Kinney Baughman Interview — Interview was conducted by Willard Watson and Ashley Warren in Kinney's office at Appalachian State University.

Q1 – Who are you, when you were born?

My name's Kenny Baughman. I was born July 6th, 1953 in Columbia, South Carolina. My hometown is Wagner, South Carolina. A small, little one horse town.

I came to Appalachian in 1971 on a basketball scholarship, and fell in love with the place, and tried to leave five times, and have come back five times. The last time was 32 years ago, when my buddy Jim Morton asked me to help him build the Profile Trail on Grandfather Mountain. I had just finished my master's degree in philosophy at the University of Georgia. And while I was at the University of Georgia, I went by the book store, and got a copy of *Mother Earth News*. In the middle of the magazine it had a full page ad. "You can make beer at home. You can even make dark beer at home, 30-day money-back guarantee" and I said, "No, you can't make dark beer at home."

I just had a scientific curiosity in the process of brewing beer. And, before I went to graduate school, I spent a year in Belgium playing international basketball. And that's where the whole thing with beer started for me. There I was in the middle of Belgium, which is right smack dab right in the middle of some of the best beer in the world hands down. But, back then I didn't know the difference between malt, and hops. I just knew I was someplace special and and so over the course of that year I developed a fineness for Gurrs and Lambic beers. (Gurrs, Lambic, that's the Lambic with no fruit in it. The framboise is a gurrs with raspberries.) I had a Belgian family, the treasurer of the club I played for, I lived with for the first month and a half

before I got my flat across town. But they invited me over to their house every Sunday, we'd start eatin' at about twelve o'clock, get up from the table at about four. And then we'd retire to the veranda and have a yellow plum brandy or a blue plum brandy or a raspberry brandy, it'd be a different one and I developed a taste for those things. Got back to the states you can't buy it, so what does a home brewer do? He learns how to make it himself. And my *Brewhe* it turned out is thermostatically controlled it had a lock down lid, so I took my wurt chiller, ran it backwards and made a still for myself.

The Belgians used to laugh at me, because in 1978 the most interesting beer in America was Michelob Dark. [Laughs] You know so they thoroughly made fun of me, as a beer drinker from America. And, so, I had all that sort of the background there. I got this kit. 30-day moneyback guarantee. The equipment just turned out to be real cheap. It was one pound of light malt extract, and you had to go down to the grocery store, and buy four pounds of cane sugar. You know I had about a half a pack of pelletized hops, and I got some yeast with that too I guess. So, I made my first batch of beer. Hey you know it was okay. I sent the equipment back, got my money back and went down to the local hobby stop, spent same amount of money, got a lot better equipment, and got to know those folks, and I went nuts with it.

The next batch of beer to make dark beer whatchu' did was, you took the one, you took the one pound of malt extract, and you took a pound o' dark [laughs] dark sugar, [laughs] and put in there! But, it gave you a little bit of a darker, a little more body. And I said, "Man, you know what? There's a lot o' potential here I think," and I had approached it thinking, "I wonder if you could make a beer as good as Budweiser at home?" And after my second batch of beer it was like, well to hell with Budweiser this might be my ticket back to Belgium! And I went crazy

with it. Went down to the Science Library (at the) University of Georgia. Went through every brewing journal they had. Anything that remotely related to a home brewer, that I might marginally understand I Xeroxed, I got a stack, I still got a stack of those articles like that, and I just started devouring every book I could find. All the books came from England, and, they had these bizarre ingredients like, "treacle." What the hell is "treacle?" That didn't even show up in my dictionary. Turns out it's molasses, and then they called for licorice sticks. Well man, if I don't have any licorice sticks, am I going to mess the beer up? You know you had a million questions to ask, and nowhere to go to get confirmation on it. So I studied the process I took the scientific approach.

I had the worst day of my life. (Laughter) It was after I had finished my graduate work. I was trying to parlay my formal logic training into a job in the computer world, and I didn't go to the career office until after I graduated - because I was too busy doing my doggone thesis, and trying to get out of school! I had laid a few fleeces for graduate school, and didn't get into any graduate schools. All of a sudden, I've got a Master's in Philosophy, and nothing to do, and nowhere to go. So, I go by career placement office, and they say, "humph you're graduated, we can't help you."

So, through one night of trying to make four batches of beer at once, and all the carboy cleaning, and everything. I had the idea that what the homebrew world needs is a fermenter that takes the yeast away from the bottom instead of me spending all of my time racking the beer off the top. And that's when I came up with the idea for the upside down fermenter, and I started my little business Brewco., and started selling that item, and I was in partnership with the only other home brewer that I knew Mike Morrissey who was a hang glider up here, and he

was importing the home brewing *Brewhe*, which was the most high tech piece of equipment at that time. So, we went into business together and he was bringing in that from overseas and I manufacturing the *Brewcap*, the upside down fermenter.

Well this is how I got invited to be the brewer at Cottonwood. *Brewcap* was my little bright idea. All that muck on the bottom is a pain and what I was going through was I had to sterilize the 5-gallon carboy and I had to siphon it off into to my next carboy, which I had to rinse out *three times*! Then I would rack into it, then I'd take that carboy that I had, then I had to clean it out and let it soak for 30 minutes. And this went on. I started at ten at night and finished at two o'clock in the morning with a severe back ache and an intense desire to figure out another way to do this. So the first idea I had was a cylindrical conical fermenter and then Mike and I started collaborating on this, and between the two of us we ended up coming up with the *Brewcap*, because all I had to do was get this little cap manufactured which cost me about two-dollars apiece. I was looking at vacuum form, 5-gallon cylindrical conical fermenter that was gonna cost me \$55 apiece which would have ended up being \$200 in the store and I didn't think anyone would buy one - if everybody was as cheap as I am. So we got that down and sold it for \$14.95 - retail. Then you can just take your standard carboy which every home brewer already had.

And we figured that out after I got the devastating news that \$55 was what it was going to cost for the fermenter. We were sittin' and I had my carboys in the corner of the living room and they're fermenting away and just sorta lookin' at it and then all of sudden I realized, you know what, if you take that carboy and turn it upside down, it is a cylindrical conical vessel. The

problem was if you plug up the bottom of the carboy you were gonna blow that thing apart during fermentation, and that's where we were stuck for several weeks.

So Mike had aquariums, he was a big aquarium builder. So Mike realized with all these tubes bubbling, and everything, he said, Kenny, not only can we take the yeast out of the bottom, we can take the CO2 out the bottom too, BOOM we were back in business, and that is how Brewco. was born. I put all of that together, Jim gave me a call, come up to Boone, let's build the profile trail, and I came up to here and along with all this was a reputation for brewing beer, it was 1985, it'd only been legal for seven years.

Jimmy Carter passed the law in 1978 that made home brewing legal for the first time since Prohibition. Great thing that he did, and this whole craft brewing industry grew out of that. I was really fortunate that I just happened to be there at the cutting edge. So once I had my little home brewing business then I packed it up and would take it to the National Home Brewers Conference, the biggest party in the United States, every year. One hotel filled with the most enthusiastic brewers in the country, every one of them bringing the best beers that they had brewed that past year and cannot wait to share it with you. It was unbelievable.

Q2 – What is a Gurr, a Lambic, and Brewhe?

Gurrs, Lambic, that's the Lambic with no fruit in it. The framboise is a gurrs with raspberries.

Brewhe was this device, it was a 7-gallon polypropylene bucket that had a heating element inside that was thermostatically controlled. The same element you would see in tea pots all over England. It was a boiler and mash ton all in one. It was quite the rage in its day. The best book, the most technical book that you could get on brewing was "The Big Book of Brewing" by

Dave Line, who had a tragic accident and died at an early age and none of us know what that tragic accident was, that's always the big mystery in the brewing world was what happened to Dave Line.

He goes through all the different ways you can make beer from grain, this was the only resource that we had for how to brew beer, all grain beer. He says you can do it this way, you can do it that way, you can do it this other way, or you can just buy a *Brewhe*. So that was the biggest sales pitch we had for the *Brewhe* and we sold copies of The Big Book of Brewing along with our *Brewhe* when we sold it.

I took out ads in *Zymurging Magazine* for my wares and asked me to send me a self-addressed, stamped envelope for more information, and then I would send those back and then people would send me a check and then I'd send them a *Brewhe* and a *Brewcap*. And I did that for 14 years. It was great, home based business, it was a wonderful thing. I loved it.

So with that I had this reputation around town, that I brew beer, and there wasn't but just, a small handful of people who did. So, all those home brewers were really enthralled by this because you know brewing beer is like alchemy. You know, you're takin' lead, and turnin' it into gold. You know, and it's magic, and it's art, and it's science, and it just does a lot of things right. We all wanted to make our living at it if we could, but the three tier distribution system was in our way."

Q3 – What is the three-tier distribution system?

After Prohibition, and the brewery's opened back up, they passed a law that if you brew beer, you can't sell it. And so, all breweries had to turn around, and sell all of their beer to a

distributer. That's where distributorships came from. Then, your distributors would then go turn and sell to restaurants, and grocery stores, and package stores. And, if the brewery wanted to sell any beer at the brewery, then they would sell it back to the brewery, so that they could sell it. If they were going to do that. So, that was the legal structure that was preventing the craft brewing industry from taking off. So this is like mid-80s to the early-90s. And lots of talk about how can we bring the small brewery back, well we've got to get rid of three tier distribution system and so state by state, that's what happened. Some advocate in each state would go before the legislature and explain that if we could make an exception to this rule there's a chance here for a whole 'nother industry to develop. You know, and the thought of having small breweries open back up was, you know, a pretty easy sell. And Uli Bennewitz down at Weeping Radish (Brewery) is the guy, he was from Germany, he was the one that got the legislation changed in North Carolina.

North Carolina was one of the first states in the country, and so basically what it was they were like, "Yeah we can still keep the three-tier distribution system, it's just that until you sell 250,000 barrels, you don't have to sell to a distributer." So that'll allow the brew pubs, in particular, to brew the beer on premise and sell it without having to sell it to somebody else and have it come back to 'em. And so state by state, started making these exceptions to the three tiered distribution rule. They're different, every state has their own limits, that magic number when you got to start sellin' to the distributer. You could certainly start selling to a distributer before that if you wanted to if you want to get in to... but the brew pub was the only thing I was really interested in, so we were all set up for that.

Now, Bart Conway who was a restauranteur here in town was runnin' Tumbleweed. The noise started to build, you know he knew Uli I think from the restaurant business, I guess Uli probably got him excited about it and he decided he wanted to start a brew pub. And he had run into a guy in town who could brew a little beer and they started brewing beer 5-gallons at a time in a little house that was up behind where Tumbleweed was, where that new noodle place is. It was literally a brew house. I'm going to say this diplomatically but they were brewing some of the most foul beer you've ever tasted in your life, they could not give it away – they literally could not give it away. And the guy who had started this, he had been doing it for two or three months, and his wife got a job down in Asheville and all of a sudden here's Bart, he doesn't have a brewer.

He gave me a call one day, to ask me if I would be interested in brewing beer. Well, yeah. Of course, I had finished building the trail at Grandfather, I was teaching part-time in the Philosophy department (at ASU), I was running my home brewin' business out of my house - that's all I was doin'. I had enough time to take this other job on, in addition to those other two things. So, we made an agreement, and I promised him I would make him better beer. It was just a matter of cleaning up, I mean they were washing their carboys out with dish soap and just doing stupid things really, so I cleaned that up. Burton Moomaw came in and helped me, he's the acupuncturist downtown, he was just getting' his climbing business started and just needed a little extra income too, and so we kinda went in partners there for two or three months and them his business really started takin off and I just ended up with it in my hands.

So we were starting out and we were gonna have the Black Bear Stout, and the Grandfather Gold, and the Appalachian Amber, those were our three main beers and I was explaining to the

wait staff that these were gonna be the beers and the wait staff said, "You think I'm gonna turn around and tell these people we're gonna sell Black Bear Stout, Grandfather Gold? Your crazy, you're just making up with fancy names so we can fool people into drinking this (expletive)."

That was their attitude towards homebrewed beer.

There was not really access to craft beer at the time, this was 1993, there was Sierra Nevada and Anchor if you could find it. Those were really about the only two widely distributed craft beers but they weren't widely distributed on the East Coast. I had been drinking these beers because every year taking my little business on the road.

I never made any money on Brewco. but it did give me the chance to go on two trips every year. One was for the Home Wine and Trade association, one for the American Home Brewers Association and I managed to travel the country those 14 years, and so I was able to go into some of these hot spots like Portland, Oregon and Seattle, Washington where I could drink some of these brew pub beers. I was fortunate in bein' exposed to it all and kinda knew what people were doing. But nobody was doing it on the nano-scale like that we ended up doing. At Cottonwood we were doing like 10 gallons at a time.

But with just the ABC's we cleaned the beer right up. I had been brewing for 12 or 13 years at this time, all grain, I knew how to put a good recipe together. All of a sudden we started selling beer like gangbusters, we traded up to a 60-gallon pot real quick. Then within just a couple months we were brewing on that thing, three to four times every two weeks. And then by this time I had discovered the internet through my beer stuff, I had met this guy when we were in Cincinnati at a home brewer's convention and at the end of his talk he had these handouts and at the bottom of it said, "subscribe @homebrewersdigest" it was the first

time I ever saw that little listserv thing, and since I was teaching philosophy at the time I had an email account on the mainframe computer at ASU and with nobody to send email to. (Laughs)

So all of a sudden, I'm in touch with the most sophisticated, knowledgeable brewers in the country, because this is pre-world wide web when it was just government and universities on the internet. I had friends at NASA – I was emailing one of my buddies at NASA one day and he said, "Well there goes the shuttle!" And he used to tell me how to do stuff on the VAX, (early operating system) 'cause they ran the VAX down there at the Kennedy Space Center. And they had access to all these chromatography machines and everything and their biology labs at the University and they had friends who worked there and they'd take the beer and they'd do all these essays and then they'd report it back to the Home Brewer's Digest and next thing you know, we had a little spin off, one guy does a Lambic Digest and then there's another guy spins off the Cider Digest. And I'm meetin' all these people by email. And then soon after all that the next time I go to the home brewers conference these guys knew I had Brewco. they're coming up to my table, "Hey, I'm so and so @princeton.edu" you know I start putting faces to email addresses. It was just a great, great, fertile time. And so, no doubt my growth as a brewer increased cause, I finally had somebody I could talk to, and it was just stunning to me that I could sit up on my little house up on top of Seven Devils, on my little computer with my 2400 baud modem, and I could talk to the most knowledgeable home brewers in the country, and it was great fun.

Then, people started submitting their recipes. This one guy compiles them all and called it *The Cat's Meow*, you can still find *The Cat's Meow* on the internet and it's all these recipes that people would put in. Every time I would go to make a recipe at Cottonwood, I would go in,

"All right I'm gonna make an IPA," you know, never been an IPA in Boone. So I look at all of the IPA recipes and I say, "OK, I like that part of that and that part of that, I know those hops I'll use those hops," and then I'd put together, I'd take the best of all these recipes and that'd be my IPA recipe. And I did the same for the stout, I did the same for the porter, I did the same for the wheat beer, I did the same for the pumpkin spice ale - which they thought I'd lost my mind on - I did the same for the Christmas ale. So that's where I got all my recipes.

I was forced to brew with extracts, cause I just didn't have enough room. I had been an all grain brewer and I had a reputation as being the place to get all grain brewing equipment.

But I learned from all of that so I went directly to the manufacturer and got malt extract in 5-gallon buckets. Would only buy light malt extract, I got it from two different places, a really light malt from California Concentrates, and then another a little more, a little deeper, darker, heavier malt from someplace in the Midwest. But, that was important to me when I made my Golden Ale. I would only use the light malt extract from California Concentrates, and then when I use to make my IPAs, and my dark beers, I'd use this other heavier one.

I would never reuse my yeast because I didn't trust my brewery. I used two or three different strains of dry yeast so the beers didn't get that brewpub taste, which is what all breweries have to fight, because you are always going to reuse your yeast and there is a taste that develops after a while across the profile of beers that are served. So because I was small and havin' to do all this other stuff, I did all these other things to keep the taste from being the same. So I used like malt extract when I made the stout, we would grind up the crystal malts and the chocolate malts and the roasted barley, and put them in a mesh bag and sink them down into the pot as the water's coming to a boil. Then we'd rinse it real good towards the end

of the boil and then we'd put the light malt extract in. So it was grain infusion beers is what I did there and if you didn't know that that's what I was doing you couldn't tell. And one of my buddies was Dave Wells, he had a fresh hops business — so I would order my hops from him from Oregon, full leaf hops, and get them in 5-gallon buckets. He got into the brewpub business he started stuffin' his beers into his hops so I could keep up with what he was doing out there. Then through *The Home Brewer's Digest*, I had written up my account called *the Tumbleweed Report* which lots of home brewer's clubs reprinted and this guy wrote me one day and said, "Kenny could you use a 120-gallon pot?" And by this time we were brewing too much on this little pot. So I said, "What do you want for it?"

"I don't know what do you want to give me for it?"

"I don't know, what do you need?"

He said, "Well, I could use some kegs."

I said. "OK, I'll give you five or six kegs how about that?" So we traded, he shipped it down here. He and his wife came down, we put them up on Beech Mountain for the weekend we had a great time. It was a cough drop pot he had gotten it from his neighbor across the street who had requisitioned it from the cough drop factory where he worked. And he was gonna make a goldfish pond out of it in his back yard, and then he got a new job offer and had to move. He had seen Scott cleaning carboys in his front yard, he said, "Hey man you want a stainless steel pot to brew your beer in?' He said "Yeah!" and Scott thought he was getting like a 12 or 15-gallon pot and when he shows up with a 120-gallon pot he didn't know what to do with it. He put it in his garage, his wife is upset with him cause now she can't park the car in the garage so it's a liability to him – so we made, really, one of the great trades.

And so we brought that down and that's when, I had already been doing a hop-back, I had seen a hop-back at Pyramid Brewing company when I was out there in Portland, and the early Pyramid ales just had the best hop character. And so I made my hop-backs out of stainless steel pressure cookers, so I had four of those on that big 120-gallon pot. And so we would stuff those full of hops and then when we drained the beer it would flow through, you know, the favorite time, favorite part of making beer is then you throw the hops in the boil, and then, all the hop aroma comes up into the brew room. Well, as wonderful as that smells, you've lost all of that from the beer. The hop-back, you drain the hot wort through the fresh hops, then immediately goes into the wort chiller - which we made our own wort chillers out of heater hose and copper tubing - and then it gets force cooled down so there is no steam to carry away the hop oils, so we were able to capture all of that and it went straight to the fermenters. And Man, oh, man our beers had some great hop character.

Q5 – So, you brewed the first IPA in Boone?

Oh yeah.

Q6 – How long until Tumbleweed became Cottonwood?

It came while we were over there. We got a letter from this restaurant chain out in the Midwest, Cottonwood Grill. The page was about that long. The top of the page was the list of all the lawyers in this law firm. [Laughs] The partners in this law firm. "Dear Mr. Conway," it had about 3 or 4 lines on it, and then went onto the next page to say you know, you got to cease and desist 'cause this is a trademark name. You must cease, and desist, or we will sue you like

you've never been sued before. And so, then we just had to you know, what are we gonna' say? So, Tumbleweed became Cottonwood. Though, Cottonwood is a nasty tree. It kinda rolled off the tongue the same way Tumbleweed did. And so, we ended up going with Cottonwood. The best shirt we ever did was Tumbleweed in the background and then we made like a board, looked like a board that was nailed over the top of it diagonally that said "Cottonwood" and that was our first shirts that we came out with for a while. Then, ya' know we were rollin' along, doin' real well and, then I submitted those beers to the Great American Beer Festival, and we won a bronze in 95.

So, alright we started brewin' beer, and we started sellin' beer like crazy, and we put our beer in those 5-gallon corny kegs. You know, and would carbonate 'em. We had, cordoned off the living room up there in the brew house—and we were brewing in the bedroom, plumbed it, and so we'd have a sink, and everything in there — on parquet floor. We cordoned off the living room with 4 (foot) by 8 foot sheets of foam insulation - that if you were building a house that had cathedral ceilings and you wanted to expose the beams you would nail these things down and then nail the shingles to it on the hard side -and we had a couple of those up in one corner and made our own refrigerator and had the local refrigerator guy come in and put in the cooling coils and everything, but the door was one of these 4 (foot) by 8 foot pieces of insulation that you would open up, and I mean it was hard, it was not fiber glass and then it was cold as can be in there. And then we'd carbonate up our kegs and put them in there and then haul 'em down the hill and put 'em up in the tap to tap 'em.

So, when the beers really started sellin' we ran out of Cornelius kegs. And I'm brewin' one day, and then, we didn't have anything to put the beer in. Said, I got some kegs at home.

So, I got in the car. I flew home, and I went in to the corner of my basement. I found y'know kegs that didn't have any beer left in 'em but, just a little bit. I probably hadn't put beer in these kegs in four or five years I guess. So, there was that much beer, with that much CO2, which is the perfect environment for the pediococcus damnosus bacteria, which is a souring bug, which is one of the souring bugs in a Lambic beer.

So I come in with about four or five kegs, and we clean them out, Clorox was our sanitizer of choice, I mean Tumbleweed was just an overgrown homebrew operation. So it turns out Clorox is a base and pediococcus damnosus encapsulates itself in an alkaline shell that is impervious to a base, a base cannot get into it. So we thought we were sterilizing these kegs and we put the beer in them. Next thing you know two or three weeks later we got a tart beer coming up. So, you know they're bringin' the beer back up from downstairs going, "Man this beers tart." By this time, it had gotten into some of the fermenters and we started haven whole batches of beer coming back tart. Which would have been a nightmare for any other brewery in the country. Except those were the kind of beers I liked to drink! (Laughter) And I started drinking these beers, and I'm goin' "Oh wow! Man. I used to drink beers like this in Belgium. I'm not gonna' throw these beers away." But, I'm dealin' with, a drinking population up here that has no concept of a tart beer.

What the Lambic brewers do, they are blenders, what they'll do, because every year the beers are just different so they will take two or three years of beer and blend them together so

they get some continuity from year to year and the tartness can get really intense, I mean you can even get vinegar notes out of some of these true Lambic beer. So what they do is put fruit in them and that made it more palatable to the average person.

So I went scrambling around to my malt suppliers and they had a raspberry concentrate and a cherry concentrate and I bought both of those in. Even my stout got sour — and nobody is drinking tart stout beers. I was up there one day and we got some lactose sugar and I thought maybe I can sweeten up the beer and this guy just happened to come by the brewery and he said, "You know if you put lactose in that beer, some people are lactose intolerant and you're gonna make people sick." I was so glad he came by you talk about a fortuitous 15 minutes! That's when I went after the fruit concentrates. So I would get a stout that was too tart for anybody to drink and I'd brew a new stout and blend them until I found a good tart level. I would add a teaspoon of raspberry concentrate then do the math and start blending kegs. That was the Black Framboise, that was probably the best beer I ever brewed in my life and anyone who drank it would probably like to drink it again.

Q7 – So how long were you with Cottonwood and how long was that?

Well after we came home with that medal, we didn't even need an airplane to fly home from that one, we got tons of publicity and Bart started getting dollar signs in his eyes. And everybody was aware of the success we were having and the Wilcox group decided they wanted to start developing down here on Howard Street. And they were gonna put in a brew pub and I had begun hearing rumors of that, some of my fellow brewers were saying, "Kenny

you doing a new brew pub in Boone?" They had come and talked to Bart and Bart told them, "You don't want to put and restaurant back there on Howard Street, if you put a restaurant back there nobody's gonna go and then it's gonna fail and then you'll never get anybody in there." And so Bart told me he had talked them out of it. But he had never talked them out of it.

So Steve Minton who used to run Caribbean Café up on King Street, they approached him to run the kitchen and I actually got involved in some talks to do the brewery cause after John McDermott from Highland Brewing called me he said, "Man, Kenny, they're gonna do a brew pub, they've asked me to come and brew, I'm not gonna come up there and brew against you but you probably need to go over there and talk to those people." And so I did. And on the way out of town I told Bart, "Hey man you might have thought you talked those guys out of a brew pub but you haven't and I just wanna let you know I have begun talking with them I think I can brew for both places." Cause I was just comin' in and brewing we had another guy full-time doing the day to day brewing operations, I figured I'd set up another situation like that up for them. And then by the time I got back from the Home Brewers Conference, Bart had called them up and cut a deal with 'em to be the brewer at the new brewery.

Q8 – Is that when you transitioned to being in the computers?

Yea, I had one foot firmly in the computer world and one foot firmly in the beer world. It was really hard to turn my back on the beer world, because you know I gotten a little national recognition. But that was a gut wrenchin' decision to make, but I just, I couldn't do it.

Q9 – Was Brewco. still going on?

Brewco. was still going on then. There was just a brief little time, when Bart and I decided to part ways. He had gotten this consulting contract to put in a brewery down in Fayetteville, NC, Huske Hardware House. So, Bart gave me this consulting contract as kind of a golden parachute. The company that we (Cottonwood) bought that brewing system from, they sold two systems - they sold one to Huske Hardware House, they sold one to Bart Conway. Bart came down to see the brewery system that I was putting in for Huske Hardware House. Called the guy, and ordered one just exactly like it. That brewing system is at Foothills brewing company now.

Q10 – So then, Foothills came in and purchased Cottonwood?

No, no, no. I guess the rights first went to Carolina brewing company. They were the ones that started packaging the beer and putting it on the shelf. Now, I don't know if Bart still has a hand in that or, if he gets residuals, I know I don't. But eventually, he hired Don from Colorado to come brew, and Don was an absolutely great brewer, I could not have brewed as good of beers as Don did. So, I mean it all kinda worked out. But the problem from the business point of view is that Bart gave up a business where he owned 100% of, and then went into business with a bunch of people where he owned 28% of the business. He went from a brewery that cost him \$1,000 to build, to a brewery that cost him \$350,000 to build, and that was just the equipment. They had more money in the tapping system, than I had in the entire brewery at Cottonwood. It was \$5,000 worth of equipment just to get the beer from the tank to the tap.

Q11 – People thought you were crazy for brewing a pumpkin spice beer?

Oh yeah.

Q12 – So when did you come out with the pumpkin spice beer for the first time?

Well, about the first October that I was brewin', cause it just seemed like the right thing to do. And, you know I was aware of them and it was a seasonal beer. So we had the Black Bear Stout, the Appalachian Amber and the Grandfather Gold, but the fourth beer was always a specialty beer, and we change that every single time. So, that's where we kept our interest. Look, brewing beer's fun but, at the end of the day, if you're brewing the same beer over and over again it's assembly line work. And so, it's the specialty beers that kept us engaged. And so, yea man that first pumpkin spice beer was great. And the great thing about Tumbleweed was the kitchen. The kitchen was one of the best kitchens for brew pub, ever and my home brewing friends who came into town, and ate there, said as much. And so, Len made up a pumpkin flan, pumpkin spice flan, as a dessert. That was probably the first pairing of a dessert with a beer that had ever been done. It was a pretty good one, two punch.

Q13 – How long did you work with Brewco. and then as your time as a professional brewer?

How long would you say you spent in the industry?

Started Brewco. in 85, and, I guess I brewed my last commercial beer was down at Huske Hardware House when they opened up, which was something like 97.

Q14 – Do you still brew?

Not much, you know, what I do more than anything is I make brandy. That was, five things I came away with: made some great friends, learned to appreciate wine, certainly learned to appreciate beer, and cheese and fruit brandies.

Q15 – How would you say, the brewing industry has changed since when you first entered it and your time with Cottonwood, and as a consultant to where it's at today?

Well, it's certainly gotten bigger. There are a lot more, you know, you can now buy just about any kind of beer you want to off the shelf. Which wasn't the case back then. It's gotten more [pause] It's gotten more, I guess commercial is not the word, corporate okay? The early days, there was very much the feeling, you know just a buncha' home brewers trying to do what they loved. One of the first guys I ever met was Greg Newnan who wrote, *Brewing Lager Beer*, which is now a classic book. He's the guy who went to Vermont, and got Vermont to change their brewin' laws. And he put up the Vermont Public Brewing Company right there on the lake in Burlington. He helped me out immensely gettin' started. I went up there and brewed with him some.

So I think, certainly everybody who's brewing now loves to brew. Every brewer does. But it's a little more the case where the businessmen are in control I guess, instead of the brewers are being the driving factor. The brewers were the driving factor early on. After traveling around the country and going to all these brewing events, if you ever get a chance to go to Vermont and take a tour of Greg's brewery up there, you need to, he built everything from scratch the best beer that I've tasted in America.

Back then was if you went into one of these bright shiny breweries that had one of these off-the-shelf-turnkey breweries - usually their beer sucked. If you went to like the McMenamin brothers in Portland, who would go in and refurbish, and rehabilitate these old restaurants and then just put in a little brewery. Basically I emulated them in many ways. I had seen what they were doing out there. They were brewing with extracts; they were the ones that let me know that it could really be done. And they were brewing great beer. And so, everybody who built their own brewery made good beer. Everybody who bought an off the shelf brewery seems like they didn't make such great beer. Or the kitchen you know, the beer would be good, the kitchen would be bad. Or the kitchen would be good and the beer would be bad. Highland Brewing Company, John McDermott, he built his first Highland Brewing Company using old dairy equipment. There was just a lot more craftiness going on early on, I guess. Now of course you know the wallet guys smelled money and have gotten involved. But it's been good, It's been good.

Q16 – What are things that outsiders would not expect entering the profession? I feel like definitely the cost is one thing that people would not expect.

Yea, I'm a big, big advocate for the nano-brewery which, is what we had. And there weren't many people who got into the business that small. But, to its advantage, yea, it was labor intensive but, I'm tellin you man, we had a thousand dollars in that brewery, and most of that was in the corny kegs cause we traded for our pots, we made our own hop backs, I made our own wurt chillers, we brewed in 31-barrel plastic fermenters that we had on dollies that we rolled around the house. I got that idea from a winery that was just getting started down in

Athens, GA when I was part of the wine club and we took a tour of the winery down there.

Plastic has a bad connotation as a fermenter but only because people don't take care of them correctly. When we finished with a beer we would rinse it out, fill it up with water, pour a little Clorox in and they just pickled in Clorox until the next time we used them. I never had a contaminated beer from the way I handled sanitation, the contaminated beer I got came from my kegs but that turned out to be a good thing.

Q17 – Does brewing have any special sayings or expressions? Like certain lingo that you wouldn't know unless you were a brewer?"

Well, I think the most fun words is *sparge*. [Laughs] You tell people that you sparge. Nobody knows what sparging is. That's sorta' is a technical term. Sparging is when you make all grain beer. So you mash the beer, so you bring the beer, you grind up the malted barley, and especially the grains if you have 'em. You add water to it, and you bring this whole thing up to 150 degrees. 150 degrees is the maximum time for the enzymes to kick in, and turn the starches into malted barley, into polysaccharides, or starch.

The *mashing* process is where the natural enzymes in those malted barley grains convert these polysaccharides into monosaccharides, which is what yeast have. Yeast can't digest a complex sugar; it can only digest a simple sugar. So you mash for about an hour and a half. And then, you have all of this, for the home brewers, a sparging bag, which is a mesh bottom bag. Then, you start pouring hot water over the top of the grains in there, and then you flush all the sugars out through the mesh bag at the bottom and that's called sparging. You're rinsing the malted grains to get all of the fermentable liquid out of it. Then that goes into the boil, and then it

boils, and then they marry the hops with the malt at that point. And, then you force cool it through a wort chiller. And I'm a big advocate of having a hop-back between the boiler and the wort chiller. Sparge is a good word.

Wort is also a good word. Wort is what you call raw beer before it's fermented. Mash has a different meaning in the brewing world than it does in the liquor making world. In the liquor making world that is what you ferment, that's what they call the mash. But we sparge before we do the cooling. In the liquor making world you'll grind up corn but everyone will add malted rye or malted barley.

Now what *malt* is, you take a raw barley seed or raw rye seed and you sprout it you know just like you'd make sprouts in the sink, and once that aquaspire bursts through the shell of the seed that's when you put it in the oven and roast it which will set the little starch implant and keep it from growing anymore. Malted barley is the starchy endosperm of a brand new barley plant or a rye plant. And you have to have that to ferment the starches out of the corn if you are making corn liquor. So you always have to have some component of malted barley and you add that into the corn and then they just fill their 50-gallon barrels up with water and make a real thin solution that at room temperature it will take two or three days for those starches to convert and by then they add the yeast and they just go ahead and ferment the grains and everything all together. You ferment your mash when making liquor but you don't when you are making beer.

We would drink *trub*. There's another good word for ya'. After you boil the beer in the boiler, and you got the hops, and everything, proteins coagulate, proteins come out of the

grains, and they coagulate along with the hops and it just, it just makes a snotty consistency at the bottom.

Q18 – What type of special skills and techniques?

Cleanliness is next to godliness

Q19 – So, when you were brewing what was your typical work schedule? Was it just weekdays?

No, we usually brew a Monday and a Thursday or a Tuesday, and a Thursday one week and then one day the next week. That was the schedule we were on when we were finishin'. As we were maxing out our smaller pots, we were doing two or three times a week, just to keep up. I just had to be there to brew and do quality control, taste it, see how they were doin', evaluate our recipes, do we need to make any adjustments for the next batch, you know (points to mouth) this was our laboratory. We dreamed of being able to look at all this stuff under a microscope, but it never happened.

Q20 – What's one thing about being a brewer that outsiders wouldn't expect?

Probably, I don't know. How hard, and how hot a job it is. You know? I think people have glorified notions of what is it to be a brewer. But you know, it's hard work. And at Huske Hardware House, we'd have to get inside that pot. The boiling pot at the end of the day to scrub it down, and man you would be like a, would be sweatin' pretty bad by the time you get out of there.

You can get hurt, and get hurt bad. I had second degree burns on me after the first night that we brewed down there at Huske Hardware House. And so, you stir, stir, stir, stir, and get the wort going. And that helps just funnel everything down to the bottom. And we had a 4-inch garden hose on the bottom of this thing to go down into the drain. You know, it was our first time using this, and we tightened it down, and it was all cold. But, man when it heated up it got soft, and when we drained some of the trub, and then when I slammed it shut like that the water hammer blew that thing off. And it just splashed up my arm, and in my face, and in my ear, and I was more interested in getting it out of my ear before I realized that my arm was just sittin' there cookin'. So, man we were in the middle of a brew, this was one o'clock in the mornin', I realized that if I could stick my arm into a bucket of water, I could take it out and I'd have about three minutes four minutes I could work before I had to stick it back down in bucket of water to take the pain away. And we did that until we got the brew.

Q21 – What would you say was originally the most difficult aspect of being a brewer? Well, the business end of it was. The business people turned on me in the end, even though I'm just a nice guy I can't help myself and I'm free with my advice and my knowledge and here's this guy and here's that person, but at the end when it came down to money I got short end of the

Q22 – What would you say was the most satisfying part of it?

stick. That was the most disappointing thing about the beer business to me.

Oh man, to walk down the restaurant and see your beer on everybody's table and see a smile on people's face. That was without a doubt the most satisfying. You know beer is proof that

God loves us. (Laughs) You know? And there's no better position to have than to be the local brewer in town. I mean, who doesn't like the local brewer? (Laughs) You know, it's a great position to have.

Q23 – Was there advice from anyone along the way that kind of stuck with you, for how you viewed the business?

Not really, I mean it was really, I mean it really was just the case of just discovering it as we went along.

Q24 – What's something memorable that you haven't touched on?

Man, gettin' that medal at the Great American Beer Festival was just, unbelievable. I entered that Black Framboise into the great American Beer Festival, and then I had an Amber Framboise, old brown tart beer that was starting to get tart, but it hadn't gotten real tart, and so we brewed it up and blended it up and sent it off to the great American Beer Festival. You had to do this a month ahead of time. Well it turns out that I sent the Black Framboise out when it was perfect and it continued to get tart and there was no sour beer category, I just put it in the fruit beer category for god sakes! I can only imagine what they thought when they drank that beer. With the Amber Framboise I put it into the Belgian beer category where people would expect the taste. Well It turns out that the Amber Framboise developed over that month and was just peaking at the time they did the judging, and we came in third place. You know, we were, they were giving out the medals, and everything and I'm back in the back running my mouth talking to some friends of mine or something like that. And so you know

they go from one category to the next, so I didn't know that the Belgian category was coming up. And then we got the bronze, so that was the first medal. And I'm back there, I'm back there talking to some friends of mine and they said, "Kenny, Kenny go on up on stage!"

I said, "What do you mean?"

"They just called your name."

"What!? For what!?" And I looked up, and a friend of mine was giving out the medals, and everything, and he's sitting there. I didn't even hear them call it out. So that was a big one, cause I don't know any other brewery in the country that was any smaller than we were. That was huge, that was huge, you get that kind of confirmation on that level that what you're doing is good.

This is one of the greatest businesses to be in. I don't know any other business where, in especially case early on, where you would go talk to your competitors, and they would help you. I mean, the sense of comradery in the beer business is just unparalleled. If I had a problem in my brewery, John Mcdermott helped me out one day. He happened to be in town, I was having trouble with one of these beers. He took one taste of the beer, and says you know, I think I taste, Clorox. And then I had to go back, and I went back to my assistant brewer I says, "When you're putting the beer into the, racking into the secondary, what are you doin'?" He says, "Well, I'm taking most of the water out, but I leave a little bit of the Clorox water in the bottom like that, so I'm not splashing when I'm-,"

I said, "Well, don't do that anymore." We just helped each other out. We weren't really competitors. We were like y'know brothers of the craft. And I miss that. That was a really a big,

big part of it all. The sense of we were doing something new, doing something special, we thought. So that was, that was all that was very satisfying.