

CLUNYEXPORTS

AGRIBUSINESS SPECIALISTS

**“Quality is remembered long
after price is forgotten”**

Ed Sabol

DORPER SHEEP

Brief History

The breed was developed in South Africa in the 1930's by crossing Blackhead Persian ewes with a Dorset Horn ram. They were bred to produce a high quality carcass under extensive conditions. The Blackhead Persian was selected for its non-selective grazing, coat shedding, hardiness and good mothering abilities. The Dorset Horn was selected for its rapid growth rates and carcass attributes.

The Breeding program resulted in the development of the black headed and white headed Dorper. successive Dorper breeding has shown it to be a fixed breed type, giving a reliable reproduction of features and characteristics. It is now numerically the second to largest sheep breed in South Africa. Dorper are arguably the most dynamic and successful of the hair sheep breeds.

The breed was introduced into Australia in 1996 and has the potential to be developed for domestic and export meat markets and is revolutionizing the sheep industry in this country.

DORPER SHEEP

Dorset Horn

• Black Head
Persian

Conformation

The Dorper is characteristically barrel shaped with short, dullish black or white hair on the head. A short, loose light covering of hair and wool (wool predominating on the forequarter) with a natural clean kempt underline, is a typical breed standard.

An even distribution of a thin layer of fat compliments the breed.

The Dorper sheds its fleece as hotter weather approaches in the Spring in Australia, thus avoiding the need for mustering for shearing, crutching and fly control. The Dorper, Van Rooy and Damara would be ideal for tropical climates as they are hair not wool sheep and are low maintenance from F3 (3rd generation on).

DORPER SHEEP

There is little difference between black headed and white headed Dorpers – the choice is a matter of target market preference. There is no scientific evidence that one color is superior to another.

The black headed animals are less popular as the black hair has been a problem in the abattoirs on carcasses. White Dorpers are dominating the market now in Australia, with the harder to source Black Dorper becoming more expensive without evidence of better performance than it's white cousin.

Worldwide higher prices are paid for White Dorper pelts than Black Dorper pelts.



Pure Bred Dorper Rams

DORPER SHEEP



Dorper Country
Central Western New South Wales



Dorper Crossbred Lamb
100 days old 40kgs



VAN ROOY SHEEP

The Dorper Sheep have been successfully crossbred with Damara, Wiltshire, Merino, White Suffolk, Border Leicester and Van Rooy breeds. Van Rooy have also been successfully crossed with the above breeds however, are a newer breed to Australia. The Van Rooy are proving to be as tough if not tougher than the Dorper and have crossed exceptionally well with this breed.

Van Rooy

Also Known By: Van Rooy–Persie (Afrik.), Van Rooy White Persian, White Persian.

These extremely hardy sheep were developed by Senator J. C. van Rooy, in the Bethulie district of South Africa in 1906 he started his experiments to propagate a breed of sheep for slaughter lamb production: 1. The breed had to be strong and hardy to cope with regular droughts.

The breed have proved to be quite resistant to internal parasites it has crossed well with not only the Dorpers but also of the Damara and other breeds. In 1997 Cluny Exports Agribusiness exported the first Dorper and Van Rooy x Dorper crossbreds to Pakistan. The weight gains and adaptability of these animals has been exceptional.

THE VAN ROOY



Van Rooy Ewes near
Forbes, New South Wales

VAN ROOY SHEEP

With the purpose in mind to breed a hardy, drought resistant animal that could thrive on relatively poor feed, he made use of a white "Blinkhaar Afrikaner" ram and eighty Rambouillet ewes. With the progeny of these the principle of inbreeding, coupled with severe selection, was applied. This selection mainly aimed at size conformation and white sheep with enough wool in between the bristly hair to serve as protection against cold and yet this would shed in the hotter summer months.

Senator Van Rooy realized that he could not dispose of fat localization without sacrificing hardiness and fertility. Then an attempt was made to get good conformation with a little fat localization on the body as possible and only a reasonable accumulation on the rump.



VAN ROOY SHEEP

The present day Van Rooy sheep is still run mostly in the arid areas where survival and reproduction on natural grazing are essential for the economic production of meat. They are generally put into tougher areas than the Dorper sheep.

As well as grazing with the pure Van Rooy some farmers in South Africa also take advantage of the hardiness of the Van Rooy ewe to crossbreed with Dorper, White Dorper Merino and others to produce a heavier slaughter lamb. This breed is new to Australia and is proving to be hardy and a great cross with the Dorper breed.

The milking ability of the Van Rooy ewe coupled with her ability to utilize natural grazing in adverse conditions allow maximum production in the dryer areas.

Van Rooy sheep although a new breed to Australia are proving to be even faster maturing than other hair sheep breeds including the Dorper sheep.

DAMARA SHEEP



Damaras are one of the oldest sheep breeds in the world originating from the Hamites in Eastern Asia and Egypt and moved down to Namibia and Angola. They require the least maintenance of the hair sheep mentioned, require no shearing, docking or crotching, are highly resistant to parasites and are poly-estrus (able to reproduce at any time of year).

They are low cost survivors. Their fat tail is like the camel's hump - a store of fat reserves laid down in good times for use in the drought. They have smooth clean rear ends, unattractive to blow flies. They don't need shearing, crutching or docking. They are agile and alert, and stick together in herds for mutual protection against predators. And they are very fertile, all-season breeders. Lambing percentages average from 110% to 130%. Damara ewes can have their first lamb by the time they are one year old.

The Damara is noted for its high value skin ("glove" quality). Damaras come in all colours, and flocks are quite pretty.

Reports on crossbreeding with Van Rooy's in Australia have been exceptional. They don't achieve the high weight gains of the Dorper, however, are a tough low maintenance breed.

IMPORTANCE OF SHEDDING ABILITY

The Dorper and Van Rooy sheep can be described as full shedding or partial shedding or non shedding. In a tropical Environment a sheep that sheds (loses) its' hair is critical to the success of a farming venture. Sheep that do not shed will need to be regularly shorn to avoid external parasites. During the wet season in Lahore temperatures can be in the high 40s with high humidity, so full shedding hair sheep are critical. The same can be said of Malaysia and the Philippines or any tropical climate where farmers are contemplating importing hair sheep. The right animal must be imported to suit the environment, the hair sheep we send to Pakistan would vary from those we send to Malaysia.

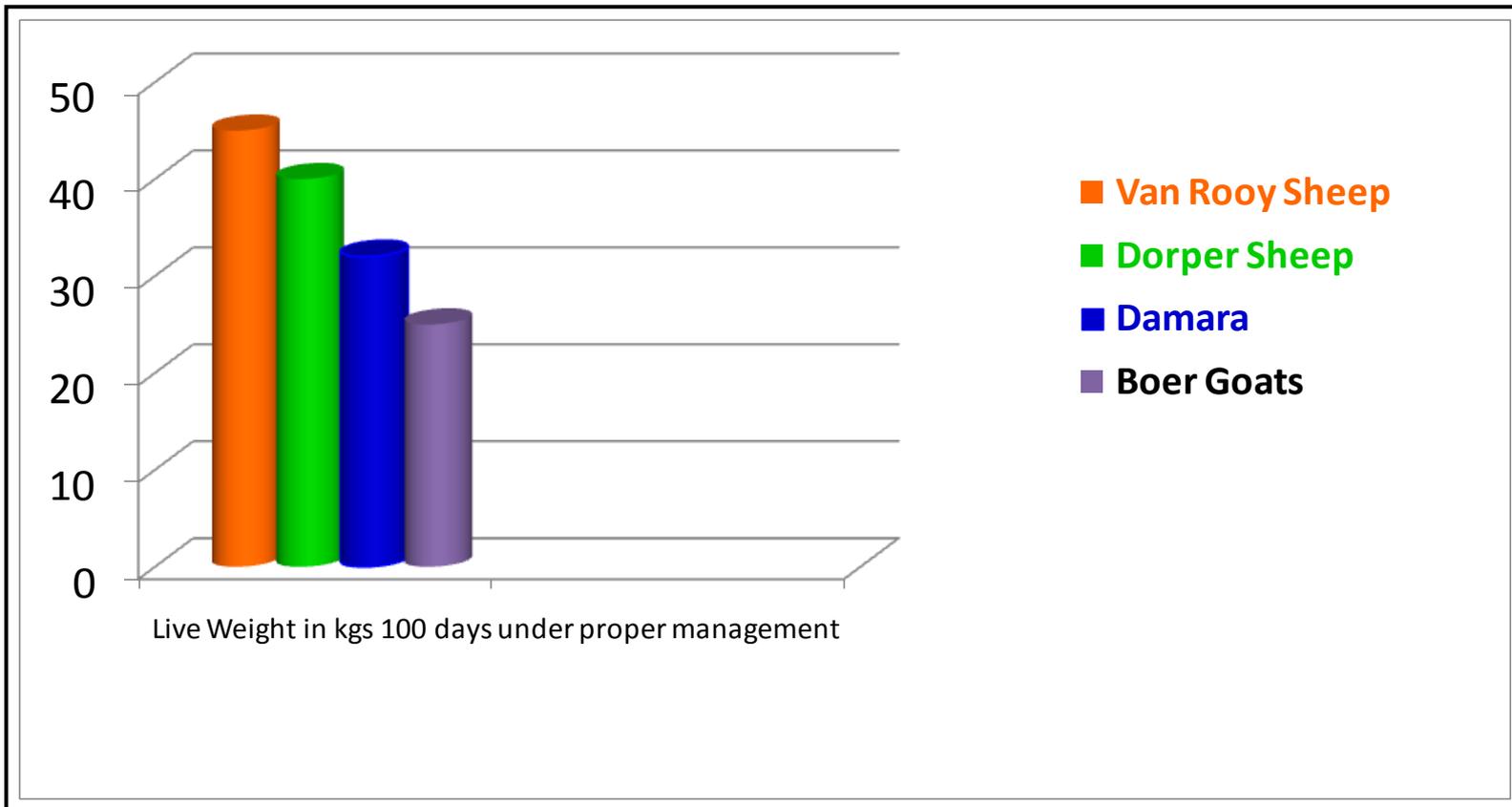


Dorper ram exported to Lahore, Pakistan



Full shedding Van Rooy x Dorper ewes
Lahore, Pakistan

HAIR SHEEP – LIVE WEIGHTS 100 DAYS



CROSSBREEDING GUIDE

Some questions on Crossbreeding

When we speak of crossbreds what do mean?

A Dorper Crossbred has a Dorper ram and another breed as the mother, a Van Rooy Crossbred has a Van Rooy ram and another breed as a mother etc.

By F3 or F4 what do you mean ?

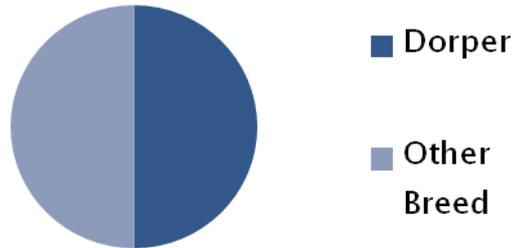
This refers to the generation of the crossbred, Dorper F1 is first generation crossbred, F2 is second generation etc.

When is a Crossbred nearly pure?

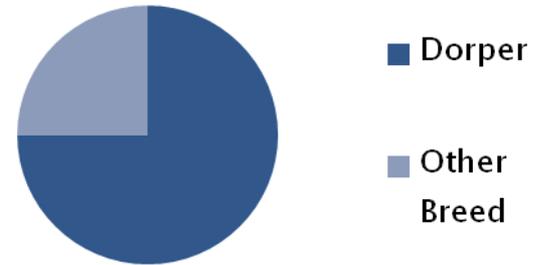
An F11 is 2047/2048 or 99.95% pure. The guide on the next page details the percentage of genetics if the same breed ram is used every time.

CROSSBREEDING GUIDE

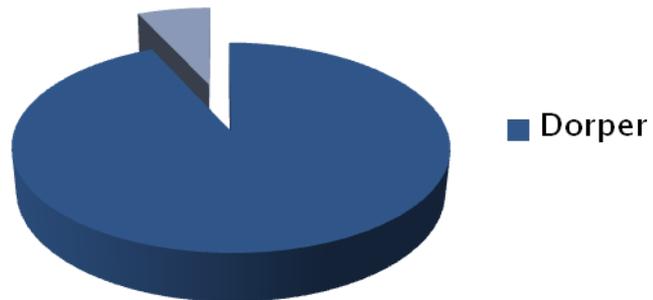
**% DORPER IN F1
CROSSBRED**



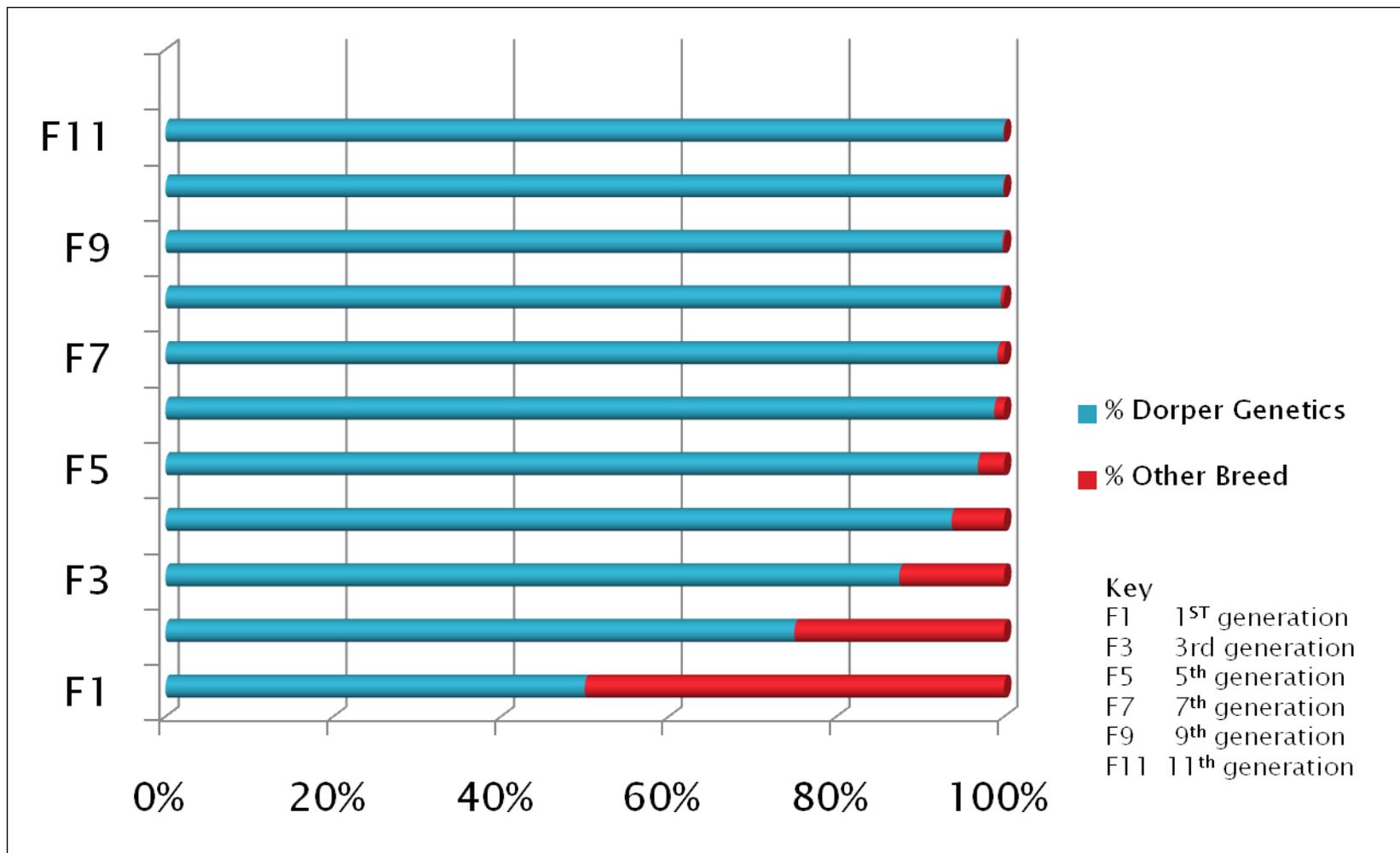
**% DORPER IN F2
CROSSBRED**



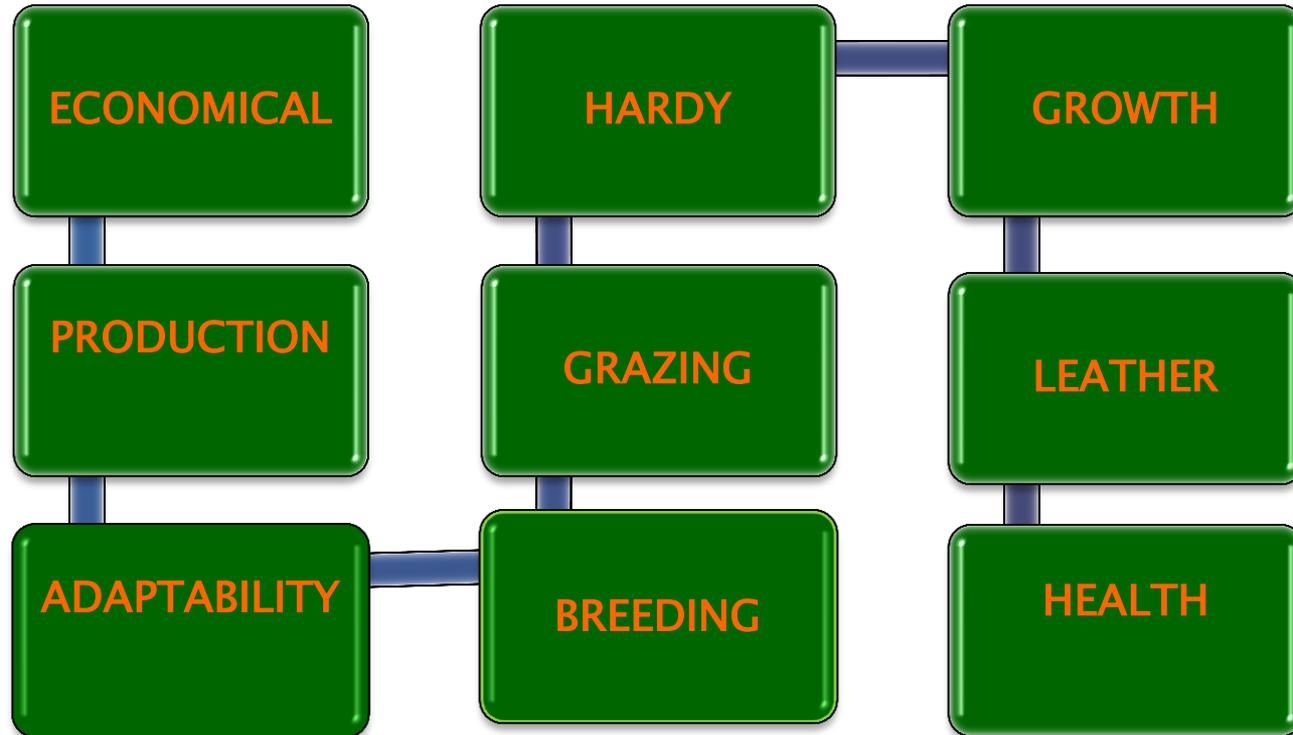
**% DORPER IN F4
CROSSBRED**



CROSSBREEDING GUIDE



THE ADVANTAGES OF HAIR SHEEP



THE ADVANTAGES – ECONOMICAL

ECONOMICAL

The Hair Sheep are an economical breed due to:

- ❑ their excellent feed utilization and conversion
- ❑ the fact they don't need shearing (minor clipping on back every year)
- ❑ with Damara requiring no clipping
- ❑ no need for crutching and mulesing shearing, crutching and mulesing
- ❑ disease resistance
- ❑ little to no trouble with grass seed contamination in carcass
- ❑ small vigorous lambs at birth so reduced lambing problems
- ❑ decreased susceptibility to internal and external parasites.

THE ADVANTAGES – PRODUCTION

MEAT PRODUCTION

- Purebred Dorper and Van Rooy rams reach a live weight of 90–120 kg and ewes 50–80kg. The carcass has a good conformation and fat distribution
- Trials and producer experience in Australia indicate that it should be possible to breed Dorper Crossbred lambs with a bodyweight of 40kg at 100–110 days, to produce a carcass of about 17–21 kgs the Van Rooy being about 5kgs heavier at this same age
- Have a dressing percentage of over 50%. This compares to up to 48% for Boer Goats, 42–45% for feral goats
- Meat qualities such as low fat, tender, fine grain, good flavour, minimal aroma. Carcass quality i.e: high meat to bone ratio.

As shown in the show ring, carcass competitions and in analytical comparison between sheep breeds, Dorpers produce a superior quality and highly sought after carcass. They have a higher percentage of muscle and a lower percentage of fat. They are also high in Omega 3 and 6 Fatty Acids (unsaturated fats see also Health).

THE ADVANTAGES – ADAPTABLE

ADAPTABILITY

Hair sheep are now well adapted in South Africa to a variety of climatic and conditions. It thrives in arid to semi-tropical areas and 100mm–760mm rainfall. In Australia Hair sheep are found in similar regions and climates.

Hair sheep thrive in arid to tropical climates and are suitable for areas with rainfall of only 100 to 760 mm. Although this breed was developed originally for the more arid areas of the South Africa, today they are widely spread throughout the country. The breed has performed well in Namibia and has been exported to many countries throughout the world including Zimbabwe, Zambia, Kenya, Mauritius, Malawi, Burundi, Israel, Saudi Arabia, Brazil and now in Australia (Campbell 2000; de Waal and Combrinck 2000; Milne 2000).

THE ADVANTAGES – HARDY

HARDY

The Dorpers have the ability to thrive in harsh conditions. They were developed to be turned off quickly from arid, extensive grazing conditions in South Africa and have the potential to be produced successfully in a wide range of climatic conditions in Australia. The cross with the Van Rooy is proving to be an exceptionally tough sheep.



From Arid climates to

THE ADVANTAGES – HARDY



greener pastures -Hair sheep thrive in all conditions.

THE ADVANTAGES –GRAZING

GRAZING

Hair sheep are non-selective grazers. Experience so far suggests that these sheep can adapt to most grazing conditions. There is evidence that they prefer fibre to grains and they respond well to good quality hay.

While Hair sheep are often referred to as "non selective" grazers, this term can be misleading. It suggests that these sheep will eat anything, although research shows that they have similar diet preferences to that of the Merino. However, their foraging behavior in comparison to that of the Merino is very different. The Merino will travel large distances in a day, selecting the choicest of what is available and moving from one area to another, always looking for a better bite. Hair sheep on the other hand, whilst still eating a similar diet, is content to eat what is under its nose.

THE ADVANTAGES –GRAZING

GRAZING cont'd

This has multiple benefits in that there is a large reduction in the amount of forage wasted through trampling, the food intake per metabolic body weight is lower, and we believe the Dorper and Van Rooy crosses are improving pasture conditions.

Purebred lambs will start to graze in the first few days after birth. F1 lambs after about two weeks.

Hair sheep can be advantageously incorporated into under-utilized pastures of lesser quality, thus converting a poor asset into profit.

THE ADVANTAGES – BREEDING

BREEDING MERITS

Hair sheep are one of the most fertile of the sheep breeds, are polyoestrus (can breed continually, with no defined season) with potential lambing intervals of only 8 months. Their breeding intervals can be as short as 8 months or 3 times in 2 years. Strong mothering and protective instincts – great milk production over a long period of time.

Lambing percentages in excess of 150% (2.25 lambs per annum) are possible and 100% is feasible for most areas. Short lambing intervals have various advantages, of which greater selection possibilities and the sale of larger numbers of lambs are the most important.

THE ADVANTAGES – BREEDING

BREEDING MERITS cont'd

Rams high in libido – high fertility and fecundity running rams with ewes continuously is one option that may stimulate reproduction, however it is also likely that ewes will adjust their fertility according to conditions. Rams reach sexual maturity at an early age, rams have been observed to start working at five months of age.

The ewe is a very good mother and protective of her young. Multiple births are common, with some instances of triplets recorded. Lambs are extremely mobile at birth and survival rates are high. The Hair sheep ewe produces a large quantity of milk, aiding lamb survival and early growth.

Dorper Crossbreds ewes have higher weaning rates of lambs compared to Merinos bred to three other breeds (source Dorper and White Dorper 2005)



THE ADVANTAGES –GROWTH

GROWTH RATES

Dorper lambs have an inherent weaning weight. growth potential (ability to graze at an early age) They grow rapidly and can attain a high live weights at an early age.

They respond well to increased planes of nutrition, giving growers the potential to increase weights rapidly in response to market demands.

Dorper Sheep consistently reach a finishing weight faster than other breeds, and they do this with a lower food intake.

Dorper lambs from the Eastern States of Australia grow fast obtaining weights of around 37-40kgs at 100 days with good quality genetics. Carcasses at this age range from 17-21 kgs.

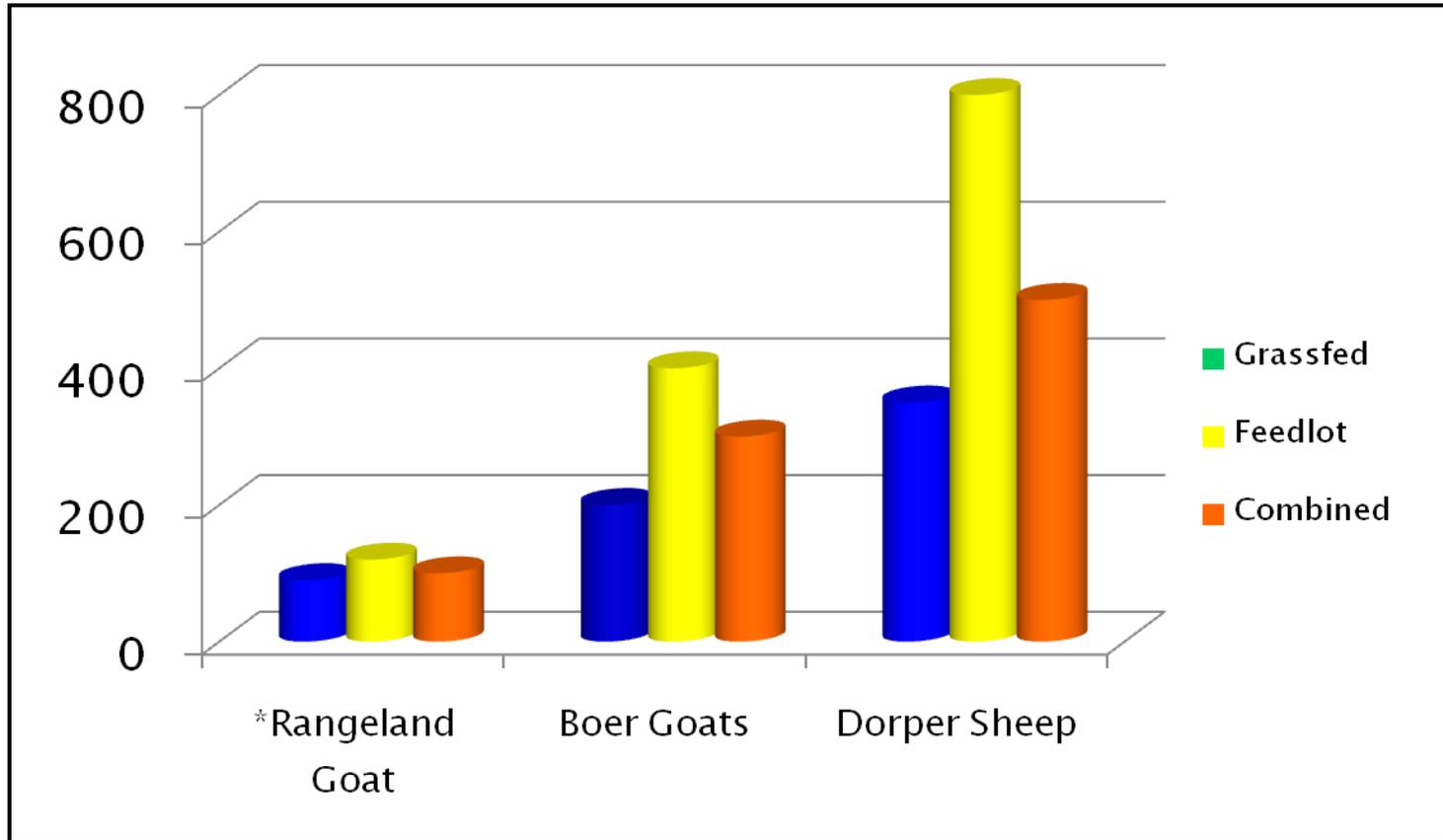
Dorper cross lambs are heavier than Damara Cross lambs and Van Rooy's are heavier yet again.

THE ADVANTAGES –GROWTH



Young Dorper Crossbreds achieve live weights of between 35 – 40kgs at 100 days of age and Van Rooy's 45kgs plus at the same age.

WEIGHT GAINS PER DAY IN GRAMS



*Indigenous also known as feral

THE ADVANTAGES– LEATHER

QUALITY LEATHER

Dorpers are a dual product sheep, the hides are the most sort after in the world and in many countries represent a greater part of the income.

Dorper and Damara are considered to be high enough quality for glove leather.

The Dorper skins are regarded as some of the finest in the world and are highly prized by Mercedes Benz for car leather seats. They have a smooth grain and are used in the manufacture of high quality gloves and automotive seating. The skin structure is tighter and denser than goat skins or wool sheep skins, and the thickness of the skins allow them to be split. This means each Dorper lamb skin can be used to produce twice the square footage of leather compared to other pure hair sheep.

THE ADVANTAGES– HEALTH

HEALTH

The health aspects of Boer Goats and Hair sheep have been backed up by research as people turn away from diets containing Saturated and Trans Fatty Acids. This complex subject is covered in another PowerPoint presentation.

Our website has more information (see White Papers on Home page) and galleries plus videos (see breeds section) at:

www.clunyexports.com

CLUNY LIVESTOCKEXPORTS

Please do not hesitate to contact
Angus Macpherson if you have any questions.

TEL: + 61 2 8205 9617

MOBILE: + 61 404 009343

Email: angus.macpherson@clunyexports.com

Website: www.clunyexports.com

Skype: [angusmacpherson888](https://www.skype.com/people/angusmacpherson888)

References

- Baker R.L. Mwamachi D.M. Audho J.O. Aduda E.O. and Thorpe W. 1999. Genetic resistance to gastro-intestinal nematode parasites in Red Maasai, Dorper and Red Maasai X Dorper ewes in the sub-humid tropics. *Animal Science (UK)*. **69(2)**, 335–344.
- Baker R.L. Mugambi J.M. Audho J.O. Carles A.B. and Thorpe W. 2002. Comparison of Red Maasai and Dorper sheep for resistance to gastro-intestinal nematode parasites, productivity and efficiency in a humid and a semi-arid environment in Kenya. Proceedings of the 7th World Congress on Genetics Applied to Livestock Production, 18–23 August, Montpellier, France.
- Brand T.S. 2000. Grazing behaviour and diet selection by Dorper sheep. *Small Ruminant Research*. **36(2)**:147–158.
- Campbell Q.P. 2000. Make money with Mutton sheep.
- Cloete S.W.P. Snyman M.A. and Herselman M.J. 2000. Productive performance of Dorper sheep. *Small Ruminant Research*. **36(2)**:119–136.
- DAD-IS 2005: <http://dad.fao.org/en/home.htm>
- DAGRIS, 2005: <http://dagris.ilri.cgiar.org>
- de Haas H.J. Chemitei V.C and G.P. Smith. 1973. Three years experience with Dorper sheep at the National animal Husbandry Research Station, Naivasha. Sheep and Goat Development Project, Ministry of Agriculture, Kenya. Working Paper No. 4. pp.5.
- de Waal H.O. and Combrinck W.J. 2000. The development of the Dorper, its nutrition and a perspective of the grazing ruminant on veld. *Small Ruminant Research*. **36(2)**:103–118.
- Fourie L.J. and Horak I.G. 2000. Status of Dorper sheep as hosts of ectoparasites. *Small Ruminant Research*. **36(2)**, 159–164.
- <http://studbook.co.za/society/dorper/right.html>
- King'oku J.M. J. N'Thorne E.M. Ogutu and C. Rakozi. 1975. Fifteen years production data on Dorper sheep at Katumani research Station, Machakos, Kenya. Sheep and Goat Development Project, Ministry of Agriculture, Kenya. Technical Note No. 12. pp.12.

References

Milne C., 2000. The history of the Dorper sheep. *Small Ruminant Research*. **36(2)**:99–102.

Schoeman S.J. and Burger R. 1992. Performance of Dorper sheep under an accelerated lambing system. *Small Ruminant Research*. **9**:265–281.

Schoeman S.J. 2000. A comparative assessment of Dorper sheep in different production environments and systems. *Small Ruminant Research*. **36(2)**:137–146.

Related Literature

Buvanendran V. Makuzaa S.M. and Chironga P. 1992. Phenotypic and genetic parameters of weaning traits in Dorper sheep in Zimbabwe. *Small Ruminant Research*. **7(4)**:369–374.

Chemitei V.C.C. 1978. The sheep and goat production at various Research Stations in Kenya. Sheep and Goat Development Project, Ministry of Agriculture, Kenya. Technical Note No. 21. pp. 16.

CLUNY LIVESTOCK EXPORTS

CLUNY LIVESTOCK EXPORTS

