**UConn CSCH Podcast Episode - How Kids and Young Adults Benefit from Nature**

Helene Marcy: Hello and Welcome to the CSCH Podcast. My name is Helene Marcy, Director of Programs & Communications at the UConn Collaboratory on School and Child Health, or CSCH. The CSCH mission is to facilitate innovative and impactful connections across research, policy, and practice arenas to advance equity in school and child health. CSCH is committed to anti-racist work that prioritizes inclusion, reduces disparities, and creates systemic change. I invite you to take a look at our website at csch.uconn.edu.

Today I’m here with Jean Coffey, Damion Grasso, and Cynthia Jones. Jean is a Clinical Professor in the UConn School of Nursing and a CSCH Steering Committee member; Damion is also a steering committee member and an Associate Professor of Psychiatry and Pediatrics at UConn Health, and Cynthia is Professor Emeritus in the Department of Ecology and Evolutionary Biology at UConn. All three of our guests are interested in how people benefit from nature, and specifically how kids and young adults benefit, and that's what we'll talk about today. Welcome to all of you.

Jean Coffey: Great to be here,

Damion Grasso: Hello. Thank you for having us.

Cynthia Jones: Good to be here

Helene Marcy: Jean, tell us a bit about your background, and how you became interested in children and nature.

Jean Coffey: Thanks for asking. So I've been a nurse for a long time a pediatric nurse, and more recently a pediatric nurse practitioner, and observed lots of children not getting opportunities out in nature and seeing some of the health consequences from that. Specifically obesity and also the potential for developing comorbidities like Type 2 diabetes which typically is rare in children. But it was showing up in children that weren't getting out and exercising

Helene Marcy: So based on that experience, you suggested the idea of prescribing nature for kids. Tell us about that and what happened based on your suggestion.

Jean Coffey: Back a few years ago I was invited to be on a national committee to develop a nature prescription. And so it was park professionals and health care professionals worked together collaboratively to develop this prescription that we thought may help get children out into nature. We specifically targeted the use of national parks because they're somewhat accessible and able for the children to be able to go there--they're usually nearby. And so, about two years, three years ago, we did a study looking at whether, if a primary care provider wrote the prescription the children and family would actually go, and they actually did.

Helene Marcy: That's terrific. Damion. Let's still a little bit more into the mental health benefits to kids being outdoors. How did you get interested in that? And what are the benefits?

Damion Grasso: Well, I guess I can say it I experienced the benefits of being outdoors really early in life as a kid. Getting outside and being in nature was an escape for me, a place where I could really be present in the moment, and and kind of be carefree. And I was fortunate to grow up in a family that really valued being outside and often brought us outside, hiking and camping, and so forth. So I carry this deep appreciation for the outdoors into adulthood, and and you know it's a way; for for not only me to manage my own stress and to unplug and and to practice this idea of mindfulness, but also to share that with, in a clinical sense, with a youth who I work with to overcome mental health impairments.

Although my research program at UConn focuses on child traumatic stress and not, specifically nature based interventions, there's been a a good amount of work that I'm aware of done on a topic—including a number of systematic reviews that that show the benefits of nature on youth, showing increases in things like self-esteem, emotional well-being and reductions in depression and anxiety. There's also a pretty large body of work focusing on the Japanese practice of forest bathing, not necessarily for for youth, but in general, which combines being in nature with meditation—this activation of the five senses through your interaction with the with the natural environment. Other aspects include self-reflection, and kind of this feeling of being welcomed into the the natural environment and a sense that you're recharging your positive energy.

Also been studies conducted that demonstrate associations between psychological well-being and your proximity to green and blue spaces, as well as experimental studies, showing more short term psychological and physiological benefits after exposure to things like nature sounds and and nature images.

And there's also this, this large literature on the experiences of awe, this emotional state that arises when one feels that they're in the presence of something something grand and and and have that sense of vastness that nature provides. And it's a feeling that that we're connected to something larger. And empirical studies on this emotional experience has associated this with reduced daily stress, a greater sense of connectedness with people, and also greater distress tolerance, and tolerance of uncertainty.

Helene Marcy: So because of all these wonderful benefits, you developed a program called the Youth Excellence Project. Tell us about how you got kids outdoors and what the benefits have been.

Damion Grasso: Yeah. So I started the Youth Excellence Project on a volunteer basis about ten years ago, and it and it really does blend my my love for the outdoors, and appreciation for the benefits of nature with dedication to youth mentoring and efforts that help promote resilience in adversity-exposed youth. The program is loosely based on wilderness therapy programs like Outward Bound, in that it immerses youth in an unfamiliar natural environment where they can unplug from everyday life distractions and work with a team of peers and adults to gain skills, meet challenges and experience success. Practically speaking, we meet as a group to do weekend outings about once per month, and these monthly gatherings culminate in a in a longer week-long expedition in the summer, where we do things like back-packing, paddling, rock climbing and things like that.

YEP currently operates within a small nonprofit in Connecticut called Outside Perspectives that that kind of share my philosophy and and who I partnered with for for many years. And these are are male adolescents in the program. Every youth in the program has experienced some significant life stressor or trauma which which might be family violence, loss, emotional or physical maltreatment, or some other form of adversity. And a portion of the youth are in foster care, or have been adopted from foster care. So these youth tend to experience multiple disruptions in their life, have fewer opportunities to make lasting relationships with with peers and adults, and also face barriers to, to getting outdoors and experiencing the benefits of nature. Also these youth are are often under representative in terms of their racial and ethnic groups, and so also face that additional burden of discrimination and barriers to outdoors. The majority of youth experience some form of emotional or behavioral impairment. So many of them are diagnosed with depression, uh suicidality, anxiety, or or trauma-related disorders. And there are several aspects of what we do in a program that I think help these youth to address these impairments, offer some advantage over just office space types of therapy. I could tell you more about that if you, if now is a good time.

Helene Marcy: Sure.

Damion Grasso: So one one clinical aspect of overcoming stress and trauma impairment, which is my primary focus, is to explicitly address and process the memory of of past adversities—to kind of learn from these experiences. Learn that that while they're negative, they're no longer threatening. That the memory of these experiences are, are emotionally distressing, but tolerable. That these experiences are personally meaningful, but not self-defining.

But a common reaction to to these things is a tendency to avoid and distract from doing that important but difficult work. And we help youth overcome these issues through evidence-based psychotherapies which I which I do use in the office. But there are several advantages of of getting these youth outside and in a program like YEP, that can help kind of advance their ability to process these experiences. So importantly, disconnecting these youth from technologies that are often used either purposely or not consciously, to distract them from processing these experiences is helpful. And when you're hiking for for miles or or paddling down a river for for a week without being plugged into a phone, this really does force you to to sit with your thoughts. And And this is something that these kids have a really hard time doing and it can be pretty uncomfortable, but necessary to kind of resolve these thoughts and feelings. And I I guess I believe that that being surrounded by by nature, experiencing feelings of awe, and being supported in this sense by adult counselors and and positive peers, helps these youth to tolerate that discomfort and distress that they feel when they're processing these memories and helps them to kind of tolerate sadness and fear and anxiety and process these experiences in a constructive way, and I could think of a number of youth who I've worked with over the years who have I've seen really show this personal growth in their ability to kind of recover from really traumatic or adverse experiences.

Helene Marcy: So both nature and that unplugging can be so powerful. So let's talk a a bit about how to get unplugged and to get into that nature every day. Cindy, you developed a website and a program with your students at UConn to help with that. Tell us how you got interested in in that program and what you did.

Cynthia Jones: Gladly. I am a botanist, I mean, I grew up, like Damion, in the outdoors as much as possible, and I have always felt like I had some sort of very deep link to being in natural spaces. So, of course, as a botanist, I really love doing field work most of all, and I'm also the director of our greenhouses on campus. And I was talking to a friend about how to get people into the greenhouses, and he said, Well, have you heard about this program called Nature Rx, And I said no, and he said, Well, it started at Cornell. It's a national program across now seventy campuses across the country, that are focusing on communicating the mental health and well-being benefits of being in nature to, in particular, college students. So every program is different, and it relies on the expertise of the people who are are involved at each campus.

But we started putting Nature Rx together at UConn right at the beginning of Covid, and we said, Well, we can't do programs, so what can we do? And what we ended up doing was putting together a set of maps, basically, of all of the hiking trails that we knew of in the Town of Mansfield. So places that students could get to without a car or with a car if they happen to have one. Mansfield, in particular, was interesting because we have town maps. We had at that point a set of maps through Joshua's Trust, which is a Land Trust. And then we also have maps that some State Park properties like Mansfield Hollow as well as trails through UConn properties. So what we did was put all of these maps together in one place, and created a map –a general, interactive map-- where you can find any of these places within the Town of Mansfield really easily. We also decided at that point that we would present the maps two different ways. So on the website, you can either look for what you want to do—and we have it broken into hiking nearby, hiking further away, or biking or quiet spaces—and then you can also just sort of scroll through a whole series of images that we have of these various places. Perhaps for an inspiration, and to look, you know, at something that might appeal to you at that moment. I mean one of the things we did when we were putting this together for UConn was walk around and inventory all of what we thought were the quiet spaces on campus as well, places where there was a place to sit, or a particularly nice view, because we recognize that not everyone is comfortable going out on their own on a trail, and not everybody likes hiking. So we really wanted to—I mean, I think the goal of the Nature Rx program is to get people to engage with Nature, because they'll feel better and for all the reasons Damion said, it also increases your creativity and cognition, which are things that students in particular might be interested in. But get them to do it in a way that they're comfortable doing, so even if it's just staring into a tree canopy that's blowing in the wind, you know, with all the different leaves and all the colors, and the sound, and or listening to birds, all these kinds of things. And then with Covid it turns out that people have are pretty much aware in general, because there was a lot of discussion of it in the popular media, but pretty much aware of the benefits of being in nature. So we've also been spending a lot of time talking to students about what would get them to leave their dorm rooms and go out into nature. And that's sort of the hurdle at this point. It has to be very compelling because what we found when we did a student focus group was that students know that being outdoors is good for them, at least this particular group of students did, but they just said, Well, we can‘t always make ourselves do what we know is good for us, So we're thinking about doing a program next fall that would be sort of an incentivized program to get people to go out, students to go out and and do particular things. But my interest in all of this was just to make people aware of the resources that we have, really very close to Mansfield and around the UConn campus.

But for people who don't live here, there's a really amazing website that was developed in part by the extension offices here, and it's called Connecticut Trailfinder. Trailfinder is one word. And if you Google that, they've got trails from all over the State and including urban parks. And you can look at how, what the distance is, how difficult it is, whether or not it's a managed trail. Actually, I think they only included managed trails. But so if you're interested in hiking anywhere, there's a lot of web resources for finding places to go.

Helene Marcy: So related to what Cindy was just talking about. Jean, do you have advice for those who don't live near hiking trails or near a university? What are some other resources for people needing a walk, or a quiet spot in nature?

Jean Coffey: Yeah, in looking at the United States, there are lots of park availability, and about ten percent of the land in cities are dedicated to parks, but unfortunately, it looks like about a third of people in the hundred largest cities in the U.S. are greater than a ten-minute walk. So there is some socio-economic disparity between location to a park, and, you know, being able to get there without a vehicle or some type of transportation. But interestingly, back as far as 1634, Boston Common was the first park that was dedicated in the United States, followed by Central Park in 1853. And then, after that Fred Olmsted, who designed Central Park, started to work with more cities to grow more urban parks. So there really are a lot of parks across the country.

You can go to park and recreation sites to find parks. There's a actually a trail finder website that covers the whole U.S. and covers even tiny small parks and towns and it's very, very detailed. In most of the urban parks, the most common features are playgrounds and ball fields, and those kinds of things. So you have to –you have to look for a place that's quiet to sit, but it's available. It just might take a little bit more effort to get there. But there are opportunities within urban areas, and there's some data to support the fact that the closer you are to the park, the healthier you are. It's interesting in rural areas where children are not as close to parks where there are places for them to do things they're less likely at times to go out, because there isn't anything for them to do but to be out in their backyard.

Helene Marcy: Given that we're recording this at a time when the weather is getting cold outside, Jean, what are some of your tips for? Making sure that we still get that needed nature time.

Jean Coffey: So to to back up a bit. My relationship with the outdoors is really fueled by my sled dogs. I have a kennel of sled dogs, and I take them out all winter, no matter what the temperature is. And so I really have to think about how to be out in all types of weather, and really the key to being out is layering. To have a really good solid base layer that is, you know, able to be evaporative so that if you do have some perspiration it really can soak that up and pull that away from your body. And then the layers that you put on top of that to make sure that you leave enough room around those layers. Your base layer should be very fitted, and then over that should be multiple layers of less fitted clothing. Making sure you have some water with you, so that you know there's insensible water loss when you're hiking, and you want to make sure that you have that with you. And then the other part that's important is your footwear. And while you know there's a lot of cute shoes out there, they're not—they don't lend themselves to warmth. So, having a set, a pair of boots that has a liner in it, and you can actually buy liners for your boots to make them a little bit warmer. And then finally gloves, a neck warmer, and a hat. Hats are really important to keep in body heat. Again, they might mess up your hair, but if you're going to go out for a walk, you just leave it on until you come back. A decent pair of gloves, and sometimes a liner with gloves will help as well to make that extra pocket of warm air around your fingers. When worse comes to worse you can also buy warmers for your gloves like disposable or reusable warmers. Obviously the reusable would be more ecologically friendly to keep your hands warm. And then keep moving. Always let someone know where you're going when you're gonna go out on a trail, especially in inclement weather, because there could be a problem, and someone would need to find you.

Helene Marcy: Then the only trouble becomes getting a kid to wear a hat.

Jean Coffey: Exactly, exactly.

Cynthia Jones: Can I make a plug? I just wanted to make a plug for the ecology and evolutionary biology greenhouses that are on the campus, too, because they're open to the public from 8 to 4 Monday through Friday, and then 10 to 2 on Saturdays, and anyone is welcome to come walk through them, and there's no better place to be in February, I think, than our greenhouses.

Helene Marcy: Well, I hope this podcast episode inspires some people to get themselves and any kids in their lives outside into nature. I myself am determined to get out more, Jean and I'm going to start layering. Jean, Damion and Cindy: Thank you so much for joining us today.

Cynthia Jones: Thank you.

Helene Marcy: We will add links to the sites our guests mentioned in the podcast description. And a reminder to our listeners that you can find information about our work and all our podcast episodes at the CSCH website, csch.uconn.edu. You can also follow us on social media @UConnCSCH. Thanks for listening.