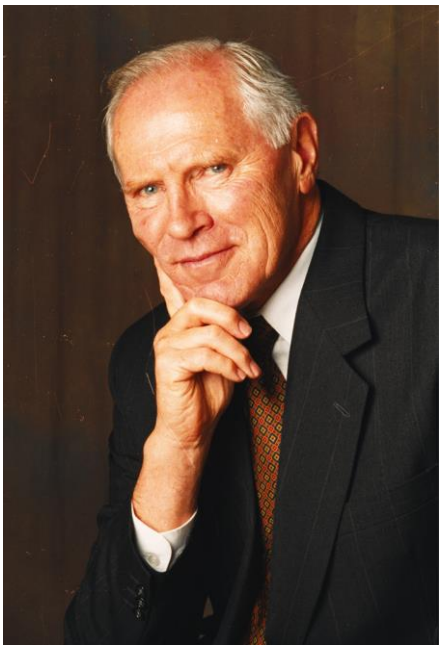
In memoriam Michael J. Selby (1936-2018)



Michael John Selby died in Auckland, New Zealand, on 21 January 2018 aged 82. In his professional career as an Earth scientist at the University of Waikato, Hamilton, New Zealand, for nearly 40 years, Michael began as a junior lecturer and ended as a deputy vice chancellor. He played a pivotal role in helping to establish and develop the Department of Earth Sciences, and its unique, integrative multi-disciplinary approach, at Waikato from 1970. Articulate, friendly, and with a good sense of humour, Michael exemplified diligence, hard work, and professional integrity. He was an inspiring leader with qualities of decency and reliability that made him appealing to staff with whom he worked, and to undergraduate and postgraduate students.

Born in the UK (on 13 January 1936), Michael was a geomorphologist/geographer trained at the University of Oxford (after a two-year stint in Berlin in the Royal Military Police of the British Army), receiving an MA as well as a BA(Hons) and a DipEd. Following an initial job teaching (from 1960) at Christ's College in Christchurch, New Zealand, Michael was appointed in 1964 as a lecturer in physical geography at the Waikato Branch of the University of Auckland (in Hamilton, New Zealand). In 1965 he transferred to the new University of Waikato (founded in 1964) in Hamilton when students were first enrolled. Michael was then appointed a senior lecturer in the new Department of Earth Sciences in 1969 with foundation professor John McCraw, helping to prepare the department to open its doors to its first students in 1970 (McCraw 2002; Nelson et al. 2015). Harry Gibbs joined McCraw and Selby in 1970 and the three set out to teach Earth sciences, with new staff being appointed as student numbers grew rapidly.

Exceptionally well organised, Michael was eloquent and authoritative in his lectures, and always up with the latest advances, such as the theory of plate tectonics (Selby 1970a) and the newly-published (in 1973) marine oxygen isotope record of glaciations (Lowe 2014). His doctoral thesis was on the erosion of the extensive Pumice Soils (Vitrands in Soil Taxonomy: Lowe and Palmer 2005) in central North Island. Michael used a quantitative and experimental approach that involved novel factor analysis by computer (e.g. Selby 1970b, 1970c, 1972, 1973; Selby and Hosking 1971, 1973). His D.Phil. thesis, conferred in 1972, was the first to be awarded in Earth sciences, and one of the first three doctorates to be awarded by the University of Waikato.

Studying landsliding processes and drivers in volcanic-ash mantled slopes on greywacke (a hard, resistant sandstone pervasive in much of New Zealand) early in his career (Selby 1966, 1967a), Michael had already made a name for himself by writing two text books, "The Surface of the Earth", Volumes 1 and 2 (Selby 1967b, 1971). These books were used in some high schools as well as universities, and were responsible for attracting a number of students to the fledgling department. His early papers, published at a prodigious rate, gave important credibility and respect to the research capability of the new Department of Earth Sciences. At the same time, Michael edited Earth Science Journal, published by the Waikato Geological Society (Hamilton), over five years (1967-71).

Awarded a personal chair in 1980, Michael's career transgressed through hard work and new thinking into rock and soil mechanics, bringing together geomorphology (making it more quantitative) and engineering geology. This latter discipline became an important strength within the Department of Earth Sciences, leading to many students subsequently gaining livelihoods in the field. Michael developed simple portable equipment to assess the mass strength of rocks and, from this and a number of other easily assessed parameters, he established a 'Rock Mass Strength Index', which has been adopted internationally, not only by geologists and geomorphologists, but also by engineers (Selby 1980; Selby et al. 1988).

Fig. 27.Michael Selby relaxing atop Derrick Peak in the northern Britannia Range, Transantarctic Mountains, 11 December 1978. The high peak in the background at right is Mount Selby (Photo: David Lowe)

Michael then published (in 1982) what some regard as his magnum opus textbook, "Hillslope Materials and Processes". The second edition (Selby 1993) was named in 2005 as one of the 10 'classic' books of geomorphology and its author as one of the 20 most-cited geomorphologists in the English language, highlighting the fact that Michael's reputation extended well beyond New Zealand (Doyle and Julian 2005). Michael published seven books in all, including Selby (1985) and two editions of "Landforms of New Zealand" (Soons and Selby 1992). The latter book comprised the first synthesis of New Zealand geomorphology and landscapes since the seminal volumes of Sir Charles Cotton of the early- to middle-20th Century (e.g. Cotton 1942). It is only recently that new texts (Shulmeister 2017; Williams 2017) have partly superseded it.

Fig. 28. Michael Selby (near centre wearing tie) amidst colleagues of the Department of Earth Sciences at University of Waikato, Hamilton, after his final lecture in 2001 (Photo: University of Waikato)

Michael undertook four expeditions to Antarctica, leading three of them. Mount Selby in the northern Britannia Range was named for him as a mark of respect for his leadership and contributions to Earth sciences, both at Waikato and globally (Fig. 27; Kamp and Lowe 1982). In 1984 Michael was awarded a D.Sc. from Oxford University in recognition of his highly regarded texts and papers on rock slope stability.

Michael moved increasingly into senior management and became Deputy Vice Chancellor of the University of Waikato in 1986. While maintaining an undergraduate teaching load until his retirement, he increasingly devoted his time to mentoring staff across the university in the art of winning external research contracts and, importantly, successfully completing those research contracts.

Michael retired in February 2002 (as emeritus professor) (Fig. 28; Lowe and Kamp 2002). He became an Officer of the New Zealand Order of Merit (ONZM) for services to education in 2005.

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