Glanvac™ B12

Protection against Cheesy Gland, major Clostridial diseases and added prevention of Cobalt deficiency in sheep and lambs

A small drop of red.
A whole lot of protection.

Scabigard™

SAFE, PRECISE CONVENIENT

The Ultimate Scabby Mouth Solution!

Scabigard™ and Glanvac B12™ are registered products of CSL LIMITED ACN 051 588 348
45 Poplar Road Parkville Victoria 3052. Toll Free 1800 333 011 Phone: (03) 9389 1610 Fax: (03) 9389 1646

CSL The Australian Vaccine Specialist
Contents

WORLD CONFERENCE 2000

3 Federal President’s report
6 Genetic progress
9 Breeding success
11 Wool outlook
14 Lamb and sheepmeat outlook
16 Show results
18 Victorian Chairman’s report
19 West Australian Chairman’s report
20 New South Wales Chairman’s report
20 South Australian Chairman’s report
21 Tasmanian Chairman’s report
The success story of the nineties

At Gambier View, we don’t breed sheep to show, but rather, show the sheep we breed. Throughout the nineties, the results speak for themselves:

• 26 Champion and Reserve Champion ribbons at the Melbourne ASBA
• Most successful exhibitor five times at the Melbourne ASBA, Ballarat and Hamilton sheep Shows
• 10 “All Breeds” Championships at various spring Shows against British Breeds
• Four production class wins at Melbourne ASBA

The Savage family has spent a lifetime achieving a purebred, prepotent high quality stud and its regular displays of teams of 25-30 sheep is an indication of the depth of genetic excellence it has to draw on.

Long time Gambier View client, Alec Bramich of The Curragh Partnership, in 1998 shored 123 per cent of lambs with the first draft of wether lambs averaging 27kg for a result of $65 a head. The second draft averaged 24.5kg returning $55.

The Savage family believes strongly in the future of the true, dual purpose Corriedale with its self-replacing qualities. Why not call the Savages today to find out how their success can also be yours.
A special welcome to all Corriedale breeders and friends and best wishes for the year 2000 and beyond. No doubt we were all looking forward to the new millennium and now it has come, it's time to get back to normal.

In my first year as Federal President, the increase in energy around the Corriedale breed all over Australia through promotion and advertising has been very noticeable.

This is due in part to the energies of previous Federal Chairmen and promotion committees. I just hope we can keep this energy up and work together so that we can start to see some results. That is, to see Corriedale sheep in strong demand in the stud and commercial sectors.

As we all know too well, the world does not stand still and there is ever changing competition for the Corriedale from other sheep such as crossbreds and new breeds that are seeking an increased market share.

So as Corriedale breeders, we have to be diligent to maintain the status quo and improve our market share. We know what the Corriedale can do (and has done for the past 100 years) over varied climates, but we cannot rest on our laurels.

The move to performance recording, mainly through Lambplan has been pleasing but if we get more studs participating, the whole breed will benefit more.

I feel we must accept technology as it is the way to the future. By utilising it, we can show commercial sheep breeders the actual gains that can be made from measurement and overcome some of the hype we see from other breeds in the press and from agents etc.

And now that we can accurately measure carcase traits and wool measurements objectively, I believe the future of Corriedales is looking strong and this will be bolstered when full maternal values become available.

Certainly crossbred lambs from Corriedale ewes are now keenly sought after. Even the purebred Corriedale wether lamb is still well suited to export but it must be in the higher weight ranges.

By Richard Archer

FEDERAL PRESIDENT'S REPORT

You breed them... let Rural Press Stud Stock Services promote them

Complete advertising & promotion service
Advertising, design, make-up & media placement
Press releases and photographic services
Sale previews & reports
Sale & breed features
Editorial support

your success is our business!

Contact any of our representatives for further information.

Corriedale Journal
Quamby Plains

CORRIEDALES THAT DO PERFORM

Grown in 750mm rainfall under high stocking rates. Progeny tested in a 3000 commercial ewe flock

Emphasis on: Fertility - 120-150% lambing
Production - wool - 25-29 micron - Soft handling for all conditions
meat - crossed - meet carcase specifications, eg. Island Prime Lamb - Ideal for heavy lamb exports

Contact
Richard Archer
Quamby Plains
Hagley
Tasmania, 7292

Phone: 03 63 922 322
Fax: 03 63 922 269

QUAMBY PLAINS
One of Australia’s parent studs
Founded 1917  Flock 36
In Tasmania, we have a brand called Island Prime. Under this label, we have been successfully selling lambs to supermarkets and butchers for a premium but the lambs must make certain specifications as outlined in a grid.

The Island Prime lambs supplied, out of purebred Corriedale ewes, have done exceptionally well due to their leanness, growth rate and muscle, which are very important factors to Island Prime and maintaining its high quality image.

Wool prices have been disastrous, but with the Corriedale’s micron, softness, brightness and strength of fibre, there is a market niche to be filled that I am sure could become very strong.

The Corriedale is a dual purpose sheep and we tend to emphasise the product that is selling well (wool or meat), but it will be to our detriment if we ignore one or the other.

The major sheep shows are still important as a window to our breed and to display the improvement that has been made. And it is pleasing to see the quality of sheep at the major shows and how the numbers are still holding up.

We are now nearing the World Conference 2000 in Ohio, USA, and I wish Hal Walker and his organising committee well on a successful conference. I note there has been time set aside for discussion and exchange of opinions, which I hope will be fruitful and beneficial.

In closing, I wish all Corriedale breeders a prosperous future in both the short and long term, and most importantly, remember to enjoy life, have a laugh and enjoy everyone’s company, no matter what the season. Bye for now!
The Corriedale breed’s use of LAMBPLAN continues to grow which means more animals are being evaluated each year. Animals are only just starting to be evaluated from the 1999 drop, so numbers for that drop are far from complete.

Corriedales are making real progress in the traits that affect sheep enterprise profitability, i.e. growth, carcase, wool and fertility traits (see graphs on page 7).

**SUMMARISING THE GENETIC TRENDS TO DATE:**

• Growth rate is being significantly improved

• Maternal weaning weight dropped early in the ’90s (prior to LAMBPLAN EBVs being available for this trait) but has since been held constant and is now steadily improving

• Leanness and muscling are being held virtually constant, with improvement in carcase muscling starting to become apparent

• Wool cut is steadily improving (with a hiccup for the 1998-drop)

• Fibre diameter has been reduced by nearly 0.2 micron

• Marking rate is beginning to rise steadily

These genetic trends (especially in the last 2-3 drops) are in line with what is expected from use of the Corriedale Indexes designed by Corriedale breeders with some input from LAMBPLAN. The result should be a balanced improvement across the range of traits that Corriedales contribute to sheep enterprises.

**ELITE CORRIEDALE GENETICS FOR THE FUTURE OF THE BREED**

The top 30 Corriedale sires on the Corriedale $25 Index range from $150 down to $125 ($150 means that the daughters of the top ram will earn $50 more in their lifetime than an average sire).

There are over 150 young Corriedale rams with Index values above $125 and these young sires represent a range of sire and maternal grand-sires across the breed gene pool. There are large numbers of genetically elite young ewes being bred, from a range of sire and maternal grand-sire lines. There is great scope for steady and exciting genetic improvement in the profitability of the Corriedale, and breeders in Australia keeping good records and making sensible use of LAMBPLAN information are achieving that improvement.

The Modern Australian Corriedale: ~ balanced genetic improvement for better sheep business returns!

**STANBURY CORRIEDALES**

**at WEST CLOVEN HILLS**

**WORLD’S BEST GENETICS FOR THE WORLD’S BEST SHEEP**

A typical Stanbury WCH sire

WEST CLOVEN HILLS
CAMPERDOWN
VICTORIA
AUSTRALIA, 3260

Tel. (03) 55 939 278

e-mail: stanbury@gatewaybbs.com.au
We are proud to be associated with the Corriedale breed and wish this World Conference and the participants every success and happiness.

Corriedale Hills

Founded 1926

Continues a long and distinguished history with Corriedale sheep spanning 74 years and three generations.

Winner of many Show Championships and achieving major sales of sheep in southern Australia and the export of stud Corriedales to 15 overseas countries.

Graph 1

ANIMALS EVALUATED IN THE CORRIEDALE BREED

There is a steady upward trend in genetic merit for wool production and marking rate, and there has been a small but significant genetic reduction in average fibre diameter. Together these trends mean significant improvement in overall genetic merit for profitability.

Graph 2

$ IMPROVEMENT IN AUSTRALIAN CORRIEDALES

This trend in improving dollar earnings per ewe mated has averaged $1.00 extra per year, but in the period 1995-1999, it is averaging $2.00 extra per ewe per year - the genetic improvement in profitability is accelerating.
If the numbers are important to you *The Weekly Times* is the No.1 paper for livestock advertising.

Independent audits by the Australian Bureau of Circulation show that *The Weekly Times* is the biggest circulating rural newspaper in Australia with a circulation six times greater than our Victorian competitor.

Get the numbers working for you.

Advertise your stud stock in
*The Weekly Times*

---

**Andy Worland**
(03) 9292 1180
0417 675 320
worlanda@hwt.newsltd.com.au

**Mark Inglis**
(03) 9292 1216
Free fax 1800 151 156
inglism@hwt.newsltd.com.au
The makings of success were due to the tragic end of a man’s life. Hugh Moore, who was the first to bring the Corriedale to Western Australia, was gored to death by two bulls in 1919. A short time after Mr Moore’s death, a clearing sale was arranged to raise funds for his grief stricken widow.

A kindly neighbor by the name of Walter Pederick purchased the flock of slightly strange looking (for those days) sheep. As time went by, Walter, with the help of his son Horace, developed the stud. Then in 1926 their stud, “Corralyn” exhibited at the Perth Royal Show for the first time and won their first blue ribbon.

Horace Pederick went on to take the reins of the Corralyn stud and based at Wagin in WA, many trips were made to the Perth Royal Show. In 1942 they won their first Royal Show Champion ribbon. Horace went on to win many more Champions, Grand Champions and “most points” Corriedale sheep and wool awards, while all the time improving the genetic breeding of his beloved Corriedales, sitting on state committees and representing WA at Federal Council. Horace Pederick was rewarded with an Honorary Life Membership at state and eventually Federal level.

The Pederick dynasty at Corralyn had been a huge success already when another young man ascended to the throne - Arthur Pederick - upon whose shoulders rested the stud’s entire future.

This young man had been groomed under his father’s wing and together they had many trials and tribulations. Arthur became stud master in 1975 having to fill two generations of very big shoes. From 1976 to the present, Arthur has served on WA’s state committee, has had six years as state President, six years as Federal Vice President and three years as Federal President (1993-1995) during which time he led Australia’s delegation to the World Conference in Argentina. Arthur also had stints as ACAWA’s publicity officer and on the RASWA committee.

An exceptional breeder of the true dual purpose Corriedale, Arthur was also invited to judge all around Australia and he did such a fine job of this, that his judging went international at Christchurch in NZ in 1985.

Arthur’s show success has seen a total of six Governor’s Cups (WA’s highest agricultural award). The Grand Champions and other broad ribbons won by Arthur in both sheep and wool, including Supreme all breeds ribbons are too numerous to list.

At the Wagin Woolorama on March 10, 2000, it was moved by fellow stud breeder Gordon Beard, after reading a list of credits of Arthur’s contribution of 24 years to the ACA, that Arthur be nominated for an Honorary Life Member of the ACAWA branch.

This motion was carried unanimously with much shaking of hands and pats on the back. Of course, Arthur was almost speechless and could only manage the words, “Thank you”.

As many of you reading this are aware of Arthur’s charismatic, statesman-like, no nonsense, humble yet firm, friendly, salt of the earth kind of nature, I’m sure you’ll all congratulate his making success successful.

This article was kindly submitted by ACAWA publicity officer, Warren McLaughlin

Corriedale Hills West
A DIVISION OF CORRIEDALE HILLS, Founded 1926

Noted for:
• Heavy, soft wool
• Lamb production
• Self replacing flocks

L.C. & D.L. Lush
Box 42
Inman Valley,
SOUTH AUSTRALIA
Australia, 5211
Tel/Fax (08) 8558 8251
Performance Corriedales

Recorded with Australian LAMBPLAN
(Website http://ansc.une.edu.au/lambplan)

On the independent Lambplan, 8 of the top 10 sires listed have been used or bred at Coora.

Male progeny listed, 28 of the top 33 rams carry the Coora prefix.

At Hamilton Sheepvention in 1999 Coora Corriedales won both Performance Classes, which includes the Nulkwyne trophy.

Homepage: www. Iconnect.net.au/~coora

Jim and Midge Gough,
Tel: 03 55 786 267 Email: jgough@iconnect.net.au
“Gometra” Branxholme, Vic. 3302
In the most optimistic forecast for wool in five years, the Australian Bureau of Agricultural and Resource Economics (ABARE) has predicted wool prices should average nine per cent higher in 2000-2001 than this season.

ABARE forecasts an average of 639 cents a kilogram clean for the 2000-2001 season for the eastern market indicator, compared with the 580 cent average (to the end of February, 2000) for the current season.

A surge in January-February in wool prices, driven mainly by hot demand for fine wools, lifted wool prices to their highest levels since June, 1998 - and well clear of the lower prices of September and October, 1999.

ABARE is saying in effect, that the peak prices in January should become the average price for the next season.

But the nine per cent bounce starts from such a low base that the forecast price remains below the 700c mark for the eastern indicator - the break even price many woolgrowers say they need to stay with wool growing.

ABARE senior industry analyst Trish Gleeson said: "Prices will continue to rise over the next five years.

"The growth in consumer expenditure on textiles, however, is expected to remain slow and so competition among fibres, at both retail and processing levels, will continue to be significant."


Prices should continue to gain each year over the five years of the forecast, reaching 794c by 2004-2005, a price which, when adjusted into a "real" 1999-2000 price equivalent (702c) remains above 700c.

If that happens, 2000-2001 would become a recovery milestone year for the wool industry.

The ABARE report lacks comment on whether the broader micron wools, which have been lagging in the marketplace, will catch up ground lost to the finer wools over the forecast period.

Higher prices are expected to flow from reduced availability of wool and continued strong economic growth among Australia's major customers.

In particular, Asian economies, despite continuing difficulties in Japan, are now back on track after the big slump. Asian growth of around six per cent annually in gross domestic product is forecast - that's well above the growth levels needed to reactivate textile industries.

Chinese Taipei has become Australia's third-biggest single customer in the current season. It should continue to grow in importance.

In another Outlook session, visiting US economist, Dr Bruce Krasman, said the resurgence in the European economy would really take off in 2000-2001.

As Europe still takes more than 35 per cent of Australia's wool, that's another promising indicator.

The Australian sheep flock, however, is forecast to continue to decline from 116 million sheep to a low of 111 million by 2002 - the smallest flock in 50 years.

With a relatively modest official stockpile (now under one million bales) becoming a diminishing force in the marketplace, the reduced flock size will start to squeeze supply over the forecast period, especially when high current levels of on-farm stocks of wool diminish.

Sheep numbers should stabilise at this new level before rising again in 2005, in response to improving prices.

Article provided courtesy of Rural Press, written by Chris Griffith.
CORRIEDALES AT HO

Visit the ACA website website at:
Australia exported its highest monthly shipment of lamb ever in March, reflecting strong demand from most markets in the lead up to Easter.

Higher sheep kills have not had the negative impact on wether prices which may have been expected with improved meat and live export demand lifting prices over the month of March.

**LIVESTOCK PRICES**

Unfortunately lamb prices fell again in March. Quality remains an issue, with prices for good quality heavier export types well above prices for remaining lighter new season lambs. Domestic trade lambs averaged 174¢/kg for March, down 1¢/kg on February prices.

Prices for this category are now a massive 21% below March 1999.

Sheep prices are finally recovering from the depressed levels of 1999, assisted by a lift in export demand. Fuelled by stronger buying, due to export demand, wether prices rose 8¢/kg in March, averaging 68¢/kg. While prices are still well below those seen in mid 1999 this price rise is encouraging especially considering that sheep turnover was higher in March.

Another positive factor for future prices is the sharp lift in wool prices so far this year. Fine wools, already close to viable levels, rose a further 25% over recent months. While coarser wools have lagged behind, the long-awaited recovery should lift interest in ewes and wethers in the coming months.

**SLAUGHTER AND PRODUCTION**

Lamb supply remained strong throughout March, despite the fact that traditionally supply tends to fall off around this time of year. In both Victoria and NSW, the two biggest lamb production states, year-to-date lamb kills are up 6% and 2% respectively. This increase is interesting given that relatively unattractive prices and a good season would usually encourage producers to hold onto stock.

Official slaughter statistics from the Australian Bureau of Statistics show that February lamb slaughter was up 12% on February 1999 as well as up 14% on January slaughter. On a year-to-date comparison lamb slaughter is also well up, from 2,480,000 head in 1999 to 2,648,000 so far this year. As expected higher weights, combined with increased slaughter have also lead to increased lamb production - with production up 10% in February on last year, with the biggest rises in WA and SA. Sheep kills rose in March, reflecting the more attractive prices and the build-up of older stock after the withholding of sheep last year (due to low prices and abundant feed). On a year-to-

---

**DON'T call anyone for Rural Insurance until you phone Wesfarmers Federation Insurance (W.F.I)**

W.F.I. is the recommended insurer for many Rural Associations.

- They provide on farm service.
- Your Insurance Premium can be paid over 8 months.
- You can tailor the excesses to suit your needs.
- Claims are handled locally.
- The New Farm Pack Cover has $135,000 worth of additional benefits at no extra costs including cover for TAX Audit.

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albury</td>
<td>Troy Waller</td>
<td>02 6025 7699</td>
</tr>
<tr>
<td>Ararat</td>
<td>Graeme Bates</td>
<td>03 5352 4211</td>
</tr>
<tr>
<td>Bairnsdale</td>
<td>Jim Moore</td>
<td>03 5352 4856</td>
</tr>
<tr>
<td>Ballarat</td>
<td>Brett McKinnis</td>
<td>03 5331 3611</td>
</tr>
<tr>
<td>Bendigo</td>
<td>Dennis Maw</td>
<td>03 5448 3274</td>
</tr>
<tr>
<td>Bendigo</td>
<td>Graham Black</td>
<td>03 5445 5522</td>
</tr>
<tr>
<td>Carlton</td>
<td>Frank Ispanovic</td>
<td>03 9347 4035</td>
</tr>
<tr>
<td>Carlton</td>
<td>Sammi Aboud</td>
<td>03 9347 4035</td>
</tr>
<tr>
<td>Deni</td>
<td>Mary Izovi</td>
<td>03 9792 0442</td>
</tr>
<tr>
<td>Deni</td>
<td>Kevin Friend</td>
<td>03 9792 0442</td>
</tr>
<tr>
<td>Deni</td>
<td>Tony Hinch</td>
<td>03 9792 0442</td>
</tr>
<tr>
<td>Deni</td>
<td>Rob Walker</td>
<td>03 9792 0442</td>
</tr>
<tr>
<td>Deni</td>
<td>Caroline Shand</td>
<td>03 5881 5277</td>
</tr>
<tr>
<td>Geelong</td>
<td>Wes Costin</td>
<td>05 5221 8766</td>
</tr>
<tr>
<td>Hamilton</td>
<td>Phil Beezer</td>
<td>05 5572 5988</td>
</tr>
<tr>
<td>Hobart</td>
<td>Rachel Watson</td>
<td>05 6224 4735</td>
</tr>
<tr>
<td>Horsham</td>
<td>David Phillips</td>
<td>05 5382 2246</td>
</tr>
<tr>
<td>Launceston</td>
<td>Craig Haedelene</td>
<td>05 6331 5022</td>
</tr>
<tr>
<td>Mildura</td>
<td>Ray Carrao</td>
<td>05 5021 1488</td>
</tr>
<tr>
<td>Moe</td>
<td>Kathy Hatfield</td>
<td>05 5127 8611</td>
</tr>
<tr>
<td>M Gambier</td>
<td>Peter Miller</td>
<td>08 8725 1546</td>
</tr>
<tr>
<td>Shepparton</td>
<td>Ben Drummond</td>
<td>05 9513 5600</td>
</tr>
<tr>
<td>Shepparton</td>
<td>Cheryl Winters</td>
<td>05 9831 5600</td>
</tr>
<tr>
<td>Swan Hill</td>
<td>Ian Donalds</td>
<td>05 5031 1460</td>
</tr>
<tr>
<td>Swan Hill</td>
<td>Caryn Vincent</td>
<td>05 5031 1460</td>
</tr>
<tr>
<td>Traralgon</td>
<td>Keith Walker</td>
<td>05 5174 2574</td>
</tr>
<tr>
<td>Warragul</td>
<td>Danny Answorth</td>
<td>05 5625 4777</td>
</tr>
<tr>
<td>Warrnambool</td>
<td>Lance Lloyd</td>
<td>05 5561 4400</td>
</tr>
</tbody>
</table>

Ring Now for an obligation free presentation.
date basis, kills are currently up 38% in Victoria and 7% in NSW. Compared to February kills, kills were up 13% in both Victoria and SA and 17% in NSW.

THE DOMESTIC LAMB MARKET
After experiencing significant price falls during February, the wholesale lamb market recovered slightly in March. Quality remains an issue in this market with plainer types continuing to receive heavy discounts. Demand in the retail area appears to have remained lacklustre, with wholesale beef and pork prices also only recovering slightly in March. The indicator wholesale lamb price, 16-18kg FS3, rose only slightly to 265¢/kg - from 260¢/kg in February, which was its lowest since the middle of 1998.

However, it remains difficult to gauge the actual strength of domestic consumer demand while lamb supplies are abundant. Even if the strong demand of late 1999 has been maintained, wholesale prices would still be weakened by the 16% lift in supplies.

SHEEPMEAT EXPORT MARKETS
While not reflected in the saleyards, our lamb export markets appear to be going from strength to strength. Total lamb exports for March were 9,900 tonnes, the highest monthly figure on record and close to 1,000 tonnes above the previous record, achieved in November 1999. This shipment was a staggering 22% above March 1999 and was fueled, in part, by a pre-Easter surge in lamb exports to the US.

Despite US trade restrictions, exports to the US totalled 2,658 tonnes in March, the highest level ever. Exports to this market were 44% above the same month last year, and 33% higher than February shipments. It appears that while some product has gone into the US 'above quota' (therefore attracting a 40% tariff), a number of quota holders held onto quota for this high demand, higher price period in the lead up to Easter.

In other markets, lamb shipments remained relatively steady, with exports to the EU and Canada almost identical to the same month last year at 932 and 180 tonnes respectively. Exports to the Middle East declined in March to 616 tonnes, down 36% on the same month last year as well as down 18% on February shipments. With the continuing shift in lamb exports to this market from frozen to chilled product, it appears that prices offered for chilled product have not been sufficiently high compared to prices offered in other higher quality markets.

Mutton exports have also continued their strong start to 2000. In March, 17,950 tonnes of mutton were exported from Australia - an increase of 3% on March 1999 and 16% on last month. Exports were well up on the previous year to all our major markets, bar the EU. Exports to the US were up 67% on March last year to 1,487 tonnes - primarily reflecting what appears to be strong Easter demand from a variety of ethnic groups, especially on the East Coast. Exports to Japan also increased markedly, up 54% on March last year and 8% in February to 1,166 tonnes, also reflecting increased demand in the lead up to traditional holiday periods.

Courtesy of Meat and Livestock Australia
## CORRIEDALE SHOW RESULTS

### 1999

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL ADELAIDE</td>
<td>PJ &amp; LJ McVee</td>
<td>AR &amp; JL Hunt</td>
<td>AR &amp; JL Hunt</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corralyn</td>
<td>Corralyn</td>
<td>Corralyn</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Gambier View</td>
<td>Corralyn</td>
<td>Corralyn</td>
</tr>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>Corrie Park</td>
<td>Corralyn</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>Compton Archer &amp; Son</td>
<td>J.A. Nicolson</td>
<td>J.A. Nicolson</td>
</tr>
</tbody>
</table>

### 1997

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL ADELAIDE</td>
<td>Stanbury WCH</td>
<td>AH &amp; MJ &amp; BJ Lush</td>
<td>AH &amp; MJ &amp; BJ Lush</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corralyn</td>
<td>Corralyn</td>
<td>Corralyn</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Gambier View</td>
<td>Gambier View</td>
<td>Gambier View</td>
</tr>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>J.A. Nicolson</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
</tr>
</tbody>
</table>

### 1996 (cont)

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>Sans-souci</td>
<td>Sans-souci</td>
<td>Sans-souci</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Stanbury WCH</td>
<td>Ellanora</td>
<td>Ellanora</td>
</tr>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
</tr>
</tbody>
</table>

### 1995

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL ADELAIDE</td>
<td>AH &amp; MJ &amp; BJ Lush</td>
<td>WV Secker &amp; Son</td>
<td>WV Secker &amp; Son</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Stanbury WCH</td>
<td>Ellanora</td>
<td>Ellanora</td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
</tr>
</tbody>
</table>

### 1998

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL ADELAIDE</td>
<td>AH &amp; MJ &amp; BJ Lush</td>
<td>Corralyn</td>
<td>Corralyn</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corralyn</td>
<td>Corralyn</td>
<td>Corralyn</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Haven Park</td>
<td>Gambier View</td>
<td>Gambier View</td>
</tr>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>Oakshot Pty Ltd</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
</tr>
</tbody>
</table>

### 1996

<table>
<thead>
<tr>
<th>Event</th>
<th>Champion Ram</th>
<th>Champion Ewe</th>
<th>Most Successful Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL ADELAIDE</td>
<td>Haven Park</td>
<td>AH &amp; MJ &amp; BJ Lush</td>
<td>PD &amp; JF Secker</td>
</tr>
<tr>
<td>ROYAL PERTH</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
<td>Corrie Park</td>
</tr>
<tr>
<td>MELBOURNE ASBA</td>
<td>Stanbury</td>
<td>Gambier View</td>
<td>Gambier View</td>
</tr>
<tr>
<td>WAGIN WOOLORAMA</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>CAMPBELL TOWN SHOW</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
<td>I.M. Mackinnon &amp; Co</td>
</tr>
</tbody>
</table>
There are many dedicated Corriedale breeders throughout Australia whose commitment to the Show ring and commercial results have no doubt made a large impact on the progress of the breed. Breeders like the Foster family and the Savage family, both from the Western District of Victoria.

Graham, Shirley and Rick Foster from the Haven Park stud at Casterton, report that this year’s drop of lambs will include progeny of Supreme Champions from Australia and New Zealand. The Fosters have been breeding Corriedales for more than 25 years and Rick and Shirley are both elected members of the Victorian State Committee. Rick is actually the youngest ever member elected while Shirley is only the second lady ever to serve on the committee.

In recent times, Haven Park has broadened its genetic base with the introduction of Stanbury bloodlines and a small infusion of “Piccarra” owned by the late Les Reading. Graham, Shirley and Rick are looking to the future with confidence, having also purchased semen from “Clifton” and “Strathblane” (New Zealand) for this year’s lambing which they believe, when combined with their own Champion sires, will consolidate a sound selection criteria (Haven Park’s selection has focused on wool weights, structure and fertility).

In Haven Park’s commercial enterprise, prime lambs have always been the focus, with all lambs sold direct, over-the-hooks. Lambs at six months of age average 24kg carcass weight while at 10 months, they average up to 34kg. Haven Park believes the future for lamb is in heavy weight, large lean lambs for export.

In the highly successful national ewe trials in 1996 and 1997, where 16 of Australia’s leading studs competed with five ewes each, Haven Park results included the highest fleece value, heaviest fleece weights and the highest carcass value.

For John Savage’s Gambier View stud, the nineties have been particularly successful. During the past decade, Gambier View has taken out 26 Champion and Reserve Champion ribbons at the Melbourne ASBA show and achieved most successful exhibitor five times. Gambier View has also won four production classes at Melbourne and its daughter stud, Compton House, run by John’s son Milton, last season sold all lambs with the exception of 200 replacement ewes, for an average of $47. The replacement ewes cut just under 4kg of wool with 6.5 months’ growth (second shearing) while the breeding ewes averaged 5.9kg.

Long time client, Alec Bramich, The Curragh Partnership, last season sold 123 per cent of lambs and the first draft of wether lambs averaged 27kg carcass weight for a result of $65.

The principals of Gambier View believe strongly in being able to follow the way the sheep breed by keeping pedigrees and first and foremost look for good solid carcases, carried on well placed legs with the ability to wear hooves evenly.

Gambier View has used two sires from New Zealand, “Strathblane” and “Willfield” with the aim of improving the fertility and carcass traits of Australian sheep. Well nourished and protected wool is regarded as being of paramount importance in producing high quality wool in high rainfall areas. Gambier View’s 1999 Supreme Champion had a CV of 17.3.

**NULKWYNE CORRIEDALES**

Performance based selection
Concentrating on profit traits:

<table>
<thead>
<tr>
<th>Fertility</th>
<th>Growth</th>
<th>Muscle</th>
<th>Wool</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLW</td>
<td>YWT</td>
<td>EMA</td>
<td>GFW</td>
</tr>
</tbody>
</table>

**Contact**

Tom or Wayne Munro
RMB 2295
Branxholme, VIC
Australia 3302

Phone: (Tom) (03) 55 794 555
Fax: (Tom) (03) 55 794 554
Phone: (Wayne) (03) 55 786 316
The Australian sheep industry has reduced its numbers markedly over the past few years and the Corriedale has not escaped its share of the reduction. However we believe we are producing, by comparison, an excellent product and there appears to be good enthusiasm within the breed. Perhaps it’s blind faith or maybe just supreme optimism as the current low prices in the wool sector for the medium to strong micron levels can only be described as financially critical.

The optimism must stem from the lamb carcass trade which has been consistently buoyant over the past few years. However sections of this industry focus on the specialised lamb producing breeds and the Corriedale, being a multi-purpose breed, is not readily accepted.

Our Hamilton branch has actively been associated with the Prime Lamb Carcass competition at the Green Triangle Expo and this year, Corriedale based lambs won the major share of places over all breeds and dominated the heavy lamb section due largely to the great support of Corriedale breeders from the Mount Gambier area of South Australia.

This is very positive proof of the advancement of Corriedale studs in breeding quality, lean prime lambs and with these results we hope to impress the lamb trade to recognise these achievements.

As for the season, the major sheep producing areas of Western Victoria have been suffering an extreme long term dry over the past few years and as I write, it is causing a desperate shortage of stock water - in both catchment surface dams and underground.

In other news, the ASBA Show, to be held in July, is being moved from its long term base in Melbourne, to the large regional city of Bendigo, in central Victoria. It is hoped that this venue will be more convenient to access for rural people.

One can only admire the quality of Corriedale sheep presented by exhibitors at our recent sheep shows and their efforts to promote our breed at these venues should be applauded by all members.
As I gather my thoughts to pen this report for the Australian Corriedale Journal 2000, feelings of joy and sadness grip me.

Joy because another five years have passed and preparations are well in hand for my wife Lyne and I to attend the 11th World Conference, Corriedale 2000, to be held in the USA. We will again meet some of the many Corriedale friends made in Australia in 1990 and Argentina in 1995. I’m sure more friends will be made because as we all know, “when one breeds Corriedales, one breeds friends.”

So why the sadness? The answer is more complicated. Some Corriedale breeders have passed on and despite the world being in a state of relative peace and the economy picking up, much of the world’s sheep industry is in crisis. Agricultural commodities like our meat and wool are trading at historically low prices. Due to the poor prices, profits from sheep have disappeared. As a result, I fear that many who would like to attend Corriedale 2000 will not be able to. For this I am sad.

On the wool scene, the quantity of fibre traded dropped dramatically when the Eastern European Countries suffered severe economic decline and ditched the communist system of government. It is hoped that as the economies of these countries pick up, so the monies become available for mills to purchase raw wool. When this occurs and the world stockpile of wool is dispersed, the “supply and demand formula” will surely work to our advantage.

World prices for meat are reasonable in some markets but access to other good markets are restricted where the “free market” is corrupted by subsidiaries, tariffs and other barriers. Western Australia farmers bear this burden.

The Corriedale is still a versatile, multi-use sheep producing quantities of quality meat and wool. In WA, the Corriedale is under attack. Let me explain: Meat and wool prices are extremely low and farmers have diversified into commodities such as tree farms, vineyards, beef cattle, new exotic sheep breeds and various crossbreeds. So we have reducing sheep numbers, reducing demand for rams, yet more breeds with rams to sell.

To enable the Corriedale to compete and to maintain its place in WA, we the studmasters must continue to breed sheep that grow product that the market requires. To that end, we use only the tried and proven methods of vision and handle, but also with measurement.

**We measure:**
- weight gain
- weight for age
- eye muscle size
- fat thickness
- greasy and clean wool weights, and
- wool micron and other attributes.

Corriedale genetic material is imported from and exported to the other Australian states. The Western Australian Corriedale is a fine example of the breed and Western Australian Corriedale breeders would welcome the opportunity to display our sheep to overseas visitors.

We send best wishes to our Corriedale friends at the 11th World Corriedale Conference.
South Australian
Chairman’s Report
By Brenton Lush

Greetings to our fellow Corriedale breeders and producers across Australia and around the world from your colleagues in South Australia.

I hope those of you attending the World Conference in the USA are enjoying your time together, learning lots of new information and selling each other plenty of top Corriedale stud rams.

The past few years have seen a number of significant changes in the sheep industry and many of these have been positive. Many of South Australia’s Corriedale breeders have used the flexibility that the Corriedale offers to their advantage, modifying their breeding programs to suit particular markets, especially for lamb.

In many instances, breeding priorities have been adjusted to reflect a more commercial, production-based sheep enterprise, focussing on particular markets. In SA, we have a number of export abattoirs, together with local and interstate markets which give producers a reasonable amount of competition for their product. Wool sold by auction is now sold in Melbourne, but a number of other options exist for selling wool on-farm.

The focus on the production aspects of breeding Corriedales has even found its way to the show ring. At the Royal Adelaide Show, the Corriedale has introduced performance-based classes, including dual purpose and carcass measurement classes.

The Corriedale was the first breed at the Adelaide Show to have a shearing based performance class - a concept which other breeds have since followed.

At this year’s Adelaide Show in September, SA will be hosting the Australian Corriedale Association’s Federal Council. This will coincide with Corriedales being the feature breed of the Show, a status which not only gives prominent coverage to the breed, but also offers exhibitors significant sponsorship.

Of the issues facing stud sheep breeders in SA, Ovine Johnes Disease (OJD) is the major one. Fortunately, only one zone of the state has any confirmed cases of OJD and it is hoped that eradication of this disease is a definite possibility within the South Australian zone. Under a Market Assurance Program, OJD has been tested for, around the state and abattoir surveillance has revealed no new cases. So we look forward to keeping on top of this situation.

Finally, a word on the future. Although there are aspects of the future of sheep production and farming in general that have some uncertainty clouding the coming years, as a young farmer in Australia, I feel confident of the future of agriculture and sheep production. And as Corriedale breeders in this state and elsewhere strengthen the focus on breeding for production, I believe there is a solid future for the Corriedale breed.

On behalf of South Australia’s Corriedale breeders, I hope you all have a good 2000 season and those of you in America for the World Conference have a fantastic time.

New South Wales
Chairman’s Report
By Charlie Prell

Corriedales in New South Wales have fallen from favour with commercial sheep breeders in line with a general decline in sheep numbers across the state. Numbers of registered studs have remained fairly constant, but ram sales are diminishing.

Under this pressure, the NSW Branch, particularly Charlie Prell and Tony Manchester, have worked hard to introduce the attributes of the breed to a number of schools in NSW.

This strategy, to target tomorrow’s sheep breeders, has had some success, with four schools now actively involved in showing Corriedale sheep. One school, St Gregory’s College from Sydney, made its debut at the ASBA Show in Melbourne last year.

As well as this, Branch members have undertaken to display Corriedale sheep at selected field days across the state. As the heavy lamb market has consolidated and the wool market has only shown gradual signs of improvement, we have seen a gradual rise in interest in the breed. This hopefully will be reflected in improved ram and ewe sales in the coming spring.

One group of breeders has started a pilot project selling branded Corriedale lamb meat direct to the consumer and early results have seen outstanding success for both the quality and quantity of meat coming from Corriedale yearlings.

The project has been based broadly on the business plan drawn up for the project selling branded Corriedale lamb and many of these have been positive. There will be a number of NSW breeders attending the conference.
The highlight of the past year for Tasmanian Corriedale breeders has certainly been the continuing demand for top quality ewes, beautifully presented, most notably for those offered by members of the Burbury family at the Tunbridge sale.

I sincerely hope that many more breeders will come to appreciate the benefits of maintaining a flock of purebred, self-replacing Corriedales, both as prime lamb mothers and wool growers.

The main showings of Corriedales were at Campbell Town and Melbourne. Nick Cole did an excellent job as judge at Campbell Town where Quamby Plains exhibited the champion ram and honours were evenly divided between that stud and Streanshalh. It was good to see the breed exhibited at some of the spring shows, where Corriedales fared very well in interbreed contests.

For the first time, the main offerings of Corriedale rams for sale were at a series of on-property field days in November, rather than by auction at a central venue. Most buyers had completed their requirements early in the day, but the concept was certainly a success and will be continued in the future.

Currently, seasonal prospects over much of the pastoral area of the state can only be described as grim. Generally favourable conditions prevailing until the spring of 1999 changed abruptly to severe drought and we now face the prospect of hand feeding for the next six months.

All Tasmanian breeders will share in extending hearty congratulations to Richard Archer on becoming the third generation of his family to be President of the Australian Corriedale Association. Another appointment that gives me great pleasure is that of Carmen Bailey as our state secretary, thus maintaining a link with a family that has made a tremendous contribution to the breed here and throughout Australia.

This year has witnessed the dispersal of the Dalness and Cluny studs. Although they have adopted a fairly low profile in recent years, both rate highly among the parent studs of the breed. Although it is recorded in the Flock Book as having been founded in 1908, Dalness had probably reached its centenary, as there are records of them selling Corriedale rams as early as 1901.

Dalness won the ASBA champion ram three times between the wars, once with the celebrated ram, Mac. Cluny set a standard for quality wool that has never been surpassed within the breed and enjoyed very great success both with export sales and in the show ring, including ASBA champion ram in 1959.
LIBERTON CORRIEDEALES

Principal: Jim & Brenda Venters
Phone/Fax: 03 52 711232
E-mail:jventers@pipeline.com.au
Postal Address: “Springdale” 1245 Hamilton Hwy.
Stonehaven, Victoria, Australia Postcode: 3221
Directions: Melways Map 439  C9

• Expert visual appraisal.
• Full use of objective measurement since the 1960s.
• Detailed records computerized since 1970s
• Careful introduction of other bloodlines.

Highlights of last 10 showing years
1990: World Conference with a first in the Production Class (carcase and wool) and overall winner
1994: Royal Melbourne Show Champion Ewe Fleece
1995: Winner of Ram Production class at Hamilton Sheepvention
1997: 2nd in the National Trial Ewe Competition
1999: Royal Melbourne Show Champion Corriedale Fleece
J.F.Guthrie Perpetual Challenge Trophy for the most valuable fleece


WAHROONGA PARK
CORRIEDEALE STUD
est.1963

LONG HISTORY OF GOOD PRODUCTIVITY

176 Champion and Reserve Champion sashes in 36 years of Sheep and Fleece Shows incorporating the Melbourne Sheep Show with 13 Junior Ram Champions and 10 Junior Ewe Champions.

Now producing top pure Corriedale lamb carcases using a depth of LAMBPLAN detail.

K & M Moreton
Wahroonga Park
RMB 1310
Lake Bolac, VIC
Australia, 3351
Ph: 03 5350 2283

Pure Corriedale Lamb Carcases
The increasing emphasis on quality control in recent years from regulatory bodies and overseas trading partners has resulted in a growing number of sheep producers across Australia routinely vaccinating their stock against scabby mouth.

This is particularly important to maintain existing markets and to open up opportunities for new markets such as the live sheep trade to Saudi Arabia, one that Australia has not participated in for over a decade.

This year all producers intending to participate in the live sheep trade are strongly encouraged to vaccinate all of their lambs at lamb marking time.

The following checklist provides a guide to an effective vaccination program;

• Vaccinate all lambs every year at the first opportunity, lamb-marking time is the most convenient.
• It is very important to vaccinate all lambs (not just the wethers) as vaccinated sheep may act as a source of infection for those unvaccinated.
• If beginning a vaccination program, whole flock vaccination should be considered - again for the same reason in point two.
• Vaccinate sheep on the bare skin, preferably inside the front leg or on the side of the brisket.
• Check for ‘takes’ from a sample of the flock approximately 10 to 14 days after vaccination to ensure immunity has developed. A ‘take’ will develop along the line of vaccination, appearing as inflamed raised blisters before developing into scabs. This is indicative of the vaccination being effective.

---

GET AHEAD WITH NAYOOK SOUTH

• Lamb Plan Tested - Nayook South Ram 930041
  Corriedale +$25 index 151.13
• Reared and selected under true commercial conditions
• Lambs consistently hit targets in over-the-hooks trading
• 1999 and 2000 highest scoring Corriedale carcases at the Hamilton Beef Expo Lamb Carcase Competition in the 22-26kg class

WALLY, VERONICA, SCOTT & LEGH JENKIN

tel: (08) 8738 7259  mobile: 0407 612 844
fax: (08) 8738 7340  e-mail: nayooksouth@seol.net.au

ENQUIRIES AND INSPECTIONS ALWAYS WELCOME
Since the launch of the industry initiative to encourage all sheep producers to vaccinate against scabby mouth, CSL Veterinary have been developing a new, improved applicator to ensure maximum operator safety, accuracy and efficiency.

This year producers have access to this world first patented technology.

The major benefits of the new applicator are:

- **Safe**,  
- **Precise**,  
- **Convenient and**  
- **Re-usable**

This unique applicator has evolved over the last couple of years with a high level of feedback and input from sheep producers from across Australia. This was considered very important to ensure the end product was exactly what the market needed.

The new applicator has been designed specifically for use with CSL's liquid scabby mouth vaccine, Scabigard.

The retractable safety cover provides maximum user safety by enabling the applicator prongs to be protected at all times whilst not in use. When the applicator is in use, the safety cover can be locked into position to maximise user efficiency at marking time.

**The simple procedure for using the new applicator is as follows:**

1. Firstly place the bottle of vaccine into the applicator. Prime the applicator by pressing the vaccine bottle onto the applicator pump (approximately 10 pumps will prime the applicator). Pump the applicator before applying each dose. Commence vaccinating with no messy mixing and no exposure to the vaccine.

2. One of the major benefits of the new applicator is its ability to be re-used. Following each day’s use, the applicator should be sterilised by dismantling and placing in boiling water for 10 minutes. At the end of each season’s use it is recommended the applicator be discarded.

Combined, the new Scabigard applicator and Scabigard vaccine provide sheep producers around Australia with the most advanced technology available in the world to ensure this disease is controlled enabling continued participation in the live sheep trade.

For further information on the new Scabigard applicator or the vaccine contact CSL on 1800 333 011 or your local CSL stockist.

Scabigard is a registered trademark of CSL Limited, A.C.N. 051 588 348
At “Gundowringa”, we are marching into the new millennium. It’s easy when you can see where you are going.

A draft of 50 15-month-old hoggets awaiting delivery

FOR BIG BULKY WOOLLED SHEEP WITH BARE FACES

Contact

H.J. & C.J. PRELL  
“GUNDOWRINGA”  
CROOKWELL,  
NSW 2583 AUSTRALIA

CHARLIE: (61) 02 4848 1244  
JEFF: (61) 02 4848 1212  
FAX: (61) 02 4848 1263  
e-mail: cprell@goulburn.net.au
Are you getting the most out of your Corriedale Flock?

_Better Genes plus Better Feeding plus Better Marketing means Better Returns!_

**LAMBPLAN ENSURES YOU CAN SOURCE THE RIGHT GENETICS**

**LAMB, SHEEP MEAT AND GOAT PRODUCERS:**
- Producers who use LAMBPLAN-tested rams and ewes produce faster-growing animals with more valuable carcasses, from more productive dams
- The LAMBPLAN Breeders Directory and The LAMBPLAN Flock Genetic Merit Listing will help you find the right breeding stock for your production system and target market
- Don’t waste your feed resource and management skills on genetic also-rans — get the LAMBPLAN Advantage!

**SHEEP AND GOAT BREEDERS:**
- LAMBPLAN is a simple, reliable and powerful tool for your breeding business
- LAMBPLAN provides EBVs, $Indexes and Breeding Program Design Tools to maximise your return on investment
- LAMBPLAN Total Genetic Resources Management (TGRM) can help you make more progress in all the right traits faster

**LAMBPLAN:**
- Is used by over 600 leading sheep breeders across Australia in a wide range of breeds — terminal sires, maternal breeds and Merinos, plus meat goats
- These breeders are making very rapid genetic improvement in the full range of traits that drive enterprise profits
- LAMBPLAN is helping progressive Corriedale breeders achieve real $ improvement in their flocks — genetic improvement in growth, carcase traits, wool weight and quality, and reproduction and maternal ability

Contact: Rob Banks or Alex Ball  ph: 0267 732948  
email: aball@metz.une.edu.au  http://www.ansc.une.edu.au/lambplan

*LAMBPLAN ~ excellence in sheep breeding and production*