

Female Narrator: [00:00:00] Welcome to the Lawn and Garden podcast [MUSIC] with University of Wyoming Extension Specialist Jeff Edwards, and co-host Jerry Erschabek. Originally aired on KGOS & 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: Good morning, everybody. This is Jeff Edwards. This is the KGOS/KERM Lawn and Garden program. In studio with me today is Jerry Erschabek. Good morning, Jerry.

Jerry Erschabek: Good Morning, Jeff.

Jeff Edwards: How are you today?

Jerry Erschabek: Hey, pretty darn good. Thank you.

Jeff Edwards: Excellent. With us also in studio today is Chrissy Land. She is a community forester from Nebraska, and we will be talking about community forestry, which I don't think a lot of people really know about. But before we dive into that, let's take a moment and listen to some comments from our sponsors.

Female Narrator: [MUSIC] Starting May 18th, some University of Wyoming extension offices will be open to the public. Contact your local office to learn about your county's variances for COVID-19 restrictions. Even if your county remains closed, you can always contact your local educator by phone or e-mail. Go to wyoextension.org to find your county's contact information.

Female Narrator: [MUSIC] Do you have questions about the corona virus or COVID-19? Go to uwyoocnp.org/coronavirus/uw-extension to find reliable information, community resources, and recipes using the food in your pantry.

Jeff Edwards: Okay, we're back. This is Jeff Edwards and Jerry Erschabek. This is the KGOS/KERM Lawn and Garden Program, and with us today is Chrissy Land. She is a community forester. Are you in Gering, Chrissy?

Chrissy Land: [00:02:00] My office is actually in Scottsbluff.

Jeff Edwards: Okay.

Chrissy Land: I am just off of the airport. But I cover the whole western half of the state. So I am typically on the road most of the time, all over the place.

Jeff Edwards: Typically. [LAUGHTER]

Chrissy Land: Typically. [OVERLAPPING] Now, I get to just fly through Zoom and meet all of my wonderful community partners that way.

Jeff Edwards: Right. So when we talk about community forests and community forestry, what can you tell us about that, or what do you want to share with us about community forestry, and what it is that you do?

Chrissy Land: Now, when we think about the community forests, we think about community, and that's people, and then the forest, the trees. I always tell people that a community forester is not the same as a forest forester, and that kind of sounds funny, but it makes sense.

Jeff Edwards: Sure.

Chrissy Land: We are in a man-made forest more often than we are in a natural made forest. So we have different challenges, and a lot of it is just finding the balance between mother nature and all of her good things, and that all of our benefits of being people and living among the trees. So how do we

make man-made industrial marry with mother nature? And that's ultimately, the community forests. We have everything from the trees to the perennials, the wildlife, the water management. It's the whole tier of everything. It's not just trees.

Jeff Edwards: So is your role primarily an educational role for the public? Do you plan community forests? Do you work with individuals to, specifically, plant types of trees in the community?

Chrissy Land: Right. So if you were to go to Fort Collins or even Cheyenne, Wyoming, they're going to have their own [00:04:00] community forester, specifically, on staff with their municipality. Basically, in Western Nebraska and even Eastern Nebraska, across the whole state, we have a lot of smaller communities that don't have the budget to have their [NOISE] own independent, specific position to pay for a certified arborist slash forester. So it's basically the Lorax position of the parks departments, and because they don't have the budget for that, our state provides two positions: an Eastern community forester and a Western community forester.

So primarily, I'm working with a lot of tree boards which is a part of being Tree City USA, and it's like a parks board, and sometimes it's both. It's a parks board, serves as the tree board, but it's the group of people that are working with, usually, the governing body of a community that identify the needs of the trees. How much money do we need to budget for removals, or street tree planting, or park tree maintenance? All of those different things. Usually, they're in charge of also doing an Arbor Day celebration, which would have been just here in April. So that's primarily a lot of what I get to do, and then I also do a lot of educational workshops with the industry, and also, municipality, and then also with the public. So maybe with the Master Gardener course, we might step in and do some education, and really we go by request. So if you wanted to hear about pruning, if you want to hear about planting, or placement, or maybe even something more specific, then we get to come in and do a hands-on training with you.

Jeff Edwards: Perfect. Jerry, did you have questions you wanted to start off for Chrissy?

Jerry Erschbeck: Well, I just wanted your opinion. Jeff and I are the two of a kind, if we're mowing and we hit a branch [00:06:00] with our head, we have a tendency to lop it off. Now, others have said, "Oh, don't do that. Put a bigger mulch ring around it so it distances you from the tree." What's your feeling on that?

Chrissy Land: Everyone manages their yard a little bit different, and there's not one [inaudible 00:06:19] [OVERLAPPING] or wrong way. [LAUGHTER]

Jeff Edwards: Wait a minute. That sounds like the politically correct answer. [LAUGHTER]

Chrissy Land: Well, honestly, if that is the way you want to manage your trees, you can. If it was my yard, I would be putting in a larger mulch ring. And you can go all the way out to the edge, the tips of your branches, to the drip line, and mulch all the way out. But then we have to think about some of our old lindens or other trees that are going to have those lower branches that could potentially be like a 25 foot mulch ring.

Now, what we could do instead, sort of a compromise, is put in a six foot or an eight foot mulch ring, and then those branches that are lower, if possible, instead of removing them completely at the trunk, we can just stunt them back to the length so that they are only within that mulch ring. So then when you're mowing around it, that tree, if it's not completely shaded out, say, it's a young tree, then that's the best thing to do instead of removing the branch completely, is to just stunt the branch back to that mulch ring, so that way it's still producing leaves, and those leaves are feeding the trunk right there. So then, the tree is benefiting from that branch still and you're not getting whacked in the face with it every time you mow.

But if you're not able to do that and that is a pet peeve of yours because you do probably mow your lawn once a week, then maybe it's time to think about going in. It's better to remove them when they're smaller than to wait until they're the size of your wrists and then go in and chop it off.

Jerry Erschabeck: [00:08:00] Well, that sounds like more of a personal answer than the political one.

Chrissy Land: Right.

Jerry Erschabeck: So I have another one. I know that in Cheyenne, the arbors there are concerned with the emerald ash borer, and they're setting traps and that sort of thing, but we're up here in Torrington, I have two ash trees myself that we got from, I don't know, a bank one Arbor Day. They were just little sticks, and now, they're 25 feet tall. So they appear to be healthy. Is it just a matter of watching that tree and see if it starts to decline in health? What can I do to help my tree?

Chrissy Land: It's good to have a healthy tree to begin with. That goes back to proper selection, proper planting, proper pruning, and making sure that you're not whacking it with your mower deck every time you go by.

Jerry Erschabeck: Or your weed eater.

Chrissy Land: Or the weed eater, exactly. [OVERLAPPING]

Jeff Edwards: Or your rototiller, Jerry.

Jerry Erschabeck: [LAUGHTER] Or your rototiller. Don't get too close to trees.

Chrissy Land: Yikes, that would not be good. [LAUGHTER] Any way that we stress our trees out, it invites pests. We have a native ash borer, the lilac-ash borer, and it's already been here, it's already been doing some damage. Really, it's going to target trees that are stressed, whether it's from over watering, from damage, or improper planting, say it's too deep. So if your tree seems to be in good health, it's good to monitor your neighboring states and within your state of where the emerald ash borer is. It's not really a matter of if it's going to get here, it's a matter of when it's going to get here.

So you have to come with peace that the potential right now might not be high, but the potential down the road might be higher [00:10:00] that that insect would be attacking your ash trees, and coming along and just saying, "Oh, look at these yummy trees. I'm just going to feast on these," and then you have a dead tree.

So if you have a declining tree, maybe it's time to think about removing that tree and replacing it with a different species. If you have a rather healthy tree, love it and enjoy it for now, and maybe plant another tree next to it. So that way, when it comes time to remove that tree, whether by the beetle or by some other act of mother nature-

Jeff Edwards: Plant another tree that's not an ash tree.

Chrissy Land: Plant another tree that is not an ash tree next to it, within proximity of it. So that way, when that tree goes away, you don't miss it as much. It doesn't become this big gaping hole in your landscape. It's instead, now, it's just we're going to shift our focus over to this beautiful oak or this beautiful [NOISE] [inaudible 00:11:01] or whatever it is that you select.

Jeff Edwards: That's called successive planting. [LAUGHTER]

Chrissy Land: Yes.

Jeff Edwards: Planting for the future. [LAUGHTER]

Chrissy Land: Yes, it's important for us to be proactive for one, when it comes to trees, because we notice when trees are gone, when there's a big gaping hole. But if we can plan for no gaping holes and continue to plant, whether it's every five or 10 years, it's still going to make a big difference. You don't have to plant a tree every single year, every spring and fall, but just think about what is the next generation. We have a lot of generation gaps in our community forest, and we talk about diversity. It's important for us to not only have species diversity, but it's also important for us to have age diversity. We want trees of different types and trees of different ages.

So you don't want to go plant your whole yard all at the same time, which I'm struggling with right now because we just purchased our house last fall and we've planted [00:12:00] probably over 20 trees on the property. I'm just telling myself as a forester, "Chrissy, you're really excited about planting trees. Let's take a break and plant more in five years." But I don't want to wait for five years. I have seven acres to fill with trees. My husband thinks that's a great idea.

Jeff Edwards: We live in an environment where it is hard to get trees to establish. Once they get a good go at it, then we have things like gophers, and rabbits, and voles, and deer. Then if they make it through a lot of that, then we get hail and wind. [LAUGHTER]

Chrissy Land: Right.

Jeff Edwards: I'm pretty sure we aren't supposed to have trees here. [LAUGHTER] based on all this stuff that can go wrong. My wife and I live on a piece of property that we've owned since the '90s. Just this year, we put in a four species, four row, three row to the north of us. Wished we had done it a long time ago, but didn't have access to water up there. So am I going to see the shade of those trees? Probably not. [LAUGHTER]

Chrissy Land: But it will increase the value of your property for your future.

Jeff Edwards: Yeah. The next people will enjoy those trees. [LAUGHTER]

Chrissy Land: Right. If you think about it when we're buying houses, do we want the house that's in the newly developed neighborhood with tiny stick trees, or find the house in the old neighborhood with a big beautiful tree is more appealing? Those are houses with higher property value.

Jeff Edwards: Yeah. [OVERLAPPING]

Jerry Erschabeck: Now, that's what my wife and I started out with about 30 years ago when we moved here and it was void of trees. Well, it wasn't void of trees. It had a whole bunch of dead and dying elm trees, and we must have burned successive weekends throughout one whole summer and finally got rid of all those trees, but we started just putting more trees [00:14:00] in, and I kept complaining that that was more work for me. When every weekend, Myrna was dragging home another tree. "Oh, hey, somebody's offering us a tree. If we come dig it up." I'm going, "Good gosh, what the crap is this?" [OVERLAPPING]

Jeff Edwards: Yeah, but you were younger then [LAUGHTER] and able to do that. [LAUGHTER]

Jerry Erschabeck: 30 years later, gosh, we have nice shade. We did put in one new tree. It's a rose bud tree, but it's a real slow grower and the buds have been on it for a long time, it's not opening up, it doesn't seem right. But the thing is, the point of the story is, 30 years later, we are enjoying the fruits of our labor, and your tree row, you can look at it grow and say, "I did that."

Chrissy Land: Yeah. [LAUGHTER] It's a piece of satisfaction. It's a hard world to live in to be a tree. [OVERLAPPING]

Jeff Edwards: Oh, yeah.

Chrissy Land: In Nebraska and eastern Wyoming. We just have to accept that it's going to be a challenge. Dig our heels in the dirt and move forward. There's always opportunity to plan for the future and feel good later on when you get to look back at that planting and say, "Man, look at that beautiful tree. I planted that."

Jeff Edwards: [OVERLAPPING] go ahead.

Jerry Erschabeck: I got to look at this little YouTube about seed bombs, and they are planting trees inside it like a biodegradable container with a pointy tip, and they throw that out of a C-130, and they say that they can plant like 200,000 trees an hour. I mean, out of that, you'd only expect one out of 10 or one out of 20 to grow. Have you ever seen that? [OVERLAPPING]

Chrissy Land: I would be interested to know what the deployment method is, once it is released from the cannon or whatever it is that's shooting it, does it bust open and then everything spreads [00:16:00] out and then hits the ground?

Jerry Erschabeck: It's deployed by an airplane, a C-130, and it has a pointy tip and it's filled with a little bit of nutrient and that sort of thing. So it hits the ground at about 200 miles an hour, and plants it at the appropriate depth.

Chrissy Land: So is there one seed per thing or are there many seeds?

Jerry Erschabeck: I think that it's an actual little tree, like a real small tree. They throw that out in a biodegradable container with pointy tips, and fertilizer.

Chrissy Land: That's some ingenuity.

Jerry Erschabeck: Yeah, and that's mainly for like a fire area, wouldn't it be?

Chrissy Land: Yeah. It would probably be a method they would use to re-establish or help give a boost to re-establish a burn footprint from a fire. I know that in northwestern Nebraska, around the Chadron area where they had those bad fires in 2012 and 2006, they're doing a lot of hand planting efforts, where a crew will come out and they plant conservation size trees by hand, and it is amazing to watch those crews go to work. But it's good work that they're doing, they're just helping give that forest a boost to move forward. Again, you have to remember that it's survival of the fittest, whichever ones get placed properly, planted properly, and happen to not get stepped on as a young seedling.

I mean, just like Jeff said earlier, there's all of these things after we plant that come in afterwards, whether it's mother nature or some wildlife that just tries to beat down on those small trees. But in the end, you are at least doing something, and helping that forest recoup from such drastic loss, [00:18:00] and it's making a difference. It is.

Jeff Edwards: The hazards of being a tree.

Chrissy Land: The hazards of being a tree.

Jeff Edwards: So Chrissy, as we're talking about community forestry, I wrote an article about emerald ash borer a couple months ago, for one of our University of Wyoming publications, and some of the data that I found was placing a value on community forests, a numerical value. I think in Wyoming, there were at the time that the survey went out, it was the mid '90s, and they really stated that there's only three species of trees that live in the community forests in Wyoming, and ash trees was one of the three. So if we have a pest that comes in and attacks these things, and we really have no defense mechanism for it, that can be a significant loss to those community forests. I'm not certain that people totally understand that, that all of these ash trees could potentially be gone from our state. It's

happening in other places. So it has a real significant impact not only visually, but also the value of the community forests goes down, right?

Chrissy Land: Right. So we use some tools, a lot of data collection tools. So when we're looking at the population of the community forest with these tools, we are evaluating the data and we're trying to figure out, we're going along this 10, 20, 30 rule, where you don't want more than 10 percent of any one species, no more than 20 percent of any one genus, or 30 percent of any family, and really it's those first two that we pay attention. So we think about the buying mentality.

So if the reason this year, the fad is that [00:20:00] everybody needs to wear blue, and so we go to the store and we have the option to buy blue, red, yellow, and green, and everybody buys blue, and they take blue home. Now, everyone in the whole community has blue in their homes. The same thing happens with trees and nurseries. For some reason, this new hot tree, whether it be a red sunset maple, or an ash tree, and many years ago, ash tree was the fad for the year, everybody went home with an ash tree. It was the tree that got handed out at Arbor Day events. So a mass number of ash trees were planted because they were the fad for that time. Everybody was told this is the tree that will grow in our environment. So everybody's like, "Oh yeah, that's the one that I want, give it to me." So then if everyone in the community goes home and does this, now we've increased the population of that one species. So our tree inventory tells us, what's our balance? Because now, say, we have a bug that comes in and only eats the blue and only eats the ash. Now everybody with that ash, that tree is potentially going to be lost.

Jeff Edwards: They're devastated because they've invested 25 years in this tree, [OVERLAPPING] and it's going to leave a big hole in their landscape, [OVERLAPPING] right, Jerry? [LAUGHTER]

Jerry Erschabeck: I am one of those who are feeling blue right now. [LAUGHTER] [OVERLAPPING]

Chrissy Land: Imagine the homeowner who just bought six acres or something, and they have this big long drive that they want to invest in trees and they want to plant trees along their drive, and they go and they plant, say it's 30 or 40 ash trees to line their drive and they plant them all the same species. This is down to like a homeowner's perspective. Then if you amplify this [00:22:00] to a whole community's perspective, you could potentially end up losing that whole drive at once of trees, and then say, the rest of the community did that, then all of a sudden, you've lost 10 percent of your canopy cover, and all of the benefits that go with it. The beautiful part of the data collection is that we can use a system known as iTree that was developed by scientists in research, that actually gives a monetary number to your tree and to all of your trees, that tells you the value of your community forests, and tells you the value of the different things that it's doing. Is it increasing property value? Is it helping your storm water management system? Is it providing benefit to your markets? All of these different metrics we can look at and identify.

So then we can predict what sort of impact is this going to have on our community forest and how can we be proactive and try and mitigate all of that. Where we can start selecting the dead and dying ash trees and replacing them with a species diversity. We don't want to repeat the past, we want to learn from the past. So instead of removing all ash trees and going and planting all oak, or all elm, and then we have something else that happens. So we think about three things that we know fairly common: so we know emerald ash bore with ash, we know pine wilt with Scotch pine, and then we also know Dutch elm disease with elm. So imagine you have a whole community forest that is 10 percent of each of those, and say, for some reason the stars line up, and you now are hit with all three of those at the same time. Then there goes your entire community forest, and you are sx[OVERLAPPING] exposed to the hot summer sun, you're exposed to the cold winter winds, and you're unhappy [00:24:00] because your environment is not friendly, you don't want to be there. Everybody wants to be under the shade of a big tree.

Jeff Edwards: So diversity is key, correct?

Chrissy Land: Diversity is the key.

Jeff Edwards: Diversity in species, diversity in planting. So you have a canopy of different ages and a healthy home forest really is what you're looking for, right?

Chrissy Land: Yeah. If everybody does their part of having a healthy home forest, then we have healthy community forests.

Jeff Edwards: We as humans try our best to damage, wound, and kill our trees. [LAUGHTER]

Chrissy Land: Too much.

Jeff Edwards: I'm sure you have seen this. I've been on calls in a lot of different places and it's like, "Yeah, that one's dead, you're going to have to give up on it, and you induced it. I'm sorry, but you did it." [LAUGHTER]

Chrissy Land: Right. Sometimes it's so hard to accept defeats, especially when we are the cause of the problem.

Jeff Edwards: Yeah.

Jerry Erschabeck: So those things where you ask your nephew or your younger siblings or someone else other than you to mow your lawn and you go, "But don't hit my tree." Weed eating, don't whack my tree. Come on man. [LAUGHTER]

Chrissy Land: That's where those mulch rings come in handy.

Jerry Erschabeck: Yeah, really handy.

Jeff Edwards: But Jerry, it's not only the people of the younger generation. Those of us who own and manage and care for it, also damage our own trees [LAUGHTER].

Jerry Erschabeck: Yeah.

Chrissy Land: Right.

Jerry Erschabeck: That's a true story there. [LAUGHTER]

Jeff Edwards: Here, let me put this piece of barbed wire around this tree forever. [LAUGHTER]
[OVERLAPPING]

Chrissy Land: And forget about it.

Jerry Erschabeck: Let me put this bird feeder up and let me smack a couple nails into the tree.

Jeff Edwards: Right. I can't remember where I was at just recently, where I was looking up into the canopy and I believe that the tree at [00:26:00] one time had a split in it and there was actually a piece of webbing like from a toe strap inserted through the tree. I couldn't see it on the backside, but it had this loop sticking out about eight feet up [LAUGHTER] that was part of the tree now, so we do odd things to our [OVERLAPPING].

Jerry Erschabeck: Jeff, let me tell you a story about my neighbor. They had a honey locust that it came up and had two large branches and during one heavy, heavy windstorm, it started splitting down the middle. So they drilled through the Y of the tree with a bolt and stuck it through there and then started cranking that up and their tree survived for a number of years that way.

Jeff Edwards: Yeah, it is a common fix to do that. The other thing would probably be to take that tree out [LAUGHTER].

Jerry Erschabeck: Yeah slack it, start over [LAUGHTER].

Chrissy Land: I'm sure if you spoke to their homeowner's insurance, the latter would have been [LAUGHTER] an option instead of what they did.

Jerry Erschabeck: So yeah.

Jeff Edwards: Strapping it together. Yeah. I've seen that. [OVERLAPPING]

Chrissy Land: They would say take it down.

Jeff Edwards: Yeah. I've seen that done many occasions because we do have our life invested in those trees and it's hard to give them up.

Chrissy Land: Right.

Jerry Erschabeck: But the thing is as well, when you talk about homeowners insurance, the homeowners insurance will pay for the damage the tree creates. But as you said the tree has value, but the homeowners insurance doesn't seem to think that that tree is worth anything unless it buries into your house and creates damage.

Chrissy Land: Right.

Jerry Erschabeck: Interesting [OVERLAPPING].

Chrissy Land: They're only worried about the liability of it.

Jerry Erschabeck: Yeah, there you go.

Jeff Edwards: Right. Exactly. Okay, so we've talked about the emerald ash borer. Chrissy, can you describe it? How big is it? I understand that, but can you describe [00:28:00] it for our listeners and where it came from and why is it a problem now? Those types of things.

Chrissy Land: Yeah. So the most important thing to understand is that we have a native tree and a non-native insect. The research goes back and identifies the insect being found in Detroit, Michigan in 2012 for the first time, it was first confirmed sighting of this insect. It's an Asian insect.

Jeff Edwards: So if it's an Asian insect, how did it get here?

Chrissy Land: Well, that's the fun question. We think, it just like got here, it flew here or something. Well no, all insects actually, the fastest way that they move across a vast space, whether it be an ocean or a large piece of land, or across the United States is by people. It's our processes of ordering and shipping and moving firewood that actually moves those insects around. So it's believed to have been transported over in some pallet wood that came over with a shipment.

Ultimately, what happens is, so it's a beetle and beetles metamorphosize. They go from an egg to a larva like a caterpillar. Then they metamorphosize into a beetle, like a butterfly goes through that process. So while it's in the larval stage, it's feeding on the outer layers right underneath the bark of the ash tree. If they are in that lumber and say we harvest that tree to use for lumber then that larva could potentially still be in that lumber. Then we use that lumber to build things like pallets to be able to move produce, or merchandise whatever across [00:30:00] the ocean. So then we bring it over, not even realizing what we're doing and then that larva metamorphosizes and then it emerges as an adult. And say that instead of bringing over like two or three pallets, we brought over like 5,000 pallets and every single pallet was infested with the larva of this beetle. Well, now, we've brought over enough to

sustain a population and those beetles emerged. They go and find a beautiful feast of ash trees.
[OVERLAPPING]

Jeff Edwards: That nobody else is living in.

Chrissy Land: Yeah, exactly. Nobody else is touching those ash trees. So it's like a whole new world of just food. So then we have the challenge of usually we don't catch the population until the population is actually quite large.

Jeff Edwards: So what year was that? What year was it detected in Detroit?

Chrissy Land: 2002.

Jeff Edwards: 2002. So 18 years, right?

Chrissy Land: Eighteen years, right. You can go to the USDA's website and Google emerald ash borer and it'll show you a series of maps that show you how this beetle was expanded. Well, if you think about it when you show up to a new world with a bunch of great food and a great place to live, then you are going to be happy, merry, and you're going to reproduce a lot and you're going to spread your way about. If people don't realize yet of your presence, then we go about our business doing normal things where we harvest lumber, we make products, and we ship products around. Those things continue to happen until the beetle is actually confirmed when the population has increased. So over time, it's moved its way sort of south and then east and then west. Then all of a sudden, I think it was in 2012, the insect was first found in Colorado and it was kind of an anomaly like all of a sudden, there's this big dense area over by the Great Lakes and then [00:32:00] like boom, there's just this one spot in Colorado where the beetle has been found.

Jeff Edwards: In Boulder.

Chrissy Land: Yep, in Boulder. I was at a seminar last year and one of their entomologists from the Colorado Department of Ag was talking to us about this and the quarantine. So then they come in and they say, "Okay, we now have a quarantine. You can't move lumber, you can't move any sort of ash products. We're trying to restrict this," and she told us that because we can't detect the insects for the first time until it's been there for maybe two or three years.

Jeff Edwards: Right.

Chrissy Land: The quarantines are kind of not as beneficial as we thought they might have been. So it becomes this challenge because then people continue to go about their business and say I- For example, so we just recently in the last couple of years have confirmed emerald ash borer in far eastern Nebraska. There's a lot of people who travel to Lincoln and around that area for Husker football games. If you think about it, I go down there, I decide I'm going to have a tailgate party, I need some firewood. I'm going to buy some firewood. It might be ash wood. I'm going to take it to the tailgate. Dang it, I didn't use all my ash wood. I'm not going to waste this. [OVERLAPPING]

Jeff Edwards: You're going to take it home.

Chrissy Land: I'm going to bring it back home and drive clear back across the state because I don't know anything about the quarantine. Then next thing you know, you've potentially, whether enough to sustain a population or not, but it's really by people doing normal people things and moving insects around that we don't realize.

Even when we go out of state and we buy nursery stock and we bring it back. There's a lot of rules and regulations about what you can purchase and move across state lines. So it's important to be aware of emerging pests like emerald ash borer and know things of good practices. What are the bad [00:34:00]

management practices? How do I play my part in helping reduce the speed of the spread? We were all very familiar with the term flattening the curve and we can think of that with this insect is that we're playing our part to flatten a curve and slow the insect down.

Jeff Edwards: We saw exactly the same type of distribution with the mountain pine beetle into Torrington. One particular instance, there was cut firewood right underneath the pine and the pine was totally infested with mountain pine beetle. It came from that pile of wood that was underneath it. So you don't want to be patient zero for a new insect infestation. [LAUGHTER] [OVERLAPPING]

Chrissy Land: Right. Well, that's where I say, it's important to know what your neighbors are doing because Torrington is literally 25, 30, 45 minute drive from Scottsbluff. I mean, it depends on how fast you're driving and which way you take.

Jeff Edwards: Right.

Chrissy Land: I mean it doesn't take much. How many people from Torrington are driving to Scottsbluff go shop at Walmart?

Jeff Edwards: Many.

Chrissy Land: Or to go to Lake Minitare, or even going to Guernsey Reservoir, like all of those different places that you might be transporting firewood. So we really emphasize burn it where you buy it and don't move wood. It doesn't matter. Try to keep it as local as possible. If you want to buy firewood, buy it within your county. Don't buy it clear across the state or across state lines and bring it back to your community, because you never know. It could be an elm, it could be walnut, it could be pine, it could be ash, it could be all different kinds of things. It's hard to keep track of all of those things. So it's just easier for us to keep in mind in the back of our heads buy it, or [00:36:00] burn it where you buy it.

Jeff Edwards: So I hate to interrupt, but I think it's time for a break or overtime for a break to listen to our sponsors. So here's a couple of words from our sponsors and we'll be back right after this. [MUSIC]

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Jeff Edwards: All right, we're back. This is Jeff Edwards and Jerry Erschabeck, with the KGOS/KERM Lawn and Garden program. Our guest today is Chrissy Land and we are spending time talking about the health and welfare of community forests. We've spent a lot of time on emerald ash borer. But you had mentioned also in conversation that we had a little bit earlier about there's another one that may be on the horizon. I don't know if you wanted to talk about it or not, but I think since we've prepped people for the emerald ash borer and there's other things that may be showing up. Do you want to share any of that information?

Chrissy Land: Yeah. So just recently, the Nebraska Department of Ag, we'll touch on it briefly.

Jeff Edwards: Sure.

Chrissy Land: The Department of Ag released an announcement followed by the Nebraska Forest Service about the first confirmed collection of walnut twig beetle and [00:38:00] in Gering, Nebraska. It's the first confirmed collection in the state of Nebraska.

Jeff Edwards: So as a walnut twig beetle, what trees might be under threat from it?

Chrissy Land: It's going to be our black walnut that we're going to be most concerned of watching.

Jeff Edwards: Darn, that's a tree that grows really well in Wyoming and southeastern Wyoming. [LAUGHTER]

Chrissy Land: Right. We're in this world that is becoming harder and harder to be a tree.

Jeff Edwards: Yeah. [LAUGHTER]

Chrissy Land: They have been doing, so you talked about earlier some traps within Cheyenne for emerald ash borer, because they want to be ahead of the game. So that's a lot of work that our Department of Ags do, is that they go out and they set these traps which are loaded with a pheromone, which is a scent. Basically, it's saying that, if there is a population, it will hopefully draw in one or two or many of that population so they can try and detect it earlier when the population is small. So that way we can learn as much about it as we possibly can before providing too much information about how do we manage this now? Like this is a new challenge, this is a new problem. Now what do we do?

So it's good for us to have those traps because then it does give us a little bit of a proactive edge on things. So they did set some traps, Nebraska Department of Ag, set some traps across the state and they do a survey each season. The last year's set of traps, I believe it was last year's set of traps, was successful in capturing a walnut twig beetle on the golf course in the city of Gering. Basically, they have investigated it and they've said that they've only found the beetle. But the challenge that comes with it is that sometimes, like pine wilt, we have a [00:40:00] beetle and other pest that comes along with it. Whether it be a fungus, a disease, bacteria of some sort. So [OVERLAPPING]

Jeff Edwards: Chrissy, you mentioned that the beetle itself isn't necessarily the real problem for the trees, correct?

Chrissy Land: Right. So the beetle carries or can carry a fungus that causes what we know as thousand cankers disease. [NOISE] Basically what happens is that the beetle, which is very, very tiny, goes into the twigs, walnut twig beetle. They're really fancy at naming insects. It is a beetle that affects walnut twigs, and it goes in and it creates a hole and it starts feeding on the twigs, on the nice fresh growth on the twigs. Then what happens is that, if it's carrying that fungus, then it can then inoculate a tree or infect the tree with that fungus and what happens is that the fungus creates a canker. I've always explained cankers to the public as basically cancer for trees. There's not much that can be done about it besides pruning it out. If you imagine thousands and thousands of these little walnut twig beetles chewing on every single branch of your tree and then infecting your tree with the fungus, thousand cankers disease, then all of your branch tips that are producing all of that energy for the tree are now affected and your tree is going to die a slow death. [OVERLAPPING]

Jeff Edwards: So again, removal. [LAUGHTER]

Chrissy Land: Right. [OVERLAPPING]

Jeff Edwards: It's like the best course of action.

Chrissy Land: Right. We know walnut twig beetle has had a big impact along the front range with the fungus and causing thousand cankers disease in walnut. There's a lot of walnut that had to be removed

because of it. However, they have only found the beetle. So they have released a statement saying, "Hey, we found the beetle, we have not confirmed the fungus." So we're all crossing our fingers [00:42:00] that it's just the beetle. Because if it is just the beetle, it's okay. For the most part, it's not as detrimental, it's not as big of a deal as if it's carrying the fungus. So this season they're going to do a much further investigation to see if they can identify any beetles carrying the fungus or any branches that are infected with the fungus. So the city of Gering park staff is following all recommendations by the Nebraska Department of Ag and the Nebraska Forest Service of what to do. At this time, they really don't want them to cut those trees down or removing any walnut because they want to do some more investigation. But they have strictly said that if any trees do need to come down for the event of a windstorm or some other damage, then it's best to chip, burn, and bury onsite. Basically, don't move it. Try to keep it within your community. Don't move it around.

Jeff Edwards: Don't use the mulch.

Chrissy Land: Yes. Don't chip them mulch and then go put it in your landscape in Torrington, Wyoming.

Jeff Edwards: Right. So let's shift gears a little bit. I've bought a new tree and what are the things that I need to think about? If I think I know where I want to put it, what are the things that I need to think about in order to give it the best chance for surviving and maybe outliving myself?

Chrissy Land: There's a number of things. I would first suggest that you confirm the growing space that you have. So you're imagining where you want to plant this tree. You need to look at the tag and identify what's the mature size of this tree. Is it going to be a small tree, a medium tree, or a large tree.

Jeff Edwards: Let's say, 60 feet.

Chrissy Land: Oh, boy.

Jeff Edwards: Sixty feet tall.

Chrissy Land: That's going [00:44:00] to be a big shade tree.

Jeff Edwards: Right.

Chrissy Land: You need to go and look up and make sure that you don't have any power lines over your spots. Make sure that you don't plant it two feet away from your house where it's going to interact with the gutters or the eaves of your house. So that's 60 feet tall, how wide is the tree?

Jeff Edwards: Thirty to 40 feet. [OVERLAPPING]

Chrissy Land: Okay. [OVERLAPPING]

Jeff Edwards: So I guess, what I'm thinking and I didn't do this personally, but what I'm thinking is, you go to the nursery and you buy a Colorado blue spruce, and it's this cute little, maybe three-foot tall tree at the time, but they get big and people don't [OVERLAPPING] think about that, right? [LAUGHTER]

Chrissy Land: Right. Yeah. That's why it's so important to look at that tag and see what the mature size is. So the reason I asked you what's the width of your trees, you said 30-40 feet. Even, let's imagine that it's going to be a Colorado blue spruce. So we know that the canopy, the branches, are going to be all the way to the ground, unless something comes in, and whacks them all up, and limbs that tree up.

Jeff Edwards: Because they were interfering with the mowing, right, Jerry?

Chrissy Land: Because they were interfering with the mowing. [OVERLAPPING]

Jerry Erschabeck: That's right.

Chrissy Land: Well, we need to create a bed big enough for it to be growing [LAUGHTER] or continue to increase it as the tree grows. So if the tree is going to be 30 feet wide, then half that distance from the trunk to the tip of the branches is going to be 15 feet. So we know that we need a plant it at least 15 feet away from our house or anything else, and honestly, give it an extra five feet for wiggle room because no tree grows perfectly symmetrical, and that 30 feet might be perfect on center, but it might be shifted a little off center as that tree grows for light and nutrients. So give that tree some wiggle room to grow. So we've talked about looking up, but now, we also need to look down. Before you plant the tree, it's best to call diggers hotline. [00:46:00] In Nebraska, it's 811.

Jeff Edwards: It is in Wyoming as well.

Chrissy Land: Okay. Because if you are in town, or in the country, it doesn't matter, you need to have them come and locate underground utilities like electric, gas, phone lines, anything, there's water lines, there's all sorts of things. Especially, if you're going to think about planting in the right of way along the curb, in-between the curb and the sidewalk, there's a pretty high chance that there's some sort of water line running right down in the middle of that thing.

Jeff Edwards: If you cut those lines, you are liable for lost business, or lost services. So it is very important. [OVERLAPPING]

Chrissy Land: It's free. You call them, you tell them what you're going to do, you mark your area with a white flag, they come, whoever potentially might have something in your area, those services will come, they will locate them and they will flag them. If they don't have something in your area, they'll put a flag in your yard that says, "Clear," basically saying, "You don't have anything in your yard." So I previously did this. I live six miles west of Scottsbluff, and I'm on a county road out the middle of nowhere, we're ripping up our whole front yard and redoing everything. I called 811 before I started planting, they came, Nebraska Public Power District said, "You're clear," but then the phone company came and said, "Hey, you have a line right here, be careful and only dig by hand." There's all of these services, even phone lines, that we have to think about what's underground. I tell you, working for a landscaping company, we have this magical power of selecting tree placements [LAUGHTER] over the sprinkler line or right over some sort of line every time, I swear. It wasn't every time, but it was [00:48:00] a lot of times.

Jeff Edwards: So if I can relate a story, this past weekend, I worked on replacing a frost-free hydrant that had not drained correctly and froze, and it completely split the pipe from the head all the way down into the soil. It was a five-foot bury hydrant, so it took me a day to hand dig to where it needed to be. I was working around other water lines and I had to go through tree roots all the way down to the bottom of it. So at five feet down, there were still tree roots that I was cutting through, and the primary reason for that particular hydrant to not be draining correctly, the tree roots had gotten into the drain and basically grown around the base of that hydrant five feet down. So when you're planting your trees, [LAUGHTER] looking down in the ground and thinking about what's there is as important as looking up.

Chrissy Land: Yeah. It's important to know your water lines are, where your septic lines are, all of the things, because trees are opportunistic.

Jeff Edwards: It may not be a problem for you. [OVERLAPPING]

Chrissy Land: Right. Yeah. Later down the road, you're going to be spending a lot of money to be repairing that pipe or calling a plumber to come rooter out your line.

Jeff Edwards: But Jerry, it's like those legacy plants, I'm telling you that you're leaving behind for your family.

Jerry Erschabeck: Yes.

Jeff Edwards: It can be a legacy problem for the next [inaudible 00:49:36] [LAUGHTER].

Jerry Erschabeck: One other thing, when you buy a tree from the nursery, generally, they have it in a position, I think they call it facing the tree. So if you can, before you take it away from the nursery, do you look at the north, south, east, west portion of it, or when you take that tree home, do you just position it so it, "Hey, it looks really [00:50:00] good like this. Let's go."

Chrissy Land: Right. So after you've done all of the previous groundwork, look up, look around you, and look below ground, because we also don't want to plant five feet away from the sidewalk or five feet away from the stop sign on the corner, that our tree is going to then block in 10 years. So then now, it's time to think about, "Okay, we're going to put this tree on the ground," and you have to think about what stalk is your tree. Is it a balled and burlap, is it a container tree, is it a grow bag tree? Like what sort of system is containing the roots?

It's important to understand that containers are temporary. When we go to the store and we buy fish, they put them in a plastic bag, and they send them home. Trees and containers are the same thing. Trees are only meant to be in containers. It's the products, the production package, and literally, its only purpose is to get that tree from the growing nursery, to the selling nursery, to the planting site, and it makes transportation easy. So when we bring the tree home, usually, there's some sort of container on the roots, whether it's one of the previous that I said. There might be some sort of supports to keep it from whipping around while it's being transported because young trees do not have strong bones yet. And there's usually a tag identifying what kind of tree it is, and there might be a series of other marking pieces on it. It's all packaging.

I think it's easier to remove all of that packaging before we even think about planting the tree. Once you're done removing all that packaging, because if we leave a tag on, like we talked about barbed wire earlier, in many years down the road, the tag could potentially be girdling the growth. But now, when we set the tree in the ground, [00:52:00] and it's important to step back, look at it and see which way are the branches growing? If you think about long-term, how high do I want the lowest branch. Do I want the lowest branch the height of my head, which is five feet, which means every branch below five feet is temporary. I want to look at the branches above five feet and determine which direction they're growing because I don't want to position my tree with that five-foot branch pointed right at my house or right across the street. So then we can think about positioning the tree. Some nurseries will position, most don't, they just get them off the truck, stand them out, and put them in a line for you to go down the row and pick out which [OVERLAPPING].

Jeff Edwards: So Chrissy, I have a personal problem involving a tree. I believe it's a type of a Hawthorne that I purchased, probably been in the ground two years now. Could not get it so that it would stand up straight, so I braced it. I've removed the bracing; it still isn't straight. My plan is now, can I go in on the low side and pull off all the topsoil, and try to get in underneath that, and lift that tree, and put soil underneath it so that it actually straightens it up, or am I just now going to be at the whim of the tree, whatever it wants to do?

Chrissy Land: How much of a gambling man are you?

Jerry Erschabeck: [LAUGHTER] Why with the personal problem?

Jeff Edwards: Yes. I'm not opposed to taking a risk or two. It's one of those trees that we planted in a place that I look at it every day. My wife goes, "Man, I wish we would have planted that thing straight." So it just wouldn't go in the hole straight and now it leans.

Chrissy Land: How crooked is it?

Jeff Edwards: How crooked is it? Well, the tree itself is straight but it's probably [00:54:00] leaning 10 degrees off straight, maybe lower.

Chrissy Land: So I would say, you either love it for the unique tree that it is and let it be and just tell people that it's an ornamental and that's it's intentionally supposed to be that way and they'll accept that it's a good tree and that it's supposed to look that way. If you were to walk through the woods, how many trees are straight up and down? The tree will grow just fine.

Jeff Edwards: Majority of them [LAUGHTER].

Chrissy Land: It's your specific desire to have that tree grow straight up and down.

Jeff Edwards: But it is the only tree looking that direction. It's the only tree on that side of the house.

Chrissy Land: Right. So you can take the chance, so you said it's a hawthorn, is there anything growing below it?

Jeff Edwards: No. It's in the corner of our lot and I have a couple of shrubs on either side of it. But probably [OVERLAPPING]

Chrissy Land: How big are the shrubs and how big is your planting space?

Jeff Edwards: I don't know. Probably 20-foot in diameter. The shrubs are farther away from it.

Chrissy Land: So my suggestion would be to get a shrub that's going to grow about five to six feet tall and plant it in front of the trunk so you don't have to look at it.

Jeff Edwards: Now, you're just camouflaging the problem. [LAUGHTER]

Chrissy Land: You're just accepting it the way it is. The reason I say go this route, if the tree is been in the ground for two years and it's established and you go in and you start interacting with the root system, you're going to set that tree back. Depending on how well established it is or how healthy the tree is, you are potentially going to gamble losing that tree by interfering with the roots. When we have big, beautiful trees growing along the sidewalk that's starting to crack and raise and we blame the roots, really the crack happened first and the tree's root system was opportunistic, found oxygen and water in that crack and started [00:56:00] growing. Well, then we come in and we tear up that concrete, we chop the roots off and then we lay a new path. Three to five years later, that tree is fine because we cut half of its root system off. Even if you were gentle [OVERLAPPING]

Jeff Edwards: Even if its diameter is no more than two inches?

Chrissy Land: Two inches. Okay. So it's still a young tree, like you are safe enough in this, like you don't want to waste six years and then decide that you want to do this. Now is the time to say, "Oh, shoot, like we should have done something." I guess, maybe we can try something still. But, yeah.

Jeff Edwards: Okay.

Chrissy Land: Go in and very gently, dig on the side opposite of the lean and then you will also want to go and loosen the soil on the side of the lean and all the way out to the tips of your branches. So you're going to be digging quite a big, wide hole, so that way when you go to stand the tree up, you're not snapping the roots that are on the lean side of the tree. So we're going to loosen the soil basically all the way around the tree, going on the opposite lean side and try to remove some of the excess soil from up underneath the root ball and by now that root ball is at least a foot deep, if not deeper, the majority of it, those little feeder roots are going to be all the way out to the tips of the branches, you can remove some of that soil, loosen it and then stand it up straight, back fill the soil but the thing is, is that you have to think of a teeter totter, when one side drops, the other side goes up and now you're going to

have a gap underneath the other side, underneath the root ball that also needs to be filled. So you're almost removing it from one side to put it on the other side and so you have to interact with the whole root system. You can't just dig on one side, pull until it's straight, shove some dirt back in the ground and then walk away. [LAUGHTER] [00:58:00] [OVERLAPPING] Doesn't work out so well.

Jerry Erschabeck: Now, Chrissy, would you suggest digging a moat around that tree then to put water in the moat and making all that soil really loose and then maybe pulling it over with a spade?

Chrissy Land: It depends on what type of soil you have. Because if you have clay soil, that's going to be really wet and heavy. As you start tugging on those roots, that weight is going to be on the small root system and it's going to snap those roots off. If you have sand that's going to like shift among itself as it moves around, you have less of a chance of breaking those small feeder roots.

Jeff Edwards: So I have 92 percent sand, just so you know.

Chrissy Land: Okay. Well, then you could get away with watering it. You don't want to do this with like a totally saturated ground and you don't want to do it with a totally dry ground, in the middle somewhere. Then afterwards, the aftercare is you are going to treat it like a freshly planted tree and water it regularly throughout this year and then water it probably in the next year because you're basically setting the tree back and you're doing a transplant shock. It's said that a tree will go through one year of transplant shock per inch of caliper. So if it is a two inch caliper tree, the trunk is two inches wide, you're potentially going to set that tree back for two years and you won't see new growth happily for a couple of years.

Jeff Edwards: Okay, good to know.

Chrissy Land: I say camouflage the problem, just leave the tree alone.

Jeff Edwards: [LAUGHTER].

Chrissy Land: If it's happy and growing, just plant a beautiful shrub [OVERLAPPING] right in front of it.

Jeff Edwards: I'll consider the alternative. [LAUGHTER]

Jerry Erschabeck: Let it go, Elsa. Let it go. [LAUGHTER]

Jeff Edwards: Okay. All right. That letting it go part is a discussion with my wife. [LAUGHTER].

Jerry Erschabeck: That's more information that I ever even thought of about [01:00:00] a leaning tree. Good job.

Jeff Edwards: Yeah. Thank you.

Chrissy Land: Just accept the beauty of its uniqueness.

Jeff Edwards: Okay. All right.

Chrissy Land: That's what you can tell your wife.

Jeff Edwards: We will consider it a unique tree. I think that we have burnt up another hour. So Jerry, do you have any parting comments that you would like to make?

Jerry Erschabeck: Parting comments, we have given away one set of giant pumpkin seeds. We have one more set of giant pumpkin seeds to get rid of.

Jeff Edwards: Don't say it like that. [OVERLAPPING] You're encouraging others to [LAUGHTER] grow giant pumpkins.

Jerry Erschabeck: Let me build it up. So should you want to grow a giant pumpkin from a giant pumpkin grower. He actually, Allen Corbin won the Wyoming record holder last year. He lives in Cheyenne. He's donated these pumpkin seeds to us. I think this pumpkin is like 1440 pounds, huge pumpkin. He's willing to give and donate these pumpkin seeds to our giant pumpkin growing committee to give out to the general populace if they can answer a simple question. Based on our earlier conversation, Chrissy, would you have something in mind?

Chrissy Land: Yes. What are the two types of diversity that we talked about that are best practices to have in the community forest?

Jerry Erschabeck: All right.

Jeff Edwards: Yeah, good.

Jerry Erschabeck: Ask that question again. That was kind of a difficult one, I think.

Chrissy Land: What are the two types of diversity that we spoke about, that are best practices to have for proactive management of the community forest.

Jerry Erschabeck: All right. The first caller with those correct answers, call [307]532-2158. That's [307] 532-2158, KGOS/KERM and [01:02:00] give your answer, get those pumpkin seeds and please give your name and your phone number and we will send those seeds to you.

Jeff Edwards: If we send them to them we will also need their address, Jerry.

Jerry Erschabeck: Address, you bet.

Jeff Edwards: [LAUGHTER]. All right.

Jerry Erschabeck: It's not too late to grow a giant pumpkin. It's not too late to set that into the ground.

Jeff Edwards: Perfect. Very good. Chrissy, thank you once again for being our guest. I think we might have to do it again maybe in the fall if you're up for it.

Chrissy Land: I would love to be here every month. [LAUGHTER]. This is fun!

Jeff Edwards: Okay.

Jerry Erschabeck: This is fun.

Jeff Edwards: It is fun. Thank you very much for being here. We will see you all next week.

Female Narrator: [MUSIC] You've been listening to Lawn and Garden with University of Wyoming extension specialist Jeff Edwards and co-host Jerry Erschabeck. Next week, we welcome Gary Stone, University of Nebraska Extension Educator. Thanks for listening. [MUSIC]