The University of British Columbia

EXTERNAL REVIEW OF THE FACULTY OF FORESTRY The Faculty's Response to the Report of the Review Committee

1. Governance, Organization, and Administration

1. Diversify the countries of origin for International Students to reduce risks of lack of students if one country should curtail the ability of students to travel abroad.

We agree that there is a need for this. The diversification of our student body is an important part of the internationalization of the Faculty. International students not only enable the continuation of some programs and options that would otherwise risk being closed down (such as Forest Operations), but add significantly to the student (and teaching and research) experience. International students in UBC Forestry today primarily come from the USA and China. An agreement with Taiwan is being developed, and the possibilities of recruiting students directly in Korea, Japan, and southeast Asia are being explored. Following the closure of the forestry program at Aberdeen, the Faculty is considering launching a recruitment effort in Scotland. The Dean, in his positions as Chair of the Commonwealth Forestry Association and Chair of the Standing Committee on Commonwealth Forestry is also working to establish UBC as the primary Commonwealth forestry school, filling a role once exclusive to Oxford University.

2. Look at new teaching methods including large lectures with graduate student led discussion sessions and/or online lectures for some classes.

The Faculty is exploring new pedagogical techniques, and has received a number of grants from the Teaching and Learning Enhancement Fund at UBC to do so. The Faculty has been recruiting more instructors, and these individuals are being asked to play a leading role in developing the Faculty's teaching. The Faculty has two 3M Teaching Fellows, and these are contributing to improved pedagogies. We will take advantage of the CTLT Faculty Associates program to help improve our pedagogy. We will also be looking very carefully at the nature of our teaching, and in particular whether some courses might be better offered online than face-to-face.

3. Evaluate scheduling to optimize use of classrooms and labs during more hours of the day. Currently, classes in the Faculty run from 8 am to 8 pm, although most are scheduled during a narrower period. Considerable efforts go into scheduling, including accommodating the unique preferences of individual faculty members. However, as pressure increases, the Faculty will not be able to be so flexible, and so priority will be given to those with good reason for particular scheduling requests (e.g. childcare provisions). The scheduling of many classrooms on the UBC Vancouver campus is coordinated centrally (through Classroom Services), and we need to comply with their rules for scheduling those classrooms and for timetabling classes.

4. Understand the "accounting" of applications versus acceptance rates in the University and develop a policy and communication method to allow the University to understand the FoF model.

This issue arose, in part, because the Faculty discourages prospective undergraduate students with no possibility of admission from applying. As a result, we have a fairly high acceptance to application rate, which some can interpret as a negative indicator. This will be taken up with Dr. Pamela Ratner in the Provost's Office. It is also a function of demand for our programs among prospective students. We do well in terms of student demand compared to other forestry/natural resources programs at North American and European universities, but have quite low demand relative to most other UBC direct entry programs.

5. Develop several ways of communications, including "listening sessions," so that faculty, staff and students can better understand the operations and management of the FoF.

Currently, operations and management information is provided in several ways (Department meetings, Faculty Council meetings, Faculty 'Town Halls', weekly e-news). Based on this recommendation, new methods for internal communication, including feedback sessions with students, are being explored and, where appropriate, will be introduced to facilitate better feedback opportunities from students, staff and faculty members.

2. Infrastructure and Resources:

6. Continue to encourage and support the use of the Experimental Forests as primary classrooms and teaching tools for the programs. This may include working with the University to develop cost effective transportation programs and use of the forest as classrooms for other faculties and programs within the University.

The Faculty fully supports this recommendation, and completion of the Loon Lake camp was a major goal of the latest fund raising campaign. Thanks to the generosity of our donors, the last building (a renovation) should be completed by the end of March 2016. We are exploring mechanisms to get our 1st year students into the forest for basic training in field skills, this could occur after consultation with other faculties as it requires substantial curriculum changes. Presently, several advanced undergraduate and graduate courses are being conducted in our experimental forests.

The Malcolm Knapp Research Forest is already used by some non-Forestry classes, but following this recommendation, we will seek ways to inform other faculties of the opportunities that are available at the Research Forest.

7. Perhaps by use of a space audit, develop and present needs for classrooms and labs for the FoF.

This is constantly under review by our Space Committee, but is complicated by the classroom management system within the university. Some of the classrooms are centrally managed and scheduled while others are managed by the Faculty. We do not have control of the university managed classrooms. The Faculty's continued growth is now being constrained by space needs and the working environment for both students and faculty members will deteriorate if solutions are not found.

8. Evaluate alternative funding models for graduate students including fellowships (funded by new development efforts) and teaching assistantships and their allocation.

The Faculty fully supports this suggestion. During the UBC *Start an evolution* fundraising campaign graduate fellowships were a priority, and will remain so in the coming years. Several new graduate student awards have been established during the campaign. At present, graduate student fellowships exceed \$1 Million annually, the majority of which are from internal funds.

9. Communicate how "indirect returns" to the FoF are allocated to all.

This will continue to be done at the annual meetings with each Department. We will also calculate just how much each Faculty member brings in "indirect returns", as there are some major misconceptions about the amount received by the Faculty (which in 2015 was \$300,000, all of which was used to support Departmental financial administrators).

10. Develop a policy on responsibility for equipment maintenance (and use of that equipment) and have clear written "contracts" for equipment that may fall outside of this policy.

This is a potential gap that the Faculty acknowledges. In 2015, a decision was made to establish a fund (\$25,000) that is available to anyone who needs it for technical support. The fund rolls over every year. If equipment needs servicing, faculty can apply to the Dean's Office for funds to "hire" expertise from one of our partner Faculties (Science or Applied Science). No one has taken advantage of this.

11. Within the strategic plan, increase targeted funding goals for development to meet some of the recommendations included in the report.

This is an important recommendation, as many of the suggestions made by the Review Panel will result in increased expenditures, and the finance will have to be found.

At UBC the Development goals for each Faculty are set through a discussion between the central development office, the Faculty development office and the Dean. The goal is set based on the current active 'pipeline' of prospects; identified potential gifts and fundraising needs of the Faculty to ensure goals are achievable. Over the last 5 years the Faculty has doubled its annual funds raised compared to pre-2011 levels and based on the current pipeline and the state of the industry it is felt this is a sustainable and realistic level. The Faculty will however consider raising its fund-raising goals and widening its search for potential donors.

12. Reengage faculty and senior leadership to work with the VP for Research to find funding options for the CFREF application that did not get supported.

The Faculty of Forestry was actually closely involved with two CFREF applications that were not supported by the university, and so it is unclear which application is being referred to here. In one of the applications (Global Research Excellence Institute of Forest BioProducts (FBP)), many of the researchers subsequently transferred to an application being developed by Lakehead University, which has received the go-ahead to move to the next stage. The \$25 million funding contribution from FPInnovations was also transferred from UBC to Lakehead. The UBC application in this area was particularly strong, and would have been an incredibly significant and strategically important success for British Columbia had it been approved by UBC. If Lakehead is successful with their application, it will be a significant blow to the forest sector research. One senior industry spokesperson has described the decision as "a significant strategic error on the part of UBC". Despite the challenges, we believe that FBP proposal has much merit, and the Faculty has committed to support its development under a new financing model being developed by the proponent.

The second proposal (Institute in Adapting Biosystems) was developed in the Faculty of Science. Its future is much less certain, and there has been no further information received on the plans of the researchers to continue seeking funding for collaborative research by the group.

3. Interactions and Service Outside the Faculty:

13. The Provost and Deans could make a greater effort to ensure that the FoF is always included in appropriate decisions.

This recommendation is not directed at the Faculty of Forestry. Its implementation is dependent on the Provost and other Deans. We welcome any such participation and have advocated modifications to the current Provost model that would result in more direct involvement of faculties in the affairs of the university.

14. Dean Innes should actively seek to develop cooperative relationships with other Faculties, even if it seems that the FoF alone might produce a better result.

While quantification is difficult, we believe that we are the originators of more collaborative relationships than we are the recipients. Consequently, without more specific details, it is difficult to know how to take this recommendation further. We would add that we currently have joint appointments with the Faculties of Land and Food Systems, Science, Applied Sciences, and Arts, and will soon have one with Medicine. Developing a joint appointment with the Faculty of Law would be of considerable interest to us, most likely in the area of Indigenous land rights.

15. The Faculty should engage more in the bioproducts field, including mass timber (e.g., cross laminated timber and others, as evidenced in construction on the UBC campus).

The Faculty is fully supportive of this recommendation, although there are complications to it. Faculty members have played, and continue to play, an important role in timber engineering. This has been weakened by the Province's establishment of a new timber engineering program at UNBC in Prince George, which has resulted in the potential loss of a key Faculty member at UBC. The loss of the CFREF biorefinery proposal, and the possibility of the centre of Canadian biorefinery research being established in Ontario is another significant setback, especially as Canada's concentration of expertise in this area is at UBC.

The Faculty, together with the Faculty of Applied Sciences and the Sauder School of Business, has recently established a Master of Engineering Leadership in Green Bioproducts, and we are investigating the possibility of a new undergraduate program in this area.

16. The Faculty should increase involvement in First Nations and other indigenous issues as noted elsewhere in this report.

We fully concur with this recommendation, and are already taking actions to implement it. We are already leaders in this area, as noted in point 20 below, and we have several initiatives underway, including a cross-faculty cluster to continue to expand on this. In the last 12 months, almost a million dollars has been given or pledged to support Aboriginal students in the Faculty of Forestry.

17. There should be more involvement by the FoF in the biodiversity field, already being developed by the Faculty of Science and the Faculty of Land & Food Systems.

We fully concur with this recommendation. A Faculty member was heavily involved in the CFREF proposal on biodiversity, and we would be keen to be further involved in the developments

referred to in this recommendation. We are also exploring closer involvement in a number of other biodiversity-related areas, including tropical forest ecology.

18. The FoF Faculty should develop a strategic plan for communications.

We concur with this recommendation. The Faculty will initiate a review of its current communication and marketing strategy and, based on the results of this, will develop a comprehensive communication plan.

19. The FoF Faculty should develop a new model for industry relations at various levels. This would include identifying lead and target communication messages, including stories about the outstanding graduates produced by the UBC Faculty of Forestry.

This recommendation is related to the observations in the section about the forest industry that "UBC should not be focusing on the environment and conservation", "neither government nor industry seems to understand why the FoF is engaging so heavily with overseas students". "neither government nor industry was very complimentary about UBC Forestry graduates; one said they do not hire from UBC because of a lack of field skills" and "the industry wishes that the FoF had a stronger policy and economics group".

We believe that there are many misconceptions and 'rural myths' about the Faculty of Forestry at UBC. We agree that there is a need to identify, lead, and target communication messages; these will be incorporated into the strategic plan for communications (*Recommendation 18*). It is notable that the two industry foresters involved in the review of the Forest resources Management program in early 2015 indicated that they were unaware of the scope and depth of the current undergraduate program, indicating a need for more communication about this to the industry.

We wish to elaborate on some of the statements made in the report, particularly those related to field skills. Field skills were traditionally acquired by forestry students while working for forestry companies during the summer. When many forestry companies stopped hiring summer students, this source of learning and field experience dried up for most students. We continue to encourage co-op placements in both industry and government, many of which involve the acquisition of field skills, and have almost trebled the number of placements. However, this is also dependent on employers. We maintain two mandatory field camps for forestry students, and are looking into the possibility of instruction in field skills for 1st year students (making them more attractive to employers in their first summer).

In 2015, we instigated formal reviews of all teaching programs. The forestry program was assessed by four individuals, two academics and two Chief Foresters from companies in BC. A number of suggestions for improvement were made, and these are being instigated. We have sought evidence that our students are *not* being employed, but this has been difficult to find, and all the evidence points to a significant demand amongst employers for our students. The biggest

employer of our students is the Provincial government, followed by a number of larger forestry companies in the province.

The Faculty routinely profiles our successful alumni through the Faculty's newsletter, *Branchlines*, and each issue contains an alumni section where an alumnus is profiled. *Branchlines* has a circulation of approximately 5,000, including industry, government and alumni. These profiles are also on the Faculty's website.

We do accept that the policy and economics group is weak in certain more traditional areas and in need of strengthening in particular fields. Steps are being taken to rectify this. However, the Faculty is strong in emerging policy areas, such as Indigenous forestry and forest – community relationships and this is where some of the most interesting innovation is occurring today. Based on advice received from the Faculty of Forestry Advisory Council, the Faculty will look at ways to reach out to a broader audience through webinars, TED-style talks and other means.

4. Aboriginal Engagement:

20. Become the leader of UBC's team working in the area of Indigenous engagement. We fully concur with this recommendation and would be pleased to work with the FNHL as a Faculty champion for the development of UBC's Indigenous engagement. Our First Nations Council of Advisors has emphasized that leadership comes through successfully doing things; we should ensure that we do what we do well, and that we then communicate those successes to others. The Faculty has a number of success stories already, and it should ensure that others at UBC are informed of these.

5. Environment and Culture:

21. Cross fertilization of ideas within the FoF is key – find several methods of doing this, as one is not usually enough.

The Faculty is looking into ways to implement this recommendation. Research seminars are now being presented by faculty members, but attendance by other faculty members is low. Departmental seminar series are better attended, at least in Forest and Conservation Sciences. Other methods are under investigation such as Post-docs and Research Associates seminar series. A recent success has been themed meetings: these have so far occurred on urban forestry, Aboriginal research and research in China. All three attracted significant numbers of faculty members and resulted in initiatives to coordinate between initiatives and research projects.

22. Faculty should be encouraged to travel more and be ambassadors for the FoF when they do.

This is considered an important aspect of faculty development, but there are no procedures in place to facilitate it. The Faculty has developed links with many research institutions and universities around the world, many of which would be pleased to host a UBC Forestry faculty member on study leave, but the interest amongst faculty members in taking advantage of this is limited. Faculty members often establish their own relationships and collaborations abroad, and these activities should be encouraged to continue.

6. Academic Programs and Teaching

23. Undertake curriculum mapping for each program.

Based on this recommendation a more formal procedure, with clear feedback mechanisms, will be investigated and implemented. This process will be started by mapping Aboriginal content in the undergraduate programs. The recently completed program reviews will be used to refine the current programs. This will be a priority fort the incoming Associate Dean for Undergraduate Studies.

24. Develop dialogues with employers about their needs for employee skills in each program. While this is currently done informally, there is an obvious need for further improvement. The Faculty of Forestry's Advisory Council has indicated that professional accreditation standards are considered narrow and may not always reflect the requirements of the industry/employers. Accreditation standards are developed by the provincial professional forestry associations; whose memberships represent the professional practice. This alleged divergence between the needs of the employers and the needs of the practice presents a challenge for the Faculty which can probably only be resolved by encouraging further dialogue between all interested parties in the skills and competencies that are expected of a forestry graduate from an accredited program.

25. Ensure that there is adequate training in oral and written communication for all students. The development of oral and written communication skills is already required throughout the different curricula. We acknowledge that greater efforts should be made to ensure that the skill development that has been agreed to is actually being implemented in individual courses.

26. Each professional Master's program should have a strategic plan with a business plan for revenue generation, for which they should be held accountable.

We fully concur with this recommendation, and a committee has already been struck to review the strategic and business plans of each professional program.

7. Scholarly Activities

27. Continue the excellent scholarly activity performance that the Faculty has produced to date.

The Dean's Office focuses on developing and supporting and research and teaching within the Faculty. It will continue to focus on these, consistent with this recommendation. The new appointment of an Associate Dean for Research and Innovation in 2015 is already raising the profile of the Faculty's scholarly activity.

28. Partner with other university Faculties for new areas of grants and scholarship. This recommendation is already being implemented. The Faculty will make an attempt to quantify the number of Collaborative projects, and will then monitor trends in collaboration. It will also encourage Faculty members to develop co-operative projects in new areas of grants and scholarship.

8. General recommendations:

29. A revised strategic plan should be developed that includes goals and strategies for academic programs, research, marketing, communications, and development.

The current Strategic Plan has an associated document that includes goals and strategies. This was developed collaboratively, but a decision was made to limit the extent to which this was made public. The concern was that the broad dissemination of potential future actions in what is a highly competitive environment would not be in the Faculty's best interests. The Faculty had been waiting for the university's new Strategic Plan to be revealed; however, as it is anticipated this will not be for some time after a new President is selected, the Faculty will proceed to review and revise its current strategic plan and expand to include the above elements.

30. This plan should include action steps and timelines that bring the FoF together in a concerted effort to show how the Faculty intends to accomplish its goals (links to University priorities should be highlighted).

The Faculty agrees with this, and will be pleased to revise its strategic plan accordingly.

31. Where appropriate, work with other Faculties to accomplish these goals. This will be done. For example, the Faculty has been in discussion with the Faculty of Land and Food Systems over the introduction of a first-year integrated program.

32. Communicate with multiple audiences in multiple ways about the Faculty's accomplishments.

This will be done in association with <u>*Recommendations 18*</u> and <u>20</u>.

John Innes Dean, Faculty of Forestry