



An Invitation to a Joint Discussion on Forestry Education Declining Forestry Enrolment: a concern for the forestry profession in Canada and the United States

Jointly developed by the Canadian Institute of Forestry and the Society of American Foresters

Issue from Canadian and U.S. Perspectives

Enrolment in Canadian forestry universities increased in 1995-96, peaked in 1998-99 and has since decreased by about one-third, as of 2003. The Deans of Canada's forestry schools indicate that graduate enrolments are stable but they feel the numbers are still far below levels required to sustain a "broad, innovative research agenda". Although there is a lack of data for forestry technical school programs, it has been suggested that those schools are experiencing a similar trend. This trend is contrary to several other programs at Canadian universities and colleges where demand for places has been increasing at an unprecedented rate. All the Canadian forestry schools have not shared declining enrolment equally. Over the last few years, the University of New Brunswick and the University of Alberta experienced a greater share of losses while Laval University and the University of Northern British Columbia improved their enrolment numbers. In the last year or so, University of Alberta and the Northern Alberta Institute of Technology have both increased enrolment through aggressive recruitment while the University of Northern British Columbia has experienced a decline in numbers. Mill closures in BC have had direct effects on individuals and communities, which are likely, affected enrolment at all, BC schools.

In the United States, similar declines are evident although, again they are not inherent in every forestry school or college. While overall undergraduate university enrolment has greatly increased in the US (8.5 mill in 1970 to 15.8 mill today, *RNRF 2004*), enrolment in forestry and natural resource programs has decreased since 1983. In the mid 1990's the U.S experienced a slight increase but enrolment has since steadily declined through 2003.

While enrolment in forestry schools in general, continues to decline in both Canada and the U.S., the number of foresters retiring is expected to surge in the next three to seven years in both Canada and the U.S. A 2003 Canadian Council of Forest Ministers survey showed that over 80% of their forester workforce is in the 30 to 55 age bracket. In Ontario, 12% of forestry professionals are age 55 and older, 29% are age 45 to 54 and 36% are age 35 to 44. By comparison, in 1996, only 7% were 55 and older.

In Canada in particular, early retirement has become a common trend, with many foresters retiring before age 65 and often before age 60. In addition, many more senior foresters are moving into management positions and are no longer doing forest management work. In the next three years the retirement rate is not seen as a concern, but it becomes a significant concern in the next four to ten years due to the high rate of retirement, coupled with declining numbers of graduates. Human Resources and Skills Development Canada statistics predict that competition for jobs among forestry professionals will be below the average of other professions.



The Canadian Council of Forest Ministers survey also found that an anticipated 3% increase in number of entry level positions in Canada in the next 5 years is expected. By 2008, entry level positions could increase by as much as 150%, just to replace those expected to be retiring. Graduates currently earn 24% more on average than all university graduates at the bachelor's level and those earnings are also growing 5% faster than average. Additionally, 50% of graduates have work within one month of graduating and 95% are working within one year. There is equally good success at the diploma level with many finding jobs and their wages are among the highest compared to other diploma graduates.

U.S. data indicate that just in the US Forest Service alone, 50% of leadership positions eligible to retire by 2007 and 46% of total workforce is expected to turn over by 2007 (RNRF 2004). Within the US Forest Service, less than 10% of the workforce is under 29 years of age, just over 50% are between 30-50, and 40% of the workforce is above 50. Additional data for other sectors of employment are not currently available, but hopefully will be in the near future.

Why Should the Profession be concerned?

This issue is of grave importance not only to the forestry educational institutions, but also to the forestry profession. Both Canada and the U.S. rely heavily on the management, protection and use of forests to provide major economic, social and environmental benefits. Canada is the largest exporter of forest products in the world, the US continuing to be the major customer, thus making the management and use of Canada's forests an important challenge that spans well beyond Canada's borders. The U.S., particularly with its growing population, continues to rely heavily on wood products as well as the non-timber amenities U.S. forests provide.

Declining enrolment is also an issue when it's considered in the context of both countries' aging population. Will there be enough trained professional foresters and forest technologists to fill the gaps soon to be created by retiring baby boomers? Continued enrolment declines may impact the future of forestry schools. If enrolment declines are significant enough to warrant additional cancellations of undergraduate programs, as seen in Canada, the ability to provide qualified graduates to fill new positions and replace retiring professionals will be greatly undermined. There is a strong potential that increasing demands for more foresters and forest technicians could coincide with a very much reduced ability to provide them. This is additionally important when considered in the context of existing and potential legislated mandates that require qualified individuals to carry out certain forest management activities. These requirements could become moot if there are not enough professionals to do the job or the jobs are filled with "allied" professionals, making the forester or forest technician less competitive.

The profession is also concerned that this decline may in fact represent a longer-term reflection of society's view that forestry as a profession is no longer relevant. New perceptions of forest management may be taking hold, wherein the scope of the profession of forestry is regarded, incorrectly, as being too narrow to deal with broad ecosystem-based approaches to forest resource management.

Ultimately, this issue is of concern to the profession because of the potential implications on the sustainability of forest resources. It is the view of the profession that foresters, forest technicians, and forest technologists are the best equipped professionals to continue the development and to lead in implementing new and more comprehensive approaches to the management of all



resources and values provided by forest ecosystems. The profession must continue to take the lead in training people who understand the various components, can weigh the tradeoffs and prescribe management treatments that will enhance benefits, reduce the risk of negative impacts, and ensure long-term resource sustainability. Only properly trained professionals can make this happen and forestry schools are key because their curricula integrate biological, quantitative, managerial, and social components.

What can Forestry Professionals Do to Help?

Because of the potential challenges this issue of declining enrolment in forestry schools presents to the profession, there is a need for a broad, sector-wide effort to examine the issue, take ownership of the problem as a profession, and become part of the solution. There is work needed to better define the causes for decline and identify solutions, work that the forestry profession should engage in.

The first step however, is to clearly identify the causes of the declining enrolment. As a forestry professional, you can contribute by participating in the Joint CIF/SAF session entitled *Why in the World Would I Enrol in Forestry When I Can Take Environmental Studies*. This session will take place on Monday, October 4, 2004 from 4:15-5:00 as part of the Feature Forest Programs stream/track.

About Canadian Institute of Forestry/Institut forestier du Canada and the Society of American Foresters

The Canadian Institute of Forestry / Institut forestier du Canada (CIF/IFC) is a national voice of forest practitioners. Formed in 1908, the Institute represents members who are foresters, forest technologists and technicians, educators, scientists and others with a professional interest in forestry. The Institute's mission is "*to provide national leadership in forestry, promote competence among forestry professionals, and foster public awareness of Canadian and international forestry issues.*" <http://www.cif-ifc.org>

The Society of American Foresters, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Society was established in 1900 by Gifford Pinchot and six other pioneer foresters. The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

Sept. 2004