Dr Arthur Rickards OAM

Arthur Rickards established the Agricultural Business Research Institute in 1970. The Institute now engages a 180-person team which provides specialised services to the livestock industries in 20 countries. In addition to his responsibilities as Managing Director of ABRI, Dr Rickards is Manager of Australia's National Beef Recording Scheme and Executive Director of the Australian Registered Cattle Breeders' Association. He has worked closely with the Hereford breed in many countries. In his spare time he is Chairman of the New England Conservatorium of Music.

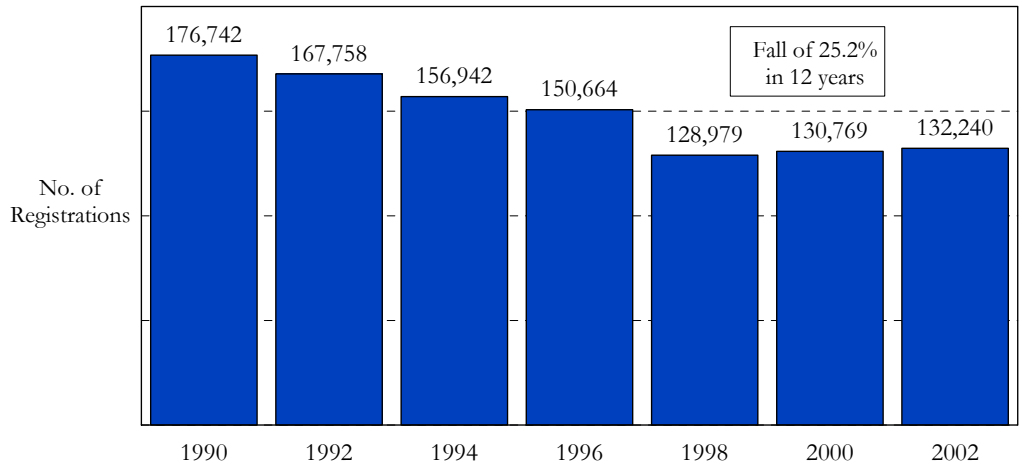
VISION OF THE FUTURE FOR BREED SOCIETIES

1. Review

Breed societies have played a key role in promoting beef cattle improvement for many decades. However, the number of beef cattle being registered each year has been declining in virtually every major beef producing country.

In Australia, beef cattle registrations across all breeds have fallen from 176,742 in 1990 to a low of 128,396 in 1999 before recovering to 132,240 in 2002. This is shown in Figure 1. The overall decline is 25.2% in twelve (12) years.

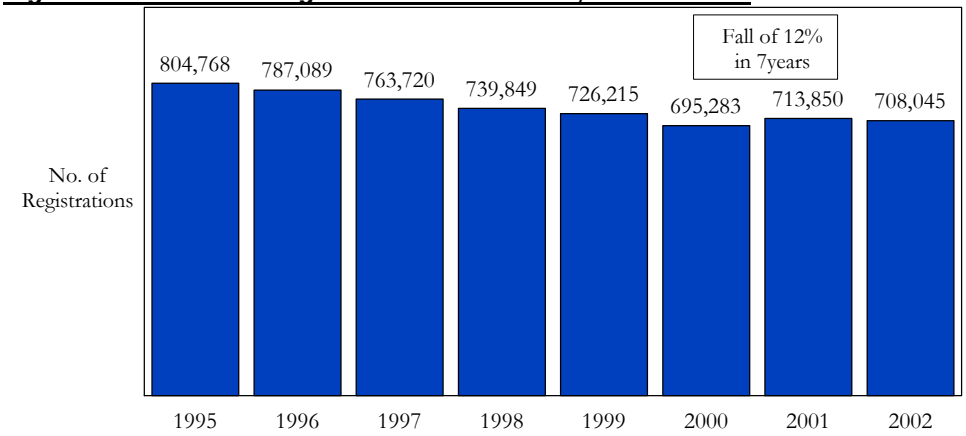
Figure 1: Beef cattle registrations in Australia, 1990 to 2002



Source: Australian Registered Cattle Breeders' Association Inc

In a shorter data series collated from statistics released by the National Pedigree Livestock Council, the beef registrations in the USA have declined by 12% in the past seven years.

Figure 2: Beef cattle registrations in the USA, 1995 to 2002



Source: National Pedigree Livestock Council

For traditional breed societies, the majority of income comes from registrations (or inventory fees), transfers and membership. All three components are declining. There is no evidence of any factors that will cause this to change in the future at an industry level. My colleague Laurie Paterson recently said, *"Breed Societies are great for looking inwards with self congratulation, burying their heads in the sand and letting the world pass them by".* He should know. He's been a breed director for many years.

At the rebadging of the Shorthorn breed in Australia just one month ago it's newly-appointed business development manager, Peter Vincent, said *"Conservatism or fear of evolution is no longer a valid excuse for inaction, particularly when an inactive state might lead to the demise of a farm, a family dynasty, or a cattle breed society".*

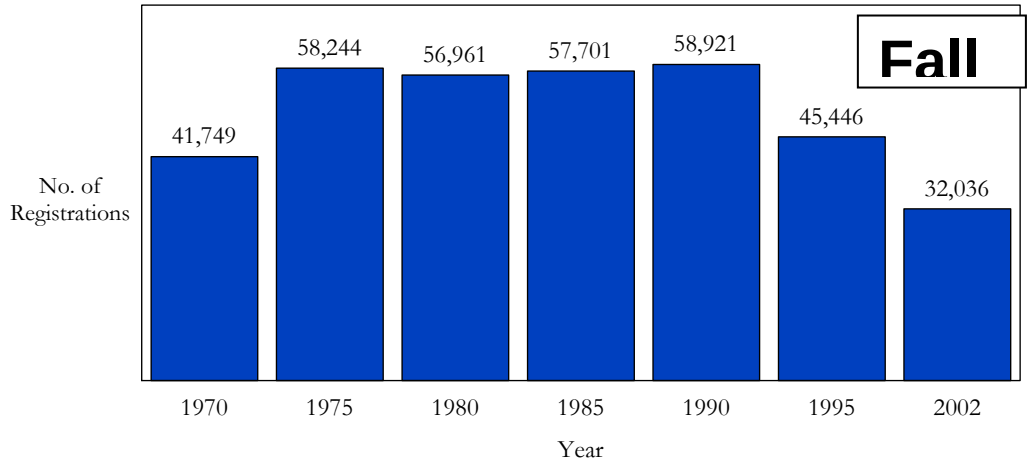
I have maintained for many years that for breed societies to be viable in future they need to adopt a radically different business model.

2. Hereford Trends

Because the Hereford breed in many countries uses the BREEDPLAN International system, medium term trends of Hereford registrations are available. In some major markets, catastrophic losses of Hereford registrations have occurred.

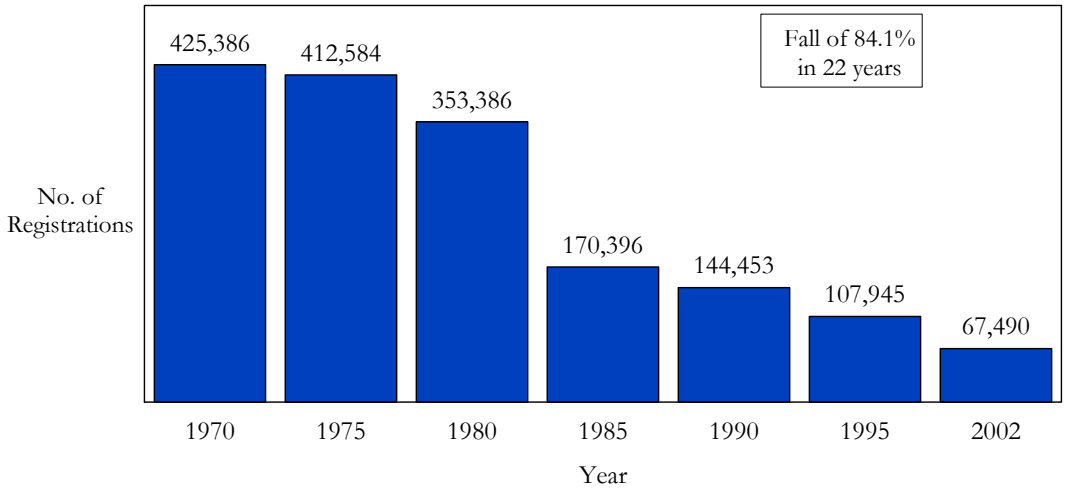
Figure 3 shows how the combined Australian Hereford and Poll Hereford registrations rose from 41,749 in 1970 to 58,244 in 1975 and the remained at this level for 15 years before crashing by 45% between 1990 and 2002.

Figure 3: Trend of combined Hereford and Poll Hereford registrations in Australia , 1970 to 2002 (by year of birth)



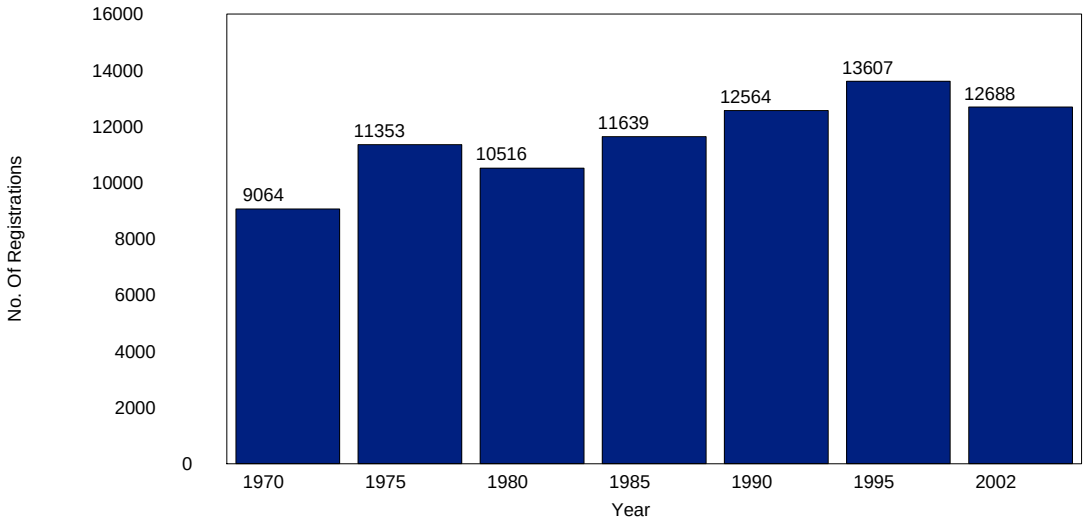
In the USA, the decline in Hereford plus Poll Hereford registrations since 1970 are shown in Figure 4. This decline has been unabated through this period and has seen registrations in 2002 at just 15.9% of earlier levels. However, an impressive fight back has commenced in North America, which I will outline later.

Figure 4: Trend of combined Hereford and Poll Hereford registrations in the USA, 1970 to 2002 (by year of birth)



The combined registrations of Hereford and Poll Hereford in New Zealand since 1970 is shown in Figure 5. Registrations have increased between 1970 and 1995 and the NZ Association is tenaciously maintaining these hard-earned gains.

Figure 5: Trend of combined Hereford and Poll Hereford registrations in New Zealand, 1970 to 2002 (by year of birth)



A detailed analysis of what has driven these differences is beyond the scope of this paper although it is a topic that should be of great interest to the World Hereford Council.

It is likely that the early emergence of the feedlot industry in the USA, the consequent strong adoption of crossbreeding and the challenges of both European breed and black genetics have been major factors in the differences observed between countries. The Feedlot industry development in Australia lagged that in the USA. This could mean that the market for Hereford genetics in Australia is still vulnerable. The market for Hereford bulls in New Zealand's large dairy industry, combined with a predominantly grass-based beef industry, has helped the NZ Hereford Association to maintain its volume.

These trends have been presented to emphasise the critical need for breed societies to become more imaginative in their thinking and strategic planning or face the threat of becoming largely irrelevant to the beef industry of the 21st century.

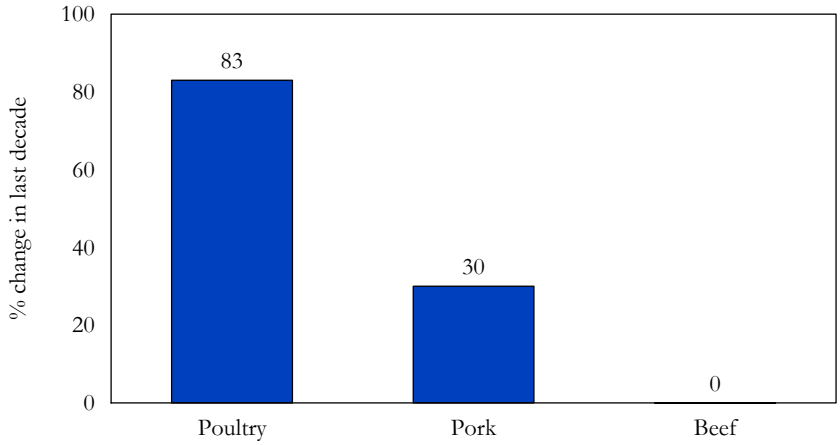
Let's be dispassionate about this situation. If you had some spare funds to invest on the Stock Exchange – would you buy shares in a company with a shrinking business? Of course not. You would look for growth stocks. Breed societies need to figure out how to get themselves in this category and at the same time develop cost efficiencies with their current business operations.

3. Future Threats

It would be foolish to think that the worst is over in terms of industry-wide contraction of breed society business. In the immediate future, the following threats must be faced:

Consumption stalled – there has not been an ounce more beef eaten globally in the last ten years. In this period pork consumption has increased by 30% and chicken by a dramatic 83%.

Change in global meat consumption in last decade



Cross breeding and composites – the trend towards the use of crossbreeding and composites for commercial beef production will continue and in some countries it will accelerate. Those breeds which do not position themselves to be part of the crossbreeding explosion, will suffer further losses in the demand for purebred genetics.

Corporate agriculture – there is a trend for corporate agriculture to increase the size of breeding herds and feedlot operations. For example, there are a number of pastoral companies in Australia running over 150,000 cattle and one aspiring to run over 1 million cattle. Many of these companies are implementing their own breeding programs which will source very few seedstock from breed society members.

Genomics – genomics companies are making great progress, cloning and semen sexing are occurring now and may become a commercial reality in the future. Genomic companies may seek to control the market for clones, sexed semen and gene markers at the expense of breed societies, just as Artificial Insemination decimated bull registrations in the dairy industry 40 years ago. In Australia alone it is estimated that up to $160M will be invested in genomic research in the beef and dairy industries in the next six years. Who will be the commercialisers?

Traceability – BSE and Foot and Mouth Disease outbreaks are forcing many countries to implement traceability in order to maintain consumer confidence and hold export markets. In future, all these schemes will use some form of electronic identification of animals. New software is being written every day to help commercial organisations that are breeding cattle, running marketing alliances, feedlots or abattoirs to keep track of the cattle they control. This has previously been almost the private domain of breed societies. It is likely that commercial initiatives in traceability will threaten the very existence of breed societies and in some European countries this has already occurred.

The Internet – the combination of electronic identification on farm, automatic reading of ids and measurement of production and access to the internet means that many cattle producers can undertake advanced recording without the need for a breed society infrastructure.

Labour costs – salaries will continue to rise while breed registrations are falling. This means that breed society services are getting more expensive. This will escalate the downward spiral of registrations. For medium-sized breed societies, the breed executive officer salary is the biggest single cost. There is ample evidence that a good breed executive officer can effectively administer an organisation turning over 100,000 registrations pa or more. Yet there are many breed societies with fewer than 10,000 registrations and a full time EO. This is unsustainable.

Computer systems – there are still a number of breed societies outside Australia that have installed one-off computer systems. This robs them of the ability to make the types of improvements that are required continuously to remain competitive. That is because those service providers don't have enough business to make changes economically. Once the breed registry system becomes dated, the society using it becomes uncompetitive.

Capital limitations – in order to offset many of the above threats, breed societies need to build new and competitive business activities eg. a brand label for their beef. This requires capital. The American Hereford Association has done this very well. Unfortunately, most breed societies have run down their capital reserves and can't initiate new business.

Let me assure you I don't have any sadistic intention of depriving you of the pleasure of visiting Armidale for such a magnificent Conference. But I do hope to command your attention. I trust that I have convinced you that attempting to maintain the *status quo* will provide a fast track to the rare breeds trust.

However, there is a bright future for those breed societies which are prepared to make radical changes in the way they operate.

4. Towards a dynamic future for breed societies

It is very unlikely that the traditional registered seedstock industry will increase in size. ***Therefore, breed societies that wish to expand MUST develop services for the commercial cattle industry.*** Given that the commercial cattle industry is at least 30 times the size of the seedstock sector, this provides considerable opportunities for growth!

Services to Commercial beef industry – breed societies should turn the inevitable mandatory requirements for traceability to their advantage. They should be offering to run the databases for supply management schemes. This facility can be tacked onto their respective breed registry systems and commercial producers can be educated on how to access the electronic herdbook of the breed society to source sire genetics. For example, while the American Hereford Association (AHA) processes around 70,000 registrations per year it also runs a branded beef program handling 250,000 animals per year with plans to lift this to 1 million head. Significantly, the last four years has seen a **22% increase** in Hereford's market share of bull use in the US cow herds of over 100 head. As traceability becomes mandatory in the USA, the AHA should seize the initiative to provide an EID-based supply management and feedback system for these cattle.

Open herdbook registers – why compete against the composite breeders, when you could join them. Breed registers should be thrown open to identify and record various types of grading up and composite cattle and use current technology to produce breeding values for them. In Australia, Angus has doubled its registrations and Holstein Friesian has quadrupled its registrations by taking this approach.

Computer systems – with good software developers costing $100,000+ with on costs, it makes no sense for breed societies to maintain their own software systems or use one-off systems from third parties. Economies of scale are created by driving more data through the existing leading systems such as BREEDPLAN International. In reality, there is probably only room for two major systems worldwide and even those systems should have the capability for economical file transfer.

The Internet – breed societies and their software service suppliers need to seize the initiative and use the internet to capture new business (or face the risk of losing new and existing business to third party suppliers). The internet will allow larger breed societies to offer on-line processing to an international clientele. Thus, as registered genetics is introduced to a new country this can come

packaged with a registration and performance service – overcoming the need to establish a plethora of small uneconomic breed societies.

Rationalise breed administration – the obsession which many breeders have to run independent breed societies needs to be revisited. There are, in fact, very few breed societies in the world that are of adequate size to run a cost-efficient business. The sooner breeder members open the door to collaborative activity with other breeds the better off the registered seedstock industry will be. New Zealand provides commendable examples of what should be happening. This country has a beef industry with total registrations of about 40,000 per year. Not only have Hereford and Poll Hereford always been combined in just one society but Hereford, Angus, Shorthorn, Simmental, Charolais, Limousin, Maine Anjou and Romagnola share the one office. These breeds provide 95% of the registrations to the whole NZ Industry.

All breeds use the BREEDPLAN International computer system and achieve considerable economies of scale which allows them to divert funds to developing profitable business in the commercial industry. A look at the trend in NZ Hereford registrations shows that the strategy is working. New Zealand Herefords have not yielded any market share to New Zealand Angus, despite inviting Angus to share the original Hereford office. In Australia, Herefords and Poll Hereford have separate breed societies despite having a common database. One can only question the long-term economic rationale for this. In the UK, beef registrations total about 50,000 but there are 20 small societies scattered all over the countryside – none of them with a fully-integrated pedigree performance system. With respect, this puts the UK about 20 years behind in best practice for breed society management.

Joint Ventures – in the future, it is important for seedstock breeders to tell themselves each morning that they are in the global food industry. The American Hereford Association clearly recognise this as their mission includes…. ***"to promote and facilitate the production and consumption of Hereford Beef".*** Seedstock breeders must aim to add value to beef as a preferred source of protein and participate in supply management systems that allow this added value to be captured by all sectors of the supply chain. To the extent that few breed societies have the capital to run supply management systems, entering into joint ventures with abattoirs and feedlots should be explored.

Technology Licences : - breed societies should also be proactive in seeking licences to commercialise genomics technologies with their members rather than being bypassed. As Mike Nathan wrote in "The Age" newspaper in May 2003, *"Biotechnology is a key transforming technology: changing old industries, creating new ones, and providing means to solve many of man's most intractable problems".* We had best have a strategy in place to fill a financially-rewarding role within the "new" industries.

Export of genetics – the International Food Policy Research Institute has predicted a demand-led Livestock Revolution in the next 20 years. Much of this will be driven by increases in both population and meat consumption in developing countries, particularly China.

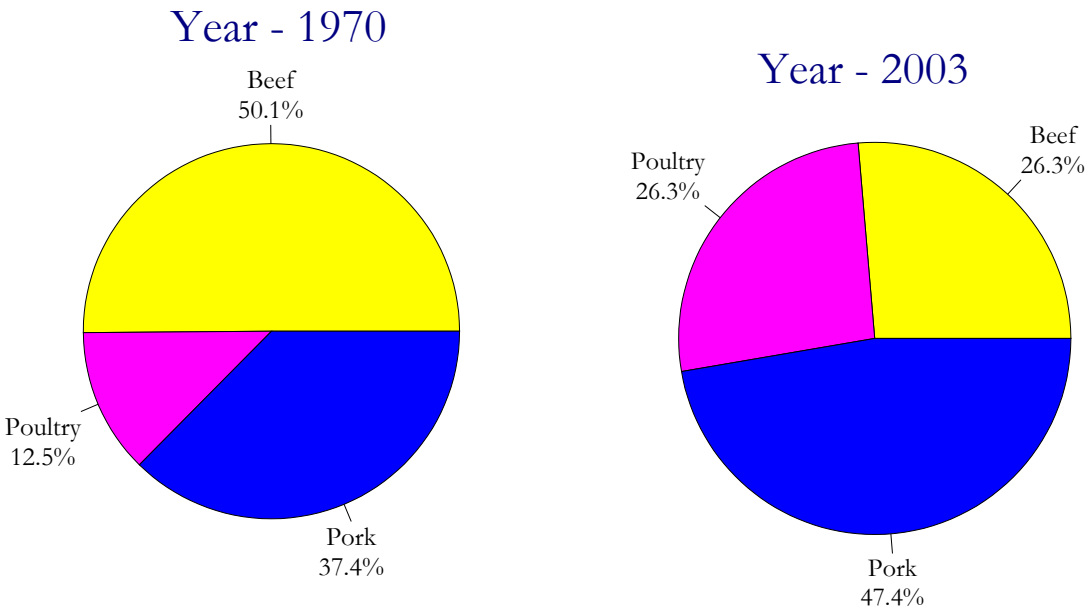
The Livestock Revolution will create a demand for superior genetics in various forms eg. live animals, semen and embryos. Breed societies need to be proactive in taking a key role in servicing this demand for the benefit of their members. Quality control and effective follow up services will be the key to holding long-term markets. If breed societies do not become proactive, the genetic export market will be driven by commodity traders attempting to maximise sales at the lowest unit price and we will have another "Kormo Express" situation on our hands and a nosedive in repeat orders.

International genetic evaluations – breed societies will benefit from moving cautiously towards international genetic evaluations, or at least establishing clusters of countries that combine data for genetic evaluation. I'm very pleased to acknowledge that the Hereford breed, in its partnership with BREEDPLAN International, is further advanced than any other beef breed in progressing this futuristic goal.

5. Summing Up

So there you have my private view on the types of initiatives that breed societies should take to secure a bright future. It is so easy at an event like this to get carried away with the euphoria of the occasion and the fellowship of your colleagues from around the world. Who would not want to enjoy this. But let's not be blind to the simple reality – we are collectively doing an absolutely lousy job in promoting beef as a

world commodity. Between 1970 and 2003, beef's share of the global meat market fell from 50.1% to 26.3%.



The future of beef is your future and it's in your hands. If we are collectively prepared to commit to radical restructuring of not just breed societies but the whole beef supply chain, we would drive beef's market share higher. And as beef's share grows, the market for beef genetics expands. All of our respective businesses can then grow, and to use my early analogy with the share market, this will cause the community at large to seek to invest in our business. This would include investment in research and development, production and marketing. It would be the most tangible measure for the success of my vision of the future of the beef industry.