

Jeff Carpenter ([00:00:09](#)):

I am Jeff Carpenter, and this is Zach Woods Herb Farm in Hyde Park. We are a certified organic medicinal herb farm, also real organic project certified. We started in 1999. My wife, Melanie, and I, she and I have been at this for 26 years now.

Andy Chamberlin ([00:00:30](#)):

I'm your host, Andy Chamberlin, and I take you behind the scenes to learn how farmers are building their business and sustainable agriculture. These farmer-to-farmer interviews cover a wide range of topics from cropping systems, marketing channels, lifestyle decisions, and lessons learned along the way.

([00:00:46](#)):

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([00:01:16](#)):

Today's episode comes to you from Hyde Park, Vermont, where we visit with Jeff Carpenter from Zach Woods Herb Farm. They grow medicinal herbs and have been doing so for 26 years. We start off with a look into his high tunnel where they grow all their starts, we take a look at their new batch dryer, and then check out a field of perennial herbs before taking a look inside their packing shed. After that tour, we then sit down on the back deck and chat about how and why they built their business to meet their needs. He shares the lessons they've learned by scaling up too much and how investing in labor-saving tools has really paid off.

([00:01:52](#)):

I hope you enjoy this episode, learning about medicinal herbs with Jeff.

Jeff Carpenter ([00:02:03](#)):

This is our greenhouse, very small. Obviously, we are set here in this really hilly, hardscrabble farm, and we didn't really have a big level spot for our greenhouse. We built this one, which is 22 X 48. The size of this has actually been fine, given that we've kind of made it work through the years just by being able to do a couple different cyclings of seedlings here in the spring. We start it in mid-February. We grow a lot of perennials, so a lot of the perennials are... the seeds need to be stratified to help them germinate. We start really early in the greenhouse here. And then we get that first, the hardy perennials, out pretty early, and then we start some of the annuals. We've made do with a small space.

([00:02:56](#)):

But almost everything we grow is from transplant, very little is direct-seeded. We experimented a lot with direct seeding through the years, but it was difficult because these medicinals, they're wild plants by nature. They're not bred like carrots and other things to germinate really predictably and consistently. They have been selected for their qualities and traits and stuff, but very little of them have been hybridized in bred. They're wild plants. They want to grow where and when they want, and they're not very open to our feedback on that. You know what I mean?

Andy Chamberlin ([00:03:39](#)):

Not as-

Jeff Carpenter ([00:03:39](#)):

It's tough.

Andy Chamberlin ([00:03:40](#)):

... reliable or-

Jeff Carpenter ([00:03:40](#)):

Yeah, exactly.

Andy Chamberlin ([00:03:41](#)):

... consistent, yeah.

Jeff Carpenter ([00:03:43](#)):

Yeah. This is also a multipurpose. After we're done with the transplants, it's kind of a processing house for us. This is where we hand-garbled the herbs by rubbing the dried plants over these screens, goes into here, and then kind of different processes for different herbs. This is how we separate the dried leads from the screens. Some of the bigger farms, this process is automated and we feel like... Our business is really focused on quality instead of quantity, and this is part of what differentiates us from the mass produced stuff. It's a lot of the more hands-on processing.

([00:04:24](#)):

This is a table where... I'll show you in the drying shed, we're actually processing some Japanese knotweed.

Andy Chamberlin ([00:04:31](#)):

Oh.

Jeff Carpenter ([00:04:32](#)):

You're familiar with that plant?

Andy Chamberlin ([00:04:33](#)):

Yeah.

Jeff Carpenter ([00:04:35](#)):

We mill it, and then we had to magnetize it because where we harvest it... It's a wild harvest on an organic dairy farm. We need to make sure when the buyer buys it, they're going to be powdering it and encapsulating it, that there's no metal in it. We use really strong magnet after we've milled it to pull any of the-

Andy Chamberlin ([00:04:53](#)):

Do you find metal?

Jeff Carpenter ([00:04:54](#)):

Yeah, we do find mostly small filings and shavings. But every once in a while there's an old nail or a... yeah, little pieces of metal.

Andy Chamberlin ([00:05:06](#)):

Is it the roots you're harvesting or-

Jeff Carpenter ([00:05:08](#)):

Correct, yeah.

Andy Chamberlin ([00:05:09](#)):

Oh.

Jeff Carpenter ([00:05:10](#)):

Yeah, it is the root.

Andy Chamberlin ([00:05:10](#)):

Not the green?

Jeff Carpenter ([00:05:11](#)):

Not the greens at all. The root is really rich in resveratrol. Are you familiar with that compound? It's one of nature's most potent antioxidant compounds. It's really helpful for some people dealing with the symptoms of Lyme disease. We wild-harvest it, and we process it and sell it to a company that formulates capsules and liquid extracts primarily for people with Lyme disease, but also just as another kind of herbal supplement. Yeah, I'll show you that.

Andy Chamberlin ([00:05:47](#)):

Talk about innovative then.

Jeff Carpenter ([00:05:48](#)):

Yeah, yeah. It's wild.

Andy Chamberlin ([00:05:49](#)):

An invasive-

Jeff Carpenter ([00:05:50](#)):

Exactly, yeah.

Andy Chamberlin ([00:05:51](#)):

... plant. So yes, I understand there may be metal fragments then if you're sifting through soil.

Jeff Carpenter ([00:05:56](#)):

Yeah, exactly, because we're harvesting it from the wild. This stuff came from the side of a big hay field. So this will be about 250 pounds of dried knotweed root.

Andy Chamberlin ([00:06:13](#)):

Wow.

Jeff Carpenter ([00:06:15](#)):

This is about 750 that's represented in these. This has already been processed and is ready to ship. Then this will be processed, and then we'll ship it. The buyer wants 1,000 pounds, so this is the remainder of it.

([00:06:36](#)):

This is a new dryer, and this is what a lot of the second edition, the revised edition of the book, addresses. It's our new drying technology. In the first book, which we wrote in 2015, we primarily talk about the drying on screens in a tunnel drying situation. Through the years, I kind of got the opportunity to go tour some other bigger herb farms and stuff. What I saw they were doing was this more like a batch dryer system, and they were doing this on a bigger scale with big grain dryers, similar to grain dryers. So I decided that this was going to be a better, more efficient kind of way to dehydrate the herbs for us.

([00:07:20](#)):

I built this dryer and it's been really successful, a good model for a lot of people to scale either up or down and build their own. So it's like a DIY plenum dryer. It's a 400,000 BTU, a greenhouse heater in an enclosed ducted heater, so it blows the hot air through the bottom, through the plenum. And then when everything's dried... The beauty of this one when we're drying the leaf crops on here is when the leaf crops are dry, we... Garbling is the term of, you've probably heard this maybe when you were at the hillside-

Andy Chamberlin ([00:07:57](#)):

Yes.

Jeff Carpenter ([00:07:58](#)):

... separating the leaves from the stems. We can do the first step of that right here. As we're rubbing them, the leaves fall through and the stems mostly stay on top, and then we discard the stems into the compost pile and we take these grates out and shovel everything out. And then... Okay. Yeah.

Andy Chamberlin ([00:08:17](#)):

Is this aluminum grating?

Jeff Carpenter ([00:08:18](#)):

It is aluminum, yeah, and then everything else is stainless steel lined inside.

Andy Chamberlin ([00:08:23](#)):

Okay.

Jeff Carpenter ([00:08:23](#)):

Yeah. So that's been a game-changer for us.

Andy Chamberlin ([00:08:26](#)):

I bet. What kind of cycle time do you find on average you can do a batch through there?

Jeff Carpenter ([00:08:35](#)):

With a lot of the leaf crops, like the mint family crops, like the peppermint and the lemon balm and the stinging nettle and that-

Andy Chamberlin ([00:08:42](#)):

All that.

Jeff Carpenter ([00:08:42](#)):

... generally about 24 hours, especially when the weather is good, which is great. Because when we were doing the tunnel drying on racks, it took longer and it was a lot more labor-intensive because we had to spread the herbs out kind of really carefully on the racks, and it took so much longer. This has really cut down on the cost of labor. Surprisingly, we actually are producing a higher quality product because the drying time is quicker, the herbs are exposed to the elements for less time, less oxidation, less volatilization of their important essential oils and other compounds. That was a real awesome revelation for us. We were thinking, "Okay, this is going to be a lot more efficient. We'll be able to do more volume with less work," but the surprise takeaway was the increase in quality, which has really been awesome, and just more control over the whole process, which is great.

Andy Chamberlin ([00:09:32](#)):

Even though you're burning propane.

Jeff Carpenter ([00:09:33](#)):

Even though we're burning propane, exactly. We get a lot of benefit just from the solar gain from this being in a greenhouse, which is great. On a day like today, a lot of the heat's free. We're kind of supplementing the solar gain with the propane. At night, that's when the propane takes over, but it's relatively efficient. It burns less gas than you would probably imagine.

Speaker 3 ([00:09:56](#)):

Hi, there.

Andy Chamberlin ([00:09:56](#)):

Hi.

Emily ([00:09:56](#)):

Hi.

Jeff Carpenter ([00:09:57](#)):

This is our long time employee, Emily.

Emily ([00:09:59](#)):

[inaudible 00:10:00].

Jeff Carpenter ([00:10:02](#)):

They are processing echinacea root.

Andy Chamberlin ([00:10:07](#)):

What's the steps of processing echinacea? I'm unfamiliar.

Speaker 3 ([00:10:10](#)):

Well, Jeff has mowed it down out in the CLM. We just bed-lifted it and then harvested it. We have to take the tops down some and then separate it into quarters and bang out the dirt so that when it goes into the root washer... You see the... there's a rod of... What is that called? Pipe seed [inaudible 00:10:29]?

Andy Chamberlin ([00:10:29](#)):

Yep, the copper tubing. Yep.

Speaker 3 ([00:10:31](#)):

COVID brain is a real thing. I can't even speak. I like grunt and point. Anyway, the water comes out in jets and it does this... centrifugal force, so the water has to be able to penetrate in there to get the dirt out. We just have to break it up because if we send something like this through, there's just not enough water or force. It would just take a lot. It's kind of a nice thing after digging in the soil to stand a little bit and just work with your hands. It's a little bit easier on the body.

Andy Chamberlin ([00:10:56](#)):

Break it down.

Speaker 3 ([00:10:56](#)):

Emily wasn't being ordered. She's like, "I want to come out and plow this root because it's [inaudible 00:11:00]."

Andy Chamberlin ([00:11:03](#)):

Today's a beautiful day to get out.

Jeff Carpenter ([00:11:03](#)):

So this will be washed and then dehydrated, similar to the knotweed root.

Emily ([00:11:08](#)):

Do you want to see the total ech? I can grab a bag of that for the [inaudible 00:11:11]. It's right up there.

Speaker 3 ([00:11:11](#)):

Every part of this [inaudible 00:11:18].

Jeff Carpenter ([00:11:17](#)):

Emily's going to grab a sample of the finished product of echinacea root, and this stuff will be the echinacea root with the tops too.

Emily ([00:11:24](#)):

With the tops.

Jeff Carpenter ([00:11:24](#)):

The leaf and flower.

Andy Chamberlin ([00:11:26](#)):

You said you're quartering the crown?

Emily ([00:11:27](#)):

Yeah, quartering and then just, sometimes, we break it apart more, just making sure that most of the mud is out and it has access to the water.

Andy Chamberlin ([00:11:33](#)):

Okay.

Emily ([00:11:36](#)):

Some of the smaller ones, you can just pull apart, but the real chunky ones... We just did all that knotweed, so our hands and our forearms are a little bit sore. So rather than twisting, I'm like, "I just want a pound, straight movement," but that is a fun harvest too. Those roots are really [inaudible 00:11:53].

Jeff Carpenter ([00:11:52](#)):

These are three-year-old plants.

Andy Chamberlin ([00:11:55](#)):

Okay.

Emily ([00:11:56](#)):

So you can see they just kind of falls apart.

Jeff Carpenter ([00:12:00](#)):

This is the aerial portions of the plant, which also have medicinal qualities. It's a little more concentrated in the root, but it's the same compounds in the leaf and flower.

Andy Chamberlin ([00:12:11](#)):

Oh, this is the whole plant, right?

Emily ([00:12:13](#)):

Yeah, absolutely.

Jeff Carpenter ([00:12:13](#)):

That's right, so this has root and... This is everything.

Speaker 3 ([00:12:18](#)):

It's like the full [inaudible 00:12:19].

Emily ([00:12:18](#)):

Got the little flecks of purple and-

Andy Chamberlin ([00:12:21](#)):

Yeah, it's pretty.

Emily ([00:12:21](#)):

Pretty. Great this time of year too, cold season.

Speaker 3 ([00:12:25](#)):

Yeah. [inaudible 00:12:28].

Jeff Carpenter ([00:12:30](#)):

Yeah. This is the time of year when the sales of the immune herbs really go up.

Speaker 3 ([00:12:35](#)):

Yeah, it was kind of an-

Jeff Carpenter ([00:12:35](#)):

So this is our little pack house.

Andy Chamberlin ([00:12:38](#)):

Oh, little is right. It's a cute little shed.

Jeff Carpenter ([00:12:40](#)):

Yeah. This is a true timber frame building that was built from trees that were taken off our land where we built our pond. Yeah, it's all pegged, all real traditional timber frame construction. It was a fun project.

Andy Chamberlin ([00:13:00](#)):

I love that about Vermont farms is that there's so many instances where people do exactly that. You're like, "Oh, this shed was built off that tree right over there."

Jeff Carpenter ([00:13:12](#)):

This is primarily where we fill retail orders and small... We're also in stores with these... Let's see if we have any samples in here of window bags. It looks like we don't have any full, but we have... This is primarily our retail packaging with a label on it. I wish I had... Oh, yeah, here it is, yeah. There's some-

Andy Chamberlin ([00:13:42](#)):

Yeah, that's perfect.

Jeff Carpenter ([00:13:43](#)):

That's what we sell in a lot of the stores. That's our kind of retail-friendly packaging.

Andy Chamberlin ([00:13:50](#)):

Yeah, it has a nice visual.

Jeff Carpenter ([00:13:54](#)):

Yeah. Our sales are about 50/50 retail to wholesale. On the retail end, it's mostly mail order through our website and a little bit of in person. But we're pretty far off the beaten path here, so there aren't a lot of people that are just driving down the road, knocking on our door.

Andy Chamberlin ([00:14:14](#)):

Looking for a bag of peppermint.

Jeff Carpenter ([00:14:15](#)):

Yeah, it's mostly through our website. Most of that is just word of mouth and just kind of recognition based on us being in the business for 26 years now. We don't really do any marketing at all. We have a very minimal social media presence, so it's all just kind of organic, word-of-mouth stuff, which is awesome.

([00:14:35](#)):

And then on the wholesale end, we're primarily selling larger quantities to both herbal product manufacturers. They're encapsulating herbs, they're making liquid extracts, they're making all kinds of herbal products, be they topical for skin care or internal for wellness, healing, immune support, things like that. The other end of the wholesale market is mostly companies who are making herbal teas with our herbs. They're either buying them after we hand-garble them in kind of a rougher cut. Or we also have the opportunity to do a finer milling for companies that they may be putting our herbs in tea bags, so we have equipment to do that. Those are primarily our wholesale markets, and it's mostly companies that we've been working with for a long, long time, that we develop relationships with 20 or so years ago and they've stuck with us. That's been really awesome.

([00:15:37](#)):

There's very little... It is pretty low risk and not a lot of speculative growing. Most of the growing we do on the wholesale end is contractual, which is great. These companies place their orders in the middle of the winter, in January, February. Oftentimes, they'll give us a little deposit on the sale. We grow the herbs for them. There's obviously clear communication if we're having issues with crops, shortfalls, or other issues. We will communicate and let them know. But it's just been great to have these long-term relationships with these known entities and not have to do a whole lot of marketing and research and pretty low risk. It's taken us a long time to get to this point because there have been some times

through the years when we took on some new clients and new businesses that didn't pan out as well. The old, tried, and true standbys have stood by us and it's been awesome.

[\(00:16:38\)](#):

Most of the plantings we do are on this two-row bed system, 2 rows to the bed, 6 feet on the center, 28 inches apart. This is stinging nettle. These smaller plants here were planted in, I want to say, early August. They're just kind of getting well established. These nettle plants were planted in June. You can see they're quite a bit further along, although a little bit struggling with the drought. We will not harvest these this year since they were planted this year. These perennials will be in the ground. We're planting on a permanent bed system. These perennials will be in the ground for five, six, maybe seven years with two to three, sometimes even four harvests a year, depending on how good the growing season is. They're really generous plants. Growing perennials is one of the most awesome things about the work we do is that these plants are in the ground for a long time in these permanent beds, and it gives us a chance to be really a lot less impactful on the soil than if we had to plant and till every year.

[\(00:17:52\)](#):

We have a low-till program going right now. We're trying to switch to more of a no-till, but it's been a tough experiment with some of the no-till, just dealing with the weeds and the fertility issues. That's a continual experiment that we haven't had success with yet, but we're going to keep trying. The low-till has been successful. We're up here on this hillside with these hardscrabble soils, and it's definitely not ideal agricultural conditions, but we've made the most of it. As much as we have really attempted to and intended to raise the organic matter in our soil through the years, through the application of compost and a lot of cover cropping and stuff. We've kind of just maintained... We feel it as a success that we're not losing. We're convinced in the beginning that we're going to be able to really increase the organic matter in the soil, and it just hasn't been that way.

Andy Chamberlin [\(00:18:47\)](#):

And to maintain it, I would say, is a metric of success.

Jeff Carpenter [\(00:18:52\)](#):

Yeah, I would say so too. Yeah.

Andy Chamberlin [\(00:18:56\)](#):

For things like that that you're planning to leave for 3, 4 years-

Jeff Carpenter [\(00:19:00\)](#):

Yeah, 5, 6, 7 years.

Andy Chamberlin [\(00:19:02\)](#):

Yeah. Is that an aggressive of enough plant that it shades out weeds and makes like a bush?

Jeff Carpenter [\(00:19:08\)](#):

It does, yeah. We are really proactive with our weeding. So when we put these perennials in the ground in the spring, we're weeding... We have a high crop cultivating tractor doing a lot of mechanical weeding, trying to do as little hand-weeding as possible because the costs of that are really expensive. Once the plants get established though, their canopy grows so fast that they become more aggressive

and the weed control is a lot easier. However, mid-season after we harvest them two or three times, we have to go in with the sweeps and we're just doing a real shallow cultivation just to keep the raw leaf annual weeds down.

[\(00:19:52\)](#):

We really work hard to keep the perennial weeds out the grasses, especially because once the grasses start coming into these perennial plants, it really is hard to control them. Again, we're super proactive with our weeding. You can see here these beds of mint. There's three types of mint here. There's peppermint, spearmint, and then more stinging nettle over there, two types of peppermint and spearmint. This is the second year with these. This has been harvested three times this season, and you can see how dense the planting already is after... We harvested this I think three weeks ago. The weeds really don't have much of a chance to grow with the mint being so aggressive.

Andy Chamberlin [\(00:20:37\)](#):

Yeah, that really rebounded.

Jeff Carpenter [\(00:20:38\)](#):

Yeah.

Andy Chamberlin [\(00:20:39\)](#):

I wish you could include smells on the podcast because there's a lot of real nice aromas on this farm visit.

Jeff Carpenter [\(00:20:50\)](#):

And then this is our favorite cover crop combination. This is oats and clover. We've harvested the oats. One of the other awesome things about this combination of red clover and oats that we use for our primary cover crop is that we get to market both of these crops. The milky oats, we market, and the red clover blossoms, in addition to their soil restorative qualities.

[\(00:21:17\)](#):

You want to walk around a little more?

Andy Chamberlin [\(00:21:18\)](#):

Yeah, sure.

Jeff Carpenter [\(00:21:19\)](#):

Okay.

Andy Chamberlin [\(00:21:20\)](#):

How much space are you growing on?

Jeff Carpenter [\(00:21:24\)](#):

We're growing up... Well, we own 10 and a half acres, and we currently have about 6 acres in cultivation. In the past, we've gotten as big as 15 acres, and that was around 2018 and 2019 during the

hemp boom. We had a few acres in hemp, and we had a really big crew. We had about 15 people on payroll, and that was too much.

[\(00:21:52\)](#):

Mel and I are really plant people and love working with the plants. At that point, we felt like we were doing too much management and all we were doing was managing people, so that's been part of the reason that we've scaled down since then. This is kind of our sweet spot is the five or six acres. Since we are now in our mid-50s and aging, we want to farm sustainably into the future while also dealing with the labor shortages, which have been a thing in the early years of our farming, like 10, 15 years into it. We had so many people wanting to work with us, mostly friends and friends of people who had worked here that it was really hard to select. We get dozens of emails during the winter, people wanting to work here.

Andy Chamberlin [\(00:22:40\)](#):

What a problem to have.

Jeff Carpenter [\(00:22:42\)](#):

Now, it's the opposite. We really have had hard time finding people. It's just the labor market has really changed. That's another reason why we have shrunk the farm, and we're actually feeling like, again, this is the sweet spot for us. Bigger is not better for us. Smaller is actually better because we can focus more on the quality, and Melanie and I can do more farming rather than personnel management. The quality of the plants is higher, the quality of the products is higher, and the quality of our lives is a lot higher too because we have just a little more space to do some fun things in addition to the farming. The days of the 50, 60, 70-hour work weeks are over an hour. Now, we're more like 40 hours a week, and we have our weekends free, which is awesome. We never thought we'd be able to do this, and here we are. It's really great.

Andy Chamberlin [\(00:23:32\)](#):

How many people are on payroll now?

Jeff Carpenter [\(00:23:36\)](#):

Emily is our full-time person, and we have a couple of floaters that come in. We call them part-time floaters, just people or friends that come in when we're doing a big project to help out.

Andy Chamberlin [\(00:23:46\)](#):

That sounds like a sweet spot to be at.

Jeff Carpenter [\(00:23:50\)](#):

It really is. It definitely is.

[\(00:23:54\)](#):

Have you seen the barrel washer, root washers before?

Andy Chamberlin [\(00:23:56\)](#):

Yes.

Jeff Carpenter ([00:23:57](#)):

Yeah. Okay, yeah.

Andy Chamberlin ([00:23:58](#)):

I've never seen one quite that dirty though because, normally, they're used for carrots and things-

Jeff Carpenter ([00:24:04](#)):

Carrots and things and stuff, yeah.

Andy Chamberlin ([00:24:05](#)):

Trying to clean the knotweed.

Jeff Carpenter ([00:24:08](#)):

That's knotweed debris, yeah.

Andy Chamberlin ([00:24:12](#)):

Do you do other stuff in this greenhouse, or is it primarily your drying space now?

Jeff Carpenter ([00:24:17](#)):

No, we kind of utilize that as a cold frame as part of our transition of moving plugs from this greenhouse into the field in the spring when the temperatures are still kind of marginal, but it's not like a heated greenhouse. It just gives us a little more flexibility.

Andy Chamberlin ([00:24:34](#)):

Yeah.

Jeff Carpenter ([00:24:36](#)):

Yeah.

Andy Chamberlin ([00:24:36](#)):

In the springtime, any covered space, you can utilize you your way.

Jeff Carpenter ([00:24:40](#)):

Exactly. You'll notice we're growing a lot of mint family crops.

Andy Chamberlin ([00:24:46](#)):

Yeah.

Jeff Carpenter ([00:24:47](#)):

This is lemon balm. These plants have been in the ground for... I think this is their fourth year actually, and you can see how vigorous they still are after being harvested three or four times a season. Actually, this year, we only harvested this twice because they weren't growing back as well with the droughty

conditions. You can see how tight we are with weed control because when the plants are small like this, after they've been harvested again, the grass has come in and then it's just time to transition this field.

(00:25:26):

This ground here is being prepared for garlic. We produce about 500 pounds of garlic a year. It's all wholesale. We've had really good luck with our garlic, with the exception of last year we had some fusarium because we had such a couple of wet seasons. Some of the seed we put into the ground, we were wondering if it was going to still be infected. This year's crop was better than ever. It was like one of our best crops. We had to irrigate it, of course, through the drought, but we were glad that the fusarium wasn't persistent in the seed that we put in the ground.

Andy Chamberlin (00:26:04):

So do you have irrigation on most of your ground or just a few things?

Jeff Carpenter (00:26:07):

We do, yeah. We just use drip tape. Yep, we have a pond over the bank down there, and we have a productive well that helps with the irrigation. It was really important this year to keep everything going.

Andy Chamberlin (00:26:16):

Yeah.

Jeff Carpenter (00:26:17):

Yeah.

Andy Chamberlin (00:26:18):

Nice.

Jeff Carpenter (00:26:18):

Yeah, this year was a really great rebound. The last two years were so wet that the plants were really struggling. Our ground isn't very well drained here in some spots. You can see some of the low spots in the back especially. This year was great because it's a lot easier to bring the water to the plants than keep the water away from the plants. The spring, we had good rain in the spring and then a lot of heat. The crops just did really well. We just haven't had a good third harvest in some of these mint crops because it just got so dry from late July on, but it's all right because the first couple cuts were so good. Our yields were actually overall on the higher end of our averages, which is good.

Andy Chamberlin (00:27:02):

That's good.

Jeff Carpenter (00:27:03):

Yeah, so that's kind of the farm.

Andy Chamberlin (00:27:08):

Cool.

Jeff Carpenter ([00:27:08](#)):

Do you want to sit down and do some of the interview?

Andy Chamberlin ([00:27:13](#)):

Yeah, that'd be great.

Jeff Carpenter ([00:27:15](#)):

We started out with just one acre in '99 without a lot of knowledge, really kind of experimentally growing herbs. Previous to owning the farm, we owned an herbal product company. One of the reasons we got into farming is we were trying to source raw materials for the manufacturer of our herbal products, and we wanted really high quality products, and it was hard to find local herbs and really high quality herb. We saw a great opportunity here in Vermont. We're both like plant people. We really love to be outside, working with a plant. We sold the business to buy this farm, and we've learned a lot through the years. In the early years, there were not a lot of resources for us. There's a million books out there on how to grow vegetables and the yields and lots of databases and all that, and it's not true for medicinals.

([00:28:05](#)):

There are some resources, but they weren't really helpful as far as benefiting us for what we were doing on a small scale here in a tough climate to grow some of these herbs on a hardscrabble hillside farm, so a lot of trial and error through the years and having a lot of success. Finally, a lot of people were asking us to help them do what we do and urging us to write a book based on all the knowledge we have gleaned through our trial and error. In 2015, we wrote our first book, *The Organic Medicinal Herb Farmer*, and then we wrote the revised edition of that in 2023. That's been really successful for us as kind of an adjunct to enterprise and helped a lot of people enter this industry, which is really great because there's a lot of opportunity in this industry of medicinal herbs. The learning curve is pretty steep. The market is really fickle. But once you figure out your niche, there could be a lot of success to be had in this industry.

([00:29:09](#)):

We feel good about pioneering and paving the way for a lot of young and upcoming farmers who are interested in either diversifying their offerings outside of vegetables or growing medicinals as adjunct crops in addition to vegetables and other edibles, fruits and things. It's been a lot of fun. There's been a lot of challenging years. We are going to continue to do this until we can't do it anymore, until our bodies quit. There's no retirement day in the future. What we're doing now after 26 years and entering our mid-50s, age-wise, is to definitely kind of farm more sustainable and shrink the size of our business, really focus on quality, quality of life, quality of the product. We really like where we're at. We've found the sweet spot, as I mentioned previous. This kind of five to six acre scale for us is where it's at, and it feels really comfortable. We love the work that we do, and we encourage other people to consider growing medicinal because, as I mentioned, there's a lot of opportunity in this market right now.

Andy Chamberlin ([00:30:20](#)):

That's interesting that you approached it from a company that had a need rather than, "I want to be a farmer. Now, I need to find a market for my herbs because I like growing herbs."

Jeff Carpenter ([00:30:33](#)):

Exactly.

Andy Chamberlin ([00:30:34](#)):

That's a bit of a different entrance to the space.

Jeff Carpenter ([00:30:37](#)):

It really is, yeah. There were a couple other driving factors. Well, I grew up around some of the dairy farms. My dad's family were in the dairy industry in one way or another. Although he was not a farmer, he really moved away from the farms, he kind of saw opportunities elsewhere, but I was always really attracted to the agricultural lifestyle. Even though my dad was kind of clear in pointing out that that was a really hard way to make money and there were easier career paths to choose, I was just really attracted to the lifestyle and working with the land and the machinery and the people and the plants. I've kind of always been drawn to this work. Also, I wanted to find a career where I could kind of have a little more space in the winter to pursue my other passion, skiing. These two things have really combined hand in hand, along with Melanie and my love of herbs and growing plants to offer us a really great career opportunity here.

([00:31:39](#)):

The first five years, we were both working on the farm and working doubles in the restaurant industry. Melanie was in the education field for a while as a teacher and then a middle school principal. After about year 10, we decided that we could make a living solely farming, and it's been great. One of the awesome things about growing medicinals is that almost everything that we grow and produce is dehydrated, so we have long-term storage, so we have the opportunity to have sales year round. That's kind of offers us good cash flow through the winter, and we don't really have to deal with the perishability issues that a lot of the other food growers have to do, such as keeping things refrigerated or frozen and stuff like... The dehydration factor is really awesome, offers us that flexibility. It doesn't give all of the herbs an indefinite shelf life. Some of them are more sensitive than others to time and storage, but it gives us a lot more flexibility, which is great.

Andy Chamberlin ([00:32:40](#)):

For sure. That's funny... Just to pick up on the common themes across these conversations that I've had is that a lot of Vermonters, they farm so they can ski in the winter. They do it because they like to, and it takes them 10 years before they're really got the flywheel spinning.

Jeff Carpenter ([00:32:56](#)):

Exactly.

Andy Chamberlin ([00:32:58](#)):

That's what it takes to build an agricultural business.

Jeff Carpenter ([00:33:01](#)):

Yeah.

Andy Chamberlin ([00:33:05](#)):

Did you ever have the desire to get into vegetables or other things once you started building the system, so to speak, for the herbs?

Jeff Carpenter ([00:33:16](#)):

No, I didn't. I spent enough time on my friend's vegetable farms, watching them struggle with a lot more diseases and pests and things having to do with perishability and timing of harvest than... In contrast, this growing medicinal herbs seems so much easier. It has been a lot easier. These plants are wild by nature. A lot of them haven't been bred and hybridized like a lot of the food crops have, so they're naturally resistant to pests and disease pressure and they're really suitable for being grown in polyculture situations and for long-term plantings. The plants that we grow are also really beautiful. A lot of them, like calendula and chamomile, just have gorgeous flowers and blossoms in the aesthetic aspect of this work. The aromatic aspect of this work is also super rewarding.

([00:34:14](#)):

We just feel like this is our comfort zone. I think I'd be a lot harder pressed to feel like I could farm vegetables successfully on this scale with the similar labor scale that we have, given all those kind of other variables. I have so much respect for those food growers, veggies, fruits, nuts, all that, because I can see how challenging it is, and I know a lot of them have had success, but it also seems like there are a lot of veggie growers and the market seems a little more challenging with regard to the price of the high quality local organic produce versus the people who want convenience and going to the supermarket. I think we have the advantage in our industry of having a lot of the customer base that we're working with really quality-focused and not as much price-focused. We have the opportunity to work at higher price points and really be... We feel like we're paid fairly for the work we do, let's put it that way.

Andy Chamberlin ([00:35:18](#)):

Yeah. Have you noticed any major shifts in this industry over your career or impacts from climate or major swings in that regard? You mentioned that herbs seem to be fairly resistant to pests and disease, so maybe that's been less burdensome than-

Jeff Carpenter ([00:35:38](#)):

We definitely have seen some big shifts in the industry. The first big shift in the industry we saw around the mid-1990s, I want to say it was like 1994, 1995, the FDA established DSHEA, the Dietary Supplement Health and Education Act, which basically... It was beneficial to herbal product manufacturers in that it kind of separated herbal products from having to go through the scrutinizing process of pharmaceuticals being approved and vetted. It basically made the distinction that herbs and herbal medicine and herbal supplements are more of a food than a medicine, which is helpful.

([00:36:25](#)):

But it also brought on increased scrutiny from the FDA through the current good manufacturing processes procedures, which is also beneficial to the consumer because it limited the amount of dangerous practices as far as people using non-hygienic raw materials and herbal products, and some of the adulteration that was going on, like substituting high-priced botanicals for things that were not the same botanical, but trying to sneak it into a formula, like ginseng for example. A lot of people know that ginseng is highly prized, really difficult to grow, really expensive to buy. That's an example of adulteration. Some of the companies that were not as scrupulous were substituting other ingredients.

([00:37:18](#)):

This current good manufacturing process kind of tightened up some of this and I think restored confidence in the herbal product consumer. But what it also did was the unfortunate consequences that it forced a lot of the smaller to mid-scale herbal product manufacturers to have to shift to working with

third-party manufacturers because they had trouble maintaining compliance, because the FDA would come into their businesses and really scrutinize their practices and force mandates on them that were unaffordable. We went from, in the early days of our farm, working primarily directly with the herbal product manufacturers to now them having to work in a lot of cases with the third-party manufacturers. Now, all of a sudden we're having to sell more herbs to these contract manufacturers. The contract manufacturers weren't always quality-focused, they were more price-focused. That's been one of the big shifts we've seen in the industry through the years.

[\(00:38:19\)](#):

Fortunately, a lot of the real high quality herbal supplement companies, tea companies, product manufacturers, have really maintained control of the manufacture of their products and they're having success, but it's been difficult for them. So that said, we have learned to work with some of these contract manufacturers and we encourage other people to not see that as a challenge that's not able to be overcome, but it just takes some finessing to convince these contract manufacturers that quality is oftentimes more important than price.

[\(00:38:52\)](#):

The other challenge, as you mentioned with climate change, we have seen that in a big way directly. Everything is obviously a lot more extreme. The big gully-washing rain events, the thunderstorms in mid-July and August that used to kind of like... We'd see a little sheet erosion here and there on the farm. Some of these events in the last decade or so have been so intense that we have really had to change the way that we farmed on some of these hillsides to prevent some of the big gully-washing erosion events that we had. We've seen obviously a lot more rain, had a lot more challenge with growing plants in some of our lower lying, less well-drained areas, and had to shift some of the way that we farm on this land and leased land from our neighbors to compensate for that, some of the more well-drained land.

[\(00:39:48\)](#):

And also, in the drier years, like this year for example, really uncharacteristically extreme drought for this region. We haven't seen anything like this. Our pond is two feet below the standpipe. I've never seen it that low before. Fortunately, we have a good well. Just having to really adapt and be more resilient to these extremes has taken a lot of work and a lot of thoughtful planning on our part. Really looking at the land and trying to figure out how to mitigate the damage that some of these events have done, had success in a lot of ways, and still learning a lot as we go along.

Andy Chamberlin [\(00:40:30\)](#):

Yeah, it's a challenge. It seems like we're all trying to learn from each storm.

Jeff Carpenter [\(00:40:36\)](#):

Exactly.

Andy Chamberlin [\(00:40:38\)](#):

What did you envision your farm would look like when you got started?

Jeff Carpenter [\(00:40:43\)](#):

Wow. We did a lot of dreaming in the early days before we actually bought the farm. We didn't have a lot of money, so we envisioned having to buy a chunk of land that was maybe not cleared and not as

suitable for agriculture, not down in the prime bottom land. That's kind of exactly what we found here is a hardscrabble piece of land that required... The previous landowner had cleared some of it. He had some cattle grazing here, and he had kind of high-graded a lot of the good trees off. We had to do a lot of clearing on this land, but never did I really envision back then the success that we would have and the scale that we would achieve as far as eventually getting to that 15 acre scale that I mentioned.

(00:41:35):

We always thought it was just going to be really small, like an acre or two, and that we are going to have to always have jobs outside the farm. So that really exceeded our dreams and our expectations, the fact that we were able to enter that larger side of the small scale by getting into 15 acres and having a lot of success and not having to have adjunct work off the farm. Although we do have other ways of diversifying our income, but we don't have full-time jobs off the farm.

Andy Chamberlin (00:42:04):

That's a good point too, that you do still have diverse income streams.

Jeff Carpenter (00:42:08):

Exactly.

Andy Chamberlin (00:42:09):

Yeah.

Jeff Carpenter (00:42:09):

Yeah.

Andy Chamberlin (00:42:11):

You mentioned now that you've approached a sweet spot as far as your scale and your number of employees, do you think that that growth, we'll call it the apex of production, was fundamental in you learning that lesson?

Jeff Carpenter (00:42:31):

It was very fundamental. I think a lot of farmers and I think business owners in general kind of live under the assumption that bigger is better, and it can certainly be better. Economies of scale come into play where higher profits can be had through higher volumes based on the lower cost of each given unit produced. But we really saw when we got to that larger scale that it was really hard to maintain the quality. Not only the quality of the product, which as I mentioned is one of our most important tenets of the work that we do, but also the quality of life, having to manage people, and so much more maintenance of equipment, we are leasing a piece of land three miles up the road, and having to truck equipment back and forth and stuff. Bigger was not better for us.

(00:43:31):

It also, surprisingly, was not necessarily more profitable. We have found, on the smaller scale with a focus towards higher quality and really known entities as far as where we market and sell our herbs, that we have achieved the similar, if not better, profitability than we were at that bigger scale. Smaller for us is better. It feels better... It's more in line with our kind of philosophies. We're not really competitive people. We're not always chasing the bigger, more successful path. We just want to be

happy and have our products represent the quality that we feel that we bring to this work and the quality that we feel that we can achieve in the smaller scale.

Andy Chamberlin ([00:44:20](#)):

Has there been any particular people who have been an inspiration or mentor or influence for you guys?

Jeff Carpenter ([00:44:26](#)):

We have had a lot of help through the years, a lot of mentors who have been instrumental in helping us really figure out how to do this. As I mentioned, there weren't a lot of resources as far as books or other resources, especially in the early years. We learned a lot from some of our vegetable farming friends. In particular, Richard Wiswall, who's a farmer in Plainfield, Vermont here. Cate Farm was one of our mentors early on. We were involved in a program through NOFA. I can't remember what the program was, but basically he was our business advisor. After five years, he finally convinced us that having a real solid business plan was necessary. We had a business plan those first five years, and that was just to like, "Oh, grow more plants and make more money." Him working with us to establish a real formal business plan and to really do a deep dive into the business and into the growing of the plants and into the numbers was instrumental, and it wasn't easy for us.

([00:45:35](#)):

Part of the reason we got into this work of farming is to get out of the office and away from the desk and the number crunching. That took some mental fortitude, but it was so worth it. It was really a game changer for us to do that thorough analysis and to realize that some of the enterprises that we were undertaking were not profitable at all that we thought were and some of the other ones that we had kind of discarded as thinking it was too much work and not profitable ended up being. We really shifted a lot of our production model based on that work.

([00:46:10](#)):

We have another couple, Andrea and Matthias Reisen who are older than us. They're now in their, I think, early 70s. They have a similar size medicinal herb farm in Upstate New York, and they started doing this work long before we did, and they were some of the pioneers in the early organic medicinal herb farming in this region. We learned a lot from them, going to their farm and seeing what they were doing, and they were kind of along the same path of just a lot of trial and error. But fortunately, they had made some of the mistakes along the way and were able to share those with us before we made them, so they've been instrumental.

([00:46:48](#)):

And then some of the bigger players in the industry, some of the bigger farmers that I've toured across the country have also been really helpful. One of the beauties of this work in the medicinal herb farming... I think in farming in general, there's more of a cooperative kind of philosophy than a competitive. We're all trying to have our slice of the pie, be successful, and make enough money to keep doing what we're doing, but it's a lot less competitive than a lot of other industries, and I think we're really grateful for that and really fortunate. I think that holds true with vegetable farming too. There's so much knowledge. Most of us, as far as farmers, I think are really willing to share a lot of that knowledge. I don't see a whole lot of that proprietary like, "I'm not sharing that information with you," even though we're all trying to compete in the same market at times.

Andy Chamberlin ([00:47:43](#)):

Maybe a similar market, but we all have the same goal.

Jeff Carpenter ([00:47:47](#)):

Exactly, yeah.

Andy Chamberlin ([00:47:49](#)):

Do you have a favorite crop to grow?

Jeff Carpenter ([00:47:52](#)):

I do have a favorite crop to grow, and that is stinging nettle. Stinging nettle is actually our best-selling herb and has been through the years. We started growing stinging nettle early on because one of our primary mentors, Rosemary Gladstar, who's also my mother-in-law, is a well-known herbalist and kind of taught us from the early days of us learning about herbs as medicine. That stinging nettle is one of those herbs that could be in almost every formula just based on its nutritive qualities. It has a lot of vitamins and minerals and chlorophyll and is really good for you. That's one that is so rewarding, and we sell a lot of it because a lot of herbalists and people who buy herbal products know that nettles are really valuable and really important, and it's so easy to grow.

([00:48:44](#)):

It's a weed. In a lot of places, a lot of people are trying to control it or eradicate it. It's just a rewarding plant. It responds really well to applications of nitrogen at a rate of a 100 to 200 pounds per acre, and it can grow, in a good year with ample moisture, six or seven feet tall, and we can get three or four cuts a year. It's a big one. It's a highly productive plant and highly marketable and easy to grow. The challenge with it is that it's stinging nettle, so when it's fresh, it stings you. But fortunately, after we dehydrate it, the stinging compound is formic acid, it evaporates, it volatilizes, so the plants no longer sting you after they're dried. It's a lot easier to handle.

Andy Chamberlin ([00:49:35](#)):

It's nuanced stuff that I did not know.

Jeff Carpenter ([00:49:38](#)):

Yeah.

Andy Chamberlin ([00:49:40](#)):

What's a time that you felt really successful farming?

Jeff Carpenter ([00:49:46](#)):

The time that I have felt really successful farming is at the end of every season, pretty much when, in spite of midway through the season, I might've wanted to throw in the towel a couple dozen times through the years and ask myself, "Why am I doing this work? It's so hard and I'm so tired." But in the end, it always works out, and there's always reason to do it again. There's always next year, even in the challenging years. Even the last two years were two of the worst years that we've had just because of the intense rainfall that we had in the poor-drained soils here. We did okay because we're really highly diverse. For every three or four plants that don't do well and don't meet their expectations as far as yields or qualities, there's another dozen or so that do really well. We've always had success at the end of the year and to varying degrees, but that's what's kept us going and that's why we keep doing this work is having those successes.

Andy Chamberlin ([00:50:53](#)):

A year seems to be just enough time to really stress yourself out and then give you enough of a break through the winter to want to do it again.

Jeff Carpenter ([00:51:01](#)):

It really does, and that's another huge benefit to this work we do. As soon as you get... We get pretty burnt out. This year, we're ready for a rest. It's been a grind with only having a really small kind of labor force. Long about the time, we get really tired of it, and we're ready to just kind call it a season. The hard frost comes in. We've got everything. All the harvests are out of the ground and everything, and it's time to kind of rest for the winter. And then through the winter, we rest and we get a little restless. Come March, April, again, we're ready to do it again and we come into it with that renewed vigor and hope and energy. We're so fortunate to have this diversity of careers. I can't imagine doing the same thing all year round every day and just kind of being in that grind. There's just so much variety to this work. It's part of what makes it so rewarding and part of what keeps us doing it.

Andy Chamberlin ([00:52:01](#)):

For sure. What's a time when you felt really challenged by farming when you wanted to throw in the towel?

Jeff Carpenter ([00:52:09](#)):

Yeah. One of the biggest challenges for us was, I think this is maybe 10 years ago or so, we had the opportunity. We were approached by a pretty big herbal product manufacturer, I think they were based out of California, and they wanted to buy volumes of herbs that were far in excess of what we could produce on the... At that point, we were at the 13, 14 acres maybe scale. We saw a huge opportunity because they were willing to pay high price points for high quality herbs, and they wanted stuff that was easy to grow in this climate. Everything was really lining up to be ideal, and they were really excited about what we were doing, but, again, we didn't really want to get so much bigger and buy more land or whatever.

([00:52:59](#)):

We saw an opportunity to start an herb growers' cooperative, and we did that. It took Melanie and I a lot of work and a lot of other partners, most of them vegetable farmers, that saw the opportunity, and we kind of recruited them to do this work. We started out with having a lot of success, but it really went sideways when we found out that the owner of the company that we are producing the raw materials for the manufacture of products for was Alex Jones, the notorious conspiracy theorist. We obviously decided not to do business with him at that point. It was a really tough kind of shift for the success that we were having with the herbal cooperative. We disbanded the co-op after that.

([00:53:49](#)):

This was also the time when there was a lot of opportunities to grow CBD hemp in Vermont, so some of these vegetable growers branched off and started doing that. That was one of the biggest challenges that we had is, we had a lot of hope going into this herbal herb growers' cooperative, and then it kind of got crushed. But we do see that there's opportunities to renew this, and I think there are some people right now, like Sarah from Hillside Botanicals and some other folks, who are trying to reinvigorate this idea of the herb growers' cooperative because it can be a really good model for combining resources to tap into bigger markets and also share equipment and other technologies and knowledge.

Andy Chamberlin ([00:54:33](#)):

Is that something where products would get aggregated, you think, or more or less you could just work together to serve a bigger need?

Jeff Carpenter ([00:54:45](#)):

What the herb growers' cooperative was essentially was a marketing agency. So yeah, we were all... again, and also working together to try to pool our resources to fill these higher volume orders, again, at really good price points. That was one of the challenges. That's a good point that you brought up the aggregating of products. I'll give you an example. Say one of these buyers wanted to buy two tons of dried peppermint leaf. Well, we didn't want to grow two tons of dried peppermint leaf on our farm, but there may be three of us who wanted to pool in on that together. The challenge was with finding, producing, growing, producing, as far as the post-harvest processing, a really consistent product that could be combined and also meet some of the testing requirements.

([00:55:40](#)):

Some of the testing requirements, again, with the safety of herbal product consumers in mind have to do with things like testing for microbiological contamination like yeasts and molds, salmonella, E. coli, some of the obvious ones. Also, some of the bioactive compounds in the plants, they were testing for to make sure that they had the potency and the quality that they needed. The aggregating of the products was definitely a challenge that was far in excess of what we had imagined, but can be had given the right set of circumstances and the right technical assistance and knowledge and consistency in the practices across the board from farm to farm.

Andy Chamberlin ([00:56:21](#)):

The thing that comes to mind after that little clip there was, is there a fairly routine way of testing the potency of a compound of... I know there is in the cannabis space, but is there that for herbs and other stuff as well, mint, and be like, "Oh, this mint is really strong," or not? I'm sure there is, but it doesn't seem to be talked about.

Jeff Carpenter ([00:56:51](#)):

No, it is really important, and we really respect a lot of the... especially the companies that we're working with on the wholesale end who place a lot of value and a lot of importance in that testing because it allows us to demonstrate that our practices with our attempts to differentiate ourselves from what we call the mass marketers, which is the stuff that's really mass produced, a little more highly automated, they're using a similar testing procedures as they do with the cannabis. It's often like chromatographic testing. There's also the non-scientific testing that is organoleptic testing, which is basically the description of using your organs to test. That's a lot more subjective, but also valuable. Does the peppermint that's going into this tea taste good? Does it smell good? Does it really hold up in a cup of coffee after the hot water is added, and it's steeped? These two things, both the scientific testing the levels of some of these bioactive compounds, as well as just the overall kind of organoleptic quality things are really valuable and good ways of measuring the quality of herbs.

([00:58:05](#)):

Also, it starts out with just the fundamental, the visual aspects of the herbs. Do they look similar to what they look like the plants when they're growing and living in the field? Do they have that vibrant color and that... Do they look fresh and vibrant? That's kind of where it starts is the visual.

Andy Chamberlin ([00:58:24](#)):

So sensory testing is a large part of it.

Jeff Carpenter ([00:58:26](#)):

It really is, yeah, and it's really valuable.

Andy Chamberlin ([00:58:30](#)):

What does sustainable farming mean to you, and how are you achieving it?

Jeff Carpenter ([00:58:36](#)):

To me, sustainable farming means us being able to continue the work that we're doing as long as we can. It also means farming in a way that is sustainable to the environment that we're working and trying to maintain the quality of our soils, trying to sequester the carbon and keep the nutrients from flowing into the watersheds and protect our soils from erosion and provide good habitat for the pollinators and the other insects and mammals and all the other inhabitants of this land. That's, again, one of the awesome things about the work that we do growing these medicinal herbs is a lot of these herbs that we're growing are insectary plants. They attract the beneficial insects that are providing pollination and also preying on some of the more harmful insects and stuff. These plants are naturally suitable for that, so it's great. That's part of the reason we don't have the pest pressure that those that are farming other crops often have.

Andy Chamberlin ([00:59:45](#)):

Got a large diversity of plants and bugs.

Jeff Carpenter ([00:59:51](#)):

Yeah.

Andy Chamberlin ([00:59:52](#)):

If you could restart now knowing what you know, would you do differently?

Jeff Carpenter ([01:00:00](#)):

Well, the first year we started farming, I think we started out with 70 different species of herbs because we... As herbalists, we were trained as herbalists before we were farmers. We knew what the hot herbs were and what we knew what people wanted as far as not only for their own personal home pantry use, but also what were being used in the herbal products we were seeing and we were also making. That was really ambitious because as it turns out, a lot of those herbs were far from suitable to being grown in this climate, here in Vermont where the growing season is short and the soils are not always ideal and the climate is harsh. We started out with 60 or 70 different species, and now we've narrowed it down to... I think there's like 14 species that we're really focused on now.

([01:01:00](#)):

We were pretty naive coming into this work, and we've learned a lot just based on what really grows well in this climate, what do we like to grow, and what is marketable, what is also sustainable for our bodies, so we've kind of moved away from the... We don't grow as many root crops as we used to because growing roots oftentimes means you're harvesting the roots in late October, early November,

and we're standing out there washing roots when it's snowing and blowing and cold and wet. The older we get, the less of that we want to do, so we're focusing more on the herbs that are prime harvest mid-season so we can wrap it up this time of year when it starts to get cold.

Andy Chamberlin ([01:01:46](#)):

Fair enough. Are there other maybe equipment upgrades or shifts that you've done to make it easier on your body?

Jeff Carpenter ([01:01:56](#)):

We have, yeah. Some of the automation we've done, we really should have done early on. Both Melanie and I, we run fiscally conservative. We had this kind of mentality in the beginning that we didn't really want to go into debt, which is not a bad mentality to have, but I think it really was self-limiting in that we were kind of afraid to borrow enough money to buy equipment that could have really advanced our practices faster. Part of the work that we did with Richard Wiswall and some other farmers that we kind of mentored with was made it obvious to us that it was really worth some of the automation and some of the equipment. We did automate a lot of our harvesting and post-harvest processing aspects and machinery through the years without losing quality, which is important to us because there's definitely... You can really focus on quality with a more hands-on approach, but you can also prevent the loss of quality with a careful, more automated approach without getting automated to the point where the quality suffers.

Andy Chamberlin ([01:03:06](#)):

That's a good trade-off, right? You're keeping quality front of mind because if your hand-picking leaves, your quality's going to be spot-on. But when you bring the sickle bar out, you're cutting everything.

Jeff Carpenter ([01:03:17](#)):

That's it. Exactly. Yeah, we spent a lot of years digging roots by hand with spading forks. As soon as we bought that chain digger, the potato digger, from an auction and kind of modified it, it was like, "Wow, we should have done this." There was so many kind of those revelations through the years. Finally, we just were like, "Okay. We just need to spend some money on some equipment," and the payoff is so fast once we get to that point of automation without losing quality.

Andy Chamberlin ([01:03:45](#)):

I'd imagine that equipment is going to last you many years with minimal repairs.

Jeff Carpenter ([01:03:51](#)):

It really is, and it's paid for itself a thousand times over in the meantime.

Andy Chamberlin ([01:03:56](#)):

And then you're thanking yourself. I wish we did this sooner.

Jeff Carpenter ([01:04:00](#)):

Yeah.

Andy Chamberlin ([01:04:01](#)):

Are there any other tools like that, that you're like, "Man, that's key"?

Jeff Carpenter ([01:04:05](#)):

Yeah, the upgrade in our drying schema has been such a game-changer for us. Going from placing the herbs on racks in the tunnel drying system to working with a batch dryer has been such an increase in our efficiency. And again, as I mentioned previously, the really, as surprised as we were, helped us to increase the quality of the plants, just the fact that the plants are spending less time in that drying environment and less time exposed to the elements. That's been the biggest advance in our practices, I think, is the drying, going from tunnel drying on racks, more of a kind of passive system to more of an active, the plenum dryer, the big batch dryer that we use.

Andy Chamberlin ([01:04:52](#)):

If someone was just getting into this and pretty confident that they're going to do it for more than a year or two, would you recommend they get into a batch dryer like that or step into the racks to start?

Jeff Carpenter ([01:05:08](#)):

Well, it depends on the scale. A lot of times people that are new to herb farming are really struggling with, "What comes first, the product or the market?" It's kind of a chicken or the egg dilemma, and it's a tough one to really say either way. In order to get people excited about supporting your business and buying your products, you want to demonstrate that you can produce a high quality product and that you have the capability to... If someone, a wholesale customer, places an order in January for 200 pounds of peppermint, you want to make sure you can supply that in August so that they aren't left hanging. On the other hand, we don't ever recommend that people do a whole lot of speculative growing of this stuff because it's a volatile market. These medicinals, it's definitely a more niche market. Everyone, or not everyone, but most people eat vegetables and fruits and nuts and that sort of thing, these food crops, these common food crops.

Andy Chamberlin ([01:06:14](#)):

Most people.

Jeff Carpenter ([01:06:14](#)):

Not everyone uses medicinal herbs, so there's definitely a different approach there for sure. With regard to tunnel drying on racks or batch drying, I think it depends on the ultimate scale of farmer envisions. If a farmer is getting into this medicinal herb growing and thinks they're going to be expanding, then I would say a batch dryer is in order due to the scalability of the technology. But if they think they're just going to be growing herbs as a small adjunct or adjunct kind of enterprise or as more of a hobby, I would say just having a few racks for drying herbs is probably adequate. The thing with these batch dryers though is they're really highly scalable. You can have something that's as big as a refrigerator for a real small scale, like a cottage garden approach, or you can have something that's able to hold five tons of fresh material and turn it into one ton of dried material as some of the bigger farms that I've seen in the Midwest, the bigger medicinal herb farms.

Andy Chamberlin ([01:07:21](#)):

Your batch dryer was essentially single layer. Is there a reason why you don't have racks above that?

Jeff Carpenter ([01:07:28](#)):

Well, we can have both going at the same time. The batch dryer, it works best when there's a lot of material in the dryer. Some of our smaller harvests of some of the more... I'll use chamomile, for example. We don't produce a lot of chamomile because it's very labor-intensive in the season. The kind of prime season for harvesting chamomile blossoms is pretty short, so that's a smaller scale harvest. We do that on racks, and it's also... Some of the blossoms, chamomile, and calendula, for example, are really sensitive to degradation from ultraviolet lights. We are drying those in a dark environment, so we're drying those in a loft above our garage or in the drying shed with shading and protection from the light around them. We can do both at the same time. We can have the batch dryer running in that building that you saw with some of the racks that we've kept through the years of doing our tunnel drying, kind of drying smaller batches alongside them, benefiting from the heat from the batch dryer. So we can do both.

Andy Chamberlin ([01:08:38](#)):

Yeah. What advice would you give to your beginning farmer self?

Jeff Carpenter ([01:08:42](#)):

Oh, boy. Okay. Advice for my beginning farmer self, I would say if I could have tapped myself on the shoulder 26 years ago and said, "Here's what's going to really guide you to keep doing this work into the future," it would've been eyes on the prize. Eventually, you'll get to the point where you'll have enough success doing this work that you won't have to work off the farm and you'll have a comfortable enough income to live modestly, but successfully in that it will all work out in the end. Because there were so many times in the early years, it was really stressful, and we really questioned ourselves whether we were going to be able to have success doing this work and whether we were going to be able to really focus on doing this as our sole source of income and our sole source of employment.

([01:09:36](#)):

It caused a lot of stress through the years. There was a lot of those real soul-searching moments, and I think I could have saved myself a lot of anxiety if I could have looked into the future and saw that at this point now in my mid-50s, I'm feeling pretty comfortable with where we're at, and there's a lot less stress and anxiety and uncertainty in the work that we do. We're really fortunate to have good support from our customer base and a good marketplace for which to sell these herbs in.

Andy Chamberlin ([01:10:10](#)):

If you knew back then, you're like, "Yeah, it is possible. It would help."

Jeff Carpenter ([01:10:13](#)):

Yeah, exactly, right. Take a lot of that doubt out of the equation through the years that we were faced with, although we did persevere. It's been worth it.

Andy Chamberlin ([01:10:23](#)):

Yeah. Is there any particular advice you would give to somebody who is just getting into the herb space?

Jeff Carpenter ([01:10:32](#)):

Yeah, growing medicinals, as I mentioned, the market is pretty volatile and pretty fickle. I would say start small and focus on the species of herbs that are really approachable and more well-known and maybe focus on the herbs that are more suitable for teas. An example of this is... We have a couple of value-added products that we produce, they're both tea blends, and we call them our gateway products because oftentimes people will buy. One of them is called rejuvenation tea. It's a nice beverage tea that's also very healing and supportive, brings wellness to people.

[\(01:11:19\)](#):

Oftentimes, people will buy that tea. They'll see it in one of the health food stores or the herb stores or whatever, and they'll bring it home and brew a cup of the tea and realize that it tastes really good and maybe it even makes them feel good. And then they'll maybe be a little more curious about some of the ingredients that are in it. Oftentimes, that leads to them singling out one of the herbs that's in the tea and saying, "Well, what does this actually do?" and learning more about it, and then bringing more knowledge of herbalism and what these plants can do into their lives.

[\(01:11:53\)](#):

I think, again, for new farmers, focus in the beginning on less on the obscure herbs that are less marketable and more nichey and more specific than more of the really widely approachable herbs that people are familiar with, like the lemon balm and the chamomile and the echinacea and the elderberries and the spearmint and the tulsi and things like that that are more well known. I think that's part of... What is challenging for a lot of new herb farmers is they hear about some of these more obscure herbs that can fetch a higher price, things like ginseng and stuff, but they're really challenging to grow and even sometimes to market. I would say bring some of those more challenging ones into your systems later on, but start out in the game with herbs that are approachable while you build a brand and build a market.

Andy Chamberlin [\(01:12:52\)](#):

Makes a lot of sense to me. If people want to learn more about your farm or herb growing, how can they do that?

Jeff Carpenter [\(01:12:59\)](#):

Well, they can check out our website, www.zackwoodsherbs.com, and it's spelled Z-A-C-K-W-O-O-D-S, herbs. The other way they can do that is to check out our book. We've actually written two books. But the most recent book, they're both published by Chelsea Green, is the revised edition of the Organic Medicinal Herb Farmer. It is over 400 pages, highly illustrated. It's a how-to manual for growing, processing, and marketing organic medicinal herbs in this climate, and also elsewhere too. It's pretty applicable for other climates, but more specific to what we're doing here.

Andy Chamberlin [\(01:13:46\)](#):

Well, thanks for sharing. Thanks for coming on the show, and thanks for showing me around your farm.

Jeff Carpenter [\(01:13:50\)](#):

I appreciate the opportunity. Thank you, Andy.

Andy Chamberlin [\(01:13:52\)](#):

Yeah. What is the story behind Zack Woods?

Jeff Carpenter ([01:13:57](#)):

Zack Woods Pond is a local landmark. I grew up in Barre, but my grandparents had a camp on Lake Elmore, and I would come and hang out with my grandfather, but he was always like, "The fishing's no good at Lake Elmore. Let's go over to Zach Woods Pond," and we would go fishing over there, and it was great. There was a lot of brook trout in there, and we just slay brook trout. When we were trying to come up with a name for our farm and drawing a blank, someone mentioned considering a local landmark to name it after. That was just the first thing that we came up with, and this was just without giving it a lot of thought.

([01:14:35](#)):

It was shortly after that, some of our friends that are in the marketing world were like, "Oh, you, guys, the name of your business starts with a Z, that's such a bad idea. Because when people are looking for businesses, you're at the end of the listing if it's alphabetical." It's never been a problem.

Andy Chamberlin ([01:14:52](#)):

Don't worry about that.

Jeff Carpenter ([01:14:53](#)):

But it's also really confusing to people because a lot of people try to find the farm and they end up over at Zach Woods Pond looking for us, and it's four miles away as the crow flies. That's been funny, yeah.

Andy Chamberlin ([01:15:12](#)):

And that is The Farmer's Share. I hope you enjoyed this episode with Jeff Carpenter of Zach Woods Herb Farm.

([01:15:22](#)):

The Farmer's Share is supported by a grant offered by the USDA Specialty Crop Block Program from the Vermont Agency of Agriculture, Food and Markets. This funding helps to cover some of my time and travel in order to produce this podcast until March of 2026. The USDA Agricultural Marketing Service supports projects that address the needs of US specialty crop growers and strengthens local and regional food systems. I have no doubt that this podcast will meet those needs and help educate growers to support the industry.

([01:15:52](#)):

If you enjoy the show and want to help support its programming, you can make a one-time or reoccurring donation on our website by visiting the farmersshare.com/support.

([01:16:07](#)):

We also receive funding from the Vermont Vegetable and Berry Growers Association. The VVBGA is a nonprofit organization funded in 1976 to promote the economic, environmental, and social sustainability of vegetable and berry farming in Vermont. Their membership includes over 400 farms across Vermont and beyond, as well as about 50 businesses and organizations that provide products and services of all types to their members. Benefits to members include access to the VVBGA Listserv, to buy, sell plants and equipment, share farming information, and tap the vast experience of our growers, access the Community Accreditation for Produce Safety, also known as CAPS. This program is designed for growers by growers to help you easily meet market and regulatory food safety expectations. You can access the VVBGA's Soil Health platform where you can organize all the soil tests and create and store your soil amendment plans and records, access to webinars for growers in the VVBGA annual meeting,

an email subscription to the Vermont Vegetable and Berry Newsletter, camaraderie, enhanced communication, and fellowship among commercial growers.

[\(01:17:25\)](#):

Memberships are on a per farm per calendar year basis, and annual dues this year are \$80. These funds pay for the organization's operating costs and support educational programs and research projects. These funds also support projects that address grower needs around ag engineering, high tunnel production, pest management, pollinators, produce safety, and soil health. Become a member today to be a part of and further support the veg and berry industry. You can visit thefarmersshare.com to listen to previous interviews or see photos, videos, or links discussed from the conversation. If you don't want to miss the next episode, enter your email address on our website, and you'll get a note in your inbox when the next one comes out.

[\(01:18:12\)](#):

The Farmers Share has a YouTube channel with videos from several of the farm visits. We're also on Instagram, and that's where you can be reminded about the latest episode or see photos from the visit. Lastly, if you're enjoying the show, I'd love it if you could write a review. In Apple Podcasts, just click on the show, scroll down to the bottom, and there you can leave five stars in a comment to help encourage new listeners to tune in. I'd also encourage you to share this episode with other grower friends or crew who you think would be inspiring for them. Thanks for listening.