The official journal of Mohair Australia Ltd. Serving breeders of angora goats & producers of mohair MOHAIR Australia Limited

ABN 40 008 585 135









## **National Presidents Letter**

7 March 2023,

Dear Member and Growers,

It is great to hear that mohair is selling and being consumed, which is a really positive outcome from the pre Christmas hiccup in the market. Mohair South Africa has reported good growth in the international knitting wear market. We have included details on a Sydney event from KOCO about showcasing the mohair jumper and the story behind the maker.

Goat meat market continues to come off with US exports significantly down because apparently, they are consuming a lot of cheap US beef mince and good local supply in Australia is at best under developed. We are hearing of longer lead times to book in animals and lower prices per kg.

We have reported on several of the local shows and it is great to see people enjoying themselves, catching up and showing their goats. Thank you to the volunteers.

On the international news we wanted to report on the buck sales coming out of South Africa. We have included a summary on the Newlands and guest sellers, Graaff Reinet Veld Group, Van Hasselt and guests, Heritage group, Reitfontein and guest sellers veld sale, and the Karoo group. They all had excellent clearances and good prices right through the offering. I noticed on facebook two of the groups made a real event out the sale.

We have also included 3 different technical articles in this issue which should make good reading. First one doe selection for mating, Second is on Pneumonia in Sheep however it is from Qld Goat Producers group who had a member that lost over 300 animals from an introduced bacterial infection brought on by Pneumonia and thirdly the full journal report from Dr Kiri Westphalen study from her own herd.

It is now the time to start to think about mating mobs, bucks and joining times.

Yours sincerely, Nick Gorrie



## Tasmanian Division Annual Show 2023

I had the pleasure of judging the 2023 Tas Division show which was part of the Annual All Breeds Show.

There were 4 breeders exhibiting goats and 5 exhibiting fleeces. It was nice to see a new exhibitor, Barry Cant. Barry has acquired goats from Peter & Vicki Winley.

There was a reasonable number of fleeces exhibited, fourteen in total, which was better than the nine exhibited last year. The winning fleece came from Class 11: Skirted fleece of young goat doe, exhibited by Neethorpe Angoras (Brian Smith). The Reserve Champion Fleece came out of Class 13: Skirted fleece – hair type of doe or wether, exhibited by Elonera Angoras (Eian Rayner).

20 goats were exhibited, and I was very impressed by all exhibits and the standard in Tasmania continues to improve and is of high quality.

The Champion Buck bred by Brian Smith was Class: Buck 3 years and over: Neethorpe Angoras: Henrieta. He was well grown and had an excellent fleece of finer quality and went on to win Supreme Exhibit.

The Champion Doe was also bred by Brain Smith and was Class: Doe 1 year and under 2 years Neethorpe Angoras: Neethorpe 2106. Champion Kid was a doe kid bred Don & Gaye Ackland and was Henrietta Angoras: Henrietta N120.

Thank you to all the exhibitors.

Audrey Gaffney Judge



#### SUPREME CHAMPION ANGORA

CLASS: BUCK 3 YEARS AND OVER

Neethorpe Angoras: Henrieta (Brian Smith)



#### **CHAMPION BUCK**

CLASS: BUCK 3 YEARS AND OVER

Neethorpe Angoras: Henrieta (Brian Smith)





### **RESERVE CHAMPION BUCK**

CLASS: BUCK 1 YEAR AND UNDER 2 YEARS

Henrietta Angoras: Henrietta J067 (Gaye & Don Ackland)

### CHAMPION DOE

CLASS: DOE 1 YEAR AND UNDER 2 YEARS

Neethorpe Angoras: Neethorpe 2106 (Brian Smith)

#### **RESERVE CHAMPION DOE**

CLASS: DOE 3 YEARS AND OVER

Neethorpe Angoras: Neethorpe 1846 (Brian Smith)

#### **CHAMPION WETHER**

CLASS: WETHER UNDER 1 YEAR

Henrietta Angoras: Henrietta N101 (Gaye & Don Ackland)

### **CHAMPION FLEECE**

CLASS 11: SKIRTED FLEECE OF YOUNG GOAT DOE

Neethorpe Angoras (Brian Smith)

#### **RESERVE CHAMPION FLEECE**

CLASS 13: SKIRTED FLEECE - HAIR TYPE OF DOE OR WETHER

Elonera Angoras (Eian Rayner)



#### **CHAMPION KID**

CLASS: DOE KID LESS THAN 1 YEAR

Henrietta Angoras: Henrietta N120(Gaye & Don Ackland)





# Foster Show 2023

As a result of the Berwick show committee deciding that all goats that came to their show have had CAE tests done, the Victorian Division moved their 2023 show to Foster in South Gippsland. The Foster show committee were so excited to have us come, they applied for funding and were able to provide a new marquee and pens to house our goats. The show also provided ribbons and trophies as well as seating for the interested public. We also had a microphone and a speaker talk about running Angora goats in South Gippsland to help with weed control and blackberry elimination etc.

Even though there were only two exhibitors the standard of the goats was outstanding. The goats were requested to be not washed and left in paddock condition which happily every exhibitor a bided by. Our judge Mr John Hornwigg was extremely impressed, Grand Champion Exhibit was The ERIN doe kid and Reserve Champion Exhibit was the 18-month-old doe from KOONKIE WOORUN.

The Victorian division will endeavour to find an Agricultural show in Northern Victoria to stage an Angora Section at their event in a different climate and environment as well as the Foster Show, as it is practical to have a ready-made audience of interested country farming people to show our industry to, instead of spending time, money, and effort on an event that nobody of the general public comes to.

Many thanks must go to Robbie Davies from the Foster Show Committee for all his help and enthusiasm. Mr Paul Hamilton for displaying his goats and his manpower, as well as Mr. William Day. A big thankyou to Mr John Hornwigg for stepping in as our judge on the day and Lil and Roger Roberts for displaying their Mohair.

The photo is of Mr Danny O'Brien who is the State Member for South Gippsland from the National Party, he was extremely interested to view the Angoras and the Champions.

- Supplied by Victorian Division.







## TAGORA ANGORA STUD



• Yearling bucks born 2021 Aug – Sep drop.

- Tagora and AZ genetics.
- Out of Tagora stud does.
- All bucks classed as weaving quality.
- Some will be retained to use in this stud.
  - Microns available on 2nd fleece.

Please contact Susie Paterson for more information.

Located near Toowoomba QLD.

Mobile 0427 959 108



# Show season off to a flying start in the East

The show season got off to a flying start in the Eastern region, with shows at Albion Park, Berry and Goulburn all within the past few weeks. With many shows back at full strength after several years of cancellation, it was great to see large crowds in attendance with many questions stopping to watch the Angora goat section and ask questions about mohair production.

## **Albion Park**

Albion Park Show was held on 21 January, with a small but keen showing presented for judge Debbie Scattergood.

The Champion and Reserve Champion fleeces at Albion Park Show went to Winder's Kid and Young Goat fleeces, respectively. Champion Doe and Champion Buck went to Wilton Park with Champion Kid, also claimed by Winder. Supreme Champion on the day was the doe from Wilton Park.

The highlight of the day was having the South Coast region's Young Women competitors stop by to present ribbons to the competitors and also learn about the Mohair industry in their local area.





## **Berry Show**

Only a few weeks after Albion Park, Berry Show saw great crowds attending the animal section. While the entries were few, there was still great depth to the quality of the animals and fleeces presented for judge Stewart Crear.

Champion Fleece went to Wilton Park's Young Goat fleece, and Reserve Champion Fleece to Winder's Kid fleece entry. Winder won Champion and Reserve Champion Kid. Champion and Reserve Champion doe won by Wilton Park and Champion Buck by Winder. Supreme Champion went to the doe from Wilton Park.

It was exciting to see interest from Nowra High School, who stopped in for an impromptu lesson on the finer points of Angora goat and Mohair judging. With the students already familiar with judging alpacas, they picked it up quickly and looked forward to participating in other competitions.





## **Goulburn Show**

The first weekend in March saw the Angora goats feature in a well-represented goat section at Goulburn Show.

Judge Eleanor Santolin awarded Champion and Reserve Champion Mohair Fleece to Cullbookie. Champion Kid went to Windy Reefs and Reserve Champion Kid to Winder.



Narrandera High also participated in the school's classes and Young Judges competition, with eight students and one independent participant.





## **Next shows**

The next shows for Eastern Region are Castle Hill Show (19 March) and Camden Show (25 March) before the season culminates with the Sydney Royal Easter Show. Follow our Facebook page (Eastern Region Mohair - https://www.facebook.com/easternregionmohair/) to stay up to date with the results.



## BRINDELLA ANGORA DOES FOR SALE



- Sound, large frame and pink tagged Does producing high quality mohair
- Does have produced and reared healthy kids, many with twins
  - Snyberg genetics have been used for the last 10 years to enhance production
  - Aged from 2 to 6 yrs old available

Phone: Jennifer on 0458 264 672 for prices.



# **International news**

## **Buck sales from South Africa**

## Auction Report | 26 January 2022 Angora Veld Ram Sale



Petrus Marx (Buyer), Chris Curtain (HOF)

The Most Expensive Ram achieved the TOP price of R47 000 today! The seller was Jannie Lategan (Fairview Angoras) from Aberdeen, and the buyer was Petrus Marx (Marwyk Angoras) from Wolmaransstad.

Average Rams - R9 071 (Avg of all 66 rams) Stud - R22 600 SF - R13 300

Flock - R7 000 Congratulations, and thank you to all the Sellers and

Buyers! May the rams bring you lots of luck !!! FIBRE

#### Auction Report | 1 February 2023 Heritage Angoras Ram Sale



Record auction for Heritage's Angoras 1st Ram Sale

The Most Expensive Ram achieved the TOP price of R80 000 The seller was Sean Hobson (Martyrsford Angoras) from Jansenville; the buyer was Max van der Wath, and Emile Janse van Rensburg from Sutherland.

Rams - R15 126 (Avg of all 79 rams, 100% sales) Stud - R42 500 SF - R20 750

Flock - R10 900 Congratulations, and thank you to all the Sellers and Buyers! May the rams bring you lots of luck!

FIBRE

## Auction Report | 24 November 2022



the enert expensive ram was sold for **R36 000**, and the selfer Roelfie van der Merwe, Newlands Angoras from Aberdeen. The buyers were, Petrus Marx, Marwyk Angoras & Stephan Ersamus, Frasmus Angoras & Reco Pieterse, from Woltmaransstad. Average Ram prices The a ction : re was R9820.51 for 78 rams

Stud: R25 285

SF: R14 285 Flock: R7 640

outstanding auction!

180 shedding 2 Tooth Ewes sold for an average of R2629/ewe! I want to congratulate and thank all the Sellers and Buyers for an

FIBRE

ieved the highest price of

#### Auction Report | 23 February 2023 Rietfontein Angoras & Guest Seller Angora Veld Ram Sale



Michael and Robert Bosch (Rietfontein Angoras) sold the most expensive ram for R20 000, Congratulations to Jakkie Nel (Somerset East) who bought the ram. Average

 
 Average

 Rams - R8 559(Avg of all the rams)

 Stud Rams - R17 500

 Select Flock Rams - R11 750

 Flock Rams - R7 100

 2T Select Flock Ewes - R1 475
 2T Flock Ewes - R1 250 2T Kapaters - R1 325 4T - 6T Kapaters - R1 335

Congratulations, and thank you to all the Sellers and Buyers! May the rams bring you lots of luck!

FIBRE

#### Auction Report | 18 January 2023 Van Hasselt & Guest Seller Angora Veld Ram Sale

FIGHE FIGHE FIGHE FIGHE FIGHE -----14665 1466

The top price was achieved for a ram sold for R44000 by Jordi van Hasselt (Van Hasselt Angora Stud), from Prince Albert to Benjohan Snijman from Rietbron.

Average ram prices: R14 764 (An auction record average was achieved over 121 rams with 100% sales) Stud: R31 000 SF: R21 500

Herd: R11 900

Congratulations, and thank you to all the Sellers and Buyers May your rams bring you much success!

FIBRE







Max van der Wath and Emile Janse van Rensburg from Sutherland purchased the most expensive pen of stud ewes at a price of R5 000 per ewe, while Matthew Broeksma from Aberdeen acquired the most expensive pen of SF

at R3 400 per ewe

On average, the 204 stud ewes sold for R3 528, while the 160 SF ewes were sold at an average price of R2 771.

We extend our congratulations to Jordi van Hasselt, the seller, as well as the buyers, and we wish them much happiness with their new acquisitions!

FIBRE



**AUCTION REPORT** 







# **Ewe Selection**

By Dr Mackie Hobson BSc(Agric), BVSc

Thursday, 3rd June 2021

## REPRODUCTION

#### **EWE SELECTION**

## The Correlation between Reproduction, Bodyweight and Mohair Traits.

Gretha Snyman (Grootfontein Agricultural Development Institute) investigated the correlation between the various traits that Mohair Producers select for.

The more important selection criteria Producers concentrate on for Angora goats include:

- · body weight,
- fleece weight,
- fibre diameter
- fleece quality traits,
- · reproduction (receives least attention)

For the producer to have an effective breeding plan, it is important that accurate genetic parameters for the traits involved be available.

Most producers select their maiden ewes at 16-18 months of age. Gretha Snyman estimated the genetic and phenotypic correlations between early and adult body weight, fleece traits and reproduction. The data was collected over 15 years.

#### Medium heritability:

- body weight
- · fleece weight

#### **High heritability:**

fibre diameter

#### Low heritability:

- Staple length
- · Reproductive performance of maiden ewes.

If used as selection criteria, care must be taken that maiden ewes reach an acceptable weight at first mating.

This implies that if any of these traits are included in the selection, genetic progress in the trait will result according to heritability.

#### EARLY SELECTION CORRELATIONS (maiden ewes):

Selection for early fleece weight will lead to a genetic INCREASE in:

- · in adult body weight,
- · fleece weight
- · staple length,
- · adult fibre diameter (economic impact)
- · Total weight of kid weaned

Selection for early **fibre diameter** (fineness) will lead to a genetic **DECREASE** in:

- · in adult body weight,
- fleece weight,
- staple length
- · Total weight of the weaned kid.

#### Selection of early staple length

The only trait that would be increased would be adult staple length



#### Selection for early **bodyweight** will be **INCREASED:**

- · adult body weight
- reproduction,
- an unfavourable effect on adult fibre diameter and should not influence adult fleece weight

## Selection on maiden **ewe reproductive performance** will lead to an **INCREASED**:

· Adult reproductive performance.

Genetic correlations estimated between maiden reproductive performance and adult body weight, fleece weight and fibre diameter were unreliable due to very high standard errors.

#### ADULT SELECTION CORRELATIONS:

#### Selection for adult fleece weight will DECREASE:

- reproduction,
- · in the fibre diameter profile traits.

The contradiction between the correlation of early and adult fleece weight with lifetime reproduction could possibly be explained through the fact that fleece production in Angora ewes decreases with age after peaking at three years of age (Snyman, 2018).

#### Selection for adult fleece weight will INCREASE:

- The number of fibres in the fleece,
- staple length

#### Selection for adult body weight will INCREASE:

- reproduction,
- fibre diameter,

**Dr. Mackie Hobson** BSc (Agric) BVSc Industry Veterinarian

082 860 0406

samgavet@gmail.com

💿 www.angoras.co.za

Unfortunately, the reproductive traits have the lowest heritability of all the economically important traits. Bodyweight indirectly contributes to reproduction through favourable genetic correlations with reproduction.

Selection of young ewes should therefore be focused on:

- early body weight,
- number of kids produced and
- · Weight of kids weaned at the first parity.

The negative relationship between reproduction and fleece production in the adult ewes emphasises the fact that positive selection pressure on early fleece weight should not be done at the cost of reproduction.

Only young ewes with unacceptably low fleece weights should be culled, while too much selection pressure on early fibre diameter in the young ewes should also be avoided. Selection for fleece production and fleece traits should rather be addressed through ram selection.

#### **REFERENCE:**

Extracted from: CORRELATIONS AMONG MOHAIR TRAITS, BODY WEIGHT AND REPRODUCTION IN SOUTH AFRICAN ANGORA GOATS. M.A. Snyman (Grootfontein Agricultural Development Institute)





# Reproductive efficiency in Angora goats

## A cohort study in southern New South Wales

K. L Westphalen<sup>A,B</sup>, A. Gunn<sup>A</sup> and S. M. Robertson<sup>A</sup>

<sup>A</sup>The School of Agricultural, Environmental and Veterinary Sciences, Charles Sturt University, Wagga Wagga, NSW 2678. <sup>B</sup>Corresponding author: kiri\_westphalen@yahoo.com.au

Poor reproductive efficiency is a well-recognised phenomenon of the Angora goat. However, reproductive performance in Australian Angora goats on commercial properties is inadequately described and the causal factors of reproductive inefficiency difficult to ascertain. We present a cohort study conducted in one flock of Australian Angora does in south eastern NSW aiming to identify the major sources of reproductive loss between joining and weaning.

This study was conducted over a four year period on a 20.4 ha property in Humula, NSW, 130km west of Canberra. The flock was established in 2015. Comprehensive reproductive performance records were collected between 2017 and 2021 by the owner. A total of 228 records were available. The flock grazed pasture throughout the year except in 2019. In 2019, a pen research trial was conducted in which pregnant does were fed differentially during different stages of pregnancy to determine the effects of feeding on the skin follicle density of the progeny. These results are presented elsewhere. Does weighing >25kg prior to joining were selected for breeding. Each year 40-60 does were mated with 2 bucks for a 9 week joining starting in early April. Each year a different oestrus synchronisation protocol was undertaken. Transabdominal ultrasonography for pregnancy diagnosis and fetal number occurred 8 weeks after removal of the bucks. Daily monitoring of the flock began two weeks before the first expected kidding date in early September. For each kid born,

the dam was identified and birth type (single, twin) and sex of kid was recorded. Kids were marked at weaning and breeding outcome for each doe recorded. In 2021 only, dead kids (n=16) were necropsied to identify likely causes of death. Descriptive statistics were conducted using SPSS statistical analysis software.

The overall conception rate (pregnant does/does bred) was 72% or 80% excluding maiden does. Foetal loss from scanning to birth was 17.6-26.9%, although this is likely an overestimation if kids dying during or after birth were not found. Reproductive rates (kids weaned/doe bred) were lowest in maidens (12.1%) and does >15 years (0.0%). Highest rates were observed in does between 3-9 years old (50.9 Vs 42.3% >10 years). Kidding rates (kids born per doe bred) were 67-87%. The majority of births were single female kids (50/153) but females born as twins were more likely to be weaned (78.1%) than single females (72%), single males (52.4%) or twin males (62.1%). Losses between birth and weaning were up to 48% with an overall reproductive efficiency of 50% (50 kids weaned per 100 does bred). Starvation-mismothering-exposure complex was the primary cause of death between birth and weaning. Copper deficiency was suspected to play a role in postnatal mortality based on clinical signs and response to copper supplementation; limited blood sampling (n=2) substantiated this observation.



Year	Number of Does	Oestrus Sync	Preg/doe bred	Foetus/ preg	Doe kidded/ preg	Kid born/ doe bred	Kid born/ preg	Kid wean/ born	Kid wean/ doe bred	Kid wean/ preg
2017	52	Nilª	~	~	~	0.830	~	0.860	0.711	~
2019	49	PG⁵	0.694	1.147	0.824	0.673	0.971	0.515	0.350	0.50
2020	49	CIDR + PG°	0.837	1.220	0.780	0.796	0.951	0.538	0.429	0.512
2021	45	CIDR + PG°	0.889	1.225	0.775	0.867	0.975	0.615	0.533	0.60
Adult mean	195		0.804	1.20	0.791	0.790	0.965	0.643	0.508	0.539
Maiden mean	33		0.386	1.111	0.867	0.242	0.867	0.50	0.121	0.622

Table 1. Reproductive performance of adult does 2017-2021 and mean performance of adults and maidens in one Angora goat flock.

<sup>a</sup>Nil: No reproductive hormones given.

<sup>b</sup>PG: Given 250mcg cloprostenol IM (Ilium Estromil 1mL, Glendenning NSW), repeated 11 days later.

°CIDR + PG: CIDR (Zoetis EAZI-BREED CIDR, West Ryde NSW) inserted for 21 days. Given 250mcg cloprostenol IM at removal.

Conception rates were lower than expected (86-89% (Robertson et al 2020)). Fetal losses were higher than those reported elsewhere (10.1-20% (Snyman 2010)). Postnatal kid mortality was the major source of reproductive inefficiency similar to other reports (Robertson et al 2020). Based on a limited number of necropsies, starvation-mismothering-exposure and copper deficiency were the major causes of



mortality although the area is not known for copper deficient soils. It is suspected that inadequate pre-joining liveweight is the cause of poor conception rates particularly for maidens. Although this study was conducted in only one flock, there is considerable potential to improve reproductive efficiency. Further research on the wider Angora industry is necessary to develop benchmarks for producers to utilise this potential.

#### References

Robertson S. M et al. (2020) Animal Production Science 60: 1669-1680.

Snyman M. A. (2010) South African Journal of Animal Science 40: 41-53.

Reproductive efficiency in Angora goats: A cohort study in southern New South Wales by K.L Westphalen, A.Gunn and S.M Robertson.

Reproduced with permission from 34th Australian Association of Animal Sciences Conference Proceedings, 5-7th July 2022, Cairns Australia.



## Pneumonia in sheep

Dr Joan Lloyd has kindly shared this information with our group.

It was through Dr Joan that the Mycoplasma in my herd was confirmed & a management plan has been made to save what remains of our herd.

I personally recommend the use of the PCR tests on any introduced animals, we could have saved 300+ goats from a terrible death if we had known about the simple available tests offered by Dr Lloyd when we introduced 3 stud doelings to our herd.

Please consider this as we quarentined the introduced animals but now know animals can be carriers without obvious signs of the Mycoplasma Ovipneumonia.

Knowledge is essential as this bacterial disease is common in sheep & goats throughout Australia

I am happy to talk to any of you about our terrible two year journey

With kind regards,

Glenda Henry Ph: 0428 774 687 Vice

Anita Dennis Ph: 0408 328 647 Chair Kylie Leahy Ph: 0437 881 246 Sec Fleur Tarlington Ph: 0419 770 364 Sec Paula Gordon Ph: 0421 559 072 Tres Queensland Goat Producers Inc qldgoatgroup@gmail.com

## Australian Mohair Marketing Organisation (AMMO) Upcoming A season Sale Update

## A2023 Sale Timeline

- · Cut off for receivals ASAP contact AMMO to discuss any delay in consignment
- Contract Classing commences 17th APRIL
- Contract Classing complete 26th APRIL
- Press up 1st—2nd MAY
- Core tests 8th MAY
- Test results back 15th MAY
- Catalogue out to Buyers 16th /17th MAY
- Set up show floor 22nd/ 23rd MAY
- SALE DATE FRIDAY 26th MAY



# Pneumonia in sheep

## A cohort study in southern New South Wales

## **Pneumonia in Sheep**

## **COMMON AND COSTLY**

Sheep and other ruminants are anatomically predisposed to pneumonia through the rumen pressing on the diaphragm, resulting in shallow breathing.

Pneumonia and pleurisy in sheep are referred to as Ovine Respiratory Complex or ORC for short.

Pathogens commonly involved in ORC include the bacteria Mycoplasma ovipneumoniae, Mannheimia haemolytica and Pasteurella multocida, and two viruses, Parainfluenza-3 Virus and Respiratory Syncytial Virus.

In Australia, ORC is often called Summer Pneumonia. Marking, weaning, hot dry weather, raised dust, summer storms, the first shearing and grain feeding can be stressful for lambs, contributing to outbreaks of the disease.

## **Abattoir Survey**

The abattoir survey of ORC pathogens funded by Animal Health Australia and Meat & Livestock Australia is now complete.

Twenty-four abattoir visits were completed between October 2020 and December 2021, with 1095 samples collected from diseased ovine lungs. The samples represented 253 abattoir lots, including 182 lots of lambs and 71 lots of adult sheep.

Sample collection and polymerase chain reaction (PCR) testing confirmed the findings of my previous research on ORC in Australian sheep, with widespread detection of Mycoplasma ovipneumoniae in lungs from lamb and sheep carcases sourced from around Australia.

Mycoplasma ovipneumoniae was detected in sampled lots at each abattoir visit (range 28.6% - 100% of sampled abattoir





## **KEY POINTS**

- PNEUMONIA IS COMMON IN AUSTRALIAN SHEEP.
- THE ABATTOIR SURVEY OF SHEEP PNEUMONIA PATHOGENS IS NOW COMPLETE.
- THE ABATTOIR SURVEY
  HAS REVEALED WIDESPREAD
  INFECTION WITH MYCOPLASMA
  OVIPNEUMONIAE IN
  AUSTRALIAN SHEEP.



lots). Across all the abattoir visits, 64.4% of sampled abattoir lots tested positive for Mycoplasma ovipneumoniae.

Abattoir lots positive for Mycoplasma ovipneumoniae came from New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia. No sheep from the Australian Capital Territory were sampled as part of the survey.



PCR testing for ORC pathogens is cost- effective & fast!

## Mycoplasma ovipneumoniae

Mycoplasma ovipneumoniae was first isolated from two large sheep flocks in southern Queensland in the 1960s that had shown poor growth rates and reduced exercise tolerance for some years.

Mycoplasmas are a type of bacteria. Infection with Mycoplasma ovipneumoniae predisposes sheep to secondary lung infection with other bacteria such as Mannheimia haemolytica and Pasteurella multocida that normally live in the nose and throat of sheep without causing any harm. Once in the lung these bacteria grow and secrete toxins that cause inflammation and lung tissue destruction.

All breeds of sheep are susceptible to infection with Mycoplasma ovipneumoniae. Infection persists in a flock in chronic carrier ewes and rams, with infection passing from ewes to lambs soon after birth. Ewes shed the bacteria from their nose and throat, as well as in their milk. Infected ewes and rams may show no outward signs of infection, or may be coughing, wheezing, have runny eyes, breathe heavily after exertion or simply be found dead.

Lambs may begin showing signs of infection (wheezing, coughing, runny nose, runny eyes, difficulty suckling) from one to two months of age. Some lambs may develop swelling of the carpal (knee) joints.

## Sheep Respiratory Viruses

Infection with Mycoplasma ovipneumoniae makes it more difficult for sheep to fight off infection with respiratory viruses.

During the abattoir survey of ORC pathogens small numbers of abattoir lots (less than 5%) tested positive for Ovine Parainfluenza-3 Virus or Ovine Respiratory Syncytial Virus.

Abattoir lots positive for Ovine Parainfluenza-3 Virus came from New South Wales, Tasmania and Western Australia.

Ovine Respiratory Syncytial Virus positive lots came from New South Wales, South Australia and Western Australia.

Parainfluenza-3 Virus is one of the most common viral infections of the respiratory tract of domestic ruminants (cattle, sheep, and goats).

Historically it was thought that the bovine strain of Parainfluenza-3 Virus was responsible for infections and disease in sheep and goats. However, new molecular techniques indicate that sheep and goats have their own strains of the virus.

The virus infects calves, lambs and kids when grouped together for any reason, i.e., weaning, husbandry procedures, transport. Transmission is by aerosol droplets or by fomites contaminated with respiratory secretions from infected animals.

Infection spreads rapidly and within a few days many or most animals have fever, clear nasal and ocular discharge, heavy breathing and may be coughing. Usually, infection runs a brief clinical course of three to four days, followed by complete recovery.

Outbreaks can be so mild that no clinical signs are evident.



However, serious disease and pneumonia can occur, particularly if the animals have underlying disease such as chronic respiratory Mycoplasma infection, co-infection with other viruses or are stressed due to poor weather, inadequate nutrition, transport, crowding or unhygienic conditions.

Respiratory Syncytial Virus causes lower respiratory tract disease in humans (children and adults) and cattle.

The bovine strain of Respiratory Syncytial Virus causes respiratory disease in cattle worldwide and plays an important role in enzootic pneumonia in young dairy calves and summer pneumonia in nursing beef calves.

Clinical disease from Respiratory Syncytial Virus infection in sheep is not well defined. However, it is quite likely that the disease in lambs' mirrors that in humans and cattle. Further research is needed to understand the role of Ovine Respiratory Syncytial Virus in ORC in Australian sheep.

## **Pleurisy in Sheep**

The pleura is a thin membrane that covers the outside of the lungs and the inside of the chest cavity.

When animals have pneumonia, the pleura can become inflamed. Approximately 20% (1 in 5) sheep that have pneumonia from Mycoplasma ovipneumoniae infection will develop pleurisy.

Pleurisy is a problem in sheep processing plants because it makes it difficult to eviscerate the carcase.

My research has shown that trimming for pleurisy results in an average 1 kg per carcase loss to producers.

In addition to lost carcase weight will be the financial penalty to some producers from the trimmed carcase no longer being within specification.

Losses are highly leveraged to the processor as high value cuts and the on-floor costs incurred by the abattoir in handing affected carcases.

## PCR testing for ORC pathogens

In the 1970s researchers in Victoria suggested that nasal swabs could be a useful way to monitor sheep for respiratory



Average 1 kg trim from pleurisy

pathogens. Today, PCR tests and new sample collection technology makes nasal swab monitoring even more useful.

When detected early, infection with Mycoplasma ovipneumoniae can be treated.

I offer Sheep Pneumonia Testing Packages that can be used on nasal swabs from live animals or on bronchial swabs collected at post-mortem.

The Sheep Pneumonia Testing Packages include the PCR tests developed for the abattoir survey and the innovative Genotube Livestock Swab for collecting PCR samples from livestock.

Please get in touch to arrange testing of your sheep.

Published by Joan Lloyd Consulting Pty Ltd, Suite 201, 29-31 Lexington Drive Bella Vista NSW 2153 Australia. This publication should be used as a general aid and is not a substitute for specific advice. To the extent permitted by law, we exclude all liability for loss or damage arising from the use of the information in this publication. Copyright 2008-2023 Joan Lloyd Consulting Pty Ltd. All rights reserved.



## Instructions for collecting nasal swabs from sheep and goats

#### **Key points**

- Collecting nasal swabs from sheep and goats is a two-person job. One person will need to restrain the animal and the other person collect the swab.
- The nasal mucosa lining the nostrils of sheep and goats is delicate. Do not force the swab as this can damage the nasal mucosa.
- Hold the animal's head parallel with the ground and insert the tip of the swab. Most animals will then lift their head, allowing the swab to slip into the nostril. This will make is easier to insert the swab and allows sample collection from deep within the nostrils.
- Clean/sanitize your hands at frequent intervals, preferably between each animal.
- If the animals have been treated with antibiotics, wait 4-6 weeks before collecting swabs for Mycoplasma ovipneumoniae testing.

#### **Equipment required**

- Genotube Livestock Swab
- · Pneumonia in Sheep and Goats submission sheet
- · Water-based baby wipes or equivalent
- Hand sanitizer
- Plastic zip-lock bag
- Tag scanner or pen for recording the swab number and animal tag number

#### Swab

• The swabs are prelabelled with a number and matching bar code on both the cap and cover.



The swab has a flexible plastic shaft and a generous 3 cm-long sample collection surface.



Only the sample collection surface and the flexible plastic shaft should enter the animal's nostrils. The plastic cap must not enter the animal's nostrils.

#### Sample collection

- · Hold the animal's head parallel to the ground.
- Clean the animal's muzzle with a water-based baby wipe or equivalent. Use a clean wipe for each animal. The PCR test is very sensitive and will detect bacteria and viruses carried from one animal to the next on a used wipe.
- Sanitise your hands.
- · Take the swab from the foil wrapper.
- · Record the swab number and sheep or goat tag number.
- Twist the swab cap to open. Hold the swab by the cap. Do not touch the swab shaft or sample collection end with your fingers.
- Insert the tip of the sample collection end of the swab into the first nostril of the animal. Most animals will then lift their head, allowing the swab to slip into the nostril. In adult animals the whole sample collection surface and swab shaft will fit into the nostril. In small lambs and kids only 1-2 cm of the sample collection surface may fit into the nostril.
- Rotate the swab gently five times. Pull the swab out of the first nostril and repeat for the second nostril. The swab must be in each nostril for 5 seconds to fully absorb the sample. Re-cap the swab.
- Place the swab in the zip-lock bag.
- Once all the samples are collected mail the swabs and the completed submission form to us:

Joan Lloyd Consulting Pty Ltd PO Box 496 WEST RYDE NSW 1685



PNEUMONIA IN SHEEP & GOATS PCR TEST									
Tick the box for the PCR test required.									
□ Mycoplasma ovipneumoniae	Ovine Parainfluenza-3 Virus	□ Ovine Respiratory Syncytial Virus							
□ Individual PCR test on each swab	Pooled PCR test on up to five swabs								
OWNER DETAILS									
Owner									
Address									
PIC									
Phone									
Email									
Signature									
Date									
ANIMAL DETAILS									
Species	Breed								
Age	Sample Dat	te							
Number affected	Number at	risk							
PLEASE PROVIDE A BRIEF HISTORY OF THE ANIMALS BEING TESTED									



## CORAL MANIA



## 25.5.2023

We warmly invite you to attend a gala event to celebrate the launch of The Mohair Jumper and join us in an exhilarating evening of retail theatre!

Come along, enjoy some bubbles and nibbles and speciallythemed runway show, followed by a curated shopping experience.

Your senses will come alive.

Cost: AUD\$49 (includes bubbles and nibbles) Time: Doors open at 6:30pm for a 7pm start Venue: Paddington Town Hall, Oxford Street, Paddington.



https://themohairjumper.com/pages/coralmania

## **Jamaican Curry Goat**

Jamaican Curry Goat – insanely delicious slow cooked Jamaican Spiced Curry that is full of flavour and tender to the bone! An absolutely must-make Jamaican food! So easy to make with minimal prep.

## INGREDIENTS

- 3-31/2 pounds goat meat (cut in chunks)
- 1/4- 1/2 cup cooking oil
- 2 teaspoons minced garlic
- 1-2 teaspoons minced ginger
- 1 medium onion sliced
- 4-5 Tablespoons Curry powder
- 1 teaspoon white pepper
- 1-2 teaspoons fresh thyme
- 2 green onions sliced
- 2-3 medium potatoes
- 1 Tablespoon tomato paste
- 1 scotch bonnet pepper (adjust to suit taste buds or replace with any hot pepper)1 tablespoon Bouillon powder (optional)

Salt to taste



## INSTRUCTIONS

Season goat with, salt and pepper. Set aside.

In a large pot, heat oil over medium heat, until hot, and then add the goat meat sauté stirring, frequently, any browned bits off the bottom of the pot, until goat is brown.

Then add curry, stir for about 1-2 minutes.

Add the garlic, ginger, white pepper, onions, thyme, tomato paste, scallions (green onions) and scotch bonnet pepper stir for about a minute.

Then pour in just enough water to cover the goat and bring to a boil and let it simmer until tender (depending on the goat size and preference) about 2 hours or more, stirring the saucepan occasionally and adding more water as needed.

About 15-20 minutes before you remove from the stove add potatoes and bouillon powder. Continue cooking until potatoes are tender, if you want really thick curry goat let the potatoes cook even more.

You may adjust thickness of soup with water or stock.

## Mohair Australia Limited

PO Box 248, Mundaring, WA 6073 Secretary - Sue Jordan **p** (08) 9574 7090 **m** 0409 743 968 President - Nick Gorrie **m** 0409 129 123 **e** mohair@mohair.org.au **w** mohair.com.au



