

SIR ARTHUR WARD AWARD

Gordon John Greer

The Sir Arthur Ward Award recognises the successful application of research or experience to an aspect of animal production in New Zealand. For the entire 47 years of his working life, Gordon John Greer has been all about the successful practical application of the research programmes at AgResearch's Invermay Agricultural Centre. Over that period, scientists at Invermay have received the McMeekan Award on nine, and Sir Arthur Ward Award on three occasions. While the reasons for the nominations have been diverse, one common element is that this year's Sir Arthur Ward awardee was involved in all but one of them.



Gordon Greer began work at Invermay Agricultural Centre as an 18 year-old in 1966 and served as a research technician there until his retirement in 2014, working first for the Ministry of Agriculture and Fisheries through to the current day AgResearch. Gordon worked with all of 2015 "Living Legends" on a wide and challenging range of research areas. Throughout his entire career, Gordon's trademarks have been his passion and enthusiasm for excellence in science, technical accuracy and his advocacy for practical application of research to farmers and researchers alike. Over his career, many of the technologies Gordon has worked on have come into widespread use and have helped in greatly improving the productivity of the New Zealand sheep and deer industries.

A brief snapshot of the key research areas Gordon has worked on over his career include ultrasound and CT scanning for carcass composition. Gordon worked with the A-mode ultrasound scanner developed by the DSIR, and later on the B-mode medical ultrasound scanners that are now in widespread use by commercial operators. The establishment of a CT scanner facility at Invermay in 1996 required a significant research effort to establish practical systems for animal handling, scanning protocols for ram breeders and calculation of genetic parameters so that ram breeders would have improved breeding values for carcass yield. Gordon handled all the stock management and quarantine and related matters over a period of 18 years, and was an advocate to breeders on the value in their flocks.

Ultrasound scanning was used to establish a high, low and control Invermay Coopworth lean and fat selection lines for carcass weight adjusted back-fat thickness. These lines were maintained for 30 years as a research flock to investigate the effects of selection for leanness. The data from these lines have provided genetic parameters for Sheep Improvement Ltd and many research papers on the correlated responses to selection for leanness. The resource was then used to investigate qualitative trait loci for carcass growth, yield and meat quality traits. Gordon managed the flock for the

entire 30 year period and was responsible for collecting the majority of the phenotypic records.

Research into genetic selection for host resistance to internal parasites began in 1991, and because the commercial WormFEC service in 1994. The research was undertaken in ram breeders' flocks located throughout New Zealand. Gordon organised the field and lab work over a period of 24 years, and in the early years collected samples for the ram breeding farms in the South Island. During that time, breeders only had praise for Gordon in all of their interactions.

The deer industry has been a fortunate recipient of Gordon's technical skills, commitment to detail and research integrity. In the pioneering days, carcass composition work and the on-the-edge blending of research inquiry with newly captured and relocated deer, Invermay's reputation in this area was founded on the basics of good technical work, meticulous attention to detail. And above all Gordon's rare communication skills to the early deer farmers, and also new researchers at all levels that needed confidence, and to some extent technical assistance, to be engaged in that new adventure.

Application of science ultimately comes down to people and communication. Gordon's enthusiasm, diligence, attention to detail, and ultimately his relationship and credibility with ram breeders, has been a major factor in the success of these programmes.

Neville Jopson and John McEwan