

## Alumni Profile: John O. Wheeler, PhD '56



Rex Gibson

Sixteen-year-old John Wheeler on the summit of Mount Hungabee, 1941. Like his father and grandfather, John was a passionate explorer of the natural world.

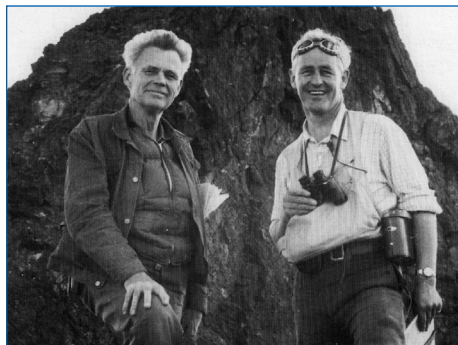


Photo courtesy of the Wheeler family

John Wheeler, president-elect of the Geological Association of Canada, with John Rodgers, president of the Geological Society of America, at Mount Revelstoke National Park, 1970



Photo courtesy of the Wheeler family

Nora, John, and their dog Mike on one of their many trips in the mountains

John Oliver Wheeler was born in 1924 in Mussoorie, India, among the foothills of the Himalayas. The world's great, uncharted mountains were not only in his line of view from the beginning—they were also in his blood.

John would grow up climbing mountains in the footsteps of his father and grandfather, both eminent mountaineers and geographic surveyors. John quickly gained a fascination with mountains that would propel him into a career marked by outstanding contributions to geoscience in Canada.

John's father, Edward Oliver Wheeler (known as Oliver), completed the first detailed map of Mount Everest as a surveyor on the British Mount Everest Reconnaissance Expedition of 1921. Oliver later became Surveyor General of India and was knighted in 1943 in recognition of his work.

John grew up in Canada, attending boarding school on Vancouver Island near the home of his grandfather, Arthur Oliver Wheeler, a world-renowned mountaineer. Over the course of his career, Arthur surveyed extensive sections of British Columbia and Alberta, and cofounded the Alpine Club of Canada.

It was summers spent climbing and camping in the Canadian Rockies with Arthur, and the influence of his father Oliver in India, that inspired John to carry on their work in what would become a legendary family tradition.

By the time John finished boarding school, he was already an accomplished mountaineer with a refined appreciation not only for the beauty and danger of mountains, but also for their nature, structure, and development. In 1947, John graduated from a geological engineering program at the University of British Columbia, with awards recognizing his academic achievements and leadership on the rugby field—both of which would prepare him for the decades of challenging fieldwork that lay ahead.

John began working with the Geological Survey of Canada (GSC) in 1945 as a student assistant in Yukon and British Columbia. Three years later, the GSC asked him to complete geological mapping of the Whitehorse area in Yukon—an offer that provided sponsorship toward a PhD.

In 1949, John began graduate work at Columbia University. Upon taking Marshall Kay's course on the stratigraphy of North America, John decided to study the stratigraphic history of Mesozoic rocks in the Whitehorse area under Kay's supervision.

John's studies were interrupted in 1952 when the GSC wrote asking if he would lead an expedition to map the Selwyn Mountains—an especially remote and uncharted region in Yukon, which the Canadian government was competing with prospectors to survey for natural resources. At the time, no maps of the area existed and knowledge was limited to a mosaic of aerial photographs.

Despite the delay it would cause in the completion of his thesis, John's thirst for challenge and adventure made him unable to resist this opportunity. Like his father's experience producing the first map of Mount Everest more than 30 years prior, the Selwyn Mountains Expedition of 1952 was a defining debut for John's career.

John embarked on the expedition in June with a party that included a geological assistant, a packer, a cook, and eight horses. In four months, this motley crew covered 800 kilometers of the most rugged terrain. Under John's leadership, they persevered through extended solitude, extreme weather, streams of rushing meltwater, and encounters with bears, returning with a precedent-setting map of the distribution and composition of rock formations in the region.

As mineral exploration expanded, the GSC called on John again in 1953 to lend his expertise to mapping the Saint Elias Mountains. These sto-

ried early expeditions remain a testament to John's tenacity in the field and his scientific wit.

Returning to Columbia, John defended his thesis in 1956 before moving back to Canada to spend the next 20 years mapping about 80,000 square kilometers in the mountainous regions of the southern Yukon and southeastern British Columbia.

While mountaineering and fieldwork initially attracted John to geology, it was the synthesis of scientific insights that became the most satisfying of his accomplishments. He would grow to solve some of the great tectonic mysteries of the western Canadian mountains, reconciling the region's evolution with the developing model of plate tectonics. During this time, John rose through the ranks of the GSC to become deputy director general and the Survey's chief geologist, responsible for all research programming.

In the 1980s, John was coordinator and general editor of the eight-volume *Geology of Canada*. He also prepared large-scale geological maps of the Canadian Cordillera and contributed geological maps of Canada, Greenland, and Iceland for the wall-sized Map of North America.

It has been more than 130 years since Arthur Wheeler's imagination was first fired by the great unknown mountains of the western territories. In the 1960s, John mapped the Selkirk Range nearly 60 years after his grandfather Arthur had been the first to survey the area. This summer, John's grandson, Jeffrey Crompton, will be studying the Kaskawulsh Glacier in southwest Yukon, 57 years after John was the first to map its bedrock geology.

This extraordinary family passion has spanned five generations of pioneering work that endures through the continued appreciation and protection of the great mountains of western Canada.