

BOSTON COLLEGE HOSTS BOSTON PUBLIC SCHOOL STUDENTS & TEACHERS FOR SCIENCE AND TECHNOLOGY EXPLORATION
Summer Urban Ecology Institute, through August 3

CHESTNUT HILL, MA (July 2006) — The "hands-on" study of bird bioacoustics and urban forestry is on the agenda for local youths, during Boston College's annual "Summer Institute on Urban Ecology and Information Technology."



The goal of the institute—for Boston public school students and teachers—is to improve the students' futures by engaging them with technology and real-world science experiments. Forty-six local middle- and high-school teachers have been on campus since July 10, for a two-week workshop in preparation of the arrival of 65 Boston public school students, who are participating from July 24-August 3. During this latter part of the program, the teachers will implement curriculum projects— including field work—with students.

Urban Forestry: teachers lead students in mapping the area known as Chandler Pond off of Lake St. (Photos by Lee Pellegrini)

"The program engages students in learning scientific content about career trajectories in science and information technology," says Boston College Lynch School of Education Assistant Professor Michael Barnett, who is leading the program with BC colleagues Eric Strauss, director of the BC's Environmental Studies Program, and Charlie Lord, executive director of the Urban Ecology Institute.

"Through their work students also learn how individuals can make a difference in caring for their local environment. Urban students, in particular, have a great deal to offer in regard to caring for their urban environment and one of the major goals is to empower students to take action in caring for their urban environment," he adds.

At right: An urban forestry session on the shore of Chandler Pond drawing maps of the surrounding area.



The students—primarily 8th and 9th graders—and teachers are from the following schools: Brighton High School, Urban Science Academy, Nativity Preparatory, St. Columbkille School and Odyssey High School.

The summer institute is designed to foster student interest in science and technology and to encourage career exploration in these areas. It includes daily classroom lectures and visits

to local field sites in Boston, for "hands-on" study of urban ecology using the technological tools of practicing scientists. Institute participants have opportunities to:

- *Conduct a field-based research study;*
- *Use technology;*
- *Learn career skills;*
- *Learn science concepts;*
- *Interact with scientists and educators;*
- *Work in science labs on a university campus.*

Two field projects focus on bird bioacoustics and urban forestry. The former addresses animal communication through the investigation of local bird songs and calls, and is being led by BC Lynch School of Education graduate student Meredith Houle. The latter engages students and teachers in exploring relevant issues related to the health and economic impact of urban trees, with the support of Lynch School graduate students Anne Gatling and Janice Anderson.



According to organizers, the institute fosters an understanding of how urban ecosystems function and respond to change; establishes scientific observation and sampling techniques for teachers to implement with their students, and provides a forum to discuss strategies that promote student learning and enhance community stewardship.

Photo: In the bird bioacoustics track, a teacher helps students identify birds..

Through the use of curriculum materials and scientific experiences, the program aims to help inner-city students connect their academic work and future career options, and enhance their motivation to succeed in school. They will work with their teachers—as well as with Boston College scientists and educators—to conduct investigations and analyses which explore the physical and biological aspects of urban ecosystems.

BC organizers also note that, through the program, they have developed an information technology component for the new field-based urban ecology modules in 7th-12th grade classrooms of Boston-area public schools. The materials have been piloted and will be implemented in multiple schools this fall, with plans to expand the initiative.

The summer institute—a collaboration among Boston College's Urban Ecology Institute, Lynch School of Education and Environmental Studies Program—is funded by the National Science Foundation through the Information Technology Experiences for Students and Teachers program.

The institute runs from 8:30 a.m. to 3:30 p.m. Mondays through Thursdays.

For more information on the initiative—including details about the schedule or to arrange interviews with/photos of participants—please contact BC Lynch School of Education Assistant Professor Michael Barnett at 781-367-2337 (cell) or via e-mail at barnetge@bc.edu.

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