

HONORARY LIFE MEMBER**John Neil Clarke**
M.Agr.Sc. (N.Z.), Ph.D. (Edinburgh)

Neil Clarke has devoted his career to the development of knowledge in genetics and to its application for the improvement of our national sheep flock. He has an international reputation with regard to sheep breed comparisons, improving their growth and carcass composition, and modifying the quality of their wool. He is well known for his close involvement in the development and support of national sheep improvement strategies. He has been a prolific presenter at the New Zealand Society of Animal Production Conferences as well as taking his turn on the Management Committee between 1976 and 1978.

Neil was born in Palmerston North and graduated from Massey University with a Bachelor of Agricultural Science degree in 1959 and, after 2 years back on the family farm, returned to Massey in 1962. Having been awarded a New Zealand Wool Board Scholarship, he undertook work for the Master of Agricultural Science in the Sheep Husbandry Department receiving First Class Honours and in 1963 joined the Genetics Section at Ruakura Animal Research Station. In 1966 he was awarded a National Research to study for a PhD at the Institute of Animal Genetics in Edinburgh. He studied the developmental antagonism between carcass weight and carcass fat content, using mice as a selection model.

Dr Clarke returned to Ruakura in 1969 and became heavily involved in the design, establishment, integration and analysis of a number of long-term sheep breeding research projects. He played a major role in the importation of exotic sheep breeds from Britain in 1972 and in the initiation and co-ordination of research projects and facilities for their evaluation in comparison with local breeds and crosses. The termination of this project in 1978, due to a suspected disease outbreak, was a bitter blow to Neil and his colleagues. However, from the ashes he developed the large Romney Strain Trial at Rotomahana, which became an industry focus for sheep breeding research for almost the next 10 years.

Neil's activities at Ruakura in the application of genetic knowledge to livestock improvement have included defining breeding objectives for genetic improvement; comparing families, strains and breeds for genetic merit; assessing alternative mating plans; and disseminating research information to industry. He became leader of the Ruakura Genetics Section in 1978 and became increasingly involved in co-ordinating government funded research in animal breeding, developing national improvement programmes and establishing training programmes to further industry adoption of animal breeding principles. He also made a very significant contribution in encouraging and participating in collaborative projects with scientists in other disciplines, especially in nutrition, physiology and meat, wool and veterinary science. His success in this



area stemmed from, not only his obvious professional competence, but also his pleasant personality, his humour, his enthusiasm and his concern for people.

Neil was again the driving force in 1984 for a second importation of Texel, Oxford Down and Finnish Landrace sheep embryos and semen from Scandinavia. These breeds are now well established in the New Zealand national flock.

Neil later extended his PhD studies and undertook considerable research on breed comparisons with respect to growth and carcass composition. Aided by the development of ultrasound techniques for measuring muscle and fat depths, he developed index procedures for controlling the simultaneous improvement of lean growth and carcass fatness. These indexes were rapidly adopted in the national performance recording scheme.

Neil's interest in breed comparisons and in selection naturally led him to become a major contributor to the investigation of the genetic expression of wool bulk, and the development of GrowBulk sheep. This genotype has since been released for dissemination to industry.

Despite his retirement from AgResearch in March 2000, Neil continues to be closely involved with the development of technical aspects of Sheep Improvement Ltd. (SIL), the national performance recording programme. His valuable and demanding role as a leading member of the technical committee for SIL and its predecessors Animalplan and Sheeplan, demonstrates both his scientific ability, his versatility and his concern to ensure that the results of animal breeding research are applied in the industry to maximise genetic improvement in the future.

Neil has published widely in scientific journals and contributed to many international and local conferences. In recognition of his service to the New Zealand Society of Animal Production, Neil received the McMeekan Memorial Award in 1986. His presentation of nearly 70 papers, as either author or co-author, at the Society's Annual Conferences would contribute the equivalent of a single volume of the Proceedings.

Dr Clarke was also heavily involved with the Australian Association for Animal Breeding and Genetics or AAABG, since its inception in 1979. He was a key speaker at the 1985 meeting, and was instrumental, as President, in organising the very successful AAABG conference held in New Zealand in 1990. Fittingly, he was made a Fellow of AAABG at their 2001 Conference in Queenstown.

We are proud to nominate John Neil Clarke for Life Membership of the New Zealand Society of Animal Production.

D.J. Garrick, C.A. Morris and R.M.W. Sumner