

# Research leader and all-rounder

Athol John (Sandy) McQuire 1925-2005

Sandy McQuire died in hospital in Rotorua on Friday April 8th after a protracted illness, at the age of 80.

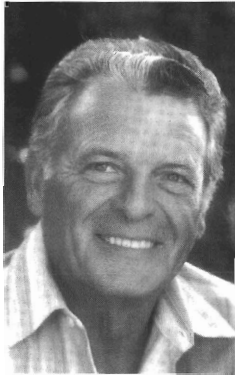
Sandy was the product of the excellent training system developed by the New Zealand Forest Service. He joined as a technical trainee in 1949, graduating from Auckland with a B.Sc in Botany in 1953, and gaining his B.Sc. (Forestry) from the University of Edinburgh.

He was then posted to the Forest Research Institute with the ambitious title of Podocarp Domestication Officer, a field of endeavour dear to the heart of the then Director of Forestry, Alex Entrican. However, Sandy didn't see much chance of success with the slow-growing and difficult to manage podocarps and soon moved to Conical Hill mill as a Technical Officer. There he developed the first 'dip-diffusion' plant in the South Island, then in 1958 moved back to FRI to take up wood preservation as his full time career.

From small beginnings (the wood preservation laboratory was a modified World War 2 Quonset hut), he built the wood preservation research field into a well-balanced and top-class group. While his main focus was on timber processing research, he also found time to set up a long-term programme evaluating the effectiveness of wood preservatives through laboratory tests, field tests and service tests of treated products. The value of the latter has been immeasurable in demonstrating the enormous versatility and long term durability of preservative treated radiata pine. Many of the trials he established still exist and the results from them have been used to refine New Zealand timber treatment specifications and standards.

The work of the research group he established and expanded was (and still is) widely recognised and appreciated by industry, nationally and internationally, and Sandy became known and respected by his contemporaries in New Zealand and throughout the world. Over the years his expertise drew him into many overseas aid projects which took him to a number of countries, and he made FRI's first visit to Japan, beginning a long and important association with scientific colleagues there.

His main personal research contribution was in developing timber treatment processes. Perhaps his greatest achievement was in adapting the Swedish Oscillating Pressure Method (developed for low wood moisture content Scandinavian species) to the treatment of a high wood moisture content species like radiata pine. Sandy's solution was pre-steaming freshly-cut, debarked roundwood to reduce the moisture content to levels where preservative solutions could be forced deep inside the sapwood. This avoided the need for lengthy air-seasoning, with its high risk of irreversible fungal degrade. It was the proud boast of one user of this development that in less than a week, trees had been felled, debarked, steamed, treated and erected as building poles at his sawmill and treatment plant site. The massive increase in roundwood treatment



for horticulture and farming in the 1970s and 1980s would not have been possible without the processes he developed.

He got along well with the people in the wood processing industry that FRI serviced, many of them down-to-earth men who needed practical answers. This easy association was exactly what was needed to ensure that research findings were made known to industry and put into practice. He instinctively understood that the scientist's work is not finished until the research findings are picked up and used. An excellent all-round communicator, he wrote well, spoke effectively, and explained technical matters clearly.

He set something of a record by winning an overseas study award in his early forties that took him to Leeds University where he gained his PhD degree. In 1980 he became Director of FRI's Forest Products Division which undertook research into all aspects of wood properties, wood treatment and wood use. He was elected a Fellow of the International Institute of Wood Science in the early 1980s and became a Fellow of the New Zealand Institute of Forestry in 1988.

He retired from FRI in 1984 after a distinguished career and was then much in demand as an industry consultant for many years.

Sandy excelled in a wide range of sports: he, Gavin Molloy and Mick O'Neill would challenge each other to triathlons - and energetically go through with them. The cricket matches between AJ McQuire's eleven and PC Crequer's eleven, annual at one stage, were serious events. However, rules could be amended to fit the circumstances of each game: for example "no chucking unless you are a left-handed Norwegian" allowed Knut Bergseng to take his turn at the bowling crease.

On the topic of fishing, Lew Skudder writes: "I took Sandy out to the Rangitaiki River to a well known pool named Suckers' Reach, so called because it was reckoned any sucker could catch a fish there. And so it was with Sandy. To this day I can still see the look of surprised delight that lit up his face when he hooked his first trout. The trout was reeled in - so was Sandy." And together Sandy and Lew went on to terrorise the Rangitaiki's trout population for the next 30 years.

Sandy McQuire was an all-rounder: a great mixer with everyone no matter what their station in life, fun-loving, good company, an accomplished sportsman and a talented scientist.

He is survived by his wife Madge, children Valerie, Kay and Gavin and his three grandchildren.

**Colin Bassett with help from Mick Hedley and Lew Skudder.**