

Partners in Fieldwork 2017–2018 Program Application for High School Science Teachers



Program Overview

Throughout the course of the program, students will

- conduct authentic science projects aligned with Urban Wildlife Institute research through genuine data collection, data analysis and dissemination approaches.
- gain awareness about the diversity of Chicago wildlife.
- be encouraged to explore nature in their communities.

Throughout the course of the program, teachers will

- submit student-collected data to be used by the Urban Wildlife Institute.
- participate in authentic wildlife research practices used to augment the classroom life-science curriculum.

This FREE program incorporates a research model including observation, data collection/analysis, and dissemination of results. The program occurs on school grounds, at Lincoln Park Zoo, and at a natural field site. The program will culminate in a special **Family Night** event held in spring of 2018.

Due to high demand and limited availability of spots, we want to make sure that teachers who are chosen to participate will be able to follow through with the full program. Teachers* must teach a high school level science course. A minimum of 2 classes/periods must participate. The program begins in August with a required Teacher Workshop, to be held August 26, 2017. Student involvement with the program will begin with the school year in late August. Please review the program with your school administrator and return this application by May 19, 2017.

*Participating teacher should be the primary science teacher of the participating classes.

Program Components

The program will consist of the following:

Teacher Workshops - One Full-Day Session & One Half-Day Session

Time Commitment: August 26, 2017; Full-day session (6 hours) & January 20, 2018; Half-day session (3 hours)

During these interactive workshops, you will receive an overview of the program and its components, supplementary information on research techniques, necessary materials to participate in the program, time to collaborate with fellow participants, and a chance to learn more about the animals and researchers at the zoo. Specifically, we will focus on showing you how to use a motion sensor camera and a passive bat monitoring device as research tools to make observations about urban wildlife. We will also provide training regarding how to conduct a bird survey and how to conduct a Giving-Up Density study. The workshops will include an orientation to the online course management system that zoo staff will use to stay connected to you and your students, as well as an overview of deadlines for research data submission.

Attendance at the workshops is required, and teachers will receive a stipend for attending. In the unlikely event that a workshop must be rescheduled, please note that workshops may take place during either school or non-school hours. During school hours, funding for an external substitute will be provided. During non-school hours, a stipend will be provided. The zoo will also provide CPDUs, parking, and meals.

Three Classroom Visits from Zoo Educator

Time Commitment: Three periods for each participating class

A zoo educator will **visit your school on three separate occasions, free of charge,** to work directly with you and your students.

The visits will focus primarily on building authentic research skills that will allow students to collect data to be used by Urban Wildlife Institute scientists. Students will then have the chance to apply these research skills by



carrying out a group research project of their own. All three visits are an opportunity to provide background information on research techniques, model lessons, provide peer coaching to the classroom teacher as requested, and engage in dialogue on how to support student success throughout the program.

Classroom visits will be scheduled through the zoo educator. A one-week notice will be required for any schedule changes or cancellations. Additional support can be arranged if needed.

One Field Trip to Lincoln Park Zoo

Time Commitment: One field trip for each participating class; you may need to attend on multiple days to accommodate multiple class sections.

All participating students are required to **visit the zoo** in order to conduct research and learn more about the research done here at Lincoln Park Zoo. Each visit will be partially facilitated by the zoo educator while the other portion will give students a chance to explore on their own. The teacher workshop and classroom visits will prepare you for the field trip experience.

Participating schools will receive free field trip buses and additional funds to cover an external substitute to cover the participating teacher's absence.

Field trips will be scheduled directly through the zoo educator. Teachers will schedule specific days that work with their schedule.

If you need to change the date for your visit, you must do so a week before the actual scheduled trip. Due to the limited dates available for field trips, there may not be time to reschedule additional trips that are cancelled after the deadline, therefore if you need to reschedule after the deadline, your visit may be subject to cancellation.

One Field Trip to a Natural Area

Time Commitment: One field trip for each participating class; you may need to attend on multiple days to accommodate multiple class sections.

All participating students are required to **visit the natural area** in order to conduct field research and learn more about local nature sites. Each visit will be facilitated by the zoo educator. The teacher workshop and classroom visits will prepare you for the visit.

Your school will receive free field trip buses and additional funds to cover an external substitute to cover your absence.

Trips to the natural area will be scheduled directly through the zoo educator. You will get to schedule specific days that work with their schedule.

If you need to change the date for your visit, you must do so a week before the actual scheduled trip. Due to the limited dates available for field trips, there may not be time to reschedule additional trips that are cancelled after the deadline, therefore if you need to reschedule after the deadline, your visit may be subject to cancellation.

Ongoing Research on School Grounds & Timely Data Submission

Time Commitment: One-two hours per week, September through May

As a class, students will be expected to conduct **ongoing research and analysis at school**. You will be responsible for **sending data** to the zoo educator **once a month**. All ecological data is the property of Lincoln Park Zoo and will be analyzed by the Urban Wildlife Institute. To ensure that the data is of high quality, certain standards must be met in the collection and entry of ecological data. Standards for frequency of data collection and data submission are outlined below for each research project.

Bird surveys: From September-December and March-May, at least 1 full class period every 2 weeks will be devoted to conducting bird surveys outside. This data must be submitted on the last Wednesday of every month.

Giving-Up Density (GUD) studies: From January-May, at least ten trials of the GUD studies should be completed. GUD studies evaluate animal foraging behavior by drawing their attention away from predator vigilance and



evaluating opportunities to stay and forage or search for food elsewhere. This data must be submitted on the last Wednesday of every month.

Camera traps: From September-May, motion sensor cameras should be placed outside for the entire month to ensure comprehensive data collection. These cameras will capture photos of animals. You will check the camera every two weeks to change the batteries and upload the data. Students will identify the animals and collect data from the photos. Photos and completed camera trap data sheets must be submitted on the last Wednesday of every month.

Bat monitoring device: Between September and December, you must help arrange for an acoustic bat monitor to be placed on the roof of the school for the duration of a week. Due to the complicated nature of the bat monitor device and software, the zoo educator will be responsible for placing the device, collecting and analyzing data, and sharing the results with each participating school.

Teachers will receive practical support and necessary materials for leading research and analysis during the teacher workshops. Teachers will also receive support in aligning this research with existing science curricula.

Family Night

Time Commitment: One evening, for you, selected students, and their friends and families.

We will celebrate your students' success at our culminating event, titled Family Night, in spring of 2018. You will select approximately 15 students to represent your school at the event. The **program includes buses** to bring you, your students, and their friends and families to the zoo. The event will include a catered reception, conversations with zoo researchers, and time to present the final posters. This will be an opportunity for students to share their discoveries with each other, members of the community, and zoo staff!

If you would like to participate with your classes, please complete the application page completely and return to us by May 19, 2017.

If you have any further questions, you may contact us at: (312) 742-2051 pif@lpzoo.org



Part I: School Information

Teacher's Name		Anticipated Grade Levels for 2017-2018	
Subject Taught		Length of Class Period	minutes
Number of classes to participate	(minimum 2)	Approx. total number of students t	:o participate
School Name		CPS Network	
School Address			
School Phone	School Fax		
CPS Email Address			
Part II: Participant Information Alternate Email Address			
Cell/Home Phone	Phone Number You Can Be F	leached During Summer	
Are you the primary science teach	er of participating classes?		
□ Yes □ No			
How many years have you been teaching sci	ence?		
Have you received science endorse	ements?		
□ Yes □ No			
What is your background in science research	7?		
How many hours does each high school scie	nce student receive in science instruction.	per week?	



Date

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Part IV: Statement of Interest

School Administrator Printed Name

School Administrator Signature

As we can only accommodate a small number of teachers, we are interested in partnering with teachers who are as excited to work with us as we are to work with them. Please attach a brief written statement (maximum of 500 words) letting us know what you find most interesting about the Partners in Fieldwork program and how you believe your students would benefit from participation.

Part V: Submit Materials

Please mail/email/fax completed application form and statement of interest to:

Student Programs Coordinator Learning Department Lincoln Park Zoo 2001 N. Clark St. Chicago, IL 60614

Ph: (312) 742-2051 Fax: (312) 589-7177 Email: pif@lpzoo.org