This article, inspired by the discovery of a photograph of MacMillan and Millar on the Kanisku National Forest in 1908, provides a link between the Canadian Forest Service, the United States Forest Service, and the Yale Forest School.

**A FORTUITOUS INTERNATIONAL MEETING of TWO YALE FORESTERS in 1908**

H. R. MACMILLAN AND W. N. MILLAR

The Canadian and U.S. Forest Services evolved in a remarkably similar manner. They were formed about the turn of the century in response to emerging forest conservation movements in both countries—movements which were both separate and intertwined. They were both largely based in the west where publicly owned forested land was available to be dedicated to forestry, and their initial concerns were mostly about timber and forest fires.

This story is about two young foresters, one with each agency, former classmates at Yale, brought together in 1908 became influential in Canadian forestry, each in his own way. The Canadian Forest Service (CFS) started in September 1899 with the appointment of Elihu Stewart in a new position of Chief Inspector of Timber and Forestry for the Dominion Forests. Stewart was to Canada what Gifford Pinchot was to the

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U.S. Forest Service (USFS). Although Pinchot had been appointed a year earlier in 1898, the USFS officially began in 1905.

Canada's western lands were acquired in 1870, about three years after the 1867 Confederation which linked the four eastern colonies of Nova Scotia, New Brunswick, Quebec and Ontario into the Dominion of Canada. Prime Minister Sir John A. Macdonald had immediately launched two actions. One was to encourage British Columbia to join Confederation by promising to build a transcontinental railway to link it to Canada over land. He also urged the Imperial government in Britain to arrange to acquire Rupert's Land from the Hudson's Bay Company to turn it over to the Dominion of Canada in order to complete its territorial integrity.

A Royal Charter in 1670 had granted exclusive trading rights to a vast area in British North America to the Company of Gentlemen and Adventurers Trading into Hudson's Bay. The region, called Rupert's Land in honour of Prince Rupert, chairman of the Board of Governors, comprised all those lands draining into Hudson's Bay. It effectively included most of the prairies and forests east of the Rockies to and around the Bay.

Prime Minister Macdonald achieved both of his objectives in 1870 when British Columbia joined the Dominion and Rupert's Land became the Dominion Lands and Forests within the North West Territories (NWT) of Canada. The NWT was a vast, sparsely populated region with only a few settlements, largely around trading posts. To help to maintain law and order the North West Mounted Police force was formed in 1873, and in 1894 three hundred men marched west to Alberta in a gruelling two-month journey. Half the force stayed in southern Alberta to found Fort Macleod, the other half were sent to northern Alberta.

The Canadian Pacific Railway arrived in Calgary in 1883, and was completed in 1885. This created a great demand for wood for ties and bridges, and to construct new communities that sprang up along the line. This demand, in turn, gave a monetary value to the timber on the eastern slopes of the Rocky Mountains—timber which lay on the newly-acquired Dominion lands. Large steam-powered sawmills supplied by timber driven on the east-flowing rivers launched the forest industry in the central interior west.

Another of Macdonald's policies was to encourage settlement of the prairies. The objective was to fill the land with loyal British subjects to offset the American "Manifest Destiny." Settlers would also provide business for the new railway. Large areas of the railway land grants lay on the short-grass prairies in southern Alberta, an arid region not well suited to extensive cultivation. However, trials with irrigation showed great promise for increasing agricultural production, and led to greatly increased property values. Promoters of irrigation recognised that the source of their water lay in the foothills and mountains, leading to representations to the government to protect those water sources from fire.

These were the major catalysts that led to formation of the CFS in 1899. Their dual mandate was first to protect the forests from fire; the second to plant trees on the prairies to provide wood for settlers and ameliorate the climate. Stewart was well acquainted with the west as a land surveyor. However, upon his appointment he immediately travelled through his vast domain to size up the magnitude of the task, made more difficult by extent and inaccessibility. He quickly determined that he would have to focus on creating Forest Reserves on the most valuable lands, then extend fire control to the rest of the forests to the north through seasonal Fire Rangers. It is interesting that in both countries potential locations for Forest Reserves had already been identified—starting in 1887 on the Rocky Mountains Park area in Canada and in 1891 in the Yellowstone-Teton area with other lands subsequently added in both countries. Stewart quickly evaluated the reserved lands and added more which were confirmed as the initial Forest Reserve System by legislation in 1906.

In the meantime, Stewart had been recruiting staff. Among the first was a Canadian forester, Harvey Reginald MacMillan. Raised in Ontario, H. R. took forestry courses at Ontario Agricultural College then graduated with a degree in forestry from Yale in 1908. He had worked as a seasonal Forestry Apprentice with the CFS since 1903, two seasons at the Indian
Head Forest Nursery for prairie tree planting stock, two in the field surveying for forest reserves, and one at head office in Ottawa. Upon graduation he was appointed Inspector of Forestry Reserves with broad responsibilities for making them operational.

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By 1908 the broad outlines of the Dominion Forest Reserves had been laid out. They were scattered throughout the prairies on higher ground which supported trees and which were not suitable for agriculture. However, the major one was the Rocky Mountains Forest Reserve (RMFR) which lay along the east slopes of the Rockies from the U.S. border north for about 900 miles. As he got started, it must have seemed natural to MacMillan to visit the U.S. Forest Service just across the line to exchange ideas about how to set up and run a forest reserve system. Among his stops in the fall of 1908 was the Kaniksu National Forest in eastern Washington where he visited his Yale classmate, Forest Supervisor W. N. Millar. Here were two recent graduates in two different but similar agencies, both keen to improve their operations and eager to share experiences.

W. N. Millar had a degree in science from the University of Pennsylvania and had also graduated in Forestry from Yale in 1908. He had begun an impressive administrative career with the U.S. Forest Service. He and MacMillan probably kept in touch. Millar moved to Canada in the fall of 1911 to take a job with the CFS to work with MacMillan. Millar's move enabled a similar opportunity to organise the administration of the Rocky Mountains Forest Reserve. From his headquarters in Calgary, Alberta, he travelled widely and obtained a thorough understanding of the countryside and its forests and wildlife. He initiated surveys to determine the content of the timber resource and instituted fire control systems.

In the fall of 1912, H. R. MacMillan was invited to become Chief Forester of the newly-created British Columbia Forest Service, and W. N. Millar was chosen to replace him. When Millar took over as the principal administrator, his primary objectives were to continue the improvements of fire control and establishment of ranger stations, cabins, lookouts and phone lines. Recruitment of staff to meet the needs of a new organisation in
rugged land was an ongoing function. W. N. Millar was a "hands-on" administrator who visited much of this important watershed and timber producing reserve. He conducted extensive field travels, insuring that well-maintained primary and secondary trails connected the new ranger stations. Numerous patrol cabins were placed at intervals about a day’s horse travel apart. Lookouts and telephone lines followed as the Forestry Service became established. The efforts of Millar formed the patterns of the present day management regimes throughout much of western Canada.

Of particular note is W. N. Millar’s vision of wildlife preserves outside the Dominion parks. In fact, in 1915 he published a comprehensive documentation of big game species in the Canadian Rocky Mountains. From his extensive travels he observed and recognized the need to protect big game, which he reported had suffered severe unregulated harvesting from residents of new mining communities and Indians.

Millar let it be known that steps were necessary to provide protection to big game species such as elk, moose, mule deer, caribou, bighorn sheep, mountain goat, grizzly bear and black bear. To this end, he proposed to establish game preserves within the Forest Reserves adjacent to the Dominion Parks while allowing programs for timber extraction, watershed protection and limited grazing of domestic livestock. These initiatives recognized the value of wildlife including benefits accrued to tourists, outfitters, guides and sport hunters. Similarly, Millar pointed out in two national reports the merits in reducing apparent aboriginal overkill of bighorn sheep in specific areas of the Canadian Rockies. One of his reports was published as a Forestry Branch Bulletin.

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In later years wildlife protection zones were established in essentially the same areas proposed by Millar. From his earlier recommendations a variety of sustainable land management strategies have evolved to enhance elk and bighorn sheep population levels which now afford reasonable hunting opportunities for residents and non-residents.

In September of 1914, Millar left the CFS to start as a Lecturer in forestry at the University of Toronto, but continued to be retained as an adviser to the CFS. This was Canada’s first university forestry program, established in 1907 with Bernhard Fernow as Dean. It was Fernow who recruited Millar to fill a vacancy on staff. Millar stayed on at the University through 1933, except for wartime service. The new Dean, Dr. B. Sisam, commented: “About this time the staff was considerably strengthened with the return of Professor Millar from military service at the beginning of 1919.” Millar’s experiences influenced a whole generation of foresters.

H. R. MacMillan was also a major contributor to the Forestry Branch Bulletin series. Among the most notable were his compilations of forest fire statistics for Canada in 1908 and a major treatise on forest fires in 1910, written with G. A. Gutches. These were the first national summaries which have been continued since. MacMillan also wrote eleven reports on forest products of Canada for 1909 and 1910 detailing the kinds and amounts of wood used and their products. This no doubt laid a foundation for his later ventures. During WWI, he became timber-trade commissioner for the federal government and by the end of the war was with the Imperial Munitions Board. In 1919 he started the H. R. MacMillan Export Co. Through aggressive marketing, investment and mergers he developed the diverse MacMillan Bloedel forest products company. He remained an advocate for improved forest management throughout his career.

Both men had a positive influence on forestry events in Canada. Theirs was a fortuitous meeting, perhaps setting the stage for the many ensuing cooperative forestry exchanges and links between our respective forestry professionals in Canada and the United States.