

# SCHOOL ENGAGEMENT

## 2024-2025 EVALUATION REPORT

**122,000**

STUDENTS IN PROGRAMS

**1,200**

EDUCATORS TRAINED

**32,000**

FAMILY MEMBERS ENGAGED

**935**

SCHOOLS REPRESENTED

WCS Education's mission is to foster the next generation of conservation advocates by creating meaningful connections to wildlife and nature. Engaging PreK-12 schools is critical to advancing this goal. This report highlights the work we do with schools through field trips and outreach programs for students, professional development for educators, and school community days for staff, students, and families. During the 2024-2025 school year, we facilitated **4,639 programs for 121,737 students, 1,222 teachers, and 32,472 family members, who collectively represented 935 schools.**

This evaluation report describes the reach and impact of WCS Education's work with PreK-12 school audiences. Results provide insight into how our work connects these audiences to wildlife and nature and how we can continue to strengthen our practice and increase reach.

## Data Sources

- **Registration records** included program details and school information for all programs delivered.
- **Student program surveys** ( $N = 316$ ) allowed teachers to provide feedback on their student-focused program, including their students' engagement and learning.
- **Educator workshop surveys** ( $N = 326$ ) allowed educators to share feedback on professional development workshops, including application in their teaching context.
- **Program observations and lesson plan reviews** allowed the evaluators to see what programs look like in practice; this year, we focused on climate change programs ( $N = 5$ ).
- **WCS Education staff interviews** ( $N = 6$ ) allowed the evaluators to learn how teams are integrating climate change content into their programs and their plans for future programs.



# By the Numbers

# 4,639

Total Programs Facilitated

## Students

| Type                | Programs     | Students       |
|---------------------|--------------|----------------|
| Classroom programs  | 2,141        | 54,621         |
| Self-guided & tours | 1,507        | 42,432         |
| Outreach programs   | 168          | 4,529          |
| Virtual field trips | 12           | 252            |
| <b>TOTAL</b>        | <b>3,828</b> | <b>101,834</b> |



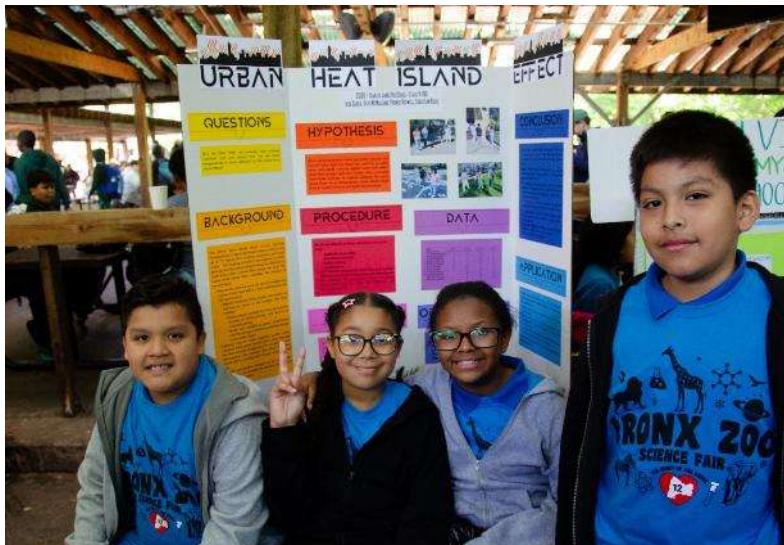
**935 Schools Engaged\***



**700 NYC PreK-12 Public & Charter Schools**



**626 High-Needs Schools\*\***



## Educators

| Type         | Programs  | Educators  | Contact Hours |
|--------------|-----------|------------|---------------|
| Workshops    | 18        | 362        | 5,957         |
| Partnerships | 12        | 223        | 2,924         |
| <b>TOTAL</b> | <b>30</b> | <b>585</b> | <b>8,881</b>  |

## School Community

| Type                        | Events | Participants |
|-----------------------------|--------|--------------|
| Science fairs & family days | 36     | 7,726        |



**Urban Advantage** is a partnership between New York City Public Schools and eight science-based cultural institutions, including the New York Aquarium and Bronx Zoo. Urban Advantage supports school field trips, professional development for teachers, and family visits to the parks.

| Urban Advantage    | Programs | Participants |
|--------------------|----------|--------------|
| Student programs   | 727      | 19,903       |
| Educator workshops | 18       | 637          |
| Family programs    | n/a      | 24,746       |

\*Schools include those that participated in student and school community programs; future reports will include schools represented by educators.

\*\*High-needs schools includes K-12 schools that have an Economic Need Index of 0.6 or higher and preschools that serve high-needs communities. This number is an underestimate because we do not have data for all preschools.

# Student Programs

## Reach

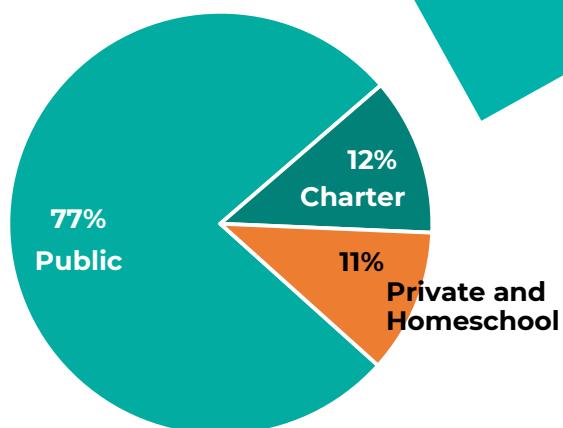
This year, WCS Education delivered **4,555 programs to 121,737 students from 935 unique schools**. Prospect Park Zoo reopened for school programs this year, boosting program numbers relative to the 2023-2024 school year; however, decreases in average class size meant that programs reached a similar number of students overall.

Almost all (98%) of the schools engaged were in New York State and 86% were in New York City. Of the NYC-based groups, 89% were from public and charter schools (the same as last year). There are about 1,900 NYC public schools and we reached students at 700 (39%) of the schools in the system, a 4% increase from last year. We had particularly high reach among elementary schools, connecting with students from almost **half (49%) of NYC public elementary schools**.

As in previous years, we delivered more than two-thirds of the programs (71%) to students in K through 5<sup>th</sup> grade. Preschool students (3K and Pre-K) made up 4% of groups, a low percentage, likely because preschoolers cannot travel on school buses to reach our parks. Twenty-one percent of programs were delivered to middle and high school students. **Over two-thirds (69%) of programs delivered to middle schoolers were grant-funded**, thanks in part to Urban Advantage which focuses on middle school students.



### Types of NYC Schools



**1,446**

Free programs for classes from high-needs schools

**29%**

of groups included students with disabilities or accessibility needs

### K-5th Program Highlight



#### Incredible Insects at PPZ

Students use observation, hands-on exploration and dramatic play to learn about insect anatomy, life cycles, and the important part they play in earth's ecosystems.

### Special Education Program Highlight



#### Amazing Animals at CPZ

This flexible, multi-sensory program engages students through movement, artifacts, and meeting an animal. Educators prioritize the adaptability of the program to accommodate students of all ages and abilities.

### Science for All

This year, we provided 1,446 free zoo and aquarium field trips to 38,039 students at high-needs schools in NYC. This initiative is supported by numerous government, corporate, and private donors.



## Motivations and Learning Goals

About 10% of teachers whose classes participated in student programs responded to the post-program survey. Nearly two-thirds of teachers indicated that they booked the program for the *opportunity to see animals and exhibits*. Similar to last year, the next most common motivations were the *focus on science content and connections to curricula*.

Regarding learning goals, **84% of teachers noted the relevance of the program's specific STEM topic**, such as animal adaptations or ecosystems, a 7% increase from last year. This aligns with the increased percentage of teachers who indicated the connection to curriculum motivated their program choice. Twenty-five percent described their goals as making real-world and hands-on connections to in-class curricula. Eleven teachers shared goals connected to **non-STEM subjects like writing and social studies**.



*“As part of our ELA curriculum, students need to write an informational piece in which they compare and contrast animal behavior and defense mechanisms.”*

## Satisfaction

**Most teachers (87%) rated their students' program experience as excellent or superior.** Programs facilitated by a WCS educator or volunteer were rated more positively (89% excellent or superior) than self-led scavenger hunts (66% excellent or superior) emphasizing the value that facilitation brings to the program experience.

## Favorite Experiences

Teachers praised multiple parts of the student programs. By far, the most common favorite parts were the opportunity for students to see an animal up-close (47%) and the **interactions with WCS educators and staff (43%)**, who teachers described as engaging, knowledgeable, and organized.

Thirteen teachers (5%) mentioned **accessibility accommodations** as their favorite part, with particular emphasis on WCS educators' experience and approach. Teachers emphasized how the instructors' flexibility and patience with students with special needs made the program particularly impactful for them and their students.

# 90%

*“were very satisfied or satisfied with facilitated discussions, exhibit visits, and animal encounters.”*

*“Most of the boys [in my class] are native Spanish speakers learning English. They had so many questions and were trying to communicate them in English. Once the instructor responded to them in Spanish, their faces lit up and the questions and engagement went up tremendously.”*

*“The most important part for me was the educator's background in special education and their interactions with my students. They were comfortable with them and let them speak and ask questions at their pace. They seamlessly met them at their individual levels.”*

# Learning Outcomes

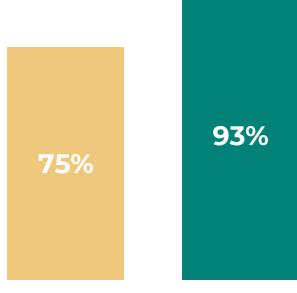
Teachers shared the variety of ways their students benefit from WCS programs. Almost all felt that their students benefited from their interactions with the instructor (95% agreed or strongly agreed). Regarding learning, nearly all teachers indicated that their program **increased students' knowledge of the natural world (93%) and science concepts (91%) and encouraged students to care more about animals (93%)**.

While conservation messaging is included in all programs, some provide a deep opportunity for students to connect with a specific conservation issue or action. This year, **535 programs delivered were conservation-focused**, a 15% increase from last year, emphasizing teachers' interest in these programs and an increase in conservation-focused program offerings.

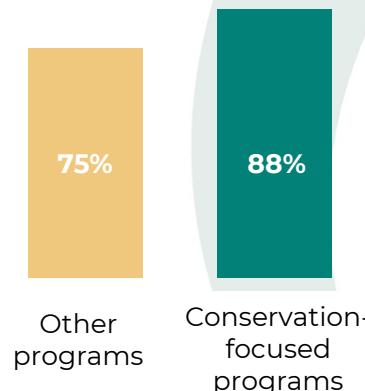
Like last year, teachers whose students did a conservation-focused program were more likely to agree or strongly agree that their students were more aware of conservation issues and knew how to help wildlife, than teachers whose students attended other programs. While still very high, agreement for conservation programs dropped slightly compared to last year, as the teams launched new programs and honed the activities and messaging.

% Agree or Strongly Agree

Are aware of conservation issues.



Know what they can do to help the wildlife and the environment.



## Guided Tour Highlight

### Protecting the Environment at QZ

Students visit exhibits to learn about animal natural history, what it means to be an endangered species, and discover simple ways they can help protect wildlife and habitats.



# 96%

agreed that their students were engaged during the program

"My students were engaged and asking tons of questions. They are already inspired on what they want to do more research on!"



## Conservation-Focused Program Highlight



### Conservation Innovation! at BZ

Middle school students investigate the complex relationships between humans and wildlife, including snow leopards, an endangered species that increasingly comes into contact with humans who share their habitat. They discuss real-world solutions and what it means to be a conservation stakeholder.

# Educator Programs

## Reach

We worked with 1,222 educators who accrued 16,130 hours of training through our professional development programs. More than half of the participants (55%) taught middle school; this high percentage reflects WCS Education's participation in the Urban Advantage program, which provides free PD for teachers at select middle schools. Ten percent of participants were parent coordinators and informal educators. About one-quarter (26%) taught elementary school, a slight decrease from last year (32%). Eighty-five percent of participants said they taught science, either exclusively or in addition to other subjects, an increase from last year. Thirty-four percent were special education teachers and six educators taught ENL or in multilingual classrooms.

## Motivations and Experience

Educators had multiple motivations for participating in their PD program. The most common motivations were to learn new teaching strategies, interest in the course topic, and to learn new content. Completing CTLE hours and P-credits (i.e., professional development requirements for certified educators in New York State and New York City) were also common motivators.

Almost all (90%) educators rated their PD program as excellent or superior and were highly satisfied with program logistics, structure, and content.



**16,130**

Contact hours

**85%**

of participants taught science

**34%**

of participants taught special education



### PD Program Highlight

#### **Predators: Conflict and Conservation**

Teachers explore and debunk common misconceptions about predators in this blended science and social studies course. They look back through history, explore Indigenous perspectives, and model environmental dramas that will help inspire their students develop a deeper understanding of these animals.

# Impact and Application

All programs aim to connect educators with new resources to support their science teaching, such as online videos, data sets, lesson plans, and discussion questions. Additionally, program content often highlights WCS's field-based conservation efforts around the world, aligning these real-world actions, research, and policies to standards commonly used in science teaching. Ninety-eight percent of educators *agreed or strongly agreed* that the program **increased their knowledge of WCS education resources and awareness of WCS conservation efforts.**

During programs, WCS educators encourage learners to reflect on implications for their classroom practice, often providing dedicated time for participants to develop an action plan to bring what they learned to their students. Like last year, almost all participants (94%) indicated they were *likely* or *extremely likely* to apply what they learned in the PD program in their classroom. They planned to bring in new science content, with several describing how they would **integrate science content and skills in innovative ways, including in non-science subjects.** Some noted that they would **use WCS conservation stories and resources in their lessons.**

The survey asked educators to share any barriers they may face when bringing their PD learning into the classroom. Like last year, the most common barriers were limited time, a structured curriculum that limits innovation, and limited resources. Some elementary, ENL, and special education teachers were looking for more support in adapting or differentiating the material for their students.



**94%**

**Plan to apply what they learned in their classrooms**

*"I can incorporate it in my writing curriculum to write a persuasive essay about why it is important to conserve the deep sea."*

*"I really valued taking the time to give voice to Indigenous communities as people who hold scientific knowledge. I want to continue to exemplify these voices in my classroom especially when relating it to conservation."*

*"I would like to connect climate change to access to clean water and water quality around us. This connects with one of the priority issues WCS is working with worldwide, and will connect with my current science unit, Chemical Reactions."*

# Climate Change Education



Zoos and aquariums are uniquely positioned to make science concepts meaningful by linking them with real-world conservation challenges – none more urgent than climate change. In response to this global crisis, WCS Education has embraced our role as a leader in climate change education (CCE), delivering several types of CCE programs to school audiences this year. We documented our CCE approach as part of this year's evaluation to understand what worked well and to lay the groundwork for growth and impact assessment for the 2025-2026 school year.

This year, teams developed new CCE programs that integrated climate change content in meaningful, developmentally-appropriate ways and included flexibility to accommodate highly variable levels of climate science knowledge. Four student programs at three parks centered on climate change, with **almost 4,000 students attending these programs**. Student programs often included learning goals related to weather versus climate, how animals are impacted by climate change, and how New Yorkers are affected by climate change. **Over half of educator programs included climate change content** and included titles like, *Climate Change Conservation and Your Curriculum*. Educator programs often integrated nationally-recognized resources on climate science, such as NOAA datasets, that teachers can use with their students.

This year provided an opportunity to build and test programs and **our goal for the 2025-2026 school year is to integrate CCE into all WCS Education programs**. We continue to prioritize innovation by **building new partnerships** to better highlight local climate change projects and increase opportunities for learners to take climate change action directly. We will continue to increase our programs' focus on **building hope and centering solutions**.

**3,843**

Students attended CCE programs

**148**

CCE student programs delivered across three parks

**55%**

Educator programs included climate change content

"We're thinking about stewardship and deepening partnerships, like with the NYC Public School Sustainability Team."  
- WCS Educator

There's no simple way to make CCE uplifting and empowering. It takes strategy, framing and shifting perspectives from individual to systems-based solutions.  
- WCS Educator



# CCE Program Examples

## Blue Futures (NYA)

### 9<sup>th</sup>- 12<sup>th</sup> Grade Field Trip

After learning about the greenhouse effect and the impacts of climate change, students work in small groups to evaluate carbon reduction strategies tied to sectors like energy and transportation, using a framework inspired by global policies, such as the Paris Agreement. The session features an animal encounter and a visit to the Sea Change exhibit to help students connect climate change solutions to impacts on ocean wildlife.



## Climate Change, Conservation, and Your Curriculum

### Educator P-Credit Course

This one-day workshop for K-12 educators uses interactive games, digital resources, and hands-on learning experiences to support educators in teaching climate change in their classrooms. The workshop included activities like the **Carbon Dioxide Game**, tours of zoo exhibits that highlight the impacts of climate change on wildlife, and the creation of an advocacy campaign to support animals affected by climate change. After each activity, teachers brainstormed how they could adapt the lesson for their own classrooms.

## Sustainability Partnerships

Each year, WCS supports up to five schools as they apply for a \$5,000 grant from the NYC Public Schools Office of Sustainability and Energy. Schools that receive funding collaborate with WCS on programs to bring sustainability education and practices to their school community. Teachers attend PD workshops and participate in responsive coaching to help them design these programs. Each school plans a Climate Action Day, during which students, teachers, and families visit a WCS park to learn about sustainability and climate.

Over the last 4 years, we have entered these partnerships with 12 schools, including several that have received the award multiple years in a row.

“In our [CCE] programming, we try to focus on what participants can do, so activism is the center focus rather than focusing solely on climate science.”  
- WCS Educator

### Activities

The **Carbon Dioxide Game** simulates the greenhouse effect by having sunbeam players try to leave the Earth without being trapped (tagged) by CO<sub>2</sub> molecule players circulating in the “atmosphere”. With each round, human activities add more CO<sub>2</sub> molecule players to the game, increasing the difficulty. The game helps participants to visualize how increased greenhouse gases trap more heat and raise Earth's temperature.



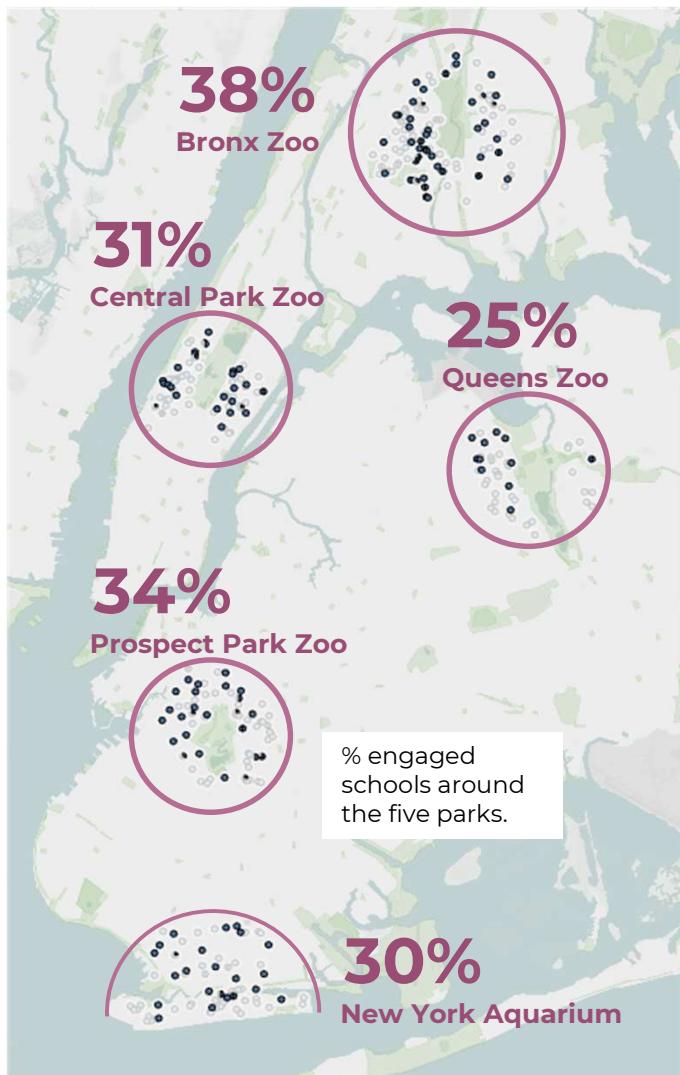
# Multi-Audience

## Education Ecosystem

We work to engage schools located within walking distance of our parks: our Education Ecosystem. Twenty-two percent of student programs were delivered to schools in our Education Ecosystem. While we reached a similar number of nearby schools as last year, the **total number of programs delivered to these schools increased by 33%**, reflecting deeper relationships.



| Park              | # Schools in Ed Ecosystem | % Schools Reached<br>(Δ from FY24)* | # High-Needs K-12 Schools in Ed Ecosystem** | % High-Needs K-12 Schools in Ed Ecosystem Reached |
|-------------------|---------------------------|-------------------------------------|---|---|
| Bronx Zoo         | 142                       | 38% (+3%)                           | 106   | 51%   |
| Central Park Zoo  | 89                        | 31% (-2%)                           | 29  | 17%   |
| New York Aquarium | 80                        | 30% (+3%)                           | 34  | 50%   |
| Prospect Park Zoo | 77                        | 34% (n/a)                           | 37  | 38%   |
| Queens Zoo        | 48                        | 25% (-3%)                           | 23  | 43%   |



The percentage of Education Ecosystem schools that are high-needs varies by park, ranging from 33% of the schools close to the Central Park Zoo to 75% of those close to the Bronx Zoo. Four of our parks had higher reach among these high-needs schools, thanks in part to funding for free field trips. This funding is primarily focused on the Bronx Zoo and New York Aquarium.



\* Schools reached include those that participated in student and school community programs. Next year, we plan to add data from schools that participated in educator programs. \*\* We do not have economic need index data for private schools and the majority of preschools, so have limited this assessment to K-12 public schools only. An exception is for Queens Zoo, which has a partnership with two high-needs preschools in the Ecosystem; these preschools are counted in the table.



## Partnerships

School partnerships reflect our commitment to build long-term, deep relationships with local schools. Partnerships are customized based on school needs and often provide engagement opportunities for the whole school community, including students, teachers, and families.

We had **ten school partnerships** this year and have worked with each of these schools for multiple years. Most partners are also located within our Education Ecosystem and the proximity of the school to the zoo or aquarium enables students, teachers, and families to visit regularly.



### STEM Starters

STEM Starters brings science learning to some of our youngest learners: 3-year olds at two partner schools in Corona, Queens. Funded by the Robin Hood Foundation, we engage the whole school community, students, teachers, and families in science activities. Students – most of whom are English language learners – participated in a bilingual outreach series in their classrooms, went on field trips to the Queens Zoo, and visited the zoo with their families for a Family Day event. Their teachers participated in workshops to build their self-efficacy teaching science and received custom-built kits of books, tools, and other materials to bring science activities to their classrooms.

## 10 Partnerships

234

Student Programs

3,165

Teacher Contact Hours

13

Community Days



### District 12 Partnership

The District 12 partnership began in 2017 as a science fair for middle school students. Now, in its 8<sup>th</sup> year, students from over 30 schools in District 12 visit the Bronx Zoo and their teachers participate in PD coaching and workshops. The year culminates with a Science Fair at the Bronx Zoo with students from Pre-K through 8<sup>th</sup> grade presenting their research, with prizes awarded to each age group. For the last two years, the Science Fair has been had an environmental justice theme and WCS staff support teachers as they support student-led projects on topics like the urban heat island effect, diabetes and food deserts, and clean water.

# Conclusions

- During the 2024-2025 school year, WCS Education connected over 155,000 students, teachers, and families with innovative, high-quality science learning.
- NYC is the largest school district in the United States, with 1,900 public schools. Our programs had a large reach, connecting with audiences at nearly 40% of NYC public schools. We continue to build connections with high-needs close to our parks, understanding the value of local connections.
- Our programs continue to foster engagement and learning in a novel and fun environment. Student programs increased students' knowledge of science and the natural world and interest in animals. Educator programs provided teachers with new skills and resources to better incorporate science and conservation in their classrooms.
- This year, we focused on developing our climate change education programs, with plans to build on this foundation in the 2025-2026 school year to more deeply connect school audiences with critical content and inspire hope and action.



# Recommendations

- Consider updates to self-led field trips to increase satisfaction to levels similar to facilitated programs.
- Consider strategies for increasing educators' comfort adapting activities to their unique teaching context.
- Continue to develop relationships with high-needs schools close to our parks. Offering free fall field trips and reaching out to schools that already visit on general group visits or scavenger hunts may be high-yield strategies to boost engagement.
- Share experiences with climate change programs across teams, learning from others' strengths and areas for improvement as we continue to refine these programs.
- Update strategy to increase student programs' survey response rate, including collaborating with the program teams to increase teachers' awareness of the survey immediately after their program.
- Refine the strategy to collect data on educators' schools to ensure that we have this information to measure reach during the 2025-2026 school year.



# WCS Education

WCS Education is a pioneer in zoo-based learning, inspiring over 1.5 million people each year across New York City. Since 1929, we have been at the forefront of science education, fostering the next generation of conservation advocates by creating meaningful connections to wildlife and nature. Operating across all five WCS parks—Bronx Zoo, Central Park Zoo, Queens Zoo, Prospect Park Zoo, and the New York Aquarium—we provide innovative, high-quality learning experiences that empower individuals to care for and protect the natural world.



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## Photos

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