

THE WOOL PRESS

March/April 2021

Volume 328

Telephone +500 27355

vetreception@naturalresources.gov.fk

In this issue...

Editorial *page 2*

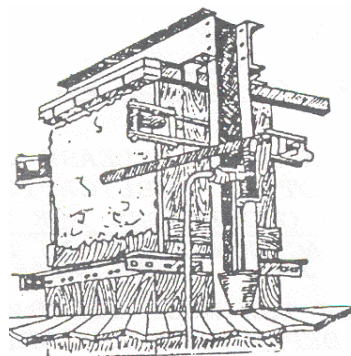
Farmer-based Research - An on-farm experiment to test the effect of lime amendment on pastures and livestock grazing behaviour *page 4*

Vet Reminder: Sheep movement *page 9*

Market price trends for Wool *page 10*

My work experience week with the Veterinary Department by Jessica Lee *page 11*

Saladero News *page 12*



Edited By Merrie Ellis

Printed by The Print Shop, Stanley

Produced by the Department of Agriculture, Falkland Islands Government

EDITORIAL

This Wool Press coincides with the conclusion of my contract as the Senior Agricultural Adviser at the DoA. It has been a real privilege to lead the DoA since August 2019. The Team in the Agricultural Service has achieved some major outcomes in this short time.

- The Covid-19 Wool Producers Scheme, which has purchased all the wool offered by farmers and has sold all but a few bales within the investment limits of the ExCo paper.
- The introductions and establishment of a new OFDA Service, giving farmers the ability to test mid-side samples quickly and cheaply within the Falkland Islands.
- Establishment of a Farmer Based research programme which put the farmers needs front and centre.
- In conjunction with the steering group the Responsible Wool Standards (RWS) Pilot scheme has been commenced, with 33 farms participating in the first year.
- Progression of infrastructure programs including sheep yards at Saladero and the removal of the Millennium Dome.
- The redirection of resources from the National Beef Herd acknowledging the Islands capacity through breeding and Artificial Insemination (AI) for there to be no longer a need for FIG to provide this support.
- A National Stud Flock which offers excellent sound genetics to the Falkland Islands.

These achievements are a result of the efforts, skills and work put in by DoA staff, farmers and agents involved in farming in the Falkland Islands.

Within this edition the Saladero News article showcases the success of the 2021 Ram sale and it is a credit to the NSF committee who have guided the NSF offering over the past year. As stated in the article genetics, grazing management and stock management have combined to provide an excellent selection of animals with a 96% clearance. A survey has been circulated regarding the Saladero Review and I encourage all those involved in the industry to submit a response.

Since 2016 Mandy Ford has been the Farm Manager at Saladero. In May Mandy will be leaving the DoA and all of us would like to thank her for her hard work. Under Mandy's watch the fences have improved, the grazing plan has been implemented and is working well with a 2021 lamb marking back at 70%. The DoA takes this opportunity to say farewell to Mandy and wish her well for the future.

In March we said goodbye, best wishes and farewell to Mike Davis in his dual Biosecurity/ Ag Assistant role. A full time Biosecurity role has been advertised and we welcome back Naomi Baxter who is covering for Dani Baigorri whilst she is on maternity leave. At the end of the season we will also say goodbye, best wishes and farewell to Nathan Wenn who has been the Wool Coring Officer for the past two seasons. Andrew Bendall will be acting Senior Agricultural Adviser from June 2021.

Thank you to all the farming community, FIG staff, WoolCo, Falkland Wool Growers, FLH and FIDC who have made my time in the Falklands such a positive one.

Tom McIntosh
Senior Agricultural Adviser

The Department of Agriculture (DoA) release all copyrights on content to The Wool Press.
Other publications are invited to quote freely.

However, such quotations are to be made in context and the Wool Press must be acknowledged as the source.

The articles printed in the Wool Press do not necessarily represent the views of the DoA.

© Crown Copyright 2019

DOG DOSING DATES FOR 2021/2022

Date	Drug
Wednesday 6th January 2021	Drontal
Wednesday 10th February 2021	Droneit
Wednesday 17th March 2021	Droneit
<u>TUESDAY 20th April 2021</u>	Droncit
Wednesday 26 th May 2021	Droncit
Wednesday 30 th June 2021	Drontal
Wednesday 4 th August 2021	Droncit
Wednesday 8 th September 2021	Droncit
Wednesday 13 th October 2021	Droncit
Wednesday 17 th November 2021	Droncit
Wednesday 22 nd December 2021	Drontal
Wednesday 26 th January 2022	Droncit

Regular weighing - it is important to keep a check on dog's weights to ensure correct dosage is being given.

All dog owners are responsible for worming their own pets. Please remember to contact the Veterinary Office and confirm this has been done. After normal working hours, please leave a message or email.

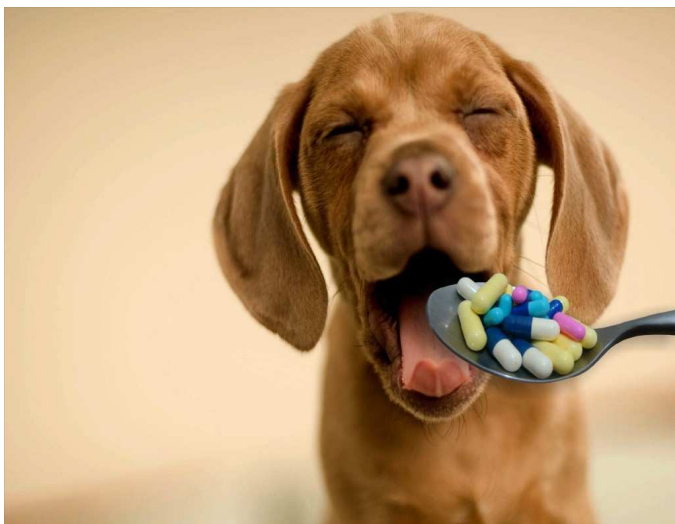
The Falkland Islands Government

Department of Agriculture,

Veterinary Service,

Tel: (500) 27366 Facsimile: (500) 27352

E-mail: sbowles@doa.gov.fk



**SEEN ANYTHING STRANGE
LATELY??**

**IF SO CONTACT THE DEPART-
MENT OF AGRICULTURE ON
27355
OR VETERINARY SERVICES ON
27366**

**Bargains Galore
Have a lot of books!
Would you like any
sent to your farm?**

DATES FOR YOUR DIARY

April 21st: Public holiday (Queens birthday)

If you have a favourite recipe that you would like included in the Wool Press email it to vetreception@naturalresources.gov.fk

FARMER-BASED RESEARCH – AN ON-FARM EXPERIMENT TO TEST THE EFFECT OF LIME AMENDMENT ON PASTURES AND LIVESTOCK GRAZING BEHAVIOUR

By Dr Matt McNee

Through the Farmer-based Research Program, Ali Marsh will orchestrate the simple strip trial experiment within his own management system at Shallow Harbour. Guidance, data collection and analysis support will be provided by the Agricultural Service.

The hypothesis for Ali's on-farm experiment is that,

Ewe hoggets will favour forage on lime amended soil, be in better condition for lambing and that this will have positive impacts on lifetime performance and lamb survival.

Whilst it is widely accepted that liming has positive impacts on acid soils and pasture, it is possible that the magnitude of the benefits won't be enough to significantly improve livestock production in the Falkland Islands context. A study in the 1990's found lime to depress plant growth through negative impacts on phosphorus availability.¹ An earlier study by the Falkland Islands Grassland Trials Unit found that low levels of lime application did raise soil pH but not forage yields.² There also isn't much information on improving degraded re-seeds, as compared to opening up new land or introducing species to native pasture. Degraded re-seeds have typically developed other issues like loss of topsoil, excessive soil iron and sodium levels, contributing to poor soil structure, as is the case at Top's Reseed.



Box 1: Tracking Livestock Distribution

- **Livestock distribution is an economically relevant trait. It is one of the principles of grazing management and uneven grazing of pastures is a common concern. The lime treatment may hopefully lead to more even grazing pressure on that strip over time.**
- **Increased uniformity of grazing can allow stocking levels to be sustainably increased or grazing periods lengthened. In this environment, being able to lengthen the grazing period is one way to improve the nutritional background of the livestock before the hungry season.**
- **Background variation like slopes in the landscape, soil conditions, watering points may all be a greater influence on livestock distribution than the lime. To learn from this we can use aerial imagery and geographic information systems to quantify the time sheep spend within a certain distance of notable locations in the landscape, like a stream or gully depression**

Importantly, farmer-centric investigations are conducted at the large landscape scales that these problems exist to different extents. Undertaking experimentation at a realistic management scale that reflects 'real' environmental variation puts Ali Marsh's decision-making and learning at the centre of the experiment.

This approach is better placed to provide meaningful information that farmers need to make informed decisions regarding the economics of lime application. If Ali can see a difference in the grazing behaviour and condition of ewe hoggets on a lime amended field, we will have reason to expand the scope of the exploration to GPS track these animals and their progeny in his ewe camps. The device is integrated with google maps and it's possible to overlay satellite images to see where the livestock roamed.

Two mobs of 50 ewes will be put on either side of the fence shown in Figure 1 and fitted with the GPS tracking devices (Figure 2) to measure differences in livestock distribution (See Box 1). Those same animals will be used throughout the experiment so that the cumulative effects on their lifetime performance can be observed.

Figure 1 Layout of the On-farm experiment at Shallow Harbour. Two blocks of 20ha each. The top block is split into Strip A (Without lime) and Strip B (With lime). Both strips were split into 10 zones to gain some idea of the variability in soil pH between and within these treatments.

Tops Reseed OFE design (Split block, 20ha each)

	pH 4.50	pH 4.56	pH 4.51	pH 4.81	pH 4.39	pH 4.39	pH 4.34	pH 4.48	pH 4.40	pH 4.57
Strip A: No Lime	1	2	3	4	5	6	7	8	9	10
	pH 4.36	pH 4.62	pH 4.47	pH 4.67	pH 4.37	pH 4.70	pH 4.43	pH 4.42	pH 4.53	pH 4.80
Strip B: With Lime	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Dividing Fence line										
CONTROL										

Some novel practices being tested in Ali's on-farm experiment.

A) Multiple small applications of lime: In order to affect a greater rate of change in soil pH and favour calcium uptake by growing root tips, Ali will try multiple smaller lime applications rather than a single large application of lime. With one large application, the rapid reactivity of his lime product will make most of the calcium carbonate available quickly and a percentage may be lost to leaching or other pathways. Even 2 or 3 smaller applications of 1-2mt/ha of granulated lime may see a gradual improvement in sward health and pH improvement versus one larger application if the Ca is being utilised more effectively and not lost. With the 26mt total lime available for the trial, it is possible to apply either two applications of 1.3mt/ha or three applications of 0.86mt/ha.



There is a lot of conjecture as to what ratio should be given to the reactivity (and therefore results) of a granulated product versus a standard ground agricultural lime. The Irish Government have effectively used a very rudimentary equation based on the distribution of particle sizes in ground agricultural lime to come up with a ratio of 3:1. Based on this, a 2mt/ha application would be equivalent to spreading 6mt/ha of ground ag-lime. This is about the correct annual recommendation for an organic or peaty soil with a pH of 5-5.6 (max 7mt/ha). So, although Ali's lime application may seem low they are equivalent to a rate that would be expected to show a soil pH response.

Continued on pages 6 & 7

B) *Managed time of grazing:*

The grasses at Tops Re-seed are Tall fescue, Kentucky bluegrass and Cocksfoot, which reportedly have common physiological limits of between 0.5% and 0.65% calcium when plants are young and leafy (more calcium is contained in leaves compared with stems). Calcium intake in ewes can be maximised when grazings are timed to coincide with vegetative growth. If lime application evens out the pasture we can expect it to become easier for Ali to make grazing management decisions to optimise nutrition for livestock. For instance, Ali might see enough improvement in the pasture to lengthen the grazing period. A key output of this experiment will be any realised changes in grazing management, made possible by the lime soil amendment.

Box 2. LIME

- Improves soil structure, corrects iron, manganese and aluminium toxicity, makes phosphate more available, stimulates nitrogen turnover and provides more suitable habitat for soil organisms.
- All pasture improvement projects depend on raising and maintaining soil calcium and phosphate levels.
- It is the carbonate in lime that raises the soil pH.
- Calcium plays a very important role maintaining the soil nutrient balance. Calcium maintains balance among nutrients by occupying space which would otherwise be taken up by acid elements.
- Calcium is also a bonding agent in soil which helps to form soil particles and develop good soil structure, which in turn also influences the nutrient balance and plant uptake.

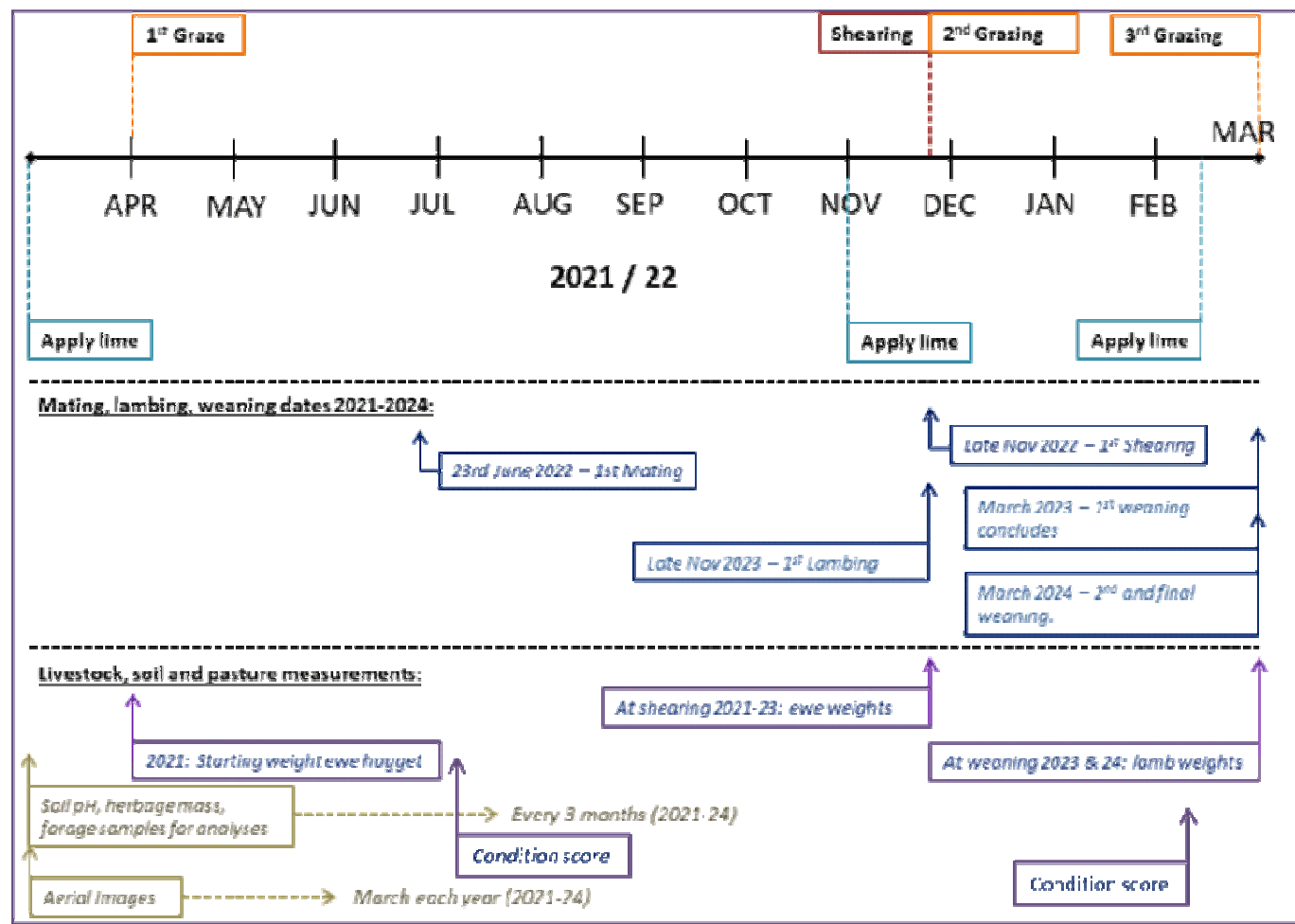


Figure 2 Livestock collar device, GPS Catlog2 in PVC tube enclosure, with rechargeable Lithium battery (9000mAh). Perthold Engineering.

C) *Delaying the introduction of high calcium species in the sward:* The calcium concentration of plantain is 1.62% compared with the 0.5% of Tall Fescue which is probably the most prevalent species at the site. The impression we have from the initial site assessment is that plantain is surviving in areas of Tops re-seed where mean pH is about 4.8. Raising soil pH to 5 across the site should provide an opportunity to re-establish high calcium species in the sward. Recent observation of the introduction of Red Clover into Re-seeded pastures at Saladero indicate that establishment is most successful in areas with thick grass swards, whilst most unsuccessful where grass growth is sparse. This observation is consistent with the findings of the Grassland's Trials Unit in the 1980's, where they recommended delaying the introduction of white clover until a grass sward with a high density of plant cover had been created. The high density of grass is indicative of improvement in nutrient cycling, which is a desired outcome from lime application.

D) Strategic fertiliser management: Meeting the increased yield potential of a limed field needs to be met through a tailored fertiliser strategy. In Ali's on farm experiment, there is the potential to embed some different fertiliser treatments with lime or no lime application. Randomised islands of high and low phosphorus fertility within Tops Reseed might further influence livestock grazing distribution.

Figure 3 The activities schedule for the Shallow Harbour On-farm Experiment (2021-24)



WHY EXPERIMENT WITH THE POTENTIAL OF RE-SEEDS TO SUPPLY MORE CALCIUM TO SHEEP?

There is growing recognition of the negative effects that sub-clinical calcium deficiencies might be having on the lifetime performance of reproducing ewes and their progeny.³ These effects include impaired bone growth, retarded weight gain, and increased requirement for vitamin E, deprived appetite, impaired digestion, reduced fertility and lower vigour. Ali Marsh has observed many of these symptoms at different times in his ewes and suspects that collectively they may impact the lambing percentage on the farm.

Pregnant ewes coming out of the reseed system into winter, will likely endure low value feed yet face the requirement to meet somewhere in the order of 70% of their lamb's calcium requirement. Native pastures need to provide the remaining 30% calcium required by lambs. Added to this is the interaction with low Vitamin D in the winter. In 1969 it was concluded that calcium deficiency in Falkland's sheep is very likely when the forage concentration is below 0.1%, as in a very large number of the species samples collected in native camp.⁴ The introduction of swede and turnip winter forages probably hasn't done much to improve calcium nutrition since these only have 0.06% calcium and don't tend to be used

Continued on pages 8 & 9

for strip-grazing sheep anyway. Working with farmers and their digital soil maps has also revealed the extent to which calcium levels in soil can vary substantially between ewe camps used on farms, potentially contributing to performance differences.

A grass forage calcium content of 0.2% - 0.4% is generally thought to be adequate, so long as the ratio with phosphorus is maintained at between 1:1 and 2:1. However, this rule of thumb seems to be most relevant to farming systems that have quality feed all year round i.e. 365 days x 0.2% Ca x 800g feed intake / day = 1168g Ca, which is about the annual requirement for a pregnant ewe. IN the Falkland Islands it seems likely that the bulk of a ewe's annual calcium requirements may have to be met over 180 days in advance of winter.

Table 1 demonstrates the theoretical potential for animals to enter the winter 'hungry season' pregnant with 85% of their calcium needs satisfied versus 22% in the worst case situation. The key thing to note in the table is that when pastures are productive, less land is needed to satisfy the forage requirements of 300 ewes and their calcium needs going into winter. Should calcium prove to be a limiting factor for ewe health and reproductive efficiency, the best case scenario below would potentially shift the goal posts in terms of the economics of lime application in the Falkland Islands.

Table 1 Theoretical capability of re-seeded pastures to meet the dietary calcium requirements of 300 ewes (40kg) grazed for 180 days before winter. A proposed 'worst' and 'best' case scenario.

	SCENARIO 1 (‘WORST’ CASE)	SCENARIO 2 (‘BEST’ CASE)
AVERAGE SOIL PH	4.5	5.0
GRASS PRODUCTION POTENTIAL (KG.DM.HA)	2000	3200
TOTAL FORAGE REQUIREMENT FOR 300 EWE HOGGETS (KG)	59,400	59,400
LAND REQUIREMENT (HA)	29.7	18.6
PASTURE UTILISATION EFFICIENCY (%)	65	85
PASTURE CALCIUM CONCENTRATION (%)	0.2	0.6
CALCIUM UPTAKE / ANIMAL (G)	257	1010
% OF EWES DIETARY REQUIREMENT	22	85

- This assumes there is no soil water limitation, 180kg of nitrogen (NH₄⁺, NO₃⁻) supplied per hectare from soil and fertiliser. Scenario yield differences calculated based on soil pH effect on plant nitrogen uptake.
- Based on the assumption that ewes will consume 1,100 grams of forage per day
- Calculated based on grass production potential and the total forage requirement
- Assumed, on the basis that livestock will be grazed on productive pastures more efficiently
- What is thought to be adequate for livestock in most pasture systems (0.02%) vs. what the reported concentration in grasses (0.6%) grazed at the optimum time (thick leafy stand).
- Calcium concentration x forage intake x Effective pasture / utilisation efficiency (%)

ANALYTICS

A problem with large-scale on-farm experiments is that background environmental variation makes it difficult to see the outcome from treatments. However, this background variation is very important information that can help inform management decisions. These days, technologies like satellite imagery, aerial images from drones and other tools like the GPS tracking devices being used help farmers see what changes and how the variation in a paddock or even a landscape is impacting the outcomes. In this context, there is much advance happening in the analysis of simple on-farm experiments. A most recent tool developed to analyse on-farm experiments has been designed for use on farmers normal PC.⁵ The future is on-farm experimentation, including analyses that are truly farmer-centric and based on learning.

References

¹ Mendoza *et al.* (1995) Effects of liming and fertilization on forage yield and vegetation in dry heath soils from Teirra del Fuego, Journal of Plant Nutrition.

² McAdam, J.H. (1981) The effect of lime and phosphate on soils and sown species in the Falkland Islands, Journal of Agricultural Science, Cambridge.

³ Friend, M.A. *et al.* (2020) Do calcium and magnesium deficiencies in reproducing ewes contribute to high lamb mortality?, Animal Production Science.

⁴ King, R.B. *et al.* (1969) Land System analysis of the Falkland Islands, with notes on the soils and grasslands, Land Resources Development Centre.

⁵ Jin, H. *et al.* (2021) An efficient geostatistical analysis tool for on-farm experiments targeted at localised treatment. Biosystems Engineering.

Veterinary Reminder: Sheep Movement

Please remember when keeping sheep or moving sheep between farms, or the Abattoir, that you follow the relevant legislation and the arrangements issued by DoA.

The relevant legislation is the Livestock and Meat Products (Identification and Movement of Sheep) Regulations 2010. This is a short and basic piece of legislation that says you must mark your sheep in accordance with national arrangements published by the Department of Agriculture.

The national arrangements state that sheep on the property on which they were born must be marked with: station mark OR a station mark and a farm tag (the tag can bear the farm code and numbers depending on what information you want on it). If you are going to MOVE sheep from your property to another farm the sheep MUST bear a farm tag with your farm code on it. Just a station mark is not sufficient. If you are RECEIVING sheep you must apply your own farm tag but NOT remove previous tags. Sheep that are being moved directly to the Abattoir can be identified to your farm either by a farm tag OR by a paint brand or spray mark of the farm code. A simple raddle or spray dot or stripe does not identify a sheep back to its farm of origin - you should only use these as sorting marks.

Please also remember to complete an Animal Movement Certificate as FULLY as possible and when the movement is complete the pink copy should be sent to the Vets ASAP. Please remember to mark if your sheep have received any treatments or tick the box if they have not.

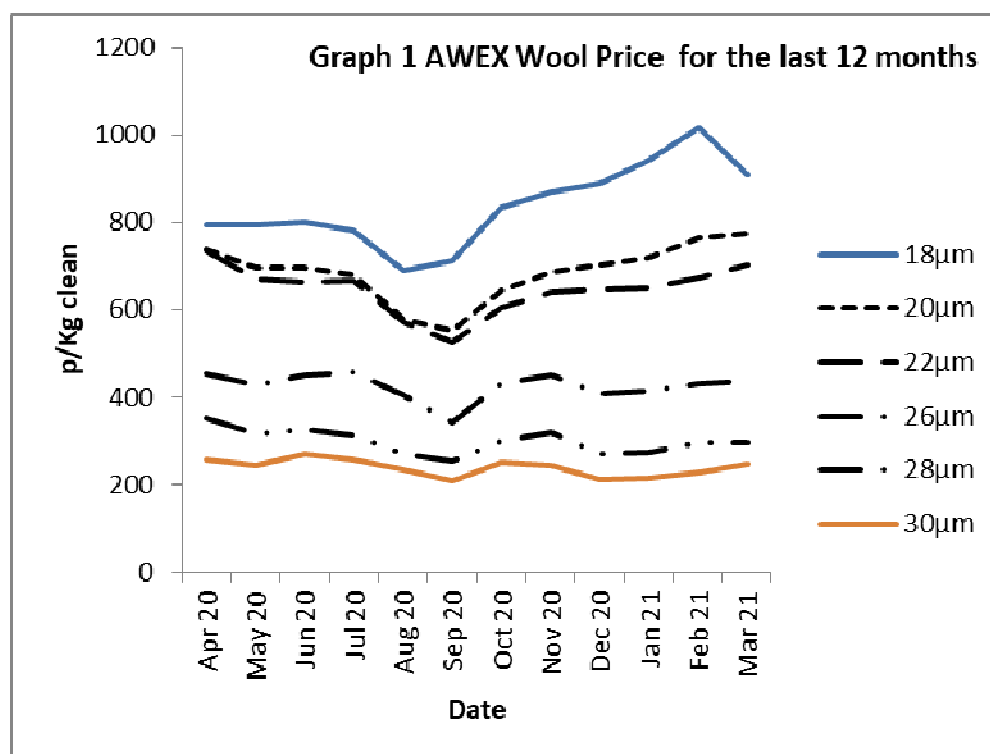
Recording livestock movements may seem like extra paperwork and a waste of time but it is valuable information to have in the face of a serious disease outbreak and for farm biosecurity.

Please contact the Vets if you would like a copy of the regulations or arrangements or if you have any questions.

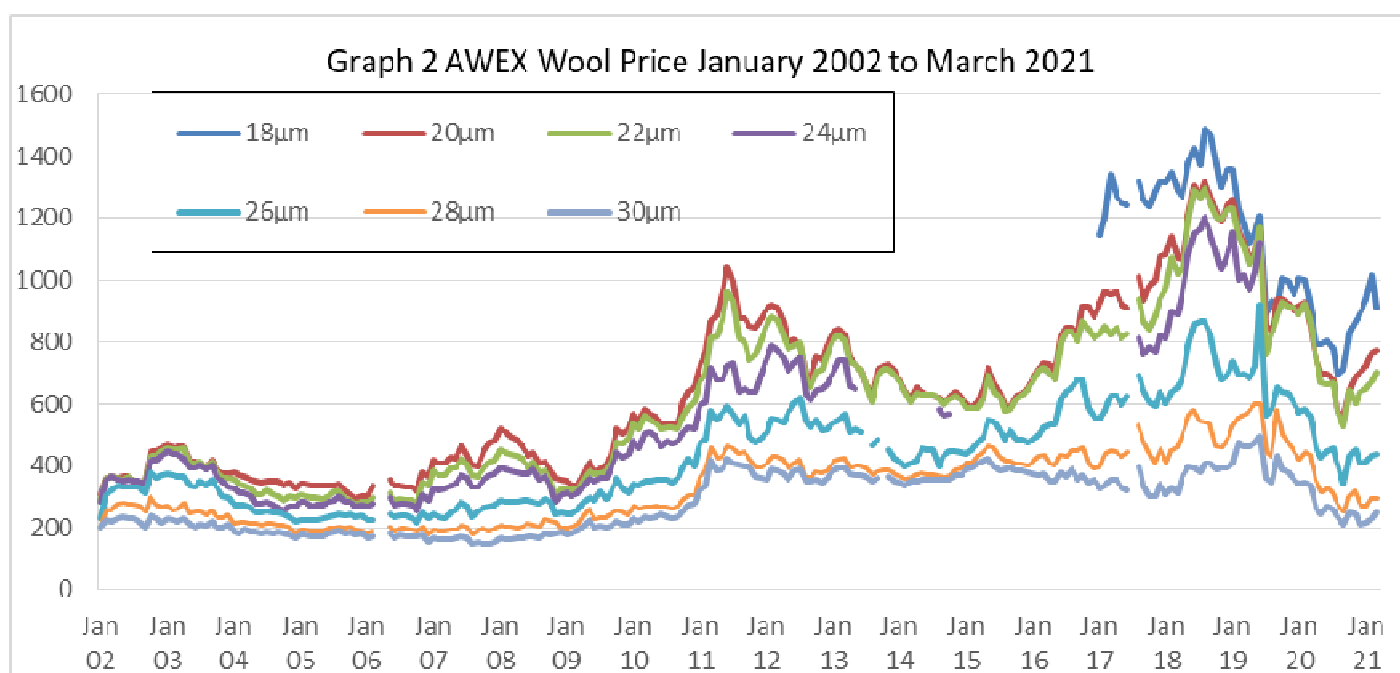
Market Price Trends for Wool (Using AWEX Data)

By Tom McIntosh

The Australian Wool Exchange (AWEX) Eastern Market Indicator (EMI) for the last twelve months shows fluctuation with downturn and recovery but overall no significant improvement since April 2020 Graph 1.



The long term trend shows a trend for recovery since the lows of 2019/20 Graph 2.



My Work Experience Week with the Veterinary Department

By Jessica Lee

For my work experience I really wanted to work at the Vets and luckily I got my chance. I was so excited for my first day I showed up 10 minutes early just so I could calm down.

Day one

My first day was amazing I got shown around and met lots of lovely friendly people and they made me feel very happy and calm. My first job was to feed the animals in the kennels, then Steve brought his cat to stay the night whilst he went to the West and it was a lovely cat but very fussy. After feeding the cat I got the chance to see Zoe do acupuncture on a dog it was very interesting and so well behaved. I did get the chance to stand in on some other consultations and then I did the laundry and went home.



Day two

My day started off the same as the day before only I had to feed Anna (Steve's cat) and she was lovely, she came and gave me a cuddle while I gave her a different sachet, she ate more than she did the day before but she soon went back to her biscuits. Then I got the opportunity to see a bitch spey and see some mammary tissue being removed, it was amazing. In the afternoon I got to meet some lovely cats that we took blood samples from and I finally found out that Anna ate a type of pate for cats then Steve came back to collect her. By the end of the afternoon it was just me and Zoe. We had a good laugh and I stayed late to help her with a cat that had come in from the West called Yellow.

Day three

In the morning Zoe and I went to castrate a young ram. Then I helped Zoe and Teenie X-ray Yellow and it wasn't good so I then saw Zoe and Teenie put Yellow down, it was sad but I had a good rest of the day because it was Steve's birthday so we all wished him happy birthday. Then Sarah asked me to do some computer work and that didn't go too well but we fixed it and then I got it finished and then I ended the day with more laundry and went home.

Day Four

I got to see Phillip drain an abscess on a cat's face and that was awesome, there was a lot of pus. Later in the morning I went to the Agricultural Department to learn about the wool and how we tested it. Later on I went to the Abattoir with Steve and saw the whole place in action and it was so cool how they skin them and how they process them, it is very efficient. In the afternoon I got to see a cat with a bite on its tail and another cat with an eating problem then did the laundry and went home.

Day five

My final day started with a cat spey and I got to clip its nails and give it an injection with Teenie's help. Then I went into the Agricultural Department for a bacon sandwich. After that a beautiful dog came in with a leg problem and she was lovely, friendly and gentle. In the afternoon I saw a black lab that had been in earlier in the week for a check after an operation much like the previous dog, he was sweet and he was very cuddly. He had managed to take his bandage off and he kept licking it, this could cause an infection so Philip gave him a vest to wear so that he didn't lick it as much. Then I got to see a cat that had torn off his bandage so we put it back on him and reinforced it. Then I saw a cat with a bad eye we gave it some cream and sent it home. The last patient that I saw was a bitch and she had to have an X-ray of her leg because it was not working properly. I really enjoyed my time at the Veterinary Department and I have learnt so much, thank you to everyone that helped me and let me see the Vets, Agriculture and the Abattoir.

Saladero News

By Andrew Bendall

February - March 2021

National Stud Flock 2021 Ram Sale

Sale day happened on Friday 19th March after the Saturday date was postponed due to predicted bad weather that would have caused cancellations on the Concordia Bay.

A great turn out of people with 20 registered buyers of whom 17 purchased NSF rams, we had a 96% clearance of all presented rams on the day which was exceptionally pleasing.

The NSF presented 10 mixed aged ex-elite rams which all sold well, once again the top priced ram being purchased by "Hope Cottage" other mature rams being bought from farms representing both East & West which will be used across their own smaller stud flocks.



Of the 133 Shearling rams presented, 98 were sold as individual lots under the helmsman silent auction system which meant there was some frantic bidding at times. Of the 98 single lot shearling rams 92 were sold with a better average price realised than in previous years.



Also presented were 35 Flock Shearling rams, these were sold in lots of 5 rams grouped together by their wool micron measurement. These rams all sold and represented an effective way of purchasing a group of rams at once under one bid.

Blue Beach Farm also had for sale mature and shearling rams, the mature rams sold well. There were some shearling rams passed in but these either sold after the auction or post sale day.

Without the covid restrictions that were in place in 2020 it enabled people more freedom to get about the whole sale complex. Hot food was again provided by Heather Smith which as always was greatly appreciated.

There is considerable investment that goes into running the NSF, both financial and in the form of labour from both the Saladero Manager and the DoA staff. So it's only prudent that we are constantly looking at ways we can improve on what we do.

So the end of ram selling is a good time to evaluate and review our successes! It's also a great time to look at the strengths, weaknesses, opportunities & threats of the overall business.

So please make time to answer the questionnaire put out by the DoA and engage with the department with any thoughts or suggestions you may have.

Post Weaning Management of Lambs (Hogs);

Off the back of an improved lambing this year, weaning weights were good with lambs weighing 23.6kg at an age ranging between 70 – 105 days.

Lambs have been drenched and had their 2nd Glanvac vaccination and are being run together on camps that have been spelled for the last two months. Ram lambs will be separated after the NSF ram sale. Weights will be taken again at this stage with the aim to have these hogs going into the winter at a 30kg average.

The above piece was written in the last issue of the Wool Press, so how have we done, as stated the lambs were run together for a month post weaning and came in 30 days later and were drafted into ewes & rams and all had a second drench. Worm counts were at an average of 700 epg which highlighted a couple of things,

- Firstly that there must have been a high level of contamination left on the pasture from the previous stock as these camps had had over two months spell.
- Secondly, that such a significant worm burden had been reached only 30 days after their earlier drench.

Ten days later a drench test was done to test the efficacy of the drench, this test resulted in showing the drench was effective. The lambs had been growing well even under a moderate worm challenge. Rams lambs had been doing 150 grams a day and ewe lambs 120 grams per day.

These two mobs were bought in again on the 31st March to have their Live weight (LW) & Body condition scores (BCS) at 6 months taken for input into the Australian Sheep Breeding values (ASBV's). These LW & BCS go towards making up their Dual Purpose (DP) index that you see in the ram catalogue.

Faecal samples were taken again at this stage with counts only at 260 epg for the rams and 155 epg for the ewes, so we will continue to monitor these over the next few weeks with the aim of giving them a pre-winter drench if needed.

Growth rates continue to tick along with the ram lambs doing 120 grams per day and ewe lambs 80 grams per day. So they are ahead of their 1st May target of 30 kg, with the ewe hogs averaging 30kg and ram hogs 33kg on the 1st April. Every kg and any extra condition that these hogs can carry into the winter means that their starting point come the spring is so much ahead of an underweight animal. It also makes them just so more robust with a better immune system to tackle the arduous winter.

Breeding Flock Ewes body weights & condition scores, leading up to joining in May.

Ewe Weights Summer 2021		January		April	
		Weight	BCS	Weight	BCS
MA Ewes		50.3	2.6	51.4	2.7
2018 Born mated Shearlings		45.7	2.6	47	2.8
2018 Born un-mated Shearlings		52.6	3	51.4	3.1
2019 Born Rising Shearlings	(Nov)	29	2.1	38.2	2.4

Continued on pages 14& 15

As seen on the previous page all the ewes have been in weighed & conditioned scored and any ewe (excluding the 2018 born ewes) that did not rear a lamb has been culled along with any poor condition ewes plus any that were not structurally sound.

The 2018 born ewes, that were mated as shearlings but didn't rear a lamb have been given a second chance.

Faecal samples were taken from both the younger ewes and older ewes, with the younger ewes having a significantly higher burden than their older counter parts. The younger ewes sitting at 900 epg while the older ewes only at 400 epg. Given they are slightly behind the BCS of 3 that would be ideal, we may look at drenching them either pre joining or at joining itself. They will continue to utilise some autumn growth that has appeared within their designated rotation.

Wether Trial

The wether trial has now been concluded with all wethers being killed at FIMCo on March 23rd, their average carcass information is in the table below and to be expected being killed at 2.5 years old there was little difference between them. In fact looking at their individual carcasses there was more variation within a farm group than between the five different farms.

WETHER TRIAL		Carcass information average per farm group			
Farm	Lwt Kg	Cwt Kg	Value £	Yield	P/kg
1	61.0	25.53	£ 16.34	42%	0.64
2	60.2	25.98	£ 16.35	43%	0.63
3	65.9	27.91	£ 16.75	42%	0.6
4	58.1	24.28	£ 16.88	42%	0.7
5	61.6	26.34	£ 16.71	43%	0.63

Extra Wool information

Following the last Wool Press article where we published the results from the OFDA machine the below results are from the NZWTA which are the same test results that most of our wool is sold on.

WETHER - (TRIAL)										
Average		23.2	71.6	4.7	3.4	126.2	32.4	4.5	19.5	9.6
Farm		MFD	Yield	GFW	CFW	Length	Strengt h	StDev	CofV	% >30
1		20.6	73	4.8	3.5	125.8	31.1	4	19.7	2.3
2		22.6	72.2	4.7	3.4	128.9	33.1	4.4	19.6	7.2
3		24.1	69.4	4.7	3.2	127	32.5	4.6	19	12.2
4		24.1	73.1	4.8	3.5	125.2	35.2	4.6	18.9	11.4
5		24.1	70.7	4.7	3.4	124.2	30.3	4.9	20.1	14.1

There will be a comprehensive report on all of the last two years data coming out in due course, but a couple of points that may be worth dwelling on looking at the above results are;

- The %>30, this is the percentage of fibers within the fleece which are above 30 microns, the significance of this is that when your bales have a grab sample taken that % is going to greatly affect the overall micron and subsequent price realized. Given that these animals were only 2.5 years old this percentage figure may only get worse as the wethers age.
- The mean fiber diameter (MFD), these wethers were in general on a better plain of nutrition than they would have been on their farms of origin, so at this age of 2.5 years are slightly stronger than their homebred counterparts. That said it highlights the effect that age has on micron, when there has been little or no real selection done on the ewe base.

Agronomy update;

Of all the various seed mixes that were sown in to existing swards back in January, (legume, grasses & brassicas). The most successful have been the cocksfoot & red clover mix which was drilled into old re-seeds.

Unfortunately a lot of the others have proved unsuccessful which to some degree is not surprising. We know that paddock selection and preparation are critical to any forage improvement success and without appropriate fertility correction the natural soil environment is just too toxic for any real success.

There is still some lotus seed to be drilled into some older re-seeds within the "Brenton Loch" area and given appropriate rotational grazing and resting of camps, lotus seems to be persisting very well and providing some quality feed in the late summer early autumn.



Saladero Management;

By the time the next edition of the Wool Press is written Saladero will be under new management as Mandy will finish up late May. So on behalf of the DoA I would like to thank Mandy for all her efforts over the last four years and in particular over the last 15 months during my time at the Department.

Huge congratulations to Agricultural Adviser, Andrew Bendall & Practice Manager, Sarah Bowles who both completed the half marathon on Sunday 11th April.

Andrew ran in a time of 01:32:20 and Sarah walked/run in 02:20:56, both were running for work colleague and special friend, Tracy Evans.



Puzzle page!



		First Names				Beers				Rings			
		Angie	Camille	Dillon	Lilian	bitter	dark lager	pilsner	stout	platinum	silver	titanium	white gold
Orders	first												
	fifth												
	sixth												
	ninth												
Rings	platinum												
	silver												
	titanium												
	white gold												
Beers	bitter												
	dark lager												
	pilsner												
	stout												

Logic puzzles require the solver to deduce the relationships between different people, places and things based on a limited number of clues given in the puzzle. Remember: every item on the board belongs to one and only one person, no item will ever be shared. Using only the clues provided and simple deductive logic and reasoning, fill in the grid with X's and O's to determine the solution.

Logic Puzzles

Presented by Puzzle Baron

Puzzle ID: K225OL

For hints, solutions and more puzzles, go to www.Printable-Puzzles.com!

Orders	First Names	Beers	Rings
first			
fifth			
sixth			
ninth			

- The person with the white gold ring drinks dark lager.
- The bitter drinker is not Dillon.
- The person with the titanium ring is not Camille.
- The one who is first in line wears the platinum ring.
- Angie doesn't drink stout and isn't first in line.
- Of Dillon and the pilsner drinker, one is sixth in line and the other is ninth in line.
- The person with the silver ring is farther down the line than Camille.
- The person with the platinum ring doesn't drink stout and is not Camille.
- The one who is sixth in line is not Camille and doesn't wear the titanium ring.
- The bitter drinker is closer to the front of the line than the person with the white gold ring.
- Either the person with the titanium ring or the person with the white gold ring is Angie.

		1	2	3	
	1	3	1	1	1
3					
2					
1, 2					
2					
2, 1					

			1		
	1		1		
	2	1	1	2	1
1					
1, 2					
3					
1					
1, 1					

Numbergrid puzzles are a special kind of logic puzzle, where the goal is to uncover the pattern of black squares hidden within a grid. A series of numbers is provided for every row and column which defines that row or column's sequence of black squares. "1,4,1", for example, means that there is 1 black square, followed by an indeterminate number of spaces, followed by 4 consecutive black squares, followed by another indeterminate number of spaces, followed by a final single black square.