**Climate Close-ups: Brianna Amingwa**

**Transcript**

**Cold Open**

Brianna Amingwa**:** Kids have so much natural empathy that I think there’s a good window to teach them about climate change and how it’s affecting nature. One thing we talk about a lot is their sense of wonder, and like as you get older it kind of lessens. But when you’re a kid, like how much you wonder and how much you think about creative ways to be helpful to nature – it’s a great time.

Olivia Gieger: This is climate closeups: an audio series that brings you the voices of those working against the tide of global climate change through their daily work here at the Service. It’s an opportunity to take a look at the individuals behind the work and what drives them. I’m Olivia Gieger.

Mason Wheatley: And I’m Mason Wheatley. Today we sat down with Brianna Amingwa. Growing up in the Metro Detroit area, Brianna never really saw nature around her. But she loved finding animals and bugs, riding bikes, and having picnics in her city. So today, Brianna aims to help local kids see that that’s all part of nature too – right in their backyard. As the environmental education supervisor at the John Heinz National Wildlife Refuge in Philadelphia, she strives to pass along a conservation legacy and climate consciousness by starting from a place of love.

Hey Brianna, thanks so much for joining us.

BA: Thank you for having me.

MW: So, I guess we can just start out by having you introduce yourself and your role at the service.

BA: My name is Brianna Amingwa, I’m the environmental education supervisor at John Heinz National Wildlife Refuge at Tinicum, located in Philadelphia, Pennsylvania. A lot of my job involves working with students and families in the Philadelphia area. I schedule and plan all the field trips that occur at the refuge, manage our partner schools program, called the Philly Nature Kids, and work with teachers to train and help them learn how to incorporate the outdoors and science into what they already do at school. That’s mostly what I do at Heinz.

OG: So tell us a bit more about that school partnership program, if you don’t mind.

BA: So our model is called Philly Nature Kids, and we see the students every other week for the entire school year. It’s about 125 students and that’s where a ton of my staff time goes to, is just – PNK, we call it, Philly Nature Kids. So the kids get to do all that learning – first we come to the classroom every month and we bring a lesson there. And then they come to the Refuge two weeks later and we study that exact same thing in real life. So they get to be in their comfort zone, and then they get to step out into nature and learn about it there.

Through the course of that whole year, they’re learning, they’re exploring, we’re getting our hands dirty, we’re checking out decomposers and wetlands and watersheds and, by the end of the year all the kids are given some gratn funds – they’re given 500 dollars for every class to design their own environmental stewardship project. And it’s really strategic the way we’ve designed it, because we want to do all that exploration and “love-building” kind of about nature, and for fourth graders, they’re pretty creative – they’ve done some great stuff in the last few years.

OG: Yeah, so going off of that, how are you using this program to teach students about climate change?

BA: Yeah, it’s a really good question, it’s a very big question. There’s a lot of work to do with climate change. There’s a lot that, you know, bigger entities need to do, but there’s a lot that we can do as individuals. And in order to even have a willingness or a want to do it, you have to have a love or an awareness about nature that’s, you know, right outside your door. And especially at Heinz, you know – there’s a big misconception, I think, with “nature people” and even with people who aren’t into nature, that the only place you can find nature is if you go out west, or, you know, into a forest. But we like to think of nature as, like, right outside your door. So in Philly, for a lot of the schools, that’s on the blacktop – you know, we look at the cracks in the blacktop and study all the different plants that are actually growing there, and we create little things to check out the ants and see how they’re traveling through there, and the sparrows that are in the city, and the pigeons, you know, that are there. There’s a lot of nature and that is valid to study and to experience what’s right immediately outside our doors.

MW: Yeah that’s a really great point Brianna. Like, sure they don’t have the rocky mountains to wake up to everyday or whatever. But, you know they have birds, they have trees and parks, all around them. That’s not any less “nature”. Um, so how do you validate those kinds of connections to nature, for these kids?

BA: Sometimes we kinda think “okay, kids in urban areas, people in urban areas, they don’t really care about nature”, right? “They’ve got too many other things to worry about”. and I think that’s false. They still do have connections. Um, even myself growing up. Like I am one of those people – that’s how I grew up. We were in Detroit, you know? We weren’t hiking and birdwatching, but we were definitely picnicking outside and bike-riding and playing sports outside and those are all valid connections to nature. So that’s really important to me: validating the kids’ experiences that they come in with.

And you know, one thing that we do in our lessons is ask the kids, “what does this remind you of?” You know, if we’re studying plants, we bring in one of the plants in the classroom on the first day of our partner school program and we have the kids draw and sketch it in their journal, and they’re supposed to use their senses to explore it. And just the smell, “what does it remind you of?” And the kids all say different things: “This smells like my grandma’s garden”, “This smells like peppermints” or things like that.

Just making those connections and validating what they come in the door with is really important and is crucial to how we teach. If we can build up those connections that are already there, and also increase that awareness of what’s going on outside and in the resource through science education and interdisciplinary learning, then we can later ask the kids to be stewards.

MW: And so where does climate change come in exactly?

BA: Sure so, it’s interesting because if you look at our schedule of what each monthly topic is, there’s not a month that’s about climate change. But the subject of it comes up quite a bit. They may not have the word climate change on their mind, but they have the signs all around them, and they see it. Especially in Southwest Philadelphia, it’s a very flood prone area. The marsh and wetlands absorb a huge amount of water and filter so many pollutants just by their own biological properties. But even that isn’t necessarily enough to help all the flooding issues in the area, and every year it gets worse and worse. So people are seeing that stuff up close – how these storms are becoming stronger, how it’s becoming hotter. Those topics come up a lot even though we don’t have it as a lesson plan that we do. The kids are really aware of that, and – kids have so much natural empathy that I think there’s a good window to teach them about climate change and how it’s affecting nature. They want there to be animals, they want to see them, they want them to be around, they want to help. They’re just helpful little beings already.

One thing we talk about a lot is their sense of wonder, and like as you get older it kind of lessens. But when you’re a kid, like how much you wonder and how much you just wanna know things and think about creative ways to be helpful to nature – it’s a great time.

OG: So given this great success that Philly Nature Kids has had in reaching students in these ways, how do you hope to see it grow in the future?

BA: Sure, yeah that’s a great question. My favorite story and our just banner thing that we love to talk about so much is one of our students – this is before I was at Heinz – in the first couple years when the program was created, there was a student named Mohammad who was just so nice [laughing]. Such a nice young man. He kept coming back year after year to our camp, even though he could only do Philly Nature Kids in fourth grade. So we brought him back as a ranger-in-training, and he was one of the older kids there. And he volunteered and helped us out, and then just this last year, he’s old enough now to get on one of our high school youth crews. So he worked on a youth crew and was at the refuge and in the community working and he had the best summer ever.

That’s what we’re trying to do at Heinz – just create this youth ladder. You know, where we’re seeing kids for Nature Tots when they’re 3-5, and then they’re visiting with their parents, or engaging in nature offsite with us at community programs, then they’re Philly Nature Kids, and then, you know, they volunteer to hang out with us, and then they’re old enough to get on high school youth crews and actually be stewards and engaged.

All those kids might not grow up and become a biologist – that’s okay. They may not even grow up and work anywhere in STEM, and that’s okay too. But they might be a voter whose gonna go out and decide, “Hey, I actually do care about the environment,” or “I wanna donate to some environmental to cause,” or “I wanna make sure the National Wildlife Refuge System is funded, because I had those experiences when I was a kid.” That’s all success for us in this area.

MW: Yeah, it sounds like Philly Nature Kids is really doing some excellent work in breaking down barriers that prevent kids like Mohammad from getting into nature and getting into stewardship. I think it’s really great that we’re continuing to support these kinds of programs and kind of broadening the reach of conservation, especially considering that often these communities where these kids live are impacted by climate change the most.

OG: Right. So, given how important programs like this can be, especially for removing barriers like you were just talking about, it feels like every kid and every city should have access to their own version of Philly Nature Kids. So, I’m wondering how do you think that Fish and Wildlife can scale up what you’ve done in Philly to cities and refuges all across the country?

BA: When it comes to how that works outside of Heinz and at a bigger level, we’ve been developing a manual for how to launch a Philly Nature Kids-type program. We’ve been calling it “National Nature Kids”, and we want folks to kind of do something like this: I think the Service has a really perfect and ripe opportunity for school partnerships, you know? All refuges have a school that’s nearby, and that’s a great opportunity to get to know the community better. So we’re making this manual, it’s gonna have all the lessons in it. A lot of them can be duplicated outside of our habitat and folks can have that at least to start with.

In it, we also have a lot of resources that are just about how we teach. Right? How we teach is equally as important as what we teach. We don’t do a lot of just telling the kids like, “here’s all the bird species” and listing them and all that stuff. We do a lot of inquiry-based learning. So we kind of act as guides on the side. We’re not there to just be this – you know, “I’m Park Ranger Bri, listen up, let me tell you about nature.”

We’re gonna say, “alright, today we’re studying birds. What do you all know about that?” you know, and we let them think of a question they want to solve and we’ll go out to try and figure it out, and we’ll use our journal and kind of refer, so the kids are learning that they don’t need us to explore. They don’t need tools that we have. All they need is maybe a paper and pencil. Maybe a spoon to dig through the dirt to find things or an old peanut butter jar to catch a bug in it. We try to use very resource-light lessons so that kids have that accessibility factor as well, and don’t need a park ranger to get outside.

MW: The fact that you just had a kid, I think, is gonna be really interesting. Like who’s that kid – that kid’s gonna be such a nature lover. I’m really excited. Huge sense of wonder!

BA: I’m very, very excited for him to start comprehending more things, you know? [laughing] Like, we’re learning letters, but we’re learning letters as they go with bird names, you know? We have these little flash cards and the one that always ends up on top is “bird”. This is the first word we need after “Mama” and “dada”

MW: Brianna, thank you so much. We really appreciate your time. I know you’re super busy, so thanks a lot!

BA: Awesome, thank you for having me.

OG: Thanks for joining us this week on Climate Close-ups, and thank you especially to Brianna Amingwa for joining us in this conversation. The editing and interviewing for this episode has been done by Mason Wheatley and me, Olivia Gieger. We’ll see you back here next time on Climate Close-ups, and until then, try to find some of that wonder in the nature surrounding you.