

THE U.K. LAMB INDUSTRY  
AND THE INFLUENCE OF  
THE TEXEL SHEEP

REPORT BY:  
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## **ACKNOWLEDGEMENTS**

The opportunity to apply for a Nuffield Scholarship came for me at a time when I least expected, with Eastern Australia still gripped by a five year drought, in the midst of one of Australia's worst rural recessions. How could I possibly leave under such circumstances? I now realise I could not have afforded to miss a single day of my five month scholarship, which took me to Europe and the U.S.A.

Nothing could have been possible without the continual support from my family, especially my wife Kym, whom I seemingly 'abandoned' only ten days after the birth of our first child, Zoe. I am forever grateful to Kym, my parents Ian and Sally, and Kym's parents Lester and Barbara for so capably continuing the smooth operation of our family properties under such adverse conditions.

My thanks, to my referees Mr. W. Bonthron M.B.E., O.A., and Mrs. Jan Joyce from the United Graziers Association for their supportive statements, and to the Nuffield selection committees in Brisbane and Melbourne for having faith in me to live up to the high expectations of Nuffield.

## **SPONSORS**

My gratitude to QANTAS for providing me, and later my wife and daughter, with the wonderful opportunity to fly to Europe and return on the safest and best airline in the world, and also to Q.I.D.C. for making the financial side of my scholarship dream a reality.

U.K. HOST: To Richard and Anna Knight of "Dry Lease Farm", Siddington, Cirencester, thankyou for making my infrequent stays so enjoyable and fruitful. The ultimate hosts in the most magnificent part of England.

## **OBJECTIVES**

My objectives were to study the lamb industry in the U.K. and the Texel sheep's influence on this sector, and ultimately our own Australian Market. Also visits to two major cattle cross and composite breeding operations in the U.S.A. King Ranch, Kingsville, Texas and the Leachman Cattle Company, Billings, Montana, combined with an intensive study programme at the U.S. Agricultural Department, Meat Animal Research Centre, Hastings, Nebraska; to evaluate crossbreeding advantages to the Beef Industry and the influence of the Gelbvieh Breed within the industry.

Nuffield gave me the opportunity to visit many places associated directly and indirectly with agriculture. It gave me insights into areas of diversification outside our traditional farming practices, and the ability to assess our home situation into the future whilst some 13,000 miles away; hence I kept my objectives somewhat flexible during my trip.

However, as over four months of my scholarship was spent studying the Meat and Lamb industry in the United Kingdom and Europe, I have written to that theme for this paper, and hence condensed my impressions from the U.S.A. into my statements concerning the future of our Australian Meat Industry.

Nuffield has given me the opportunity of a life time. My objective was to make the most of it!

## **FELLOW SCHOLARS**

|                       |   |             |
|-----------------------|---|-------------|
| Tony Lehmann          | - | N.S.W.      |
| Rod Bradshaw          | - | Canada      |
| Les Kletke            | - | Canada      |
| Jack Rigby            | - | Canada      |
| Jean Francois Marmier | - | France      |
| Roger Barton          | - | New Zealand |
| Tony Reilly           | - | New Zealand |
| Trevor Gifford        | - | Zimbabwe    |

An excellent six weeks sharing your company, humorous and educational and in the close confinement of a mini bus, made me realise how much I missed my wife!

## INTRODUCTION

For every one sound reason to eat meat, there are at least half a dozen to ‘counter attack’; be they factual, emotional or total distortions of truth, the MEAT INDUSTRY is placed continually in the ‘defence’ and struggles to maintain image and market share.

My intention on the scholarship, was to discover what influence consumer trends and fashion has had on the Meat Industry in the U.K., specifically lamb, to seek the benefits of Quality Assurance (if any) and to relate marketing methods used in Europe back to our own Australian environment. My belief that the “Texel” sheep could be a major benefit to our lamb industry had to be substantiated by understanding the origin of the sheep and observing its performance in today’s market place in the U.K. Only then can a true assessment of the breed be concluded.

## MEAT CONSUMPTION AND CONSUMER TRENDS

Australians, like 97% of the British population, enjoy eating meat, which seemingly pales into insignificance the true vegetarian 3% (Meat and Livestock Commission, 1994).

However, in real terms, consumer influences are having an important effect on the demand for meat. Overall in the United Kingdom and Australia, meat consumption has not changed much in the past twenty years, although red meat consumption has steadily declined for the past ten years to the advantage of poultry and pork. (See Figure 1.)

**Figure 1. Per Capita Red Meat Consumption in Australia, 1985-1995**

| Year | Beef and Veal | Mutton | Lamb | Pigmeat | Total |
|------|---------------|--------|------|---------|-------|
| 1985 | 39.3          | 7.0    | 17.5 | 16.8    | 80.3  |
| 1986 | 39.7          | 6.5    | 15.8 | 16.7    | 78.5  |
| 1987 | 38.3          | 8.6    | 14.7 | 17.1    | 79.0  |
| 1988 | 38.3          | 6.1    | 14.5 | 17.6    | 76.4  |
| 1989 | 39.9          | 7.9    | 15.5 | 18.0    | 81.2  |
| 1990 | 38.3          | 9.8    | 14.6 | 18.2    | 81.4  |
| 1991 | 37.8          | 6.0    | 13.4 | 18.1    | 75.5  |
| 1992 | 36.6          | 7.1    | 13.0 | 19.1    | 75.6  |
| 1993 | 36.7          | 8.8    | 11.6 | 18.9    | 76.1  |
| 1994 | 37.1          | 5.5    | 11.6 | 19.1    | 73.4  |
| 1995 | 34.2          | 4.7    | 11.0 | 19.0    | 68.7  |

(Australian Meat and Livestock Corporation, 1996)

The reasons for this are many, but have much to do with the changing socio-economic environment seen in progressive consumer lifestyles.

Change in the family structure (single parents), expansion of the retailing industry (supermarkets), younger more informal consumers and their various culinary requirements and cooking ability, health, diet and vegetarianism are to name but a few key issues underlying meat demand in the U.K. today. More problems lie around the corner and could be potentially more destructive to the industry than anything encountered in the past - the all powerful and financial Animal Welfare Lobby. The Europeans are already experiencing the influence of this group, as will we in the future. Surprisingly, the poultry and pork industries have had little influence from the Animal Welfare groups, but disastrous effects to these industries' intensive operations could be close at hand. Our Nuffield group experienced first hand, the 'power and the emotion' generated by these people at Coventry Airport during the 'Veal Crate' controversy. In my opinion the majority were 'professional' demonstrators.

## **QUALITY ASSURANCE AND THE IMPORTANCE OF IMAGE**

All is not doom and gloom however. There is a large majority of people eating meat, the issue is, how do we keep that majority. The most effective means at our disposal is the presentation of a 'healthy image' for our product. Excellent results have been achieved with selective promotion in the U.K. from the "Farm Assured, Scotch Beef and Lamb" programs and "Certified Angus Beef" both operating successfully in Britain, promoting a healthy, environmentally friendly and most importantly, a quality product with prompt and understandable feedback to the producers. We have only tipped the 'iceberg' in Australia with similar groups and need to aggressively pressure our competitive markets in such a manner, presenting our product to a very cautious and informed consuming public.

Following in the 'health conscious' push has been the emergence of the present 'lean meat' era. This has coincided with the widespread introduction of the continental beef breeds and their expansion in the lean beef markets of today, giving higher growth rates, less external fat, leaner meat and arguably, more 'dollars in the pocket' all without great emphasis on beef quality. Some say this has come to the detriment of taste and tenderness. Even if this

is the case, how often do we experience the taste of meat alone, without the flavouring of spices, sauces and other such additives with today’s culinary techniques and fashions? It should be remembered that the 25-40 years old, price conscious and busy housewife is the consumer today, not the experienced breeder of our traditional animals.

During a visit to “The Chitty Group” Guilford abattoir, south of London, I saw modern meat processing in action - topside muscle being tenderised in a press with hundreds of needles, cut into exact portions, flavoured, and presented in a packet you could almost eat itself as it looked so good! Sold in identical portion prices, with a 7 day shelf life, by one of the largest wholesaling abattoir chains in the U.K. to one of the most exclusive supermarket chains. Tenderness and taste were added in the processing, image and presentation is what is all important in this ‘large turnover’ section of the industry.

**Figure 2. European Union Sheep Classification Grid**

|   |   | <i>FAT CLASS Increasing fatness</i> |   |    |    |    |    |   |
|---|---|-------------------------------------|---|----|----|----|----|---|
|   |   | 1                                   | 2 | 3L | 3H | 4H | 4L | 5 |
| CONFORMATION CLASS<br><br>Increasing conformation | E |                                     |   |    |    |    |    |   |
|   | U |                                     |   |    |    |    |    |   |
|   | R |                                     |   |    |    |    |    |   |
|   | O |                                     |   |    |    |    |    |   |
|   | P |                                     |   |    |    |    |    |   |

To identify the carcasses to suit special markets or supermarket requirements, the European Sheep Classification Grid has been in use in the E.U. for some time and controlled in the United Kingdom by the “British Meat and Livestock Commission”. (See Figure 2.) My Nuffield scholarship allowed me to study this carcass classification system and furthermore, the way that the Texel Sheep has influenced the British market as a continental, lean lamb, aiming to fulfil the market requirements.

There are five main classes within the carcass classification scheme, E, U, R, O and P. The conformation class is determined by a visual appraisal of shape, taking into account carcass

‘blockiness’ and fullness of the legs. No adjustment is made for the influence of fat on the overall shape in this class. The fat class is determined by a visual appraisal of external fat development. There are five main classes ranging from 1 (very lean) to 5 (very fat). Classes 3 and 4 are subdivided into L (leaner) and H (fatter).

The scheme is used in the industry on a voluntary basis, but my experience proved that the larger and more market conscious operations are utilising this system for the identification of superior quality carcasses, and the premium return is available to producers who fulfil the top category requirements.

One such operation is “The Chitty Group” from Surrey in England. They offer what is called the “Special Lamb Premium” paying presently 25 pence (54 cents) per kg above the average current market value for lambs fulfilling the top criteria, namely the E and U, 2 and 3L classes. See figure 3.

**Figure 3. Chitty Special Lamb Premium Grid**

|   | 1 | 2     | 3L | 3H                    | 4L | 4H |
|---|---|-------|----|-----------------------|----|----|
| E |   | + 25p |    | P<br>R<br>I<br>C<br>E |    |    |
| U |   |       |    |                       |    |    |
| R |   | BASE  |    |                       |    |    |
| O |   |       |    |                       |    |    |
| P |   |       |    |                       |    |    |

This equates to nearly a 10% premium on today’s Hot Dress Weight (HDW) market values in Britain which presently stands at around 230 pence/kg (Meat and Livestock Committee, 1995).

The breed continually returning these market premiums is the Texel, both as a pure and cross-bred lamb.

## **THE TEXEL SHEEP IN THE EUROPEAN MARKET**

“Texel” is an island off the bleak North Sea Coast of Holland where the soil is sandy and natural vegetation is sparse. The Texel sheep belong to the ancient “Polder Sheep” group. Other breeds included the East Friesian, Groningen and The Zeuise, hardy white faced, short tailed marsh sheep that grazed the coastline from Denmark to Northern France including the Polders; areas of reclaimed land from the sea. By means of cross-breeding with the Leicester, Wensleydale, Lincoln and Cotswold sheep, the new Texel sheep was developed and greatly improved through continual selection to the present day.

Since 1930, the Texels have been exported world wide to such climatically varied destinations as Spain, Denmark, Poland, Mexico, South Africa, Egypt and New Zealand and in 1993, Australia. France, now a bastion of the breed, boasts the oldest flock book outside Holland. The first pedigree Texel females were imported into Britain from France in 1974, and vast improvements have been made to the breed by way of progeny testing, back fat and muscle depth scanning and more recently, the sire reference scheme to identify superior genetics. The Scots were the first in Britain to realise the advantages of this breed and to my mind, have today the most adaptable and practical Texel to suit the U.K. markets, and should be the type that Australian breeders should strive towards. They, the Scottish, have developed the Texel sheep, retaining its superior carcass, into a most practical and commercially viable sheep. After visiting eight of the most respected breeders in North Holland and Texel Isle, I concluded that the type seen in Holland, an extremely over muscled animal, has lost important commercial traits that we would recognise. I believe the animal must be competitive in the market as a breed in its own right, before it can be channelled into the terminal sire market. Like the extreme ‘genetic freaks’ seen in the “Belgium Blue” beef cattle, the Dutch Texel pedigree breeder has placed too much emphasis on show ring success and pleasing select judges, and not addressed future existence of the breed. Overall conformation such as feet and leg structure, respiratory and breeding problems have developed since the emphasis on muscle hypertrophy (double muscling) has been pursued. Returns such as \$150 Australian dollars equivalent, for a 12 kg carcass from a 10-12 week old lamb (yields of up to 60%) in Paris keep the Dutch breeder striving towards heavier young lambs and premium returns at the expense of the breeds physical viability. Considering that the average Dutch farmer may own only 20 acres,

valued up to \$50,000 an acre in some regions, and has lived for generations under the same roof as his animals assisting them in every way to eat, walk and breed, you learn to understand why this development has taken place.

Fortunately these problems do not occur in the competitive commercial Texel we see today in the U.K. Sound structure combined with excellent balance of length and hindquarter development, together with prolificacy and hardiness are features of the Texel amongst the breeders in the U.K. Texels continually dominate the lamb and carcass competitions winning major events including the Royal Smithfield Show, because of their conformation excellence and high killing yield.

Criticism of traditional breed problems and traits is hardly valid when one can see the success that the breed enjoys today. How many of us would consider the original Merino sheep, Hereford or Angus cattle, as commercially viable in our present Australian market environment?

Dystocia (lambing difficulty) is a common concern amongst Australians in their consideration of the Texel and is a valid concern considering the difficult conditions that we must survive and compete in, in comparison to the intensive U.K. systems. European management practises and market rises revolve around the Easter lamb premium. This means that most ewes are lambed in-doors in February, during the winter period and are obviously fed, bedded and physically checked on a regular basis. Because of ewe density in sheds, assisted lambing is common practise to avoid mis-mothering, infection and stress under such unnatural circumstances. The ewe is then placed with lambs in a mothering pen for up to 48 hours to enhance the natural mothering instinct, then is either returned to the lambed mob or put outside. These are common practises amongst all sheep breeders, even the "Shetland" breed, as I saw in Somerset, one of the easiest lambing breeds in the world in its natural environment. From my experience and observation, I saw no evidence to suggest that the Texel has more lambing problems in the commercial field than any other breed in the U.K. Careful animal selection however, must play the major role in making sure that lambing problems do not occur under our Australian conditions. Firstly, the Texel ewe should not be over-fed prior to lambing.

Handfeeding and lush European pastures keep the ewe on high nutritional planes right throughout gestation, giving rise to large single lambs and sometimes dystocia. Ewes should be scanned, drafted and fed accordingly on multiple or single lamb conditions. Texels are great converters of feed and the difficulty is keeping the condition off pregnant ewes. Most important is conformation selection; smooth shoulders and good neck extension are vital. If head and shoulders are presented as one then lambing becomes difficult.

It is important to remember that the Texel has been bred as a superior meat sheep. "MEAT IS MUSCLE." If drastic steps are taken to reduce muscle then the advantage of the Texel's carcass superiority will go. The balance can be attained by careful and sensible selection. Common criticism of the traditional British breeder is "he selects a new breed for superior characteristics, then immediately sets about breeding these attributes out, to give the appearance of his traditional breeds". This could happen to the Australian Texel if we heed unsubstantiated criticism and follow traditional traits to the detriment of an initiative.

There is nothing traditional about today's meat consumption trends. We, in Australia, like the rest of the Western World, are changing rapidly from a nation of small shopkeepers and innumerable meat wholesalers to one dominated by a handful of highly capitalised supermarkets and processing plants, who will insist on a leaner, more muscular and, most importantly, a more uniform prime lamb. The Texel may best fit these requirements.

The Texel is not however, ideal for all conditions. If it were the optimum prime lamb sire then more of the U.K. industry would be Texel based. In fact the Texel accounts for only a 10% share of the terminal sire market in the U.K., coming in a distant second to the 80% Suffolk domination. So why is this the case in a country that leads the way in the E.U. in sheep meat production with 350,000 ton/annum, surpassing Spain as its nearest rival by 30% (MLC Sheep Year Book, 1994), and is therefore highly market orientated?

In my opinion a number of reasons could account for this. Firstly, tradition. The Suffolk is without doubt a good prime lamb sire fulfilling the run-of-the-mill R type carcass that make up a large portion of the export to the E.U. and namely France. The Suffolk cross is a quick maturing, well fleshed lamb and has been bred throughout Britain for many years, out of the breed ewes, and its capabilities are recognised and understood. Buyer and producer

reference play a major part here. Secondly, the original Texels introduced to the British terminal sire market were certainly not the calibre of sheep available today after 25 years. Graded up, Texel rams gave 'throw-backs' to inferior selected stock and the 'Texel' image suffered as a result. The traditional slower maturing, 'dumpy' Dutch Texel still gives a lot of lamb producers the wrong perception of the breed and the common concern that the Texel is a slower maturer than the Suffolk. After visiting numerous abattoirs and commercial lamb producing units, this argument could not be factually substantiated.

The third, and main reason I believe, is financially based. Returns of £1.50 or \$3.20/kg live weight is common market value in the U.K. at present; this equates to approximately \$112 per head value - considering the lowland lambing flock average for lambs reared is over 150% (MLC Sheep Year Book, 1994) there is already a return of \$168 per ewe. On top of that there is the 'Sheep Annual Premium Payment' of nearly \$42 per breeding ewe. For some producers this is coupled with L.F.A. payments (Less Favourable Area), E.S.A. (Environmentally Sensitive Area) and Hill Livestock Compensatory Allowances; sometimes approximately \$12 per ewe for each category; amounting to returns of \$210 per ewe and more. This is what a producer in the U.K. could expect.

This type of return is hardly driving the average producer to seek premium returns in select markets when the 'status quo' is obviously quite comfortable. COMPLACENCY INHIBITS INNOVATION.

This however, may not always be the case and with further pressures from the G.A.T.T. and perhaps the U.K. taxpayer, the British farmer will have to become more accountable and aware of market trends. A concern now being felt right across the U.K. agricultural sector.

The quality of lamb I saw in the U.K. was good, even amongst traditional "hill sheep" breeds such as the Scottish Blackface and North County Cheviots, however in the latest figures to hand (MLC Sheep Year Book in England, 1994) only 47.3% of lambs slaughtered fall into the E.C. target categories of E, U and R. Improvement is needed for them to remain competitive and retain their export market which accounts for over 50% of their total production. Here lies the greatest potential for the future of the Texel.

Results of a three year assessment trial carried out by Canvin International of England proved that “Lambs sired by a Texel killed out 2-3% better than lambs sired by other breeds. They had better conformation and carried less fat. Because the Texel-cross lambs do not run to fat as quickly as other crosses, lambs can be taken to heavier weight without any detrimental effect on quality.”

Work by the Welsh College of Agriculture, with “comparisons between lambs from other meat sires”, show major advantages to the Texel in terms of killing-out percentage, lean content and bone and fat content (Dr. Basil Wolf). I was fortunate to observe the Texel study flock at the Aberyswyth Welsh College of Agriculture with Dr. Basil Wolf, who has pioneered this area of research.

One of the most obvious characteristics of the pure and cross bred Texel lamb is its get-up-and-go attitude at birth. Lazy lambs are problems of other breeds. The Texel’s ability to thrive in adversity and inherent adaptability, as well as its carcass and lean meat quality, is placing it in the forefront of European production today. Up to £10 per head premium for Texel and Texel cross lambs is common in the present prime lamb market. The message is therefore becoming clearer to lamb producers, as the consumer trends of the future encompass the Texel qualities eagerly.

## **ADAPTATION OF THE TEXEL TO THE AUSTRALIAN INDUSTRY**

With the recent introduction of the Texel to Australia, the opportunity now exists for Australian producers to decide on the future of our industry. Because of the quarantine requirements of our country, no more Texel sheep can be introduced at present, so this factor alone will restrict the numbers of Texel’s that are to be used in the industry. Here lies an opportunity however, to slot into niche markets with this new ‘lean lamb’, bypassing our traditional and ‘archaic’ open auction system and selling direct (on the hook) to wholesalers, possibly to market the new, lean, healthy image of lamb as purely “TEXEL”. Consumers will pay for quality as is the case in select restaurants and exclusive food product outlets.

“Leonard’s Chicken” is such an example of new presentation and image, that has grown across Australia to provide consumers with quality and ‘exciting’ variation of a traditional commodity.

My Nuffield experience enlightened me to now believe we should be marketing our superior products to the consumer who can afford to pay for quality. **QUALITY PRODUCT, QUALITY IMAGE, QUALITY PRICE.** Maintain a high standard in a niche market then maintain the price.

Export potential is enormous at present within the Asian-Pacific region, and further afield, for sheep meats. Millions of Merino ewes in Australia are joined every year to terminal sire British breed rams. The benefits of the Texel terminal sire to this sector of the industry is proving to provide a superior carcass of the first cross lamb, demonstrated by success in carcass competitions across Eastern Australia and the current Australian Saleyard Record price of \$104 for a Texel/Merino lamb at Dubbo, N.S.W. in June 1995.

With the introduction of a similar Grid Classification that is in place in the U.K., identification of export quality lamb to suit various overseas markets would be possible. Papua New Guinea, our nearest neighbour, imported 9.5 thousand tons of lamb in the 94/95 period, equating to nearly \$10 million export income. Australia’s total value of lamb exports for the same period was \$120.9 million, over half of our sheep meat export income (A.M.L.L. Sheep Exports, 1995). Export potential to Asian countries must be excellent when tradition and culture ensure that their rapidly increasing population will always be large consumers of Red Meat. ‘Self Sufficiency’ is their goal, but population encroachment on agricultural land will ensure that this aspiration remains far from reality.

For us to be a successful provider to a potential market, both export and domestic, we must be able to identify their requirements, hence the need for a more thorough classification system in Australia with one such as the European Classification Grid. Only then will we begin to be able to react to market signals and ultimately be paid for producing a quality product.

## **CONCLUSION**

Red meat is losing market share in the United Kingdom and Australia. If we, as producers, are to remain a key element of today's food industry, then a new and professional marketing approach must be adapted to maintain our market share, and improve our image. I genuinely believe that some form of total industry support from Government is necessary to achieve this, but immediate improvement can be attained with elements such as **MARKETING GROUPS** and **NEW BREEDS**. I discovered many individuals and groups in the U.K. aggressively meeting head on the problems facing meat consumption, such as fashion and health trends, and more recently the serious B.S.E. or 'Mad Cow Disease' concern. We in Australia must adopt such an attitude and promote our healthy, 'Clean Green' image to the world, if we are to be providers for the 21st century.

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Meat and Livestock Commission (1994) Sheep Year Book M.L.C. Milton Keynes, England.

## **PERSONAL CONTACT REFERENCES**

Australian Meat and Livestock Corporation (1995) Red Meat Consumption Graphs, Statistics Department.

Chitty Group Abattoir, Guilford, Surrey, England.

Dr. Basil Wolf, Geneticist, Welsh College of Agriculture, Aberyswyth, Wales.

## **APPENDIX**

### Relevant Individuals and Institutions Visited:

- Sylvia and John Rawlings, 'Wiston Texels', Suffolk
- Chitty Group Abattoir and Horndean Cutting and Packing Plant, Surrey
- Dewi Jones and Dr. Basil Wolf, Welsh College of Agriculture, Aberyswyth, Wales
- Cor Baker, Ven Huizen, Holland
- Caas Commedeur, Texel, Holland
- Rob Osbourne, Galloway Lamb Group, Thornhill, Scotland
- Jim Warnock, Chairman of The British Texel Sheep Society, Lanark, Scotland
- Jon Hunton, Edinburgh Genetics, Scotland
- Bob Crockett, President of the Angus Cattle Society, Perth, Scotland
- Allan Draper, Highfields Texels, Mayfield, E. Sussex
- Richard Weir, Butcombe Rylands, Bristol, Somerset
- Dr. David Bryson, Government Veterinary Science Institute, Belfast, Northern Ireland
- Dr. Raymond Steen, Hillsborough Research Institution, Belfast, Northern Ireland
- Alun Evans, Chairman of the British Wool Board, International Wool Textile Conference, Harrogate, Yorkshire
- Cyril Lewis, Penmachno, Snowdonia, Wales
- Iolo Owens, Angelsey, Wales