THE McMEEKAN MEMORIAL AWARD

P.F. FENNESSEY

Peter Fennessy started his agricultural career at Lincoln College in 1966 graduating B.Agr.Sci in 1969 with the award of Senior Scholar and promptly proceeded to a Masters degree. He studied the energy balance and body composition in early weaned lambs under the enthusiastic and infectious leadership of a former contributor to this society, the late Dr Karl Jagusch.

Following Lincoln College (now Lincoln University) Peter was at the Invermay Research Centre for 10 months prior to taking up a New Zealand National Research and Advisory Council Scholarship for postgraduate study. During this time some research was undertaken concerning the nutritive value of silage with Dr Tom Barry. PhD studies were undertaken at the Waite Research Institute through the University of Adelaide, under the watchful eye of Dr Adrian Egan. His work concerned amino acid nutrition and metabolism in sheep with particular reference to the sulphur containing amino acids in animals fed low quality diets. This work was, of course, of more relevance to Australian conditions than those here in New Zealand.

Peter has been involved in many areas of animal research since his return to Invermay in late 1975 and has made a significant contribution in most of these. The deer farming programme at Invermay had been initiated by Dr Ken Drew in 1973 and at the time of his return facilities and animal numbers allowed a perfect opportunity for an energetic young scientist. Peter had at that early stage, and still has now, a very close and productive working association with Ken Drew in the deer farming programme. The definition of feed requirements for various classes of deer for maintenance and growth first published in the proceedings of this Society in 1981 are still the basis used by the industry today. Aspects of antler growth and body composition were also scrutinised in these nutritional studies.

The area of manipulation of reproductive times and rates through hormonal treatments and crossing with Pere David deer have also been included in his research activities. A strong interest in breeding programmes involving selection of productive characteristics, the productive outcome of crossing of various strains of red deer and elk, the genetics of antler growth, body growth and size, and intake has provided much needed information for the deer industry in the country.

A very strong industry involvement through frequent contributions to this society's conference, deer farmers conferences, NZ Veterinary Association, Deer Branch meetings and also international meetings has been a notable characteristic of Peter's involvement.

He has visited China and Hong Kong with the NZ Deer Farmers Association delegation and has been widely sought in Australia as an authority on deer farming. Peter has been an outstanding contributor in the development of the deer industry and is just at home in the deer yards on farm talking with individual farmers as at a laboratory bench or in front of a conference audience. Peter's easy approachability and enthusiasm to draw on stored information and an ability for lateral thinking have made him a constructive contributor to many a project or programme involving farmers, technicians and scientists. Clearly very few have the intellectual excellence in such a wide array of agricultural science areas while maintaining the capability for dis-

cussing with individual or groups of farmers a wide range of their practical concerns, albeit usually with a characteristically rapid verbal delivery.

That, of course, is equally true in the sheep industry where he has also made a considerable contribution in the area of selection for leanness.

Following early work on lamb and hogget nutrition, the availability of ultrasonic instruments to allow measurement of fat thickness allowed Peter to establish selection lines on the basis of measured back fat thickness. Considerable genetic progress has been made in these lines which are proving of major interest in studies of physiology and growth. Again in industry, Peter has been a leader through demonstrations of effective genetic progress based on fat thickness measurement, the selection line sheep being sourced from co-operating Coopworth breeders in Otago and Southland. These differences in back-fat thickness are reflected in overall carcass fatness.

Now many breeders are also involved in such programmes, these breeders frequently consulting Invermay.

More recently, Peter has become involved in the area of molecular genetics, and is MAF's programme leader in a national co-operative project with DSIR to develop a gene map in sheep and in work defining genetic markers and productive traits, specifically the Booroola gene, but ultimately other traits.

In consideration of this award, ample justification is found in the research and development, and also industry liaison and implementation aspects of Peter's scientific career. However, he has also been active in the Society's affairs, being on the management committee for eight years, two as a treasurer and one as President - 1982/3. With Ken Drew, he edited perhaps the Society's most successful occasional publication, Supplementary Feeding and also Biology of Deer Production.

Sandwiched into his busy scientific life, Peter also has time to supervise post-graduate students and to indulge his fascination for thoroughbreds where his encyclopaedic memory is put to good use in assessing ancestry breeding, nutrition and form in the animal industry in New Zealand, which is most dependent on, and ruthless in selection for, productive performance.

Peter could not have achieved what he has without strong family backing, particularly from his wife Mary, who is appropriately with him tonight. I have been privileged to work with Peter in the past and to speak to this presentation.

A.J. Allison