have to double down on my flour consumption just to make up for it.

[00:35:21]

Sarah Adams: [Laughter] That actually goes to a question I had about how you accommodate that, especially asking about future plans. You know, we're coming out of a moment where people are buying more flour than ever before, but we're also in a moment where fewer people are eating flour, even though most people still do, but fewer people are eating wheat than they have historically, so I'm curious about how you negotiate that and if you have plans to accommodate that market or how that would work.

[00:35:49]

Charlie Wade: I don't think we'll ever have a gluten-free product. Of course, corn itself is gluten-free, but we don't—I mean, we don't have a separate facility for it. We break down equipment and clean in between the runs, but there's no, you know—there's

always—we can't label anything as gluten-free because there's always that chance of some sort of contamination.

[00:36:11]

Sarah Adams: Right.

[00:36:12]

Charlie Wade: But I don't know. I mean, we're trying to focus on the heirloom wheats that may not have the same issues as more modern wheats do. Personally, I think a lot of the issues with, you know—the digestive issues and whatnot may not be with wheat itself. I think it's more with the way the wheat is grown and the varieties of wheat. So we, you know, again try to focus on heirloom wheats. Not all the growers we work with are organically certified, but all of them do use higher-than-normal conventional standards. We don't—there's no herbicide or no chemicals sprayed on the wheat itself. So we try to take steps like that in our sourcing to kind of, you know, provide the best product that we can.

[00:37:01]

Sarah Adams: How much time have you spent with your wheat sources? Have you witnessed or participated in the growing or harvesting process just to get a hand in, or is it just something you educated yourself about secondhand?

[00:37:14]

Charlie Wade: Yeah, I've never actually been there when they're harvesting it, but I've met with all the growers. I've been out to see them, know them all. I'm able to call them up at any point, and we have a good relationship.

[00:37:28]

Sarah Adams: And would you ever expand to other—to milling things? You do flour and corn now, but to buckwheat or other grains?

[00:37:38]

Charlie Wade: Oh, yeah. I mean, we do buckwheat already. We do rye. Being a forester, there's a great book out there called *Tree Crops*. J. Russell Smith, I think, is his name. Anyway, I read that book a number of years ago, and, you know, it really got me interested in trying to kind of take the milling interest and my forestry background and kind of combine them into one, so nut flours have always been an interest of mine, mainly chestnut flour, acorn flour, and trying to figure out a market for—I mean, we know there's a market for chestnut flour, but, you know, different types, acorn flour, trying to figure out what that market is and the processing around that.

[00:38:23]

Sarah Adams: What kind of history is there for acorn flour? What has it been used for and—

[00:38:28]

Charlie Wade: Oh, historically—

[00:38:27]

Sarah Adams: —where and when?

[00:38:29]

Charlie Wade: I mean, it's been part of the Native American diet. I mean, I think worldwide it's been used as a crop or as a food source.

[00:38:42]

Sarah Adams: And is it the kind of thing—does acorn flour makes a flour that looks like wheat flour, just a powder?

[00:38:50]

Charlie Wade: You grind it. It creates the same type of flour. There's a lot of research that needs to be done on this before it can actually give production, but, yeah, I mean, it's difficult because, you know, I guess the main obstacle would be sourcing the acorns, getting the infrastructure in place to go to harvest them. Then you have to grade them, you have to shell them, then you have to leach them because they have tannic acid, and then dry them, then mill them, so it's a pretty intensive process. But, you know, I just think it's pretty cool, be interested to try it.

[00:39:30]

Sarah Adams: And then I'm fascinated that that's something you've thought of as a combination of your backgrounds in forestry and then milling, that it sort of draws on both. I'm curious about what else in forestry—how else do you see that applying to the milling you do? Or do you still see combinations of the two?

[00:39:51]

Charlie Wade: Oh, I mean, like, yeah, no, I always had agroforestry-type schemes and plans. It'd be nice to do more like a polyculture farm, but I'm not sure that's necessarily related to the milling business, but trying to use the nut products and produce a flour out of those, that's kind of the main focus.

[00:39:51]

Sarah Adams: That's great. And what about your own family? Does your family—you're married and you have two children, is that correct?

[00:40:25]

Charlie Wade: Yeah, we have two girls, a four-year-old and I think she's sixteen months now.

[00:40:33]

Sarah Adams: And are they active or involved in the milling process at all?

[00:40:37]

Charlie Wade: [Laughter] Not yet.

[00:40:39]

Sarah Adams: The little one's probably too little, but yeah.

[00:40:40]

Charlie Wade: Yeah. The four-year-old, I think she gets excited. For us, it's like an hour-and-a-half drive to the mill, so she hasn't ventured down there too much yet.

[00:40:53]

Sarah Adams: Is it something that she understands that you've done and that her grandfather's done and that his father and grandfather have done?

[00:41:00]

Charlie Wade: I mean, she knows that I do it. I don't know if she realizes what the family history is.

[00:41:06]

Sarah Adams: Yeah, that it's in her blood.

[00:41:08]

Charlie Wade: Maybe it'll be the seventh generation to do it.

[00:41:11]

Sarah Adams: Yeah, that's right. And what about—going back to Common Grain Alliance, how many people are involved in that or how many organizations?

[00:41:24]

Charlie Wade: It think we're up around like 100 members now.

[00:41:27]

Sarah Adams: Wow!

[00:41:28]

Charlie Wade: And it's a combination of growers, a couple different millers and bakers, and then just people generally interested in the process.

[00:41:36]

Sarah Adams: And where—what is the region that that covers? Is that a Southeast thing or—

[00:41:42]

Charlie Wade: Our target area is the Mid-Atlantic, so Maryland, West Virginia, and then parts of North Carolina.

[00:41:51]

Sarah Adams: And is there much exchange between you—I know you talked about going to like the Geechie Boy Mill, so do you travel much or do you host other millers or just other people in the industry or industry adjacent?

[00:42:06]

Charlie Wade: Not yet. Yeah, the reason I was—Geechie Boy was kind of opportunistic. I was down there for a conference in Savannah, so I stopped over to visit with them while I was down there. I would love to host people at Woodson's, but right now is not the best time to do that, but I would love, once we get out of all this, to start having more meetings like that, bring people together, kind of share ideas.

[00:42:33]

Sarah Adams: Yeah. And you've talked a lot about sources, you know, books and people in the broader community. Do you have other influences, other mentors, inspirations that have been a force or a guide?

[00:42:50]

Charlie Wade: No direct ones that I can really point to. I've always been motivated to always have—to try new things, always have these side projects, and I've always had that motivation to work on different things.

[00:43:07]

Sarah Adams: Yeah, so the motivation and then the lineage combined, the history.

[00:43:12]

Charlie Wade: Yeah.

[00:43:13]

Sarah Adams: That's great. Well, do you have any questions, anything else you'd like to talk about that we haven't covered yet?

[00:43:22]

Charlie Wade: No, I don't think so.

[00:43:24]

Sarah Adams: Anything? If you could make or let everybody know, what's one thing you wish the world knew about regional milling or Virginia-based milling or even about your mill, what—

[00:43:38]

Charlie Wade: Just think about what they're eating, you know, where their flour's coming from, just kind of know that there are producers out there like us.

[00:43:49]

Sarah Adams: Yeah. Actually, let's go back to that quickly, because we talked about that a little bit, about where you fit into a broader food chain and, you know, it's

something that you want people to know about these smaller small-batch producers.

Where do you see that position? How do you see that kind of being promoted more or people being able to take better advantage of it?

[00:44:17]

Charlie Wade: Yeah, that's a good question. Yeah, I think a lot of it is on us, I think, at least me in general. I don't really use—I'm not a very good marketer. I don't spend a lot of time trying to push our brand. I get kind of set into what I'm—you know, just the process itself and not necessarily on the marketing of it. So I think as producers, we could probably do a better job at that. Yeah, and consumers looking for us, I mean, just when they go to the bakery or coffee shop or wherever they get their bread products, just kind of ask where they're getting their flour from, you know, just kind of be more informed like that.

[00:45:00]

Sarah Adams: Mm-hmm. All right. Well, anything else you'd like to add?

[00:45:07]

Charlie Wade: No, I think that covered everything pretty well.

[00:45:11]

Sarah Adams: All right, great! Well, thank you so much.

[End of interview]