>> Hey, Wyoming, 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 all their special guests as they talk, all things gardening in the great state of Wyoming. From plant variants to weather events, to pesticides and pollinating.

Our morning Garden podcasts helps you improve your home garden as well as your small acreage. Let's welcome Jeff Edwards and Jerry Erschabeck. [MUSIC]

>> Good morning, everybody, this is Jeff Edwards and Jerry Erschabeck for the KERM Lawn and Garden program. We're happy to have you with us today. Good morning, Jerry. How are you?

>> Hey, pretty good. Now, how about you guys?

>> Hanging in there, things have been interesting this last week. [LAUGHTER]

>> Are we talking about the weather?

>> We can, but not yet. Let's welcome our guest [LAUGHTER]. Our guest today is Amy Seiler and we're always happy to have her join us. She works for the Gering parks department in Gering, Nebraska, and we are always happy to have information about trees that she provides is wonderful resource to have on our program. Amy, welcome again, happy to have you here.

>> Morning, thanks for having me. I always enjoy it. It's one of the highlights of my week when I get to spend time with you guys and talk about my favorite topic, trees and plants.

>> Well, that's great, we love it. I think we're going to have a good program today. Let's take a few minutes and listen to our sponsors, and we'll be back right after.

>> This summer Wyoming First Lady Jenny Gordon's Wyoming Hunger Initiative is a nutrition program, and the University of Wyoming Extension are partnering to launch a program called Grow A Little Extra. We invite you to join us and growing a little extra to donate fresh produce to local anti-hunger organizations that support our neighbors facing food insecurity. Stop by your local extension office to pick up your free seeds or donate extra from your garden harvest. For more information, visit www.nohungerwyo.org/grow.

>> Good morning again everybody, this is the KERM Lawn and Garden program. Jeff Edwards, Jerry Erschabeck, and our guest, Amy Seiler. Amy, I'm going to let you take it away. I think we've got some tree things and Lawn and Garden things that we'd like to talk about today, so go ahead.

>> Yes. Well, I talked to you previous to this show Jeff, about somethings to talk about, and I said, I really want to talk about drought and how it affects your trees and then you informed me that you guys have gotten unbelievable amounts of rain in the last week and I think that you guys have certainly gotten much more rain than the panhandle of Nebraska has gotten this summer, which is a huge blessing for you guys, and I'm really happy about it.

>> That's really hard for me to believe that the storms hit us and missed you [LAUGHTER].

>> Well, you know what's interesting I think is they've gone north and they've gone south around the monument area, we have just not had a lot of measurable precipitation, especially in the last 45 days, which is just it's awful. I live over by Monument Shadows Golf Course and our golf courses, we're watering, but we have all these dry spots and it shows all of the places where your irrigation system does not cover because [OVERLAPPING]

>> Right.

>> We just haven't had any moisture to really help things out at all. It deflated me a little bit on the drought talk for trees, but I think it's still important that we still discuss it. I'm going to geek out a little bit. Trees and plants in general are so cool and so adaptable and they have so many things within them that can help when we do have times of drought or even when we have times of excessive moisture, what they do to keep themselves alive.

I just wanted to geek out this morning to just talk about the processes that especially a woody plant has to sustain itself during drought. There's a super cool, insanely knowledgeable tree person named Dr. Kim Coder, the University of Georgia. This individual has done incredible research on all stuff related to trees. But he's got a really good study on what drought does to trees and how trees, work through the process of drought and what they do.

I thought I geek out and talk about that this morning not that it's going to help any of our landowners, but I think it gives you an appreciation for all of the mechanisms built into trees specifically that help it deal with drought. Are you are you familiar with Dr. Coder by any chance?

>> I am not. Where did you say he was from?

>> University of Georgia. He's in their forestry department there.

>> Okay.

>> Just phenomenal. People just want to google him and lots and lots of really good information. Obviously, he's from the South that he's done work all through the United States and has put together some really good info, specifically on trees. [OVERLAPPING]

>> Amy, if we did want to google him or search the Internet for him, [OVERLAPPING] how do you spell his last name? [LAUGHTER]

>> Sorry. C-O-D-E-R.

>> Pretty easy.

>> Yeah, really easy. It's Dr. Kim Coder.

>> Trees, I don't want to humanize them, but I think I like to do that sometimes just explaining the processes of trees that they are not human. But I think when you speaking in human terms, I think it helps people understand it a little bit better. If I say that trees are thinking, we know that trees don't really have a brain, but they have all of these processes within them that one thing triggers another and makes things happen and so. [OVERLAPPING]

>> Wait a second, I have a trivia question for Jerry if he's paying attention. Jerry, when you give non human things human traits, what do you call that?

>> You know I don't know. [LAUGHTER] I do that with my cats all the time.

>> Well, I would like to be able to say it, but I get stuck on that word all the time, anthropomorphism or something like that. Isn't that correct?

>> Yeah, sure, that's sound really good.

>> Okay. Sorry to interrupt, Amy, go ahead.

>> Okay. Note your anthropomorphize size plants, but [OVERLAPPING]

>> There you go.

>> I think it's so cool how they start to identify. I've got an issue. These are the things that needs to happen for me to actually sustain life. I'm just going to go through this little list that what trees do, so the first thing that happens is that when there's drought conditions where we don't have the appropriate amount of moisture in the soil, is that the tree actually recognizes there's a water availability issue which is, obviously they're not pulling

up the right amount of water so there's probably less pressure in the tree which may be triggers something. Then it says that the tree starts to chemically alter cell contents. The chemistry within the cells is changing, which I think is super interesting.

>> If there's less water, things are probably becoming more concentrated?

>> Yes, more concentrated. If they say that it's osmotic. Do you know what that means?

>> Osmosis?

>> Chemically altering osmotic cell contents. It's probably not pulling in the [OVERLAPPING]

>> Through the cell membrane.

>> Yeah.

>> Movement of things through a cell membrane. Maybe things are not moving quite like they should if there's not enough water.

>> Correct, there probably not enough pressure, I would assume. This has to do with the pressure, so the closing of the stomates. For those that don't know stomates are basically little circles or triangles or little holes, they're little valves on the leaves. If you turn the leaf over, you can sometimes see those little stomates. They're just teeny tiny things and they're a little valve. They open and close. It's an opening and closing of the leaf and the stomate

is where water is released, it's transpired out and gas exchange is taking place in that little stomate. When it closes, water's not being released and we're not having the gas exchange, it's not absorbing that carbon dioxide. We know why do we need carbon dioxide for, why is that so important for trees? Well, that's one of the things that goes into photosynthesis. When you close that stomate, then your tree can't produce

the food or the energy I should say that it needs. What happens next is that the stomates close, the tree starts to do increased or absorbing production. It's creating all these little fibers which try and find more and more water and so that takes a lot of energy, and so it starts to use the food storage reserves because it's not making any energy because the stomates are closed more often.

That begins the stress on your tree. It's starting to use its reserves.

>> Amy, just out of my own observations this year since it's been so dry, could the color of the leaves appear off if they aren't photosynthesizing normally?

You're lacking water, you're not photosynthesizing like you should. I have some cottonwood trees that are four or five years old, and this year I've noticed several of them are just not as green as what I think that they ought to be. Do you think that that is probably a symptom or a visual cue?

>> Yes.

>> Okay.

>> I do and actually, I'm glad you brought that up. I've been noticing that too. What that means is that, that may not even be a result of the dryness this summer, but that's the dryness that we had throughout the winter for the most part. If we don't have enough of that moisture in the soil early in the spring when the trees start, even when the trees don't have leaves they're very busy under the ground creating more fibrous roots and they're starting to pull

up those nutrients and if that water is not there, they can't do those processes correctly. You are going to have different color because you're not going to have the iron absorption, you're not going to have the chlorophyll produced properly in the leaves, so yes, huge factor. That's why it's so important, when we talk about, it's so important that we're watering those trees even in the dormant season. We really need to be doing that because we need

that soil to have good storage of moisture in it, so the trees when they start those processes in March or April depending on soil temperatures, that we need to have that reservoir of water in there that it can be utilizing. That's such a cool question. Thanks, Jeff.

>> Thanks.

>> Yeah. [OVERLAPPING]

>> I think about things every once in a while. [LAUGHTER].

>> You're so clever. [LAUGHTER]

>> When we say that the tree is under stress.

>> What's your question, Jerry?

>> Well, if you're having a drought condition, aren't we stressing that tree like crazy?

>> Massively. Like we talked about, the chemical production is not happening like it needs to be happening. It's not pulling up the nutrients because there's not enough water in the soil to allow those fibrous absorbing roots to pull up the water and the nutrients that it needs. Yes, that becomes a stressor. That's why drought is so problematic for trees because it can't do all the processes that it needs to.

I'm going to humanize it a little bit. When we're tired, when we're dehydrated, we feel pretty lousy. We get stressed out. We may be more susceptible to catching a cold when we are stressed, when we aren't eating right, we're not drinking right. That just sets us up for the opportunity to potentially get sick. That's the same thing with trees. When they're stressed, they're trying to be in survival mode, so they are shutting down some of their other processes like

producing chemicals to fight off fungi or fungus. Like a pine tree, it's not producing the pitch that can pitch out a mountain pine beetle. This is definitely a major stressor on trees.

>> Very good. Drought is bad. [LAUGHTER]

>> Drought is bad.

>> Water when you can. [NOISE] In my driving back and forth to Cerak this year, I've noticed a lot of places where it seems like the trees were doing really well and then this year there is just spontaneous death. I think it's been an accumulation of our weather, the weird freezes that we get, the weird temperature fluctuations that we get, and then we don't get any water to [LAUGHTER] go along with that, so the tree is like, I'm done. [LAUGHTER]

>> Yeah. [OVERLAPPING] It's like it can't recover.

>> Didn't we hear that we're under a 21-year drought?

>> Maybe but I don't know if we've talked about that on the radio program, Jerry. [LAUGHTER]

>> [OVERLAPPING] Maybe I've heard it somewhere. Jeff, you and I have talked about looking at old trees, old cottonwood trees, and there suddenly seems to be a drop in the leaf. But I think Catherine had talked about that. Catherine Risner had talked about sudden limb drop and big cottonwood trees. Just a huge limb, just drops. I've been seeing more of that,

and again, a lot of those older trees just dying.

>> Are you talking about a green limb or are you talking about a dead limb?

>> Well, a dead limb usually, but usually they only have like three or four green leaves on them. They're struggling, they're trying, but boom there it goes in.

>> Well, when you have all that biomass and you're under stress you got to get rid of parts. [LAUGHTER].

>> Yeah.

>> Yeah. Well, and that's interesting that you say that because that's the next thing that tress starts to do. I don't know if it's going to drop a limb, but they do start shutting down different areas in the tree that are not pulling their own weight basically, and I'm not going to say the branch is going to drop off, but the tree will actually shed off different branches. If they're not real productive doing photosynthesis, maybe they're lower on the tree crown where they're not

absorbing as much sunlight and honestly not pulling their weight, the tree will, and again, I'm humanizing it, they're going to decide, okay, I need to shut this branch off because it's not doing what we need. That's been one of the next steps that takes place when they're drought-stressed, is that they just start shutting down. Sometime it starts at the top, sometimes it's just wherever, the plant is not productive, it starts to shut some of those things off. They call it setting

up obsessions and compartment lines, and they seal off and let stuff die. If you drove around, probably more over here than over there where you've gotten more moisture, you'll see that trees will start to shed off parts that are not productive. That's just one of their ways to keep themselves alive. Those oldest trees in the world, those bristlecone pines that are in Nevada and Utah and all of those, if you see those trees,

they're not impressive looking things, but they 4,000 years old. But what they've done is they've shut off all parts of the tree that are not productive and focusing all

their energy on those few little spots that they can sustain and the tree will just start to eliminate parts of it that are and they know what they need to do. If the tree is in absolute total stress and you have all these little tubes that are called xylem, and if you can't pull up any water out of those they

get little air bubbles in them or it's just air in them and then they're not functional any longer and that's when you get total mortality in a tree.

>> That's a vapor lock. [LAUGHTER]

>> Yeah, exactly. [LAUGHTER] You're not going anywhere.

>> The tree vapor lock.

>> It's so important especially for young trees, you cannot let them dry out because you do so much internal damage that sometimes they can't recover. There's so much inner damage that we can't see and maybe they only pull up water on one side and you will see a tree will die on one side where they maybe didn't get very much moisture. The trees is just like, you know what, these tubes don't work anymore. I can't pull up water so this whole side is then shut off.

We need to be really, really aware of what's going on with our trees. We talked about drought, the same thing happens when it's excessively wet too, so there's a balance.

>> The other day I was out in my garden and all of a sudden, what's the saying about if there's no one in the forest, if a tree falls, does it make a sound?

>> Yeah.

>> I wasn't in the forest. I was outside. All of a sudden I heard this large crash and I could tell that it was tree related so I went wandering around and a limb from one of my locust trees just decided it was done. [LAUGHTER]

>> I'm glad you weren't standing underneath it when that happened?

>> Yeah. I'm glad I wasn't standing underneath it as well, but after looking at it, I can tell why it was done. It had been damaged previously, I'm guessing from a wind storm, but many years ago and then it finally just got too heavy and broke off.

>> You and Jerry are touching on some really interesting and honestly really important and Jerry had mentioned that sudden branch drop earlier and that happens more than people realize. My mom has a little lake cabin. She has a ton of cottonwoods and we've just decided we're not going to park underneath those trees anymore because not on a windy day, on a calm, hot, humid day,

those branches will drop without any warning. We just had that in one of our parks just last week. A huge hackberry and I'm so thankful no kids were around. A huge branch fell about four o'clock in the afternoon and there was no wind whatsoever, but it was hot and it was pretty muggy and what happens is that there's plenty of moisture in the soil. The tree is pulling and pulling up lots and lots of moisture and not releasing it;

or it's just so bogged down with weight of moisture in the leaves and it can't handle that weight and it will just drop out of nowhere. What we observed and it's scary sometimes, Jeff, you had said you noticed that yours was damaged. Our hackberry branch was not damaged. It was just so much weight and it was crazy because I took pictures just to make sure that I could do some observations on it. There was no rot in it and there was maybe like

a little bit of squirrel damage but not enough to say, this is why it fell. It was just too much weight on that branch and these things happen randomly out of nowhere and I wish that there were better predictors of it. But from the ground, we would have never thought that that branch would have broke. Thankfully, no kids were around. It was close to a playground but nobody got injured, which I'm super thankful for.

But these things happen and so you just have to be aware.

>> You brought up hackberries so I'm going to derail the conversation a little bit. Hackberries in my yard are probably the number five weed. I've got a list of really important weeds, but hackberries right now are an invasive species as far as I'm concerned. They germinate really well in my flower beds and if you don't get them in the first year, you're probably not going to get them. I've been cutting them off

and treating them with glyphosate. But I don't know if that really works. I think the area that's treated dies and then the darn thing grows around it, so [LAUGHTER] any suggestions? [LAUGHTER]

>> I have that same problem in my yard and I have honestly, you'll laugh I have lots of hackberry seedlings. I have a ton of black walnuts, and I can't believe this is a problem, but I have insane amounts of oak sea weeds means that come up. Probably more oaks than hackberries actually.

>> I have many oaks this year too, that Jerry and I have talked about this in the past. The squirrels planted them, but they didn't put them where I wanted them [LAUGHTER]

>> Isn't that disappointing?

>> Yes.

>> You should give them a map.

>> Right. Here's a flag. Put that seed right here. [LAUGHTER]

>> I always want to make it like let me produce some nice loose soil over here that you can just put this in because this is where I want a tree. Because they really are the best. I've let a lot of those seedlings grow to my husband's irritation, but yeah, they don't put them in the right spot. But back to your question at hand. I have also treated them with glyphosate but this year and pardon me if it's not correct, but we did put a little bit of Trimec on

the cuts this year and that seemed to help with the hackberries. That's not a product that I like to use in my yard at all. I allow my husband to spot spray for dandelions, but we don't do a broadcast of that because it's so damaging to your woody plants and that was my plan. I'm like, okay, it stresses woody plants out this Trimec should work beautifully and for the most part it did. All the spots we treated, we definitely got pretty good kill on,

but I do have a black walnut that I actually just treated with glyphosate. That did not do the trick. The black walnut came back. It's a really robust bush right now so I'll have to do that again.

>> [LAUGHTER] Love it, when they turn into a bush. [LAUGHTER].

>> Yeah, and this one is right by my electrical transformer so I'm like, yeah.

>> Yeah, you can't leave that one there.

>> Yeah, good question on that. The other thing is those little hackberries, dig them up Jeff and move them.

>> I've been relocating them, but if you continue to relocate them, then there's always more of a problem. [LAUGHTER].

>> Yeah, exactly.

>> Or you could put them in a pot and grow them and sell them one day?

>> True. What is the best time of year for controlling them, Amy? If you're going to cut them and treat them with glyphosate.

>> I would say, I think there's a couple of different thoughts out there, but certainly when they're actively growing, they're going to be able to pull that down in their system a little bit better. We did our practice this spring and it seemed to do well. But I would say anytime during the active growing season because you have to spray the stump and you need to get every seed. If it's like in my situation with my little black walnut, I'm going to need to treat

every one of those little cuts that I did and you have to do it immediately. You can't do all your pruning and then come back and then spray the product on it. You have to do it. Make the cut, do the application.

>> There's about a 10 minute window according to the product labels that you have. What I've been doing, I've been doing it right now actually, working through some flower beds to clean him up. When I come across a hackberry or another tree that I don't want that's been lovingly planted by a bird or a squirrel. If I can't pull them, I will cut them and then treat them. I'm hoping now is adequate time.

I've done it in the fall. That doesn't work. [LAUGHTER] [OVERLAPPING]

>> I'm sorry. We've had most of our trouble with cottonwoods growing in bushes and stuff and we did the the cut, the paint and it has done really well.

>> Cottonwoods are very susceptible.

>> Yeah, man.

The honey locust seems to just wrote a tail up or if you get them young enough, you can just lift them up and out of the soil. But even with just a little bit of a hoe. The cottonwood seem to be our number one problem, but they grow inside of a bush or inside of a rose bush and makes it a little harder to get to, but it always helps to have two people or three people helping you and you go,

okay, cut. All right, paintbrush.

>> If you are tackling trees inside of your roses, Jerry, make sure you're wearing your welding gloves. [LAUGHTER].

>> Oh yeah. We have two pair of rose gloves by the way, and Meryl was out clipping, what is it? It's a old wild pink rose and we wanted it to come down and I said, hey, do you want to use these? She goes where did you find those? I said we've had them. She says yeah, those work great. It's just the idea of knowing where your product is, utilizing said procedures and

product and going after them.

>> Hey, let's take a break and take a few moments from our sponsors mode. When we come back, I think we're going to talk a little bit about squirrels.

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>> Hi, everybody. Welcome back to the KERM morning and Garden program. I'm Jeff Edwards, along with Jerry Erschabeck. Our guest today is Amy Skyler and prior to the break, we were spending time talking about drought and trees and other issues that we've come across. I'm sure I derailed the conversation from what Amy wanted to talk about. But we also want to do talk a little bit about squirrels. I think she's got some really wild rambunctious squirrels, she said.

We touched on oak trees and the squirrels have already removed the acorns from the trees. What does that mean? Does that mean it's going to be a really hard winter? [LAUGHTER].

>> Squirrels are hungry.

>> It has been crazy. I'm really blessed. I live amongst a lot of trees, I had neighbors that were really thoughtful and planted a lot of windbreaks. We live in a really windy area, but with all those wonderful trees comes these little tree rats. I mean, I shouldn't talk like that. That's so negative because they're so cute to watch, those little squirrels and they have little personalities. One of them tortures my dog endlessly.

>> Wait a minute. Are you sure it's the same one? [LAUGHTER]

>> You have to wonder, they all have this plan together. Our dog might lose her mind. But we do live traps, we take it out to my mom's cabin and I swear they are the same ones. They find their way back in.

>> They beat you home.

>> It's almost like that. I won't let my husband kill them because I mean, I dislike them greatly, but I don't want to kill them because they're put on this planet for a purpose. I haven't figured it out. But anyway, I've got issues with these squirrels and what concerns me is they do significant damage to trees and the little impact that we have does damage all summer long. Sometimes you'll just see that squirrel damage,

especially on hackberries late in the summer when they're really starting to feed on that soft, tasty, sugary tissue when the tree is starting to transport everything back down to the storage in the trunk and the roots.

>> Do they strip the bark off, Amy?

>> They munch it off. They nibble it off and they will because they really just want that sweet cambium tissue and that cambium tissue is where the tree makes the energy and the leaves and then it will transport it in that tissue. It's actually called the phloem and it has that sweet sugary and that's what the squirrels want for energy and it must just be tasty like candy and they will do damage. But they also love new shoots.

On my oak trees, they will munch off all my new growth that my oaks will put on and it just drives me nuts because I'm like you stunt the growth of my tree.

>> Nibbling.

>> Nibbling. Frankly, I'll be honest with you. I don't care too much about the mess in my grass, but I know that's very bothersome to a lot of people and so the squirrels just drive, not only dogs crazy but humans crazy by the mess that they create. Like you said, they had been going at it. I have a young oak tree and I think that they have completely taken every acorn

off that tree and they have made a huge mess. I thought to myself, I didn't even know this tree had this many acorns on it this year, but they've thrown all the shells on the ground. >> I have two oak trees, two bur oaks, and they were absolutely loaded with acorns this year. I walked out there the other day and they're entirely gone. They were not even close to them being mature as far as I thought. Same thing with our plum trees. I finally had a handful of plums develop on my plums this year and they're gone. [LAUGHTER] I think the squirrels are preparing for something. [LAUGHTER]

>> My goodness, I hope it's not a super early frost like we had last year, but those little critters, they have an innate sense about them sometimes. They get it. But I think there's several different things and Texas A&M puts together some pretty good information. They've got a great community forester that puts out lots of stuff. It cracks me up because one of its control methods,

and this is from Texas, is shoot him. I'm like, well, I don't know if most people can do that, especially in an urban environment.

>> Amy, we talked about the squirrel damage. What can damage you do with a 12 gauge or a 20 gauge to your tree? Amy, when the squirrel eats like a pretty good limb, does it eat it like an ear of corn? Does it go around it?

>> Yes, it does. You know what I've found and I don't know if you guys have made the same observations, and maybe it's just because it's easier for them, they'll eat the top part of the branch, but I'm sure it's harder for them to eat upside down and so I normally will see the damage on the top side. I've not had complete girdling all the way around to the branch, but that's been at my house, but I have seen it in our park system where they've munched around the whole branch. But for the most part,

particularly in hackberries which they seem to really love, I see a lot of squirrel damage on the top side of the branches and that always makes me a little bit nervous because again, from the ground we don't always see that and so if that tree doesn't seal off that wound effectively, that's where that decay can start to compromise the strength of the tree, but I don't know. Jerry, what have you seen? Does yours looks like there munching it like an ear of corn?

>> It doesn't really. I mean, I have those soft trees, the honey locust, and we only have several other trees, but they don't seem to really get after that. We feed birds so they like to have the easy access to coring.

A point that Jeff made, are you sure it's still the same one? Well, all the adults and I'm not trying to be funny, but they all look alike except for the young ones and they have that bottle brush tail. You know that they're young and you go, oh, there's a young one. But right across from an older one and they look exactly like the 1, 2 steps down.

What's funny is people will put newspaper tin. You can buy the tin from newspapers. They'll wrap their tree and it's usually a large

cottonwood or something and the branches are touching other branches of other trees in those squirrels just fly through those trees.

>> They fly through them. We will sit and watch ours in our backyard and I can't believe they will jump from the top of our linden tree and they will land over in one of our pines. I'm like that is so gutsy. I don't even know how they can assure that they're going to make that happen. But they're pretty remarkable little critters, even though they do intense amounts of damage. But that's why it's really hard to control squirrels.

If they wrap it with that tin, it can't have any other trees even in close proximity or it's just really a waste of time because they will literally, and they're not the flying squirrels, but they can jump a long ways and they can jump from tree to tree and so unless you have good space, it's not very effective. The live traps are good. It's just that you need to make sure that where you're taking those,

people are allowing squirrels to be moved out to those locations.

Don't take it down to the river. You need to be real thoughtful about where you put them. Plus there an animal and you want to make sure that they have a food source available to them. You don't want to just dump them out and get prairie because they're not going to do well out there.

>> If you're handling squirrels, honest to God, you need to be wearing some really good gloves. Because they'll bite the crap out of you because you're handling them.

>> It's the same gloves that you're using for getting in underneath your roses, Jerry.

>> No.

He need the heroines of that. I didn't think they could bite right through those.

>> Mesh male armor.

>> Yeah. [LAUGHTER]

>> Before we move on, I have two questions. I am seeing, I think it's relatively new shoot growth being clipped out of my cottonwoods. I'm fairly certain that that's squirrels but I don't see him do it. Then the other thing is if you're using a live trap, what do you use for bait?

>> I let my husband do the live trap. He has put fruit in there. Let me think what else he has put in there. I feel like maybe one time, he did peanut butter. It's on their route. We will put sunflower seeds and those types of things because they love sunflower seeds. Because whenever they're going to eat at your bird feeder,

you can put that in those live traps. I have a great little story for you guys on a live trap. This squirrel was torturing my trees and I just was so upset about it and my husband got a live trap. That's when my kids were really middling. What happened is one of the squirrels got caught in the live trap, and this is so heartbreaking. The other squirrel, his buddy, saw that he was in the trap and they were in a state of panic. The one squirrel, honest to goodness, he was on the trap and they were panicking together and, I'm humanizing, it looked like he was trying to get him out. My kids are witnessing this, they're like, "Mom, you can't separate the little friends." I was like, "Gosh." [LAUGHTER] These are little live critters and you need to be thoughtful about what you're doing, especially when you're around your kids or your grandkids. [LAUGHTER]

>> Yeah. You need to be respectful of them.

>> Yes.

>> Let's see. Jerry, we've been ignoring you.

>> No. [LAUGHTER] I'm right here.

>> I feel like we've been ignoring you. Do you have questions for Amy today?

>> I don't, right off the top of my head. Let me think about it just for a couple of seconds. But I will want to tell you a story about we came home, and this is going back to a tree limb drop. We had a cottonwood that was probably 85 or 90 years old and it was huge. The base of it was, I'm thinking maybe 14 feet around at the bottom. We didn't have any electricity. Well, a branch had come off and had

pulled our electrical line out of the house, which it could have been a fire, it could have been most anything. The arborist said, "Hey, I want to show you something." He had cut it off and he was working on the stump and he says, "Look at this in the middle." He reached his arm up into the tree and pulled out a whole bunch of wet, wadded, chewed up looking material, wood fibers.

He said, "You guys were so lucky that this didn't just fall over." The whole inside had hollowed out.

>> Was it being occupied by squirrels?

>> No. Well, squirrels were in it, out of it, birds were in it and around it. But to cause that much damage, no. No owls were inside. It was just the death of a tree. I think it just aged out.

>> Jerry, I mean, you're talking about something really interesting. Those old trees that are hollowed out that are still alive, obviously, if they're in a place, in the tree world, we would call those where there's a lot of targets around, things that it could fall on and damage. People are targets, houses are targets, cars are targets.

>> You mean widow makers?

>> Yeah. [LAUGHTER]

>> Yeah.

>> But it's important for people to remember, though, if you have the opportunity, those decayed and even dead trees and snags and those kinds of things, those are critically important for habitat. If you can, if it's in a safe place where if it would fall or something would drop, it wouldn't do a lot of damage. I know that's hard in town because we don't have that much space in our yards.

But if you're a homeowner on an acreage or in the country, it's important to leave those as long as you can because they're critical habitat. You had touched on it. A lot of birds use those for nesting and obviously, just for their little homes, and squirrels use them. I mean, there's all kinds of wildlife that need those old, dead trees to live in

because they're not making holes in live, healthy trees, they can't, it's not functional, but when we get a little bit of decay, that's when they can really start to utilize those. We need to be real thoughtful. Like in our park system, we really can't have a lot of trees that have that. But in our cemetery, where there's limited amount of traffic and very seldom do we have people, in some areas, we can tolerate that.

I know that in Fort Collins, their former forester, Tim Buchanan, they had a philosophy because their cemetery was actually a bird sanctuary per se. In the corners of the cemetery, they left dead branches and trees, in places where they wouldn't fall on people or cars, because they wanted to have that habitat for wildlife. People came from all over to do bird watching in their cemeteries because they had provided these environments for those birds and things to live in.

>> Amy, if a limb does drop this time of year and it's not a clean break, probably, is that an okay time to take a chainsaw to it and clean it up or make that pruning cut now? Or would you, of course, haul off the limb and then make that pruning cut next spring before new growth occurs?

>> I would like to see that pretty cut made now if possible because the tree immediately, when a branch comes off, they want to start sealing over that wound. If you have a jagged portion of it, it's harder for that, it's process over and heal it. Now, granted, the process takes a really long time so if you don't get to it till next spring, you'll probably be fine. But the sooner that you can get

that jaggedness out and remove the opportunity for pathogens to get into the tree in those areas, the better off your tree will probably be.

>> Pruning, if you have to, anytime of the year is okay?

>> Yeah. If you have to, anytime of year is okay. We need to talk about the best time to prune. Obviously, is late March is the least amount of stress. But in all honesty, arborists all across the country are doing tree work all year. Your very worst times to prune are right when the tree is leafing out, that's incredibly stressful because they're working on flowing

and putting on leaves and creating all these water absorbing roots. Then in the fall, right before the leaves drop, that is super stressful time on the tree because it's

using a lot of energy to create this little abscission layer to separate the leaf from the branch. That takes a lot of energy. If you are doing a lot of branch removal, its main priority is

dropping leaves and so it's not going to put energy into sealing over that wound as much. I mean, it'll divert some energy but that means it's going to have to use a lot of reserves which it didn't plan on.

>> Now, Amy, my criteria for removing branches before I was enlightened by you was if it knocked me in the head while I was balling, it was gone. [LAUGHTER] You [NOISE] said, "Hey Jerry, why don't build a little buffer away from the base of your tree so you don't have to get so close?" [LAUGHTER] I'm like, what a concept.

>> [LAUGHTER] How is that working for you, Jerry?

>> Much better.

>> Good.

How's your tree performing since you've removed some of that grass? Does the health and vigor look a little bit different or is it about the same?

>> It's about the same.

>> Yeah.

>> If you don't get a nick on the bottom of your tree or girdle your tree with your lawn mower, your tree really appreciates that.

>> Yeah, that is huge, Jerry. You're right.

>> A friend of mine had hired the neighbor kid to come over and mow his lawn. He had a Hot Wings Maple and it was doing really well and the young man allowed the back wheel as it was turning to be turning on the trunk of the tree and so it just girdled the entire tree.

It's just a matter of time before that tree is dead.

>> Yeah, and especially if it's all the way around.

Different researchers have different opinions but obviously if it's girdled 50 percent, you have like a 50-50 chance of it recovering from that. But if you damage 30 percent of the trunk, the tree should still probably be okay but any more than that you are really minimizing its opportunity to really do well. Remember that right on

the very edge is where there is the phloem. That's the little tubes that take the energy back down to the roots and distribute it. Then right on inside of that is the cambium layer that does the cell division. Inside of that is where all the water. This is such a teeny, tiny thin layer. When you look at tree rings, you'll see how big those layers are and you don't have to go very far into the tree to significantly damage the tree and interrupt its processes. That's why keeping those trimmers away from the trunks of the tree is super important. Honestly guys, and it's not just for young trees, it's older trees too. If we have nice bark tissue, they can handle a little bit of damage but that chronic string trimmer around the base of the tree are getting hit by a mower, all of those things. You may not see the damage on the bark,

but you're still doing damage to that tissue inside and so you're not even seeing the damage that you're doing, but it's still affecting the tree. That's why it's so important to have a nice mulch ring around your trees, keep the mowers away. Those types of things.

>> What about being hit by a lawn sprinkler every couple of days?

>> Well, it depends. On our golf course, we have those huge golf heads and they have a ton of pressure and that is pretty stressful. Our trees get hit by it and you can tell it's a stressor on our trees. It does do damage to them. If you have just a little low, I don't even know what kind of spray you would have.

>> Thirty PSI.

>> Yeah. That's pretty low spray. I think you'd be fine. It's not ideal to have water spraying on the trunk of that tree all the time for multiple reasons actually. So it happens. I know that we don't live in a perfect world guys. When we talk about these scenarios, we're saying the very best thing would be for that not to happen, but I also live in reality and reality tells us that sometimes if you can't help it,

that you're going to have to spray across the tree trunk to get that. Now what's going to happen on the other side is you're going to have that shadow and you're always going to have dry grass on the other side that you can may be hit that area with another sprinkler head.

>> I fixed it. I added another head.

>> We have an apple tree and when we sprinkle it with a high pressure sprinkler, we get shepherd's crook. The end of the tree limb dies off, fire blight.

>> I was going to say that sounds like fire blight to me, Jerry.

>> [OVERLAPPING] We get fire blight on that but if we use in that area, if we have three sprinklers that you can hook together and they reclaim their niceness, that doesn't bother them at all. If we sprinkle that apple tree with a hard impact sprinkler, we get fire blight.

>> I don't know what the science behind that is. That's interesting. Jeff, what do you think the wider drop? I know we'd have to do it. Fire blight's a bacteria. I don't know if it has to do with humidity or the bigger water droplets carry it easier. I don't know what the reason for that might be.

>> It's usually transported through the flower, so I don't know if it could be a

symptom of something else.

>> You don't know.

>> If we don't use it, our tree looks pretty darn good.

>> Interesting.

>> Except for those darn codling moths and that's my fault because I didn't separate my apples.

>> You know, everybody's hungry.

>> The squirrels, the codling moth.

>> Hey, as we get close to wrapping up time here today, I'd like to comment that it's corn silage season, so watch out for those guys on the highway. It's also, for those of us who have gardens, things to be eating well. Tomatoes, melons, sweet corn, all that stuff is coming and being available now. Peaches from Colorado or locally if you're lucky enough.

>> Some of that corn is so good. We only have it for just a little bit.

>> That's right, Jerry.

>> Just a little bit.

>> Get out there and support your local growers and be watchful of the guys that are there. Jerry, do you have any information of things happening this weekend?

>> We have farmers market, you will support your local farmers market and other farmers market, like you just said.

>> Yes, lots things going on, lots things that have happened. Amy, again, thank you for being our guest today. We enjoy having you on. I always learn stuff when you're here. We appreciate you very much. Thank you very much.

>> I just love spending time with you guys. Thanks again. I hope everybody has great harvests in their garden. Hopefully it will close down this ball.

>> Yeah, and we get regular water.

>> Yes, I hope so.

>> All right. Thank you, Jerry. Good to see you. Hope you're feeling better next week. If everybody gets out and does a little gardening this weekend, that'd be great. We'll see you next week. [MUSIC] >> You've been listening to Lawn and Garden with the University of Wyoming Extension specialist Jeff Edwards and co-host Jerry Erschabeck. Looking at each week for details on new events and how to make your garden flourish.