

Pioneer's river concern

Theo (Tim) John Marshall, OAM

Pioneering soils scientist

Born: March 26, 1907; Boulder, WA

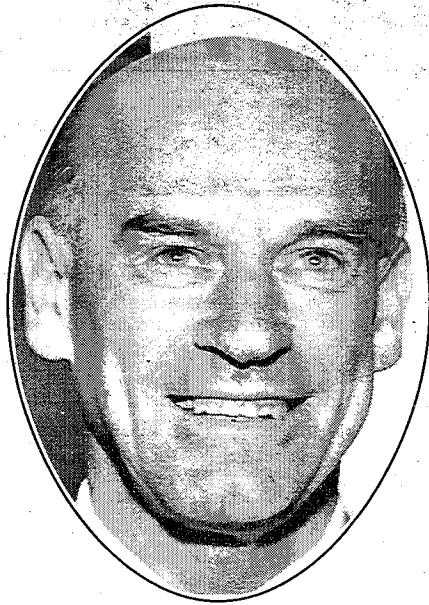
Died: August 28, 2008; Eltham, Victoria

TIM Marshall was born West Australian, but poured his wisdom into South Australia's soil science institutes for 40 years to mentor generations of innovators. He was the first to identify the stressed soils of the Murray-Darling river system and applied his wisdom as widely as building World War II airstrips, to conducting national soils science schools, to writing science articles into his 90s.

He was raised around the WA farming districts of Boulder, Pingelly and Wickpin. He obtained a BSc (Agriculture) at the University of WA before joining the new CSIR (now CSIRO) Division of Soils in Adelaide in February, 1929, working under the direction of Professor J.A. Prescott and J.K. Taylor to survey the irrigated soils of the River Murray system.

He was particularly interested in the physical properties of soils and, encouraged by Professor Prescott, obtained an MSc (Agriculture) in 1933 from the University of Adelaide. He studied at the University of California Berkeley where he completed a PhD in soil physics in 1938.

Returning to Adelaide, he married Ann Nicholls. He and Professor Prescott ran two Winter Schools of Soil Science, in 1939 and 1945, which assembled soil scientists from all over Australia and led to the formation of the Australian Society of Soil Science in 1955.



In 1942, the chairman of CSIR (A.C.D Rivett) sent him to Townsville to help the U.S. Army with soils for aircraft landing strips and to develop an inland route for army supplies.

He would recall how flying with American pilots was "more terrifying than any threat from the Japanese".

In 1944, the army sent him to the Kimberley region where he joined the WA Agriculture Department to conduct soil surveys for irrigation on the Ord River. Tim was the first

to express concern about the stress being placed on water of the Murray-Darling system for crops such as rice. He became leader of the Soil Physics Section of CSIRO Soils Division in 1945 and was a great mentor for many Australian soil scientists.

The output of the Soil Physics Section under Tim's direction brought it a high international reputation, particularly advancing our understanding of soil water movement in a Mediterranean climate. He co-authored a textbook with Professors J.W. Holmes and C.W. Rose called *Soil Physics*.

He became assistant chief (and acting chief) of CSIRO Soils Division and was awarded a Fellowship of the Australian Institute of Agricultural Science and Technology in 1964, the Prescott Medal of the Australian Society of Soil Science in 1974. In 2000, he was awarded the Order of Australia Medal.

After 40 years in Adelaide, he and wife Ann moved to Victoria in 1983 to build a cluster of three family homes with their daughters at Eltham. He continued working in soil physics, publishing his last peer-reviewed research paper at age 98, and used his knowledge to grow tree fruits and vines.

He cared for wife Ann through five years' illness to her death in 2001.

Tim is survived by daughters Professor Jenny Graves and Professor Marilyn Gray Richards, four grandchildren and three great-grandchildren.

Cam Grant, School of Earth and Environmental Sciences, University of Adelaide, Waite campus.

READER CONTRIBUTIONS

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