Steacy L, President Smoky Mts Wild Ones: I'll just start with a small introduction of who we are for those who are new to wild ones. Wild ones. Smoky Mountains chapter is. is the Knoxville chapter of wild ones. We meet usually every month at the Knoxville Botanical Gardens. In person we hold other events, such as hikes and winter sowing seed swaps, plant swaps, and we're always out there doing our best to help native plant habitats flourish and thrive. and you'll have to ignore my voice. I'm sick today, so I'm going to try not to talk very much. My name is Stacy. Regina is our membership chair, and she'll be doing more of the talking tonight, so I'm going to hand it over to her.

Regina Santore, TN - Smoky Mountains: Okay, well, thank you. Everyone for your commitment to ecosystems and your interest in native plants and removing invasive species. You know the mission of wild ones actually is to get native plants in the hands of people, and generally to support ecosystems through thriving native plant communities. So our panel tonight we have a lot of great folks for you. I'm gonna try to go in alphabetical order here, I guess, and we've got our 1st up is Dr. Amanda Benoit. and she is a teaching professor in ecology and evolution at the University of Tennessee. She is co-founder of Appalachia flora, a native nursery. and we're so glad to have you, Amanda. Next we have Jimmy Groton, who is a wetland ecologist, specializing in wetland restoration and an environmental scientist. He has over 30 years of experience in invasive species removal, and he is an avid supporter of Tennessee citizens for wilderness planning and Tennessee invasive Plant Council, and most notably he was discover life in America's conservation hero of the year in 2019. So welcome, Jimmy, thank you. And then we have Dr. Andrea Ludwig, who is a biosystem engineer and Soil Sciences, Professor at the University of Tennessee. She is the director of the fabulous Tennessee smart Yards program which guides homeowners to stop erosion and water problems and utilize water resources on property which protects our waterways. It's very important work, and we hope that you will investigate making your yard a Tennessee smart yard. and we also have Tom, and probably also I think we may have Tom and Paula Welburn. Tom has a degree in forestry. Paula has a degree in forest management. Tom has been a park ranger, a Wetlands biologist, and has been a supervisor for the EPA in trees, wetlands, and ocean dumping. He founded trees, Knoxville in 2014, in which both he and Paula have been very active, which is focused on urban forestry and the urban tree canopy so welcome. and finally we have who will be on and off the call for a little bit. Here is Jimmy Tucker, who is a certified Tennessee master, naturalist and bird expert. He is, in fact, a past President of the Tennessee Ornithological Society, and he has extensive, fully native gardens on his property as well as do many of these people actually. And so between them and many of our members, who may pipe up from time to time with a bit of information from their learned knowledge. We hope that we can answer most of your fabulous questions. so I guess we should begin looking through all of these. Oh, wait a minute, Stacy, did you have one more introduction.

Steacy L, President Smoky Mts Wild Ones: Sorry. No, I don't.

Regina Santore, TN - Smoky Mountains: Oh, okay, all right, I just wasn't sure. Okay, so regarding this is the 1st question here regarding native plant matrix planting and seasonal provision which plants do you recommend for clay soils what ratio of native to ornamental plants is acceptable? Hmm. And this happens to be asked by one of our members who is highly involved in trying to develop policy around protection and support of our land. As regards to land use management going forward in our local counties. So that's a that's a pretty heady question there regarding native plant matrix planting. We might need to start at the very beginning. Can anyone explain native plant matrix planting dealer. Anyone out there. None of our none of our experts want to speak to that one.

Andrea Lorene Ludwig: I'm not sure if I'm the most appropriate person to be addressing that. But I can. I can start us off, and then, please everybody, maybe add, so, okay, so a little bit of a funny aside as an engineer when I hear the word matrix, of course, I'm going to think of a spreadsheet with a whole bunch of like decision, like like columns rows a decision matrix, you know, that's kind of an engineering tool. So I thought, oh, well. when I heard my landscape architect colleagues, you know, use this word matrix planting. I was like, Oh, they're meaning like gritted off and plant plants in that like kind of gridded pattern, and then come to find out that it's I mean, that might be the methodology to get to where we're going. But I don't think that's exactly what the term is referring to. And so my understanding of the situation is that matrix planting is you're you're trying to create again, a robust native plant community where different types of plants are functioning, are providing the functions that create like an interconnected matrix of plant material in in your landscape. And so thinking about, you know the different types of layers that would happen kind of in like a natural setting. So you've got your ground layer. You know your herbaceous layer, your your shrub layer, your canopy layer well in in a forest condition. If you're going more towards Meadow, then you obviously wouldn't have the forest layer and that sort of thing. But you're trying to recreate this like native plant community as as kind of this. You think of the plant community. As a matrix. So like things are connected, and each type of plant form is is serving a functionality. And and that's kind of the goal I think of of matrix planting is thinking of that community and picking out plants that are serving those different types of functions as you think of layers in your your kind of natural plant community you're trying to to emulate in your landscape. Did I get that right?

Regina Santore, TN - Smoky Mountains: I think you did. I do think sometimes it's used at least by Benjamin Vogt, for example, it's used more to describe trying to interplant grasses amongst plants that might otherwise flop. But in general I do think that there's a you know, you might consider a somewhat symbiotic, maybe the wrong word. But you know a relationship between yes, a support structure between the 2. Would you be able to speak to what that is doing at the soil level. So the question was, you know, which plants do you recommend for clay soils? My 1st thing is all of them right. But what do you think.

Andrea Lorene Ludwig: Yeah, no. Yeah. So to your point about yeah. Interplanting grasses with the herbaceous kind of you know more of the charismatic species that might flop if they don't have that support mechanism. That's a great example of kind of the the type of function that I guess I was trying to get at right. So native plant grasses in that native plant community. They provide the functionality, and then your flowering forbs. Their function, you know, is to kind of arise above that grass layer and and be the thing that's going to attract the pollinators and and do its thing. And so that's how like all of those things are working together in that matrix. Right? So I love. That's a great example right there. so to speak, to the soil. Oh, and one more thing. So kind of thinking about that example, the the grasses and the forbs kind of interplay. So I guess, on my private property, you know, we we did in our Cs practice of a pollinator meadow establishment, and the native mix that we use that was recommended, you know, is a certain percentage of grasses. It's like 60 or 70% grasses. It's a majority of grasses. And then, you know, 30 to 40% of those flowering forbs in the seed mix. And it's so. That kind of gives us an idea of the importance of that grass support system versus the flowering forbs like when we think of, I want to create a meadow. The 1st thing that we probably envision are those like flowering charismatic species, and we think, Oh, it's got to be dominated. The mix is going to be dominated by those flowering forbs. Well, in fact, like you need a majority of grasses in that seed, mix to support those species so.

Regina Santore, TN - Smoky Mountains: And we're going to clarify that that's native grasses which are clumping grasses and not Eurasian pasture grasses, which is every grass you can pretty much think of if you're new to native plants.

Andrea Lorene Ludwig: Yes, yes, thank you for that.

Regina Santore, TN - Smoky Mountains: But as for clay soil, they prefer clay soil. Is that correct?

Andrea Lorene Ludwig: Well, so our native species are, are adapted to working with the native soils that we have here and in East Tennessee a lot of those soils are pretty heavy in clay content. So so, you know, prefer, I guess, is like they. These plants have evolved with the clay soils that are here. So so yes, so, without trying to.

Regina Santore, TN - Smoky Mountains: So for our laypeople at home, it is not necessary to amend soil to till soil any of these. These are actually harmful practices. To some extent, I mean, like they don't need food. If anything. When you feed a native plant you make it too tall, and it flops over. If you feed it outside of a pot right now. Amanda could speak to that inside of a pot. That's a different story. But but in the ground would you say that after the 1st year there is much to be done at all for a native plant.

Andrea Lorene Ludwig: Right? Yeah, just keep on keeping out the invasives, keeping that that pressure away. And and let those things, you know, sort out themselves.

And and they, you know, as long as it's it's dominated by that native plant community. And you're keeping the the biomass there. You know, it's going to naturally kind of evolve itself. So, yeah.

Amanda Benoit: Yeah, I would jump in. And just second all of that and say, the thing with clay soils is that they retain water really? Well. And so that's 1 of the issues. If you have a plant that really likes to dry out, it may not thrive in clay soils, but I've never had an issue with any of the native plants in my garden, you know, not liking the clay soil, so I think more so than thinking about whether you have clay soil or not, and trying to amend it, as Regina said, don't worry about that. Just think about how much sun do you have, how much moisture do you have in the location that you're trying to plant in and then selecting your species more based on those factors than on soil type.

Regina Santore, TN - Smoky Mountains: Okay? And then, finally, the part of the last part of the question was, what ratio of ornamental plants to native plants is acceptable. Does anyone have a way to answer that one.

Amanda Benoit: One study that addresses that looking at chickadee reproduction populations. And in that study they found that yards with less than 70% native plants actually became sinks for these chickadees. The chickadees would come in. They'd build a nest, and they weren't able to find enough food to feed their young, and so they would fail, and they wouldn't

be able to produce enough offspring to replace themselves. So they'd actually decrease the chickadee population if they had less than 70% native plants. So based on that one study, Doug Talamay has thrown out that number of you need at least 70%. but that's, you know, there's always a margin of error, and that's a really sort of human adapted bird species. So if we're thinking about creating habitat for more diverse species. You really probably want to be well, over 70%, I'd say, you know, as close to 100% as you can get is the ideal.

Regina Santore, TN - Smoky Mountains: Tom, you wanted to say something.

Tom Welborn: Yes, I basically listened to a recent ordinance discussion of ordinance and what was acceptable to development communities and seemed to be 50% native seemed to be something that was acceptable to the development community. I'm just throwing it out there. I'm not saying it's a the best, but at least that's something to start with. If we're going to put it into regulations to require certain amount of natives, 50% might be a good compromise to start off with to then move to higher levels of requirement, and I would also add. most of our trees will accept clay soils. I mean, I don't know of any that will not grow in a clay soil just from my background. In forestry, I think clay soils are not a problem for most of our trees. So, but the only thing I was going to say about the the percentage is, I agree with Doug, the more the better for our natives, but 50% seems to be something that the development community will accept without too much pushback.

Regina Santore, TN - Smoky Mountains: Okay, thank you. I feel like we answered the question pretty thoroughly. Sandra, are you on the call, or is there any other? You had something, but said something about seasonal provision. I'm not sure what you mean.

iPhone (7)sandra: Yes, I am, and my goal is to plant the natives in the front so that it looks intentional and has a seasonal interest throughout the year. and I'm a little confused about how to go about that.

Regina Santore, TN - Smoky Mountains: That's a wonderful question. It's sort of so it speaks to both the development and to just, you know, personal and aesthetic to some extent. So what do you think about? You know? So seasonal seasonal interest is the Holy Grail. I'll say that grasses, Benjamin Vogt says you must have ornamental native grasses in your front yard. Mix because you will have a variety of browns, and brown is a color. and so it will not all be one brown like my yard currently is because I don't have the grasses except for the the few broomsedge bluestem that have volunteered that are stunning. Oh, man, if you don't, if you haven't let the broomsedge bluestem grow up in your yard yet, you really you're missing something.

Amanda Benoit: Yeah. And I would add to that, think about textures in addition to colors. Sometimes people get really fixated on bloom time. But think about sort of leaf out time, and what those plants look like in winter, when you know gardens have a sort of stigma of maybe looking a little messy and ugly in winter. But yeah, those grasses can create really good texture. You can incorporate layered elements with small trees, especially our native winter berry is really beautiful in the winter, since it has bright red berries that stay on it all through the winter. So yeah, definitely look up, bloom time and try to get a nice span for the the blooming season. But also, just think about, you know, fall foliage and textures, and layering shrubs and small trees, along with herbaceous plants and grasses.

Regina Santore, TN - Smoky Mountains: Yes.

iPhone (7)sandra: So I.

Regina Santore, TN - Smoky Mountains: The most successful ecosystem is multifaceted.

iPhone (7)sandra: I have been looking at the yellow twig and red twig dogwood. As far as bark color goes, any suggestions about small trees and and bark in the winter.

Regina Santore, TN - Smoky Mountains: Tom. Well, Andrea, go ahead.

Andrea Lorene Ludwig: I don't. I don't know if this counts as bark. But I've been. I've been really kind of looking at my Oh, my gosh, my witch Hazel! And so bark. And then also like, yeah, yeah. you know, the more sense Marcescent leaves, you know, provides some of that that intrigue as well, and some you know, when it when the wind blows, the breeze blows, they kind of shimmer a little bit, and so you know it kind of gives you a little bit of interest as well. So bars, leaves, marcessant leaves. Yeah.

Tom Welborn: Ours are blooming right now. That's why we were walking around the yard today, and they were blooming. There were bees all over them. The witch hazard. Just phenomenal. Yeah.

Andrea Lorene Ludwig: And is now.

Regina Santore, TN - Smoky Mountains: For those. and pretty soon it'll be the the Linda benzo, and the the spice bush will be in flower as well, and for those who have the room for a stand of beech beech have lovely marsecent leaves that stay on all winter and can provide some screening even to some extent. So would would matrix planting also provide seasonal color? Oh, yeah, because of the grasses. Yes, a matrix planting is based on having a lot of grasses in between your forbs to support them. And so yes, absolutely. That's where your color, your your visual interest, comes from in the winter. I would highly recommend looking up Benjamin Vogt. Can someone drop some information about Benjamin Vogt and milk the weed in the chat? Please. Thanks. Okay. We're going to move on to the next one. I have several native species that are not thriving, and I'm hoping to get some advice on why dogwood not growing. Maybe it was a dwarf by accident or red bud. One of the branches died, Sweet Bay magnolia barely hanging in there. and this is somebody who knows a few things about native plants. So, Tom, do you have any insight into that.

Tom Welborn: Well, yeah, our when we moved back to Knoxville we live on a a ridge where my mother-in-law basically raked the leaves continuously. It's taken a long time to get the soils back to where they're productive, and to actually have even natives actually survive in the site. But they're coming along. It's just taking a while. It does take some effort. And and my mother-in-law was a good gardener. She just basically leaves. She didn't allow leaves on her yard she did. But the other thing is like, when you plant something, not everything is going to live. Every time you're going to plant stuff and stuff is going to die. It's it just happens. It's like you you have to. She grew up here. She knows what it takes to get her yard back, and we've got a lot of things that are coming along. We've got a very diverse yard, but it's taken a while to get things established. You need to give them some time. It does take a while to get things established. But yeah, just just give it some time.

Regina Santore, TN - Smoky Mountains: So speaking of the ecology of a tree, trees are autodidacts. Is that right? Autophagy? Autophagy? That's it. They're autophagus, right? Is that the right word. They eat their own leaves, they recycle their own nutrients.

Tom Welborn: They do. The leaves provide the nutrients over and over and over, and if you write the leaves off, you're taking all the nutrients off of the yard. You're basically, you know, and you can't supply that with fertilizer. It needs to go back in the soil. You need to leave the leaves. So yeah, that's definitely a plus.

Regina Santore, TN - Smoky Mountains: Priority. As a matter of fact, in trying to establish my baby Milwaukee Forest that I've got going on every year I steal as many leaves as I can from the neighbors who have put them out at the curb.

Tom Welborn: Yep.

Regina Santore, TN - Smoky Mountains: Yes, that brings in some things I don't want, and I'll have to go in and take them out if they germinate. But it's also given me many trees that I wouldn't have had otherwise. And so I would say, for those just starting out and trying to grow a forest leaves. Tom's right.

Tom Welborn: Leaves leaves create the soil. We need to leave the leaves.

Regina Santore, TN - Smoky Mountains: Okay, so.

Amanda Benoit: A few other things I think about with that are, if you know of where those trees came from. If they were genetically, locally adapted, or if they came from a nursery that maybe

got their genetic stock from a different area with different weather is important to consider, and also a lot of trees don't like to be transplanted. So if you bought them, and they were sort of already bigger and root bound in a pot, it can take a really long time for them to recover from that so often. It works better if you buy a smaller tree because its roots aren't already root bound, and it will actually grow bigger faster than if you start with a big root bound tree.

Regina Santore, TN - Smoky Mountains: Okay. And, Andrew, can you speak to what's going on in the soil as trees are attempting to establish.

Andrea Lorene Ludwig: Hmm! Oh.

Regina Santore, TN - Smoky Mountains: Is it like the I'm thinking about mycorrhizy, or.

Andrea Lorene Ludwig: Yeah, that's kind of so that I'm not sure I'm an expert to be talking about that specific.

Regina Santore, TN - Smoky Mountains: Anybody else. Go ahead!

Amanda Benoit: I mean, I can talk about mycorrhizae. Yeah. So a lot of trees really rely on forming these connections with mycorrhizal fungi, which are fungi that live in the soil, and help collect water and other nutrients and pass them to the plant in exchange for sugars from photosynthesis. So just depending on the soil around your house. If it's been lawn and you've been spraying fungicides, or you've just had, you know, really low plant diversity for a long time you might have really low mycorrhizal content in the soil. So oftentimes you can inoculate it with soil from a more diverse region. So you don't need a whole lot of soil, because you just need the the fungal spores in it. So if you're able to get sort of a shovel full of soil from a healthy forest and mix it in as you're planting that tree that can often provide those spores. because they can be a really essential ingredient. And there are some invasive plants that actually produce allele chemicals that will kill the mycorrhizal fungi in the soil, so like garlic, mustard is one of those, and there are several others, so if you have any of them nearby, they might actually be killing your beneficial fungi.

Regina Santore, TN - Smoky Mountains: Yes, I mean, I was going to speak to that, Jimmy Groton. Could you speak to how removal of invasive species leads to the improvement in the quality of life for our native trees. Gotta take yourself off mute.

Jimmy Groton: Sorry about that. So yeah, when when you're removing the invasive plants, you're removing a lot of, I mean, a lot of what you're doing there is just removing competitors that it helps to open up more space, provide more nutrients, more access to water in the soil, and that kind of thing light.

Regina Santore, TN - Smoky Mountains: Right. And I'm sure you've seen firsthand improvements in community plant communities.

Jimmy Groton: Yeah. And important thing with that, too, is that when you're especially if you're pulling stuff. you're leaving little pieces of root, and there's soil still, and so a lot of those will keep re-sprouting. So you gotta follow up after it. But and a lot of times it helps to when you. If you're pulling out a bunch of private things like that, it's good to have plants to plant in their place. they'll take advantage of that and hopefully out compete the the weedy species.

Regina Santore, TN - Smoky Mountains: Okay, alright, we're gonna move on to the next question.

Andrea Lorene Ludwig: Oops!

Regina Santore, TN - Smoky Mountains: Oh, wait! Wait! Do we have one more, one more comment.

Andrea Lorene Ludwig: Yes, if that's okay, can you all hear me? So I also wanted to piggyback on Amanda's. So the mycorrhizal comment, so so I can speak to the additional benefits. So so to the plant health. Obviously, that kind of symbiotic relationship is really important. And then from from a soil perspective. The other benefits of all of that happening in your soil from a soil quality perspective is that that improves the soil, overall health, and it improves like the soils. the the ability of of the soil to infiltrate water, and the structure of that soil. So all all of that happening in your soil creates creates a lot of like like residues and biomass that improve the structure of your soil, and the more that we can retain structure or re restore the natural structure of your soil, which sometimes could take a very long time, especially after a heavy disturbance. But as we improve that structure through incorporating biomass and the microorial fungi as part of that structure, that biomass. then your infiltration will increase, and your ability of that soil to hold on to water will also increase. And so so from an engineering and water cycle perspective like, that's kind of the ultimate goal is to reestablish like soils that have healthy structure so that we can maintain that natural water balance in the soil. Profile.

Regina Santore, TN - Smoky Mountains: And right, so your soil will hold water better if it has this network that is unimpaired, right unbroken.

Andrea Lorene Ludwig: Well, it will hold it more naturally. Right? So when we think better, you know. Don't think about

holding water, you know, at the surface, it'll hold it more naturally in the profile which makes that water then plant available for.

Regina Santore, TN - Smoky Mountains: Okay. So you mean, like a little bit deeper down when you say the profile right?

Andrea Lorene Ludwig: Yes.

Regina Santore, TN - Smoky Mountains: I? Okay? All right. So our next question is, how should the area? Oh, I'm sorry we have another.

Amanda Benoit: Sorry. I just had one more thing to piggyback on that. Also, if she's trying to grow these in an area with all just lawn and grass. The roots of grasses are really shallow. and so, if it is compacted, poor soil, without that good structure that the trees really need to thrive. Another thing that can help add that structure is adding more, deeper rooted plants. So adding more flowering plants that have roots that go a little bit deeper. They have those tap roots rather than just those fibrous root systems in turf grass.

Regina Santore, TN - Smoky Mountains: You know, I can picture that now. So maybe having a soft landing underneath each tree that's at least as wide as the canopy.

Amanda Benoit: Yeah, especially if you're dealing with compacted soils. I think that really helps helps trees thrive. And then also, if you're a butterfly fan, a lot of the caterpillars will nest and overwinter in those leaves, and if you have a flower bed underneath for those leaves to land in, those caterpillars can overwinter and become butterflies rather than getting mowed up.

Regina Santore, TN - Smoky Mountains: Okay. So for those who don't know what a soft landing is, the idea is that the caterpillars and the you know, the butterfly cocoons all fall down from above, and land in the soft landing where they're nice, and kept warm with their snug little blanket of leaves all winter, and which is also an excellent food source for winter birds. and the leaf litter provides food for detritus feeders that are also food for birds and other little animals. There's a lot to be said for soft landings, and you don't mow near your tree, and this is an important point that is often glossed over. You should never mow near the tree. You want to have the soft landing, so that you are not going to be weed whacking or mowing up against a tree where you could damage the bark and make your tree ill or kill it. Tom, am I correct on that.

Tom Welborn: Certainly, I think the most damage we see to trees in in Knoxville areas lead whackers or mowers. They they kill more trees than anybody else. We don't. We need to leave a buffer around all of our trees. Certainly.

Regina Santore, TN - Smoky Mountains: Okay. now we're moving on. How should the area I hope to convert to a native plant garden be prepared? The area is shaped like an irregular, elongated football. It is mostly shaded, and measures about 30 feet long by 5 to 7 feet wide. At the largest points it is loaded with roots of old cedar, birch, and magnolia trees, and has river rock for drainage toward the backside. That's very. We're going to try to make this a more general, if you don't mind that in general, if you're attempting to prepare for a native garden, what should you do? I'm going to open up to any of you panelists.

Amanda Benoit: The method that I really like that's worked for me. I mean, you'll get lots of opinions on this, and everyone always has their favorite method and dislikes other methods. but I really like to get native like local wood chips. So find a tree company that's cut down a tree in your area, and oftentimes they'll be willing to deliver those wood chips for pretty cheap or even free but if it's a local tree, it has all those fun fungi spores in it. So a lot of those mycorrhizal fungi that are really important for your garden health will be in those wood chips. and then I don't like to till or do any soil disturbance. I like to just put those local wood chips over top. Let them sort of smother out all the grass or whatever was already there. And then, when I plant, I dig a pretty big hole because the decaying wood chips can damage the young plant roots. So I just dig a hole that's maybe 3 times bigger than the the pot that I'm going to plant, and then backfill with some dirt, so there aren't wood chips directly on the plant, but that they're suppressing everything you don't want. and after a few years the wood chips are decaying, the plants are receding and spreading, and it works really well.

Regina Santore, TN - Smoky Mountains: Okay, so slow. But introducing the proper fungi. Okay. And I have had experience with the wood chip method. But I had Bermuda grass. And so this is gonna be my one plug, for please, can somebody drop the link potentially to the reddit post

that I made about Bermuda grass, about defeating Bermuda grass. If you have Bermuda grass, it's never met wood chips. It didn't love.

Tom Welborn: Why?

Regina Santore, TN - Smoky Mountains: So if you have time to read through, it is a deep dive into how to deal with Bermuda grass to properly get rid of it, so that you can put in your native plantings. But everybody has their own opinion. So I'm just going to leave it there. And who else has methods that they prefer for preparing for native plantings.

Andrea Lorene Ludwig: I'll just add, like you just mentioned, there's there's a lot of different paths to the Buddha there, right? And so, depending upon kind of what your land ethic is, whether you use chemicals or not. And you know there's there's a lot of different moving parts there. So it's almost like. We need a dichotomous key, for, like understanding what you know, what you have on site, what the pressures are. You know again, what your land ethic is versus like chemicals versus no chemicals in order to understand kind of what the decision matrix is there, so so it can get really complicated. I guess I'll throw out. Maybe a tip is to, you know, kind of kind of, you know. Take 1st assessment, you know. Maybe stop kind of mowing a small patch and kind of see what comes up, and really kind of better understand like what the seed bank really has to offer, or or, you know, in a good way, and maybe in a bad way, before you start really making big moves and and start small project phasing when you're talking about establishing a meadow it could be, you know, it could be really overwhelming to try to start, you know, at the you know, half acre or whatever you know, big size. So start small kind of kind of investigate your your current situation. Understand what your your seed bank has already in it, and then it might just be simply that you can change your mowing regime a little bit and really start to take advantage of a native seed bank that you have already, and you just don't know, because you're kind of keeping it suppressed with the mowing. And so hopefully, you have an opportunity to kind of, you know. Take it season by season, and and think of this as a very long term project.

Regina Santore, TN - Smoky Mountains: I'll agree with that. I have tried multiple methods in my yard, and my favorite so far has been just the use. Picture this to identify a plant. If it is not native here, I remove it. and if it's native, no matter if I was taught it was a weed, it gets to stay and just no mowing. When I did that in my entire backyard. Actually, it moved forward much faster toward being completely native, and had more diversity than the areas where I actually was trying to plant. Now, that's not always practical. Sometimes you must follow with planting, depending on how much disturbing you're doing. but if you have the opportunity to be slow and thoughtful, and see what your seed bank is willing to give to you once you remove the competition. As Jimmy spoke to. you'll find you might find you have a fabulous seed bank just waiting to come up. As a matter of fact, the question actually says it is mostly shaded, and I would say that in shady areas removal is probably your best bet, Jimmy, are you able to speak to that might need to unmute again.

Jimmy Groton: Alright. Yeah, I think that would be be good. But also, you know, if you just mulch the daylights out of it. That should help too.

Regina Santore, TN - Smoky Mountains: Okay, so are your ephemerals going to come up if you mulch a lot or.

Jimmy Groton: Well, maybe multi to start with. and then plant stuff into that. you know. Use some well composted tree leaves and that kind of stuff that would be better, though, if you go in wood chips you run into can run into issues with nutrient imbalances like carbon and nitrogen, ratios and things like that that you need to think about the.

Regina Santore, TN - Smoky Mountains: So, Amanda, do you also agree with the carbon imbalances in wood chips or or no, or like? What's the latest research on that.

Amanda Benoit: Oh, I don't know if I'm totally up to date with the research. But yeah, I know there are concerns with, if you're putting like really unseasoned wood chips down. They can release a lot of nutrients that can actually burn plant roots or make it like a little bit harder to get plants established in my own personal experience. I've not had that issue, but I have read about that.

Regina Santore, TN - Smoky Mountains: Okay. yeah, there's a lot of information out there that we all have to sort through. I go by Jimmy's practical experience. Amanda's practical experience. You know it. Certainly, I think, rather than the smothering methods that are used when you use plastic. I think I lean toward the non that you know the ones that are less smothering because the seed bank should be preserved to some extent, you know, whereas, you know, using like black plastic, I have had the personal experience of it killing the seed bank many inches down. and I mean sometimes that is

necessary.

Amanda Benoit: It really just depends what you're starting with. You know, there's not going to ever be. One fits one. Size fits all solution, because it just depends whether you're starting with a you know place that has a good native seed bank, or if you're just dealing with a totally invaded place, or if you have turf grass, you know it's it's going to always just depend on the local conditions, whether it's sun shade, what your eventual goal is, what your store starting point is.

Regina Santore, TN - Smoky Mountains: What time of year it is.

Amanda Benoit: What time of year it is. Yeah. So there's a lot of tools out there, and I think the best approach is getting familiar with all the tools, and then thinking carefully about your own situation, and which ones are going to work for you.

Regina Santore, TN - Smoky Mountains: Yes, I agree. We did have a side question thrown in in the chat about where herbicide fits into that equation for preparing a site. My feeling on that is probably that's personal taste. It can be right, I think. And, Andrea, you might be able to speak to this. I think herbicide could be correct, especially on a slope. What do you think.

Andrea Lorene Ludwig: Oh, slopes! That's always a thing right? So I think you're exactly right. I think the herbicide, the chemical question, is going to be very personal to everybody in unique situations. Right? I think you kind of have to listen to your own land ethic, and how you have an opportunity to manage your landscape. All of us have different resources and time and and different things to invest right? And so I think it depends on the scale of the invasive pressure that you have the amount of time you have to address things. I mean, there's so many different things. So you know, there's there's no right answer to that right? You know I use herbicide on my property. I have 10 and a half acres. I have an abundance of invasive pressures here, because it's a very disturbed kind of old agricultural landscape, and just the bush honeysuckle and the vine honeysuckle right now. Winter creeper. We've got it all right here. And so you know, as as you are kind of thinking about how you use chemicals in your landscape, I think it's a question of yeah, how much time do you have to invest? What is the pressure that you're experiencing and the scale of the issue that you're trying to address? And I know for me personally. My land ethic is that of course I have a job, and so I'm not able to be here all the time and just do mechanical removal, and it is my practice to use herbicides in a sparing way, so that it's very like pointed. It addresses. I use the cut cut stump, you know method at the right time of year to make it the most effective, and then, of course, doing it when it's not wet weather, so there's less risk of it being mobilized. And so, you know, using best practices. So.

Regina Santore, TN - Smoky Mountains: Right.

Andrea Lorene Ludwig: All of that is just a way to say it depends. There's not a right answer, and kind of you know. You have to evaluate your situation.

Regina Santore, TN - Smoky Mountains: Invasive species. Removal is another deep dive that I do recommend that everyone learn, and that's 1 of those things that we want to give many opportunities, for throughout the year through wildlands, smoky mountains. But I would direct you, anyone who is really interested in learning to correctly use herbicides and do large-scale invasive species removal, especially in woods, that they contact Ijams and become one of the weed warriors. That it's an excellent program teaching you how to do it correctly, so that you are not damaging the other things in the ecosystem that should be there. And there it's a it's a great program. So if someone could drop a link to the Ijams Weed warriors program that would be great. Okay, we're gonna move on any tips or activities we can perform during the winter months in preparation for spring.

Andrea Lorene Ludwig: I'll just say real quick, since we're on invasive species. A lot of invasive species still have some green hanging out right now, and so it's a great time to identify them. They might not be super active. But yeah, like, your woody species are kind of sequestering their energy down into the roots. So it's a great time to identify those woody species. Cut stump, and paint the stump again. Kind of using your own judgment. So it's a great time to seek out invasives and address some of those right now, and if they're not actively like the winter creeper right now is a little bit too waxy. But maybe you can identify the pressures right now, kind of try to get it contained. And then, as we kind of come out of dormancy and those invasive species are. That's why they're invasive.

They kind of start doing their thing earlier most of the time than our native species. and so then start to address what the challenges are, as they're starting to put on new vegetation that might be more susceptible to your your painting. The the leafy biomass.

Amanda Benoit: Yeah. And on that note, if they're small enough, they pull out really easy right now, while the ground soggy.

Andrea Lorene Ludwig: Yes, absolutely. There was a comment on the weed wrenches in the in the chat there definitely love the weed wrenches.

Jimmy Groton: Yeah. The weed weed wrangle season is almost upon us. The 1st one of the year will be on March first.st All around the State.

Regina Santore, TN - Smoky Mountains: Can someone drop a link to that in the chat.

Jimmy Groton: As in Tcwp. Has a bunch of weed wrangles scheduled through the year, and we we might have 6 or 7 this year. Schedule.

Regina Santore, TN - Smoky Mountains: Yeah. So there's lots of opportunities to learn to do it. So also, wild and Smoky Mountains will be doing invasive removal at the Knoxville, Botanical Gardens and Arboretum at some point this year also. So please we. We encourage all of you to get involved. It takes an army to battle these things back and defeat them. So I would say that this is a great time of year to do Bermuda grass removal. the hand removal method which to me is actually the most effective. Having done them all, it's the least invasive and the most benefit long term. other than that. That's I think those are the main things is like getting your things that don't belong out is probably your is what you should do at this time of year. It's a great time of year to do it.

Amanda Benoit: A lot of education and planning that you can do indoors, you know. So if the weather's too bad to be outside, you know. Brush up on your plant identification, start figuring out what new species you want to add to your garden. Start reading about. You know all those tools for invasive species, removal and site preparation, and just familiarizing yourselves with all the different practices that are out there, and sort of weighing which one's going to work best for your situation. So just doing lots of learning and planning.

Tom Welborn: Yeah, you can. You can plant a lot of trees and shrubs in this. This. During this time, too.

Regina Santore, TN - Smoky Mountains: And tree pruning tree prunings are right about.

Tom Welborn: Spring is, yeah, yeah. But there's a lot of activity you can do in terms of trees and shrubs this time of year. So because they're dormant, and it's a good time to put them in the ground.

Regina Santore, TN - Smoky Mountains: Okay, I would say, one last thought is live staking. Right? Andrea, yeah. So, Jimmy, have you done? Yeah, go ahead.

Andrea Lorene Ludwig: I'm here. Yeah, sorry I couldn't get back over to my. So I'm about to put in a publication link in the about planning in the chat, so I was trying to find that. Yes, live staking. You've said one of my favorite words ever yes, so so kind of speaking to the dormant. the of the woody species. Yeah, now is the time where our woodies are dormant. And it's a great time to do live staking. So live staking is a basically like an infield method of propagation. You're taking cuttings from our some dormant species that will propagate this way. They have the ability to root just from a cutting, and so.

Regina Santore, TN - Smoky Mountains: Usually shrubs, right.

Andrea Lorene Ludwig: Yes, yeah, there's about. There's, I think, well, off the top of my head. There's about a dozen kind of native East Tennessee shrubs like that are kind of riparian species that will readily propagate through life staking methods, and I will drop a link in the chat on live staking as well, and so think about like we talked about silky dogwoods a little bit in the chat as well. So silky dogwoods, elderberry button bush. some viburnums, arrowwood, viburnum. These are wonderful life-staking species, where you can just take cuttings. Willows, of course. Take cuttings from a dormant plant, keep the keep them, you know. Take the cuttings, and then do it at a time where you're going to be able to get them into their place pretty quickly, so you can put them in a bucket of water, keeping the kind of bottom half in water. Put them in a shady spot in your yard or someplace that's going to be pretty cool, and then, you know, pretty quickly try to get them into their place. And so if you're trying to revegetate an area like a stream bank or a soggy area, something that has like a seasonally high water table. These plants will start to grow roots, you know, as you stake them into that soggy soil into the toe of your stream bank and

propagate a whole new plant, and these are, you know, really suckering kind of like thicket forming shrubs, if you will, and all that biomass, all that thicket forming, you know, above ground that you see those roots are just as thick, holding your your stream bank in place. And so really good functional plants. For what could be a very challenging area, especially if you've got a stream that has is prone to erosion.

Regina Santore, TN - Smoky Mountains: Jimmy, do you have anything to add about stream, bank stabilization while we're on that topic?

Jimmy Groton: And yeah, yeah, staking is great for that kind of stuff and for wetland restoration. You can also bundle up sheaves of like willows stuff like that, and is what they call waddles WATT, LES. And stake those in along the base of the stream to get a bunch of, you know thick shrub thing going quickly, but but everything Andrew said was right on.

Regina Santore, TN - Smoky Mountains: Okay? Great. All right. Well, buzzing right along here. How about? Let's see here, what are some places to purchase? Natives, not cultivars in the Knox County area. Can somebody drop a link to our list at wild ones, Smoky Mountains? Because that's the very best. Everybody should look at the chat, and you'll find a link to all of the native nurseries locally that are not using neonicotinoids on their plants. Let's talk about that for just a second. Can anyone tell us what neonicotinoids are, and why we want to avoid them?

Amanda Benoit: They're a systemic pesticide, that if they're applied to the plants they get in all of the plant tissue, including the nectar and the pollen. So when your pollinators go to visit that plant, they will be ingesting poison. So absolutely don't want to buy those.

Regina Santore, TN - Smoky Mountains: How long does it persist in the plant.

Amanda Benoit: A long time. I don't know the exact length.

Regina Santore, TN - Smoky Mountains: Very long.

Amanda Benoit: It's a long time. Yeah.

Regina Santore, TN - Smoky Mountains: Right. So in in your nursery you do not use neonicotinoids.

Amanda Benoit: No. no.

Regina Santore, TN - Smoky Mountains: Why would someone use neonicotinoids on native plants for sale?

Amanda Benoit: I would say it would just be for profit, you know, it would just be to reduce any pest damage in the nursery, and so that they have, you know, completely healthy, uneaten looking plants for sale. But if you're smart about ecology, you know that plants are an important part of the food web, and you want things to eat them.

Regina Santore, TN - Smoky Mountains: Right you should be shopping for native plants that do have holes in them. Is that accurate.

Amanda Benoit: Yeah, that means they're part of the food web, and they're supporting wildlife.

Regina Santore, TN - Smoky Mountains: Okay, Tom, do you know, are trees sold? Having been treated with neonicotinoids.

Tom Welborn: No, they typically are not. It's basically your perennial, herbaceous things that are treated. No, trees are not treated with that I know of, and certainly not sold that away.

Regina Santore, TN - Smoky Mountains: Good. We're on the subject of how to buy a plant. How is there a better size, or age, or tree, you know, like for trees to be purchased like how the roots should be.

Tom Welborn: Well trees, you know the smaller trees are fine, in fact, they they catch up very quickly, though one or 2 year old. We, the reason we plant larger trees typically is to prevent damage. Like the trees we plant at trees. Knoxville, we typically plant 2 and a half inch diameter trees, because to prevent damage from mowers or.

Regina Santore, TN - Smoky Mountains: Human.

Tom Welborn: All kinds of things. Yeah, when we do it at schools, we do not plant small trees because of the kids. But anyway, that's the only reason, but smaller trees they they rapidly catch up with in terms of growth. So smaller trees are fine, they're cheaper, and they certainly, if you take care of them. They grow very quickly.

Regina Santore, TN - Smoky Mountains: Okay, do you recommend that people get trees from Arbor Day and the other events that are happening that are either giving away or selling young trees.

Tom Welborn: You know. Yeah, I've gotten them from Arbor Day. I've gotten them from the Tennessee Environmental Council. It depends on who takes care of the trees. How well they survive! because, unfortunately, they go through a process when they're distributed, that they can be damaged in the process. But and of course, trees. Knoxville gives away trees as well. If you can get a tree that's in a pot, it's probably best. If it's a it's a bare root. You're 50 50 chance of it surviving, anyway, the better it's maintained or kept moist, the more likely it will be to survive. But most of these trees are pretty hardy. And if you, if you can find a tree. I yeah. And and certainly our nurseries around here actually provide pretty good stock in terms of trees to to purchase, so.

Regina Santore, TN - Smoky Mountains: Okay, we have a question is, tree day, March 14, th 15, th safe. Tennessee Environmental Council fundraiser.

Tom Welborn: Well, that was my point about them. I it's a great program. I've gotten trees from them before. Some of them have been really viable, but some have not been, and I think it's a great program. I don't want to discount them, but it depends on who you're getting those trees from how well they're maintained and how they're kept alive during the process.

Regina Santore, TN - Smoky Mountains: Okay, all right, we're gonna move on. I see. Jimmy Tucker's joined in talking with us a little bit here. That's great. So we have a question about what are the best online companies for seeds? Anyone have an experience with purchasing seeds online.

Jimmy Groton: Roundstone is very good.

Regina Santore, TN - Smoky Mountains: Roundstone native seed in Kentucky would be our recommendation from our chapter. Someone could drop the link to Roundstone. That would be great, and also the link to trees. Knoxville, that'd be great. So just just from our previous discussion. But yeah, so roundstone native seed is probably our most local largest producer of native seeds, and some of our leadership actually did tour their facility a couple years ago, and saw how they do what they do, which is extremely carefully done, and is a 2 year process to produce seeds that are regionally viable and not just locally viable. And they are. They're absolutely excellent. And we suggest them, you should familiarize yourself with how to properly seed. If you're going to do a large area, and that's a discussion for a different day. It's easy to waste seed. I'm sure there are people who could speak to that as well. So you want to be careful. But okay and native plant rescue squad now has some seed. Also that would be very local seed the T. Dot milkweed packets. That's been another suggestion. I think maybe the last year's group was duds. But hopefully this year's are going to germinate. We had not great success with the previous batch, but and then Prairie Moon is in Minnesota, and so the issue there is that their seed isn't regional for us, and it's not that it doesn't grow. Some of it does, but you may have better success with roundstone native seed, because they are closer to our Ecoregion. It's not that we dislike Prairie Moon. Maybe some things that you really want are only available from Prairie Moon. I don't know but I would encourage you to look locally, you know, closer to home whenever possible. Would you agree? Panel? That's it. Yes, they're nodding. Okay? So.

Steacy L, President Smoky Mts Wild Ones: I have.

Regina Santore, TN - Smoky Mountains: Okay, go ahead.

Steacy L, President Smoky Mts Wild Ones: Have one other recommendation, too, and that's I'm going to drop the link in the chat that generates some buzz from the Tennessee Environmental council curates some pollinator mixes, and they are curated from Roundstone, but they are all endemic to Tennessee. So they would work really well for you.

Regina Santore, TN - Smoky Mountains: Okay. we have a lot of privet Vinca English ivy on our property and neighbors

property. We're leaning toward the cut and poison approach to much of the privet. What do you think about that? And are there times of year when you should not use that method.

Jimmy Groton: Private usually pulls up pretty well if you, you know, want to do it with an uprooter or a weed wrench.

Regina Santore, TN - Smoky Mountains: If it's a 2 and a half, 3 inch caliper.

Jimmy Groton: No.

Regina Santore, TN - Smoky Mountains: Weed wrenches will handle that. They're they're heavy. Wow!

Jimmy Groton: But the the cutting and daub method is. you know, it's a laborious but it it doesn't waste herbicide, and there's no collateral damage. Okay? And you can get something called a buckthorn blaster. Yeah, that's.

Regina Santore, TN - Smoky Mountains: Basically like a Bingo dauber and.

Jimmy Groton: a isma.org.

Regina Santore, TN - Smoky Mountains: Yes, if someone could drop the Naisma link in the chat.

Jimmy Groton: In laser species, Management Association.

Regina Santore, TN - Smoky Mountains: Yes, nasma.org and they sell the buckthorn blasters, and it comes with some blue dye that you should not get on. You ask me how I know that.

Jimmy Groton: I'm good at that.

Regina Santore, TN - Smoky Mountains: That you can put in with your herbicide in the buckthorn blaster so that you can see where you have poisoned. And this is important. The other thing you should know about poisoning in a nutshell is the soon as you cut. You should be poisoning immediately. Don't wait because some things are able to seal up the the cut quickly. Okay. So we have any other. you know, Vinca and English ivy. What are your favorite methods for removing that.

Jimmy Groton: I saw us talk Steve Manning with invasive plaque control. They They rolled up the ivy into balls like they're making snowmen. and then they just left him, and they They didn't reroute. And and then eventually they, you know, decomposed and.

Regina Santore, TN - Smoky Mountains: Okay. So so the removed, the pulled off English ivy did not have to be hung up or kept off the ground.

Jimmy Groton: No, if it's grown on a tree, it's good to. you know. Cut it as low to the ground as you can, and cut a section out of it. and then treat it. Hmm.

Regina Santore, TN - Smoky Mountains: Okay, so treat the stump of the English ivy and leave the English ivy that is stuck to the tree on the tree.

Jimmy Groton: You can do that, you can pull, pull it up if you want.

Regina Santore, TN - Smoky Mountains: Right. So I would say I would worry about damaging the bark, Tom, would you want to speak to that?

Tom Welborn: Yeah, as far as vine removal. Yeah, you want to cut a section out. You don't want to cut into the camion layer. You definitely don't want to damage the camion layer for the tree when you're removing vines. But removing vines are very critical here in Knoxville. It's unbelievable. The amount of English ivy that's in trees. and the potential for it. To actually pull the tree down is very significant, and we don't think much about that. But English ivy is a very invasive plant for trees, and we should try to remove those from our trees.

Jimmy Groton: Yeah. Winter. Creeper, too.

Tom Welborn: Yeah, you're right. Yeah. The creeper is another one.

Regina Santore, TN - Smoky Mountains: Asian bittersweet, her Oriental.

Jimmy Groton: To.

Regina Santore, TN - Smoky Mountains: I've seen that one make whole sections of trees just crack right off and fall off.

Tom Welborn: Right, yeah.

Regina Santore, TN - Smoky Mountains: Yeah, very heavy. And I would say one final thing, the question about Vinca. Like many vines, they're often the plant that ate Manhattan underground. It looks like many plants, but it might be one or 2 plants. And so a method that some people use is called glove of death, if you will Google, that you'll find that basically, you're putting on an impervious glove and you put the herbicide on the glove. And then you want to wipe the vines along from from their thickest place to the tip. trying to get the herbicide only on the underside of the leaves ideally, and then not letting it touch. You know other plants that you care about. Certainly, while it's drying. and this will take the herbicide into the vine and take it down to its stored food areas, the the vines that are bigger in the ground than what you see on top. And it will take that herbicide down and and kill the majority of the plant without you disturbing the soil. Ed. Does anyone want to speak to whether or not you agree with that?

Amanda Benoit: Oh, I just wanted to add a comment that with a lot of these invasive vines, they have really waxy coats over their leaves. So spraying is often ineffective. So these methods, like the cutting and the brushing or the glove of death, are way more effective. And someone put in the comment. And I think it's important to note that these different herbicides have different temperature ranges, that they're effective, and a lot of them need to be warmer than it is at present. So just make sure you're reading the label of whatever you're you're applying and making sure that you're in that correct temperature range, and that, you know ideally it's a sunny day, and not going to rain for the next at least 48Â h.

Regina Santore, TN - Smoky Mountains: Oh, we have a we have a hand up, Jared.

Jared H., Secretary Smoky Mts Wild Ones: Yeah, I just have a new question. Whenever that time comes.

Regina Santore, TN - Smoky Mountains: Oh, okay. So Jared is our secretary. And do we have any other speaking about? It? Looks like we have some other questions about invasive species coming up. So let's move on for a second. And, Jared, why don't you throw your question in there?

Jared H., Secretary Smoky Mts Wild Ones: Sure. So it's not really directed to invasive species. So sorry to mix it up a little bit, and this is one that's more framed towards Dr. Ludwig. But if anyone has any sort of in biased information, I'm I'm welcome to have it. So. I live in an Hoa, and we on our. In our community we have 2 retention ponds, and from what I've been told by the Board having these maintained and cleared out, is a costly expense for for the association with them already being financially strained, I was hoping that there might be a way to do some sort of installation and to help with that. Is that something that is, you know, feasible, possible to do like a native plant installation into retention ponds. And if so, what might be the best way to to approach that the best practice.

Andrea Lorene Ludwig: Yeah, great question. So so a little bit of yeah context. So as you mentioned, yes. So you're in an hoa, that means well. And and there's stormwater infrastructure that is present on the site. So that means that that infrastructure is actually on a plan. An engineering plan that is housed your local government, whether you're in the city or the county, or wherever you are like. There's a plan there. That's basically, you know, the same kind of plan that kind of like outlines. Your lots also contains a layer in that plan that describes the infrastructure that's on site to manage the Stormwater runoff. So anytime that there's a development that is in a jurisdiction that has, you know, a stormwater permit. Then, you know, it's it's required that the stormwater infrastructure is designed in a certain way to maintain the hydrology on the site that's not going to affect, you know, downstream communities in an adverse way. So so the 1st thing that I would recommend is, you know, always make sure that you that your hoa is aware of that plan document, and and where that infrastructure is associated with that plan document depending upon the local jurisdiction and the time that it was permitted, there would be what would be called an operation and maintenance agreement associated with that

infrastructure. And so that's probably what your hoa is working off of is that O. And M. Agreement with the municipality. and it, it would indicate. You know what kind of maintenance is required, and what the frequency of that maintenance is. And so look to that operation and maintenance agreement to understand kind of what those that minimum bar is. So all that said, yeah. So that that green stormwater infrastructure, including that retention pond right, is, is maintaining a a discharge or a flow coming off of your subdivision, your your neighborhood, at a rate that's not going to basically flood, downstream or blow out infrastructure or culverts downstream right? And so that's what that pond is there to do is to take that. added Stormwater runoff. That's coming from all the properties, collect it in a big pool and meter it out at a discharge rate and at a volume and a velocity that isn't going to cause adverse effects downstream. So so kind of understanding all that, you know there's functionality to it. There's probably some like legal ramifications of what your your operation and maintenance needs to be based on your municipality, and that O. And M. Agreement. So, knowing all those things getting to the question of, Can there be some sort of native plant establishment in your retention pond that would help with some of that that maintenance. I love the context of the question right? So we understand that right now I assume that the management is probably just mowing the space as much as possible, depending upon the design of the pond you mentioned that it's a retention pond, so that would indicate that there's a permanent pool of water there during the year, and versus a detention pond, which is, it just detains water and then goes dry in between storm events. So retention versus detention. So retention pond, meaning, yeah, so that there's a permanent pool of water. So so I kind of assume. Like most hoas, it is expensive to maintain kind of these common ground areas. And so, unfortunately, as we see in a lot of public spaces. The easiest thing is to do the low blow go, type, approach. So you mow right up to the edge of until the the mower is going to get stuck in the soggy parts right? So I would encourage you. So so I think the implication here is that if we can maintain a native plant community in kind of those wetter zones, and perhaps even up some of the slopes. Then that might be less of an expense in mowing. Of course we have to think about that would also necessitate that whoever's maintaining that space can do something more than just mow right? So I would encourage you to work with your hoa to understand what kind of landscape professionally they have on board. And do they have the skills to understand how to take care of a native plant community. To begin with, right? Obviously, that's going to take a skill set. That is unique, right? And then the other the other 2 final things I know I talk a lot 2 final things. So I would get with your local stormwater program. So if you're in the city or the county kind of get their take on what they allow in these practices in terms of vegetation maintenance, and have a conversation. I think that there's a good push with a lot of our municipalities, that they are understanding the value of having a native plant community. So I don't think it would be out of the question. I think that it would be a good conversation for you to have so ultimately, it would depend on being in agreement with your local municipal government, your your Ms. 4. Permitting entity that you can manage the space in a certain way if you're wanting to change it from how it, how it is, just making sure that it's that y'all are on the same page with that, because you don't want to be in violation. So that's a great conversation to have. And then, secondly, what was my second thing? I forget what it was. Oh, oh, I know so the important part! So if it is allowable with your Ms. 4, if they're open to the idea of having some emergent vegetation, some native plant community down in the base of your of your retention pond. They're probably going to say that make sure that you don't have woody species coming up in the non-native soil slope areas, and especially in the kind of like the berm, the downstream end of that retention pond. Those are things where, if you have big trees and big roots going through them. It can undermine the integrity of that, that berm or that non-native soil, and be an area of failure, and that that would be what they are, you know, trying to limit is any risk of failure of that practice. So I know that's a lot. But I hope that helped.

Jared H., Secretary Smoky Mts Wild Ones: No, I appreciate it. Thank you.

Regina Santore, TN - Smoky Mountains: I would say that growing native species in your retention or your detention could be done. But you do need to learn how to remove invasives how to spot them. Remove them early as well as your other woodies, as Andrea mentioned, and so you know, maintenance of, and this is something we haven't touched on yet, but native plantings do require maintenance. This is maybe the number. One thing that I did not understand when I embarked on my native plant journey is that because of a concept called succession, where open land will go toward grasses and then flowering plants, and then shrubs, and then trees, pine trees first, st and hardwood trees. After you know this is, you have to. You have to involve yourself to hold your whatever it is that you're maintaining at the place in succession where you want it to be. So you have to learn the plants. Would you agree with that? You have? You have to learn to identify them.

Andrea Lorene Ludwig: Absolutely, you know, as with any gardening and landscape, right? You have to keep out the invasives. So 2 more quick thoughts, you know, just kind of as like riparian areas. These, these retention pond areas detention pond areas. There's there's so much of an artificial thing happening there with the hydrology that it does kind of lend itself well to these invasive species, being able to overcome some of the challenging kind of hydrologic and soil, moisture, condition fluctuations that are happening. The invasive species can tolerate a lot of that kind of disturbance. Right? And so they kind of are just like thriving in these areas. And so kind of yeah, definitely keeping keeping that at bay is really important. And then,

secondly. you know, thinking of this, the retention area in particular, the comment about, can it be kind of like thought about as a rain garden design? It depends on the design of the system. So if so. so, you can think about that, that retention pond. You can just see the height of the embankments that are there. Sometimes, you know, they're 1012 more feet. Think about when that system retains water, and then it meters that water out over 48 to 72Â h. The amount of of inundation and kind of the stress that we put on different plants thinking about putting in kind of your most resilient hardy plants in that condition, because, again, it's a very like manmade hydrology there, and you know not just all rain, garden, rain, garden plants that can take, you know, some some root inundation, and maybe some crown inundation. These plants will need to take. You know what could be feet of water on top of them, and then some dry periods in between. It's a very extreme hydrology that they're having to deal with. And so thinking about plants that are going to be that robust is really important.

Regina Santore, TN - Smoky Mountains: And that that is a case where you might consider just continually doing non-native removals in in that section and saying, Don't, please don't mow this area. Just let us. We're just hand removing anything that does not belong. And we're going to see what decides to live here on its own. That is native. It's a great method. I've done that with my small catchment, and the path Rush moved right in and was perfectly happy, being completely inundated for 72Â h or more did not care. It seemed to like it, you know, and and so yes, there are methods that beyond the scope of this call to handle these particular issues that we need to move on to another question. So tree trimming tips. Tom, can you speak to that?

Tom Welborn: Yeah, yeah. In fact, I was looking back today. You know, we have people coming around always wanting to cut down trees and want to trim trees. My suggestion, if you can't get an arborist, at least get somebody that talks the right talk. Don't. If you got somebody who wants to top a tree, tell them to move on to someplace, else pruning trees is is a process that's take some skill. We at trees. Knox will actually

provide some training in that talk to extension. Lee rumbles is a a real good source in extension with with Knox County. Now's a good time to look at trees in terms of pruning. You want to take out those that are cross branches that are crossing and remove dead limbs. Those kind of things. It's it's important to do it. It's it's But it also takes some skill. And and I would. There's plenty of information in terms of the right way to prune and what to prune. Master gardeners, master master gardeners are certainly.

Regina Santore, TN - Smoky Mountains: They have an excellent series. In fact.

Tom Welborn: Do for pruning trees, pruning.

Regina Santore, TN - Smoky Mountains: Knox County. Master gardeners have won, I think, an international award for their series on how to prune.

Tom Welborn: Yeah, they have. And.

Regina Santore, TN - Smoky Mountains: If anyone can drop a link to that.

Tom Welborn: Yeah. It's a very good source of information on how to prune, but pruning takes some some skill and some effort to learn how to prune and what to prune the one thing about it most times you can't damage a tree unless you're taking the top out of it. You don't want to take the top out of a tree or shrub either one. But pruning is something that needs to be done on a lot of our species. But other than that. But there is a lot of information there about how to prune and properly prune.

Regina Santore, TN - Smoky Mountains: Okay. So we're going to try to buzz through a few that we've kind of already touched on. But I want people to think they got ignored. Okay, so just moved to Tennessee. My new backyard is a blank slate that gets morning sun and not much shade in the afternoon. Where do I start? Want to use native plantings? You're going to want to look at full sun. Probably dry conditions is my guess plants. You want to look at our list of nurseries. I might consider winter sowing as a method to raise your own plants. If you can't afford to buy all of the plants to fit in your setting. You're going to have to determine the height of things that you want. It's a lot of it's a it's a lot of research. There are some great books out there right now. I would look the Deball and Cox. Can someone drop a link to the Neil Debal and Cox book about prairie plants which are actually believe it or not. Tennessee meadow areas would be more or less like a lot like prairie. So many of those plants are overlaps. And so that book is really good for that. You might want to read up, generally speaking, on native plants, for called. It's called ridge and valley. That's primarily where most of us live who are in East Tennessee and looking on. Oh, gosh! I think you would want to join our chapter discussion group on Facebook or join native plant gardening on Reddit.

It is a learning curve. There are so many plants and so little time to teach you every one. So we we try every month. But I can't. We can't do that in this call, but you know we encourage you to check out some of the resources we're supplying and and join us every month. So the next thing

Amanda Benoit: Sorry can I jump in with a quick.

Regina Santore, TN - Smoky Mountains: Sure. Yes.

Amanda Benoit: That question. Okay? Also, at Appalachia, Flora, we try to make a really easy, quick starter kit for people who just want to start a native plant garden, but don't have the time or energy to do the research. So we offer a tray of 32 plants, with a mix of 6 to 10 species that are all pretty generalists, easy to grow, provide good wildlife resources. So those will be available soon. You can just order that@appalachiaflora.com, and then it'll be ready for pickup at the ideal planting time. And that's a great way to get started if you just want plants in the ground, but don't have time to really figure out all the other details.

Regina Santore, TN - Smoky Mountains: That's true. It's nice that some of our nurseries are making making it a little easier for you, and, like they said before, not everything is going to live. And so you just have to. It's some, sometimes a bit of trial and error. Okay, so we have any tips on getting rid of English ivy in a rocky forest. I would suggest glove of death, and, like Jimmy said, You know, grab that ivy, and pull hard and roll it up and let it die. Anybody have anything else quickly for English ivy? Alright! Then we have. Oh, go ahead!

jamestucker: So you know all the power to if you want to tackle yourself. But if your budget will allow. there's some great invasive species removal companies that that are part of our community. They do a great job. Cover a lot of area in a very short amount of time. So just something to think about. Don't get frustrated and give up.

Regina Santore, TN - Smoky Mountains: You can always. Can. You drop some, maybe some links to, if you can remember the names of any of those that would be fabulous. By the way, that that was Jimmy Tucker. Y'all he had to miss the 1st part of the call to some extent, but now he's here, and we're glad to have him. So let's see, we have. Let's see what are the best native plants to plant between a road and an old cemetery without headstones, lots of trees, not much sun. And then there's another question after that about what do I do about milkweed aphids and milkweed tussock, moth caterpillars. They destroyed the milkweed plant before it had a chance to survive. So we get 2 different questions. I'm not sure we can speak to the old road and cemetery. Does anyone really quick have any thoughts on that one? Yeah, I think we would have to have more information about that to be able to be helpful, but as far as the milk go ahead.

Amanda Benoit: Oh, sorry. I just want to say, if people want planting advice, feel free to reach out to me at Appalachia, Florida, and I can get more details and give you something. Idea.

Regina Santore, TN - Smoky Mountains: That's wonderful. Thank you for volunteering that you can drop the link to Appalachia, Flora, please, in the chat. And so what do I do about milkweed aphids and milkweed tussock, moth, caterpillars, destroying my plant before it has a chance to live. you have to buy several. I don't know, because they're supposed to be there. The milkweed tussock, moth, is native, and needs to eat too. I don't know. It might not be dead also. Do you. What do you think? Panel.

Amanda Benoit: I would say that those are native insects and your native plants. And the problem is just sort of getting that balance. So making sure that your plants are healthy and not water stressed will be really good for.

Regina Santore, TN - Smoky Mountains: Of course.

Amanda Benoit: Upping their herbivore resistance. And just the more you build out your native plant community the more natural predators you'll get, and the more imbalance those herbivore plant relations will become, and you won't need to worry about it. So I would say, the more you try to interfere and fix it, the longer it's going to be an issue. Whereas if you just sort of focus on creating a healthy community, it tends to sort itself out.

Regina Santore, TN - Smoky Mountains: That has been my experience as well. I focus on trying to improve the whole ecosystem. But I do think that sometimes, because milkweed certain times they just glom on right. And then, all of a sudden, all 5 of your plants are bare, and so it it may take, having many plants. many, many milkweed, and there are people here who

can help you to get more. So should I plant River Cane near my small stream, or will it get out of hand. Anybody want to speak to River Cane River Cane, by the way, is, I believe, a bamboo species that is native to East Tennessee.

Tom Welborn: It. It is. It's it's it is fairly. But that's not say you shouldn't plan it. I think it's a great plan.

Amanda Benoit: I would agree. It's a really great native. It can provide really good bird habitat.

Regina Santore, TN - Smoky Mountains: Chat.

Amanda Benoit: Some things to keep in mind is it can be a fire risk. It's fairly flammable. You wouldn't want it too close to a house.

Regina Santore, TN - Smoky Mountains: No.

Amanda Benoit: Also livestock really like it. So if there are any livestock in the area, they may just demolish it.

Regina Santore, TN - Smoky Mountains: They will eat it.

Amanda Benoit: Cows or horses or goats will eat it and just destroy it.

Regina Santore, TN - Smoky Mountains: Interesting. Okay, I would appreciate ideas for small native trees. Besides dogwoods I can plant on my sloping backyard, which faces west-southwest full sun. Ouch! I'm thinking it is, anyway, if it's west, southwest doesn't say about the sun, but it is sloping, and west southwest may dry and probably hot. Any ideas for smaller native trees.

Tom Welborn: Well, certainly, Redbud, but we'll grow most anywhere.

Regina Santore, TN - Smoky Mountains: Prunus ceratina, the black cherry.

Tom Welborn: Black cherry will grow.

Regina Santore, TN - Smoky Mountains: It will grow anywhere, and it is a keystone species, one of Ptolemy's keystone species that supports an unbelievable number of species. had hundreds so.

Tom Welborn: There's also also several hawthorns that will probably grow as well, but.

Regina Santore, TN - Smoky Mountains: Okay. It's hard, because that's a very dry setting. I think you might also look at Sumac. Some Zoom Apps are beautiful, I mean, I think all of them really are.

Tom Welborn: Yeah, sumac will definitely grow there. Most people think it's weedy looking, but it it will do well.

Regina Santore, TN - Smoky Mountains: You know they trim up. I have trimmed. I've pruned and trimmed mine. It's stunning. so I think they're very underrated. They are used in Europe as ornamental focal point species. So we could be doing that here. They're just underappreciated here, but they're

tough and they aren't. You know. They aren't going to give up just because it's a hot, dry hillside.

jamestucker: I've got a fringe tree and a red buckeye in full sun that's doing fantastic.

Regina Santore, TN - Smoky Mountains: And what was the 1st one.

jamestucker: In the street.

Regina Santore, TN - Smoky Mountains: A fringe tree in dry, full sun.

jamestucker: Oh, yeah.

Regina Santore, TN - Smoky Mountains: Okay? All right, I have one that's on a western side of my my little Milwaukee forest, and it is probably a drier location. It's a slow grower. whereas the red bud and the black cherry will be fast, the sumac will be fast. So how do you feel about your fringe, and your buckeye, fast or slow.

jamestucker: So they were very small when we planted them fringe trees growing at a decent rate. The buckeye is pretty slow.

Regina Santore, TN - Smoky Mountains: Hello!

jamestucker: I also have a chokeberry, and I have winter berry also that are doing fine, and I mostly.

Regina Santore, TN - Smoky Mountains: We.

jamestucker: Full sun, dry location.

Regina Santore, TN - Smoky Mountains: Okay, hopefully, that's helpful to our person who posed that question. We have a question on easiest, littlest way to get started for our Garden Club. Some members know everything, and many don't know where to start, so anybody have any thoughts on that. It's I think it's a matter of starting. I would say, having your more knowledgeable members volunteer their knowledge to teach your new members. That's what we've been doing with our chapter is trying to just see where you know where's kind of the spot where the the most people are, which is oftentimes they're kind of new, and it's on, you know, on the beginning end of knowledge. And so we have stepped up to say, Here's what we know so far, and teach within ourselves until everyone is brought up to a little bit higher level, and you can begin doing a little bit more. But that building that base of knowledge, maybe having everybody do presentations for each other. They have to do a little bit of research on a native plant and present it to everybody else. It's not hard. Everyone can do that. And, you know, just do sessions where you just educate each other, based on research that you each elected to do that might be one thing to do any anybody else. Okay? Oh, and picture this. That's another thing. It's a good moment to speak about apps that can help you to learn your plants. Picture. This is free. I know you've downloaded a picture of this, and you've encountered a pay screen. You're like this is not free. Yes, it is so. You have to look on the pay screen for the white X in the corner, or the word cancel in the corner, or something like that, and if you press that the pay screen goes away. It absolutely is free. It does save all of your plant things that you've taken pictures of. The reason I I highly encourage picture. This is because if you scroll down on the result. you will get a map of the world showing where that plant is native to now is, picture this perfect? No, there are times when it has gotten it wrong, and you'll begin to as you keep doing this. Learn. And you're like that doesn't seem right, but it is the most accurate that we have seen so far, and I know many of you are saying. But what about inaturalist. Well, inaturalist has its good points and bad points. It does not necessarily easily tell you. If something is truly native or not, it doesn't tell you whether someone planted that in their yard or not. Oftentimes they have failed to check the the box that says that they actually purchased that plant. and it often does not have. Each entry is not, has not necessarily been vetted by other people who know what they're looking at. and so inaturalist has its place, and I do encourage you to start using inaturalist and putting, as you go out into the into nature. put your your discoveries into inaturalist, so that because that body of knowledge is being used by scientists around the world. you are absolutely contributing to a worthwhile endeavor, if you put your fines into inaturalist, but as far as day to day, just identifying the things in your yard picture. This is more practical. I use it so much that I did pay for it, and I'm happy to have done that. Go ahead.

Amanda Benoit: And say that Inappros does have a companion app called Seek which you don't actually have to take the pictures and upload them to inaturalist, but you can just hold your camera up to the plant, and it will give you the Id. And then, if you want to take the picture and upload it to inaturalist you can. But if you're more so, just in the garden, wanting quick, Id seek might be a better option than inaturalist. I haven't used picture this, so I can't compare the 2. But.

jamestucker: Yeah, Google lens also works fairly well. I like seek better. But in a pinch Google Lens will also provide some answers. And Regina, I wanted to add one thing to the person who asked the question about the garden clubs and how to get started. You know one thing that I hope more people will take advantage of this. I know Overhill Gardens. John Mannion offers some wonderful classes.

Regina Santore, TN - Smoky Mountains: My wife and I have done several how to build a Bulg burn classes.

jamestucker: There's there's multiple classes that right for people who are trying to get more knowledgeable. So yeah, that's

something like like to add on.

Jennifer Borth: What was this? Who's the sponsor of that again? Sounds awesome.

jamestucker: Overhill Gardens. which is out in. I guess it's technically bon, or I mean, it's it's way out there.

Jennifer Borth: Yes, I saw that on the list that Regina pointed to. Okay. I saw the name. Thank you.

jamestucker: Yeah, if you if you go to their, I think typically on their Facebook page, they list the classes out for the year. But we've we've attended some just fabulous classes, and John is an excellent teacher, extremely knowledgeable.

Regina Santore, TN - Smoky Mountains: Yes, I think the wonderful ideas I love having this, the group group thinking on all these things. It's wonderful. We have a question about seeding. It is Where did it go? what is the best method and success rate of planting with seeds into an existing landscape area that contains mulch. This is covered with arborist mulch. After grading during new construction. the mulch is slightly broken down. After 4 years, part sun, clay, soil go.

Amanda Benoit: I would say, it really depends on the seed you're using what species it is. And I think somebody's microphone is on.

Regina Santore, TN - Smoky Mountains: And it's great being an echo.

Amanda Benoit: just wanted to throw that out there. So yeah, if you have a bigger seeded species, then it might seed through the mulch just fine. If it's a smaller seeded species, it might struggle. It all just depends on the species you're hoping to use, and a lot of our native species do need cold stratification over the winter, so make sure you look up whether it needs to stratify in the cold, and if so, for how long, or, if you can direct. So in the spring, if you want the best germination results, I'd say, germinate in a tray and then transplant But you can always try just seeding a small area and see how it goes.

Regina Santore, TN - Smoky Mountains: There's a it can often be quite difficult on a slope. Andrea, can you speak to seating on a slope.

Andrea Lorene Ludwig: Yes, sure, yes, so obviously like a slope is a challenging area, because you broadcast seed if you don't really get that like good soil seed contact, and that stickiness happening when it rains, it just kind of ends up washing down the slope, and you end up with perhaps a nice lovely planting at the bottom of the slope, but not necessarily anything on the slope itself, and so really just trying to create some sort of roughness on the slope, so that seed soil contact happens, and that seed stays in place, and so oftentimes this will involve some sort of adding biomass of some sort right. And so, whether that's a straw cover or a light mulch, or or some erosion control. 100% biodegradable erosion control, fabric or matting that will help with that that seed soil contact, creating that roughness. So even if it rains, then that seed might get washed a little bit, but it still kind of stays in place, it finds a little crevice to really get caught up in that like roughness, or that biomass there so kind of getting back to Amanda's point and nuance of it kind of depends on the seed and the robustness of the seed. You don't want to use too heavy of a mulch for some species, because it might not be able to to get through that. So just some caveats there, but thinking about like how to create a more rough slope. So if it does rain, that seed is kind of caught in something there and gets that soil contact. maybe even like little terraces, you know. You know, creating little You can use all sorts of things. I've seen people kind of waddle up biomass cuttings from their yard, waddle them up and create little speed bumps, you know something like that to help keep the seed on the slope itself a source for the mat. Good question. So so a little bit about the mat, so you could source like a jute mat, which is a little bit lighter versus like a coyer fiber mat. Sorry? And I guess, yeah, jute or coconut fiber coir matting some sources. so I wish I had a really robust list off the top of my head, but I know, like in the Knoxville area, for the coyer fiber matting, and even some of the jute fiber matting, there's a couple different companies. They're basically erosion supply companies would be what you're looking for. So like. There's a company called Erosion Supply. Off Rutledge. They carry various degrees of matting as well as Gin Hill is another kind of erosion Supply company with a whole lot of kind of bigger products, and so they will carry the coyer fiber matting, and sometimes some of the jute matting. Those are the 2 off the top of my head. I'm sure that there are more in the area, and I should have this rolodex in my head. But but yes, looking to the Erosion Supply Company just number one thing, making sure that it doesn't contain that filament, that plastic netting that we see so much. Just it. They have claimed that it photo degrades it does not. You know. It sticks around on your site forever. It traps all the critters, and we don't want that.

Regina Santore, TN - Smoky Mountains: Okay, so we're running out of time. We got to buzz through here. We had a question

about growing lyre, leaf sage and pussy toes as ground cover their temps are failing, even though it grows wild in their area. Maybe your soil or moisture conditions are not optimal for those. There are many other options, and you might want to shoot a question over to Amanda to talk about your setting, and she might be able to come up with some solutions for you. So then, beyond that we have. I have a yard in the suburbs with very few plants. I'm trying to create a native plant creature in human friendly space. You know Jimmy Tucker has one of those. Jimmy, can you talk about what it is that you did? Sure? You know, I.

jamestucker: I spent a lot of time on my own researching and and getting a plant list together that I knew would be aesthetically pleasing. 1st off, and then I actually hired a designer to work with come up with a plan. Throughout that entire process I shared that with my neighbors extensively talked about why I was doing it. What was the reason for doing it? And I got very good review or very good feedback with them so, and just encouraged other people to to join in, and, you know, offer. I offer seed to my neighbors if they're willing to take it, to start their own plantings. But yeah, I you know I've kept things. I try to keep things neat and orderly, obviously as large as my landscape beds are. It's sometimes hard to do, but it it's doable. You just got to put a little effort into it.

Regina Santore, TN - Smoky Mountains: I know he's not on our panel, but I'd like to ask Jared to speak about his native planting in his hoa in his own yard.

Jared H., Secretary Smoky Mts Wild Ones: Sure. So my situation is actually very, very similar to Jimmy's. But I did mine sort of out of the necessitation of being in an hoa, and when I was very new to the native plant movement I'd heard lots of horror stories about, you know. native plants and hoas mixing very poorly, and I wanted to avoid that as best as we could save ourselves headaches in the future. And so. like Jimmy, I worked with a local designer in order to come up with a good layout of plants that I wanted to use. that looked good, and also did as much as I could for the environment with the space that I had. As with us, being an Hoa, it is a little bit of a smaller lot, and so I had to kind of, you know. Give it as much punch as I could, and I took the same route with Jimmy as Jimmy. Did, you know, trying to let the neighbors know. Hey, this is what I'm planning to do, and these are all the the plants that I'm going to use. This is what they're going to look like, you know, try and garner interest feedback whatever I could to make this a dialogue, basically because I feel like the issue with native plants. Is that not a lot of people are tuned into it. You know, we've been using the traditional landscaping for so long. A lot of people just aren't. I guess, for lack of a word, the plant blind. And so it just takes a little bit of informing, educating, and you know, talking about it. And that's a line of communication. I try and keep open as best as I can. And I have had. and despite all my efforts, a little bit of issues. In my short time, because I'm coming up just a little over a year. It's been a little over a year since I installed the landscape. And so this is I'm I'm hoping the the roughest period, as you know, as things are, are filling in and things are new. I'm hoping, as as things go on, that if everything fills in it'll become more palatable. I guess you'd say.

Regina Santore, TN - Smoky Mountains: Yes, I think I've experienced much the same. Well, mine and I started with my front yard because I just dive into everything feet first, st I discovered that even after it being, you know, 3 years old now, my trial and error method isn't ideal for living in an area where the entire town is essentially an ao hoa. And so I actually did have an issue with the codes folks showing up to give me a little, a little nudge, let's call it. It wasn't a citation, but they were worried that it was unhealthful. I know. Yeah, and they also required my town requires. There be no woody debris on the property at all. It must be removed within 10 days. If you have woody debris, so let's think about all the animals. Maybe Jimmy can speak to all the animals that require woody debris, and how I was very dismayed. But you know, because I am not in a place yet to go and try to do something about said ordinance. I had to go along with it of, and they also said, no plants taller than 12 inches in the 1st 10 feet from the street. and that is one that actually is in many municipalities. So as you go forward trying to do front yards. That might be something to look up before you begin. That's not just woody. In the 1st 10 feet. It may actually be a literal height, and it doesn't matter if it's a grass or a flowering plant. so I have scraped mine completely off, and I will be planting my favorite super short, no mow items in that 1st 10 feet all the way along. My new favorite is turkey tangles. fog, fruit. phyla nodiflora, which can do like you see many people say, Oh, make a time. Lawn right. Turkey tangles, fog fruit can be a dense lawn like a like a time lawn, and so I'm hopeful that I'll have something to show you this coming year about how you can make a no mow full sun. no water. you know, Yard. But anyway, so I'm not one of the experts. I'm just a person who grows native plants. I'm going to turn it back to you all. We have a question about having experience with transplanting prairie plants. I have established cup, plant, penstemon, and Leatris, to take out of a Johnson grass field any recommendations.

jamestucker: I've transplanted a couple of those. I had a big container garden as I was starting the process of of redoing my landscape. I mean. The key thing for me was once you get them up, you gotta get them back in the ground as fast as possible, and then you might have to baby them for the first, st maybe month. Keep an eye depending on, you know. Last year was a

really rough year without any rain, so you may have to water some. You know. Natives, obviously you you shouldn't have to do a lot of work. You know. I I've I started one garden in April. I started one garden in July. I started one garden in late August, so I went through some really really rough patches during my process, so I had to water quite a bit initially, but that would be my recommendation is if you get them up. just get them back in the ground as soon as you can.

Amanda Benoit: My thoughts would be that those species have really extensive root systems. And so if they're full grown plants, you're going to have to cut a lot of the roots just to get them out of the ground like, even if you dig out a big portion, you're going to be cutting roots, and anytime you cut back roots. A good way to reduce stress is to also cut back some of the leaves because the plants aren't going to be able to suck up as much water through their roots, and they lose a lot of water through their leaves through transpiration. So if you cut back about half the leaves. They'll be losing less water, and that will help them get through that stress. and then yes, get them back in the ground and watered as soon as possible, and maybe look around and see if you can find young ones, because if you can find little seedlings that are smaller, they're going to transplant a lot easier.

Regina Santore, TN - Smoky Mountains: People always look at me funny when I pick off almost all the leaves on any plant I transplant. They're like, Oh, no, you're killing it. I'm like, actually, I'm stopping it from dying.

Amanda Benoit: Yep. Reducing water stress. It can be really important.

Regina Santore, TN - Smoky Mountains: I'm wondering. Do we have any other questions? Throw them in the chat? If you have any other questions we have not yet touched on.

jamestucker: Regina for any of the members or anybody that's joined that is thinking about starting, or has questions about gardens in your hoa or aesthetics. My gardens are always open. Just give me a heads up, and you're always welcome to to swing by here and see what I've got going on. So just throw that out there.

Regina Santore, TN - Smoky Mountains: Also, Andrea mentioned something important in the chat, and it's something called cues to care. which I will admit. I got a little lax on this summer, when I had a big blow down, I did not get on it right away to correct the blowdown. I let them flower while they were laying sideways. and maybe they don't like that here. So there is something also. So yeah, so cues to care is where you can see that you can walk around and freely through the plants, and it doesn't feel like it is wallow plants that is going to catch on fire and burn down your entire neighborhood. I think that's what they were worried about with me. And they didn't. And again, most people's knowledge is plant, not a plant. So they did not know that those were native plants when they stopped by to have a chat. So these are all things. Signage is useful, having either a mowed path, or

at least a low path. That's clear. That you can walk on seems to be helpful. Having edging or otherwise defined beds is big for the neighbors, and I think, like Jared and Jimmy both said, making sure the neighbors know what you're all about. Why, you're doing this and trying to get buy-in. That's helpful and pointing out how many birds you get. That's another thing. We haven't asked Jimmy any bird questions yet. But, Jimmy, how many species of birds have you had in your native plantings.

jamestucker: I have to go. Look! I haven't counted recently, but I know that I the last I checked I was at about a hundred 10 species of birds, I think. which is pretty phenomenal. Considering I'm in a you know. half acre lot. I do have a nice woodland behind me. And I know what I'm looking for. But yeah, about 110 species.

Regina Santore, TN - Smoky Mountains: Jimmy, we have some people who would like to know how to get in touch with you, so that they might be able to see your garden.

jamestucker: Can you drop.

Regina Santore, TN - Smoky Mountains: That in the chat.

jamestucker: Yeah, I'll I'll put my phone number in and then also, I don't do. They have access to my contact information through the chapter.

Regina Santore, TN - Smoky Mountains: No, actually, most of that is kept private. So you you have to choose to give your information to others.

jamestucker: Okay, yeah, I'll put my number in here an email address.

Regina Santore, TN - Smoky Mountains: We will probably have another event at Jimmy's amazing yard again, because we haven't seen it in spring yet. We've only seen it in kind of summer, so we haven't seen it in fall yet, and you know, going and visiting other yards is something that we actually are trying to put together as a chapter. It's something called Landscapes in progress. So those of you in the Knoxville area who would be interested in visiting such yards and then also having us visit your yard. The thing you would need to do is become a member, because again, we try to keep. You know, this kind of information kind of private. We don't just want to, you know, display your address to everyone. And so membership is the way it's done. And and incidentally, on membership. Your membership dues go to support our amazing organization, not just our chapter, but the national effort as well, which is in partnership also with like homegrown National Park. and locally, we're working with Southern Grasslands Institute and the Tennessee Invasive Plant Council and many other organizations. Your dues help us to begin to spend more time making those ties and make more for everyone. So anything you would like to give to Wild One Smoky Mountains goes to a great cause becoming a member will get you into some member, only things, especially that landscapes in progress. So we have about 3 more minutes. Does anyone else have any other questions that sounds like, maybe we're wrapping it up. Stacey, do you want to say any final words.

Steacy L, President Smoky Mts Wild Ones: I. I just wanted to let everybody know that I will be editing this video and creating a captioned video as as well as the transcript for the talk and the discussion, to make it more easily accessible for everybody. And I will also create a list of the links that were created in the chat, so that we always have that information readily available. And that will be posted on our website for everyone. And just give me about a week to do it.

Regina Santore, TN - Smoky Mountains: You know this has been fabulous. We had such an excellent turnout, and we do hope to see all of you again at our in-person events. I know everyone's like itching to do. You know, real on the ground live stuff again. And we have that. We're doing that. And so are so many of our other organizations that we work with. And so, if you would like to stay very informed about all of these things, we're trying to work that into our newsletter. The master gardeners are pushing our things out through their newsletter smartyards pushes things out through their newsletter as well. You know we're an easy place to start to get information. We're trying to figure out a way to get all of these things into one place. So bear with us and thank you all so much for being here, and if you would kindly let us know how you felt about this call, we would greatly appreciate it. You can send those to membership at smokymountainswildones.org. And we would absolutely love to hear your thoughts on that. Okay, so sure about just Daisy.

jamestucker: Hey, Regina, can I add one more thing. you know. Don't be afraid to ask questions on the Facebook page. I don't see that a lot, and it would be great, I think it would, you know, give people a little more opportunity to respond instead of Do you know, I'll do it.

Regina Santore, TN - Smoky Mountains: It on this form.

jamestucker: Oh, no. So just yeah. Just want to throw that out there to use the Facebook page.

Regina Santore, TN - Smoky Mountains: Yes, absolutely the the Wild ones. Chapter, the Smoky Mountains, Wild ones. Chapter discussion group is the official name of that Facebook group for those who don't do Facebook. I kind of hang out on several of the Reddit threads as well. So if you're in native plant gardening or no lawns, you'll also see me from time to time. Okay. all right. Well, it's 8, 30. So thank you all so much. It's been a pleasure having our entire panel. Thank you for your time. and you know, happy, happy spring gardening to everyone.

Steacy L, President Smoky Mts Wild Ones: Thank you. Everybody.

a sabala: Thank you. Bye, bye.

Regina Santore, TN - Smoky Mountains: Bye, bye. Thank you. Everyone. Good night. No problem.