

Andrew A. Swan

Dr Andrew Swan is the Chief Scientist at the Animal Genetics and Breeding Unit (AGBU), a joint venture between the NSW Department of Primary Industries and the University of New England and has been involved in highly collaborative sheep breeding research for more than 30 years with researchers, ram breeders and genetics service providers.

Andrew grew up in the Riverina region of New South Wales near Wagga Wagga, before attending the University of New England and graduating B. Rur. Sci. with first class honours in 1987. His honours research project was on crossbreeding Hereford and Simmental cattle, and with that background he joined the Animal Genetics and Breeding Unit as a PhD student studying multibreed genetic evaluation methods under the supervision of Hans Graser and Brian Kinghorn.

Following his PhD studies, he moved to the CSIRO Animal Production laboratory at Chiswick near Armidale and began a long career in sheep breeding. At the time the industry was dealing with the crash of the reserve price scheme and an over-supply of stockpiled wool, so the focus of breeding research turned to improving wool quality using new objective measurement technology. Andrew worked with the CSIRO Fine Wool Project team to understand the genetics of fine and superfine wool sheep, leading to the Towards 13-micron industry breeding consortium.

At the same time Andrew was participating in the development of the breeder-led system of sire evaluation trials run by the Australian Merino Sire Evaluation Association (AMSEA). Working with the Advanced Breeding Services group of NSW Agriculture (now NSW DPI), he contributed to the across-flock evaluations published in Merino Superior Sires from the early 1990s. As a result of this involvement Andrew joined the Sheep Genetics Technical Committee in 2004 which developed the first industry-wide Merino genetic evaluation launched as MERINOSELECT in 2005. Following this landmark industry achievement, Andrew joined AGBU in 2006 to continue working on the MERINOSELECT and LAMBPLAN evaluation systems delivered through Meat and Livestock Australia's Sheep Genetics service.

In subsequent years Andrew has contributed to the introduction of breeding values for new traits, including carcase and eating quality traits, components of reproduction, and breech fly-strike indicators, and selection indexes focused on breeder needs and strategic industry targets. Andrew also participated in the development of genomic resources and technologies in the Sheep CRC, assisting in the transition of MERINOSELECT and LAMBPLAN to genomic evaluations.

He first attended AAABG at the 1988 conference in Armidale, nervously presenting two papers on his PhD research, and has since attended almost all conferences. As of the 2023 conference, he had contributed to just over 100 AAABG papers.

For his outstanding contributions to the development of Merino genetic evaluation and the transition to genomic evaluation in the Australian sheep industry, the Association for the Advancement of Animal Breeding and Genetics is pleased to elect Andrew Swan as a Fellow of the Association.