AN INTERVIEW WITH WILL VARN

by

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Explanatory Notes to Accompany the Interview of Will Varn

by Peter MacDonald

Given that one of his primary duties for Varn Wood Products was wood procurement, it is hardly a surprise that one of the primary themes of this interview with Will Varn is merchandising – what in Canada is often referred to as "best end use". Merchandising designates the practice of converting a given tree into the highest value product possible. Normally this means producing lumber from that portion of the tree large enough in diameter to permit it (from the butt end towards the top until the diameter becomes too small), utilizing the remainder for the manufacture of pulp for paper; some trees are suitable only for the manufacture of pulp. One of the highest value products possible is "poles", which is to say telephone or utility poles made from a single tree; trees large enough for this purpose are becoming increasingly rare.

In light of this, a primary problem confronting tree harvesting is that of "sorts" – of organizing the production process to ensure that the correct product is delivered to the appropriate mill. This is accomplished in a variety of ways: two possibilities include certain trees of a given size and/or species being harvested first, or harvesting the entire tract with the sorts done afterwards, prior to delivery to the mill. In either case, the end result is a variety of products intended for delivery to different mills. Thus, when Varn speaks of the CTR saw, he is referring to a unit which delimbs and then cuts the felled tree into the appropriate lengths; often these are mounted on one end of the loader. The different products are then loaded onto different trailers.

Varn states that his mill takes saw logs of sixteen and one-half to seventeen feet long. Used for this purpose are trailers with two sets of racks for double-bunching. The technical term for these racks is "bolsters" – racks for holding the saw logs in place. With double-bunching, one set of two bolsters is located on the first half of the trailer, another set on the second half. Thus the trailer carries two loads of saw logs, one in each of the two sets of bolsters. Trailers may also carry tree lengths (an entire delimbed tree) when the trees in question are suitable only for pulp or when the "sort" is to be done at the mill instead of the harvesting site.

Different products to be loaded onto different trailers means that a number of trailers will be located at the harvesting site. Because harvesting sites are usually located by a dirt logging road, loggers often use older truck tractors to move these trailers from the logging road to the side of the highway, where they are then hauled to the mill by newer truck tractors. When Varn refers to "set-out trucks", he means the older trucks used for this purpose.

¹Loaders are machines which load the product onto truck trailers. Felled trees are delivered by skidders to roadside where the loader delimbs and cuts them with the CTR unit after which they are loaded onto trailers.

Cut-to-length designates a harvesting machine which is capable of merchandising the trees being harvested. These machines possess sophisticated computer-controlled processing heads which measure the diameter of the tree, delimbing and cutting the tree into the appropriate lengths as a function of these measurements. The Scandinavians first invented these machines, with their single-grip harvesters felling and processing the tree at the stump where it was growing. The manufactured product is then relocated to the trailers at roadside by a machine called a forwarder which carries these logs. This is the sort of system that we (the interviewers) had in mind when interviewing Varn. A different iteration is exemplified by Varn where he talks of a machine doing the same thing at roadside once a skidder has delivered the felled tree. He does note that this example requires an extra man and machine "not replacing anything".

Finally, Varn discussed the shift from felling shears to saw heads on felling machines, a change encouraged by the mill providing financial incentives to the logger. Shears are the functional equivalent of scissors which sever the tree. Their problem is that, due to the forces involved, there is a certain amount of splintering emanating upwards from the butt. This problem first became apparent in Canada when frozen trees were severed. Thus, the seventeen foot saw log may well have splinter damage over a foot or more, rendering it useless for the manufacture of sixteen foot lumber. And, as merchandising become more important, the problem became greater. The solution was the saw head, a large circular-type saw with a diameter of fifty or more inches contained within the felling head.

To conclude, Varn speaks of a variety of harvesting machines – feller-bunchers, cable and grapple skidders, and so on. These machines and their functions are better explained in some of the other interviews.

Will Varn (WV): Will Varn, I was born in Waycross, Georgia in April 1955. I've lived all around the state. Went to the University of Georgia and I decided to get an undergraduate degree in forestry. After graduation from that I decided that I'd get an MBA with a concentration in finance from the University of Georgia so I proceeded straight on to that. Upon completing that degree I was employed by the Brunswick Pulp and Paper Woodlands Division, Brunswick Pulp Lands Company and I reported the same day. Carol Martin was running the organization at the time. My title was resource analyst. I spent about a year I guess, seemed longer, in a training program where I basically worked in every department in the company, which it does land management for the shop. I worked on all the tractors. You name it; I did it. I settled into that job and was there until we were acquired by Georgia Pacific in I guess the summer of 1987. Maybe it was '88. I can't remember. Anyway, I stayed on their payroll for two weeks just so my severance pay would carry me to the end of the year so I had at least my vested retirement at the time. They wanted to move me back towards Athens and I decided I didn't really want to move my family. So I came over here and I was lucky enough to get on with our family business, which was a partnership between my grandfather and George Washington Varn, who was my grandfather's older brother. And there was a lot of family here at the time and I was the only forester that we had. Most of the people were over here on the sawmill side. Went to work for my uncle for wood procurement and land management. I sort of assumed the land management duties and upon his retirement I also took over the wood procurement dealings for the sawmill and for the timber company and continued with the land management duties. So that's my current duty right now.

Michael Clow (MC): Well, we're interested in how mechanization fits and why it occurred the way it did. So if you would give us your understanding of that, that would be a good beginning.

WV: Well, let's see. When I got here...

MC: Which would be what year?

WV: I think it's either '87 or '88. I'm not sure. I think it's '88. Anyway, I encountered a logging force that was in varying degrees of change at the time. I mean we had people that still did short wood pulpwood with a slasher saw on the loader, primarily doing very few sorts. I mean they had some tree length wood coming here or to other sawmills or to pole mills and they still slashed up their pulpwood into short wood for the most part because that was what the primary pulp mill was offering, which the Container Corporation down in Bernardino, that's the way they took the wood. The gentleman that we had logging out here on the company land, because of the fact that he was largely cutting older stands of natural timber, he didn't have a feller buncher as his harvesting equipment because he didn't have the number of stands per acre and the number of trees to make a load that a lot of the other guys did. But he had a directional shear, which didn't do any gathering of the wood. He'd take one tree at a time and fell it in a certain direction, which would make it easier for the skidder to pick it up. The skidder also that he had at that time, when I first got here was a cable skidder. It was not a grapple skidder. Once again the man was on and off the equipment all the time and his loader was very rudimentary. He didn't even have a cab. He just sat on a seat right up there on top of the loader and if it rained he just got wet, no umbrella or nothing. It was tough work. I didn't run very many trucks because most of this haul was within five to eight miles of our mill. He ran some pulpwood but he didn't generate a tremendous amount of pulpwood. He did haul that primarily to Bernardino, although he did haul some to the local markets up here. As the demands on the, well, basically in order to survive he had to modernize. His costs were probably rising faster than the pay scale for logging and hauling in the industry at the time. He [tape inaudible] and the only way that he could survive was to increase his mechanization and produce more wood. But he had gotten to the point in his career where he waited too long to change his equipment over and he just kind of got caught in the downward spiral of his equipment got too worn out. He was replacing it too often. He was doing maintenance all the time. He didn't move enough wood. Eventually got to the point where they didn't even really want to insure him because he didn't move enough wood. He basically retired and he

really went out of business. This was unfortunate because he really had spent his whole life out here working and he had some personal issues that sapped a lot of his resources within his family, medical issues and such with his wife. He just didn't have the money to go any further. He just wasn't able to get back in the wood industry so he left and the next people that came in at that point in time they had feller bunchers with shear heads, grapple skidders, and we really went through quite a few people at the time on company land and various reasons as to why. A lot of it was just because of, you know, some of the people that we tried to employ were maybe on their last leg or really were new to logging or came here to us in financial straits. There were a number of quite good loggers that just couldn't make a go of it for whatever reason it was. And then the evolution at the pulp mill was changing the way that our loggers worked also. The mill that was a primary source of pulpwood and where most of our chips go is Container, they had made the decision to go to mid length wood instead of all short wood, which was two racks on a long trailer, double-bunch we call it. So that involved a lot of retooling of the equipment out in the woods. Folks still used the slasher saws but the CTR saw, which was just a big chainsaw type thing, was a little more economical to operate and allowed for a little bit more precision cutting. So when we went to mid length, got away from the slasher, the guy kind of started evolving more to that CTR saw. It didn't require to be running all the time. It didn't require the energy consumption, pretty simple maintenance, although the slasher saws were the same way. And they had to redo their trailers. But eventually we eased into that and then when they went to the CTR saw was when we started changing our wood uses a little bit and we went to some cut to length in our mill also. And somewhere along the line we figured out that here at the mill that we should encourage our contractors to go to saw heads because we were getting a tremendous amount of shear damage with the old shear in the mill. And so that was a big deal at first. In fact, we gave them incentives to cover the saw. In fact, we still do til this day. We pay them a little extra if you have a saw head to cut wood versus cutting cut with shear wood. That's a policy we've continued. Now our log pile out there is virtually everything cut with a shear, excuse me, with saw heads. Really that's kind of where we are. We take a fair amount of cut to length wood, probably, oh, I would say right now approximately twenty-five to thirty percent, I believe a third of our furnish is cut to length material here. The mills are still dealing with the double bunch where we send ours. A couple of the mills get all tree length. We even see the double bunch wood now in hardwood and in cypress. That allows them to get a much better load on those so that was a, it was a good thing that those mills did.

MC: And normally how long are they, fifteen feet?

WV: I think about twenty-foot on the pulpwood. We take our logs that are sixteen and a half to about seventeen, in order to cut sixteen-foot lumber. The other mills we cut twenty-foot lumber and takes longer material. The predominant length is sixteen and a half feet, and then, of course, there are variations to that. The pulpwood is longer. You have some, you know, for the most part they call that twenty-foot wood mid length and they turn it whichever way they can get a load. They get a better load than people that are hauling small pulpwood under tree length size. It allows you to clean the site very well. It's an extremely good utilization of tops that way and I think we clean up the site as good as anybody. You don't get a lot of waste out there in the wood. So that's kind of where we are now. The primary crew out there will have a skidder driver, a guy running a cut down machine, a loader operator who usually is in charge of the crew. A lot of them will have a set out, guy setting out trucks, helping to unload trucks. For the most part most of our guys do employ a set out truck instead of taking an off-road truck all the way to the ground. They try to get a little bit ahead and some have, ten to fifteen trailers. Our guys run sixty to eighty loads a week for the most part. And we [tape inaudible] many truck drivers.

MC: How many feller bunchers would they have?

WV: Just one and usually the saw head can outrun the rest of them for the most part. Now if it's the thinning operation we have a little more pressure on them. Thinning goes down here three wheel

machines got to be very popular. As we went from third row thinning to usually fourth and fifth row is primarily what people are doing. When they went to the fifth row thinning for the most part we had to have something more maneuverable than a four-wheel machine, the ones they had at the time, so they went to three wheel type machines. The Bell was one of the early ones. It was air cooled. He'd get in that and it overheated something terrible. It didn't work. Franklin and some others came out with some other machines. Here lately most people are going back to a four-wheel machine with an extremely tight turning radius where the front and back tires almost touch when they turn it. What we've found is that they're just is maneuverable as the three wheel machines.

MC: Are those the bobcat system?

WV: No, much bigger than a bobcat, I mean it looks like at full size cut down machine. W had people say they'd never work but you'd be surprised. These three wheel machines are actually pretty wide. They'll scan through there but these others can turn so tight. So that gives the logger much more versatility in case it gets wet. If you got wet with a three-wheeled machine, you really had a problem. You about had to have a back up machine of some kind that you could work where you couldn't get in because it was too wet. By having these other machines it's more versatile we've found.

MC: Was the wet problem because of the ground?

WV: Weather conditions. That's right.

MC: Now in Canada the Scandinavian cut to length system, we've been calling the single grip harvester with a forwarder following it, it definitely built quite a niche for itself. Lots of people think that it's going to expand that. It doesn't seem to be very popular down here.

WV: Well, we've actually had two contractors try it. One of our guys tried it and it works pretty well in the planted pines stands. It typically don't have any higher value tree length material.

MC: Just pulpwood?

WV: Pulpwood or you can take our logs, take the logs in here cut to length. What we target with our cut to length logs is primarily something that is normally hauled as pulpwood with a five-inch top side bark. It's a small log. We're trying to make two by fours. We don't mind somebody if they want to cut to length their larger material. That's what we're going to do eventually anyway at the mill. Most people typically don't like to do that because we buy the wood, random tree length to a five-inch top. If you want to cut up the bigger material then we have a little different specs, I mean every mill's different. The utilization at this higher price is better if you haul it tree length out to wherever the five-inch top is. Okay, the other real problem we've found out other than in a pulpwood stand that didn't have a lot of grade material, a younger stand, was poles. The pole market is the highest price product we get out of this forest, short of maybe the really large clear saw log material that is used to make quality that goes to Europe. I mean it has to be really high quality. We don't have a whole lot of that. But the pole market is what really threw a kink to this cut to length like what you have over in Canada. And we had a guy cut up some our natural timber and try it and marked the poles and it was the biggest mess you've ever laid eyes on. Part of it was probably didn't know how to operate the machinery properly, didn't understand the philosophy of how to do it. Probably should have gone through and cut everything but the poles. They didn't, they come back. cut the poles. Anyway, one other variation we've seen is that we've seen a guy that has tried to take a processing head and have it on a Stratton machine loader at the brow. As they pull the wood up there, it got pre-sorted out in the woods and then he cuts to length right there at the brow so he had sort of loader operations going. It's no forwarder involved. Still a cut down machine like we had so that's all extra. So I mean you had an extra man and an extra piece of machinery not replacing anything. So I

would say that that probably wouldn't be well received because the concept of merchandizing it seems okay but it requires extra pay and that's probably tough to get in this environment. So no, we haven't seen a tremendous amount of that. I wouldn't be surprised, quite frankly, I think as saw millers we wouldn't have a problem with it. We sort of like it. We're going towards a lot of that ourselves now, depending on what kind of timber he's got. More and more the pole manufacturing people's standards appear to be going up so there's less and less of the material they want out in the [tape inaudible] so the days probably coming that it would be more likely.

MC: Now could you discuss the wood procurement system because your wood procurement system down here is completely different from what we're used to?

WV: Okay, there are two basic types of wood procurement systems I think. The mills that buy direct as opposed to the people that employ a dealer system and some of them have combinations of the two.

MC: Discuss the direct system first.

WV: The direct system would be that the pulp mill or the sawmill, like in our case, we just go out and we buy the wood directly. If you have a tract of timber for sale, you know, you put it up for sale or I've heard about it, whether it's word of mouth or whether it's an advertised sale or whether you just call me up and say hey, I've got something. We come out there and we look at it and we make you a price, however you decide you want to sell it, whether it's all in one lump sum of money and we do what we see fit with it or whether you sell it or buy it from you on a composite price per unit or whether we just buy it by individual product. We pay you for so much pulpwood, so much saw logs, and poles and right on. That's where the mills buy it directly.

Peter MacDonald (PM): Who then cuts it?

WV: Then they will hire subcontractors, the loggers, that will then take care of the harvesting.

MC: You say they, do you mean the landowner?

WV: No, the purchaser of the wood. You have occasional landowners that hire direct and that's what we do on our company land. We have a subcontractor that we hire to harvest our own timber and then we sell it to our own mill and directly merchandize it to other mills. When I say the mills buy directly I'm specifically talking about, you know, the pulp mills or for the dealer sawmills. Now back to that harvesting, there was when I first started in 1980, it seemed like every pulp mill had at least a few, some had quite a few, company harvesting crews. We had one at Brunswick Pulp and it was not particularly efficient and it was probably the most expensive wood we got in the mill and after a while we eventually got rid of that. We were a lot better off hiring somebody to do it. I don't even know why they had it. I'm not sure of the philosophy. Some companies like Union Camp, they had quite a few company harvesting crews and you know, you got the same state as ours eventually.

Then you have mills they buy some wood direct and then some they buy through what's called a dealer system. Well, we are also wood dealers ourselves for Jefferson Smurfit, where the old container mill is now, and we've been dealers for them for a long time. Sometimes they'll buy wood directly and then hire one of their loggers to harvest it. A lot of times if there's a tract out there, their hands are increasingly tied as a lot of these companies are by the SFI [Sustainable Forestry Initiative] and certification so that they have to be very selective on the tracts that they purchase in their name. So there's not very many that they'll [like]. Most private landowners that aren't members of any sort of certification programs, they won't buy their wood directly. They'll buy from other members of SFI [Sustainable Forestry Initiative] like Rayonier or [Arcoff?], whatever it is now. So then they'll hire a dealer like us to go out and buy tracts of

timber for them. And they'll give us a delivered price and then we'll do whatever we want to with everything except the product. The pulp mills probably have the more elaborate dealer systems. We don't really have any dealers. We buy from other wood dealers and other suppliers, whether it's other pulp mills other than the one that we're dealing with. There will be products that they'll buy in the process of logging their pulpwood and they'll spin off logs to us, all the way to other dealers for other pulp mills or other dealers through Jefferson Smurfit. So it comes from a lot of different sources. And we buy directly from logging contractors that are a lot closer affiliated with independents I'll call them. Most dealers have a group of loggers that work almost exclusively for them. It's rare that dealers will trade logging crews. We do that occasionally with one other dealer that happens to be a Smurfit dealer. Most other dealers look at us like we're crazy. Thus far we have had a pretty good working relationship with them for a long time. My philosophy of our dealership is maybe a little different than some of the others. The primary purpose we have our dealership is to log our mill right here in Hoboken as cheaply as we can and still maintain, you know, somewhat of a dealership that benefits the public. Most other dealers primarily don't have a facility to log and they make their money by generating large quantities of wood going wherever anybody will take it and making a brokerage off of it. So they're a little bit different position so that gives us some flexibility on how to deal with people.

MC: It must be an incredibly constantly changing thing to procure wood, in so many different relationships with mills, other dealers, your own land, independents coming into gate wood.

WV: Yeah, it's getting tougher to keep up with because what we find is every time they start a different type of wood source into this mill it seems that we have different people bringing us that wood. And so we've gone from when I first got here we took one type of material in the mill and we had about eight different people bringing us the wood and that included our individual loggers. Now oh boy, I think we figured out a year or two ago that we took wood from close to a hundred different sources. And so it's tough to keep up with on a weekly basis because a lot of the folks that bring the cut to length material, particularly what's coming out of what was traditionally a pulpwood log, it takes an awful lot of those to run through and generate a load. It might be two hundred stems per load. So it's not like unless you're in just the right kind of wood, you may not generate that many loads a week. Well, we require a lot so we have searched out every corner trying to find people who are willing to bring it to us. In the past we were one of the few people to take this kind of wood, now a lot of people do that. We were one of the first ones. We may have been the first one in this part for small wood like that. I've known people almost out of Valdosta to bring wood, you know, two hour ride. It's a distance but you're willing to haul it. But yes, it's somewhat complex. Technology has allowed us to keep records, keep track of everything, so much better than we used to.

MC: A Canadian question, which I probably should stop the tape and flip it over before I run out of tape in the middle of your answer.

PM: Canadian question, dealing with our procurement system is quite different. We have Crown Land, which I know that you don't have, government land. But even when dealing with wood...

WV: [Canadian owners?] won't sell us any wood. [Laughter] Different philosophy.

MC: Our small wood logger, your non-industrial wood log owner, they're dealt with collectively through a board appointed by the government that kind of acts as a middle man, buying wood and then selling it to companies. Or you could do it without that kind of government regulation or quasi government regulation. You could do it through cooperatives. Wouldn't that make a lot more sense to the mill than juggling, of creating this complicated job of procurement?

WV: You know, our country is based, our country believes in a free market system and that's what we

have. That's just American, everyone's an independent source and don't want folks to tell us what we're going to do with what belongs to us. I own private property rights and if I want to sell my wood then I want to decide who I want to sell it to and I want to sell it to whoever will pay me the most money for it. Would it be easier for the mills? Probably so but I don't think that philosophy fits with what we believe in. I just don't think, I don't think you'd find landowners that would accept that, probably based on just element of distrust as to where did they get those numbers and how did they decide on that, you know. We have times where our system can get chaotic and it creates problems for us, you know, when it gets very wet like it did back in the middle '90s where we had the El Nino and prices just went out the roof. But, you know, that was what the market said that was worth to keep the mills going and people were willing to pay that and when it got to where it wasn't that way anymore people quit paying those prices and they came back down. That's created a problem because all these landowners still remember how much money they got back then. So now they're saying our wood pulp doesn't bring anything because it's been dry for a long time. There are a lot of other factors in which the supply of pulp wood was a tremendous factor with suppliers, kind of a supply and demand curve structures prices on different trends. Yeah, I mean, that would make things work chaotic but I don't think it would ever work here.

PM: Well, that's an important, what we're trying to find is not only how did systems evolve but why. And so the kind of, this is something basic to the social and economic system in which forestry is embedded here as opposed to the socio economic system in which forestry is embedded in Canada or Lord know, Sweden, which would be different again.

WV: Yes, George probably touched on this but back years ago when people lived out on these small farms. They were primarily farmers. They were growing some kind of a crop and they had livestock, poultry, and timber was just something that they did whether it was naval stores or later, you know, they had a stand of timber out there and a lot of the folks that lived on the farm all those years, they were growing those in their retirement plan. And you hoped that you didn't have some disaster whether it was a fire or bugs get in it or whatever and just wipe them out. But that was their philosophy and they would maybe during bad times they might sell a little bit of wood out there if the crop wasn't quite up to what it was supposed to be. You know, people that were living off the land out there, they were self sufficient and independent and it was theirs and they were going to do what they wanted to with it. I just don't think it would work like up in Canada. That's just the way I see it.

MC: Thank you very, very much.

PM: Thank you very much.

MC: It's very good, thank you.