James Thomas Fyles December 22, 1924 – January 26, 2010

Jim Fyles left us on January 26th, 2010. Jim was a gentle, caring and modest man who was totally

committed to his family, community, profession and church. His passing is a great loss to us all but his legacy lives on.

Jim grew up in Vancouver with brothers John and David and as a youngster began his love for mountains on numerous hiking and mountaineering trips on the North Shore mountains with his father. He studied Engineering and Geology at UBC and moved to Columbia University in New York City where he completed his PhD. Jim married Shirley, the love of his life, in 1950 and together they raised four sons — Tom, James, Robert and Rex.

Jim anticipating a soak in Liard Hot Springs after a hard day's work – Liard River Project, 1982.

Jim's first mapping was his doctoral thesis in the Cowichan Lake Area (BCDM Bulletin 37, 1955). In 1951 Jim and Shirley returned to British Columbia and Jim started field work in the Kootenay Arc, which would become his major geological contribution — the unraveling of its complex structure and stratigraphy, and the setting of its lead-zinc deposits for over 250 km from the International Boundary to northwest of Revelstoke in the Shuswap Metamorphic Complex.

In twenty years of hard and insightful work in physically demanding country, Jim laid the foundation for the geological understanding of the Kootenay Arc and beyond. His maps and five classic bulletins – Salmo (Bull 41, 1959), Ferguson (Bull 45, 1962), Duncan Lake (Bull 49, 1964), Ainsworth-Kaslo (Bull 53, 1967), and Jordan River (Bull 57, 1970) – are and will remain the geological bible of this important part of the Canadian Cordillera.

Jim began his mapping with C. Hewlett (1959) at the south end of the Arc in the Salmo area, where the stratigraphy could be worked out in detail, the structure is relatively simple (although characterized by isoclinal folding!) and the rocks are virtually unmetamorphosed. Extrapolation of the Reeves

MacDonald ore horizon, based on their structural interpretation, was instrumental in the discovery of a

new orebody, the Annex mine. From the Salmo area he moved toward the north end of the Arc to the vein deposits of the Ferguson area, where he joined G.E.P. Eastwood (Bull 45, 1962) and from the Ferguson area he moved south to the middle of the Arc around Duncan Lake (Bull 49, 1964) and finally to the Ainsworth-Kaslo area (Bull 53, 1967). His interest and expertise in lead-zinc deposits finally led him to the Jordan River area (Bull 57, 1970).

Jim's preferred means of getting around was on shank's mare so that he could better see the rocks, carefully trace identified mappable units, follow

the geology, and unravel its mysteries. In his typically modest way, he practiced what he called "factual mapping", the careful tracing of marker horizons, structures and anything else that could be followed on the ground to accurately document the geology.

In the 1970s, Jim worked with John Wheeler, Phil Simony, Ray Price and other structural geologists to put together a structural transect of the Canadian Cordillera and co-led many field trips during which his passion for geology was ever present.

In 1972 he was asked to serve as Deputy Minister of Mines to which he agreed with some regret for the resulting abandonment of field work. In this new challenging task during politically turbulent years he worked very hard until his retirement in 1981.

Early in his retirement, he won a difficult and cruel battle with a very aggressive cancer which resulted in the removal of a major part of his jaw. In 1982, soon after surgery, he returned to the steep, devils club and slide alder covered slopes of the Arc near Ferguson to unravel, with Peter Read and John Psutka, the structure and stratigraphy surrounding the MAX molybdenum mine. This work, hidden in company files for nearly 30 years, is his final

publication. (Read, P.B., Psutka, J.F. and Fyles, J.T. (2009), Bedrock Geology of the MAX Molybdenum Mine Area (NTS 82K/12); *Geological Survey of Canada*, Open File 6215, 21 p.).

Jim and Shirley also enjoyed retired life in the Greenwood area where they lived in a trailer at the Anaconda Trailer Camp and they were able to again climb the hills knocking rocks in the summer and skiing in the winter. While in Greenwood, Jim and Shirley became involved in the local community and museum. They put together a delightful pamphlet, "History Still Standing - A Guide to Historical Mine Sites of the Boundary Country", which highlights the history of the Greenwood and Phoenix areas at the turn of the 1900's when the Boundary copper mines and smelters were in full operation. While wandering the Greenwood Hills, doing his factual mapping with Shirley as his able assistant, Jim unraveled the complex geology of the Greenwood Area. This work was published as an Open File by the Department of Mines (OF 1990-25). The complex stratigraphy, structure, and imbricated thrust sheets that Jim unraveled opened a window to a better understanding of this difficult part of southcentral British Columbia, revealing an ophiolitic assemblage which might well extend westward to the Osoyoos and Keremeos areas and northward to the Chapperon Group west of Vernon.

Many Cordilleran geologists of our generation had the good fortune of cutting their teeth as Jim's assistants and learned well the art of mapping. As Peter Read tells it, "When I first arrived in the Kootenay Arc, I looked at the steep slopes covered with deep, tangled "green weathering product" and turned to Jim to ask, "How do you work in this

country?" Jim's answer was to take me as his field assistant for a few days. In that short time, he taught me what no university class could teach geological about mapping, lessons that lasted have professional life time." Jim was an inventive person and a master in the use of the plane table. When mapping a mineral property where detailed base map was



ICG Field Trip CO3, 1972 Artist at work. Jim near Kaslo, oblivious to the rain, enthusiastically outlining the structure and stratigraphy of his beloved Kootenay Arc.

required, he simply made his own and added the geology as he went. He also devised a simple and very effective plastic gadget which, given flight lines and photo centres on maps, allowed the accurate transfer of data from air photographs to maps by resection.

I was not as fortunate as some of my colleagues to serve as one of Jim's field assistants, but from the years when I was a student at UBC in the late 1950s and early 1960s, the quality of both his work and character have been an inspiration to me, as to many others. A great geologist and a good friend has left us, but the guiding light that he set for us will continue to shine.

V. A. Preto Sooke, B.C. March 5, 2010