**Female Narrator:** [00:00:00] Welcome to the Lawn and Garden Podcast with University of Wyoming Extension specialist Jeff Edwards and co-host Jerry Erschabeck. Originally aired on KGOS and KERM in Torrington, join Jeff, Jerry, and their special guests as they talk all things gardening in Wyoming. Our Lawn and Garden Podcast helps you improve your home garden or small acreage.

**Jeff Edwards:** Hello, everybody. This is Jeff Edwards and Jerry Erschabeck for the KGOS/KERM Lawn and Garden program. Our guest today is Brian Sebade. Good morning, Brian. How are you?

**Brian Sebade:** I'm doing well. How are you, gentlemen?

**Jeff Edwards:** Fantastic. Jerry?

**Jerry Erschabeck:** Good. Thank you.

**Jeff Edwards:** Good. Good to have you both with us today. Let's listen to our sponsors and we'll be back in a moment.

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**Jeff Edwards:** Okay. This is Jeff Edwards and Jerry Erschabeck for the KGOS/KERM Lawn and Garden program with Brian Sebade from University of Wyoming Extension, located in Laramie, and has responsibilities in the southern part of the state. Maybe more so now, who knows? How are things going with you, Brian?

**Brian Sebade:** They're going well. I'm still in the southern part of the state. But yeah, we're doing well. Earlier this week, it didn't seem like it was really the growing season. Everybody had on jackets the entire day, but I guess that's to be expected in Laramie in the end of June.

**Jeff Edwards:** Yeah, no kidding. Did you get rain or a little frosty morning on Tuesday?

**Brian Sebade:** No frosty mornings. It was definitely really cool. So there was a cold wind, and I'm not so sure all the warm season vegetables in my garden were enjoying it too much.

**Jeff Edwards:** They'll recover, right?

**Brian Sebade:** Exactly. Yeah.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** But you didn't have to pull the plastic down to cover them up, right?

**Brian Sebade:** I did pull the plastic down. I provided a little extra insulation. I think they were going to be really chilly.

**Jeff Edwards:** You were prepared?

**Brian Sebade:** I was prepared. The low tunnels came in handy.

**Jeff Edwards:** [LAUGHTER] That's fantastic.

**Jerry Erschabeck:** Good deal.

**Jeff Edwards:** Traditionally, 4th of July coming up tomorrow and it's the middle of summer, right?

**Brian Sebade:** Yes, something like that.

**Jerry Erschabeck:** The weather is starting to turn again so that it's quite warm. I think the National Weather Service has predicted a much, much warmer July than expected.

**Jeff Edwards:** You're always full of good news, Jerry.

**Jerry Erschabeck:** Can’t hardly wait.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** But hey, on the good part, isn't your corn like 18-feet tall?

**Jeff Edwards:** So the roof of my high tunnel where the corn is at is [00:03:00] between eight and nine feet, and it's pushing the roof and my ears are filling. Not these ears.

**Jerry Erschabeck:** Yeah.

**Jeff Edwards:** The ears on the corn plants are actually filling. I’ve been pollinating, and I'm thinking about the 20th of July, I'm going to be enjoying sweet corn.

**Jerry Erschabeck:** That sounds like a plan. [LAUGHTER]

**Jeff Edwards:** You've forgotten where I live, haven't you?

**Jerry Erschabeck:** Yeah, I've forgotten exactly where you live.

**Brian Sebade:** I'll send you my mailing address. You can just ship me the corn. How does that sound?

**Jeff Edwards:** Okay. All right. I think I'll be putting the padlock on the high tunnel.

**Jerry Erschabeck:** There you go.

**Jeff Edwards:** [LAUGHTER]

**Brian Sebade:** Might need to do that.

**Jeff Edwards:** Now if we're on that subject, it's crazy to me how well the things are producing in the high tunnel this year. I tried a new variety of peas, I think they're called sugar snaps. It's one of those peas that you can eat the pod. It's a very popular variety that shows up in these mixes for vegetables and those types of things. And those things are almost eight-feet tall and producing peas abundantly, it's just crazy. Our raspberries, we've started picking raspberries, and they, too, are probably eight-feet tall. It's just a crazy growth year this year. I don't know, it's something special. [LAUGHTER]

**Jerry Erschabeck:** Could it be that the highs and the lows of our weather burning those plants on?

**Jeff Edwards:** Potentially. The things in the high tunnel look awesome, but we traditionally have very good melons.

**Jerry Erschabeck:** Cantaloupe?

**Jeff Edwards:** Yeah, cantaloupe-type melons. Those plants look horrible, and I think it's the wind shearing them off. It's just one of those things. Protected growing looks great, not so great outside, although I think Diane picked the first zucchini this morning. So zucchini season has begun.

**Brian Sebade:** Uh-oh.

**Jeff Edwards:** [LAUGHTER]

**Brian Sebade:** Better find some friends so you can give those away. [LAUGHTER]

**Jeff Edwards:** Yeah. Lock your doors.

**Brian Sebade:** Right.

**Jerry Erschabeck:** Unlock car doors.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** Yeah, that wind shear is the same thing with pumpkins. You really need to protect your plants against wind shear, especially here in Wyoming and western Nebraska.

**Jeff Edwards:** Yeah, this is the first year that we've had issues with the wind ripping the plants off. So yeah. Brian, you know, we invited you here today to talk about what's on your mind. What are you thinking about? What's going on in your area?

**Brian Sebade:** Well, we've had an up and down spring with temperatures, we've had a lot of trees that didn't really leaf out, lot of trees that died, and we've had some others that are slowly starting to come back. But it made me think a lot about water, watering during different times of the year. Been thinking about your high tunnel, but also got me thinking about water. I've seen some of the setups you have for irrigating. I have different methods I use for irrigating my backyard garden compared to your larger garden that you have there, Jeff. So I guess irrigation and getting water to plants has been on my mind.

**Jeff Edwards:** Okay. As it should be, since it's getting warmer [00:06:00] and doesn't seem to be stopping on that temperature area, right?

**Brian Sebade:** No. No, it does not.

**Jerry Erschabeck:** That's right.

**Jeff Edwards:** [LAUGHTER] So what's on your mind? What would you like to share about irrigation?

**Brian Sebade:** Well, I thought maybe we could talk about some of the different types that I've used, some of the challenges or benefits you've found to some of the different methods that you use, Jeff. For me, I'm on a really small scale for what I'm trying to accomplish. I like to always try different things, try new methods for things I like, don't like. Things I probably know aren't going to be the best, but I want to try them anyways so I can tell people, "Yeah, don't mess with it." So I have that.

 But on small scales, it's always a challenge, I think, how to effectively try and get that water to plants. I know some people like to use the soaker hoses where they're basically perforated throughout the entire length of the hose, and those are great for a while, but they tend to fill up with dirt, tend to fill up with soil that's around, some hot spots, they get big holes, so it shoots water way out of the garden and not even on the vegetables that you want it to get to. But they're definitely the cheaper end and more readily available.

**Jeff Edwards:** Sure. Squirrels and mice have a tendency to chew on them and cause those holes that cause the shooting water.

**Brian Sebade:** Right. So there's lots of different things that are out there; there's drip tapes, drip tubing. One thing I've really liked is drip tubing. I have some really sandy soils in my garden, and you can buy different distances between the emitters, and you can buy different emitters that are within that hose. So what we're basically talking about is you have a main line that's usually a half-inch of some sort of plastic material. Then from that main line, you can take little branches off and set up like a quarter-inch hose. So for me, I have fairly sandy soils, so I did nine inches is the spacing between those emitters. What I like to do is, early in the season, I can use a sprinkler and get things to germinate. But once things start germinating, then I can lay out this hose and it's flexible so I can curl it around plants, I can do different designs. I'm not really stuck to a conventional row system, if that makes sense. So it's nice if you do square-foot gardening or you have smaller spaces. So I really like it for that. I don't know for you, Jerry or Jeff, if you've used that material on different spots or not.

**Jeff Edwards:** I use the quarter-inch line in my flowerbeds and shrub areas.

**Brian Sebade:** Okay.

**Jeff Edwards:** So I can go anywhere I want to. Jerry's got a question.

**Jerry Erschabeck:** No, I have not used that kind of stuff. I've been interested in it, though. On that half-inch tubing that's your main line, you have a particular pair of pliers or a specific thing to punch a hole in for your emitter or you just poke it in?

**Brian Sebade:** So I usually use a T fitting so I can just cut the tubing with a utility or sheet rock knife. I can just cut those, and then the fittings you can just tighten by hand. [00:09:00] So that's really nice. Then off of the T, I'll run a spur line to each raised bed. Then off that spur line, I just punch in. They make just a little adapter piece that punches into that main line and connects the quarter-inch line to the rest of the garden. So it's really simple to set up. If it's really cold, Jerry, like it tends to be sometimes here in early spring when I set that up, you might have to do a real tiny drill, put a little hole in there to get it to go in. But otherwise, if it's a warm day, it goes pretty easy.

**Jerry Erschabeck:** Punches right in.

**Brian Sebade:** Yeah.

**Jeff Edwards:** So the quarter inch line that I use, I attach it to a three-quarter-inch hard poly hose and I have a little tool that actually makes a hole in the pipe, and then the connectors, the little hose barb connectors. One end slides down inside the emitter tube and then the other end of the barb goes into the feeder tube. Is that what you're talking about, Brian?

**Brian Sebade:** That's what I'm talking about. I think we just established I am definitely not a plumber by trade and I should probably stick with plants because you described that way better than I did.

**Jeff Edwards:** [LAUGHTER] I do have the little tools to help me punch the hole in the main line and actually push the hose barbs into the quarter-inch line and then back into the feeder tube. Makes it a whole lot easier. Especially, Brian, as you get older and you get a little bit fumbly with your fingertips and less nimble and those types of things, the tools are useful.

**Brian Sebade:** Okay. All right.

**Jeff Edwards:** You've got to have tools.

**Brian Sebade:** Got it.

**Jerry Erschabeck:** Got to have the right tool.

**Jeff Edwards:** [LAUGHTER] Yes, the drip line is interesting. You mentioned that the emitters you can get it on different spacing. I think I've seen them as close as four inches and then as far away as 18 inches inbetween each emitter. So it just depends on what you're trying to water and what you're trying to achieve. I think all of my emitters are on 12-inch spacing. Jerry, this is tubing that the emitter is actually already embedded into the tubing.

**Jerry Erschabeck:** Oh, yeah.

**Jeff Edwards:** When we used to set up tree rows, we used to actually buy the emitters and the plastic pipe and then put the emitters into the pipe. You don't have to do that anymore, they're already there. They're usually rated or regulated so you can get a tenth of a gallon per acre per hour or something like that, just like the old ones used to be rated 1, 2, or 5 gallons per hour or whatever. So it's a much more efficient way to get water to places without a whole lot of effort.

**Jerry Erschabeck:** You bet.

**Jeff Edwards:** I think, anyway.

**Jerry Erschabeck:** Then do you have an opening at the end that you flush that? Brian, you said that most of those soaker hoses and that sort of thing fills up with dirt or hard water deposits. Do you open up the end and flush that [00:12:00] out on occasion?

**Brian Sebade:** Yeah, you can. There's just a little cap that goes on the end. So yeah, you can pull that cap off and let it run for a bit if you'd like. Yeah, it's pretty slick. I'm not much for a typical drip irrigation that Jeff described, that we used to have to put in all those little spots. This is just so simple. I can just punch it in one spot, and then it's going to end up soaking the whole area.

**Jerry Erschabeck:** So you have to have something that's readily moved away from your plants and then put back in because if you rototill your stuff or inbetween your lines or inbetween your rows, you don't want to chew it up with your rototiller.

**Brian Sebade:** Correct.

**Jeff Edwards:** It's pretty easy to pick up and move out of the way, and then put back.

**Jerry Erschabeck:** Yeah. [LAUGHTER]

**Brian Sebade:** For me, I can just pick it all up every fall and store it, and then set it back up in the spring and it's pretty easy.

**Jerry Erschabeck:** You bet.

**Jeff Edwards:** So that's one of the things that I struggle with is how to store. I have extensions on my main line that are outside of the high tunnel that I have to figure out how to store. Well, usually, it ends up getting wadded up and put in a corner, and then next spring, when I go to unpack it, it's this spaghetti of hoses and things that I have to undo and can be a little bit frustrating. So I need to figure out a better way to store it over winter time. [LAUGHTER]

**Brian Sebade:** Well, if you're a fisherman like myself, you're quite accustomed to knots. So maybe that's why I'm not as bothered with it. I'm used to untangling knots.

**Jeff Edwards:** I do like to fish. I just don't get the opportunity to do it very often.

**Brian Sebade:** Okay. Well, speaking of stuff that's easy, Jeff, have you ever used the drip tape?

**Jeff Edwards:** Yeah. So a lot of the lines that I have are drip tape. I use a combination of the quarter-inch line, the drip tape, and then I have a hard hose. So drip tape is flat. It's a tube, but when it's not got water in it, it lays flat. But they also make hard hose in larger diameters that have emitters in it, too. So I use a combination of all of that.

**Brian Sebade:** The tape is great. If you are one of those folks that has a larger garden and you'd like to plant in rows, those are great. You can just set those up in the row. They tend to stay in place, I feel, a little bit better than some of the hoses that we just talked about. You can just wrap those up into a nice little package in the fall, if you take the time to do that, probably not like myself. So that's why I go with the hose that I can roll up like an extension cord. But those are really nice for row crop. I think they do a really good job.

**Jeff Edwards:** You've stimulated an idea. I think maybe I'll roll them up, and then put a rubber band around them, and then put them in a corner someplace. So then that way I don't have to untangle the mess in the spring.

**Brian Sebade:** Okay.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** The old paper towel holders, the cardboard [00:15:00] tubing, if you save a bunch of those, you can wrap those around just like you do with Christmas lights.

**Jeff Edwards:** Okay. [LAUGHTER]

**Jerry Erschabeck:** So if you use paper towels, you throw the inner cardboard away. Well, if you just keep that, you can wrap that around and identify where you put it. You just write on the tube outside, left membrane, over there.

**Jeff Edwards:** Yeah. Exactly.

**Jerry Erschabeck:** Yeah.

**Jeff Edwards:** Labeling is good. [LAUGHTER]

**Brian Sebade:** Yes. So with your drip tape, Jeff, do you ever bury it? Because that is one option for the tape is that you can bury it. There's different styles that are out there. There's different recommendations for different brands and such, but is that something you've worked with at all?

**Jeff Edwards:** I do have drip tape that's buried, so that's subsurface drip irrigation. Works very well for me in the areas where it is placed. But the issues that I do have would be gophers. Gophers are very bad. Any burrowing-type mammal has a tendency to not like that stuff when it comes across it and just chew the heck out of it. So there's always repairs that need to be made. I'm very diligent at walking our property and looking for gophers, but it's crazy. [LAUGHTER] When you think you got them all under control and you walk out there, in the middle of the field, and there's gophers. It's like, well, how did they get there? Because I know there weren't any trails or gopher mounds leading up to this point, but they're there. [LAUGHTER]

**Brian Sebade:** Right.

**Jeff Edwards:** How does that happen, Brian?

**Brian Sebade:** I don't know. They are just here to make our lives miserable, I think.

**Jeff Edwards:** [LAUGHTER]

**Brian Sebade:** Yeah, that is definitely a challenge. You can bury it so it helps reduce evaporation. You can bury it down to where it's going to be lowering that soil profile so plants can access it where the roots are, get them to root a little bit deeper. But yeah, anything that's down there could be a challenge. If you're out there with the rototiller, sorry, Jerry, you might end up hitting some hose if you're not careful. So that's definitely a challenge.

**Jeff Edwards:** So our subsurface drip is 10-inches down. Most rototilling that I did, I never went that deep. So I was okay to rototill over the top of ours. It was a retooling my mind process thinking about water. When I first started looking at subsurface drip, I thought, "Okay. So you lay this drip tape underneath your crop and water goes down, right?" [LAUGHTER] But the way that it operates is we water a little bit every day out there. So you have a wet zone that's basically around that drip tape, and as you water, that zone moves out. So there are places [00:18:00] out there, even though the drip tape is 10-inches underground, I can see water on the surface of the soil. So it's getting to where the plants are. But when we first put it in, I thought, "How does that actually work?" But it's capillary action through the soil and we'll move that water to where the plants need it. It's very cool.

**Brian Sebade:** Yeah.

**Jerry Erschabeck:** Then by doing that, don't you reduce the amount of weeds that you have? If you bury your waterline, doesn't that reduce some of your weeds?

**Jeff Edwards:** Yes, that is a benefit, weed reduction. But, Jerry, we still have to deal with the rainfall that we get.

**Jerry Erschabeck:** Yeah.

**Jeff Edwards:** It only takes one drop to germinate one weed.

**Jerry Erschabeck:** One weed. One

weed seed.

**Jeff Edwards:** [LAUGHTER] Yeah, under normal conditions, there are fewer weeds.

**Jerry Erschabeck:** So this year, we are perfecting the art of raising weeds.

**Jeff Edwards:** Yes.

**Jerry Erschabeck:** But with a weed-eater, it's keeping them down to a small green carpet.

**Jeff Edwards:** Myrna has yet to show up and use her weed whacker on my weeds.

**Jerry Erschabeck:** Contractually, she's booked for this year. Maybe if we get you in on the first of next year, we can pencil you in.

**Jeff Edwards:** Okay. All right.

**Jerry Erschabeck:** [LAUGHTER]

**Jeff Edwards:** I'll stop bringing it up. We'll talk about it next year. [LAUGHTER] Brian, there are ways to be very efficient at watering, which, I think, as we go forward, it might be more and more important to at least think about these types of things. I can foresee that 2021 might be a dry hot year as well, listening to Don Day talking about the weather. So however long it may be, and we've been in drought situations before, and anytime that we get in those situations and we conserve water and be more efficient at what we do, it's always better for us and everybody else downstream, so to speak.

**Brian Sebade:** Right. Yeah. No, it's a good point. For me, I'm in town where water is expensive. So I like to try to reduce the amount that I'm using, maybe just strictly for an economic standpoint. I guess maybe I shouldn't admit this on the air, but sometimes I don't like having to go out and water every day. So setting things up on an automatic timer and just having the hose out there is really nice.

**Jeff Edwards:** Yeah.

**Brian Sebade:** The one other thing to think about is the amount of pressure you might have through certain hoses. If they're being gravity fed, they're on a well that's high pressure, you might think about a pressure regulator for some of these different types of hoses that are out there. So just another thought. But yeah, that's a great idea.

**Jeff Edwards:** When I was first looking at drip tape, there was an individual here in Goshen County that had a product that he was familiar with. It's what he first started with. What he had was a five-gallon bucket. It was just gravity fed, where he put a plug into it and then tied the drip line to that five-gallon bucket, and then suspended it about three feet up in the air, [00:21:00] filled it up, and that five-gallon bucket had enough pressure to water 100 feet of row. So just that amount of vertical change and allowing gravity to feed through the drip system was enough to water 100 foot of row. That's a pretty darn good sized garden, 100 feet?

**Brian Sebade:** Right.

**Jeff Edwards:** So yeah, over the course of the day, that five gallons would drain out. Jerry, you got to haul water.

**Jerry Erschabeck:** I know.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** Or run a long, long, long hose.

**Jeff Edwards:** Yeah. [LAUGHTER]

**Jerry Erschabeck:** Yeah. I think I've said this before, there's a house here in town on Main Street that has rain barrels attached to his gutter. Then I'm not sure what he waters with, but I think it's some sort of a drip hose that he has a spigot that he can shut off so when he wants to use that rain water barrel, and I think they're 50 gallon barrels. He has them up, I would say, two feet off the ground and let gravity do its work for him.

**Jeff Edwards:** Sure. That's one way to use that water.

**Jerry Erschabeck:** Well, especially in a municipality where you are paying for water, I'm not sure that I would want to pay for water. I pay for electricity because I'm on a well, but it's far less expensive for me to put a bunch of water out on the garden than someone in town.

**Jeff Edwards:** Jerry, do you have nitrates in your water? Is that something that you monitor for?

**Jerry Erschabeck:** Yes, we do and we have a hard water system.

**Jeff Edwards:** Okay.

**Jerry Erschabeck:** We do a well check every year, and our nitrates are up there and our water is set to be hard.

**Jeff Edwards:** Okay. How do you moderate the nitrate level for your drinking water, if I might ask?

**Jerry Erschabeck:** Well, we don't so far.

**Jeff Edwards:** Okay. [NOISE] Fair enough. [LAUGHTER]

**Jerry Erschabeck:** I'm considering an RO system for us, and I think that's probably one of the easier ways to control that nitrate.

**Jeff Edwards:** Yeah. In the research that I've done, it's probably about the only way to lessen the nitrate level is through a reverse osmosis system. Goshen County, unfortunately, is notorious for having high nitrates in the water. Again, as temperatures increase and water gets scarce, it seems like those nitrate levels have a tendency to spike.

**Jerry Erschabeck:** But the biggest thing that we've done is to get away from surface water. When we first moved to our location, the well was only about 25-feet deep.

**Jeff Edwards:** Wow.

**Jerry Erschabeck:** So that surface surface water, and so it started to slough in and our well pump burned up and then our well motor burned up. We said, ''Okay. That's enough of that.'' So we drill a new well and went down 80 feet. So [00:24:00] we have really good water, really good water pressure, but still we have high nitrate and hard water.

**Jeff Edwards:** Okay. So there are things that we can do about it. But for your irrigation, you should be fine. But for human consumption, maybe it's one of those things that you've got to be careful of.

**Jerry Erschabeck:** Small children and pregnant women.

**Jeff Edwards:** Yes, yes, and really old people.

**Jerry Erschabeck:** [LAUGHTER] And us older people.

**Jeff Edwards:** [LAUGHTER] Okay. On that note, moving on. Brian, what else you got on your list?

**Brian Sebade:** Speaking of nitrogen, I was curious, do you and Jerry ever do any companion planting, looking at vegetables in the yard or in the garden, I guess I should say, complement each other based on above-ground growth or what's happening below ground as far as roots? That's something that I think we sometimes forget about when we put in a vegetable garden in the spring.

**Jeff Edwards:** Diane, this year, planted the onions next to the garlic.

**Brian Sebade:** Okay.

**Jeff Edwards:** But as far as planting, commingling things, I normally don't do that.

**Brian Sebade:** Okay. Jerry, do you?

**Jerry Erschabeck:** So are you talking like iris and daisies?

**Brian Sebade:** I'm talking like [LAUGHTER] climbing beans and corn. Good things like that.

**Jerry Erschabeck:** We had a question on air. What were the three sisters? That's a companion planting of corn, beans, what was our third thing?

**Brian Sebade:** Squash.

**Jeff Edwards:** Squash.

**Jerry Erschabeck:** Squash. So a lot of times, I think that those would be beneficial. But when I'm in the corn, I don't want to be stepping on my pumpkins or my squash, so I put them in their own place.

**Jeff Edwards:** Brian, how about you? Do you commingle? I think your space is restricted, so you have to commingle things anyway, right?

**Brian Sebade:** I have to get a little creative. Yeah, I tend to do that a little bit. In the past, when I've lived in warmer climates, I have done climbing beans and corn, and it works out really well. You can fit a lot of food into a really small space. So you can have a four-by-four garden space and you can get all your corn and all your beans in there, and it seems to keep enough food go on throughout the summer where you've got stuff to snack on. One other thing that I really like about that is, where I'm at now, I grow bush beans and sometimes I hate bending over for 45 minutes, picking beans.

**Jeff Edwards:** Wait a minute, how old are you? [LAUGHTER].

**Jerry Erschabeck:** Bend your knees, use your knees.

**Brian Sebade:** I know. I know. But yeah. So that's another thing with some of these. That was another nice aspect that I did not think about but made it really nice. So same. You could use peas or something else like that.

 You've got to be a little careful as the timing goes with some things. I noticed if I planted my beans too early, sometimes it would grow so large they would almost choke out the corn, or enough light right away until they get establishing [00:27:00] it larger. So there's some of those things to think about. But I guess I bring it up for those of us like myself who are in smaller spaces, there's some cool things you can do to maximize that space.

**Jeff Edwards:** I've mentioned on the program before that I've never tried climbing-type beans, but this year I have some, and I probably should have planted them in with my sweet corn because the sweet corn was big enough that the beans weren't going to take it over. By the time I harvest all the sweet corn, the beans should start going and you have that skeleton of the corn to be able to climb on. Just never thought about it.

**Brian Sebade:** Yeah. Well, you'll have to experiment next year.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** Now, Jeff, when you do pick your corn out of the high tunnel, will you take the plant with you or will you leave the plant and just harvest the corn?

**Jeff Edwards:** I'll harvest the corn first, and then after the pollen is done, because there's a lot of it in the high tunnel, it doesn't blow away, then I will cut the plants off at the base and haul all that organic material out, leave the roots in the ground and let them hold the soil as per Caitlin's recommendations on our program in the past, and then just go ahead and turn it next spring and plant right into it.

**Jerry Erschabeck:** Brian, we have planted tomatoes and marigolds together just to see if it would reduce the amount of any bugs or cut worms that might come around our tomatoes, and still I don't know if it worked or not.

**Brian Sebade:** Is it not?

**Jerry Erschabeck:** I don't know, but it was fun to see the different colors commingle.

**Brian Sebade:** Right.

**Jerry Erschabeck:** Those tomatoes are nice and green and marigold is a variety of colors. So we still had some bugs, but it was fun growing them together.

**Jeff Edwards:** Did you ever go into pick a tomato and it was a marigold?

**Jerry Erschabeck:** That had happened. [LAUGHTER] They were considered weeds, and I said, ''What happened to my marigolds?" Myrna says, ''Oh, I thought those were weeds.'' [LAUGHTER] We've done a lot of different things in the past.

**Jeff Edwards:** When you have a gardening partner, you guys need to be on the same page, man. You need to be communicating.

**Jerry Erschabeck:** Are you talking from experience?

**Jeff Edwards:** Well, sure.

**Jerry Erschabeck:** Well, sure. So we always plant our onions and garlic together as well, and it's either- we have a block of flowers. So on one side of the flowers we will put our garlic, because a garlic goes in in August and goes throughout the season, and then it comes back up in the spring, and then we have to figure out where we're going to put our onions. Usually, the onions go alongside the garlic.

**Jeff Edwards:** Makes sense to me.

**Jerry Erschabeck:** Yeah.

**Brian Sebade:** Yeah.

**Jeff Edwards:** Brian, in your companion planting, are there particular things that you plant together on purpose?

**Brian Sebade:** Well, [00:30:00] I don't know, yes, on purpose. There's things I like to plant in that sneak up, I guess, for lack of better term. So I like how I can sneak in onions. You can sneak in some beets here and there. Going back to what you just said, Jerry, I remember growing up one time, my grandfather actually "accidentally", I'm putting accidentally in quotes, picked an entire row of beets, thinking that they were weeds, right?

**Jeff Edwards:** Oh, yeah.

**Brian Sebade:** There are those things that happens.

**Jerry Erschabeck:** Some people do that on purpose.

**Brian Sebade:** Right. Right.

**Jerry Erschabeck:** Yeah.

**Brian Sebade:** Accidentally find some beets, you can just pick them. [LAUGHTER] So I like squeezing those in, squeezing some bush beans in around some of my squash plants is always great. They're pretty low maintenance and they'll just pop through, help fix maybe a little bit of nitrogen for them. But yeah, onions, they fit into really small spots. Above-ground growth for onions, they don't take up a whole lot of space. So you can just fit those in wherever if you're limited on space.

**Jerry Erschabeck:** So Jeff does a really good job, I understand, growing carrots. But I also have heard that if you put carrots and radishes together, the radish will grow faster and allow for spacing of the carrot?

**Brian Sebade:** Yes, I do that as well. I don't like radishes, so they get donated.

**Jerry Erschabeck:** [LAUGHTER]

**Brian Sebade:** But this year, I tried a new variety, English breakfast radish, and they got really big and really helped space out my carrots. So I'm excited to see how this variety works for that companion planting.

**Jerry Erschabeck:** Did you still donate the radish?

**Brian Sebade:** Yes, anyone that I can find.

**Jerry Erschabeck:** Yeah. I am with you. I don't care for a radish at all.

**Brian Sebade:** Every year, I think, "Oh, I'm going to like them this year."

**Jerry Erschabeck:** [LAUGHTER] No.

**Brian Sebade:** It doesn't change.

**Jerry Erschabeck:** There are people that just clamor for radish. You go, "Yeah, I've got some extra radishes." "Oh, can I have them?''

**Brian Sebade:** Right.

**Jerry Erschabeck:** Sure.

**Jeff Edwards:** I like radishes as long as they're good radishes. If they're really hot, don't care for them. If they taste like dirt, don't care for them. [LAUGHTER]

**Jerry Erschabeck:** Now, if the radish gets hot, is it because they've been starved for water?

**Jeff Edwards:** I have a tendency to think so, but I don't have any evidence or proof of that. Brian, do you know?

**Brian Sebade:** Yeah, it'd be the same lines of thinking that you're going with, Jeff. I don't know for sure. I mean, kind of like grapes, you want to stress them a little bit, get that sugar content a little bit higher. So that would be my thought, I don't know.

**Jeff Edwards:** Yeah. But why we are we asking him? He doesn't like to eat them.

**Jerry Erschabeck:** Yeah.

**Brian Sebade:** Yeah, it doesn't that matter to me. I'm just donating somewhere.

**Jerry Erschabeck:** Hey guys, on that note, I think it's time to take a break and listen to our sponsors and we'll be back in a bit.

**Female Narrator:** [MUSIC] You are listening to the Lawn and Garden Podcast presented by University of Wyoming Extension. All cut up on this year's episodes? Stay tuned for episodes from last season coming soon to Spotify, or your favorite podcast streaming site. [MUSIC]

**Jeff Edwards:** [00:33:00] Okay everyone, we're back. This is the KGOS/KERM Lawn and Garden program. I'm Jeff Edwards with Jerry Erschabeck, and our guest today is Brian Sebade. We've been talking about watering and gardening, and the vegetables that we like to eat, the ones we don't like to eat. [LAUGHTER] So I think we should probably continue on in that vein and go from there. The one thing, the one rule that we have at our house is only grow the stuff you like to eat. Unfortunately, Diane likes beets. I do not. We do not plant beets. [LAUGHTER]

**Jerry Erschabeck:** Now, have you ever had orange beet? It's a red beet. There's red beets. I think there are probably different colored beets, but this one particular beet is an orange beet. You cut it in half, you put it on the grill, you put a little olive oil on it and sear it. My word, those are good.

**Jeff Edwards:** Jerry, I'm sure that somebody has tried to sneak an orange beet into the things that I eat, and I'll bet you, I could tell you it was there. [LAUGHTER]

**Jerry Erschabeck:** I don't know for sure. My neighbor has always said, "Oh, I don't care for this, I don't care for that." Myrna goes, "You've been eating it for the last five years."

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** So maybe, maybe not. Brian, do you like beets?

**Jeff Edwards:** I do know Brian is a big beet fan.

**Brian Sebade:** I do like beets. I like Chioggias. There are red and white striped variety. They seem to do really well in Laramie.

**Jeff Edwards:** I'll bet they don't taste like a candy cane.

**Brian Sebade:** They do. Come on, Jeff. [LAUGHTER]

**Jeff Edwards:** Let's see, a candy cane that's tainted with dirt.

**Jerry Erschabeck:** Dirt. [LAUGHTER] That's how I think the red beets are. They taste like dirt. Well, there's a lot of people that like red beets.

**Brian Sebade:** Yeah, I like red beets as well. Bull's Blood is a good variety, Early Wonder is another one that I like. It's not quite as red as some red varieties, but seem to do well. Detroit Red is another one, but then yes, golden beets are probably one of my favorite.

**Jeff Edwards:** Brian not only likes beets, he is a connoisseur of beets because he knows them by name.

**Brian Sebade:** I do know them by name, [LAUGHTER] and I am particular with my beets. I make sure I stagger out the plantings so they're not planted all at the same time because if you plant them too thick and then you start harvesting over the summer, those older ones, even though it takes them a lot longer to get to that size, they become woodier. I don't like them quite as much. So I usually do a couple of rows, let them get going, and then I plant inbetween those rows. So that way, I've got a second crop later on that pops up, and it tastes better that way, Jeff. So you don't have this woody, dirt taste in your mouth.

**Jeff Edwards:** I don't care about the woodiness. It's the things that taste like dirt. I can't get it down, man.

**Jerry Erschabeck:** What did you call the orange one, is it golden?

**Brian Sebade:** Golden, yeah.

**Jerry Erschabeck:** If you would try, just as a [00:36:00] scientific, educational experiment, try a golden beet, I think you'd be impressed. I might have to grow one for you.

**Brian Sebade:** Yeah, we'll grow them for you, Jeff.

**Jerry Erschabeck:** [LAUGHTER]

**Brian Sebade:** I'll mail you some for some corn in return.

**Jeff Edwards:** You would be wasting it on me. Brian, you don't have to give me beets for me to give you corn. I'll give you corn.

**Jerry Erschabeck:** [LAUGHTER] It’s those zucchini people that have some people locking all their car doors because of people who grow them and find them as boats and then want to give them away. People ask me, "Hey, you want some zucchini?" I said, "How big are they?" I really appreciate the six to eight-inch size, I guess. But once they get about two feet and they can float you, they're too big.

**Brian Sebade:** Right.

**Jeff Edwards:** They should be fed to chickens by that time.

**Jerry Erschabeck:** Chickens, or chopped up for zucchini breads.

**Jeff Edwards:** Yes.

**Jerry Erschabeck:** Or zucchini casseroles or zucchini 900 and other four ways of eating zucchini.

**Jeff Edwards:** Exactly. A thousand ways to die eating zucchini. [LAUGHTER] Yeah.

**Brian Sebade:** What about arrots, Jeff? You're a carrot guy?

**Jeff Edwards:** I do have success growing carrots. It took me a long time, but I am quite pleased with the last several years of carrot production that we've had. I have a planter, which helps, then that way I don't have to mess with thinning them. Personally, I think that killing a carrot plant by thinning it is a waste of effort [LAUGHTER] and time. So if they're planted too thick, I never go back in and thin them. It is what it is. But this planter that I have, its spaces amount even enough. You look at the space you've planted after they started emerging, you go, "Oh crap, I think germination might have been pretty poor." But by the time we're harvesting them, they're not crowded, they're perfect. So it seems to work out okay.

**Jerry Erschabeck:** What does your planter look like?

**Jeff Edwards:** It came from Johnny Seed. It is a six-row, small seed planter. It has a tubular wheel on the front, and then it has six seed pockets that are about inch-and-a-half apart.

**Jerry Erschabeck:** Oh, I've seen those.

**Jeff Edwards:** Then it has a tubular packer on the back. You push it through the soil and it drives a wheel that picks the seed up and drops it down into the soil, and then it packs behind as it goes. It's a beautiful thing.

**Jerry Erschabeck:** Oh, yeah. I planted a field of corn like that and I borrowed one and yeah, they are. But I didn't realize that it would plant in such a small seed as carrot.

**Jeff Edwards:** Yeah. Well, I do buy pelleted seed.

**Jerry Erschabeck:** Oh.

**Jeff Edwards:** I think the pellet, it's a clay prill that they put around it, just so you can keep better track of the seed, because carrot seed is really small and the prill makes it a little bit easier to [00:39:00] plant.

**Jerry Erschabeck:** Have you had any experience with the seed tape? It's a piece of paper with carrot or a small seed embedded in it.

**Jeff Edwards:** So when I was a kid, my mom bought seed tape and I'm pretty certain that it was beets. [LAUGHTER]

**Brian Sebade:** Here we go again. [LAUGHTER]

**Jeff Edwards:** But yeah, that is a way to plant things that are really small. Brian, have you ever used seed tape?

**Brian Sebade:** I have not. Obviously, I'm the kind of guy that just goes out and throws it out there and hopes for the best. I have and I think it's a really good idea, but I don't ever spend the time.

**Jeff Edwards:** Jerry, can you buy seed tape? I don't know, I've never literally looked at it. Can you buy it?

**Jerry Erschabeck:** Yeah. A lot of the catalogs offer carrots, beets, I don't know what else, but marigolds. And you know why for marigolds because they come up really good and easy.

**Jeff Edwards:** Right.

**Jerry Erschabeck:** But there's a variety of seed tape seeds available in the seed catalogs.

**Jeff Edwards:** Okay. Good to know because if you're a new gardener and you look at that and you think, "Seed tape. What’s seed tape?" [LAUGHTER] So it's one of those things that the seeds are actually stuck on it and it comes on two sides so that the tape isn't sticky when you unroll it, and then the seed actually germinates and grows out of that tape, after you plant the tape.

**Jerry Erschabeck:** Now, the other way- another planter that I've seen is it's like a plastic funnel or a plastic scoop. It has ribs on the inside of the scoop so that you put your seed in and it just goes over these little ripples, and you probably try to get one, or two, or three seeds out at a time by just simply shaking it and/or tapping the side of the plastic funnel with your finger, and you just get a little bit of seed out at a time. Again, you have spacing. I like the idea of having a seed that's already enlarged a little bit with either clay or paper wad.

**Jeff Edwards:** Yeah. Also, that frill or that stuff that they use on the outside of those seeds, it actually absorbs moisture and keeps that seed hydrated so that it'll germinate.

**Jerry Erschabeck:** Now, isn't it one of the things that agriculture beets had perfected, was making that beet seed a little bigger so that they could actually space out their beet seed?

**Jeff Edwards:** Yeah. I think beet seed was one of the first ones to be pelletized. [00:42:00] To me, when I think of a pellet, I think of a round, flat thing, like an aspirin. But actually they're-

**Jerry Erschabeck:** They're round.

**Jeff Edwards:** They're round. Yeah, they're little round balls with a seed in the middle of it. Color-coded usually, usually have some insecticide or fungicide in them. But if you're looking through the seed catalogs and you see pelleted seeds, they either can come with a insecticidal or a fungicidal treatment or not. You can get them as non-treated.

**Jerry Erschabeck:** Now, Jeff, I have a bug question from one of our interested listeners.

**Jeff Edwards:** Okay. Let me have it.

**Jerry Erschabeck:** Rollie pollies.

**Jeff Edwards:** What about them?

**Jerry Erschabeck:** Well, they're not really an insect, right?

**Jeff Edwards:** Correct. They are the only terrestrial crustacean.

**Jerry Erschabeck:** Terrestrial crustacean, and edible?

**Jeff Edwards:** Yeah, but it would take a lot them, I think. [LAUGHTER] Oh, look at the little lobster I'm having for my dinner.

**Jerry Erschabeck:** I mean, I hate those little rollie pollies. But somebody says, "Oh yeah, you can eat them." I said, "Oh yeah, *you* can eat them." [LAUGHTER]

**Jeff Edwards:** Well, you can eat insects, too.

**Jerry Erschabeck:** Yeah.

**Jeff Edwards:** Can you eat them? Yeah, probably.

**Jerry Erschabeck:** But they are a land crustacean?

**Jerry Erschabeck:** Yes. The only terrestrial crustacean.

**Brian Sebade:** You thought beets were bad, Jeff, come on. [LAUGHTER]

**Jeff Edwards:** I got to tell you, I'd eat a rollie pollie before I'd eat a beet. [LAUGHTER]

**Jerry Erschabeck:** Okay. Done. [LAUGHTER]

**Brian Sebade:** It's on air. We've got him.

**Jerry Erschabeck:** Is a shrimp a crustacean?

**Jeff Edwards:** Correct.

**Jerry Erschabeck:** A lobster is a crustacean? That's what you said, lobster. Yeah, I wouldn't think that eating a rollie pollie would be interesting or enticing at all.

**Jeff Edwards:** Well, we'll just have to check that out, won't we?

**Jerry Erschabeck:** Well, I guess we will.

**Jeff Edwards:** So we don't think of them as being pests all that much, but they normally feed on decaying plant matter. However, in situations where there's a lot of decaying plant matter, for instance, a strawberry bed that has a lot of straw and leaves and those types of things, those darn little buggers will get into the strawberries and start consuming the berry fruit. So they can consume other things as well, kind of a pest in one of our beds that I have to figure out what to do about them. Gourmet. [LAUGHTER] Gourmet opportunities. But yeah, I've got to figure out how to get them under control in one of my raised beds where I have strawberries growing because they seem to be enjoying them before we get to them, and that makes somebody, other than myself, a little agitated.

**Jerry Erschabeck:** Yeah. When your gardening with a partner, you have to be on the same page.

**Jeff Edwards:** Right. We've already discussed that.

**Jerry Erschabeck:** Yeah. [LAUGHTER] So maybe put those in with your garlic scapes pesto.

**Jeff Edwards:** [00:45:00] Oh! Hide them in the garlic scape pesto.

**Jerry Erschabeck:** Yeah. You might even put beets in your garlic scape pesto.

**Jeff Edwards:** I do not think so. [LAUGHTER]

**Jerry Erschabeck:** So we've talked about rollie pollies, talk to me about millipedes then. Are they some of the same thing that eat on dead and decayed material?

**Jeff Edwards:** Yes. So centipedes and millipedes are two different things, right?

**Jerry Erschabeck:** Okay. Well, how come?

**Jeff Edwards:** So centipedes have a single pair of legs per body segment. You tracking with me?

**Jerry Erschabeck:** Okay. I am.

**Jeff Edwards:** Okay. Millipedes have two pairs of legs per body segment.

**Jerry Erschabeck:** Segment.

**Jeff Edwards:** So they have twice as many legs as what a centipede has. They don't have a million legs, but they have a lot. Centipedes are predators. So they're catching other little things that are living in the soil, hopefully bad stuff, and eating them. Millipedes are detritus feeders in decaying vegetable matter and those types of things. I think if you are growing things in amongst the areas where there's a lot of decaying matter, organic matter, you could have problems with millipedes as well. Now, there are varieties of millipedes, fortunately not in the United States, that are poisonous.

**Jerry Erschabeck:** Okay.

**Jeff Edwards:** They exude poison from their exoskeleton. Now, centipedes, since they're predacious, actually have venom glands like a spider. If they bite you, it can leave a welt or something like that. Now, there are centipede varieties, not in the United States, that are very poisonous, too. [LAUGHTER]

**Brian Sebade:** I'll stick with Wyoming. Thanks, Jeff.

**Jeff Edwards:** Yeah, you're welcome. As a kid, I always wanted to go to Australia, then I started studying. We have our version of poisonous things here, right? Australia is one of the places where there's a lot of stuff that's poisonous, or venomous, or likes to bite you, or remove chunks from you. So I'm thinking, "I don't know, I don't think I want to go to Australia anymore." [LAUGHTER]

**Jerry Erschabeck:** You wouldn't have to go to the outback.

**Jeff Edwards:** No. [LAUGHTER]

**Jerry Erschabeck:** Right there in the city, they could still get you.

**Jeff Edwards:** That's right. Bad things can happen anywhere, so be happy where you are, I guess.

**Jerry Erschabeck:** Happy where you're at.

**Jeff Edwards:** [LAUGHTER] All right. So I think we're getting pretty close to wrapping up our program today. Jerry, we have not, as far as I can recollect, mentioned your favorite fruit, your favorite vegetable, pumpkins.

**Jerry Erschabeck:** Well, I'm telling you.

**Jeff Edwards:** What should people be doing right now if their pumpkins are still actively growing?

**Jerry Erschabeck:** Well, we need to identify that pumpkins really like to grow on the main vine or on the primary or secondary vine. [00:48:00] So pumpkins will branch out like the branches of a Christmas tree. So if you held your hand up in the air and you are looking at your palm, there's five fingers. On the pumpkin plant-

**Jeff Edwards:** Wait a minute. Wait a minute. I thought you had four fingers and a thumb?

**Jerry Erschabeck:** Okay. Four fingers and a thumb, so five digits. So if you remove the outer two branches of this pumpkin, now you're left with the main vine and the primary and tertiary vines. So you have three vines, the primary and the secondary. Those are your vines that you want to try to grow on. The other ones are called tertiary vines, and you need to clip those off. You should start seeing good growth on your vine as it starts to edge out.

 By the end of next month, you need to chop off your vine and allow your pumpkin just to start growing. About this time as well, you're having the idea of which pumpkin you want to save to make it grow to be the biggest pumpkin. So you're starting to eliminate some of the pumpkins that are on the vine. You're still talking about wind shear and methods to tie your vine down. Some people like to just throw dirt on top of the vine, in the vine juncture. The leaf juncture is two leaves that come straight up off of the vine. You put a little dirt on there, you'll have more nutrient uptake from the vine, and it'll help hold your vine down. You can take little skewer sticks, like you would make for a barbecuing with the skewer sticks.

**Jeff Edwards:** Shish kebab sticks.

**Jerry Erschabeck:** Shish kebab sticks, and make an X on either side of the vine so that you make an X and hold your vine down from the wind shear. I keep talking about that because, here in Wyoming, eastern Nebraska, that's probably the biggest things that will ruin your pumpkin and ruin your day, is you walk out and you see your pumpkin vines all rolled over and actually torn away from the ground.

**Jeff Edwards:** Jerry, you mentioned removal or selecting your pumpkin. So that means that you are removing the other ones. Do you eat those?

**Jerry Erschabeck:** I have not.

**Jeff Edwards:** Okay.

**Jerry Erschabeck:** Usually, they're an immature pumpkin.

**Jeff Edwards:** But you could eat them.

**Jerry Erschabeck:** You could.

**Jeff Edwards:** You could eat them like a squash, right?

**Jerry Erschabeck:** Absolutely. You could fry them up, you could stew them, you could boil them, you could do almost anything with them.

**Jeff Edwards:** Pumpkin beer.

**Jerry Erschabeck:** Pumpkin wine.

**Jeff Edwards:** Okay. [LAUGHTER]

**Jerry Erschabeck:** No, I don't know what you could do with [00:51:00] the beer or wine, but I'm sure you could do something like that. Yeah.

**Jerry Erschabeck:** Okay. All right. Very good. That's good on the pumpkin topic for this week. Brian, what parting shot would you like to leave us with as far as information you'd like to cover today?

**Brian Sebade:** I don't know, I think we covered a lot of different stuff. One thing, as a side note, we were on the topic of carrots, I experiment with a lot of different types of carrots every year. So some things I really like are the Cosmic Purples. I've really liked enjoying growing those. Amarillo, which is a yellow variety, I've really enjoyed that. I've also done Atomic Red and Lunar White, but I don't seem to like those quite as much. They don't seem to be quite as firm. But since we're on the topic of beet varieties, I thought I'd throw it out there for the carrots.

**Jeff Edwards:** You throw those out as well for people to look at.

**Brian Sebade:** For them, yeah.

**Jeff Edwards:** A lot of people don't know this, but the orange carrot is not what carrots originally started as. Those other colors that you mentioned, Brian, are traditionally the carrot colors. I think that orange color has been selected for over time just because people felt that it was more appealing, or the plant breeders felt that it was more appealing. So just a little side bit to end up on, I think, today.

**Brian Sebade:** Yeah.

**Jeff Edwards:** [LAUGHTER]

**Jerry Erschabeck:** Whatever color, they are good for your eyes.

**Jeff Edwards:** Whatever color, they are good for you, yes. Thank you all for listening to us today. Brian, thank you for being our guest. Jerry, as always, thank you for being my co-host, and we will see you next time.

**Female Narrator:** Thanks for listening. Next week's guest is Abby Perry, Extension Educator in Carbon County. Find the episode Tuesday at noon on Spotify or Extension's Horticulture page. [MUSIC]