

HELEN NEWTON TURNER MEDAL TRUST

The Helen Newton Turner Medal Trust was established in 1993 following an anonymous donation to the Animal Genetics and Breeding Unit.

The Helen Newton Turner Medal is awarded to provide encouragement and inspiration to those engaged in animal genetics. The Medal is named after Dr Helen Newton Turner whose career with CSIRO was dedicated to research into the genetic improvement of sheep for wool production. The Medallist is chosen by Trustees from the ranks of those persons who have made an outstanding contribution to genetic improvement of Australian livestock.

The Helen Newton Turner Medal was first awarded in 1994 to Associate Professor John James and a list of all recipients to date is given below. The recipient of the Medal is invited to deliver an Oration on a topical subject of their choice. The Oration of the 2009 Medal recipient, Mr Ryves Hawker, is included in these proceedings.

Trustees of the Helen Newton Turner Trust are:

- Dr Richard Sheldrake (Chairman), representing NSW Department of Primary Industries
- Professor Brian Kinghorn, representing the University of New England
- Dr. Scott Dolling, representing the Association for the Advancement of Animal Breeding and Genetics
- Dr Roly Nieper, representing the National Farmers' Federation
- Dr. Hans-Ulrich Graser, Director, Animal Genetics and Breeding Unit

MEDALLISTS

<i>1994</i>	J.W. James	<i>2001</i>	G.A. Carnaby
<i>1995</i>	L.R. Piper	<i>2003</i>	F.W. Nicholas
<i>1997</i>	J. Litchfield	<i>2005</i>	K. Hammond
<i>1998</i>	J.S.F. Barker	<i>2007</i>	Lucinda Corrigan
<i>1999</i>	C.W. Sandilands	<i>2009</i>	J. Ryves Hawker

HELEN NEWTON TURNER



HELEN NEWTON TURNER MEDALIST ORATION

J. Ryves Hawker – 2009 Medal Recipient

Clare, South Australia

Director General and chairman of the Helen Newton Turner Medal Trust, Richard Sheldrake, ladies and gentlemen. I am honoured and overwhelmed to be awarded the Helen Newton Turner Medal - thank you.

I met Helen Newton Turner on several occasions. One that stands out in my memory was in 1960. The SA Merino Breeders asked Dr Turner and Dr Bob Dun to talk on their selection programs at Trangie. As a young out of school Jackeroo I was taken to the seminar at Hallett. My father and Richard Hawker from Bungaree had been to Trangie to see the sheep. At question time Helen Newton Turner was asked by Richard Hawker, why the sheep and wool were so visually unattractive as judged by a stud breeder. Her quick retort was, she thought her sheep were a whole lot better than Bob Dun's – my introduction to the scientist.

Receiving this award today has caused me to reflect on a lifelong interest and involvement in animal breeding and how the industry has changed over a relatively short period of time. It has also made me appreciate the many opportunities I have had over the years to work alongside genetists, breeders and other experts in this field.

I come from a long line of animal breeders. My grandfather Walter Hawker did medicine at Cambridge and while he was there took up poultry breeding and won medals at the London Exhibition. He explained the fastest way to breed show birds was to have a bicycle with a basket and ride round the villages. I think you call that population genetics! Walter returned to Australia and took up his share of the Bungaree flock which was the result of Camden Park ewes bred with Murray sheep and Rambouillet from France and America with a touch of Lincoln longwools. He imported donkeys from Texas USA to breed mules. He imported Friesians from Holland and New Zealand to form the Anama Friesian Stud in 1912.

He was one of two delegates from SA to form the Australian Stud Merino Breeders Society.

My father, John, did a degree at Cambridge and returned to Anama during the depression. He found the Anama stud needed reorganising and evolved a pedigree top stud where progeny testing of top sires was done and each ewe had a card with sire of progeny, objective measurement results and grading. John helped and worked with the University and Roseworthy Agricultural College and with Phil Schinkel setting up a selection trial on production. John was the subjective sheep classer backed up by objective measurement. Many former Roseworthy students tell me they remember John on his seat at the end of the classing race.

After a stint at Cirencester Ag. College I worked my way home through Kenya and South Africa where I visited many of the then top Merino breeders, Rubridge, Minaar Pinars and stayed with the Howells who worked with Fred Morley on cell grazing of natural pasture. When I returned to Anama we had three breeding enterprises, Merino and Poll Merino, Friesian and commercial Red Angus beef cattle.

For me, objective measurement started with our Friesian herd. It proved using measurement worked and through line breeding we were able to achieve one of the highest production herds in SA. When semen could be imported bulls were inspected and semen purchased. This helped greatly in lifting production and type. Anama held many age production records in SA and had the first cow to produce 1000 lb of butter fat in 300 days. The same cow was classified excellent three times.

On the beef cattle side we started using Red Angus bulls in the early 50s and formed the stud in 1970. I joined the council in 1973 and Frank Pearson of Bunyip had helped evaluate the idea of Breedplan. At this stage it was not open to general use so I started weighing cattle with the help of the WA scheme and then used that information to join Breedplan as an individual. Four studs joined together to form Performance Breeders. We then joined Angus Breedplan which showed we were on the right track. Red Angus have accepted breedplan ideals and have their own indexes from supermarket to northern. Anama steers by different sires averaged 85.67 points on the Australian Beef Carcase Appraisal System at the 09 Adelaide Show including Grand Champion Carcase and reserve Champion Heavy Weight

With the Merinos, my father had achieved his aim. A well run, organised commercial stud. Sheep like peas in a pod – big plain bodied, strong, fertile sheep selling over 1,000 rams a year into the pastoral and sheep/wheat country. We classed our clients' hoggets each year – up to 25,000 when times were good. 1967 was the worst drought followed by the wool recession in 1970. The Japanese, principle buyers at the time, decreed they wanted finer wool and in fact shorter staple – shear twice a year.

With advice from Raul Ponzoni and Jim Walkley we looked at our breeding program to improve our wool cuts, fine the wool down, keep size and improve fertility. We worked out an index to use the genetic values known at that time from the Trangie research.

Scott Dolling's research and book on Breeding Poll Merinos was of great interest at Anama as the poll stud started in 1940s came from "sports" and his information helped greatly to refine the breeding program. 80% of our stud became polled.

I got to know Scott better over the years and found his genetic expertise had been channeled to breed coloured wool for his wife's spinning trade.

The DPI and Merino Breeders ran seminars on animal health, improved pastures and objective measurement. I was fortunate at this stage to meet people like Brian Jefferies, Raul Ponzoni, Jim Walkley and Phil Hyde. Through Dr Oliver Mayo I spent some time on the Waite Institute Advisory Council and later on the CSIRO Animal Production unit based at Prospect. Through the DPI we were able to host interesting visitors from Mexico, South America, China and so on, sharing ideas on animal breeding.

In 1978 I was nominated to attend a conference at Armidale which was the formation of the AAABG. It was a huge think tank and it opened a new world for me. Meeting people like Harold Skjervold, Laurie Piper, John James, Keith Hammond and the list goes on, was very stimulating. It gave an opportunity for producers to meet and discuss with scientists concerns and seek advice on breeding. At one of the sessions we were asked as breeders what we wanted. I asked:

- How do I know my animals are improving?
- How do know how my animals rate against other breeders locally and internationally?

This resulted in:

- Raul Ponzoni helped me set up a control flock. All sires and ewes were randomly selected. After mating and after lambing all progeny were run together. All progeny of the nucleus stud and control were objectively weighed, measured and wool tested. After ten years we were able to calculate gains and losses.
- WA started a sire reference scheme at Katanning using bench mark sires and semen. After four years we found our sires tended to be above average. The scheme was not well accepted and it took up a lot of sheep and wasted progeny. The next step was to transfer this scheme to the research station and independent farms. Results were verified by using Departments of Agriculture and representatives of the stud breeders.

- This scheme was also used internationally in South America, South Africa and Russia using bench mark sires linking countries and years.

Testing of wool for sale was brought in by EWP and Jim Maple Brown, forcing the rest of the industry to accept objective measurement.

At this time, through the management committee of the SA Stud Merino Breeders, new standards were introduced to the sheep industry. Adelaide Ram sales were the first to micron test sale rams. Then the show sheep were put into strength classes followed by the testing of show fleeces. Sales of short wool rams became accepted at major events.

In 1983 I became involved with Rambouillet sheep imports with the idea of capturing the fertility and meat traits. We bred a line of poll sheep which gave us a lambing percent in 120s plus and a 5 kg body advantage at weaning. The wool needed working on.

When Turretfield had room in their breeding program, a Meat and Fibre Trial was started made up of selected ewes from willing contributors. The objective, being finer wool, more meat and more lambs, was a success.

Over time everything changes. In 1980 the Friesian stud was dispersed after some dry years. The economics of running 150 cows in a 500ml rainfall was unviable.

In 2005 a combination of bad seasons and the changing demand for wool sheep caused us to stop being a seed stock producer. It was a sad day.

Anama's future is now in the capable hands of my son Tom and his family

The world and its needs keep changing. Governments of today are trying to come to grips with global warming. Their attitude to funding research for basics seems to pushing to user pays. Wool has slipped to a minor player in the apparel market. Meat is being hassled by non meat eaters with arguments of methane gas production, use of water and carbon miles. Continuous cropping with larger and more efficient machinery has decreased the cost of labour, decreased the number of livestock and decreased the run off water.

Raising money for research and promotion is becoming harder. The wool industry is about to vote on its levy and the AMLS is fighting with the Beef Cattle Assoc. over levies and how they should be spent. Low returns and the Australian dollar will not help growers to pay increased levies.

The average consumer of the future wants easycare changeable clothes. They want more meat to spice up their cereal diet. Breeders need to increase the efficiency of animals whilst decreasing inputs. More fertility in sheep, less wool and in cattle higher feed conversion ratio, less gas output. I am told the termites in the NT expel more gas than domestic animals!

Breeders must get off their tractors and out of their shed and talk to scientists and set future goals.

To be interested in a subject, to be able to learn from others and have the ability to act on the knowledge and change for the better is a wonderful thing.

Thank you for all the help, encouragement and friendship you have given to people like me to improve our industry.