

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

Jeff Edwards: Well, good morning. This is Jeff Edwards. This is the KGOS/KERM Lawn & Garden program. I am here with Jerry Erschabeck. Good morning, Jerry.

Jerry Erschabeck: Morning, Jeff.

Jeff Edwards: How are you today?

Jerry Erschabeck: Hey, good. Thank you.

Jeff Edwards: In studio with us is Jenna Meeks. She is the Assistant Supervisor of Weed & Pest here in Goshen County. Jenna, good morning. It's good to have you here with us today.

Jenna Meeks: Thanks, Jeff.

Jeff Edwards: After a blustery week, we are hopeful that next week, we will be getting into a lot of planting and those types of things. But let's take a minute and listen to our sponsors, and we'll get into our program in a second.

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 email. Go to wyoextension.org to find your county's contact information.

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

Jeff Edwards: Okay, we're back. This is Jeff Edwards. This is the KGOS/KERM Lawn & Garden program with Jerry Erschabeck and Jenna Meeks this morning. Jenna, I know that you have some things on your mind today. You would like to maybe possibly talk about insects, which everybody knows that's right up my alley. So you said you wanted to talk a little bit about mosquitoes and what's maybe going to go on in the county this year.

Jenna Meeks: Yeah. So if you haven't taken a drive on 26 going out of Torrington, there is a business with a really great sign that says, "Mosquitoes are going to wake up and say, 'Where are all the people at?'" [LAUGHTER] So a good one to maybe parlay into what mosquitoes will be seeing this spring and summer, so I'll just give a brief overview of what Weed & Pest does as far as the mosquito control program. So our main focus is on the *Culex tarsalis*, species of mosquito which is the one that in this area transmits West Nile virus.

Jeff Edwards: Does it have a common name?

Jenna Meeks: Its common name is the western house mosquito.

Jeff Edwards: Okay.

Jenna Meeks: But unless you're identifying them under a microscope, it's really difficult to tell the difference.

Jeff Edwards: [00:03:00] So basically, a mosquito is a mosquito.

Jenna Meeks: No. [LAUGHTER] I see Jerry shaking his head yes, but the answer is most definitely no. So that's what I wanted to really talk about today. The early mosquitoes that we'll see, they're probably flying around now, they're pretty big. Those are the *Culex tarsalis*, the ones that transmit West Nile. They overwinter as adults. So they've been hiding out in storm drains, in your barns, in your attics, in some eaves, or some warm places. So they're already adults. They will not be laying their eggs until they can find a mate and lay their eggs, and then their eggs have to hatch.

Jeff Edwards: Okay. Wait a minute, I'm going to interrupt you a little bit. I think we need to back up a little bit and possibly talk about West Nile virus itself. It has an odd host life cycle. Humans are a part of that or can be a part of that. Can you talk about West Nile virus in a little bit more detail?

Jenna Meeks: Yes. So the reason we should be concerned about West Nile virus here is we have a very good environment for the mosquitoes that transmit West Nile, which I mentioned are the *Culex tarsalis*. So the virus itself is actually hosted in birds. There's over 300 species of birds that they have found in the West Nile virus in. There are certain species of birds that are more affected as in death. [LAUGHTER] There are certain species of birds that die easily from West Nile, most of them don't. So what they do is they actually just amplify the virus.

Jeff Edwards: So [OVERLAPPING] the dead ones don't make very good transmitters of the disease, right?

Jenna Meeks: Correct. But they would be more susceptible to the effect of West Nile versus a lot of other birds just host it. A mosquito would have to bite an infected bird and then the mosquito can either infect humans or a horse, in this area in particular. Humans and horses are actually dead-end host. So the virus doesn't live within us which means if we have the virus and a mosquito bites us, we can't transmit that virus to another mosquito. Same with the horses. So the virus doesn't live in a horse. So if a mosquito bites an infected horse, that mosquito cannot get the virus from the horse.

Jeff Edwards: But we as humans [OVERLAPPING] or horses can have symptoms from West Nile virus, which can be quite significant-

Jenna Meeks: So about 20 percent of humans exhibit West Nile symptoms, which do mimic a lot of other symptoms we see just from people being outside. In agriculture, you might feel fatigued, lightheaded, have a rash. So that could be anything— interesting plants that you touched, or if you have the skin rash just in general, or maybe a little bit of heatstroke or heat exhaustion and things like that. So they do mimic a lot of [OVERLAPPING], yeah. So we [00:06:00] worry about West Nile virus in the sense that people are asymptomatic and there is no treatment or vaccine. That's the concern. Like I said, the probability of getting a life-threatening illness or complications from West Nile is very low. But there are some strategies that we can take to control the mosquito population and also to limit our exposure to mosquito bites in general to prevent West Nile which is probably the best and easiest route to go to prevent getting sick from West Nile virus.

Jeff Edwards: Okay. So we have this disease that's out there. It is in Goshen County, and our strategy is to work with Weed & Pest to try to manage the mosquito population so that the humans, those of us who live in Goshen County, are less likely to be exposed to this disease.

Jenna Meeks: Correct. So along with managing the population, that's the large task and one that we do tackle. We have a fogger vehicle that goes around throughout the county, and then we also do a couple aerial applications with the airplane to control the population. However, we cannot stress enough that we cannot kill every single mosquito in the county. [LAUGHTER] People travel, mosquitoes can get locked in a vehicle and brought here from other places. So as much as we do try to control the

mosquito population, it's really an individual effort is going to be most effective in protecting yourself from West Nile virus.

Jeff Edwards: So that would be using DEET products or similar [NOISE] type things?

Jenna Meeks: Yeah. So we've promoted Ds of mosquito bite prevention. So you need to dress, drain, and defend. So dress appropriately, you need to wear long pants, long sleeve shirt. I know it seems uncomfortable, but they have some really great products, still keep you cool, but also protect you from getting mosquito bites. So long pants, long sleeve shirt, they need to be preferably light-colored. We can get into why that makes a difference a little bit later. Another one is drain. So any standing water on your property needs to be drained once a week. The reason we say once a week is those eggs, once it warms up and gets into the 80s, 90s, those eggs can develop within about seven days from the time they're an egg until they're a pupa, and then coming to an adult. So as long as you drain that water once a week, you're dumping that larva or pupa out, and then they can't develop into a flying, biting insect, so [OVERLAPPING] drain once a week. [LAUGHTER]

Yeah. So if you have an area of water that you're not able to drain, there are products such as larvicide that you can use on those areas. It might not be feasible to drain a pond every week. So you can definitely use some larvicide to mitigate those populations there. And the last one, as Jeff mentioned, was defend, and that's kinda where we [00:09:00] group these insecticides, there are pesticides that you can use, repellents, whatnot. The active ingredients that you need to look for are DEET, picaridin. You can find all these on the active ingredient list on the product. Another one is IR3535. Then there are some products that have oil of lemon eucalyptus. So those are four main ones that we want people to look at. The other thing we can't stress enough is when you use these products, they are effective, they have been registered to be effective, if you follow the label on the back. So drenching your skin [LAUGHTER] doesn't necessarily make it work better if it says to lightly mist your skin. A lot of them say maybe don't put it on your skin and then put clothing on top of that, so please follow those cautions as well. If it says to reapply after entering water, things like that, please follow that label. They are effective if they're used correctly.

Jeff Edwards: So I don't want to throw a wrench, but how do you feel about permethrin-laced clothing that you can purchase from a lot of different places. Do you feel that it's effective? Do you think it should be used in every instance? What are your thoughts?

Jenna Meeks: Yeah. So they do have clothing like boots, and pants, and sun hats, and whatnot that have been treated. I have a couple of shirts that are the insect guard, I think it's what they're called. The effectiveness does decrease as you wash them and as they are exposed to sunlight. They can be cost-prohibitive [LAUGHTER] especially as the effectiveness kind of decreases. So I don't think any product can get just across the board saying this works all the time, the best every time. But that is an option, especially if you're going into an area where maybe you're concerned about insects including mosquitoes, but also other insects such as ticks or things like that. Those are options, yes.

Jeff Edwards: So my recommendation for those clothing would be for people who are working or they're required to be in those places where there are a lot of mosquitoes. But for day-to-day use, I don't think that I would recommend that type of clothing to protect yourself from long-term exposure, that type of thing.

Jenna Meeks: I have a long sleeve shirt that I wear when we go camping. Because you wear it for a couple of days, and you wash it once, and then you pack it away until the next time you think you're going to go camping, and then it rains you out. [LAUGHTER]

Or if there's a particularly bad rainstorm and, say you're going to go drain all your water, and maybe there's already mosquitoes around or you have an activity where you're going to cut down a lot of tall grass and there might be already mosquitoes in that grass, maybe you could wear some pants. Again,

you don't have to buy the clothing. You can also treat your clothes with a spray-on permethrin. So that could be an option if you don't want to purchase specific clothing for that, you can treat your existing clothing.

Jerry Erschabeck: So my own experience with drainage, [00:12:00] a lot of times [OVERLAPPING]

Jeff Edwards: Jerry, that might be too much information. [LAUGHTER]

Jerry Erschabeck: Oh, Jeff, yeah. That is a kind of tricky subject.

Jeff Edwards: But please continue. I know you're looking for a segue, but there you go.

Jerry Erschabeck: Thank you so much. [LAUGHTER] So I was looking around my house, and just by accident, I was coming upon some of my seed starting, little cups-

Jeff Edwards: Propagation area?

Jerry Erschabeck: -propagation, and my word, they were just full of water and it was just drain water that had just blown in on top of it. I was amazed, and then I started looking around the property. I have an old rim that was full of water. It was just amazing how much standing water that I had. I thought all I have is my little pond, but in all reality, there are a lot of areas that had standing water.

Jeff Edwards: Old tires are one of the main things. If you have old tires laying around, they collect water, and you forget about them, and mosquitoes it's a big, easy breeding area for mosquitoes.

Jerry Erschabeck: Or your old junk pile.

Jeff Edwards: Yeah. [NOISE]

Jerry Erschabeck: Your iron junk pile, because it radiates warmth and it keeps those critters overwintering and stuff.

Jeff Edwards: Yeah.

Jenna Meeks: I'm glad you guys brought up tires and some old junk piles. So we will be hosting again a mosquito habitat reduction event, which is-

Jeff Edwards: Oh, cool.

Jenna Meeks: -a long way of saying we're going to take some old tires from town, from residents of Goshen County. So we hosted one last year in October. This year, it'll be the last week of June. We're still finalizing the date and the time you can bring those in. So we'll still probably have similar rules, not more than five per household, they have to be under a certain size, they need to be clean, no debris. But we do realize that that is a very, very good habitat for mosquitoes to lay their eggs, so trying to reduce that habitat. Like you said, Jerry, there's a lot of places, even just in a backyard, even if you don't have a large acreage, that you can have enough water for mosquito eggs to be. There are certain species that can lay their eggs in like a water bottle cap, and if that's full of water, [OVERLAPPING] that's the only amount of water that they need to lay their eggs. So yeah, be diligent.

Jerry Erschabeck: Even the water table around some parts of Torrington, east of Torrington, the water table is above most ground. So in a small depression out east of town, you can see, even just after a mild rain, that there's still standing water and there's standing water out there for weeks.

Jeff Edwards: Yeah.

Jenna Meeks: Yeah. That's a good point. That's where we would encourage people to use larvicide. We do have larvicide product available at the office for no charge. So if there are some of those areas

where [00:15:00] it might be standing for more than a week, especially if it's really shallow water, that water might warm up enough that those eggs can develop a little bit quicker. So even if it's going to be a week or 10 days, I would sure get in there. There's methods that you can use to see if there's mosquito larva in there. We can sure help out with that, but we do have larvicide products available at no cost at this point.

Jerry Erschabeck: So in the garden- [OVERLAPPING]

Jeff Edwards: Sorry. Go ahead, Jerry.

Jerry Erschabeck: Now in the garden, the worst part for me is trying to pick zucchini in the morning. Man, they just seemed to be so active around the zucchini plant. Have you seen that, Jeff?

Jeff Edwards: Yeah. So that's the other thing. There's a time of day when they're most active, right, Jenna? It's early morning and then later dusk in the evening. So midday, so Jerry, maybe you need to pick your zucchini later in the day.

Jerry Erschabeck: That's why we have boats. [LAUGHTER] That's why I think some of those zucchinis are so huge. I'm not going out there, the mosquitoes.

Jenna Meeks: Jerry, this is a good point where you said, maybe agree that a mosquito is a mosquito. The mosquitoes that are active in the evening, so an hour before dusk and about two hours after, same for dawn, about an hour before and two hours after dawn, those mosquitoes are typically the *Culex tarsalis*, the ones that could carry West Nile virus. You will still see mosquitoes out during the day, and they are a different species. So they're a daytime biter and they actually prefer humans. Those are typically your *Aedes* species or *Aedes* genus. The *Culex* mosquitoes, the ones that can transmit West Nile, they prefer birds. Later on in the season when that might not be as readily available, it's when they start to come after humans. But as you are in your garden, there will be different types of mosquitoes throughout the day and as the temperatures vary and whatnot. The *Culex* population, the one that can transmit West Nile, they're not really very common until end of June, early July, and we have the population map on our website. That would be about the time you're picking zucchini unless you kinda got them started inside early. So they definitely could be *Culex* if you're out there early in the morning. That's when we would especially encourage the use of proper clothing and repellents.

Jerry Erschabeck: Yeah. Now, Jenna, is it true that only the female mosquito bites?

Jenna Meeks: Absolutely. Yeah. So the male only need sugar and nectar to produce. So the female needs blood and protein in order to produce her egg. So yeah, this is a case of a [LAUGHTER] female is kind of a dangerous one.

Jerry Erschabeck: Same way with the praying mantis. [LAUGHTER]

Jenna Meeks: Yeah, yeah.

Jerry Erschabeck: Ruin nature in a lot of ways. [NOISE] [LAUGHTER] So as we proceed into the season [00:18:00] and we have water standing around, does Weed & Pest go out and check populations in ponds and those things? If there are heavy numbers of them, is that an area that you treat with fogging or is that an area that you would treat with larvicide?

Jenna Meeks: Our monitoring efforts are based mostly on adult population, so once they're already flying. So we have traps that we set throughout the week in various locations around the county, and some of those locations, we trap the entire week and we'd trap on a fogging night and on a non-fogging night so we can tell if the fogging is actually reducing the population at all. As far as larvicide population, the areas of standing water in this county are [LAUGHTER] [OVERLAPPING] not few and far between.

So like I said, if you do have an area that you're a little suspicious of, we can definitely help you with identifying those areas and providing larvicide. At this point, that's out of our scope just because we would have to stop every five feet along the side of the roadway and that isn't really feasible for us. So if there are some areas that people have specific concerns about, and we have done that in the past, kind of dip for larvicide. There are a lot of other insects and things that are in the water, near the water, and whatnot. So identifying, is it going to be a problem or not?

Jerry Erschabeck: Then Jenna, sorry, Jeff.

Jeff Edwards: No, go ahead.

Jerry Erschabeck: I've also heard and maybe you can dispel this myth that the fogging is killing our honeybees. And we fog towards the evening and most all the honeybees are going to bed at that time, isn't that correct?

Jenna Meeks: Correct. So the label for the product that we use specifies the time of day and the amount of product that we can use. [LAUGHTER] So we do stay within those label restrictions and we have been notified of various hives throughout the county and if they're within an area where we fog, we'll either turn the fogger off or just skip that area in general. So if somebody has a concern, they can sure contact us. We have not been aware of any specific hive that's been affected by fogging. So like I said, if that's a concern, definitely give us a call and we can visit with you about that. Generally, there are a lot of concerns around honeybees and Jeff can probably talk about that more, but I guess I'm not aware of some specific concerns in Goshen County with mosquito control.

Jeff Edwards: So the commercial bee producers aren't really concerned about this in Wyoming because all of their hives have to be registered with the Wyoming Department of Ag as far as where they are located. It is the applicator's responsibility to notify them, [00:21:00] actually check where those hives are at and notify the beekeepers that there are applications being made or a fogging event occurring, those types of things. For many years now, Wyoming Department of Ag has not recorded a bee kill associated with insecticides in the state of Wyoming. I think we're approaching about a 10-year span that that record has been standing. So in Wyoming, we are very diligent about protecting our commercial beekeepers and those types of things. I can't say that that's true in other states. So when you hear that that's happening, it's probably something in someplace else and not in Wyoming.

These products are insecticides. So yes, bees are insects. These products will kill bees. It just has to be applied as the label specifies and at the rate specified and those types of things in order to protect our pollinators. So there's my little soapbox. We can move on. [LAUGHTER]

So since we're on the soapbox thing, let's chat about this a little bit. The thing that's really hot and heavy out on Facebook right now, everybody's posting stuff about murder hornets. Everybody's just got to freak out about something. Yeah, they're big and they are venomous, but more people are killed every year by mosquitoes than these hornets ever possibly could. So you can see a three-inch hornet coming at you, [LAUGHTER] a whole lot easier than you can see a little tiny mosquito coming at you.

Jerry Erschabeck: These hornets can fly like 25 miles an hour, right?

Jeff Edwards: They can cover up to 60 miles a day.

Jerry Erschabeck: Wow.

Jeff Edwards: Yeah. So if you're really interested in learning about these things, number one, stop calling them murder hornets because that's not their name. They are Japanese giant hornets. If you are really curious, you can go out in the Internet and search for them. There's a program that was put in place by the Smithsonian Institute. I think it was produced about three years ago. Then there's one that was produced about eight years ago from National Geographic. Both of them are very good talking

about them, and if you want to learn more about them, I encourage you to look at both of those documentaries.

Jerry Erschabeck: Wait a minute.

Jeff Edwards: Go ahead, jump on it, Jerry.

Jerry Erschabeck: All right. [LAUGHTER] Now the news media featured Catherine Wisner. She is the UW Laramie County Extension horticulturist?

Jeff Edwards: Yeah. I work with Catherine.

Jerry Erschabeck: Yeah. She said that they were mostly found in the Pacific Northwest and they're very unlikely to come to Wyoming because Wyoming doesn't have the kind of wet, cooler weather that these Japanese giant hornets seem to like. So I'm feeling much more comfortable about these hornets. [LAUGHTER]

Jeff Edwards: Were you freaking out a little bit about them, Jerry?

Jerry Erschabeck: No. [LAUGHTER] Except [00:24:00] when you see a bird flying, you go, "Oh my God, is that a hornet?" [LAUGHTER]

Jeff Edwards: Okay. On that note, let's take a couple of minutes and listen to our sponsors and we'll be back in a bit.

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Jeff Edwards: Okay, we're back. This is Jeff Edwards, this is Jerry Erschabeck, this is the KGOS/KERM Lawn & Garden program. Our guest today is Jenna Meeks. She is the Assistant Supervisor of Weed & Pest here in Goshen County. We've been spending some time today talking about mosquitoes and a little bit of time about murder hornets, but we'll move on from them. [LAUGHTER] Jenna, do you have any other things that you would like to talk about on the mosquito subject?

Jenna Meeks: Yeah.

Jeff Edwards: Okay.

Jenna Meeks: Just know that there is some information available on our website. Like I mentioned before, we do offer larvicide product at no charge. We also have rental foggers. You can fly it in the back of your pickup or in the back of a UTV side-by-side ranger, things like that. So those are available for rent. We have our designated routes that we do the adulticide fogging with. If your area is not one of those in that particular route, please feel free to come rent a fogger. It's a minimal cost, I think \$10 for three days. So you can treat two times in that period if you're applying according to the label. So we do have some products available, a lot of good information, and please remember to drain, dress, and defend, and the last week of June, be looking for that tire recycling event to reduce the mosquito habitat. We do have some exciting things that we're going to start giving away. Hopefully, the farmer's market and the third Thursdays downtown are still going on because we have some pretty awesome shirts to give out.

Jeff Edwards: Cool. All right.

Jenna Meeks: Yeah.

Jeff Edwards: Sounds good.

Jerry Erschabeck: Jenna, in regard to dressing, is bright colors one of the things that attract a mosquito?

Jenna Meeks: Mosquitoes are attracted to different things. The main one they're attracted to is carbon dioxide, so basically our breath. [00:27:00] The other thing that can attract them a little bit closer to you would be factors out of our control such as lactic acid, uric acid, sweat. If you're sweating, you're typically having a little bit more carbon dioxide emitting from your body, things like that. So when we say we prefer you to wear light-colored clothing, some of that is just because that keeps you cool and reduces the likelihood that you'll sweat which would then attract a mosquito. So the color necessarily doesn't attract them. Maybe the effect of the colors such as making you warmer or things like that. So bright colors don't necessarily attract them more. But if your baseball uniform is a bright red and you're outside exercising and breathing heavily, then yes, the bright red is attracting them indirectly.

Jerry Erschabeck: So we should probably exercise a little later in the morning rather than first thing or at dusk?

Jenna Meeks: Yes, to avoid the *Culex* mosquito for sure.

Jerry Erschabeck: You bet. Then I've also heard that alcohol is one of also the things that seem to attract a mosquito?

Jenna Meeks: Yeah. So again, through indirect means. If you're consuming alcohol, maybe you're talking more and emitting more carbon dioxide. Or maybe you get a little more talkative with your hands and so you're moving more and maybe that just increased body temperature, more emission of carbon dioxide. So yes, indirectly, all those things can affect it. They say pregnant women might be more likely to attract mosquitoes, just their body temperature in general is higher. The other thing we hear is blood type. Certain blood types attract mosquitoes more, not any conclusive evidence.

Jeff Edwards: Wait a minute. Which blood type is that? Because I'm a mosquito victim. [LAUGHTER]

Jenna Meeks: What is your blood type, Jeff?

Jeff Edwards: Diane takes me on walks so that they come to me before they get to her. [LAUGHTER]

Jenna Meeks: What is your blood type?

Jeff Edwards: I think I'm what, O positive, the universal donor, something like that. I don't know. [LAUGHTER]

Jenna Meeks: Jerry, what do you think? What's your blood type?

Jerry Erschabeck: B positive.

Jeff Edwards: That describes you. You are positive. [LAUGHTER]

Jenna Meeks: Be positive. [LAUGHTER]

Jeff Edwards: I think that there's something to that. I think that needs to have more research, but I do think that there's something to that. I also am one of the minimalist guys with putting on DEET and that sort of thing. I loved what you said, "Don't drench yourself in the products." I like that. Now, what about the candles, the citronella, have you seen that to be effective at all?

Jenna Meeks: Yeah. So Jeff, I would be like your wife in the sense that I take my husband because he's also blood type O and mosquitoes love him. There's definitely anecdotal evidence to support [00:30:00] that they're attracted to certain blood type, which you nailed it was the O blood type, O negative or O positive. So the reasons why you need to be teased out a little bit more, but the reasons that they're attracted to certain people are probably indirect effects of your activities or some other things that you're doing.

So as far the plants or the citronella candles, things like that, we had a question a couple of years ago about what plants you can use around your house to repel mosquitoes. So the citronella, for example, is a plant, but the plant itself doesn't repel them, it's when you crush the leaves and the scent of that action then repels the mosquitoes. [OVERLAPPING] [LAUGHTER] There are some products that you can use, and again, I'll just say those are a lot of anecdotal preferences. So I would not discourage the use of them, but in order to promote some consistency, we'll say that drain, dress, and defend are probably the best ways to protect yourself.

Jerry Erschabeck: Yeah. I found a recipe on the Internet of mosquito repellent using mouthwash, Epsom salt, cheap beer, stir and spray, and I'm going-

Jeff Edwards: Stir and drink? [LAUGHTER]

Jerry Erschabeck: No. Stir and spray. I don't see where that would be effective. I just don't. But anyway.

Jenna Meeks: If somebody wants to try it, you're well within your rights to do that. My comment would be the products that are on the market have been tested, they've been approved by the EPA, so if you have a background and want to do a little chemistry experience, personally, I wouldn't waste cheap beer spraying it on myself, I'm going to drink it, but to each their own.

Jerry Erschabeck: Yep, I agree.

Jenna Meeks: Yeah. [LAUGHTER]

Jeff Edwards: Definitely. So Jenna, you mentioned that you have foggers for rent.

Jenna Meeks: Yeah.

Jeff Edwards: Would you say that that would be a good recommendation if somebody lives in the country that's outside of your spray or your fogging area, if they were planning a large outdoor event to possibly come and rent a fogger and treat the area a couple days in advance or to whatever, would that be a good thing to do for them?

Jenna Meeks: Yeah. That could be a good thing. So the product that we have available to use as a fogger are going to be most effective against mosquito. So if you have a fly problem or something like that and you come in to the office and say, "Oh, I have a mosquito issue," and we give you this fogger, [LAUGHTER] we rent you this fogger and you fog and you still have a fly issue, then that's something different that we need to look at. So this would be specifically for mosquito control [00:33:00] against specifically the *Culex tarsalis* population. So those are things we can definitely discuss with anybody who's interested who wants to come in and learn more about it.

But yeah, that's what the fogger is for, it's for mosquito control. We have three of them available and we don't take reservations at this point; it's a first come, first serve. People have been really good about bringing them back when they're supposed to bring them back. So as long as that system stays in place, [LAUGHTER] they will be available.

Jeff Edwards: You may have to assess fines if they don't bring them back, right?

Jenna Meeks: [LAUGHTER] Yeah. Last year, when we had that tire recycling event, I was really, really impressed with everybody. A couple of people brought in more than five tires and we just said, "We're only taking five this year, please understand," and they were like, "Yep, that sounds great, just appreciate you taking what you can." So that was a really great event and I do appreciate everybody making that easy for us to then want to do it again. So kudos to everybody who did that and came out and supported that, followed the rules and made it easy for us. Thank you.

Jeff Edwards: [OVERLAPPING] As a question of curiosity, Jenna, what happens to those tires?

Jenna Meeks: With the help of TDS, we took them over to the landfill in the City of Gering. I was going to go watch it in person, but the way I understand it is they grind them and kind of chop them up and then what they do is they make them into like a tarp, basically, that they throw over their landfill and trash everything so it doesn't blow away.

Jerry Erschabeck: Oh, yeah.

Jenna Meeks: So there was obviously a fee for all of that, the transport and the dropping off at the landfill over there. So there was a fee assess to that that was funded through Weed & Pest and the emergency and site management grant. So that's where our limitation comes from as far as how many we can take and the size and whatnot. So yeah, I think we collected 137 tires.

Jeff Edwards: It's a weird question, when they grind them all up and you said make it into a tarp, do they heat them back up? [NOISE] But you missed that part on the process, right? Or is it just-

Jenna Meeks: Yeah. Right. They said they'll take any tires, they were just happy to have them, no rims, anything like that. So they were happy to have them and [LAUGHTER] everybody around here is probably aware of it. It's hard to get rid of them.

Jeff Edwards: Yeah.

Jenna Meeks: We were really glad that we found that outlet, so we hope that continues to be the case.

Jeff Edwards: So Jerry, what do you have on your mind this week?

Jerry Erschabeck: Well, last week, we tried to give away some giant pumpkin seeds by Andy Corbin and we posted a question. You know, I was surprised we didn't get very much of a response.

Jeff Edwards: No.

Jerry Erschabeck: So we're going to ask the same question again. [00:36:00] It's a- Let me build this up.

Jeff Edwards: Yeah, you better.

Jerry Erschabeck: The seeds that we're giving away are produced from a giant pumpkin winner. Andy Corbin from Cheyenne last year had the Wyoming record breaking pumpkin, and he has so graciously given us some seed to give away to the general public of Goshen County.

Jeff Edwards: The seeds are this big, right? [LAUGHTER]

Jerry Erschabeck: The seeds are *this* big.

Jeff Edwards: [LAUGHTER]

Jerry Erschabeck: You always have to have someone to back you up when you're lying.

Jeff Edwards: [LAUGHTER]

Jenna Meeks: Especially on the radio.

Jeff Edwards: Yeah, exactly. Nobody can see it. [LAUGHTER]

Jerry Erschabeck: So at any rate, what we're proposing is you call the radio station after we give the question.

Jeff Edwards: And after you give the phone number.

Jerry Erschabeck: We'll give the phone number as well after the question. The question is, the planting companions, the three sisters, one being pumpkin or squash, what are the other two? The first person who calls [307] 532-2158 at the radio station can get these seeds and it's not too late to plant them.

Jeff Edwards: We're looking for two plants, two answers.

Jerry Erschabeck: Two sisters.

Jeff Edwards: Two sisters.

Jerry Erschabeck: We want the two other sisters, pumpkin and squash being one sister, and we're looking for the other two.

Jeff Edwards: The perfect trifecta.

Jerry Erschabeck: All right, and hopefully, Ryan Kath is getting a bunch of calls right now.

Jeff Edwards: [LAUGHTER] We'll get those awarded to the person who gives us the right answers.

Jerry Erschabeck: You bet. Now, on that note, we're also giving away other giant pumpkin seeds through the Extension office. You could call them at [307] 532-2438 and we'll mail those to you, but they won't be the giant pumpkin seeds that won the Wyoming record placement last year.

Jeff Edwards: Okay.

Jerry Erschabeck: Okay.

Jeff Edwards: So call now.

Jerry Erschabeck: Call now. [LAUGHTER] But wait.

Jeff Edwards: Wait, there's more?

Jenna Meeks: There's more!

Jerry Erschabeck: [LAUGHTER] I wanted to say that my wife got a new weed eater for Mother's Day, an electric one.

Jeff Edwards: Well, isn't she lucky? [LAUGHTER]

Jerry Erschabeck: She picked it out herself! [LAUGHTER] It's not like somebody says, "Well, Jerry, that's inappropriate," and I said, "But she wanted one." I'm like going, "Here honey, go pick one out."

Jeff Edwards: There could have been something else more appropriate that you could have given her for Mother's Day in addition to the weed eater.

Jerry Erschabeck: Well, yes, that's correct. Just the other day, she says, "You know, Jerry, since I've gotten that new weed eater [00:39:00], I'm driving around town and I'm starting to look at other people's yards and what we could do to weed-eat their yard. I'm like, "Easy now." [NOISE] [LAUGHTER]

Jeff Edwards: If she loves it that much, she could come to my house on a weekly basis [OVERLAPPING] and run her weedwhacker around my property. I'd be okay with that.

Jerry Erschabeck: [LAUGHTER] You'd be fine, huh?

So we started seeing some stuff starting to flower, our baskets-of-gold are going like crazy. We had a little miniature iris starting to bloom that's at the office, and lots and lots and lots of sunflowers coming up in the garden.

Jeff Edwards: Whether you want them or not?

Jerry Erschabeck: Whether you want them or not. In some places, you just keep them because they're doing so well, but others, they're in your zucchini, they offer way too much shade to plant a lot of stuff underneath it.

Jeff Edwards: Yeah. So weeds, Jenna.

Jenna Meeks: Yes.

Jeff Edwards: Since that's your other area of expertise. [LAUGHTER] It's May, what is it today? May 15th? Friday, May 15th?

Jerry Erschabeck: Yeah.

Jeff Edwards: So it's the middle of May, there are certain weeds that have started to germinate. There are certain weeds that are going to seed like the mustards, those types of things. If you are trying to get ahead of weeds, maybe not necessarily in your turf, but in areas around the edges and places where- your flower beds, what would you suggest people do so that you're not constantly weeding all summer long?

Jenna Meeks: Well, like you said, there's a lot of different areas where those weeds could be coming up already. My first and always plug, I guess, is identification. So correct identification of the weeds that are already up are going to be really important. Because if they're, like you mentioned, some of the mustards are already going to seed. So spraying those, or hand pulling, or hoeing those out at this time will effectively eliminate that weed from coming back. If it's a perennial or something like that, you might need to do multiple applications. There are some preemergent herbicides that you can use. Just remember that a lot of those will need some type of moisture in order to be activated in the soil.

Jeff Edwards: Or mechanical incorporation.

Jenna Meeks: Yes. Thank you. So those pre-emergent herbicides will also not control weeds that have already emerged. So if you have some kochia that's already up and germinated and you put down a pre-emergent, it will typically not impact that kochia, so you'll need to add something to that tank mix to get those that are already emerged. So we do encourage that. There are several products out there, just be [00:42:00] aware of what those active ingredients are. Those are things that we can help you with. We have some guides on our website and also extension has some really great guides. Local expertise, again, like I mentioned with the mosquitoes, I will caution people to follow, homemade or a recipe that you found online or in a really great forum, because not a lot of those are tailored to Wyoming specifically. You might do more harm than good.

Jeff Edwards: A lot of those products that are home recipes, they'll just burn off the top. They'll just kill the stuff that's currently growing and won't kill the root. So many, many times, it'll look like you've got a good control, but a lot of them will grow right back.

Jenna Meeks: Another thing that's important is to assess, this goes back to the identification piece, is to assess where these weeds are because weeds might be a symptom. So if you've done some work over the winter on your place or this spring and you've disturbed an area, so now you have some new weeds that are coming up that you've never seen before, that can just be a symptom of what else is happening around. So rather than just say, "It's something green and I don't want it here, I'm going to

kill it," you might need to strategize a little bit longer term and think, what caused it to get here? Where did it come from or where has it gone and things like that in order so you don't have a problem creep up later that might be too far gone.

Jeff Edwards: You may have to flood the system with your own seed. Don't rely on grasses filling in a place that's been disturbed unless you allow them to go to seed or you purchase seed and replace those that are there. That is always helpful. A lot of folks say, "Well, why isn't this grass filling in like it should?" Well, maybe it's not a spread or type of grass and it needs to have some seed put there to be grass [LAUGHTER] so that you have those plants that you like in the place that you want them.

Jerry Erschabeck: Jeff, we've always talked about dandelions. You've said that if we try to kill them now, it's revenge killing and they're best dealt with in the fall.

Jeff Edwards: Yeah. So you might kill a few of them this spring, but you will have the best luck if you wait until October-ish and apply 2,4-D and then the following year, you'll see the benefits. I'm seeing that around my place this spring. I don't have a whole lot of dandelions because I was able to get a 2,4-D treatment out last fall. So strategy is one thing when you're dealing with weeds.

The pre-emergents that you mentioned, Jenna, I really like to use those in areas where I'm trying to get puncture vine and sandbur under control. Unfortunately, those are two species that germinate a little bit later on, like towards the end of May, but it's all dependent upon how warm a spring that we're having. [00:45:00] So hopefully, [LAUGHTER] I'm hoping this week delays some of that so that you can delay your application of those pre-emergents to get those two nasty weed species under control.

Jenna Meeks: Yeah. The sandburs have been a topic of interest here at the office especially this year. You don't want to put it on too early, but too late is a larger issue than getting on too early because you do need incorporation into the ground either through mechanical, or irrigation, or rainfall, which unfortunately, we can't predict. So it'll still be there. That herbicide layer will still be there, it just needs to be moved into the soil. So if you know in the next two weeks that you might get some precipitation, go ahead and put that on there and let it wait until it becomes activated. The other thing with puncture vine is they really don't start emerging until it gets quite a bit warmer. So you won't start to see those until June, July. So some pre-emergent herbicides that you've put down for sandburs or for some other things that are coming up might not still be around when your puncture vine comes up. I tell people, you can spit on the ground and that's enough moisture for puncture vine to germinate in. So any little fresher, that might not be true, Jerry, that's just my exaggeration.

Jeff Edwards: Or a Russian thistle. Jerry's done it. He's had a controlled experiment where he's done it. [LAUGHTER]

Jerry Erschabeck: No. But to your point, it just doesn't require much moisture for those to come up, and gee whiz, they're just a yucky plant to deal with. At first, when they're starting to come up, they're so lush and lively and they're actually a pretty little plant until you get that barb.

Jenna Meeks: Oh, who's exaggerating now?

Jerry Erschabeck: Oh, yeah. [LAUGHTER]

Jeff Edwards: So if you can't get your pre-emergent on and you see them coming, then the next step is you spray them before they start to flower, right? Because once they flower, immediately, within literally a day, it seems like the seed pods are forming on those things. [LAUGHTER]

Jerry Erschabeck: Isn't it true that the actual seed can last like seven or eight years? [OVERLAPPING]

Jenna Meeks: Go ahead, Jeff.

Jeff Edwards: I think for puncture vine, it's much longer than that, Jerry. I think it's 15, 20 type.

Jerry Erschabeck: Wow.

Jeff Edwards: Yeah. So you have a long-term project on your hands if you have a patch of puncture vine that you are trying to go after.

Jenna Meeks: The good thing about puncture vine, and I'll say the only good thing, is that it's pretty easy to identify. Just walk around barefoot [LAUGHTER] and follow the swear words.

Jeff Edwards: Or watch your dogs stop in their tracks and go, "Can you get this out, please?" So I [00:48:00] think we've had a really good program today. Thank you, Jenna for being here. Jenna, do you have any last comments that you'd like to say?

Jenna Meeks: I'll just say we're always available to help with identification and herbicide recommendations or other control. We don't just spray weeds, I just killed one with a shovel the other day. But we are available. Please stop by our office, give us a call. If you do have an identification question, pictures are great. [LAUGHTER] You can email those, you can send them to us on our Facebook page, but we're here to help identify and get some good information out there. We have a lot of thistle guides and some herbicide hints and how you calibrate your sprayer and things like that. Calibration is not intimidating, we can break it down into four easy steps and those are all on our website. So please please calibrate, please please read the labels, and please please identify your weeds.

Jeff Edwards: Perfect. Thank you, Jenna. Please let us know when the tire pickup date will be. I believe Jerry has one other thing, one other thing that he would like to add today.

Jerry Erschabeck: I would like to report on something that we talked about last week. There's a wonderful forsythia located on Main Street on a person's porch. I mean, it blooms long time and it's brought out blooming, and it's put away blooming, and they confessed that it's fake. [LAUGHTER]

Jeff Edwards: See? I told you.

Jerry Erschabeck: It's a beautiful plant. When we're talking about putting out pre-emergent, well, some people talk about watching the forsythia bloom, and when the forsythia starts to bloom, that's when you start putting out the pre-emergent. I'm like going, "Hey, it's time," and I'm going jeez, how did they get that plant to bloom so early? [LAUGHTER] It's brought out blooming and it's [OVERLAPPING] put away blooming. She says, "Yeah, we do that every year. We laugh about that. So many people have asked the same question." I said, "Well, I'm one of the ones that's asking."

Jeff Edwards: That's awesome because everybody notices it, right?

Jerry Erschabeck: Oh my gosh, yeah.

Jeff Edwards: It's the first thing blooming on Main Street. [LAUGHTER] Okay. Well, thank you both for another successful program. I hope everybody out there who's listening enjoyed it. As always, if you have questions or things that you would like to ask us about, please feel free to call myself, call Jenna, and that's it for today. We'll talk to you again next week.

Female Narrator: [MUSIC] Thanks for listening. Join us next week with Chrissy Land, University of Nebraska Community Forestry Specialist. And on May 29th, we welcome Gary Stone, a University of Nebraska [00:51:00] Extension Educator. [MUSIC]