

In Memoriam: Paul Lenton

by G.R. Keller and E.C. Syme

Paul Gerald Lenton passed away in Winnipeg on September 4, 2019 at the age of 70. He was born in Winnipeg on April 26, 1949 where he remained for his entire life. Paul attended the University of Manitoba, completing a B.Sc. in Geology (1972) followed by an M.Sc. in 1979. Paul and Bonnie, his wife of 46 years, had two children; a daughter Regan (granddaughter Madeleine) and a son Mitchell. Paul was a man of many talents and interests; he immersed himself in geology, but he also loved classical music, poetry and astronomy. He enjoyed science fiction, both novels and movies, often speaking about his time watching countless hours of DVDs with his son Mitch. In his own words, Paul was a self-professed computer ‘geek’, spending hours learning about software and hardware as well as immersing himself in computer gaming. Most importantly, Paul was a family man; he was very close to his siblings and friends, always making sure that everyone stayed in touch.

Paul was also a respected and talented geologist, giving the Manitoba Geological Survey (MGS) 43 years of service. He began his career with the Manitoba government in the early 1970s as a summer student on projects in the Southern Indian Lake and Churchill areas. Upon graduation, Paul found employment with the Mineral Resources Division and first worked primarily in the lab as an “engineering aid” to staff geologists. His first solo mapping projects were on the north flank of the Kisseynew Domain, southwest of Lynn Lake (the McKnight–McCallum Lakes area in 1975–76 and the McNeill Lake–Pistol Lake area in 1978). Paul completed his Masters degree in 1979 on the mineralogy and petrology of the Buck claim lithium pegmatite at Bernic Lake. Soon after, Paul and his colleague Tim Corkery began the Lower Churchill project. This helicopter-assisted program continued through to the 1981 field season and focused on a large tract of Paleoproterozoic supracrustal and granitoid rocks east of Southern Indian Lake and north of the Nelson River. From 1982 to 1985, Paul was involved in a project to inventory and characterize rare-element enriched granite pegmatites in the Lynn Lake, Cross Lake, and Knee Lake areas of the province. While working on this project, Paul and Tim Corkery teamed up once again (1983 to 1986) for a mapping program at Cross Lake in the Archean Superior Province, with Paul’s portion of the program focusing on granitoid rocks and pegmatites. In 1987, Paul and colleague Herman Zwanzig conducted a mapping project in the Limestone Point Lake–Star Lake area of the Kisseynew Domain in order to identify the types of high-grade gneisses; the aim was to assign them to existing stratigraphic divisions and to interpret their origin.

In the late 1980s, Paul transitioned from field mapping to providing services in the newly emerging field of



computer-based data collection and mapping. By the early 1990s, Paul was responsible for managing Branch computer systems, developing data management systems, and implementing new digital technologies such as Computer Assisted Drawing (CAD) and Geographic Information Systems (GIS). He was instrumental in bringing this, at the time new, digital mapping technology (GIS) to the MGS. In the spring of 1994, Paul was promoted to Section Head of the newly formed Geoscience Information Services Section (GIS Section). At this time, he was given the additional responsibilities of directly supervising two geologists and managing all computer resources and information management systems for the Geological Services Branch. This was further expanded in late 1995 when he was given seven additional staff to supervise and assumed responsibility for managing all geological compilation, Internet resources, drafting, graphic and report production for the Branch. Paul’s passion for computers, GIS and the digitization of geological data saw him grow and thrive in the position, quickly becoming a respected expert in all three. His extraordinary vision, commitment and skill were instrumental in his pioneering digital data collection at the MGS. Paul designed a geological field database system that he called GEODATA. In this system, geologists wrote their field notes, longhand, on specially designed note sheets based on a template. The longhand notes were then transcribed into the GEODATA database resulting in complete digital capture of every observation

made by the geologist in the field. Without the incredibly important GEODATA database, some reports could not have been written.

Between 1991 and 1996 Paul was the Manitoba leader on an innovative and groundbreaking federal-provincial collaborative program. The National Geoscience Mapping Program (NATMAP) aimed to foster a multi-disciplinary team approach to bedrock and surficial mapping and related research. During NATMAP, Paul helped drive Manitoba's considerable commitment to the project and was responsible for collaboration with federal and provincial colleagues on the digital collection and dissemination of magnetic, gravity and geology maps.

From the early 2000s onward, Paul was responsible for all computer-based geological compilation programs, the production of maps and graphics for hard copy reports, the production of e-documents, providing input into website content and the development of geological information management systems for managing office data and field observations. He was also responsible for managing all aspects of the function of the cartographic support unit, guiding and managing the development of systems including geospatial databases, directing all aspects of geological information management and computer operations in the Branch, and acting as an authoritative resource for the Division on computer technology, CAD, GIS systems and database design and implementation. Throughout his career, Paul was instrumental in providing GIS and database support to a number of projects. These include the Manitoba Geochronology Database (1993), industrial minerals information systems (1993), 1:250,000 compilation map program (1990s), Operation Superior multimedia sampling program (1999–2002), kimberlite potential in Manitoba (2004), till geochemistry in northeast Manitoba (2005) and a study of the alkaline rocks in the Knee Lake area (2008). Despite the considerable workload, Paul's attitude was always characterized by a calm, can-do attitude.

In 2010, Paul was diagnosed with an aggressive type of Non-Hodgkin Lymphoma; a cancer that, at the time, was

usually fatal. He faced his illness head-on, taking a hiatus from work to undergo extensive and invasive treatment. Paul fought, and eventually beat cancer with dignity and a sense of unstoppable positivity. He returned to work with a renewed sense of purpose, once again pouring himself into every project with which he was involved. On top of his already extensive list of responsibilities, over the next nine years Paul was involved in a myriad of projects from the initial relaunch and redesign of the GIS Map Gallery, the Survey's online data distribution platform, to beginning a compilation of the bedrock geology of the Lynn Lake area. In his final years at the Survey, Paul spent much of his time mentoring, educating and doing everything he could to pass on his vast institutional knowledge; not an easy task, as he was a brilliant scientist with an analytical mind that never ceased to amaze. He always had an answer and provided solutions to complex problems whether they were in relation to databases, CAD, GIS or any topic at hand (including computer gaming and whether or not iOS was as good as Android). There wasn't a single complex problem he wouldn't tackle; he kept a large red button on his desk that when pressed stated "that was easy!", even when the problem seemed insurmountable. His encyclopedic knowledge of geology, science and technology was legendary in the Branch, as was his recall of Branch history and milestones.

After a long and incredible career, Paul retired in early 2018. He was hoping to spend a lot more time with his family, especially his granddaughter Madeleine (Maddie) of whom he spoke of incessantly. Unfortunately, the earlier cancer treatments that helped to extend his life would ultimately be the reason for his struggles. Although Paul fought and beat cancer, over the years his body wasn't able to combat the damage that the chemotherapy did to his heart. Paul was a dedicated father, grandfather, husband, friend and mentor. He is missed by all those who knew him; family, friends and colleagues. Paul is survived by his wife Bonnie, his daughter Regan (granddaughter Madeleine, son-in-law Robert), son Mitchell, sisters Pat and Judy and brother Tom.