

## Nature in the City News 2023–2024 School Year Year End Edition











Exploring Nature and Science in Syracuse in Every Season

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Baltimore Woods Nature Center Nature in your hands

### The Moments You Make Possible By Whitney Lash-Marshall, Executive Director



I'm often asked why the *Nature in the City* program is important, and my stories always take me back to the students. Even after seven years of visiting the classroom, I am always amazed by the response from students when we arrive to spend an hour with them. They eagerly assemble in their seats, wanting to know what we've brought in our bins, if we're going outside, and (if we've visited them

prior to this visit) when they can share stories of experiments and discoveries they have been working on since the last time we were together.

There are so many discoveries and special moments that were shared together with K-5<sup>th</sup> graders across the Syracuse City School District (SCSD) this year (**check out some stories from the classroom on Pages 4-5**) and we have you to thank for making it all possible! Your support brings our experienced team of Environmental Educators to over 400 classrooms across 22 schools to deliver three, one-hour lessons and helps us update lesson content and activities and upgrade tools and materials students use during the program. And perhaps most importantly, you are bringing new ways of learning and exploring to every student. During *Nature in the City*, it doesn't matter if you're already in love with science, aren't sure it's cool to



like science, are just realizing for the first time science is something you can do right in your own neighborhood, or if science isn't your thing. We all explore together and meet students where they are, helping everyone be inspired to think about the world around them in a new way because of you.

Thank you for being a part of the  $22^{nd}$  year of the *Nature in the City* program, Why 6 Lah-If-hall

### The 22<sup>nd</sup> Year of *Nature in the City* by the Numbers

- 22 Schools and Alternative Programs reached across the SCSD
- Over 25,000 hours of hands-on/ minds-on learning
- 1,262 lessons delivered September-June to 8,000 elementary students



Each spring, we conduct a feedback survey of participating K-5<sup>th</sup> grade teachers.

This year, we had teachers respond from all 22 schools for a total of 148 responses.

**97%** of teachers indicated that the *Nature in the City* program enhanced and enriched their classroom instruction.

**98%** of teachers found that *Nature in the City* visits increased student understanding of the science standards/topics.

**95%** of teachers found students making connections between *Nature in the City* and FOSS material they were learning in class.

93% of teachers feel their students show an increased interest in the natural world as a result of our program.

**95%** of teachers agreed that all three *Nature in the City* lessons directly supported their science curriculum.

**89%** of teachers reported that observing a *Nature in the City* lesson motivated them to take their class outside for lessons.

### New Perspectives On Nature

By Katie Robideau, School Programs Manager



It is hard to believe the 22<sup>nd</sup> year of the Nature in the City program has wrapped up and we are preparing for the next school year! We have much to celebrate from this past year, thanks to teachers' continued support in coordinating visits and providing students with the opportunity to connect with nature in their classrooms and communities. There's no greater joy than seeing a student's face light up when discovering something during one of our programs. This past spring, fifth-grade students across the SCSD used hand microscopes to examine living things in

their schoolyard to build a food web (**learn more about this program on Page 4**). After learning

how to focus their microscopes, we often heard collective gasps as they examined the beauty of the microscopic world right outside their school. These structures in nature too small to be seen by the naked eye were revealed to students in a way that sparked their curiosity and helped them build on science concepts in their curriculum.

As a Kindergarten teacher at McKinley Brighton Elementary shared with us, the benefit of *Nature in the City* is that "Students learn they don't need to travel far to see nature, and they get to see examples right in our schoolyard."



We look forward to another year of new experiences, discoveries, and learning about nature,

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### What is the most beneficial part of the program for students?

"The kids love it and engage in the material. The lessons stick with the kids and they talk about it when we go outside for recess."

-1st grade teacher, Franklin Elementary School



"All of it! They enjoyed every presentation/activity. They were able to experience and learn things they might not have learned in the classroom." -4<sup>th</sup> grade teacher, Bellevue Elementary School

"Hands-on, real-life experience that they cannot get from a textbook, video or other experiment in the classroom. With the ENL population in the room, having the hands-on/visual experience helped them be able to contribute and participate in the same learning as everybody else."

-3<sup>rd</sup> grade teacher, Roberts Elementary School

Thank you for:  $F \sim h \quad co M$ aND MIX CAGE Mb teachiNG DQY.

Note and drawing are from Frazer Pre-K-8 students..

"Students gain or strengthen the connection of nature in their neighborhoods and surrounding community. The program also supports student knowledge from FOSS curriculum." - 5<sup>th</sup> grade teacher, Syracuse Latin Pre-K-8 School

### **Stories from the Classroom**

#### **Animals in Motion**

By Kathryn Resanovich, Environmental Educator



One of my favorite experiences with *Nature in the City* this year was in a bilingual class at Seymour Dual Language Academy. This class had a mix of students who spoke English and Spanish and I loved this class because the kids taught each other and were helping to make sure everyone understood our discussions. The lesson was

all about how animals move through their environment and there is one activity where the students have to guess what animal we are talking about. Students helped each other translate observations and descriptions until every student was able to make a guess in both languages. It was really special when the students were able to help each other and guess the animal in both languages; they were all really excited and proud!

#### **Overcoming Fears**

#### By Lizzy Suzedell, Environmental Educator

When we head to Elmwood Park for the final *Nature in the City* lesson of the year with third graders, it can be an intimidating upclose experience with all sorts of creatures. During a field trip, one of the students in my group screamed and said "there's a spider on you!" It was crawling on my arm. Instead of brushing it off, I let it crawl on my hand. They said, "how are you doing that?!" I told them this kind of spider won't bite. They all got closer and watched

the spider crawl around my hand. Then, one of them asked to hold the spider! He was very gentle with it and all of the other kids were very intrigued after just screaming about it a few minutes before! It was a special moment helping a few kids at Elmwood Park become less afraid of spiders, and to see these creatures in a new light.



#### Science of Snow

By Katie McLaughlin, Environmental Educator

By second grade, students know and get excited to see *Nature in the City*! In their first lesson on the Science of Snow we create snowflake catchers, a simple craft that allows students to get in touch with what is happening around them. How? We head outside when it's



snowing! Students quickly line up with catchers and magnifying glasses in hand eager to get a closer look at the snow they love to play in. We can see each snowflake's unique patterns by catching them in the air, counting their six sides, and comparing them across classmates. But what happens when it is not actively snowing? We bring in jars of snow and quartz crystals, which have a similar structure to snow, have inclusions for students to find, and don't melt! On my next visit, students often tell me about the times they have used the snowflake catchers at recess, with their teachers, or at home!

### Urban Ecosystems

#### By Anna Stunkel, Environmental Educator

As part of their "Exploring Urban Ecosystems" lesson this year, Syracuse fifth graders were fascinated by using our new set of handheld microscopes! It often took a little time and patience to focus the microscopes, but once they figured it out their faces lit up as they carefully examined leaf veins, the ruffled edges of lichens, mica in pebbles, and leafhopper wings. These tools add a new dimension to the lesson, allowing students to see nature up close

and in sharp focus. It was especially fun to see them calling each other over to share a new discovery with a classmate, and sketching or keeping a list of what they found on their clipboard. We were able to create detailed food webs from their observations when we returned to the classroom!



### **Students Meet New Creatures**



"Aquatic Benthic Macroinvertebrates" is a mouthful at any age, and especially for third graders! During the Creatures of the Deep lesson we break down this phrase: aquatic meaning water, benthic meaning bottom dweller, macro meaning visible and large enough to see without a microscope, and invertebrate meaning no backbone. As students make observations of living examples of aquatic

insects from the pond at Baltimore Woods Nature Center in Marcellus, they are amazed at some of their adaptations from water scorpions having a straw-like tail they can breathe through to - a class favorite - that dragonfly larvae can move around by shooting water out of their rear ends. For Kindergarteners, their final lesson of the year includes a special guest! At Huntington Pre-K-8 School, a white sheet was placed in the center of the circle for the visitor to stay on while students tried to guess what animal it was - a rabbit, cat, lion, dog, fox, mouse? No one guessed turtle. When box turtle Geronimo came out, the class quietly awed and were introduced to learn more about this unique creature. Many raised their hands to ask eager questions about her: "How does she pull her head in?" "What does she eat?" "Why does it have such long claws?" and so many questions about her shell.



### What's New in *Nature in the City* Lessons?



As part of a science unit on chemistry, the "Universal Solvent" *Nature in the City* lesson focuses on the restoration of wetlands as natural filtering systems, including at Onondaga Lake. This year lesson materials were updated to include a wetland base created on a 3-D printer where students could then create a wetland using layers of sponges as "plants" to experience how it absorbs the water - and pollution if it is present. The students enjoyed making it rain with the mist bottles, were surprised to see how much water was absorbed (including the colored "pollution" representing chemicals) by the wetlands, and tried to find the best ways to construct their wetlands. Special thanks to Luke and Rachel Ribaudo for the design and making the the 3-D printed models possible!

"[Students] really enjoyed having the special guests in the classroom! Not only did the lessons vertically align from lessons they had in previous grades, but they also were review of concepts that we taught in the current grade level as well."

-5<sup>th</sup> grade teacher, STEAM @ Dr. King

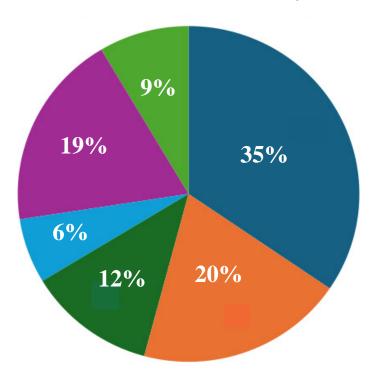
One new activity this year was part of the "Bugs, Blooms, and Birds" lesson about pollinators. Each second-grade student was asked to draw a large flower and keep the middle of the flower empty. Next, a special UV marker was handed out and the students were asked to draw a snowflake- like design in the middle of their flower. The other end of the marker was a UV light. The students removed this cap and shone the UV light onto their invisible design and instantly they could see the image they drew. "This is what Bee's would see when they go to land on a flower—they see in UV light!" The students loved this activity and it sparked curiosity and questions as they prepared to play a game where they were transformed into pollinators themselves!



### **Student Assessment Data**

When we arrive at a classroom for a *Nature in the City* lesson, we introduce ourselves and ask students a few questions - including to share examples of what they might remember from previous visits. Hands fly into the air and there is rarely a memory shared without a huge smile as nature walks, games, living things we observed - even vocabulary words! - are recalled.

This year, we collected 1,663 memories from K-5<sup>th</sup> grade students as part of this brief in-classroom assessment and here is what they remember!





Core Concept (directly related to key part of the science curriculum, such as the definition of a habitat or the water cycle)

Direct Experience (such as going outside for a scavenger hunt or using a hand microscope)

Main Activity (such as tasting maple syrup or building a biome diaroma)

Examples from Lesson (such as a specific plant or animal observed or discussed)

Memory of a Past *Nature in the City* Lesson (such as 5<sup>th</sup> graders remembering meeting a turtle in Kindergarten!)

Other ((memories from other classroom activities or a student's personal story)



As part of their second *Nature in the City* lesson of the year, first-graders collect data during a taste test to see if they can identify which sample is real maple syrup vs. that made from corn syrup. This year we collected 702 votes, and 34% of students were able to identify the real maple syrup!

A special thank you to Dutch Hill Maple for again donating enough delicious local maple syrup for all 1st graders to get a taste during their lesson on the science behind making maple syrup. We are also grateful to Dutch Hill Maple for making their contribution to *Nature in the City* even sweeter this year by donating a copy of Curious George Makes Maple Syrup to every school for students to enjoy!

## "Going outside with you has been my favorite part of school."

-5<sup>th</sup> grade student, Dr. Weeks Elementary School

### **Sponsor Highlights**

### National Grid Sponsors Nature in the City Summer STEM Kits

On June 20, all 664 students at Dr. Weeks Elementary School got a head start to summer fun and learning when the first-ever *Nature in the City* Summer STEM Exploration Kits were distributed to every Kindergarten through fifth-grade classroom thanks to National Grid!

Designed to extend the experiences students gained during *Nature in the City* lessons, each backpack included tailored activity guides, tools, and a nature journal with pencil and pencil sharpener so students could record their favorite experiences and capture observations about new discoveries. National Grid also included a specially- selected STEM book for each grade level from First Book that aligned with their science curriculum and *Nature in the City* lessons.





National Grid values hands-on, experiential learning that fosters problem solving and analytical skills needed in our future workforce. "Though the school year is coming to a close, young people's curiosity doesn't take the summer off," said Alberto Bianchetti, regional director of customer and external affairs for National Grid. "The STEM bundles ... help keep learning alive all year long and offer another avenue with which we can help inspire the scientists and engineers of tomorrow."

National Grid has been sponsoring the Baltimore Woods *Nature in the City* program for 14 years and counting, starting with supporting the program at Roberts Pre-K-8 School in 2010 and now having expanded to support Dr. Weeks Elementary and Huntington Pre-K-8 Schools in 2024. We'd also like to give a special thank you to all the National Grid employees who packed and prepared all the backpacks!

### **Engagement & Exploration During Classroom Visits**



Volunteer Amy Akin from Lockheed Martin has been joining 3<sup>rd</sup> graders at their Elmwood Park Field Trip for many years. During her favorite Nature in the City lesson, Amy can be found in the stream helping students learn how to collect samples and identify invertebrates - and students get the chance to work with a STEM professional in the field!



During a visit from Jed Walsh, Stormwater Management Program Coordinator for the Onondaga County Department of Water Environment Protection, 3<sup>rd</sup> graders at Delaware "...had buckets of fun learning about water, storms, and our environment." Here, a student shares the water drop journey they created during an activity and recorded on a colorful beaded bracelet they get to keep!



Madeleine DiGristina, the SRC Inc. Director of DEI & Community Relations, visited sponsor school HW Smith for 5<sup>th</sup> graders final Nature in the City lesson. Together, they explored the urban ecosystem around their school, learned how to use hand microscopes, observed snails, butterflies, and birds, and built a food web to explore energy flows.



Tamika Otis, KeyBank Corporate Responsibility & Community Relations Officer, joined student scientists from sponsor school Frazer Pre-K-8 School to learn about the adaptations of invertebrates they collected as part of their investigation. Students were excited to share fun facts about crayfish with Tamika, and together they gave the water quality an excellent rating!

# Thank you to our partners and sponsors for making the 2023-2024 *Nature in the City* program possible!



Supporting all 22 schools



Supporting 3<sup>rd</sup> grade programs

#### Green Family Foundation

Supporting STEAM @ Dr. King, Salem Hyde Elementary School and Alternative Programs



Supporting Webster Elementary School

### national**grid**

Supporting Dr. Weeks Elementary School and Huntington Pre-K-8 School

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Supporting Franklin Elementary School



Supporting McKinley Brighton Elementary School and Frazer Pre-K-8 School



Supporting HW Smith Pre-K - 8 School





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Anonymous Donors & Friends

In December, the Baltimore Woods Nature in the City Program Fund was established at the Central New York Community Foundation to support the program in perpetuity thanks to an inaugural gift from the Estate of John Herman. Learn more at cnycf.org.



NATURE

We look forward to working with you for the 2024-2025 Nature in the City program!

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