**Advancing Inclusion for disabled wildlife viewers: Findings from Virginia Tech**

**Webinar transcript**

Ok, there. Hi everyone. My name is Shelly Plante and I'm happy to welcome you here today. I'm the Nature Tourism Manager at Texas Parks and Wildlife Department. But it is also my honor to chair the Wildlife and Nature Tourism Working Group for the Association of Fish and Wildlife Agencies. So for those unfamiliar with our Working Group. The Wildlife and Nature Tourism Working Group has been working for just over four years with Virginia Tech the Dayer Lab to do a lot of research into wildlife viewers. It's an area where there hasn't been a ton of research in the past in terms of relationships with the state agencies, how they like to be communicated with, how they support conservation, any barriers they have when outdoors and enjoying nature. And so this work that we've been doing with Virginia Tech has really shed a lot of light and helped us really understand this constituency that we now know is so important. Numbers just have come out in the fall that showed this, more than 50% of Americans are wildlife viewers.

Hm, I think we maybe lost you Shelly. Yeah we lost your audio. Can you hear me? We can hear you now. Okay that research has led to us being able to learn more about wildlife viewers but it's also led to more grants. So this is our grant for 2024 where we're looking into wildlife viewers who have barriers and challenges due to various disabilities. And so today's webinar is exactly that - Advancing Inclusion for Disabled Wildlife Viewers with findings from Virginia Tech. Next

slide. And we are lucky to have today Freya McGregor who's a research associate in the Dayer Lab at Virginia Tech and Emily Sinkular who's a PhD student at the Dayer Lab. Not with us today, because she's in the field doing great work, is Dr. Ashley Dayer who oversees the be Lab at Virginia Tech. And then, next slide. So this is actually our second webinar on this topic in the current Multistate Conservation Grant we're working on. The first one was Inclusion for Disabled Wildlife viewers was a Literature Review that we did a few weeks ago. And that Literature Review is now available online and we'll share the link in the chat. And you can also view the webinar that was recorded, if you missed it, or if you wanted to share it with any of your colleagues. So we encourage you to do that and now I would like to turn it over to Emily so that she can start today's webinar. Thanks so much for coming. Thank you for the introduction, Shelly. It's great to see you all here today. I just wanted to start out by giving an overview of today's presentation. We'll start by sharing some stats and kind of demographic details about wildlife viewers with disabilities that we found from our work. Next we'll also talk about models of disabilities and kind of ways to understand disability and how that can connect to wildlife. Then Freya will share findings from using a strength-based approach to birding with a disability and some really cool work that we've been doing with that. We'll also talk a little bit about barriers to wildlife viewing with a disability and then we'll close by sharing about how we can support inclusive wildlife viewing and what disabled birders have shared that they'd like to see. So, I just wanted to start out by getting us all on the same page about what is wildlife viewing. We've been using the definition from the Department of the Interior and the National Surveys that they've conducted. And that defines wildlife viewing as “closely observing, feeding, and photographing wildlife; visiting parks or natural areas to observe, feed, or photograph wildlife; and maintaining plantings or natural area for the benefit of wildlife.” So when we talk about wildlife viewers, we're talking about people who participate in any of these activities. There's going to be some parts of the presentation when we talk about birders and we'll just be focused on people who talk about birding alone. But wildlife viewing does include bird watching. And we just also wanted to share some background statistics on disability. In the US, according to the CDC about one in four Americans has a disability. So about 25% of the population. And in addition, there's also stats that report about 1 in 50 Americans have a diagnosed mental health condition. So when we consider recreation and wildlife viewing for people with disabilities, it's important to note that this is a really large population here in the US. And with that background I'm going to move into some findings from our survey research. Now this finding we'll call it “my study” or “Emily's study” or “Emily's survey” is based on a nationwide survey of wildlife viewers that we published first in 2022. These were wildlife viewers from across the US and there were lots of questions in there. And just one was related to accessibility challenges or disabilities. We'll be sharing links in the chat if you'd like to check out out that survey in a little

bit. And from that survey, so about 4,000 wildlife viewers, one in three were experiencing accessibility challenges. Now, accessibility challenges were defined as “Any challenges that someone can experience while trying to engage in a meaningful activity, like wildlife viewing. These challenges may be a result of a mobility challenge, blindness or low vision, intellectual or developmental disabilities, mental illness, being Deaf or hard of hearing, or other health concerns.” And from our sample of wildlife viewers we found that 39% of them or about one in three reported that they do experience “somewhat”, “quite a bit”, or “a great deal” of accessibility challenges while they're participating in wildlife viewing. We were also a little interested in hunters and anglers. I saw in the chat that a lot of you are from state fish and wildlife agencies. So, you may also be working with hunters and anglers. And we found that of our sample about 46% of the wildlife viewers also participated in hunting and angling. And those hunter-anglers-wildlife viewers and of those hunters-anglers and wildlife viewers, about 43% of them experienced “somewhat”, “quite a bit”, or “a great deal” of accessibility challenges when wildlife viewing. So those hunters and anglers are actually experience a slight bit more accessibility challenges than those who don't participate in hunting and angling. And with that we just wanted to paint a little bit more specific picture of the demographics of wildlife viewers with accessibility challenges. And we're going to do that by taking a look at how those wildlife viewers with accessibility challenges compare to those without accessibility challenges. And first, with age we found that wildlife viewers who reported experiencing accessibility challenges were about eight years younger than those who don't experience accessibility challenges. And this actually tracks with some things we've seen in the literature and other research, with younger people being a little bit more likely to self-identify as having a disability. And in terms of ethno-racial identity we found that our wildlife viewers with accessibility challenges were 23% BIPOC, meaning Black Indigenous or people of color. And this was a lot higher than wildlife viewers without accessibility challenges which was only about 13%. And we wanted to call this out, and this principle of intersectionality and encourage you to consider when you're working to include people with disabilities, also keep in mind that they may be experiencing lots of other barriers related to other identities. And there's a need to consider this in our work more. And in terms of gender, we set quotas for this survey, but there really wasn't that many differences in the gender identities of our respondents with and without accessibility

challenges. We were also interested in how they participate in wildlife viewing. Now, from that big definition of wildlife viewing we broke out seven specific wildlife viewing behaviors. The most popular behavior for both wildlife viewers with and without accessibility challenges was feeding wild birds, with those respondents without accessibility challenges actually participating a little bit more. We also found that wildlife viewers with accessibility challenges were a little bit more likely to photograph wildlife, feed other wildlife, maintain plantings, closely observe wildlife, or take trips or outings for the purpose of viewing wildlife, than compared to the wildlife viewers without accessibility

challenges. There's an error on this graph, but we were also interested in the wildlife viewing locations, or where people participated in wildlife viewing. And we did find that wildlife viewers without accessibility challenges were a little bit more likely to participate in wildlife viewing around their home. And in terms of other locations for wildlife viewing, there is no difference in the amount of wildlife viewers who participated in federal or locally managed lands which include city parks and other

places. We were also interested in learning a little bit more about models of disability used by disabled birders. And in this study we're going to be talking a little bit more about a free-response survey of disabled birders. So, in this study Freya is going to share a little bit more information about how we conducted the data collection and who these respondents were a little bit later on, but right now I just wanted to let you know that we were interested in asking people “Hey, what types of changes could we make to support your wildlife viewing experience as a disabled birder?” And then we went through and qualitatively coded, or noted, which models emerged. And models of disability are a set of guiding assumptions, concerns or propositions. They're human-made tools for understanding and human-made guidelines for action. And all this to say, is models of disabilities are different lenses that we can use to understand the experience of people with disabilities in our world. There's lots of different models of disabilities, but today we're just going to share five big ones with you. The first model is the medical model of disability and the medical model of disability sees disability as a deficit, or something that's wrong with a person that needs to be treated or cured. The second model is the charity model disability, and this model sees disability and people with disabilities as those to be pitied, who need the support from non-disabled people. And it's important to note that we're seeing in the literature and in society, disabled people are really starting to reject this model and saying “Hey, we don't need pity from non-disabled people.” Another model that has been growing in popularity is the geographic model and this is a really cool model that sees people with disabilities as disabled by the environment around them. So in- there's nothing wrong with a person, like we see in the medical model, but rather the space around a person can disable them if it's not designed in a way to accommodate their needs. Another model is the identity model which sees disability as a positive component of someone's identity and something that can be embraced and celebrated within them. And finally another popular model that we've really used to guide our work in the Dayer Lab is the social model. And the social model of disability sees disability as the - as the responsibility of society, and it's society's responsibility to accommodate people with disabilities and address the barriers they face, not the person with a disability. And using these models we were interested in seeing how many were invoked when birders were talking about their facilitators. And we found that the social and geographic models by far were the most popular models invoked by these birders. And this tells us that, as we're considering how can we include disabled birders well we should lean towards the social and the geographic models. Remembering, the social model says disability is the responsibility of society and the geographic model really focuses on that physical space and how it's designed around a person. We also wanted to point out there were two models that didn't emerge at all. One is the medical model and we suspect that we didn't see this because people aren't looking towards birding in a medical context. But, that zero with the charity model is really important because it tells us that these disabled birders don't want to be looked down upon with this pity that is seen under the charity model. So it's important to keep in mind that with this work we should move away from these attitudes of pitting disabled people. And to help you understand a little bit more about what we mean by these models, one birder who used the social model said “Bird trips gear to specific disabilities would be helpful, especially if leader is knowledgeable about limitations.” And this quote shows us that when society, in this case a leader of a bird trip, knows a little bit more about disability organizes a bird trip geared towards people with a specific disability, it could be a really great step to redesigning our approach to birding programs to be more inclusive of people with

disabilities. Another example from the geographic model was one birder who shared “How about a trail designated for ‘Big Sit’ birders? Where an accessible path or boardwalk, leads to a quiet area - how nice if it included a bench for those not using wheelchairs - near a good birding spot off the main trail, where one could stay for a while and simply observe the birds.” Now in this quote we're seeing someone suggesting designing birding trails a little bit differently. A lot of times, they could be focused on this movement as we navigate through a birding location but this birder is suggesting “Hey, let's think about stationary birding or ‘Big Sit’ birding, too”. And these changes would be those benches, these wide spaces off a trail where people could sit, they could remain stationary and just enjoy all of the birds that are around them. We also wanted to showcase the identity model of disability. One birder said “Normalizing the idea that disabilities can be invisible and that younger people may have disabilities. Normalizing not pitying people with disabilities.” And in this, we're seeing again this movement away from pitying people with disabilities, but we're also seeing how disabilities can be a part of someone's identity and the importance of just normalizing that disabilities exist, and that people with disabilities come in all shapes and sizes, including young and old. So, to recap some of our takeaways from the study were to use that social and geographic models of disability to resonate with birders with disabilities and using the guidance from these models this shows us that we need to change attitudes, awareness, and physical designs of birding locations to increase accessibility and

inclusion. Thank you Emily. So now that we know a little bit about how birders with disabilities kind of frame their experience as disabled birders, let's talk a little bit about another lens we can use when we're talking about birding with disability which is this strength based approach. By the way, hi my name is Freya McGregor my pronouns is she/her and I am a research associated in the Dayer Lab as mentioned in the beginning I'm also an occupational therapist by training. And I'm a birder with a disability. So, disability has historically been viewed through a really deficit based lens, by which by which I mean that they it's it's really this loss, this tragic kind of bad thing. Disability has been seen in society and by a lot of individuals, too. We know this because that medical model of disability that Emily shared earlier it's really focused on fixing things that are broken. It's about the person's loss and deficits and and this, this deficit based lens is even embedded in our everyday language. Now, I'm about to give you some examples of this. These are generally, these examples are generally considered the language is considered outdated and offensive by a lot of people in the disability community these days. So, don't use this language but you've probably heard it. And I think it's be being considered outdated because of this deficit approach. We can talk about disability in a positive neutral or a negative way. How negative is this? “Tim suffers from Cerebral Palsy.” “Diane is confined to a wheelchair.” And “Jose lost the use of his

legs.” I'm going to talk a little bit, in a minute about toxic positivity so that whole positive approach might not be quite the right angle. But we can talk about all of these things in a neutral way? “Tim has Cerebral Palsy.” “Diane uses a wheelchair.” Or, “Jose no longer has the use of his legs.” Subtle, but different. Less deficit, more just neutral fact. Like, I have gray hair. It's- it's we could put a judgment on it, but it's a neutral fact that I have gray hair. So, this strength-based approach is coming through a lot of healthcare professions like occupational therapy. But that's where it's sort of coming up in the way it's being practiced in the world. But there's ways we can apply it to birding, which we'll talk about in a second. So we all have different strengths and weaknesses, right? We're all good at different things, we're not so good at other things. It's just how we're built as humans. And rather than focusing on remediating our deficits, trying to bring them up through therapy, through different different skill-building, what if we leaned into our strengths? A real world example of this is me. So, I'm a research associate in the Dater Lab. Dr. Ashley Dayer is my boss. I am not very good with numbers. I never have been. I can do math, I can do hard math. It's really really hard. It takes a lot of concentration for me, I don't feel confident that I'm doing it right. It takes a lot more effort, and time, I have to like triple check my answers. My brain lumps numbers all the time. I actually I think I have dyscalculia. This has not been diagnosed, but I'm querying it dyscalculia, is like dyslexia but with numbers. So in a research setting there's quantitative research, Emily shared a bunch of that numbers, statistics that that kind of research. I can, I can do, it's just a lot harder for me. It doesn't come naturally to me. And I don't feel like I'm really thriving in that space. Qualitative research, which is about talking to people getting long you know wordy answers, digging through those answers for emerging themes, and what people are telling us in a big way. I'm good at that. I'm good at words. I'm good at seeing those themes. I just I just seem to be naturally good at that and so as an employee we could spend a whole lot of time trying to increase my skills in in the statistics, I'm raising up my my weaknesses. It probably it'll take it'll take more time, it'll take more money because it'll take more of my time in in a workplace setting I'm not going to feel like I'm thriving. Or my boss Ashley could give me qualitative research projects where I'm talking to people, where I'm looking through their words, and pulling out these themes, and I'm going to feel really good about that. I'm going to be more efficient at it. That's that strength-based approach. It's less exhausting for every one involved and it's much more empowering. Now just really quickly, I mentioned toxic positivity before and strength, using a strength-based approach is not the same thing as toxic positivity. Toxic positivity is this pressure to minimize reality and be unrealistically optimistic regardless of the situation. If someone has just had fallen off a ladder and broken their, broken their back they now have a spinal cord injury. Their quadropalgeic now. They don't have use or much use of their arms or legs. Being like unrealistic, unrealistically optimistic about “Like everything's going to be fine. You know it's all going to be great. You'll be back to work in no time. You won't even notice a difference.” That's that's this toxic positivity. It's not, it's minimizing the fact this person just had a major injury. A massive life change. They're probably going through a lot of grief. Relearning how to do all kinds of things in their everyday life. That's not what this strength based approach is and it's probably not a good attitude to have for this person, in that early stage. This strength-based approach is also not inspiration porn. This term was coined by the late Stella Young Who was a disability activist and it's “inspiration porn” is viewing people with disabilities as inspiring, just for doing everyday things. This photo on the slide is my friend Gary. Earlier this month we, he and I, were co-leading accessible outings at the Biggest Week in American Birding up in Ohio. If you saw Gary out on the trail, he uses a manual wheelchair. If you saw Gary out on the trail and you said something like, “Oh, it's so inspiring to see people like you out birding.” Oh, that's really othering. But, it also implies that someone using a wheelchair shouldn't be out on the trail, which you wouldn't say that to someone who didn't appear to have a disability, would you? Like, that's really strange. That's weird so if you wouldn't say it to someone who doesn't appear to have a disability, don't say it about someone with a disability. If Gary was like tackling Mt. Kiamanjaro in this hardcore off-road wheelchair, you know doing this thing that would be inspiring if he wasn't disabled, okay fine. That might be, that might be inspiring but there's a difference between this strength-based approach. It's not the same thing as inspiration porn. So there is, there is this kind of fine line here. But the strength-based approach is leaning on our natural strengths and not trying to remediate those weaknesses. So this survey I conducted this survey at the end of 2020 and we had 148 disabled birders respond to it and these respondents included 50% of folks had a mobility disability, so some difficulty with walking or mobilizing. 30% had a chronic illness like Lyme disease, chronic Lyme disease or chronic fatigue. We had some folks with hearing loss, a small portion of respondents were neurodivergent. So this term “neurodivergent” if you're not familiar, this is not a clinical diagnosis, this is a community generated term. An identity that includes folks who are Autistic, folks who have ADHD, folks who are dyslexic who have dyscalculia, different ways that our brains are wired that diverge from the typical. We had a few folks here who said that they lived with some kind of mental illness, I suspect perhaps more people might have in this sample but only 7% told us. Based on that stat earlier that Emily shared 1 in 50 Americans have a diagnosed mental illness, well there's probably a whole lot more who haven't been diagnosed. 5% had some vision loss and 5% had a neurological or brain injury. So that includes people who have Parkinson's Disease, or Multiple Sclerosis, or traumatic brain injury, something like that. I didn't specifically ask a question about how these people went birding, but as we looked at these responses about this question that I'm about to share with you, that it emerged that there people were telling us about the styles of birding that they use. So Emily and I coded their responses because I thought this was really great information. So a lot of people talked about looking at birds and enjoying their plumage, or watching them fly. A lot of folks talked about slowing down, so that might have meant moving more slowly on the trail or sitting or taking lots of rest breaks. Just taking it easy. We split out folks who said that they did stationary birding from folks who said they were specifically, said that they were seated. That probably sounds really similar, the seated folks were sitting on a bench or a log, or a rock, or on the floor, the ground or in a wheelchair. They specifically told us that they had parked their butt somewhere. Stationary birding included people who maybe, they paused along the trail they didn't tell us that they specifically sat down. So maybe they like leaned against the tree, or just stood there for a while. So stationary birding, we separated out a little bit there a bunch of folks enjoy birding with others. Mindful birding was a common style used. So, this is this idea of being really present in the moment with the birds and the place that you are, maybe using birds as a sort of mindfulness meditation kind of tool. Really awesome. And 17 people specifically mentioned that they were birding by ear. I would suspect the more people did that but we didn't ask this specific question, this is just what we kind of pulled out from people's responses. So, the question that I asked was “Some people notice positives to having different abilities and experiences than others. For example, if they have to walk more slowly than others they may see birds that others have rushed past and missed. Please tell us about any positives you've noticed because of your differences to other

birders.” This is the question, that rephrasing it turns into how people are using a strength-based approach to birding with a disability. Now, I thought there might be a few positives. I was really surprised and pleasantly surprised that of the 187 people who had answered this question 59% of them said that they had they reported a positive to birding differently to others. 59%. Disability is not all bad. There are strengths here, there are strengths. So as I go through some of these quotes that people shared in this like free response question I invite you to consider some preconceptions that you might have about these various disabilities from this sample. It was very varied different access needs that people have. Think about your preconceptions and think about and then think about what these folks are actually telling us about their experiences and if your if your assumptions match up to what we being told by the people who were doing this thing

themselves. Someone said “Because I don't hear well, I've become a much better visual birder. I'm more prone to noticing visual cues of a bird's presence, habitat, nest types, material that they might use food sources etc., than some of my birding friends with good

Hearing.” This respondent was Autistic and said “My hearing is extremely sensitive. I can pick up and identify birds by sounds most people don't seem to hear. I'm especially good at picking up hummingbird buzzing.” Now, a lot of folks who are neurodivergent, experience sensory sensitivities and when it's sound some sounds big loud noises. Specific types of sounds, too much sound can be really disabling in some contexts. This is super cool, there was a few Autistic folks who responded like this about hearing in the context of birding. That sound sensitivity is a strength. That's awesome. 22 respondents told us that they notice more birds as a result of having a disability. “Having to stop and take breaks means I spend time settled down and catch more birds.” A lot of people, a lot of these folks said that the stopping the sitting down stationary or seated birding was what meant they allowed them to catch up with a lot more birds than if they were moving down the

trail. One person said “My chronic illness has taught me to be very patient and remain still and quiet for longer periods of time.” Now birding, one reason that birding is such a cool activity to use this strength-based approach on this this it's such a cool activity that we can focus on increasing access and inclusion for people with disabilities is because it is an inherently modifiable activity. There's so many ways we can do it and we can change it depending on what we feel like that day or what our body is going to let us do that day. Really cool that 19 of our respondents had adapted their birding style to suit their needs. One birder said “I get to interact with usually really enjoyable people as I ask for help with an ID if my brain fog is acting up.” 11 respondents said that this interpersonal connection, which varied in the form of interpersonal connection but interacting with other people was a positive to birding with a

disability. Someone said “Being grateful for ANY birds I see, even very common ones, since I can’t get out to see them much.” I think there are lots of birders disabled and non-disabled who could have a little more gratitude for those common

Birds. Now I'm an occupational therapist by training. Adaptive equipment is something that I'm really fond of because adaptive equipment can allow us to do things that mean something, that activities that matter to us that we otherwise couldn't do. And there was six people who talked about adaptive equipment. I'm going to give you two of those examples because they're quite different and it's really really cool. Someone said “My power [wheel]chair has a very long range so I can bird for a very long time without getting fatigued!” Tell me again how using a wheelchair is a deficit? Clearly it isn't. Wheelchairs are freedom machines, you all. And then someone else said, “Sitting in a chair with a neck rest, I can look up into trees a bit easier than most people standing or walking.” That's a strength. I tell you what wobble a neck is no fun. Haha. So being able to enjoy this neck rest on their chair that this person is bringing with them to go birding, awesome. And someone else said “My disability is what inspired me to start birding, because it is a quiet and slow task. I find them [birds] joyful and can forget about my grief over my illness.” What a powerful thing. So whether you are a birder with disability, whether you go birding with someone with a disability, whether you're involved in programming with, maybe you lead accessible outings or you'd like to start leading accessible outings or you're faciltating wildlife viewing programs at state agencies, I invite you to reframe disability in your own mind using this strength-based approach. Ask what might a participant gain from birding or from wildlife viewing, not what can't they do, but what might they gain. And then offer programs that support various styles of birding or wildlife viewing. That means that by doing that you're allowing participants to choose what works for them. Maybe you could have some stationary birding outing, maybe you could have some birding by ear outings, maybe you could hold some sensory friendly outings. Having that variety means that people can choose to lean into their strengths and choose programs that lean on their strengths, instead of trying to kind of self remediate any deficits that they have to fit in with this classic bird walk program. That doesn't work for everybody. This photo on the right is a photo I took up at The Biggest Week in American Birding, just the start of the month. Jerry, my friend there, who has is wearing sunglasses, he's totally blind. He and I co-leading this outing. It was super fun and so we did a lot of birding by ear and this in fact this was the day after his keynote. And so all of these folks paid quite a bit of money to go birding with Jerry, knowing presumably that they would spend most of that outing birding by ear. It was really fun and there's so many ways we can enjoy birds, but because we're not into toxic positivity and minimizing the reality of the situation, we do need to talk about barriers that wildlife viewers with disabilities experience. Because these are real and some of these, we can fix, especially folks at state wildlife state, yeah wildlife agencies or people working or volunteering at nature organizations. I invite you to consider, we all have a circle of influence we can advocate for change. We can implement change, we can support inclusive programs, and policies. I invite you to consider, as we talk about this section of our webinar, what can you impact of these barriers. So Emily's national survey she spoke about at the beginning, where there were 1,556 wildlife viewers with accessibility challenges, they were more limited by all of these surveyed barriers than the non-disabled wildlife viewers. All of these barriers had a bigger limiting factor on these bird, on these wildlife viewers. The distance to viewing the wildlife viewing locations was a really limiting barrier for 76% of the wildlife viewers with access, with accessibility challenges. Maybe that was related to difficulty accessing public transport, or gas, or fatigue or all kinds, of all kinds of different factors could be playing into that 76% of the wildlife viewers with accessibility challenges. Their own access challenges, or someone else's that they go wildlife viewing with was a barrier. I would reframe that and start thinking about what in that geographic - using the geographic model of disability - what in the built environment was creating that barrier? Was it the person individually or was it the built environment that wasn't supporting their ability to go wildlife viewing? Was it they needed more accessible trails? Maybe or maybe all the wildlife observation platforms had stairs and they couldn't do stairs. Think about if you can modify some of those things, and then the cost of optics or other wildlife viewing equipment, can be really expensive. This is a pretty old school pair of binoculars. So, maybe someone using their old binocular, really wanting to upgrade into a pair of optics with higher quality glass. Maybe the cost was, yeah gas to to drive two hours or or a plane ticket to go into state to to visit you know a National Wildlife Refuge that they wanted to go and see a birding spectacle at. Maybe the cost was entry fees. Many nature preserves have an entry fee, that can be that can be, that can be a barrier. On the programs too, a lot of programs have a cost to participate and $15 might not seem like much to you, but that can be a lot for a person. Disability can be really expensive, so have you got any influence in reducing or eliminating any of these

barriers this. These respondents said that they were also more limited by a lack of their own wildlife viewing skills, equipment, transportation to wildlife viewing locations, people who support viewing, people to go viewing with. So the support viewing might be you know, having a partner who says “Yeah go I'll be fine I'm not coming but you go, you go out by yourself.” People to go viewing with, organized viewing opportunities, having free time. Disability can be very time-consuming with medical appointments, and just personal care tasks. And facilities at wildlife viewing locations. Now, we mentioned earlier that that accessible trails or viewing platforms may not support disabled wildlife viewers. Go, going back people, who support wildlife viewing, people to go wild viewing with, and organize viewing opportunities. To me, those three factors might be quite related. If you are able to hold accessible, inclusive wildlife viewing programs at any location, but particularly one that has accessible wildlife viewing facilities, you might be able to impact all of those barriers all at once. These folks were also more limited by their own accessibility challenges, as we mentioned safety concerns, and not knowing where to go wildlife viewing. This final thing, not knowing where to go wildlife viewing ties into something coming right up here in a minute. So in that smaller survey that I did of just of birders with disabilities with 148 respondents, I also asked them a question about barriers they experienced while birding. And again, these were free response open questions. So, going through and coding their responses into themes 62% of these respondents had difficulty navigating the trail. That tells me we need a lot more genuinely, truly comprehensively accessible trails out there, because 62% of disabled birders are finding that to be a barrier. One person said, ““I have a chronic illness that affects how much I can do/how far I can travel and for how long. If the trail is uneven, muddy, in a slope of any sort or does not have places to stop… I consider it inaccessible

to me.” Is there anything there we could modify? I think so 60% of these disabled birders said that they had difficulty getting information ahead of time about the trails’ accessibility. And I would link that back to the finding from Emily's survey that I just mentioned about not knowing where to go wildlife viewing, because if you can't get information ahead of time many people don't know if they can visit that place with any success. Someone said “Websites for parks and trails seldom have accessibility information.” And by the way, side note saying it's an accessible trail is a great start but we need a lot more specific, detailed concrete information than that. “When I call often the person gives poor or wrong information.” This is something we can fix. Someone else said “Limited information about trail accessibility causes me to keep returning to tried and true trails and avoid exploring new

sites.” Again, knowledge is power, right. This is something we can fix. And 48% of these respondents said that they had experienced barriers accessing the trail head. One person said “Sometimes parking is strictly for cars and not for wheelchair vans with ramps. I've also been to place places that are completely doable for my chair but the parking lot has one step up to the boardwalk entrance and therefore I'm cut off from the whole preserve!” So, if you aren't familiar, there are often accessible or reserved parking spaces and there are van accessible parking spaces. This is because there are some really cool vehicle modifications that can be made to cars and vans that allow people who use wheelchairs to stay in their wheelchair as passengers or as drivers. And yes, lots of people who use wheelchairs drive their own vehicles. Some of these wheelchair-accessible vans have a ramp. Like this person's vehicle that deploys out the side of their van and that's why those van accessible spaces parking spaces have that access aisle next to the parking space with those diagonal lines. It is not a parking space. Please never park in it. It's so that the ramp can deploy and the person can get in and out of their van. Meanwhile there are guide, guidelines and if you would like to know more please check out the literature review that we mentioned at the start of this webinar, that Emily, and I, and Ashley spent several months earlier this year collating guidelines, and literature around including disabled wildlife viewers. But there are guidelines around the height of obstructions in the trail surface, and if it's a boardwalk, there shouldn't be anything higher than half an inch from the trail surface up. So this step up that this person is talking about, I visited a lot a lot of wildlife viewing locations that are “accessible” quote unquote, I'm in fact I'm writing a book about accessible birding locations in the US. So, I've done, I've been to a lot and very often the the transition from maybe the hard packed crush stone trail or the concrete trail up to the boardwalk, very often has it's not really a step, so much as just a transition. But, it might be 2 inches or 3 inches even and for some people, especially folks using power wheelchairs, 2 inches is just too high. It's just not a thing that they can do. So as this person says, 48% of folks said that access to bathrooms was a barrier when they tried to go birding. Everyone needs to pee, including people who use wheelchairs, right? And as someone else said “If I don't have bathroom access I have to limit liquid intake and risk dehydration or more likely not go at all.” This is something we can fix. Accessible porta-loos do exist. And finally access to regular rest stops, like benches. Nearly half of these disabled birders, basically you're requesting more benches. Someone said “It's important for there to be benches and for their locations to be clear, perhaps marked on maps, so we can plan our energy expenditure and breaks.” And another person said “There are rarely benches to sit so I have to choose to cut my trip short or to injure myself by continuing.” We need more benches. This is an easy thing to fix. This is next easiest after having more detailed, concrete information about trails and wildlife viewing locations on websites. What can you do to help reduce or eliminate

barriers? Thank you so much Freya with that we'll talk about supporting inclusive wildlife viewing which can also mean addressing those barriers that Freya just shared with

us. So from the big survey- nationwide survey of wildlife viewers that we did we asked about “How could we support your wildlife viewing experiences?” And it's important to note that we asked these questions in the context of state fish and wildlife agencies, so it was specific to them, but we suspect that disabled wildlife viewers would be interested in these resources or facilitators from any organization. And the one that was the most popular was access to more places to view wildlife. So thinking about those cost and distance barriers we talked about earlier, more wildlife viewing locations could be a great start. Another really important piece that emerged is this importance of information. So, in addition to information about the physical characteristics of a site, wildlife viewers just want to learn more about the wildlife that's in their state, and they also want to learn more about where to go to see that wildlife, if you want to check out that whole list of facilitators to support wildlife viewing locations, one thing I really want to call out on this slide is that these little asterisks means there's a statistically significant difference between the wildlife viewers with accessibility challenges and without. And you'll notice that there's not a lot of those stars on this page. And that tells us that as we make changes that can support wildlife viewers with accessibility challenges, we're also doing things that are going to benefit everybody, even those without accessibility challenges. And the were cases, where there were differences we can see wildlife viewers with accessibility challenges were more interested in, again, that information. Accessible features as well and programs to improve wildlife viewing skills. And on the next slide we can see that there's a little bit more of those stars coming out. And whenever there are those differences with wildlife viewers with and without accessibility challenges, we noticed that wildlife viewers with accessibility challenges are really interested in this program and interactive piece. So youth opportunities, programs to interact with other wildlife viewers, training for wildlife viewing guides or those birding buddies, volunteer data collection opportunities so citizen science, or more staff to support the wildlife viewing experiences. And one thing that we found in this work and in the literature is that wildlife viewing and birding is just such a great way to connect with people around you, and have that sense of community. And I did also want to call out here that wildlife viewers with accessibility challenges were a little bit more interested in virtual programs than their wildlife, than wildlife viewers without accessibility challenges. And there might be some wildlife viewers who just can't make it to your site, or maybe your site's not accessible to them, and virtual programs are a great opportunity to still foster that sense of connection, even if people aren't able to travel to you physically. We wanted to expand on this a little bit more with findings from Freya’s survey. And that same sample of birders with disabilities who found positives to birding differently than others were also asked about factors that impact their choice to go birding. So, in this section we're looking at these themes that can help support the burning experience. And 72% of respondents said access to information about the trail in advance. This has come up a lot throughout our presentation today. I saw a little bit of it in the chat as well. And this is one of the key findings, that this information is so important to inclusive experiences. One birder shared “If it is listed as accessible what does that mean? Are trails paved or what material is used for them? Are bathrooms available and WC [wheelchair] accessible?” And I want to call out on this slide that this trail is listed as accessible, you may deem that a trail is accessible, but it might not be accessible for somebody else. And that's why it's really important to just provide detail about the trail surface the width, the grade, the steps, like Freya was talking about. All of these are so important to for people to have in advance to help make the decision if they can go birding on that site. Another birder also shared ““It's fabulous when centers post photos of their parking areas, buildings, trailheads, etc., which can offer a lot of valuable info.” So again, this is one change that we think could be like relatively feasible. So you can upload pictures of your site, you can maybe do a little video tour of the site, and all of this could just help get that information out there and help people make that decision about if they can bird on your site. Another theme was I'm not singled out because of my abilities or differences. One birder shared “I find that people generally don't understand the challenges that I face, even if they think they do. That makes it uncomfortable when I'm singled out knowing that the person doing it likely doesn't understand and will make assumptions based on that false understanding.” Now these 39% of birders, who shared this was important to them were really saying that to not make a fuss if you see a disabled recreationists at your site or come into your nature center and treat them the way you would other visitors. Use neutral language, and again like we talked about, avoid that toxic positivity that can make people feel a little uncomfortable. And finally 30% of respondents shared that being a part of a group that includes people who also have accessibility challenges it's a great way to support a positive birding experience. One birder shared, “Being in a group with others who share my condition or other challenges would be helpful because I feel we’d have a better understanding of each other’s needs and how to help.” And this is again kind of connecting back to the social model we talked about earlier. Showing that when we can design programs for people with disabilities and with people with disabilities who are really knowledgeable about disabilities and ways to accommodate and program can really help to support this really positive

experience. And we wanted to conclude by saying we still feel like there's a lot left to know, specifically kind of with these facilitators and learning more about inclusive programming and design. And for that we have an ongoing research project and we will be conducting focus groups or group interviews with disabled wildlife viewers this summer and sharing findings over the winter. If you're interested in learning more about this project or if you're interested in helping with the recruitment process, please feel free to reach out to us you could just privately message me on Zoom or email me. But we're looking forward to conducting this work and then sharing the findings back with you all. And I wanted to conclude by saying thank you for joining us today! We really want to thank our survey participants who took the time to share their thoughts about birding and wildlife viewing. Thanks to our Steering Committee and Shelley Plante for the wonderful introduction. If you have a moment please take a short feedback survey. It helps us report back to our funders about our work and it also will help us improve future webinars and if you'd like more information we have a website. It started just about wildlife viewing and we're adding our work about inclusivity on it as well. And our emails are on the slide and we should have a few moments for questions if anyone wants to jump in and share some thoughts or ideas or questions. Thank you. Thanks Emily and the final slide in in case anyone is interested is some of the references that we shared and data from today there is a lot more references in that literature review too, in fact there's 12 pages of references in that literature - no that's not right it's it's a? Is that right you're nodding. Yes, it was a lot we that literature review was a lot of work. So if you'd like to know more about where we're pulling some of this data from, please check out that comprehensive literature review I believe it has been linked in the chat. So before you jump in for questions let's just go through the chat and see if folks threw any questions in there along the way.

Let's -

see. Oh someone said they have dyscalculia awesome. Sorry, I can't read the chat and also drive slides and speak coherently.

We also, someone said we have also heard that not enough info to know about the site to drive out to it, didn't want to get all the way out there without knowing they could use the accessible location for wildlife viewing. Yeah, absolutely it's it's pretty frustrating to to drive two hours and not be able to access the the trail or or the facility that you're trying to visit. Yes fee free wildlife viewing is important absolutely very accessible

spots. Okay I'm having trouble oh no that was the last one more information on the virtual programming aspect of what Emily said I struggle with how to make them more engaging with people and would love to know more about what folks do to make inclusive and engaging virtual programming. We try things like breakout rooms but then attendance just plummets. Okay so I helped set up the nonprofit Birdability and I was the only staff member there for the first 18 months and one thing that we did with the then George Audubon now Birds Georgia was some really really really fun virtual bird outings where we had four co-hosts. So it was, it was me, it was the engagement manager from Georgia Audubon, Karina Knew who's really friendly and fun and and very very engaging and then we had two two disabled wildlife viewers. And now we we were all out on different accessible trails in different states so we were birding from four places at once together and that created some really cool virtual programming because people were in the chat sharing like you know we we'd be talking about whatever birds we saw or heard as we went along and we'd be interrupting each other because someone you know suddenly a bird would fly through and someone would be just generally talking about why benches are important and then oh wait yo there's a red knot, oh my gosh let me try and get it in the camera and that that kind of spontaneous, you know sort of interaction that you would have actually out like doing a program in in person seemed to really help that engagement. We would create these really really lovely little supportive communities, just for that hour during those programs in the chat because we were responding to people's chat too. Someone would say oh hang on wait how did you know that was a red tailed hawk and so you know we could share a bit more about that. And people in the chat would be supporting each other as well, as that, they were meeting each other in the chat, talking about their disabilities, and things like that. So, having facilitators who are disabled but also having like creating the program to support that engagement seem to really really make a difference. That's quite a different thing than just having one person talking to the camera for an hour, which a lot of virtual programs tend to be. So see if you can mix that up and that might make a difference for for your engagement in the virtual programming. Okay does anyone have any oh here we go how can oh Emily did you have anything to add about the virtual programming? No, I think that was great. How can we encourage state parks and local agencies that are taxpayer funded to pursue accessibility changes such as removing curbs, paving paths etc.? Emily do you have any suggestions? I think sharing one aspect emphasizing that all will benefit from it and I think Freya knows a little bit more about kind of the overlap with the ADA and recreation. I don't think that the ADA covers trails, but these recommendations are still important to consider if you want to add anything Freya? Yeah so again check out that literature review because we really broke down what is out there in terms of the federal guidelines around accessibility. As Emily mentioned the Americans with Disabilities Act 2010 accessibility standards don't actually cover hiking trails, but there are other formal guidelines that that are about how you design accessible trails state parks and local agencies should be trying to include the broadest number of their constituents because the Americans with Disabilities Act says that any state agency should be making their programs accessible to people with disabilities so in that respect the ADA the Americans with Disabilities Act does cover the programming that they're doing. Often it seems like it's just a lack of knowledge and decisions were made and people weren't thinking about accessibility from a disability perspective. So, advocating can really help, talking to talking to staff, talking to interpreters, talking to facilities managers. “Hey, this is really important. Were you considering that, you know curb cuts benefit a lot of people beyond wheelchair users? People pushing carts, because they're making FedEx deliveries, or they're pushing strollers. Is there a way we can you know improve this curb so that so that it's more accessible for for all the people?” That like friendly, positive how can we make this better kind of education does seem to really make a difference. Point them to that literature review it we created this literature review to be a resource for people, so please use it. it may really help educate folks who just just didn't

know. All right, will this presentation be available later? That seems like the perfect ending. Yes, yes this presentation is being recorded. Once we have it all beautified and the the captions perfect and everything Emily will be sending out the recording of this presentation. And once we have the I didn't mention this but the strength-based study is not actually published yet so once that's published if you're interested in receiving that please let us know. Drop your email in the chat or send us an email. We had those slides we'll send those out our email address is out to all you all as well when Emily sends out the recording. We would love to share our ongoing research with you about increasing access and inclusion for disabled wildlife viewers, so yes this presentation will be available. It'll also be loaded onto that Wildlife Viewing Toolkit Website that we mentioned earlier. So you'll be able to share it with anyone that you want to. So, thank you everyone for coming I'm so glad that there's some really nice encouraging comments in the chat which means we're onto something here. I think it's exciting work, it's powerful work I encourage you to get involved in this work. It feels really good because we all should be able to enjoy birds and the outdoors and wildlife in general. Emily would you like to wrap up? Yeah thank you everyone for joining and we hope to stay in touch. Have a great afternoon bye bye.