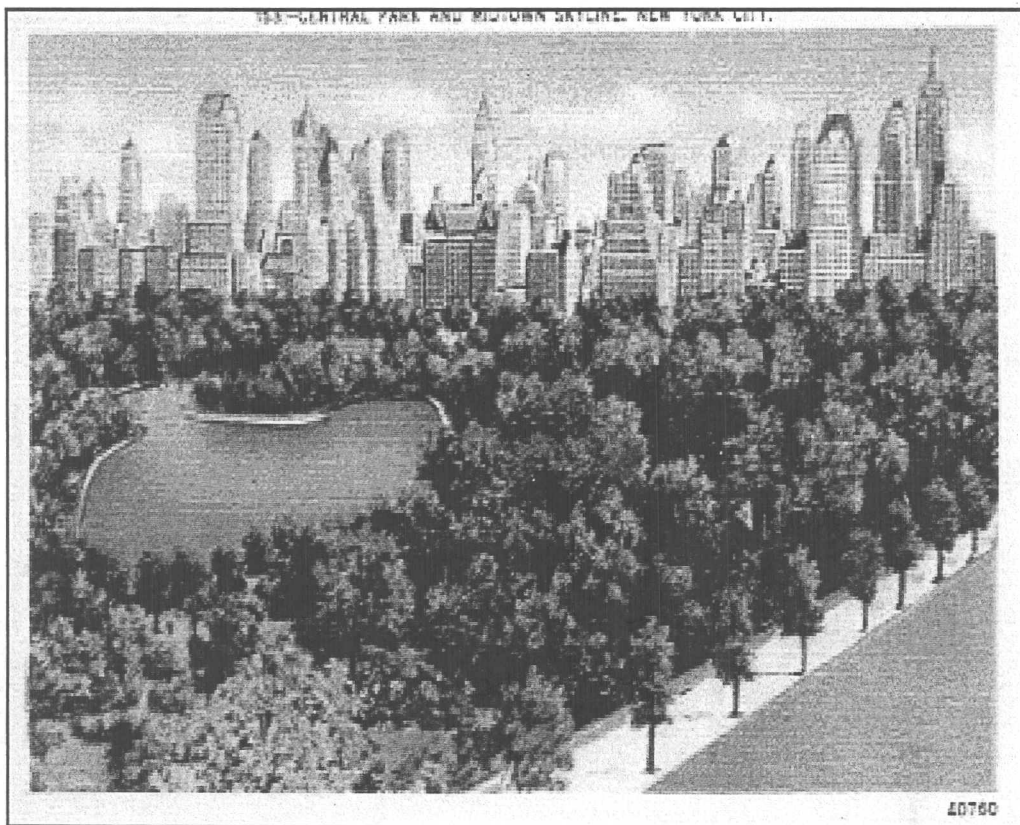


CONFERENCE PROGRAM

NATURE AND THE CITY



**CONFERENCE CO-SPONSORED BY:
THE BIOLOGY DEPARTMENT
LONG ISLAND UNIVERSITY, BROOKLYN CAMPUS
AND WILDMETRO, NEW YORK**

Saturday, 4 MARCH 2006



BROOKLYN CAMPUS

1 University Plaza • Brooklyn, New York 11201-8423

March 4, 2006

Dear Colleagues:

I am delighted that you are here for the seventh annual conference, *Nature and the City*, on issues of concern to all urban residence, co-sponsored by the Biology Department of the Brooklyn Campus of Long Island University and WildMetro, New York. The overarching goal of the Biology Department, from its inception in 1926, has been to educate its students to deal with scientific questions, that is, to help them learn how to reason instead of simply training them to classify information. Thus, we believe our students will not only appreciate and comprehend the scientific approach to knowledge, but also become involved citizens, able to make informed decisions about scientific matters by sifting through often confusing information and finding an understanding of the underlying science.

In this spirit, the Conference on *Nature and the City* was designed to present to our community, and the public at large, some of the underlying scientific principles pertinent to fauna and flora of urban centers. This conference has brought together a number of outstanding scientists, who will present an array of pertinent issues.

We thank you for attending and hope that you will find both the conference and our campus rewarding.

Sincerely,

David Cohen
Dean, Conolly College



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The Biology Department offers both B.S. and M.S. degrees. The B.S. is offered in Biology, Molecular Biology, Medical Technology, Cytology and Nuclear Medicine Technology. The M.S. degree is offered in Microbiology, Molecular-Cellular Biology and Medical Microbiology. These programs are designed to provide students with the academic training needed to enter professional and graduate schools, to prepare for teaching careers and to enter into the work force in the health fields.

Currently, the department is composed of 17 full time members of which 100% hold the Ph.D. degree. Faculty research interests encompass molecular biology, bioinformatics, microbiology, evolution, cell biology, ecology, biochemistry and physiology.

Presently there are 250 undergraduate majors and 125 masters students in the Department. These students enjoy our small class sizes (36 introductory, 24 advanced) taught by full time faculty who provide mentoring, research and teaching. Students are encouraged to participate in research on or off campus and are helped in these efforts by faculty, by our affiliations with the University of Massachusetts, Columbia University and by our Office of Minority Research which coordinates our Score program.

Our newly renovated teaching and research laboratories, accomplished with an NSF Grant of \$3 million, are open for your visit and we encourage you to attend our open house in the Spring, or call 718/488-1209 for an appointment.

Sincerely,

Joseph Morin
Chair, Biology Department

URBAN ECOLOGY

Nature in New York City is far more than trees struggling between cracked sidewalks and unwelcome creatures like rats and cockroaches. An astounding array of wildlife – both plants and animals – thrives in the big city and plays a vital role in our ecosystem.



Grass and Brick

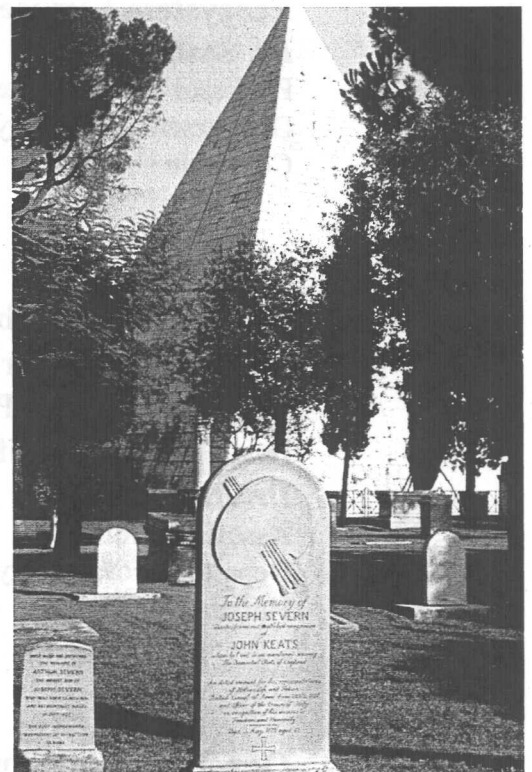
Urban Ecology – the focus of this special day-long conference - is an emerging field of research that promotes stewardship of healthy ecosystems. It can help people understand nature in their own communities and provide tools for protecting local environments.

The city represents a human construction but still one which develops a relationship with organisms which find that the city provides niches and resources for their sustenance. The space between bricks is more than enough to fulfill the needs of a seed of grass. From this merging of urban habitat and organisms emerges the discipline of urban ecology.

Though seemingly inhospitable to settlement by organisms the city provides parks, gardens, waterways and one other very appropriate living space which is vastly underrated – the cemetery. The later place becomes an island of green in the city. A cemetery can have some magnificent trees for birds and squirrels to use. Pheasants and raccoons have been seen between the tombstones and you might even find some lichen there.

There is much to study in the urban environment and it is a very compelling endeavor. Most of the world's population live in urban centers and many will never visit the great nature ranges of the world. We need not leave home, like the prodigal son, to experience nature, as we already have many natural treasures in our "back yard." By fostering and protecting the organism which forms intimate relationships with us and are dwellings we will only benefit as they certainly provide us with great psychological comfort and aesthetic pleasure. Points which are major themes of the *Biophilia Hypothesis*.

Hopefully this conference will inspire some to become active and be a part of the solution to secure a livable, hospitable and healthy planet.



From a Roman Cemetery

PROGRAM

9:30 a.m. **Breakfast and Registration**

10:00 a.m. **Studying the Human Ecosystem in Baltimore:
Approaches and Insights**
Dr. Steward T. A. Pickett
Distinguished Senior Scientist
Institute of Ecosystem Studies

10:40 a.m. **What if Nature Sent Us a Bill?
Ecosystem Services and Human Well-being**
Dr. Shahid Naeem
Professor of Ecology and Chair
Department of Ecology, Evolution and Environmental Biology
Columbia University

11:20 a.m. **The Effects of Urbanization on
Diamondback Terrapins of the Big Apple:
Distribution and Predation of Terrapin Nests
in a Human-modified Estuary**
Dr. Russell Burke
Associate Professor
Department of Biology
Hofstra University



Pelham Bay Land Fill

12:00 p.m. **Questions & Discussion**

PROGRAM

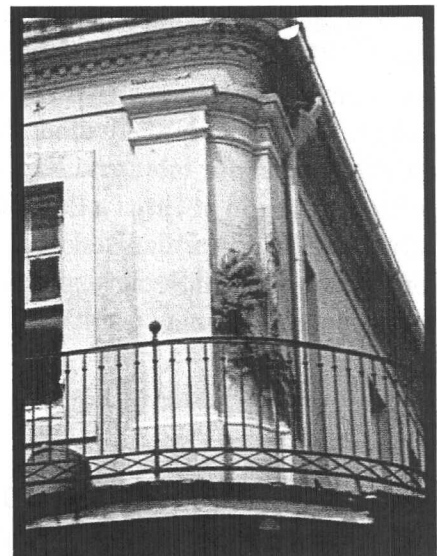
12:15 p.m. **Lunch**

1:20 p.m. **A Century of Change in the Flora of the New York Metro Region**
Dr. Steve Clemants
Vice President for Science
Brooklyn Botanic Garden

2:00 p.m. **Can't Get There From Here?**
Urban Ecology Meets the Real World
David L. Burg
President
WildMetro

2:40 p.m. **Exploring Your Own Backyard**
Dr. Sandi Franklin
Executive Director
Brooklyn Center for the Urban Environment

3:20 p.m. **Questions & Discussion**



Building with Ferns

Conference Organizers:

Dr. Carol Griffiths, Associate Professor of Biology
Dr. George Sideris, Associate Professor of Biology

SPEAKER BIOGRAPHIES

Dr. Steward T. A. Pickett

Dr. Pickett is a distinguished Senior Scientist at the Institute of Ecosystem Studies in Millbrook, New York. His research focuses on the processes that generate heterogeneity in plant communities, and in wild and inhabited landscapes. Determining how such heterogeneity affects the dynamics and function of ecological systems is his ultimate research goal. He is also interested in exploring the conceptual foundations of major sub-disciplines in ecology, and the role of interdisciplinary work in advancing ecological research and application. In addition, Dr. Pickett is director of the Baltimore Ecosystem Study Long-Term Ecological Research program, which brings together diverse institutions and disciplines to understand metropolitan Baltimore as an ecological system. Within this project, he is pursuing research on novel approaches to urban patch structure, the structure and function of vacant lots, and linking ecological principles with urban design.

Dr. Shahid Naeem:

Dr. Naeem is Professor of Ecology at Columbia University, New York, where he teaches, conducts research, and has published extensively on the environmental consequences of biodiversity loss. He is part of the Center for Environmental Research and Conservation, and the Ecology, Evolution and Environmental Biology Department. Dr. Naeem is currently principal coordinator (and founder) of BioM.E.R.G.E., an NSF-funded project that has one of its missions to bring together scientists to analyze data on our biota and how they relate to the functioning of our ecosystems. He began his college education at City College, CUNY, and went from there to complete his Ph.D. from the University of California, Berkeley, in 1989. He is the recipient of both the Buell and Mercer awards from the Ecological Society of America, and is a fellow of the American Association for the Advancement of Science and the Aldo Leopold Leadership Program.

Dr. Russell Burke:

Dr. Burke is associate professor, Department of Biology at Hofstra University. He has been conducting research on the ecology, evolution, and conservation biology of turtles and lizards for over 20 years. With his students, he has been studying the diamondback terrapins of Gateway National Recreation Area since 1998, focusing primarily on Jamaica Bay—a location that has what may be the largest terrapin population anywhere, with over 2,000 nests laid per year on the bay's largest island. Over 90% of nests are predated by raccoons, which are not native to the island. Dr. Burke has presented his work at conferences and has lectured and published on this subject. He earned his M.S. in Wildlife Ecology from the University of Florida and his Ph.D. at the University of Michigan in the Department of Biology.

SPEAKER BIOGRAPHIES

Dr. Steve Clemants:

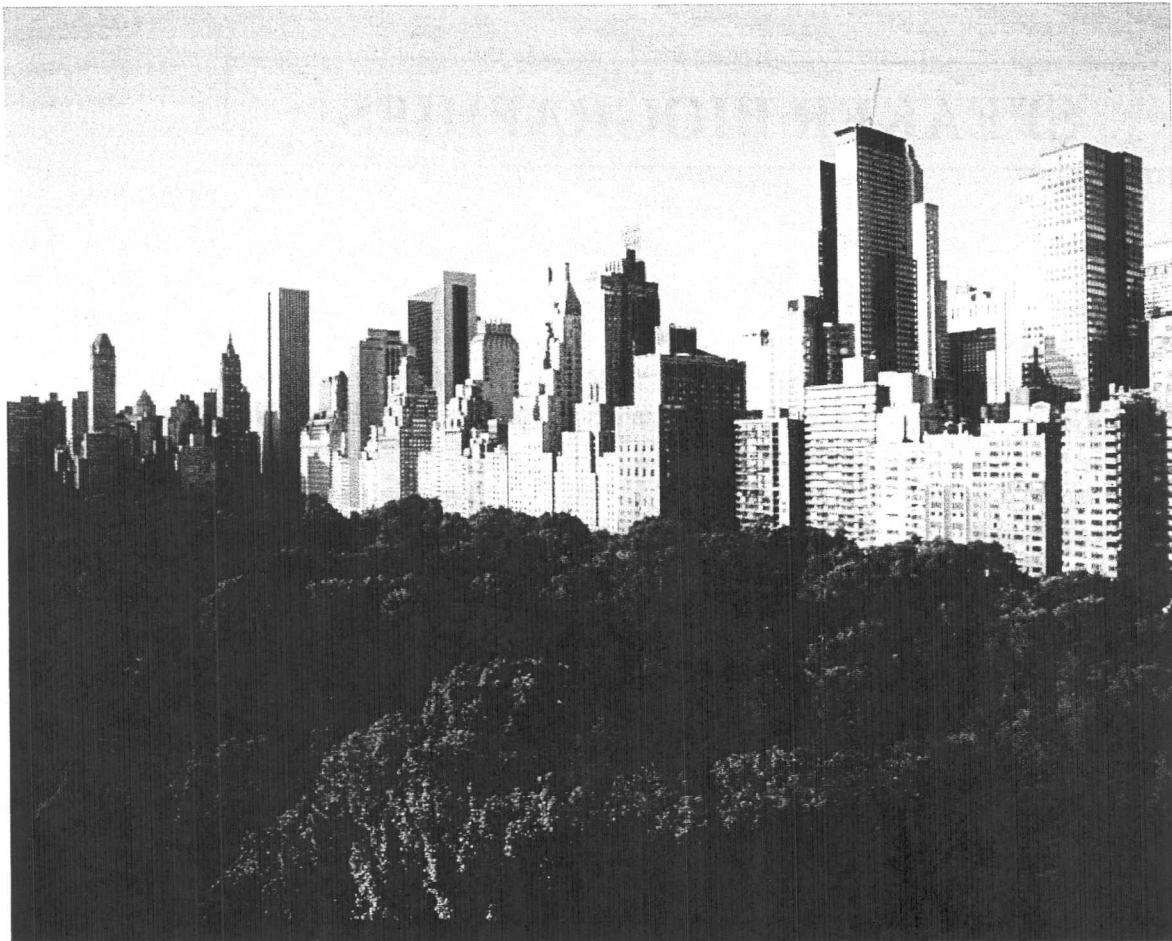
Dr. Clemants is Vice President of Science at Brooklyn Botanic Garden. Over the past seventeen years at the Garden he has developed a research program studying the plant life of New York City and the surrounding region. This program is called the New York Metropolitan Flora (NYMF). He also helped found and is co-director of the Center for Urban Restoration Ecology (CURE), a collaboration between Rutgers University and Brooklyn Botanic Garden. Most recently he helped found and co-edits a new, open access, scientific journal called *Urban Habitats* (www.urbanhabitats.org) which published research and education papers on plants and animals in urban areas around the world. Dr. Clemants is also Chair of the Botanic Garden Conservation International US Board, President of Nature Network and Chair of the Invasive Plant Council of New York State.

David L. Burg:

Mr. Burg has four decades of experience working with nature and environmental issues. A native of Southern Connecticut, he first started working as a professional naturalist as a teenager, when he was a summer field assistant for the Department of Ornithology at Yale University. He subsequently worked various jobs while hitch-hiking around North America, Central America, Europe and the Middle East before resuming his naturalist career. He was the first naturalist for the Norwalk Islands Heron Rookery in Long Island Sound, the Canoe Meadows Sanctuary in the Berkshires, and the Hai Bar National Wildlife Preserve in the Arava valley of Israel. Articles written by Mr. Burg have appeared in various publications including the Chicago Tribune, Berkshire Eagle, Sanctuary Magazine, and Urban Audubon. He has given presentations at several conferences, and his work protecting birds in New York City was featured on "CBS Sunday Morning". Mr. Burg switched careers after having children and worked in real estate for several years (an unexpectedly useful experience for an environmentalist). He and his family have lived in the Bronx since 1985.

Dr. Sandi Franklin:

Throughout her career Sandi Franklin has focused on creating opportunities for people to develop self-confidence when addressing serious problems such as substance-abuse, incarcerations, and re-employment after traumatic experiences. Now, she has taken on the challenge of affording young people the chance to develop self-confidence before problems arise. Sandi Franklin continuously develops programs that carry the rare insight that responsibility is a critical faculty, not a sycophantic one, and that through self-confidence and skills development young people and those who have experienced profound difficulties can reach their highest potential. Dr. Franklin received Con Edison's Brooklyn Woman of Distinction Award in 2003 and was nominated for the Ford Foundation's Leadership for a Changing World Award in 2004. She holds an MBA from Columbia University and a Ph.D. in psychology from New York University.



Central Park



Sewage Treatment Plant