



ZOOCREW

PROGRAM OVERVIEW

Updated January 2016

INTRODUCTION

VISION

All youth from the greater Seattle area will join the next generation of conservation leaders.

MISSION

ZooCrew empowers middle school youth to become conservation and community leaders by providing engaging science learning experiences that inspire them to learn, care, and act.



Photos by Caitlin Potter/WPZ

GOALS

- Engage middle school aged youth from traditionally underserved communities in enriching STEM (Science, Technology, Engineering, and Math) and conservation activities.
- Foster ecological literacy, conservation action, and problem-solving skills in middle school youth through yearlong after school and summer science programming.
- Excite youth about STEM subjects in school, prepare them for continued involvement in Woodland Park Zoo's youth programs, and inspire them to consider a broad range of STEM careers.
- Create a model program for middle school youth engagement and share this model with other informal science learning institutions.

“In ZooCrew, we act like scientists – we make observations, we do experiments, we work on projects....”







Julia, ZooCrew Youth

“My daughter is so enthusiastic about science now!”

Rachael, ZooCrew Parent

LEARNING MODEL

The ZooCrew program model is founded on the idea that every student should have equal opportunities to become empowered conservation leaders in their community and society. Our model uses a three-tiered educational approach to support youth engagement in problem solving around environmental themes that lead to meaningful conservation action. The chart below shows example activities during each of the three tiers:

<p>DISCOVER</p> <p>Youth explore the local environment through engaging experiences</p>		<ul style="list-style-type: none"> • Research local and global conservation issues • Use technology for research and projects • Go on field trips • Interact with animals • Meet adults working in STEM careers • Participate in teambuilding 	
<p>CREATE</p> <p>Youth design and complete projects that address a conservation issue and inspire action</p>		<ul style="list-style-type: none"> • Work with high school and adult mentors • Design and complete conservation projects • Create multimedia presentations • Learn about engineering design and science inquiry processes 	
<p>SHARE</p> <p>Youth promote sustained involvement and action for themselves and the community.</p>		<ul style="list-style-type: none"> • Present project to zoo visitors at special Zoo events • Share projects with fellow ZooCrew students, family and zoo staff at the Project Showcase • Inspire others to take action on conservation issues 	

PROBLEM-BASED LEARNING



Each term, students grapple with the complexity of a conservation problem and design projects to address the focal issue. These projects allow youth to holistically and practically approach real-world problems through informed and collaborative decision-making – crucial skills for success in the 21st century. Students use iPads and computers, which helps them discover, create and share in new and exciting ways. Combining STEM learning with a youth development program, such as ZooCrew, can boost participants' interest in science as well as the confidence needed to pursue STEM careers.

CONSERVATION ACTION

Each term, ZooCrew students work on a set of projects relating to the season's biome and conservation topic. From the tropical rain forest, to the Africa savanna, to the biomes of the Pacific Northwest, ZooCrew youth learn about conservation issues such as wildlife poaching, climate change, and deforestation and create projects to educate and advocate for solutions to these issues in their community.



MENTORSHIP

ZOO STAFF

Woodland Park Zoo has over 250 employees working across more than 25 different departments, including Field Conservation, Communications & Public Affairs, Animal Management, Events & Business Operations and Education. Each ZooCrew class has an instructor that serves as the primary mentor for students during their afterschool sessions. In addition, on their zoo field trip students interact with zookeepers during tours of the zoo, hear from Animal Collection Managers and Field Conservation staff through lunchtime lectures, and receive feedback from various staff members during their Project Showcase presentations.



Photos by Caitlin Potter/WPZ

ZOOCORPS

ZooCorps is Woodland Park Zoo's high school volunteer and intern program. Each year, we have over 100 high school volunteers who teach the zoo's visitors about animals, their habitats and zoo conservation programs at various locations throughout the zoo. ZooCorps teaches work and leadership skills, builds confidence, and inspires conservation awareness.

ZooCorps teens also serve as mentors to ZooCrew youth by facilitating activities and games, providing feedback on their projects, leading them on tours of the zoo, and serving as positive youth role models. These relationships provide supportive connections that can be further developed as youth graduate from ZooCrew and join ZooCorps themselves, beginning in 9th grade.



Photos by Caitlin Potter/WPZ

PROGRAM FORMAT

SCHOOL YEAR

ZooCrew is held after school Monday-Thursday. We currently operate at Asa Mercer International Middle School (Beacon Hill), Denny International Middle School (West Seattle), South Shore K-8 (Rainier Beach), and Washington Middle School (International District/Central District). Students sign up for ZooCrew through their after school program offices run by Seattle Parks and Recreation's Community Learning Centers.

SUMMER

Woodland Park Zoo and ZooCrew, funded through Seattle's Families and Education Levy, operates a summer program for students interested in continuing the learning that occurs during the school year. For several weeks over the summer, students dive into learning more about conservation and science through interactive hands-on projects and field trips around Puget Sound. Students also practice reading and math to keep their skills sharp for school to resume in September. Enrollment preference is given to students who fall into the Levy's focus populations. However, we welcome all applications, particularly those from alumni of the ZooCrew afterschool program!

PARTNERSHIPS

At the core of the ZooCrew program is a successful partnership. We value the existing relationships that our partners have developed within their communities. We believe that in order for ZooCrew to have the greatest positive impact on participants, we need to work with partners in a mutually beneficial relationship. In order to do this, we take a personalized approach to building partnerships by identifying the needs and capacity of each potential location for ZooCrew.

We provide:

- Administrative program support and coordination
- Program instruction
- At least one animal visit during each ZooCrew quarter
- 4 tickets to WPZ for each student to be used within a year
- Free admission to the student and two family members on the zoo field trip day
- Food and activities during the zoo fieldtrip
- Staff management, zookeeper and other zoo staff time during the field trip
- A fun, engaging, and educational experience for youth!

We ask our partners to provide:

- A classroom with access to outdoor space
- Wifi and/or computer access
- Assistance with student recruitment
- Coordination of the student application and selection process
- Assistance in the payment of instructor and supplies



STAFF



KATIE REMINE SCIENCE & CONSERVATION EDUCATION SUPERVISOR

Katie has worked at the intersection of formal and informal science education for the past 18 years. Katie earned a Bachelor's degree in Biology and a minor in African Studies from Colorado College and completed her Master of Science degree in Biodiversity Conservation and Management through Imperial College London. She develops and presents conservation education for educators of K-20; supervises on-site and outreach school, afterschool and summer science learning programs; and facilitates programs that engage these audiences in conserving wildlife.

Katie.Remine@zoo.org



RYAN DRISCOLL SCIENCE EDUCATION OUTREACH COORDINATOR

Ryan spent three years as a life science teacher in public schools and has also worked for multiple years in informal science education at various institutions including Space Camp! His passion for learning about animals has taken him into the field in Australia and Bolivia, and he is excited to use his experiences to help blend science content with games and conservation action in the classroom.

Ryan.Driscoll@zoo.org



CAITLIN POTTER SCIENCE EDUCATION OUTREACH INSTRUCTOR

Caitlin started working in the education department at the Oakland Zoo at age 12, took a break from the zoo world for to pursue a career in research, and has now returned to the field as a ZooCrew instructor. She has a B.S. in Wildlife, Fish and Conservation Biology from UC Davis, and an M.A. and Ph.D in Ecology and Evolutionary Biology from Princeton University. Caitlin's studies have allowed her to do science all over the world, including ecology and conservation projects in Kenya, Ethiopia, Guatemala and Belize, and she is very excited to continue sharing her strong science background and passion for education in the ZooCrew classroom!

Caitlin.Potter@zoo.org

PROGRAM SUPPORTERS

CENTER FOR YOUTH PROGRAM QUALITY

Woodland Park Zoo participated in YPQA from 2012-2014 to ensure the highest quality youth programming. The Youth Program Quality Assessment (PQA) is a validated instrument designed to evaluate the quality of youth programs and identify staff training needs. It has been used in community organizations, schools, camps, and other places where youth have fun, work, and learn with adults. The Youth PQA evaluates the quality of youth experiences as youth attend workshops and classes, complete group projects, and participate in meetings and regular program activities. For staff, the Youth PQA process is a great way to see what is happening in their programs from another perspective and to build professional competencies.

WASHINGTON STEM

ZooCrew was awarded the Entrepreneur Award, given to educators who are pioneering breakthrough ideas and promising practices in STEM education. Washington STEM is a statewide nonprofit advancing equity, excellence, and innovation in STEM education. Launched in March 2011 with support from the business and philanthropic communities, they invest in and lift up breakthrough ideas and promising practices that bridge education and economy through STEM. Together with educators, businesses, and communities, they are reimagining STEM

education for every student and improving opportunities for those most underserved and underrepresented in STEM fields.

WOODLAND PARK ZOO

As the Washington hub for excellence in conservation education, the zoo's programs are grounded in a robust, science and outcomes-based framework for inspiring conservation. The guiding framework for program development is: connecting children to nature, developing ecological literacy and providing pathways to conservation. From early learners to senior learners, and on and off grounds, the zoo's developmental approach to lifelong learning is to foster empathy for nature, build conservation knowledge and skills, and increase people's personal ownership for action that benefits wildlife and habitats. The Zoo's many educational elements – classes, public programs, signage, and volunteer activities – serve to illustrate the importance that conservation plays in our mission.



TESTIMONIALS

PARENT

My daughter Alexa's experience with the Woodland Park Zoo STEM camp [ZooCrew] at Neighborhood House has exceeded all of my expectations. She has found this camp to be engaging, and the camp has expanded her current understanding of science and its interaction with the everyday world.

The Woodland Park Zoo classes are particularly engaging in that they teach how to research, prepare, and (ultimately) present a project. What an exciting activity for school age children! She was so excited at developing a project, and continued her research on the Kea Parrot (her project) at home. As she enthusiastically explained her project to us, she drew the design she and her group had developed.

This camp has been invaluable because there is currently so little time for science in the current public school emphasis on math and reading scores. I very much appreciate the Woodland Park Zoo and Neighborhood House providing access to these camps to children of the community. Watching my child become enthusiastic about science has been inspiring!

Thank you so much for providing this for our children!

- Rachael Wright, ZooCrew Parent



AFTER-SCHOOL COORDINATORS

Students have gained knowledge and an appreciation for various species of animals. They learned about conservation on a deep but comprehensible level. The students gained leadership and public speaking skills. They also learned from and about each other through the course of the program.

-2014 CLC Coordinator

Through participation in Zoo Crew, I have seen our male students grow more interested in academic learning. The field trips to the Zoo, and getting to touch animal skins are definitely a hook... but that excitement translates to the school day and enables students to imagine things they want to learn about in the future.

-Marissa Rousselle, Washington Middle School CLC Coordinator

YOUTH

My favorite part of ZooCrew was learning about my new favorite animal, the pangolin. I learned that pangolins are the most trafficked mammal in the world and that all they can do to defend themselves is curl up into a ball. I'm going to tell everyone I know to save the pangolins!!

– Tyler, Denny ZooCrew

Making new friends
Learning about careers
Doing science
Helping animals
Using iPads
Being with my friends
Learning about animals
Going to the zoo
Other field trips
Having fun
Making projects
Making presentations

Science is basically trying to figure out problems and answers to questions about basically everything that's not answered yet. [In ZooCrew,] we used math and science to build a bat house. We used science to study work that other people had done to study bats and figure out stuff about their habitat.

– Josiah, Washington ZooCrew

I learned more about people who go out into the field and actually work with animals. You don't always have to be in a lab to do science!

– Julia, Mercer ZooCrew



For more information, visit: www.zoo.org/zoocrew

“I love ZooCrew! That’s basically it.”

Kristina, ZooCrew Youth