



University of Toronto Quality Assurance Process (UTQAP) Cyclical Review: Final Assessment Report and Implementation Plan

Programs Reviewed:	<ul style="list-style-type: none"> • Ecology and Evolutionary Biology, B.Sc. (Hons.): Specialist, Major • Biology, B.Sc. (Hons.): Specialist, Major, Minor • Biodiversity and Conservation Biology, B.Sc. (Hons.): Major • Environmental Biology, B.Sc. (Hons.): Major, Minor • Biology (with National University of Singapore): Minor • Ecology and Evolutionary Biology, M.Sc. • Ecology and Evolutionary Biology, Ph.D.
Unit Reviewed:	Department of Ecology and Evolutionary Biology (EEB)
Commissioning Officer:	Dean, Faculty of Arts & Science
Reviewers (Name, Affiliation):	<ol style="list-style-type: none"> 1. Prof. Elizabeth Elle, Ph.D., Department of Biological Sciences, Simon Fraser University 2. Prof. Nelson G. Hairston, Jr., Ph.D., Department of Ecology and Evolutionary Biology, Cornell University 3. Prof. Mark A. McPeck, Ph.D., Department of Biological Sciences, Dartmouth College
Date of review visit:	March 6 – 7, 2018
Date reported to AP&P:	November 1, 2018

Unless otherwise noted, all bulleted comments apply to all programs reviewed.

1 Outcome

The Committee on Academic Policy and Programs (AP&P) concluded that there were no issues to be drawn to the attention of the Agenda Committee but requested a follow up report in one year on the outcome of the workplace review and initiatives to improve staff relations. The follow-up report will be considered by AP&P at the Cycle 2 meeting in 2019-20.

2 Significant Program Strengths

- Well-deserved national and international reputation for excellence
- Dedication to undergraduate education
- Strong graduate research program
- Productive faculty who enjoy a collegial environment
- Highly skilled, motivated administrative staff

3 Opportunities for Program Enhancement

The reviewers recommended that the following be considered:

- Immediately resolving space issues, including consolidating all research labs into one building; completing renovations for new faculty in a timely manner; and having the Dean mediate any outstanding issues regarding relocation and space
- Establishing better lines of communication between faculty and administrative staff, who could be better supported in their roles
- Improving the capacity of IT staff and available services and space
- Developing a more effective system for undergraduate academic advising
- Improving communication with graduate students including the expectations for Appraisal exams, and research and travel support.
- Improving frequency or availability of elective graduate course offerings
- Finding additional opportunities for PhD graduate students to receive advice on non-academic careers in the field and to identify ways that students' interests may assist with tailoring program expectations
- Addressing challenges related to the 16-month funding model for MSc students
- Finding ways to improve its relationships with the School of the Environment and the Faculty of Forestry
- Addressing the nature of the faculty appointment supporting the coordination and delivery of the first-year program



4 Administrative Response & Implementation Plan

UNIVERSITY OF TORONTO
FACULTY OF ARTS & SCIENCE

October 2, 2018

Professor Susan McCahan
Vice-Provost, Academic Programs
University of Toronto

Re: UTQAP cyclical review of the Department of Ecology and Evolutionary Biology

Dear Professor McCahan,

Along with the faculty, staff, and students of the Department of Ecology and Evolutionary Biology, I am pleased with the external reviewers' assessment of EEB and its programs: Ecology and Evolutionary Biology, B.Sc., Hons., (Specialist, Major); Biology, B.Sc., Hons., (Specialist, Major, Minor); Biodiversity and Conservation Biology, B.Sc., Hons., (Major); Environmental Biology, B.Sc., Hons., (Major, Minor); Biology (with the National University of Singapore) Minor (Science); and, Ecology and Evolutionary Biology, M.Sc., and Ph.D. The reviewers were "*tremendously impressed with this department*" and with the "*dedication that this major research unit has to their responsibilities as undergraduate educators*" and to "*an extremely strong research program*" with regard to graduate studies.

The quality of this program notwithstanding, as per your letter dated July 20, 2018, the review report raises a number of issues and challenges. I am writing to address the areas of the review report that you identify as key. The response to these items and implementation plan are separated into immediate (6 months), medium (one to two years), and longer (three to five years) terms, where appropriate, along with who (Program Coordinator, Department, Dean) will take the lead in each area. The Department has discussed the reviewers' comments through consultation with various groups and has begun to implement changes where appropriate and that are consistent with EEB's mission.

Administration

The reviewers stated that space issues need to be resolved immediately, and were particularly concerned about the impact of delays in establishing labs on pre-tenure faculty. The reviewers recommended consolidating all research labs into one building; completing renovations for new faculty in a timely manner; and having the Dean mediate any outstanding issues regarding relocation and space.

The Faculty of Arts and Science recognizes that there have been ongoing space issues that need to be resolved. The Vice-Dean, Research and Infrastructure, on behalf of the Dean, will mediate resolution of these issues without further delay. The Faculty recognizes that pre-tenure faculty renovations need to be completed in a timely manner.

Immediate-term response: To determine if all EEB faculty (including current searches) can be consolidated into the Earth Science Centre (ESC) the Faculty will complete a detailed assessment of the current space available in the ESC as well as the space required for consolidation; this determination will be complete by the end of December 2018. This space assessment will be conducted by the Vice-Dean, Research and Infrastructure, working together with the Director of Infrastructure Planning and the EEB Chair. Based on the Faculty's preliminary space assessment, it appears there will be a deficit of required space; however, the Faculty has identified several potential options for offsetting this deficit, including the reconfiguration of existing space. The Faculty will provide EEB with viable space options to offset the projected space deficit by the end of March 2019.

Medium-term response: If consolidation proceeds, laboratory renovations will be required. Those renovations will be detailed in a Project Planning Report, which will be generated starting as early as April 2019. On average, laboratory renovations required approximately a half-to-full year to completion (from Project Planning to occupancy), depending on scope.

Immediate-to-longer-term response: With respect to the renovations of pre-tenure laboratories, the Department will communicate and document clearly with the Faculty when new faculty are hired to ensure that the renovation plans, timelines, and responsibilities are clear. Moving forward, the Department will be required to capture the project scope in a Project Planning Report, which is the standard practice, for all laboratory renovation projects, in advance of the commencement of renovations. This level of rigour has proven to be effective as demonstrated on recent projects.

The reviewers recommended that the Department establish better lines of communication between faculty and administrative staff, and observed that all staff could be better supported in their roles. The reviewers noted that several staff expressed frustration with recent changes following leadership turnover and added they were informed that a small number of faculty were not interacting with staff in a respectful manner.

Immediate-term response: The Department Chair will work to resolve communication issues between faculty and staff, with assistance from the Human Resources personnel in the Faculty, as required. The Chair has already met with staff and clearly indicated that if they encounter difficult situations with faculty members, they are encouraged to contact members of the senior administrative team for assistance and support.

Intermediate-to-longer-term response: The Department will work to improve internal communications so that the roles and responsibilities of those in leadership positions and staff members are clear to all involved in these working relationships. Again, the Faculty's Human Resources personnel will assist at the request of Departmental members.

The reviewers highlighted that the IT staff and available services and space seem to be "stretched thin", and additional capacity concerns and communications issues between IT staff and faculty have arisen due to faculty members purchasing additional equipment that requires support and maintenance.

Immediate-to medium-term response: IT support for research is the responsibility of individual faculty members, with the Department IT staff responsibilities limited to initial installation of new research computers. A short-term higher workload developed for IT personnel due to the transition to the new University email and IP phone systems. The workload has now returned to

normal levels. The Department has recently hired a Graduate and Communications Coordinator, who has taken on responsibilities for the new web site and social media presence, thereby relieve pressure on IT staff.

Undergraduate Programs

The reviewers stated that the Department needs to develop a more effective system for undergraduate academic advising.

In conducting the self-study, EEB recognized that undergraduate advising required additional attention, which they began to address promptly though enhanced outreach and communication with undergraduate students.

Immediate-term response: EEB has undertaken numerous initiatives that will enhance undergraduate academic advising, including:

- The creation of a new Undergraduate and Outreach Coordinator position to enhance delivery of guidance and curricular information to students.
- EEB currently offers 6 mentoring and information workshops annually, and they will add an additional session involving multiple faculty to provide academic guidance for 1st year biology students specifically.
- The implementation of a new peer-mentoring program (EEB:PMP) to foster awareness of opportunities and guidance for 2nd year students who join their POSTs. The EEB:PMP program dovetails with their existing mentorship workshops and information sessions to provide a more personal component to student experience within their department. Student mentors and mentees will earn co-curricular record (CCR) credit for participation in the program over the full academic year, with program criteria developed in consultation with coordinators of other mentorship programs on campus. The Undergraduate and Outreach Coordinator will lead the logistics of EEB:PMP within the department in conjunction with the Associate Chair (Undergraduate).
- Promotion of the new EEB student lounge space as a casual venue for students to share experiences and learn about the numerous opportunities available in EEB.
- The development of a set of info-graphics that provide helpful hints, information and guidance about the diverse opportunities available to students in EEB. These infographics will be showcased to students at the start of their large introductory EEB courses.
- The development of a brief “Welcome Packet” for students who enroll in their POSTs that highlights Departmental opportunities.

Medium-to-longer-term response: EEB faculty will continue their individualized student mentoring through research projects, which engages approximately 70 students annually.

Graduate Programs

The reviewers listed areas where communication with graduate students could be improved including the expectations for Appraisal exams, and research and travel support.

Immediate-term response: The Department became aware while conducting their self-study that graduate students were anxious about the appraisal exams, in part because they observed some students conduct the exam relatively late, which provided the perception that significantly more data and knowledge was required at the time of the exam. To address this issue, the departmental Graduate Affairs Committee decided that the student supervisory committee, which includes the supervisor(s), is responsible for determining the scheduling of the appraisal exam. Specifically, all PhD students will have a committee meeting in the fall of their 2nd year, at which time they will schedule their appraisal exam. If the exam is not scheduled at this time, an additional committee meeting will be held in the winter term to ensure that the appraisal exam is discussed.

The Department will continue to publicize conference travel support through email announcements. In addition, they will work with the EEB Graduate Students Association to generate and publicize a list of external sources for conference travel funding. The Department acknowledges there are differences in the level of travel support faculty members provide to their students, and the Department will work to establish standard practices, while recognizing that these funding decisions are ultimately up to individual faculty members.

The reviewers indicated that graduate students were not satisfied with the frequency or availability of elective course offerings.

The Department acknowledges that the stability of graduate course availability has been a challenge in recent years and is in the process of improving both frequency and availability. The Department is attempting to balance the number of courses with course size, to ensure an appropriate environment for intellectual discussions among students and faculty.

Immediate-to-medium-term response: The Department is taking several measures to ensure more frequent graduate course offerings:

- They will offer two frequently requested new courses this year (phylogenetics, modelling).
- To accommodate student interest in statistics, students can now complete additional statistics courses offered by other departments.
- The core graduate course in Ecology will return to its usual alternate-year cycle; this course has undergone significant modifications to assist in preparing students for the appraisal exam.

The reviewers encouraged finding additional opportunities for PhD graduate students to receive advice on non-academic careers in the field and to identify ways that students' interests may assist with tailoring program expectations.

Immediate-to-longer-term response: The Department has been active in addressing this issue and they will continue to host panel discussions with alumni and others about their non-academic careers, the transferrable skills they attained during their PhDs, how they found and assessed potential careers, etc. They will also continue to provide a short-course (for credit) in Professional Development where transferable skills and alternate careers are explored. Lastly,

they will also continue to encourage faculty to foster their students' interests before and after their appraisal exam to gauge the relative importance of maximizing research project breadth and depth beyond the minimum versus participation in outreach and professional development activities (e.g., Mitacs workshops, R courses).

The reviewers commented that the 16-month funding model for MSc students is short relative to comparable programs, and is a challenge for students.

Immediate-to-longer-term response: While the 16-month funding model for MSc students is relatively short, which provides a challenge for students, the evidence suggests that students are successful during this timeframe. For example, numerous MSc students publish their work, which indicates that the program is rigorous. In addition, the majority of EEB PhD students start in the MSc program and then transfer to the PhD. Overall, the Faculty and Department are satisfied with the current MSc program duration, given funding constraints.

Relationships

The reviewers encouraged the Department to find ways to improve its relationships with the School of the Environment and the Faculty of Forestry.

EEB has a positive relationship with the School of the Environment. EEB faculty teach several ENV courses, and many EEB faculty hold cross-appointments at the graduate level. EEB has one joint faculty line (51%EEB/49% ENV) with the School, and an EEB faculty previously held the directorship of the Centre for Environment/School of the Environment. Most undergraduate students taking the Environmental Science Major through the School of the Environment also take one or more EEB programs. With respect to the Faculty of Forestry, there is limited overlap in research interests, which constrains catalysis for deeper interaction.

Immediate-to-medium-term response: EEB faculty members have served and will continue to serve on relevant advisory committees of Forestry graduate students.

Faculty Resources

The reviewers were concerned at the decision to allocate a partial, contractually limited teaching appointment to support the coordination and delivery of the first-year program.

Immediate-to-medium-term response: The current arrangement for coordination of the first-year teaching program is temporary. The Faculty has approved an Assistant Professor, Teaching-Stream position for EEB, and the search is currently underway.

To conclude, we appreciate that the external reviewers identified the Department's strengths and noted a few areas for development. The Department of Ecology and Evolutionary Biology has already begun to move forward with plans to address the recommendations as presented by the reviewers.

Sincerely,



David Cameron, CM, FRSC
Dean and Professor of Political Science

cc.

Donald Jackson, Chair, Department of Ecology and Evolutionary Biology

Poppy Lockwood, Vice-Dean, Academic Planning and Strategic Initiatives, Faculty of Arts & Science

Daniella Mallinck, Director, Academic Programs, Planning & Quality Assurance, Office of the Vice-Provost, Academic Programs

Andrea Benoit, Academic Review Officer, Office of the Dean, Faculty of Arts & Science

5 Executive Summary

The reviewers identified the programs' strengths as its well-deserved national and international reputation for excellence; dedication to undergraduate education; strong graduate research program; productive faculty who enjoy a collegial environment; and highly skilled, motivated administrative staff. The reviewers recommended that the following issues be addressed: resolving space issues; establishing better lines of communication between faculty and administrative staff; improving IT capacity; developing a more effective system for undergraduate academic advising; improving communication with graduate students; improving frequency or availability of elective graduate course offerings; finding additional opportunities for PhD graduate students to receive advice on non-academic careers; addressing challenges related to the 16-month funding model for MSc students; finding ways to improve its relationships with the School of the Environment and the Faculty of Forestry; and addressing the nature of the faculty appointment supporting the coordination and delivery of the first-year program. The Dean's Administrative Response describes the Faculty, unit and programs' responses to the reviewers' recommendations, including an implementation plan for any changes necessary as a result. The Committee on Academic Policy and Programs (AP&P) concluded that there were no issues to be drawn to the attention of the Agenda Committee but requested a follow up report in one year on the outcome of the workplace review and initiatives to improve staff relations. The follow-up report will be considered by AP&P at the Cycle 2 meeting in 2019-20.