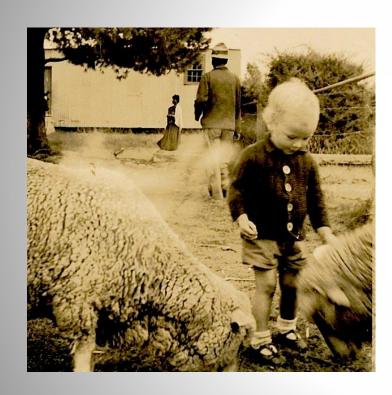




My relationship with sheep began at an early age and has persisted throughout my life



Becoming more intimate as my career progressed





BEGINNINGS

1937 Dohne Research Station established

A better adapted sheep type for the East Cape sourveld set as one of its goals

Initial trials commenced in 1939 - Mr JJJ Kotze





Mr JJJ (Koot Kotzé) Father of the Dohne

1939 German Mutton Merino x Merino. The excellent characteristics of the first cross fixed, through inter-breeding and selection.

Parameters:

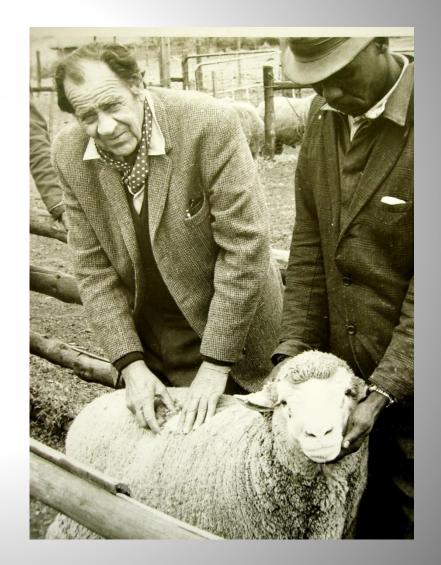
Pedigrees and performance recorded.

Sheep to be run under identical conditions in a natural commercial environment.

He defined the selection procedures that are followed to this day.

Very advanced requirements at this time (the early and mid 1940s)

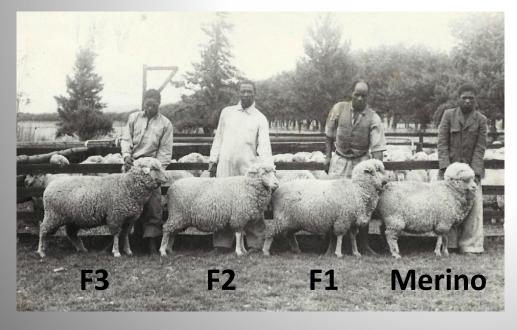
By observing the most productive and best adapted sheep in each generation, Koot Kotzé himself defined the ideal breed type.



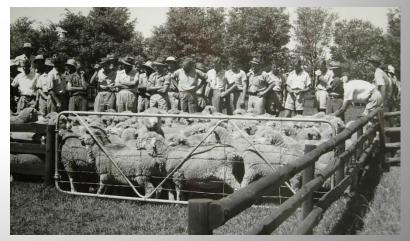








Field Day 1949





First Founation Stud - 1942

Gerald Featherston – Waterford Estate









South African Wool Record... 54½! per Pound Sold by F.C.U in January 1948.

SA record wool price

Waterford Estate wool sale - 1948



Mr. C. J.J. Kotze ... Mr. R. A. Main - Sales Manager... Mr. G. W. Featherstone - Owner Mr. C. F. Bruce - Manager. gack Ramoden

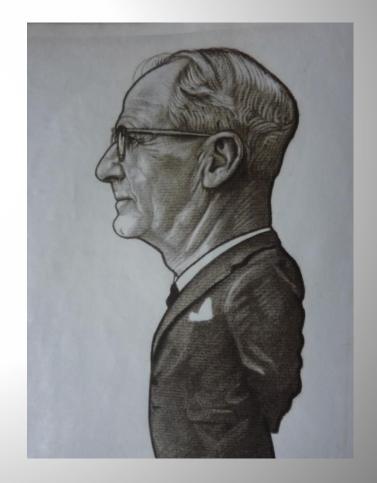


Early collaborators - 1947

Deemie Blaine, Wauldy Stud



Jack Blaine - Ross Stud



Feb 1966 Steering committee to form a Society

Inaugural meeting 16 May 1966



Koot Kotze lower left; next to him Dr Wim Verbeeck, National Director of Animal Husbandry who was guest of honour

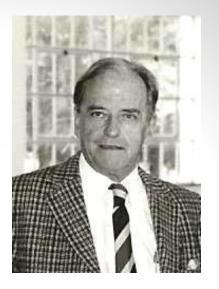






R O le Roux of the Dirko Stud was elected first President and Noel Geach, manager of the Waterford Stud, first Secretary







I believe only three persons who were at the inaugural meeting in May 1966 are still alive today.

Pinky Watermeyer was elected to the first Council. Lionel de la Harpe and I visited him in Dec 2015 and presented a copy of the book to him.



Field Day in conjunction with the inaugural meeting - May 1966



Mr Kotzé demonstrating at the Field Day





A NEW PARADIGM

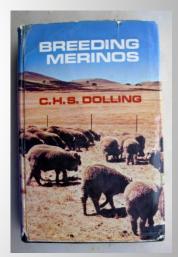
Already committed to a new venture, unencumbered by the constraints of tradition and being innovators by nature, pioneer Dohne breeders easily embraced the new concepts and principles being advocated at the time.

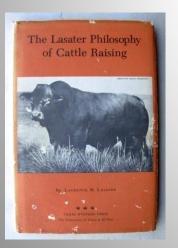
There was a wealth of new information:

"Science and the Merino Breeder" by Dun and Easto, 1970

"Breeding Merinos" by Scott Dolling, 1970







We even borrowed heavily from the logical and practical principles set out in the

"Lasater Philosopy of Cattle Raising".

His statement *Females are the basic business of livestock breeding* struck a chord with us. Selecting rams that were the progeny of highly productive and fertile ewes became standard practice.



Innovative breeding systems

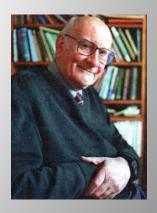
When innovators in Australia and New Zealand introduced the system of Open Nucleus Breeding, we enthusiastically followed suit.

After failing to make progress in a small closed stud, **Tony Parker** of the Romney Development Group, on the advice of **Prof Al Rae** of Massey University, began to introduce high performing females from his clients flocks, thus "opening" his stud to ewes of proven performance.



I visited Tony Parker and Prof Rae in 1974. The most valuable lesson we learned from Tony was to **enlist Nature as a partner** and observe the shape and type of animal that would evolve through selection on performance.

No longer were replacement sheep required to conform to the outdated breed standards dictated by the show ring.





Another important mentor was Jim Shepherd of the Australian Merino Society in WA.

He believed that outstanding breeding material was also present in daughter studs and commercial flocks and should be utilized.

He stated that it was tantamount to a national sin not to identify high performing females in commercial flocks and use them in ram breeding programmes.



This led to his de-registration "for conduct contrary to the objects and ethics of the Australian Stud Merino Breeders' Association". It was very strange that the Stud Breeders at the time considered this serious attempt to improve the productivity and adaptability of Merino sheep as a malpractice.



The Foundation Flock Register

The concept of the Open Nucleus System was so logical and practical and offered so much promise that it was extended to the Foundation Flock Register, where provision was made for promoting females from commercial flocks.

We followed the principle of **promoting only ewes in** the top 20% of a measured age group at the F3 generation. This was a principle adopted by **Prof Ian** Coop of Lincoln University in the development of the Coopworth, a synthetic breed developed along the same lines as the Dohne with strict emphasis on performance.

I was privileged to visit Prof Coop in 1974

Over the decades that this principle has been applied in South Africa, it has had a profoundly positive result.



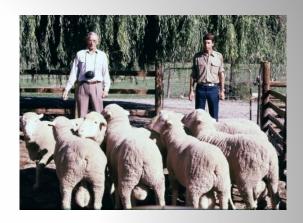


Rearing rams in commercial paddock conditions

Another innovator with whom we maintained close links was **Jim Maple Brown** of Goulburne NSW. Under the guidance of **Dr Helen Newton Turner**, he pioneered the use of selection indices. He was probably the first ram breeder ever to use the (now primitive) computers of the time - 1974 - to store and process sheep records.

He believed in rearing rams in large mobs under commercial paddock conditions in order to ensure equitable comparisons between individuals and to identify those best adapted to the commercial environment.

This fundamental principle still forms the basis of our philosophy.



Jim Maple Bown, left



Dr Helen Newton Turner



1976 – The 10th Anniversary

At the end of the first year 36 small studs were registered with 2500 registered ewes
At the end of 1979 there were 103 registered studs with 18,543 recorded ewes



At the 10th AGM in 1976, **Roelie le Roux** resigned after 10 very effective years as president.

John Torr was the next president. He served with distinction for 15 years.



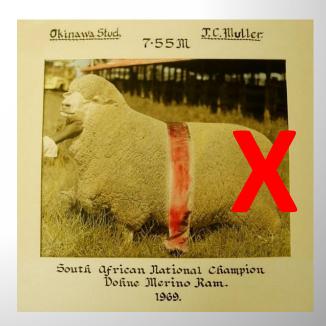
Competitive Shows scrapped in 1978

The success of a stud was now determined by its performance in a commercial environment - not by performance in the show ring.

All animals were now evaluated according to their measured relative efficiency in a commercial environment. Breeders were reluctant to isolate sheep for show preparation.

Show success was no longer of any use to breeders or their clients.





Exceptional growth over the first three decades

By 1990 there were over 300 breeders with nearly 48,000 recorded ewes, spread over the entire country.

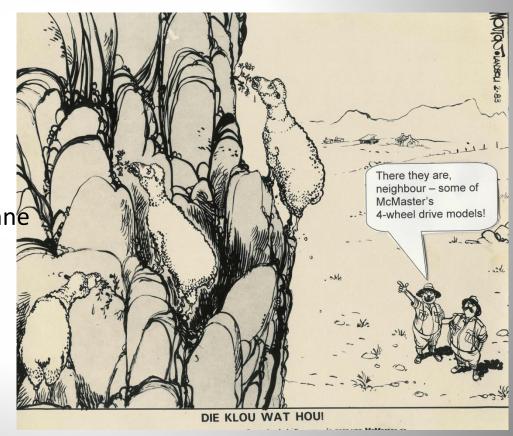
This was the result of:

•Rapid improvement due to effective breeding and selection methods

•The superior productivity of the Dohne (the 4-wheel drive sheep!)

•An education programme targeted at stud breeders, assessors and flock breeders

Effective publicity and promotion





1989 - Our first Video – later converted to DVD

Produced with the assistance of Stellenbosch University

These images taken at the Eastern Dohne Central Nucleus

Barry Armstrong of the EDCN made an enormous contribution to the development of the Dohne. He was my lifelong friend.

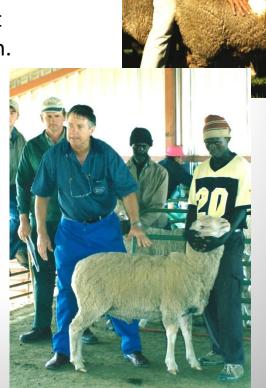


1988 – Henri Londt joined the staff of the Society

Henri Londt joined the staff of the society in 1988 initiating a new era of progress.

He was energetic, enthusiastic and ambitious, but above all highly capable and passionate about performance recording and scientific selection.

the face of the Dohne Merino, taking it to ever greater heights and extending its boundaries to all sheep countries of the southern hemisphere



Henri - the sheepman

Henri the teacher



1994 - Sire reference schemes reveal the flaws in our system

Henri visited Australia and New Zealand in 1991.

Sire reference schemes (SRS) were largely replacing nucleus flocks as an instrument for breed improvement in New Zealand.

Having been thoroughly briefed by **Professor Al Rae** of Massey University, Henri established a number of SRSs.

Using the new technology of breeding value determination, Henri was able to accurately assess the direction in which the breed was heading.

This lead to the remarkable realisation that too much emphasis on fleece weight was inhibiting progress in terms of reproduction and growth rate, the major components of flock income.







Henri's classical analysis of sires in the SRSs

Henri discovered that 93% of our 30 top sires were breeding excessive fleece weight. We had begun to deviate from the principle of true dual-purpose sheep.

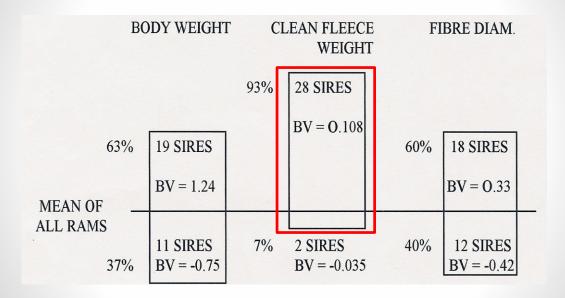


Figure: Henri Londt

From the 1990s wool was no longer the main income driver – it was **meat**. The key to increasing profitability was not fleece weight but rather the correct relationship between fleece weight and body weight – defined as Wool Production Potential WPP% – Clean fleece weight expressed as a percentage of body weight at test age



Targeted research by Wentzel (1991) Herselman *et al* (1993) revealed that excessively high fleece weight, relative to body weight, is negatively correlated with the traits that promote meat production – hardiness, reproduction rate and growth rate

Our sheep were probably already genetically capable of growing more wool than the environment could sustain, and this was impeding their potential

for meat production.

At a workshop in 1995 we amended the selection index, reducing the fleece weight component and increasing the emphasis on fibre diameter.

The WPP% and fibre diameter declined, the fitness of our sheep improved dramatically as did lambing percentages and growth rate.

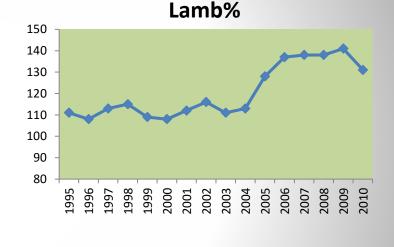


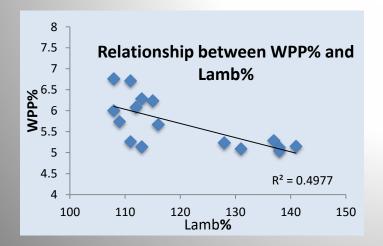


In 1996 the average WPP% of all Dohnes was 6.76%; the average lambing was 108%. Thirteen years later in 2009 the WPP% was 5.15% and lambing over all studs had risen to 141%!









While a proportion of the improved reproduction must be attributed to better management, there is nevertheless a strong relationship between reproduction and WPP%



The transition to across flock breeding values

In addition to fine-tuning the selection indices, with the help and guidance of **Dr Kobus Delport** and Dr Buks Olivier, Henri managed the transition to across flock breeding values, bringing the Society fully in line with international best practice.

It is impossible to quantify the enormous contribution that Henri made to the development of the Dohne Breed worldwide.

It is a tragedy that he was taken from us in 2012 at the height of his career.

Dr Kobus Delport succeeded him as Breed Director





International outreach

Effective international promotion done at successive Merino Conferences and other international events

Sheep and Beef Cattle Conference, New Zealand 1980, and Pretoria 1984

3rd World Merino Conference, Pretoria – 1991

4th World Merino Conference, Uruguay– 1994

World Sheep and Wool Conference, Malvern, UK – 1995

5th World Merino Conference, Christchurch NZ – 1998 (right)





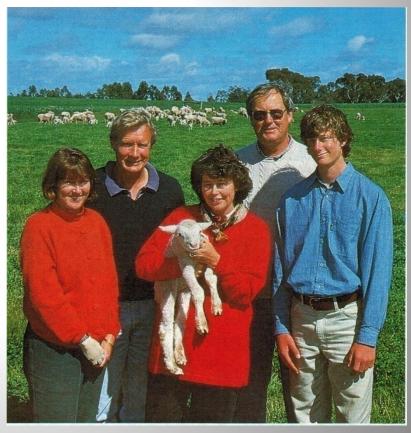
1998 – first embryos to Australia



Members of the EDCN deliver first donor ewes to Dr Jean van Niekerk, Bedford

First lamb born in Australia, October 1998

Lyn and Alex Leach, Helen and Geoff Beeck, with Cameron Beeck, formed the first two studs – Glenlea and Summerfield





In the better environments in Australia the results were even more impressive than in South Africa

By using sophisticated reproduction techniques the numbers of pure Dohnes increased very rapidly



Australian woolgrowers were able to experience for themselves the improvement in profitability of the first and subsequent generations of Dohne progeny



While fully maintaining the amount and quality of Merino wool, Australian wool growers now enjoyed the addition of prime lamb production in self replacing flocks

This was an additional lucrative income source for traditional wool growing enterprises. Even F1 (first cross) Dohne lambs easily met prime lamb export standards





Many outstanding sires were identified

Sire from a pure South African embryo from the Weska Stud

DOHNE AI SIRE RP 00-0132



SIRE: JW 98-0496 **DAM**: JW 94-0473

BW: 3.3 MD: 0.2 FAT: 0.0 FW: -4.5 FD: -1.5 CV: -0.4

FINAL INDEX: 119.0

COMMENTS:

Australia's leading Dohne sire with over 2000 progeny recorded on the database. Four of the top five sires on the database (June 06) are by RP00-0132 or his sons. The progeny of this ram are exhibiting outstanding qualities for Dohne type, length of body and eye muscle area. His daughters represent some of the best breeding ewes in the flock and just keep breeding on.

RP00-0132 is now rising six years and his wool is still outstanding for quality and brightness. His current micron is 19.8, CV 12.2 and CF 99.8%.

At the National Fleece Show at Bendigo, progeny of this ram have taken out the Champion Ewe and Ram fleeces, judged on spinning performance, weight and quality.

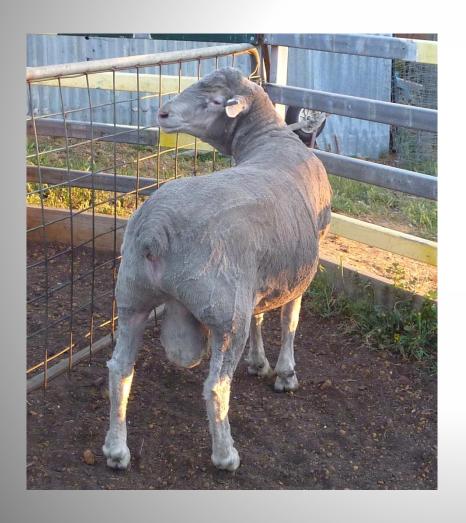
BARE BREECH SCORE: 4 (new scoring system)

No mulesing – a great plus point

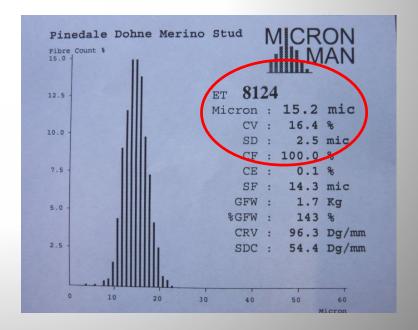




Many outstanding sires were identified





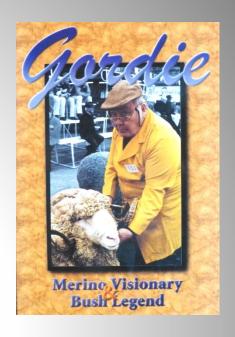




GORDIE McMASTER"Merino Visionary and Bush Legend"

Although differing substantially in our attitude to sheep breeding we have been friends since 1982

While highly critical, when seeing Dohnes for the first time in 1982, Gordie wrote this in his book: "Its beginnings were inauspicious, but in the long term it may have a major influence on Australian merino breeding" (page 112) – very prophetic!









Annual Dohne workshops

From 2002 to 2007 I visited Australia every year to conduct workshops to familiarise new and aspirant breeders with Dohne standards and principles. The welcome and kindness I received was overwhelming and I made many lasting friendships





Allan Casey - made Honorary Life Member for outstanding service to ADBA

I will always be indebted to Allan Casey who was my co-presenter in most of the many workshops we held, and generally looked after my welfare in Australia.



He authored a chapter on Australian Dohne history in "Birth of a Breed", and when visiting me in December last year, we took delivery of the book together - hot off the press from the publishers.

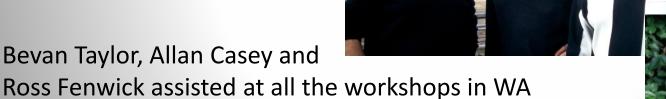
Allan, Lucy Leurs of Simon Says (publishers) and Jacobus le Roux of BKB, sponsor



They have made a great contribution to our breed



David Kain and Sally Coddington, former presidents of ADBA



Allan Clarke, first assessor in NSW. Allan and Bevan drove me many thousands of kilometers to workshops

Bevan even drove me across the Nullabor!!



David Kain, honorary life member of the ADBA

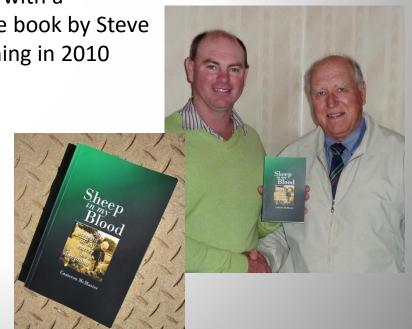


The Far Valley website is a most informative and educational site, illustrating the dramatic improvement in productivity since Dohnes were introduced in 2000.

I was presented with a protocopy of the book by Steve Abbot at Katanning in 2010

When I showed David the manuscript of my first book "Sheep in my Blood", David immediately adopted it as a Dohne project and wrote the foreword. It was published by the ADBA and enjoyed wide circulation.

Thank you David for your friendship and support.



Sc.

CELEBRATING 50 YEARS 1966 -2016

South America 2002 – 2016

The Dohne can deliver a substantial reduction of Fibre Diameter in the local Corriedale and other broad-woolled breeds, while also improving reproduction and growth rate

Because lamb meat is an export commodity, it is important to consider a breed capable of weaning weight of 30kg+ and wool under 22 microns.

The Dohne Merino adequately meets these criteria. Increases of up to 60% in wool income have been reported wherever Dohnes have been used.

Photo: Juan Gysling



URUGUAY









URUGUAY



Tres Arboles dispersal sale, March 2016

Dohnes have realised the highest average ram prices of all sheep breeds this year





Roberto and me – good friends since 1980.

Gabriel Capurro, President of Uruguay Dohne Association, and his son



© El Observador







The breeding programme of the Dohne Merino in Argentina

Modern breeding programme where 100% of animals registered in the Herdbook have productive and genealogical information

Features Breeding Programme

- Implemented by the Argentina Association Merino Breeders.
- PRO-OVINO AVANZADO as a selection tool: All animals have genetic information (EPDs) for wool and meat characteristics.
- All animals are classified and authorized by Argentina Merino Breeders Association Inspector.
- · Open nucleus.

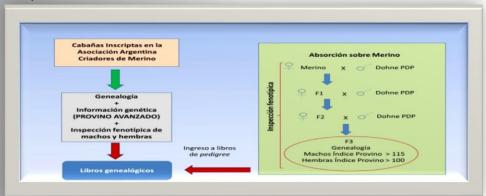


Figure 1: Diagram of genetic improvement programme Dohne Merino breed in Argentina

Dohne Merino numbers

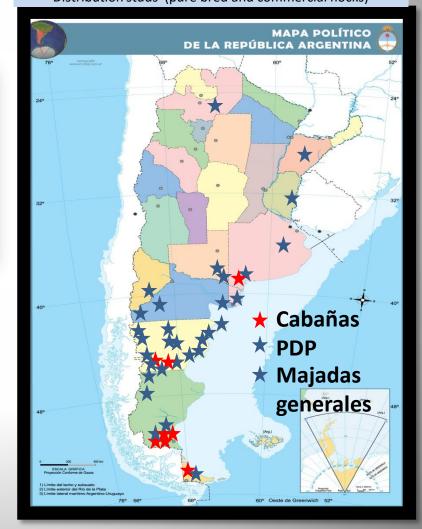
- 450 ewes (pure) in mating (2016)
- 2.000 ewes in upgrading (on Merino)
- 8 studs
- 1.500 animals with genetic evaluation
- 9 traits (wool, meat and feed intake)
- 2 selection index
- 95 sires with genetic evaluation



Alejandro Vozzi

Distribución de las cabañas, planteles fundacionales y uso en majadas generales

Distribution studs (pure bred and commercial flocks)





Chile

Since 2009 the value of wool on this property has increased by 65% for hogget wool and by 60% for adult wool with Dohne blood









Chile

Los Condores:

7000 ha - carries 5000 sheep
Has reduced micron from 29µ to 24µ
in a few years with Dohne infusion
Scans 111% and weans 90% on tussoo

Scans 111% and weans 90% on tussock with no supplements Has Increased 6 months body weight of lambs from 30 to 40kg

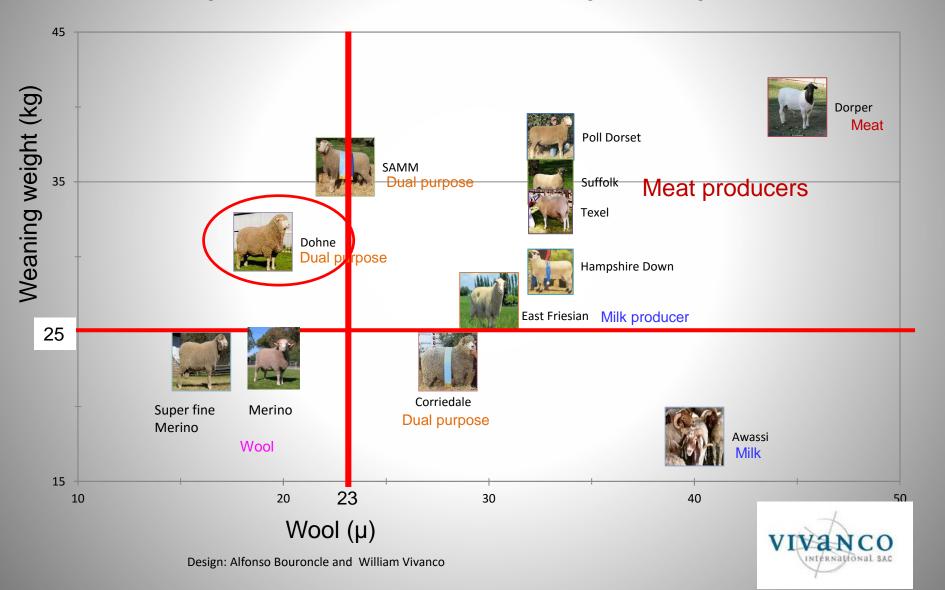


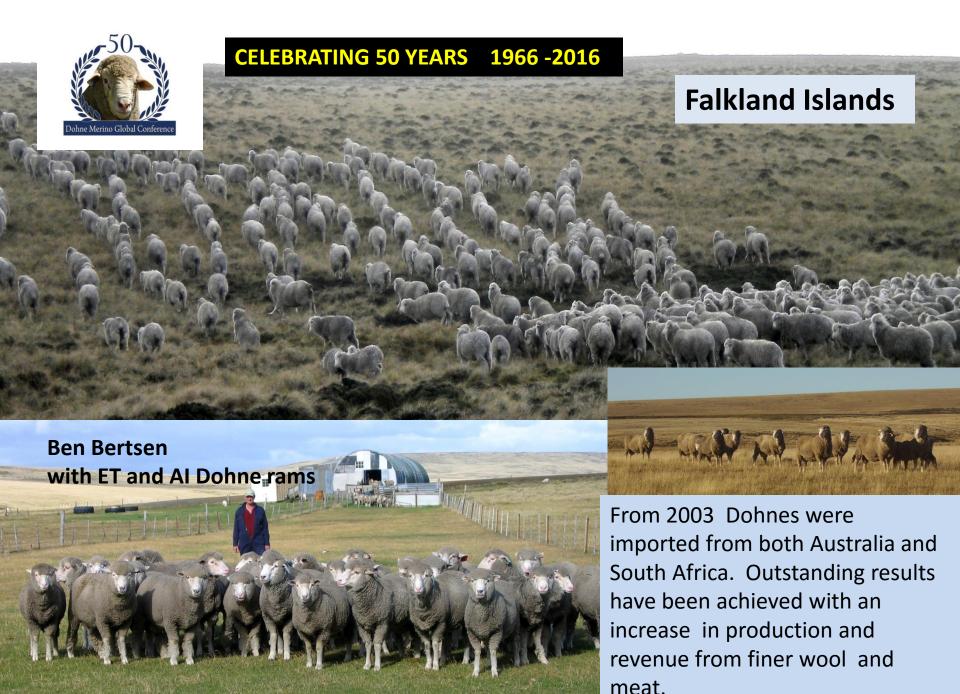
Hernan Elizalde with his team who inseminate 8000+ ewes p.a. with Dohne semen





Classification of the potential of the different breeds of sheep for fine wool and heavy lamb production









Logos























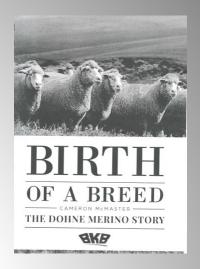






Birth of a Breed - my legacy

Please adopt the last chapter – **The Epilogue** - as your blueprint for the future. It charts the way forward.



It is up to us as Dohne breeders, to continue to improve and enhance the attributes of our sheep by adhering to the fundamental principles that have led to success.



In the 50 years of its existence, the Dohne Merino Breed Society of South Africa has made a major contribution to sheep production not only at home, but in every country where Dohnes are run. I predict a brilliant future for our breed which will continue to improve and expand.

Liza Mari Swart contributed many pictures, including the covers



Thank You

