## DR. HELEN BELYEA 1913-1986

Helen Belyea was born in St. John NB on February 11, 1913 from Loyalist of French Huguenot origin. Helen Belyea was the daughter of William Sancton Belyea and Elizabeth McDonald, the granddaughter of James Belyea and Elizabeth Jane Richards, the great granddaughter of William Bulyea and Phoebe Tucker, and great, great granddaughter of Hendrick Bulyea and Engeltie Storm, great, great, great granddaughter of Jan Boulier and Helena Williams, and great, great, great, great, great granddaughter of Louis Boulier and Anna Konnick. William, Hendrick and Jan were all United Empire Loyalists.



Dr. Helen Belyea

Dr. Helen Belyea received both her Bachelor's and Master's degrees in Geology from Dalhousie University in Nova Scotia. Her doctoral thesis was titled "The Geology of Musquach Area, New Brunswick". It earned her a Ph.D. from Northwestern University, Evanston, Illinois.

During WW II she became a lieutenant in the Canadian Navy's WRCNS. At the end of the war she joined the Geological Survey of Canada and spent the following forty-one years doing what she loved to do – working as a geologist. Although the petroleum industry was a male dominated profession, Helen Belyea was a determined woman and quickly became admired and accepted as a colleague.

Dr. Belyea's career was shaped by the chance discovery of oil in Leduc, Alberta in 1947. The Geological Survey decided to open an office in Calgary and Dr. Belyea was one of two geologists first on the scene in 1950. She spent the remainder of her career publishing papers and trying to understand the

Devonian system of Western Canada. As a sub-surface stratigrapher Dr. Belyea worked painstakingly to explain and synthesize knowledge about these rocks and their relation to adjacent sedimentary basins. She officially retired in 1975 but continued to work as a research scientist emeritus at the Institute of Sedimentary and Petroleum Geology (ISPG).

Dr. Belyea wrote numerous papers on the Devonian system of Western Canada that gained the recognition of her colleagues. Her first paper was published in 1952. Her paper on the reef patterns of the plains caught the attention of industry. In the late 50's the Geological Survey mapped the southern Northwest Territories. Dr. Belyea contributed her accurate work on the region west of the Hay River, south of the Mackenzie, and her broad knowledge of the regional geology to produce a synthesis for the Devonian rocks of the region. Her findings still hold today. She is probably best known for her contributions to the volume on the "Geological History of Western Canada", better know as "The Atlas". She published maps and detailed text for the entire upper Devonian region. After 1971, Dr. Belyea published papers that were more exploratory and based on the interpretation of the vast amounts of data from the sub-surface and her field work.

She was an excellent role model who encouraged women who worked as her assistants during their student days. She received many honours in acknowledgement of her contributions to Canada and to geology. In 1959 she received the Barlow Memorial Medal from the Canadian Institute of Mining and Metallurgy. In 1962 she was elected a Fellow of the Royal Society of

Canada, (a rare achievement for a woman), and was also made an Honourary Member of the Canadian Society of Petroleum Geologists. She received Honourary Degrees from Windsor and Dalhousie Universities and in 1967 became an Officer of the Order of Canada.

In addition to her work, she was an adept athlete who enjoyed mountaineering, skiing, walking, and swimming. She was also an accomplished equestrian. Dr. Belyea rode a horse on many of her field excursions that often lasted several days and took her into the foothills and mountains of Alberta, British Columbia and the Great Slave Lake area. She loved travelling in Europe, especially in France where she gave numerous lectures. Her wide variety of interests also included the arts and music. She served as a member of the Calgary Philharmonic Orchestra League and was an Associate Director of the Calgary Zoological Society. She died in Calgary in 1986 at the age of 73 years.

Sources: from Aurdey Wirtzfeld's book written by two descendants of the Boulier, Bulyea, Belyea family and information from the Council of Women in Alberta.

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