

James Stuart Flinton Barker graduated BAgrSc(HonsI) from the University of Queensland in 1955 and worked as a Husbandry Officer with the Queensland Department of Agriculture and Stock for two years before becoming lecturer in Animal Genetics at the University of Sydney, where he completed his PhD in 1962. Following a highly successful research and teaching career spanning more than 20 years at Sydney University, Stuart moved to Armidale in 1979 to take up the Chair and Head of the Department of Animal Science at the University of New England. At Armidale he rejuvenated animal breeding and successfully led the Department for 14 years, before relinquishing the position in 1993 to continue active research as an ARC Senior Research Fellow.

In his research career, Stuart and his students have made many fundamental discoveries in animal breeding including, establishing the importance of population size, the effects of population structure on selection response, the importance of mutations on long-term selection response, research on selection for feed efficiency, breed structure in livestock, computer simulation of population genetics, dairy cattle improvement, effects of selection on genetic correlations, genetic factors in disease resistance in sheep and genetic studies of water buffalo. Stuart has now concentrated his research into the key factors maintaining genetic variation. He has a strong vision of the issues and opportunities for study in the route from molecular genetics, through developmental genetics to the genetics of populations. This research has resulted in 136 refereed papers and book chapters, 6 books joint editor and 79 conference papers. The significance of the research has been recognised by invited contributions to 16 international conferences and substantial continuing research grants.

Stuart has been the most influential trainer of animal breeders in Australia, with 25 PhD and 13 Masters students, many of whom have attained prominence. He provided his students with a deep appreciation of the biology and nature of agriculture and the broad conglomerate science of theoretical and applied genetics. In his approach to education, he has clearly demonstrated the great value in students obtaining early, an in-depth and balanced perspective of animal genetics and breeding by utilising small laboratory species and well designed research to rapidly instil a strong appreciation of the nature of genetic variation and of how it can be manipulated.

Stuart has been at the helm of many national and international organisations, panels, committees and consultations. He chaired the Steering Committee and was the force behind the establishment of AAABG, being its inaugural President and presided over the first two Conferences in 1979 and 1981. The Genetics Society of Australia (1981-82) and Society for the Advancement of Breeding Researches in Asia and Oceania (SABRAO) (1993-97) have also prospered under his Presidency. Stuart successfully put the case for Armidale to host the next World Congress on Genetics Applied to Livestock Production in 1998. He has served on the editorial boards of 5 international journals and has been visiting scientist/Professor in the USA (3 times), UK and Denmark. He has had a prominent role in

many Advisory and Expert Committees and breed conservation efforts in south east Asia. An example of his international standing and esteem is his recent election as Chairman of the Panel of Experts on the development of the FAO's Global Strategy for the Management of Farm Animal Genetic Resources.

Stuart is both a scientist and a man of science. His love of teaching, his reasonableness of character and outstanding ability as a communicator, together with a most enquiring and rigorous mind and approach have inspired students and colleagues alike. He is a man of intense and focussed activity (i.e. a workaholic), who has given considerable benefit to his students, colleagues and our community, with great patience and support from Maureen.

In recognition of his worthy contributions to research, education and industry leadership in the area of animal breeding and genetics in Australia and internationally, the Committee of the Association for the Advancement of Animal Breeding and Genetics is pleased to award Stuart Barker, Fellowship of the Association.



Robert "Bob" Ernest Freer graduated H.D.A. from Hawkesbury Agricultural College in 1961. He joined the Beef Branch of the NSW Department of Agriculture and followed the mandatory training at "Trangie" and a year as a jackaroo in Northern Terriority, to become a 'BEEFO'. Bob subsequently completed a B.Appl.Sci. (1978) and a Graduate Certificate in Marketing (1994) at Charles Sturt University.

Bob has had a career of 37 years covering most aspects of cattle production. He is noted, particularly for his contribution to the understanding of selection and genetics in the field and more recently the application of BREEDPLAN. His career began in 1965 with his appointment as an advisor in the NSW Hunter Valley, the position in which he distinguished himself as a front-line beef extension worker with particular

contributions in the areas of beef cattle fertility and breeding herd selection. He was involved in setting up co-operator herds for the NSW Fertility Performance recording scheme in the late 60's, and spent many days towing and setting up and using the cumbersome mobile scales of that era. This scheme later evolved into the National Beef Recording Scheme.

Bob's work on bull fertility, done in the early 70's, is still quoted today. In 1978 Bob was appointed as the first National Co-ordinator of the National Beef Recording Scheme (NBRS) and played a major role in guiding the technical and extension direction of the NBRS service during the early years of its existence. He was then appointed as NSW Agriculture's Specialist in Beef Cattle Breeding and later Head of the Beef Cattle Section and Director of Animal Production Advisory Services.

Bob left NSW Agriculture in 1985, to join the Australian Hereford Society as Technical Director. This was the first such appointment within the beef industry by a breed society and proved so successful that the role was expanded in 1992 with the creation of Taurus Technology - a joint research and development initiative of the Australian Hereford Society and the Australian Poll Hereford Society.

Bob has made a major contribution not only with these two breeds but also to the industry as a whole, directing Taurus Technology research and technical development activities. Specific projects included defining research needs of the white-faced breeds and undertaking a wide range of research projects such as calving ease, cancer eye, fertility and development of the tick resistant gene. More recently, he has focussed on carcass and marketing issues. Current projects involve Bob in initiatives such as Hereford Prime, a branded quality assured product, and the use of ultrasound for marbling assessment in seedstock herds.

Bob has produced an extensive range of Technical Bulletins to inform and assist breeders in a wide range of areas relevant to stud and commercial beef production. One very significant contribution in

1993/4 was the conduct of 43 BREEDPLAN extension workshops throughout Australia attended by over 1000 producers. With Bob's guidance, Taurus Technology then implemented a new series of workshops aimed at linking the use of BREEDPLAN to feedlot performance and carcase characteristics required by different markets.

In recognition of his eminent contribution to the beef industry of Australia, the Committee of the Association for the Advancement of Animal Breeding and Genetics is pleased to award Bob Freer, Fellowship of the Association.