

production pasture species and strains into New Zealand agriculture, he has likewise made a parallel, generous contribution to the definition of associated animal thrift problems, and to their solution.

It is for this balanced approach that the Society is proud to honour Sir Bruce Levy with life membership. With this goes the sincere wish that, although now retired from active research, he will continue to contribute his effective support and interest in the animal production problems of New Zealand grassland.

JOHN FRANCIS FILMER, I.S.O., D.V.SC., F.R.S.N.Z., A.R.C.V.S.



The election of John Filmer to life membership is a recognition of his outstanding contributions to animal production, and it is fitting that he should also have been one of a small group of enthusiasts who founded the Society, of which he is a past president (1944-45). He has served on the governing bodies of other learned societies, being a past president of the New Zealand Veterinary Association (1945-46; 1952-53), and of the New Zealand

Grassland Association (1955). He has also acted as a member of many official committees and has represented New Zealand at several overseas conferences. He was elected an honorary Associate of the Royal College of Veterinary Surgeons in 1954, and a Fellow of the Royal Society of New Zealand in May, 1961.

J. F. Filmer was born in Victoria, Australia, in September, 1895. Much of his earlier life was spent in Western Australia where his father was a veterinary surgeon. A Government Exhibition Scholarship took him to Melbourne University from which he graduated B.V.Sc. in 1916. In World War I he served with the Royal Army Veterinary Corps in Greece and Salonika.

On his return to Australia he married, and engaged in private practice in Western Australia until 1925 when he joined the Department of Agriculture there. In 1936 he went to Victoria as Veterinary Research Officer to the Western District Research Association. New Zealand became the land of his adoption when he joined the then Wallaceville Veterinary Laboratory in February, 1938. Soon afterwards Melbourne University conferred on him the degree of D.V.Sc. for a thesis on his work on cobalt deficiency. In March, 1938, Dr Filmer became Director

of the newly formed Animal Research Division of the Department of Agriculture, a position he held until his retirement in September, 1960.

During his period in Western Australia, Filmer, in collaboration with E. J. Underwood, achieved a major research success which was to prove of incalculable benefit to agriculture in New Zealand and throughout the world. Up to 25 years ago "bush sickness" had imposed severe restrictions on animal production in this country. The use of iron compounds had resulted in a partial though precarious control of the disease. But it was not until Filmer and Underwood showed that the beneficial effect of iron compounds resided in the minute amount of cobalt present as an impurity that the way was open for complete control of "bush sickness" and allied wasting diseases. Fifteen years before the relationship between pernicious anaemia in man and cobalt deficiency in stock emerged, these workers, with remarkable prescience, drew attention to parallel features of the two diseases and suggested that the effect of cobalt on cattle and sheep might be mediated through "some growth factor for whose formation cobalt is necessary". This clearly foreshadowed the discovery of vitamin B₁₂ and proof that the role of cobalt as an essential trace element is exerted through this vitamin.

To his job of scientific administration Filmer applied the acute perception and breadth of vision which earned him world-wide distinction as an investigator. A fluent and stimulating speaker, he could combine an inherent kindliness with a highly developed critical faculty. Outstanding work at Ruakura, Wallaceville, and ancillary animal research stations, on animal production and animal disease problems such as facial eczema has largely stemmed from Filmer's ability to grasp the essentials of a wide variety of scientific questions and to promote their investigation. In his 1945 Presidential Address to this Society, he said: "We need a real democracy of Animal Research in which there are well-worn paths connecting paddocks and laboratories and a great many workers who are equally at home in both spheres of research." New Zealand is richer for this concept which he did so much to foster.

No recluse, John Filmer has those human qualities which have earned him many friends. Perhaps for this reason it is less easy for his contemporaries to grasp fully the immensity of his scientific achievements. But it is certain that his work has had a profound and continuing influence on animal production. To quote from a well known farming journal, "New Zealand owes much to John Filmer."