Canada



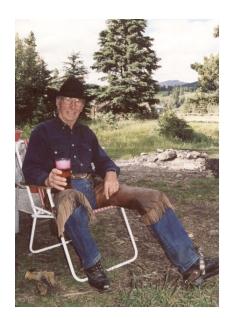
The Calgary Laboratory. The Calgary Forest Zoology Lab opened in 1947 with G.R. Hopping in charge. Field work was located at the Kananaskis Forest Experiment Station at Seebe, 67 km west of Calgary. However, the occurrence of insect infestations in Banff N.P. led to relocating work there, first at "Silver City" and finally to a newly constructed facility in 1956 known as the Eisenhower Field Station. Initial studies involved the lodgepole needle miner by Ronald W. Stark; the two-year cycle spruce budworm by Roy F.

Shepherd; and the mountain pine beetle (MPB) by Robert W. Reid and associates. The Calgary lab was closed in 1969 and its forest research and survey staff were re-located to the Northern Forest Research Centre in Edmonton. Entomological work at the Eisenhower Field Station terminated in 1970 and the facility reverted to the Park. The camp buildings were auctioned off in 2003 and the site was restored to natural condition.

Eisenhower Field Station. The site of this facility was along Altrude Cr., a tributary of the Bow R., and was suggested by Roy Shepherd who had fished the area as a boy. It was named for the nearby Mt. Eisenhower (originally Castle Mtn.). Laurenson (2006) interviewed many of the people who worked at the station. Their stories show them to be dedicated workers of high morale and are steeped in nostalgia and humor.



Safranyik (2009) recounts: "The key component of the MPB program at the Calgary Lab during the 1960s was investigation of the nature and effects of the interaction between lodgepole pine and the MPB with its associated blue stain fungi. Based on earlier work on MPB biology, Rob Reid showed the importance of resin production in brood establishment and survival. This work was followed by detailed investigations by Malcolm Shrimpton (physiologist), Stu Whitney (pathologist) and Rob Reid, under Rob's leadership, of the physiology of host response to injury, the role of the blue stain fungi in host colonization by the beetle and brood survival, and the effect of environmental conditions on host response to injury.



"Rob Reid followed Roy Shepherd as Section Head, forest entomology research, in 1968 and in 1969 he became Director of forest protection at the new CFS Edmonton lab. The same year, I took over leadership of the MPB program and started work on the role of stand dynamics and climate and weather on MPB epidemiology. The information gained from the MPB program resulted in two milestone publications during the mid-1970s that showed for the first time the key importance of lodgepole pine-beetle-blue stain interactions, stand dynamics, climate and weather, in determining changes in population and damage levels of the MPB in space and time. A strong practical conclusion from this work was that the key underlying problem relating to development of outbreaks was tree and stand susceptibility. Hence, the long-term focus of management needs to be toward lodgepole pine not toward the MPB (emphasis added by MMF).

"This multidiscipline approach to bark beetle research, envisioned by Rob Reid was seminal and influenced the direction of contemporary and subsequent work in this field. This is especially so for research on tree resistance and for studies of bark beetle associated microorganisms and bark beetle symbiology."

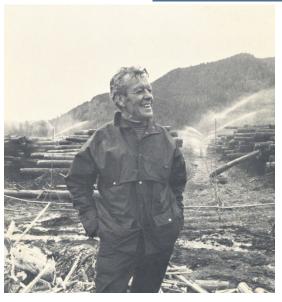
My thanks to Imre Otvos, Bob Stevenson, Les Safranyik and Rob Reid for information related to this posting. -- *Malcolm Furniss*

Literature

H.F. Cerezke. 2003. History of forest entomology in Alberta. Proceedings 50th meeting Entomological Soc. Alberta. p. 21-28.

Safranyik, L. 2009. Of Field Stations and field work: Some notes about my involvement in bark beetle research in western Canada. 7p.

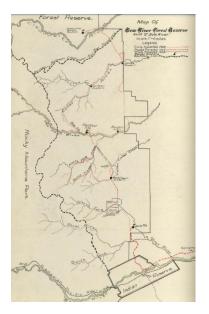
Laurenson, A. 2006. Eisenhower Forestry Station (Castle Camp) History. 98 p.



Hector Allan Richmond (1902 -1989), the youngest of five children, was born on the family's ranch in Oklahoma. Hector's father, Thomas, had emigrated from Scotland. "Father sold the ranch before I reached school age," Hector recalled. In 1911, the family settled on a ranch at Vernon, B.C., setting the stage for profound events in the life of young Hector and thereby, Canadian forest entomology.

After graduating from high school, Hec worked for two years as a spotter on a pine beetle control project and became acquainted with Ralph Hopping (see How it Began/Vernon Lab). In spring, 1924 after Hec's first semester in Forestry at Oregon State College, Corvallis, Oregon, Hopping offered him a summer job surveying insects in conifers bordering the east side of the Okanagan Valley. Then, in 1927, while in his 3rd year at the university, he was assigned to survey the forest insect conditions within Alberta





In 1929, he met and married Vi (Violet Pout). They subsequently traveled with two pack horses and two saddle horses surveying insect infestations from Red Deer River to the Athabasca River (see map). An average day's ride was 15 -20 miles. It didn't get off well, however. Hec and Vi visited the Chief Forester in Calgary to explain the new setup by which only he & Vi would be doing the survey and not involving participation by rangers. The Forester was surprised and dubious of Vi. "What experience have you had with horses?" (Not much, but I can learn with experience). "How old are you?" (Twenty). "You're not very big." (Five two and 102 pounds). The Forester then pointed out that they would have to swim horses across swollen rivers and he could not give approval. Vi left and Hec spent ten days with Ranger Tom Harvey of the Red Deer district. One night as they sat at a camp fire, Tom said that "... the people in Calgary had no authority to forbid you to take

your wife with you if you want to." He then proposed to rent Hec four horses that belonged to him plus all the equipment that he would need. "With that, you will be using nothing belonging to the government"

Two days later the party headed out for their four-month journey; Hec in front, aboard "Jim," leading the two pinto pack ponies, "Pickles" and "Painter", followed by Vi on "Jonas." From there you must read Hec's accounts in Forever Green that are alternately hilarious and tense with suspense! Five stars.



Hec the Painter. Hec's daughter, **Donnie** (Donella May) recalled: "Dad began painting with Dr. (J.J.) deGryse (Head, Entomological Branch, Ottawa) in about 1943 and painted until shortly after moving to Lofthouse, their small farm on the water in the Nanaimo area, in 1957. He first painted in oils but changed to caesin because he was allergic to the oil. His subject matter was generally landscape, forests, interior rangeland, mountains etc. During the winter of 1955-56 he studied 3 nights a week at

Beux Arts in Quebec City where he was awarded the first prize for the top student. In the fall of 1956, he had a one man show at the Palais Montcalm in Quebec City where he showed 45 paintings. It was a very successful showing and he sold a number of his paintings. While in Quebec he painted a number of lovely local scenes. He would do a quick painting on location and then do a final painting at home, he never used photographs. He did hundreds of paintings, many of which we still have, although some of them were never really finished."

Hec the actor. Donnie continued: "He found painting so all absorbing and once he had the farm he found he did not have the time to spend painting on weekends as he once had, so he turned to drama which was much more sporadic. He was an active member of the Yellow Point Players drama group beginning in about 1962 until his death. Many of his roles are well remembered such as Elwood Dowd in Harvey, a number of British farces, some more serious roles, Christmas pantomimes, The Cherry Orchard, to name but a few. He won a best actor award in a BC Drama festival, he and mom also did many support jobs for the drama group while a member. I later also joined having various roles and both my daughters and I joined him in the cast of several Christmas pantomimes." -- Malcolm Furniss

References

Richmond, H.A. 1986. Forest entomology: From packhorse to helicopter. B.C. Ministry of Forest Lands, Pest Management Report No. 8. 44 p., illus.

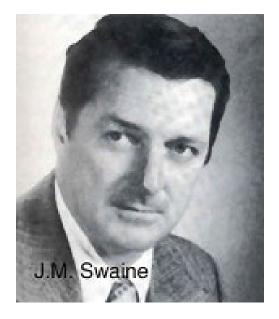
Richmond, H. A. 1983. Forever Green - The story of one of Canada's foremost foresters. Oolichan Books, Lantzville B. C., Canada.

Richmond, H.A., in collaboration with J.H. Harris, R.F. DeBoo, and J. Parminter. 1984-1985. A History of forest entomology in British Columbia - 1920-1984. BC Forest History Newsletter 1984 (9): 4-7; 1985 (10): 3-6; 1985 (11): 5-7; 1985 (12): 1-6.

Trudy Kemp. ca 1983. Hector Richmond (1902-1989) of Cedar (Vancouver Island, B.C.). The Islander (news paper) p. 9-10.

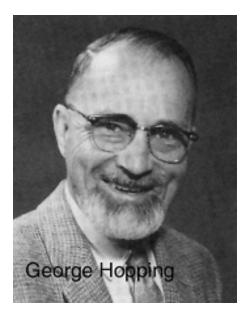
How it began. (Preface). In hopes of soliciting historical recollections from western Canadian forest entomologists, I (M. Furniss) am briefly reviewing the advent of forest entomology in Canada (1912) to the time of establishment of the first western facility at Vernon, B.C. (1919). From this introduction, I plan to present in more detail individual biographies and developments through the time of my own employment (1950-1982). Narratives will be anecdotal, humorous at times, and supported by suitable photos, preferably informal and in the field. I can call upon my recollections from WFIWC meetings and resources in hand but the best stories will have to come from those of you who were there back then or knew those who were. Please review the

entries under Personnel, etc, to see the style wanted. Then, write-up what you wish to contribute and send it to me with photos.



Canadian Forest Entomology began in 1912 with the hiring of J.M. Swaine, a graduate of Cornell. George Hopping tells it from there: "Back in 1919, forest entomology was in its infancy in Canada and it wasn't very much further advanced in the United States. . . . Outside of Ottawa there was practically nothing in the way of laboratory development. Now, it so happened that between 1910 and 1920 some very serious (bark beetle) outbreaks occurred in the ponderosa pine stands of south British Columbia, in the Merritt-Nicola country. This greatly disturbed the mill operators in that region. The outbreaks were taking a lot of timber that the mill would otherwise cut later. The provincial government had no one in British Columbia capable of handling forest bark beetle outbreaks. So they went to the federal government

and asked Dr. J.M. Swaine what could be done. ... Dr. Śwaine looked over the proposition and decided that a laboratory should be established there primarily to handle the suppression of these outbreaks. ... There was no one in Canada with any experience in the suppression of bark beetle outbreaks. There were three men in the United States; one was my father [Ralph Hopping]. Dr. Swaine wrote to my father and asked if he would come to Canada and establish a forest insect laboratory in British Columbia. Although the salary was not much more than my father was getting at the time in California, he decided to come because he would be allowed to publish his scientific articles on insects. He was not allowed to do this in the United States because of the foibles of a certain man [A.D. Hopkins (MMF)] who was in charge of the Bureau of Entomology in Washington, D.C., at the time." (Johnstone 1991)



Ralph Hopping's time was spent on direct control (fellpeel-burn) for the next decade. In 1925, Hector Richmond and William Mathers joined the staff and began research of various sort. In 1937, the Forest Insect Survey expanded to include the Vernon Lab as western headquarters. Ralph Hopping retired in 1938 and his son, George, succeeded him at Vernon. A new laboratory was established at Victoria in 1940 with M.L. Preble as head. In 1948, Preble moved to Sault Ste. Marie and Hector Richmond replaced him at Victoria. Vernon declined as a center of research during the 1950s as Victoria became the hub of federal biological science in the province. In 1955, D.A. Ross replaced Mathers in charge at Vernon; the laboratory closed in 1970. (Rajala 2001) -- Photos from Johnstone 1992; text provided by Malcolm M. **Furniss**

Cited Literature

Johnstone, K. 1991. Timber and trauma. 75 Years with the federal forestry service, 1899-1974. Forestry Canada, Ottawa.

Rajala, R. 2001. History of forest insect investigations in British Columbia. Part III. The Vernon laboratory and federal entomology in British Columbia. J. Entomol. Soc. Brit. Columbia. 98: 177-188.

Vernon Laboratory, Continued.

Ralph Hopping (1868-1941) had always been a lover of Nature; he collected beetles at the age of nine. Ill health forced him to leave Rutgers College (attended 1889-1890). He moved to California and raised cattle, horses, and mules for three years, then turned to work in a lumber mill. In 1898 he and his partner, John Broder, established a tourist business in Sequoia National Park and ran pack trips into the then virgin forested areas near Mt. Whitney. After the business failed he joined the U.S. Forest Service (Region 5 California) in 1912, in charge forest insect control work. In 1919, J.M. Swaine persuaded him to accept the position of Head of the new Forest Insect Laboratory at Vernon, B.C. He remained there until retirement in 1939. Hopping's preferred insects were the long-horned beetles (Lepticrini). He published 30 articles on beetles; one genus and one species have been named in his honour. (Riegert 1991)



Conference of Bureau of Entomology and Forest Service men at Ashland. Oregon, June 1917. From left: Front row, F. Paul Keen, Thomas E. Snyder, Ralph Hopping. Back row: Albert W. Wagner, John M. Miller, Alex J. Jaenicke. Hopping represented Forest Service Region 5 (California), and Jaenicke Region 6 (Oregon & Washington), Snyder was visiting from the Washington office of the Bureau. Wagner was an Entomological Ranger recently transferred from the Missoula station of the Bureau that had just closed. Miller and Keen were stationed at the time at Ashland studying cone & seed insects; they were subsequently stationed at laboratories at Palo Alto, Berkeley and Portland. (Photo from Burke 1946) M. Furniss.

Tail in a crack. An event that must have influenced Ralph Hopping's leaving California for Vernon had to do with a fracas during a western pine beetle control project on the Klamath N.F., California. In 1912, Hopping had been appointed as Forest Examiner to supervise bark beetle control programs of the Forest Service in California. One of Hopping's first moves was to question the percentage principle of control advocated by A.D. Hopkins, Head of the Bureau of Entomology, Division of Forest Insect Investigations. Hopkins maintained that if from 50 to 75 percent of the infestation is removed by artificial control work, natural control factors would take over and hold the beetles at an endemic level. However, Ralph Hopping believed that if there was any infestation within an area it should be treated. He examined the control project areas during the spring of 1914 and found infested trees fairly plentiful. He predicted that this untreated infestation would increase and openly criticized the Bureau of Entomology for its short policy of percentage control. Much of this criticism got into official correspondence channels which reached Dr. Hopkins and Chief Forester Henry Graves in Washington. The matter soon developed into the proportion of an inter-bureau controversy.

Chief Forester Graves decided to see for himself what all this dispute was about and made plans to visit the area in the spring of 1915. In April he made a trip to Yreka accompanied by Ralph Hopping and a Bureau entomologist. What they found was of little comfort to Hopping. The infestation left on the areas in the spring of 1914 had not increased; on the other hand it had declined without benefit of control work to such an extent that there were fewer infested trees to be seen than at any time since 1910. This condition convinced Mr. Graves that the strategy of percentage control was sound and he later issued a statement reviewing the entire controversy and giving the

endorsement of the Forest Service to the recommendations of the Bureau of Entomology. Being rebuked by the Chief of the Forest Service must have been acutely embarrassing. (Extracted from Burke 1946) -- *Malcolm M. Furniss*

Cited Literature

Burke, H.E. 1946. My recollections of the first years of forest entomology. Bureau of Entomology and Plant Quarantine, Berkeley, California. Unpublished report.

Riegert, P.W. 1991. Entomologists of British Columbia. Published by Entomological Soc. Canada and Entomological Soc. B.C. 90 p.