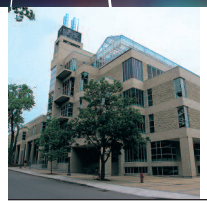


1997 Biosciences Complex

1966-1997 Earl Hall

1880-1965 Old Arts building

Biology Fast Facts

1216	number of enrolments in 100 level courses, 2006-07
1299	200 level
1182	300 level
212	400 level
230	500 level
4	FRSCs, (Fellow of the Royal Society of Canada)
2	Tier I CRCs, (Canada Research Chair)
4	Tier II CRCs,
1	NCIC Research Scientist (National Cancer Institute of Canada)
1	Baillie Family Chair in Conservation Biology
1	Herzberg Award
1	NSERC Steacie Prize in the Natural Sciences
4	Killam Fellowships
4	Steacie Awards
7	Premier's Research Excellence Awards
18	Number of editorial boards of international science journals on which Queen's Biologists serve
95	Average number of substantial papers published per year in international ISI-indexed peer reviewed literature by the 33 Biology professors over the past 10 years (peak of 112 in 2005).
$8.9	million – total research funding in Department of Biology for 2005.

For more information on the department, see http://biology.queensu.ca

QUEEN'S – KINGSTON CHAPTER OF THE SOCIETY FOR CONSERVATION BIOLOGY

The Kingston Chapter of the Society for Conservation Biology was founded by Biology Department students and faculty in 1994. Since that time, the Chapter has been very involved in local and global conservation initiatives. Our main activities include naturalizing school grounds (including planning, fund-raising, and coordinating plantings by children), hosting public presentations and workshops by guest speakers (e.g. Elizabeth May on environmental activism; Lorraine Johnston on native gardening; Guy Dauncey on solutions to climate change), organizing all-candidates debates on the environment during federal and provincial elections, and presenting an annual photo contest and silent auction. In addition to our regular activities, one of our major accomplishments was a successful environmental conference, People and the Planet, in June 2001 – now a semi-annual event hosted by the Sierra Club of Canada. We won the Cataraqui Region Conservation Authority's Environment Award in 1999, and now include over 100 members.

http://biology.queensu.ca/%7escb

External Awards since 2000

Canada Council Killam Fellowship	R.D. Montgomerie	2002
Canada Research Chair I	C.W. Hawryshyn	2006
Canada Research Chair I	J.P. Smol	2001
Canada Research Chair II	L. Campbell	2004
Canada Research Chair II	S. Regan	2004
Canada Research Chair II	P. Grogan	2003
Canada Research Chair II	A.K. Chippindale	2002
CSZ Public Awareness Award	B.L. Tufts	2005

Internal Awards since 2000

Alumni Award for Excellence in Teaching	B.L. Tufts	2004-05
ASUS W.J. Barnes Teaching Excellence Award	A.K. Chippindale	2005-06
ASUS W.J. Barnes Teaching Excellence Award	C.G. Eckert	2003-04
ASUS W.J. Barnes Teaching Excellence Award	S.C. Lougheed	2002-03
Baillie Family Chair in Conservation Biology	R.J. Robertson	2002
Biology DSC Award for Excellence in Teaching	A.K. Chippendale	2005-06
Biology DSC Award for Excellence in Teaching	W.A. Snedden	2004-05
Biology DSC Award for Excellence in Teaching	A.K. Chippindale	2003-04
Biology DSC Award for Excellence in Teaching	S.C. Lougheed	2002-03
Biology DSC Award for Excellence in Teaching	K.E. Wynne-Edwards	2001-02
Biology DSC Award for Excellence in Teaching	J.P. Smol	2000-01
Chancellor's Research Award	A.K. Chippindale	2005
Queen's Research Chair	R.D. Montgomerie	2005
Queen's Research Chair	W.C. Plaxton	2004-09
Queen's Research Chair	V.K. Walker	2003
Queen's Research Chair	D.B. Layzell	2002
Queen's Staff Recognition Award – Team	F. Phelan and F. Connor	2004
Queen's Staff Recognition Award	J. French	2003
T. Geoffrey Flynn Advancement Champion Award	R.J. Robertson	2005

Queen's University
DEPARTMENT OF BIOLOGY
Faculty of Arts and Science
Queen's University
Kingston, Ontario K7L 3N6

www.queensu.ca/biology

QUEEN'S MARKETING AND COMMUNICATIONS 06-0412

Queen's University

Queen's Biology

Autumn 2006, Volume 1

Greetings from Queen's Biology to all our alumni. We hope this newsletter will serve to remind you of your friends and experiences at Queen's and to bring you up-to-date on recent events in our department. A few of you will have experienced your entire Queen's Biology program in the new Biosciences Complex (opened in 1997), while many more of you will be familiar with the old Earl Hall that served Biology from 1966 to 1997 and is now integrated into the new building. And, we hope to reach many of you who graduated before the mid '60's and thus even pre-date Earl Hall, when the Biology Department occupied part of the old Arts building (1880-1965).

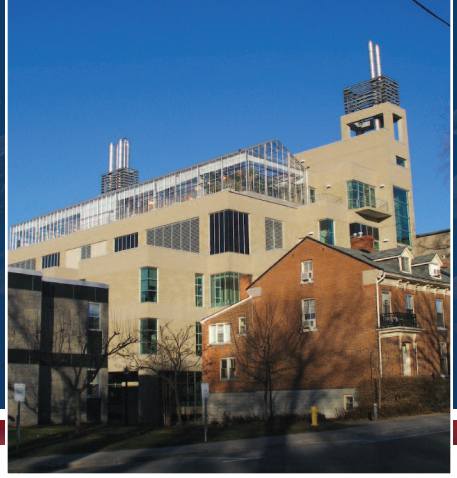
Greetings from the Head

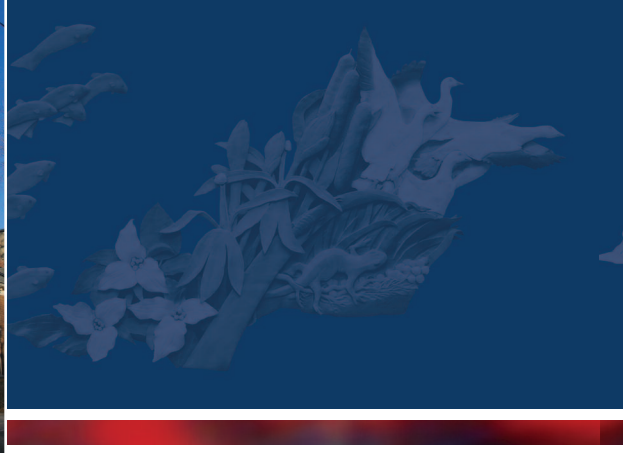
I'm very pleased to be addressing you in this our inaugural issue of what will be an annual Biology Alumni Newsletter. The intent of the newsletter is to keep our alumni informed about the current state and future prospects of the Department, particularly with respect to the previous year's activities. To some extent this issue will be slightly different because of the need to provide a broader overview of where we are as context for succeeding issues. As you will find out elsewhere in these pages the Department is in excellent health and contemplating an exciting future.

Many of you will be familiar with "Queen's Biology: an academic history of innocence lost and fame gained 1858-1965" by Smallman, Good and West (1991) which concludes with an updating epilogue by Dennis and Colgan. Thus my own brief update will start where this fascinating history ends. Gerry Morris took over the Headship from David Dennis in 1992 and presided over a period of harsh budget cuts throughout the early 1990s that reduced our faculty complement and challenged our ability to offer a high quality undergraduate experience. He also successfully led us into unionization and the establishment of the Collective Agreement between Queen's University and the Faculty Association in 1995. Towards the end of his tenure the financial situation became less bleak and an indication of this was the extensive renovation and extension that converted Earl Hall into the current Biosciences Complex (completed 1997). Peter Boag was appointed Head in 1999 and his Headship can be characterized as a period of consolidation and significant growth when we learned how to deal with the Collective Agreement and filled our new building with bright young researchers who will have a positive impact on our research and teaching programs for many years to come. Depending on how the count is made, Peter recruited an impressive 9 or 10 new faculty members in his five year term, effectively capitalizing on the new funding available in the Canada Research Chairs and Canada Foundation for Innovation programs. He also oversaw our first Internal Academic Review that gave the Department an excellent rating and a strategic plan for future improvements.

My own term as Head started in July 2004 and you will learn in future issues of this publication how well I succeed in leading the Department further into the 21st century. In spite of our new building, a significant challenge facing us pertains to space; vigorous research enterprises and a young faculty complement results in increased demand for space of all descriptions (laboratory, office and storage). This message is repeatedly delivered to upper administrative levels and I am confident that we will find acceptable solutions that will allow us to grow appropriately. As I write this we are in the process of a search for an Aquatic Biologist who will strengthen a research initiative in Freshwater Fisheries and Aquatic Science. In the near future we anticipate opening a search for a new incumbent for the Baillie Family Chair in Conservation Biology as Raleigh Robertson takes on other responsibilities, notably as Editor of this newsletter. I look forward to letting you know how we progress with our various missions in next year's issue.

Mel Robertson, Head
Department of Biology





The Queen's University Phytotron!

Overlooking Lake Ontario, the Queen's University Phytotron is a state of the art plant growth facility built as part of the new Biosciences Complex in 1997. The Phytotron includes 6 autonomous, climate controlled greenhouse zones, 26 environmental growth chambers, a plant work area, and a seed collection/sorting room. Users are able to maintain precise environmental conditions for plant growth and other biological applications – specific environmental control functions include temperature and humidity regulation, supplemental lighting, irrigation, and ambient carbon dioxide control.

The Phytotron supports the research of 9 principal investigators, and serves as a resource for a host of graduate and undergraduate students for both research and laboratory courses.

CONSERVATORY

Our tiny conservatory houses more than 150 tropical, subtropical and Mediterranean plant species from a wide range of taxonomic lineages and biogeographic regions, and includes orchids, palms, bananas, bromeliads and cacti. This remarkable display of evolutionary diversity is used to great effect in several undergraduate biology courses, and is the main attraction for visitors to the Phytotron. It is also an inviting place for faculty, staff and students to relax and enjoy the tropical ambience, particularly over the winter months.

RESEARCH

Examples of recent Phytotron research include Sharon Regan's (photo at bottom) studies of genetic expression in hybrid poplar; W.C. Plaxton's work on metabolic pathways of the castor bean, and Chris Eckert's research into the evolutionary consequences of self-pollination during range expansion in plant populations. Some other notable work that has taken place here includes endangered species recovery (deerberry) for Parks Canada and investigations into the migratory habits of monarch butterfly (Barrie Frost, Psychology).

The Phytotron is also the Kingston home of Performance Plants Incorporated, a crop genomics company founded by Dr. David Dennis investigating methods of improving crop performance in canola, soybean and corn.

CANADIAN SOCIETY OF ZOOLOGISTS HOLDS ANNUAL MEETING AT QUEEN'S BIOSCIENCES COMPLEX

The Canadian Society of Zoologists held its 2005 Annual Meeting in the Biosciences Complex, organized by Biology's Bruce Tufts and his team. The meeting brought together Canada's top researchers in diverse fields of Zoology: Comparative Physiology and Biochemistry, Ecology, Evolution and Ethology, Parasitology, Comparative Morphology and Development.

The meeting was a huge success in every respect. It was the largest meeting in the 44 year history of the CSZ. Many of the 350 attendees told the organizers that they were drawn to the meeting at Queen's to explore the university, the city and the region. The Bioscience Building again showed itself to be an exceptional setting for such meetings. It hosted more than 150 oral presentations spread over 5 days. In a dynamic evening session, students and faculty visited more than 100 scientific posters displayed throughout the Atrium. A special session focusing on the careers and roles for women in science featured Queen's Biology, Assistant Professor, Dr. Shelley Arnott. Biology's Steve Lougheed gave an entertaining and impassioned presentation on the importance of Field Biology in Education and Research in a special lecture sponsored by the Zoological Education Trust.

Departmental news

Troy Day winner of 2005 Steacie Prize

Troy Day, who holds a joint appointment in Biology and Mathematics, was the 2005 winner of the prestigious Steacie Prize, presented annually to a young scientist or engineer for outstanding research in Canada. Troy, who holds a Canada Research Chair in Mathematical Biology, studies the transmission and evolution of infectious diseases such as SARS and avian flu. His research examines how and why diseases appear when they do, as well as the reasons some diseases become deadly while others remain relatively benign.

"Troy Day is an exemplary model for our new generation of researchers, many of them working at the frontiers of interdisciplinary science," says Queen's Vice-Principal (Research) Kerry Rowe. "The Steacie Prize is a well-deserved recognition of his ability to navigate difficult mathematical problems to find solutions to compelling biological questions, and his potential to enrich our knowledge in the future."

Chris Eckert awarded Fulbright

Chris Eckert was recently awarded a Fulbright Visiting Research Chair at UC Santa Barbara where he will conduct research on the evolutionary biology of the beach evening primrose *Camissonia* during his well-earned sabbatical.

Adam Chippindale – winner of W.J. Barnes Teaching Excellence Award

Adam Chippindale was the recent winner of the W. J. Barnes Teaching Excellence Award from the Arts and Science Undergraduate Society for his outstanding teaching in BIOL-210 (Biology of Sex) and BIOL-206 (Evolution and Population Genetics). Two or three awards are made annually from amongst the 600 odd members of the faculty of Arts & Science. Biology has fared very well in this award with recent recipients including Chris Eckert (2003-04), Steve Lougheed (2002-03), and John Smol (1999-2000).

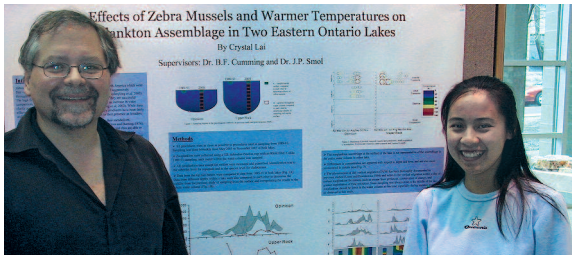
Queen's Biology Adjunct Profs team with Cataraqui Archaeological Research Foundation to explore fish population history via remains in local archaeological sites

Adjunct professors, Drs. Jonn Casselman and Bev Scott, both well known fish biologists who have made Queen's Biology their 'home' during a very active retirement, are working with local archaeologists to shed light on use of fish populations two centuries ago. "There are fish remains from the latrine at the Fort Henry naval yards ca. 1812, also Market Square ca. 1870 and from the gun floor of Fort Frontenac," says Casselman. "We have good commercial harvest data that begins in the late 1870s but really know nothing from this area prior to that. We're pretty sure we have salt cod and some haddock – very interesting how tastes persist. But it looks as if there was a broad range of fish use. Lots of centrarchids (sunfish), smallmouth bass, and at least one very large muskellunge."

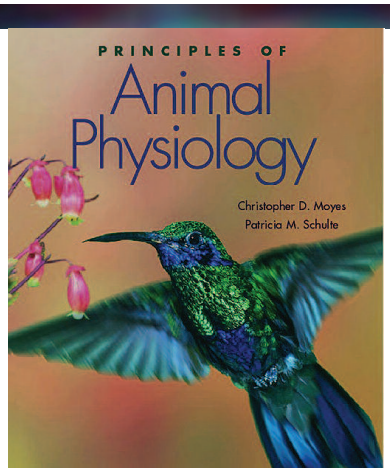
JOHN SMOL, WINNER OF 2004 HERZBERG PRIZE – CANADA'S GOLD MEDAL FOR SCIENCE AND, AN OUTSTANDING TEACHER AS WELL!

One of the world's leading environmental scientists, Biology's very own John Smol was the 2004 winner of Canada's top science award – the Herzberg Prize. A Queen's Biology Ph.D. supervised by Dr. S.R. (Ted) Brown, John, who now holds a Canada Research Chair in Biology, was the founder and co-director (with Brian Cumming) of the Paleoecological Environmental Assessment and Research Laboratory (PEARL) at Queen's. PEARL researchers study aquatic issues ranging from climate change to the impact of sewage and fertilizer run-off on lakes and rivers, and the effect of increased ultraviolet radiation on freshwater life. John's award citation commends his "efforts in bringing paleolimnology to world attention, and for discoveries, innovative techniques and research protocols that are influencing public policy on issues related to climate change, water pollution and the protection of the Arctic environment. "I think the real challenge is to ask the right questions," says Smol with a chuckle. "Quite frankly, getting answers is often much easier."

http://biology.queensu.ca/~pearl



Honours student Crystal Lai with Professor John Smol during the Honours Thesis "Poster Day". The Biology Honours thesis program truly integrates the Biology teaching program with the research efforts of our faculty. Even our busy professors such as Dr. Smol, winner of multiple teaching awards, give a high priority to providing undergraduates with research experience. In 2006-07, some 90 students will do a thesis and, based on past experience, the quality of many will be sufficiently high to ultimately lead to a publication in the scientific literature. Now that's really *doing* science.



MOYES' TEXTBOOK HITS THE BOOKSTORES AND STUDENT BACKPACKS

Dr. Chris Moyes is co-author of a very popular textbook in Animal Physiology. The book was published in August 2005 and in its first term 20,000 copies were printed, with placements in 60 universities across North America, as well as Europe and Australia. With thorough coverage of the cellular and molecular basis of animal physiology, an overarching evolutionary theme, and an emphasis on the integration of physiological systems, Drs. Moyes and Schulte present animal physiology in a current, balanced, and accessible way, allowing students to understand and retain the information. Large, carefully designed, full-color artwork guides students through complex systems and processes while in-text pedagogical tools help them learn and remember the material. The book includes the most up-to-date research on animal genetics and genomics, methods and models, and offers a broad range of vertebrate and invertebrate examples, with a student-friendly writing style that is consistently clear and engaging.

http://wps.aw.com/bc_moyes_animalphys_1

Got gas?

"Dr. Virginia Walker and graduate student, Joslynn Affleck, use insects as one source of genes that may have practical applications"

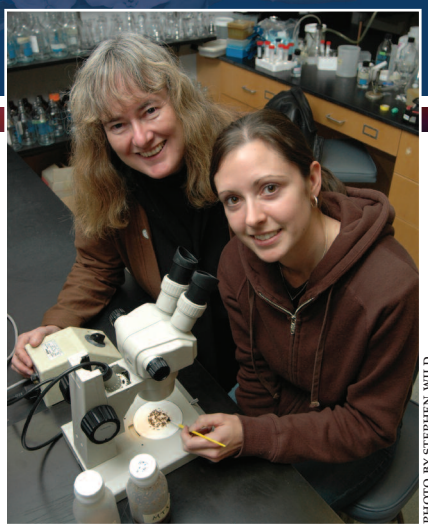


PHOTO BY STEPHEN WILD

RESEARCH IN BIOLOGY MAY PROVIDE GREEN INHIBITORS

When there is a touch of frost in the air, a skim of ice forms on the surface of ponds, demonstrating the natural outward growth of ice. If you added antifreeze proteins made by certain overwintering organisms to that pond, these proteins would bind to any forming ice crystals and arrest their growth. That's how some insects and fish survive at below zero temperatures; the outward growth of ice that would damage their cells is stopped by a loose coat of these proteins.

Biologists at Queen's are studying how these antifreeze proteins stick to ice. This isn't easy. You have to work in a walk-in freezer room a lot of the time; otherwise all of your samples will melt. Virginia Walker's students were always complaining that they were shivering with cold. And they good-naturedly told her that she should be smart enough to think of something warmer that antifreeze proteins would stick to. She took on the challenge and after a few missteps, decided to try gas hydrates.

You may not know much about gas hydrates yet, but they are poised to be our next energy source. Canada has vast reserves of gas hydrates along the continental shelves and under the permafrost. They are formed when gases, such as methane and propane stabilize cages of water so that they form crystals at moderate pressures and above zero temperatures. Above zero! The students were happy and bought Virginia a take-out Chinese dinner.

What nobody expected to happen, however, was that these antifreeze proteins stuck so well to gas hydrates that they prevented their growth. Huang Zeng, a PhD student in Biology, discovered that these proteins make even better inhibitors than current commercial inhibitors. What's more, they stop the faster reformation that can happen after hydrates are melted. No other inhibitor has ever been reported with this property!

It turns out that gas hydrates are a kind of Jeckle and Hyde story- they are a great source of energy, but when they form unexpectedly in a pipeline, there can be a blowout and environmental damage. As a result, the world energy sector spends more than $500 million dollars a year trying to stop hydrates from forming where they aren't wanted. To add to their troubles, the European Union has just banned these chemical inhibitors due to environmental concerns.

Now the work begins to try to produce enough antifreeze proteins to scale-up the tests. Genes from insects, a grass and even a microbe found in soil in Virginia's back yard have been cloned into bacteria. The idea is that the bacteria are tricked into "thinking" that these foreign genes belong to them and so produce lots of protein. Will these proteins provide green inhibitors for the gas industry? We hope so, but in any event the students are warming up to this research.

Want to read more about it? See Zeng et al. (2006) Journal of the American Chemical Society 128:2844-2850.

The Biology Field Course Program

LEARNING BY DOING – INTEGRATING RESEARCH INTO TEACHING – WITH INTERNATIONALIZATION OFTEN AN ADDED BONUS

Many of our Biology profs offer field courses as part of the Ontario Universities Program in Field Biology. Several of these courses include international travel to places such as Costa Rica, Mexico, Thailand and China, while others focus on ecosystems in Ontario, especially at the Queen's University Biological Station (QUBS). Field courses give students hands-on experience with small class size providing a wonderful opportunity for students to get to know the professor and vice versa. Field courses offered by Queen's Biologists in 2006 include: *Tropical Ecology and Conservation Biology* – in Mexico – Dr. Raleigh Robertson; *Crustacean Aquaculture* – in Thailand – Dr. Bill Bendena; *Aquatic Ecology* – QUBS – Dr. Brian Cumming; *Applied Fisheries Biology* – QUBS – Dr. Bruce Tufts; *Forest and Ecosystems Assessment* – QUBS – Rob Snetsinger and Celine Muis-Griffin; *Contaminants in the Human Food Chain* – St. Lawrence River Institute – Dr. Peter Hodson; *Limnology of Stressed and Recovering Aquatic Ecosystems* – Killarney Wilderness Park – Dr. Shelley Arnott; *The Effects of Human Development on Aquatic Environments in China* – Dr. Yuxiang Wang and Dr. Steve Lougheed.

To illustrate the internationalization potential of field courses, Dr. Yuxiang Wang's field course is designed to provide Canadian students with an appreciation of, and first hand experience with, the interaction between immense human development and the environment, with a focus on selected aquatic ecosystems in China. The course is also intended to equip students with essential biological and environmental skills to assess changes and perturbations in aquatic environments. An additional aspect of the course is to afford a medium for cultural and academic exchange between Canadian and Chinese students. Students not only learn about the effects of human development, but also about the differing attitudes and perceptions about development in the two cultures. Moreover, this course provides a bridge between young scientists from Canada and China with potential to establish future collaborations in research and environmental management. This field course is the first of its kind offered between Canadian and Chinese institutions in which students and faculty members from both countries are actively engaged in the class.

Dr. Steve Lougheed and Queen's student Ramsey Wright get a close-up look at Costa Rican reptiles in Corcovado National Park during the field course Tr*opical Ecology and Field Biology in Costa Rica* taught with fellow biologist Dr. Chris Eckert during February 2005.

The link between research and teaching, while present throughout the biology curriculum, is especially evident in field courses and is illustrated in Steve Lougheed's teaching philosophy. "My goal is to provide cost-effective opportunities for students to ask and answer their own research questions relevant to the specific themes of each course and using the latest methodologies, and to expose undergraduates to leading edge research being undertaken at Queen's by graduate students and faculty. For me, the ultimate goal here is to help train biology students who: 1. understand how science operates, 2. are familiar with the latest advances in evolutionary biology and conservation, 3. are aware of the social and political contexts in which science operates, and 4. can think critically about a range of issues, not simply biological."

Recent Queen's Ph.D. graduate, Javier Salgado-Ortiz examines a Mangrove Warbler with University of Campeche students Eloy Victoria Chan and Antonio Bustamante Cù while Queen's students, Ann Ohama, Jen Duffy, Marina Neytcheva and Emily McKinnon take notes during the field course "Tropical Ecology and Conservation Biology of Birds" taught by Queen's Biologist Dr. Raleigh J. Robertson in Mexico during February 2006.

Graduate students Jennifer Harker and Nancy Gerrish take seine-net samples at the Queen's University Biological Station during the mid-70's

Feedback from alumni…

From Field Course to Grad School

By Emily Darling, B.Sc. Queen's Biology 2005

A field course on coral reef ecology in Belize, part of the Ontario Universities Program in Field Biology, was my first introduction to independent research – " taught in the ocean, not in a lecture hall". This field course has led me to an internship on coral reef fisheries in Kenya and I am beginning graduate work in coral reef ecology and conservation this September."

From Queen's Biology to a Fulbright Fellowship at Yale

By Kate Neville B.Sc. 2005

My initiation into the Queen's world of biological research came in the form of a winter ecology field course over reading week, at the Queen's University Biological Station (QUBS). I had worked for a summer in the field for the Ministry of Natural Resources in Ontario, and the field course was a great chance to expand my ecological knowledge, and look at research from a more academic and analytical perspective. It was a course split between graduate and undergraduate students, and the research projects we carried out were mixed teams of the two levels. This was a great introduction to designing research projects, and gave me insight into the level of academic expectations faced by graduate students. The course led to two subsequent summers spent at QUBS as a field assistant, one of which included research for my honours' thesis. The exposure to field research and project design fed my interest in ecological research, and I was able to apply and further develop my skills through research on a variety of species and ecological questions, on plants, birds, and butterflies. The field projects I worked on landed me in the greenhouse and in the field, and took me from Eastern Ontario to Costa Rica, Mississippi, and Nebraska.

The field course program at Queen's is valuable in its focus on exposing students to a variety of themes that are not examined in school-year courses, and for doing so in a format that includes small class sizes, lots of student-professor interactions, and hands-on learning experiences.

I am currently at the School of Forestry and Environmental Studies at Yale University, where I am pursuing a Master's degree in water science, policy, and management. The confidence I gained through my research experiences at Queen's have been invaluable in shaping my graduate program. The encouragement I received to apply to the program and to follow my passion for the intersection between the natural and social and policy sciences has been instrumental in my academic career. The numerous research opportunities afforded to undergraduate students at Queen's are important in providing the chance for students to determine their interests in biology, and field courses offer an introduction to field research that is difficult to gain in other forms.

A Satisfying Career in Biology…

By Jennifer Harker, M. Sc. 1976, Partner, Dillon Consulting Limited

From a young age, I knew I wanted to be a biologist. I completed my undergraduate degree at Trent University, a great small university in central Ontario but without a graduate program in 1973. With aquatic biology being my major interest, I became aware of Queen's and its wonderful Biological Research Station in the heart of the Rideau Lakes. The practical skills and scientific knowledge learned there under the supervision of Dr. Allen Keast and a number of other well respected professors would prove to be crucial to my future career.

Following graduation in 1976, I was hired by the Ontario Ministry of Natural Resources to undertake a large research study, complete with an extensive field program, to determine the effects of shoreline development on sensitive aquatic ecosystems in Ontario Lakes. Once that project was completed, I was hired by Dillon Consulting Limited, a national multidisciplinary engineering, environmental and planning firm. The 25 years I have spent as an environmental consultant with Dillon have been both fascinating and rewarding. Protection of environmental features in all of our projects has become increasingly important and high profile. We seek opportunities in each project to enhance and restore degraded habitats for fish and wildlife. I also play a role in multidisciplinary teams on large strategic projects, such as watershed plans, waste management master plans and urban and regional planning studies. Although I am based in Toronto, I have been fortunate to work on interesting projects across the country.

CONTINUED

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My academic and practical training gained in the biology department from Queen's has enabled me to excel in my career as an environmental consultant. It gives me great pleasure to be invited to speak to students and show them that a career in biology is both worthwhile and satisfying. Participation as an executive in national scientific associations has also enhanced the profile of Dillon and Queen's and I never lose an opportunity to be an ambassador for both. I continue to return to the University each year to renew friendships and meet the next generation of professional biologists!

We're interested in YOUR feedback, your own experiences in our department, and your suggestions for what you would like to see in future issues of Queen's Biology. Please email Dr. Raleigh J. Robertson, Newsletter Editor, at robertsr@biology.queensu.ca

BIOLOGY THESIS (BIOL 537) STUDENTS EXPERIENCE RESEARCH FIRST-HAND

On March 10, 2006 the BIO537 fourth year honours students hosted a Poster Day in the Biosciences Atrium. Sixty-nine students presented posters based on their research to faculty, staff, graduate students and fellow undergraduate students. Graduate students selected within the Biology department judged the posters and awarded three prizes: 1st place to Mike Wilton ($100) and 2nd place shared by Rebecca Milne and Emma Goodall ($50 each). The award winning posters will be displayed by the department for one year. Following a reception hosted by the Department of Biology, Dr. Peter Zandstra, a Canada Research Chair in Stem Cell Research at the University of Toronto gave a public seminar on the generation of functional tissue from adult and embryonic stem cells.

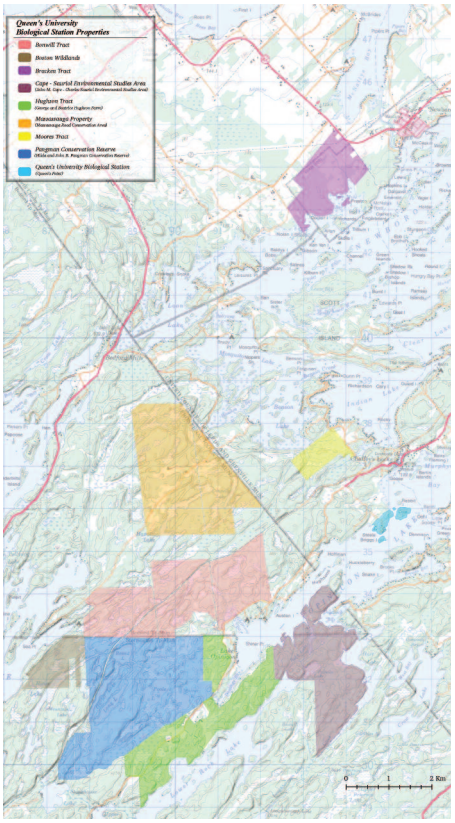
Queen's University Biological Station

QUBS has provided field course and research experience for Queen's Biology students and those from many other Canadian universities, as well as international students, since its inception in 1944 when it was founded by Dr. Wes Curran. It has grown from a seasonal operation on a 65 acre peninsula in Lake Opinicon, to a year-round facility with more than 6,000 acres of natural habitat, a new "Operations Centre" (lodge), and accommodation for about 70 researchers. http://biology.queensu.ca/%7equbs

After serving as Director of QUBS for 33 years (1972 – 2005), Dr. Raleigh Robertson (left) is happy to hand-over this role to Dr. Bruce Tufts on 30 June 2005. Bruce plans to work toward establishing a Centre for aquatic sciences and fisheries biology at QUBS.

The Lodge 2001– built with funding from the Canada Foundation for Innovation, and generous donations from Mrs. Hilda Pangman.

The original "lodge" 1945-2000.



With the acquisition of 9 separate parcels of land since 1976, QUBS now encompasses a wide array of terrestrial and aquatic habitat, providing enormous potential for field studies on a wide range of organisms, habitats and species assemblages. The "Queen's Land Trust" has been established to provide funds for acquisition of a few critical parcels of adjacent lands, and to allow stewardship and teaching programs based on these lands that simultaneously serve teaching, research and conservation.