

South African Stud Book and Animal Improvement Association: Current state and opportunities for international collaboration in beef breeding.

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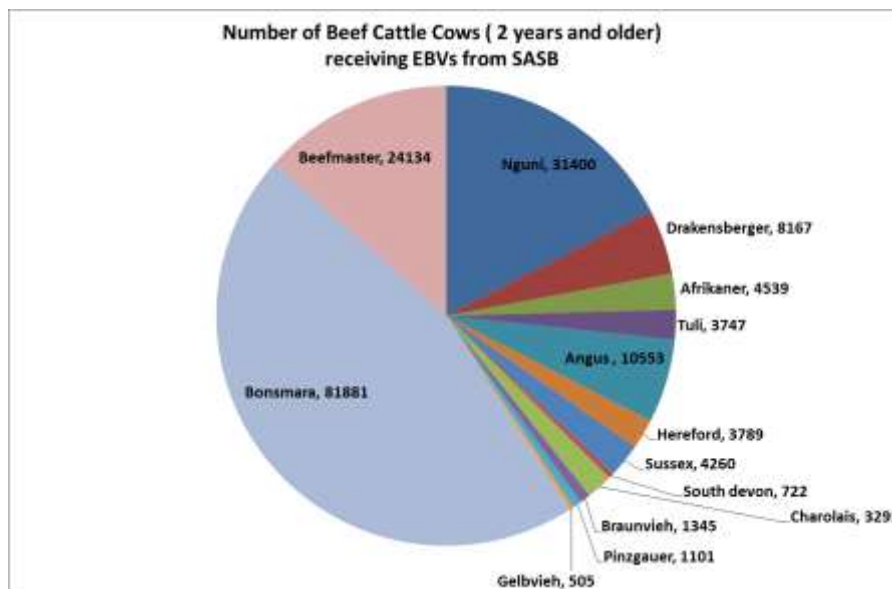
Background

The South African Stud Book and Animal Improvement Association was founded in 1905 and is owned and funded by breeders' societies. Of the 72 recognised breeders' societies (all breeds and species) in South Africa, 63 are members of Stud book. Traditionally Stud book has concentrated on pedigree (stud) recording and related services. Since January 2012 services has been extended for existing and new individual farmers to include recording of production traits as well as genetic evaluation.

Beef Cattle recording and Genetic Evaluation.

SA Stud book currently records 404 000 South African beef cattle (183 000 females over 2 years old). This represents approximately 83% of recorded beef cattle in the country. (Source Beef Breeding in South Africa. 2nd Edition, 2010. Editor M. M. Scholtz. ARC, Pretoria and Logix Database).

The following figure depicts the female numbers (2 years and older) of the respective breeds receiving BLUP breeding values from Stud book.



The largest breed dataset used for BLUP (Bonsmara cattle) represents 1.5 million pedigrees and production records ranging from 7 000 (RTU scanned records) to 950 000 (weaning weights) from eight countries.

Genetic ties with other countries differ, for example relatively good ties for Angus and Hereford (USA, Australia and UK) Charolais (UK and France), Bonsmara (Namibia, Zambia, Botswana, Brazil, Argentina, Columbia and USA) to very weak or limited ties, usually for local or regional breeds.

Opportunities for international collaboration in beef cattle breeding.

SA Stud book employs eight post graduate trained animal breeding and genetics staff (five with a PhD qualification) and six full time system developers (one a fully trained data base administrator). Furthermore, permanent agreements exist between SA Stud book, the University of Pretoria and government agencies giving access to a range of research and development options as well as other animal geneticists, also in molecular.

SA Stud book and all its members are committed to international collaboration in the interest of the science, animal breeding in general and the South African livestock farmers in particular. The organisation therefore offers full support of any efforts of ICAR or its sub committees, working groups and task forces.

Stud book is keen to contribute data, technical and scientific support and also to participate in any research projects or other endeavours of Interbeef. The organisation also sees the benefit of international genetic evaluations for beef cattle breeds, especially those with good genetic ties between the South African population and the major exporting countries. The South African beef cattle population has also developed into a source of genetic material for some other countries, especially in Africa and to some degree South America.