

Biographical Portrait

CHARLES S. COWAN

(1887–1969)

By World Forestry Center

When Charles Steven Cowan moved to the state of Washington in 1927 to work in fire prevention, he came to a place still feeling the effects of a devastating forest fire from twenty-five years earlier. The Yacolt Burn of 1902 had burned more than 370 square miles of timber. In response, George S. Long of Weyerhaeuser Timber Company and other leaders in the timber business organized the Washington Forest Fire Association (WFFA), on April 6, 1908, to combat the enemy fire. Appointed as the association's chief fire warden, Cowan was so dedicated to fire fighting and fire prevention in his adopted state that eventually he earned the nickname "Mr. Forestry" from the governor of Washington.

Charles Cowan was born in 1887 and grew up on a farm along the Campbell River on Vancouver Island, British Columbia. His father, Bruce Napier Cowan, was an engineer who helped design the government railway across Canada.

The eldest of eight children, Charles Cowan was encouraged to seek his education in Scotland. His father paid his fare there when the boy turned 14, but sent him with the admonition that after his first year Cowan was on his own and would need to earn scholarships to continue his education.

Cowan finished preparatory school in Scotland and then was educated in forestry and engineering at the University of Edinburgh and at Oxford University, where



As chief fire warden and manager of the Washington Forest Fire Association, Charles Cowan had a national impact on fire prevention.

he earned a bachelor of arts in forestry in 1907, after which he went to India in the service of the Crown and worked as a forester.

While Cowan was in India, he heard about plans for establishing a forest service for his home province of British Columbia. This intrigued him, and in 1912 he returned home and became the assistant chief forester on the newly formed provincial forest service. In British Columbia the

provincial government owns the vast majority of forestland, yet in the early 1900s very little was known about the precise extent of these government-owned lands. Cowan's work with the forest service would help address this problem, as it involved mapping the wilderness areas and evaluating the quality of timber.

When World War I began in 1914, Cowan was assigned to France as an infantryman in the Canadian army. Cowan was wounded twice, first in Mesopotamia (now Iraq), where he was awarded Britain's second-highest valor award, the Military Cross, for single handedly repelling a Turkish advance. He suffered a second, nearly fatal wound in France while he was serving as a major in the British Flying Corps, commanding a squadron of fighter planes. His plane crashed and a portion of his skull was destroyed. Surgeons inserted a metal plate, but he was left with a serious stutter. Major Cowan, as he was known throughout his career, even long after his time in the military, later worked to correct the stutter and went on to become a well-known forestry speaker.

After the war, Cowan returned to forestry and soon married a nurse from British Columbia—Adelaide Alexander. They were married on August 8, 1920, and had two children, Bruce Napier and Patricia Eileen.

In 1927, Charles Cowan moved to Seattle to become the chief fire warden of the Washington Forest Fire Association

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(later the Washington Forest Protection Association). He managed the association for more than 30 years, a stint longer than any other in association history. Applying the expertise of a forester and the precise planning of an engineer, he launched the first comprehensive program of fire protection—that is, protecting land from fire without regard to ownership boundaries—in the Pacific Northwest. Primarily through Cowan's efforts, the WFFA attained cooperative forest protection with state and federal agencies. He originated the first cooperative firefighting plan between the U.S. Forest Service, the state of Washington, and British Columbia's forest service. His work included originating or revising a number of state and federal laws. So vigorous was his work before the legislature and administration that he was dubbed "Mr. Forestry" by Governor Arthur Langlie, a title succeeding governors adopted in addressing Cowan.

In a period when the concept of sustained yield was little understood and government agencies struggled to exist, cooperative efforts and realistic planning did not come naturally or easily to many, and the existing problems did not disappear. Nevertheless, Cowan continued to attack these problems, tempering a strong sense of mission for the forests' future and the tirelessness of an evangelist with the wit of a George Bernard Shaw. His witty, articulate speeches were all the more remarkable since he had to overcome the stutter caused by his war injury. His son, Bruce Cowan, said, "I remember my dad practicing in front of a mirror for hours at a time, until he had completely removed any trace of stuttering."

The focus of much of his work at the association was fire prevention and firefighting. During his career, fire was considered—and frequently characterized as—the enemy. Mechanically innovative, Cowan was instrumental in adapting and creating firefighting equipment. Lightweight backpack pumps with outboard motors, routing teeth for caterpillar tractors to make fire trails, and special lightweight hoes were all redesigned by Cowan to increase efficiency. The invention of a quick-release hose coupling by the energetic forester was patented in the name of the Washington Forest Fire Association, with the provision that the plans would be made available to anyone who needed them. And before bulldozers emerged on the scene, Cowan developed a fire plow

that was in use for several decades.

Accepting the added responsibility of helping with President Franklin Roosevelt's Civilian Conservation Corps in western Washington, Cowan pushed for access roads into areas of acute fire danger and for the federal government's contribution to a lookout system that ultimately covered the forestlands of the entire state. In addition, emergency fire crews were formed and accommodations built for them.

In the early 1920s developments in meteorology gave new insights into causal conditions for low and high fire danger. When Cowan learned that a higher relative humidity reduced the danger for forest fires and a lower relative humidity increased the forest fire danger, beginning in the 1930s he had the association retain a meteorologist to monitor atmospheric conditions. When conditions were ripe for fire, the meteorological readings translated into shutdown recommendations to members to prevent fires. Soon individual operators had installed their own equipment to gauge local conditions and govern their own operations.

Cowan incorporated the idea of shutting down logging operations and sending men home whenever severe fire weather conditions warranted into Article 10 of the National Lumber Code, which went into effect on June 1, 1934. The law included a provision that gave state foresters the authority to issue shutdown orders. Though the U.S. Supreme Court struck down the law the following year, what was considered a radical idea at the time nevertheless became common practice. During its brief official life, Article 10 contributed to a reduction in acreage lost to fire during the 1934 fire season. Based on that result, many in industry voluntarily adhered to the code even after it was overturned.

In 1939 Cowan joined with a group of timberland owners and state officials in deciding that an organization was needed to educate the public about fire prevention.



*Charles Cowan put his years of knowledge and experience into the book, **The Enemy is Fire!**, a history of the Washington Forest Fire Association and its involvement in forest protection.*

Thus, the Keep Washington Green Association was formed, which Cowan helped organize and promote. Soon other states followed Washington's example, and today all U.S. states have an agency that disseminates information about fire prevention.

Forest fires were not the only enemy. When the hemlock looper, a voracious caterpillar, threatened the forests of Pacific County, in Washington's southwest corner, Cowan's talents were called upon. In 1931 he organized and supervised the first aerial insecticide dusting operation. He designed a hopper to attach to the plane that could carry up to 1,000 pounds of insecticide. The aircraft dropped the insecticide from 40 feet above the treetops. In its next annual report, the Washington Forest Fire Association stated that results from the first year of field use were "at least partially successful," meaning effective enough to keep using the method.

According to his son, Bruce, Cowan gained his greatest satisfaction in forestry as a motivator: "Many who have reaped the laurels of accomplishment in the field

of forestry received that special, personal interest from Charlie that turned them in the right direction or boosted them a step higher toward greater accomplishment.”

Charles Cowan left a legacy of green forests that were preserved by his tireless efforts to implement fire protection measures. When he joined the Washington Forest Fire Association in 1927, the average annual fire loss on state and private forestlands in western Washington was 127,000 acres. When he retired in 1958, the annual fire loss had been reduced to 7,000 acres. Garrett Eddy, past president of the association, said in the 1969 annual report, “The record shows that the course of our fire history was immediately and dramatically altered after Charles Cowan arrived. We of Washington State owe Mr. Cowan much.” Even before he had retired, Cowan was being recognized for his work. In 1950, the University of Washington’s forestry alumni association made Cowan its first

honorary alumnus in recognition of his many achievements in the prevention of forest fires and the improvement of forestry practices.

In addition to his day job with the Washington Forest Fire Association, Cowan was an active member of the Society of American Foresters and a fellow in that organization. He was secretary-treasurer of the Washington State Forestry Association from 1928 until 1958. He was also treasurer of the Western Forestry and Conservation Association from 1928 until 1958. After retiring in 1958, he worked for six years as a consulting forester in Kirkland, Washington. He died on May 15, 1969. □

This article is an adaptation of the biographical entry on Charles S. Cowan in the Memorial Gallery of the World Forestry Center’s Discovery Museum in Portland, Oregon. We are grateful

for their permission and cooperation in preparing this article.

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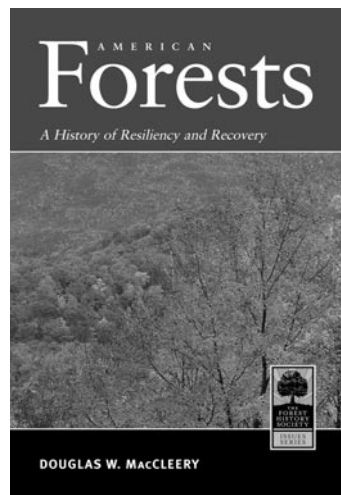
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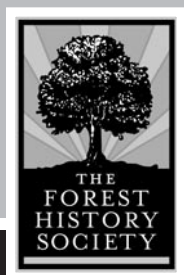
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