

An Australian soldier–naturalist

The civilian and military contributions of Captain Ronald Vernon Southcott AAMC (1918–1998)

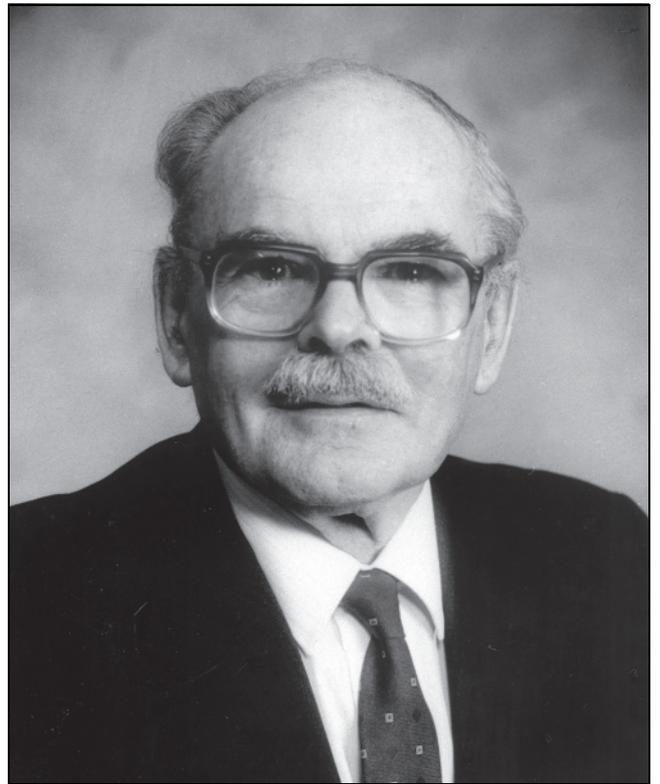
Major General John H Pearn, AM, RFD, MD BSc, PhD, FRACP, FRCP, FACTM, FAIM

CAPTAIN RONALD VERNON SOUTHCOTT (1918–1998), as a doctor–soldier, was, in his own words, “an unconventional Regimental Medical Officer”. He was also one of the greatest of the Australian doctor–naturalists. His contributions to toxinology included the formal description and naming of the world’s most venomous creature, the Australian box-jellyfish (*Chironex fleckeri*). He undertook the first definitive study (1950–1957) of the toxinology, taxonomy and biology of Australian scorpions; and made the first observations in Australia of the introduced fiddleback spider (*Loxosceles*). His research and publications on toxic fungi, poisonous plants and Australian insects were extensive. In 1962 he was a founding member of the International Society of Toxinology.

In the international context, his toxinology research was complemented, even surpassed, by his extensive contributions to acarology (the study of mites and ticks), a specialist field in which he was a passionate investigator. His research over 50 years resulted in 70 publications on acarology. The potential military significance of the mite vectors of typhus is most significant. Historically, mite- and louse-borne diseases, such as “camp fever”, “ship fever” and “jayl fever”, were the scourge of both armies and navies. Southcott’s taxonomic work on the subfamilies and genera of the Erythraeoidea will be the datum reference for centuries to come. Following the devastation of Australian agriculture by locust plagues, he began an extensive collaboration, with Dr Ken Key of the Commonwealth Scientific and Industrial Research Organisation, on the mites of grasshoppers. This work resulted in the most extensive body of data on the relationship between any invertebrate group and its ectoparasites.

Initially a Captain in the Citizen Military Forces in the Australian Army, Southcott enlisted in the Australian Army Medical Corps on 2 January 1942, five months after graduating as a doctor. After completing an accelerated undergraduate medical course because of wartime exigencies, he served in Adelaide as a Resident Medical Officer. As an intern he received several weeks’ training in each of the specialties of medicine, surgery, accident and emergency work, anaesthetics and, as he was to write, venereal disease. His initial military posting was to care for internees at the Loveday Internment Camp, near Barmera in South Australia.

**Office of the Professor of Paediatrics and Child Health,
Royal Children’s Hospital, Herston, QLD.**
John H Pearn, AM, RFD, MD BSc, PhD, FRACP, FRCP, FACTM, FAIM,
Professor of Child Health.
Correspondence: Major General John H Pearn, Office of the Professor of
Paediatrics and Child Health, Royal Children’s Hospital,
Herston, QLD 4029.



Captain Ronald Vernon Southcott AAMC (1918–1998), doctor–soldier, senior administrator of the Australian Department of Veterans’ Affairs and pioneer Australian toxinologist.

This was the period immediately following the Japanese attack on Pearl Harbour (7 December 1941). The Japanese bombing of Darwin on 19 February 1942 engendered an urgency in Australia about the perceived threat of invasion. On 28 February 1942, Southcott was posted to the Northern Territory, to Banka Military Camp, near Tennant Creek. His formal posting was as Regimental Medical Officer of the 11th Line of Communications Depot. Subsequently, he spent several months in Alice Springs and then was posted as a Medical Officer to 2/7 Australian Field Ambulance, part of the 19th Infantry Brigade, based at Coomalie Creek, near Batchelor in the “Top End”. Subsequently, he was transferred, as a member of the 6th Division, to the Atherton Tableland, where he also acted as the Relieving Medical Officer of 2/4, 2/8, 2/11 battalions (of the 19th Infantry Brigade) and 2/1 Pioneer Battalion.

Throughout his military postings, both in the Northern Territory and in northern Queensland, Southcott worked

indefatigably in his spare time as a naturalist, especially on local entomology and parasitology. He collected the ectoparasites of kangaroos (especially from road kills), and collected and named a number of new species of tropical mites. On the Atherton Tableland, he undertook pioneering work on mites and their role as vectors of the newly described scrub typhus. His work on anti-mite repellents was of particular significance. His military studies on scrub typhus and its prevention were subsequently published in the *Medical Journal of Australia* in 1947.

As a member of the 6th Division, he embarked at Townsville on the *Bontikoe* in 1944, and arrived at Aitape, on the north-west coast of New Guinea. Thereafter, he was posted as a Regimental Medical Officer to 2/6 Australian Cavalry Commando Battalion, based at Babiang, some 15 kilometres from the Japanese lines. He was extensively involved in the management of wounded, and of people ill with dysentery, malaria, scrub typhus and dengue fever. In one month, he personally cared for 900 sick and wounded.

In 1945, he returned to Australia for an urgent course in tropical medicine in Sydney, and was posted to the huge military encampment at Grovely, in Brisbane, where he served with 20 Pioneer Battalion. Inexplicably, from his point of view, he was subsequently posted to Tasmania, where, in his own words, he “wondered whether this had anything to do with his having acquired a Diploma in Tropical Medicine and Hygiene!”. There he served as a Regimental Medical Officer with the Demobilisation Wing.

He returned to Adelaide and was discharged from the Army in 1946.

His puckish sense of humour, his self-deprecating humility, his uncompromising integrity when it came to science, and the humorous irony he displayed in the face of frustrations and inconsistencies in the “military machine” all inevitably meant that he was never promoted from his enlistment grade of “Captain” while in uniform.

After his discharge, Southcott’s work and reputation as a tropical medicine expert developed rapidly. During the next five decades, he became the leading doctor–naturalist in Australia. His prodigious output was achieved by one who, with the exception of his war service, almost never travelled outside South Australia. Furthermore, his work as a naturalist, toxinologist and acarologist was almost entirely self-funded and undertaken from his home laboratory. In one year alone (1987),

at his own expense and in his own time, he published papers on the toxinology of sea sponges, hydrozoans and jellyfish, and on the medical effects of moths and butterflies, coral wounds, mites and hallucinogenic fungi — all while maintaining his publication program on the taxonomy of Trombellidae, Johnstonianidae and Trombidiidae mites. With PD Scott and CJ Glover, he became the authority on the fish of South Australia. His *Marine and freshwater fishes of South Australia* was published in a second edition in 1980.

After his discharge from the Army in 1946, Southcott joined the Australian Department of Veterans’ Affairs. He became a medical epidemiologist and senior medical administrator (1949–1978) with the Department. In this role, he continued his links with the military, albeit in the more comfortable role of a civilian, throughout his professional life.

While working for the Department of Veterans’ Affairs, he completed the largest epidemiological study of poliomyelitis in Australia — a work for which he received the degree of Doctor of Medicine from the University of Adelaide. He also instituted and supervised epidemiological studies of veterans, including research into the post-service

risks of hypertension and leukaemia.

In both his civilian and military careers, Southcott brought the fascination of medical zoology, botany and toxinology to a broad audience. He served for 30 years as an Honorary Consultant to the Adelaide Children’s Hospital, was President and Executive Member of the Royal Society of South Australia for more than three decades, and was President of the Medical Sciences Club of South Australia for several years. He is remembered also for his work for the South Australian Museum, where he was Chairman of the Museum’s Board from 1974 to 1982. In the ranks of those military doctors who have contributed greatly to scientific knowledge of Australian flora and fauna, he stands with Surgeon Robert Brown (formerly RMO of the Fifeshire Fencibles), who served with Flinders on HMS *Investigator*, and with his contemporaries, particularly Hugo Flecker and Ian and Josephine Mackerras, who also served in uniform and contributed much to the body of knowledge on the medical implications of contact with both invertebrates and vertebrates.

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Certificate No 4061

Australian Military Forces

Certificate of Service of an Officer

This is to Certify that

SA26061 CAPTAIN RONALD VERNON SOUTHCOTT

2/7 AUSTRALIAN FIELD AMBULANCE

Served on Continuous Full Time War Service in the
 CITIZEN MILITARY FORCES FROM 2 JAN 42 TO 2 OCT 42
 AUSTRALIAN IMPERIAL FORCES FROM 3 OCT 42 TO 2 OCT 46
 for a Total Effective Period
 of ONE THOUSAND SEVEN HUNDRED AND THIRTY FIVE Days
 which included Active Service
 In Australia for 1535 days Outside Australia for 28 days
 Service in the Ranks (included in above) was
 from to
 Honours, Decorations and Awards during that Service

N I L

War Badge A34925B
 Full Time War Service as an Officer in the
 AUSTRALIAN MILITARY FORCES ceased on 2 OCT 46

Place HANMESTRAL MAJOR
 Date 2 OCT 46 Officer in Charge 4 M.D. Ech 2 Rec

Description of Officer on Completion of Service
 Height 5 ft 8 ins Eyes BROWN Complexion FAIR Hair BROWN
 Marks or Scars NIL

Specimen Signature of Officer R.V. Southcott

* EFFECTIVE PERIODS HAVE THE MEANING OF SERVICE, IT IS ANY SUBSEQUENT 21 DAYS OR MORE FOR WHICH THE OFFICER WAS IDENTIFIED TO THE
 * SUBSTRATE BEING THE TERRITORY OF AUSTRALIA AND TASMANIA. * DOES NOT INCLUDE WAR AWARDS

The Certificate of Service of Captain Ronald Vernon Southcott, who served with the 2/7 Australian Field Ambulance and the 2/6 Australian Cavalry Commando Battalion. Courtesy of Mrs Heather Southcott, with acknowledgements.