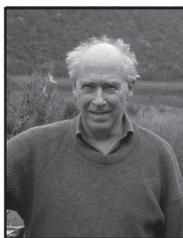


obituary

The mighty rimu has fallen

Leith Knowles, 27th November 1943 - 19th November 2007

A forest consists of many trees. But - like a giant rimu emerging from a beech canopy - some trees tower over the others. Leith Knowles resembled that dominant rimu.



Leith was raised in Southland and attended Gore High School, from which he qualified with UE. He represented his school in athletics, in cross-country running, in rugby (2nd XV) and was a sergeant in school cadets. At the age of 17 he applied to join the NZFS, and was accepted for the 1962 intake. The induction course took him to Rotorua and Reefton, and subsequently he was posted to Conical Hill and Rankleburn Forests to gain practical experience. He was assessed as a "quiet and pleasant trainee of strong character". Later, we all lived in awe of that strong character!

Following another posting to Eyrewell forest to assist with the salvage of wind-thrown stands, he was transferred to Rotorua to be an instructor on the Trainee Induction Course. His rave report: "superb performance, leadership left nothing to be desired". Thence to the Ecological Survey and to Indigenous Silviculture, followed by the Chemical Control Group and Forest Pathology.

Although he tried to further his education with an extramural BA in economics in preparation for entry into the School of Forestry, the Forest Service wanted him to remain as a Forest Ranger and he did not complete the degree. In February 1968 he was formally appointed to a Science Technician vacancy in the Economics of Silviculture section at the FRI, from whence he progressed to Scientist in 1984.

Leith undertook many tasks over the next 22 years, attaining international recognition and eminence as a speaker. Among his major achievements was his part in the development of EARLY - the model that performed the seemingly impossible task of simulating changes that occur to a stand over the period of pruning and thinning; his establishment and continuation of the Tikitere Agroforestry trial (more on that later); the formation of the highly successful Douglas-fir Cooperative; and - a project that he commenced after he had been diagnosed with cancer - the astonishing Radiata Pine and Douglas-fir Calculators. These simple spreadsheet-based tools contain the very latest and best knowledge of stand-level growth, but without the confusing complexity of other systems. I suspect we will all be hearing a lot more about them. In fact, when Leith's Douglas-fir work is included, we could say that his productivity increased with every year and reached spectacular levels in his last few months.

A future historian, writing about New Zealand forestry research at the turn of the century, could not fail to note the prominence of this man. It was not just the quantity and significance of his published papers (and Leith had

over 100 to his name), it was his enormous personal influence. It was his wide experience in many areas - black walnut, silviculture, economic analysis, agroforestry, computer modelling, Douglas-fir, poplar, wood quality, erosion control and water quality, to name just a few. It was the encouragement and supervision he provided to farm foresters and to generations of students at all levels of education. It was the important international contacts he made in Canada, the United States, France and the UK - and the funding he obtained by such collaboration.

He had a lot of friends and colleagues, but also a large number of detractors. Leith was quick to condemn these people - anyone who opposed the direction of his work was a despised, albeit temporary, enemy, at least until their views had been vindicated or else been forgotten. Thus, few could remain neutral to Leith: he influenced both those who agreed with him and also those who disagreed. A visitor, innocent in forestry matters, might have assumed that this middle-level scientist with no formal tertiary-level academic qualifications was merely a minor cog in the great FRI research machine. Not so. A person's official status in a hierarchy can be quite different from their importance to that organisation. So what made Leith special?

Leith was highly intelligent. Indeed, he had one of the quickest x-ray minds I have ever met. His mastery of many academic subjects contrasted with his lack of formal qualifications (all the more credit for such bootstrap achievements) and he became sceptical of those who had gained doctorates by mindless drudgery rather than by natural ability. But his most important characteristic, at least as far as his professional career was concerned, was his enthusiasm. He gave 120% to everything he did. The stereotypical public servant, time-keeper and task-avoider, he was absolutely not. He would work on weekends and in holidays, and even measured trees by torchlight. (It must not be taken that this dedication to work involved ignoring his family, his home, his rhododendrons and hellebores, and his fishing: he had a well-balanced life). The first time I ever heard the word 'proactive' was through Leith's lips - and he typified its use. He would positively seek out work that was in forestry's best interests even if it committed him to long hours or arduous and inconvenient trips. He demonstrated the sterility of a reliance on academic tests for personnel evaluation - motivation is all-important. His example also showed that it would be far more productive to create a research programme around such a person, rather than merely establishing a programme and advertising for staff.

As his friends knew - and forgave him for, with a chuckle - Leith had many faults. Indeed, his faults were an essential part of his productive personality. To his credit he had the insight to know his failings, to accept and to tell jokes at his own expense. One characteristic was his

underestimate of the time taken to do new tasks combined with his tendency to leave things to the last minute. Thus he was permanently in a rush. Having said this, when thrust into the limelight in a state of total unpreparedness, he would put on a brilliant performance that implied thorough background planning.

A less attractive fault was his hasty condemnation of research that had been done elsewhere, of disciplines of which he was not familiar, or discoveries which impinged negatively on his own work. But, as the good scientist he was, he always (eventually) changed his mind when confronted with sound arguments and hard data. He lost interest in the Tikitere trials when evidence mounted that wood quality on farm sites, particularly at low stockings, was greatly inferior. (In my view, though, he was far too self-critical about Tikitere. From that important and substantial (93 ha) trial, driven by Leith from planting right through to harvest, New Zealand made many discoveries, including details about final crop stocking, pruning and the "farm site effect".) When Leith led the Douglas-fir Cooperative, a major thrust of his research was - ironically - internal wood quality. Indeed, at one stage his wood quality projects were in advance of those being undertaken by the WQI for radiata pine.

Another example: some 20 years ago, Leith ostracised one of his staff (this writer) for months, for venturing into the topic of carbon-offset forestry. He thought this topic was academic and irrelevant. Later, he gracefully apologised, and his very last paper - written only weeks before he died, although crippled with cancer - was a pivotal one on this very subject. When Leith chose to fully embrace a particular research area, he could achieve enormous advances in weeks when lesser researchers had taken years. To those who were the target of his scorn, I would suggest that almost every useful researcher has felt the lashings of Leith's tongue at one time or another. Those of us who had the privilege to know Leith well could easily forgive this: it was the result of a dedication to the task in hand. Nothing could be allowed to get in the way, side-line or detract from the thrust of the undertaking.

And now the mighty rimu has fallen. The scrawny saplings that remain among the debris will not achieve Leith's stature for many, many years if ever. Leith's best monument is the people he has influenced, and those that they will influence in turn. He will certainly live on in my memory.

Piers Maclaren
(Photo Courtesy of Nick Ledgard.)

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**Trade and Media Services Ltd
P.O. Box 6215, Whakarewarewa
Rotorua 3010, New Zealand
Tel: (07) 349 4107;
Fax: (07) 349 4157;
mike.smith@southern.com
www.southern.com**